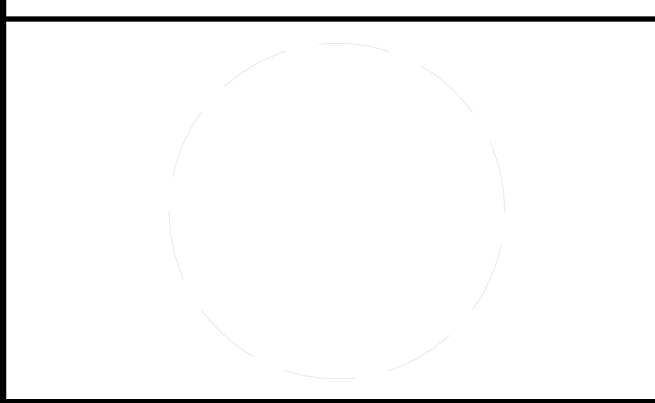


MISSOURI S&T CHAMELEON HOUSE



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 ADDRESS: 1051 NORTH BISHOP AVENUE
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 ROLLA, MO 65401-11410
 CONTACT: SOLARHOUSE@MST.EDU
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 COVER

G-001

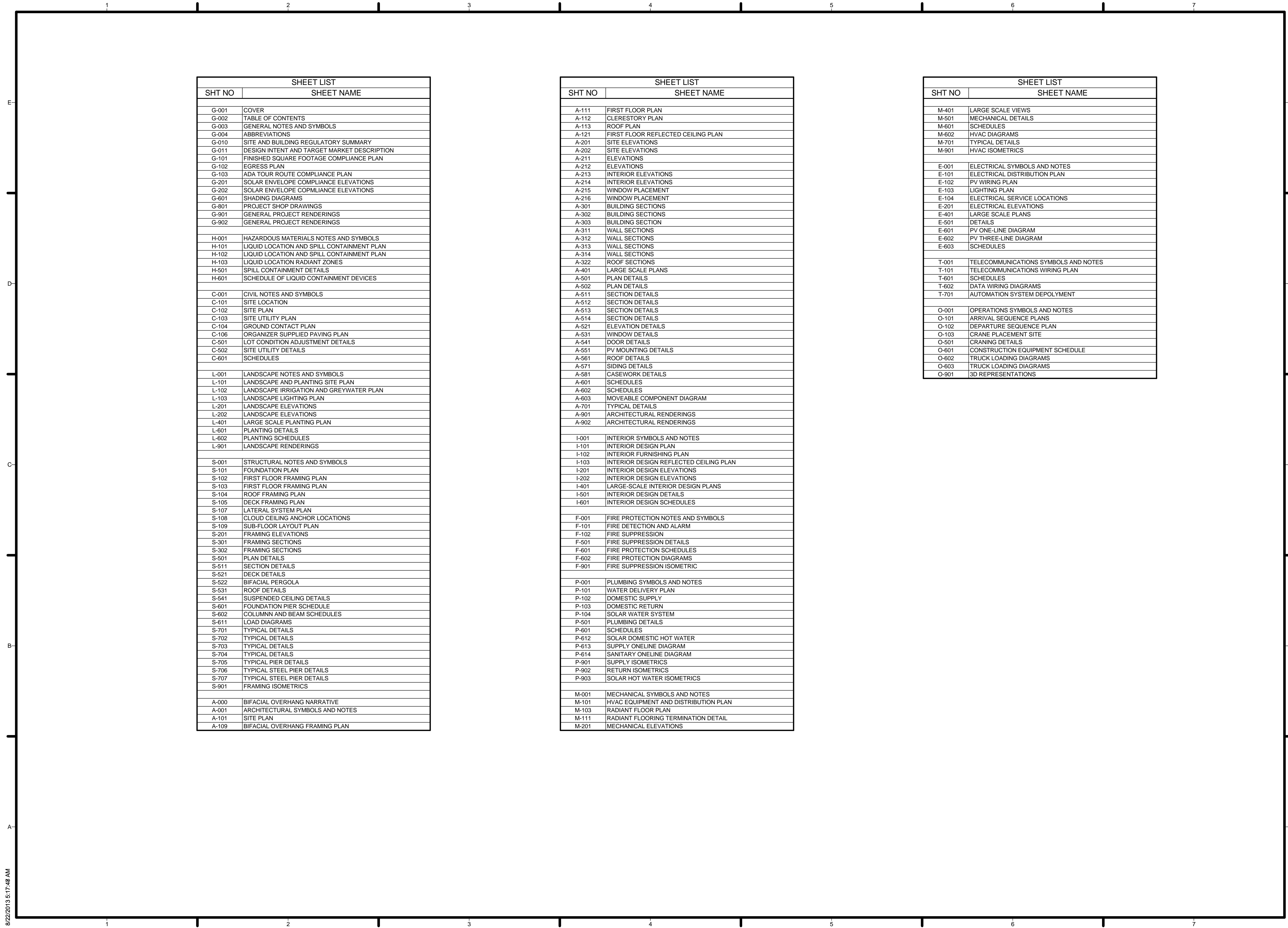


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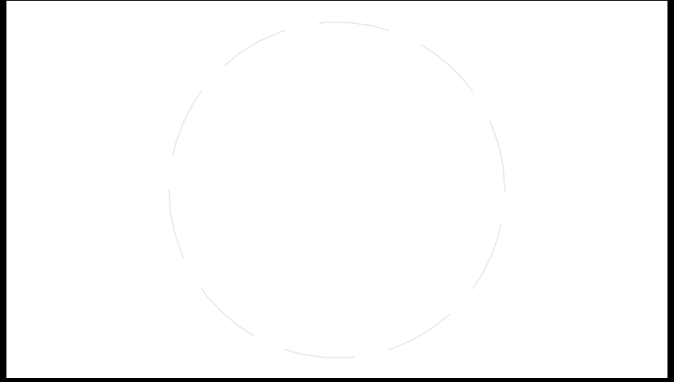
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ADDRESS: 1051 NORTH BISHOP AVENUE
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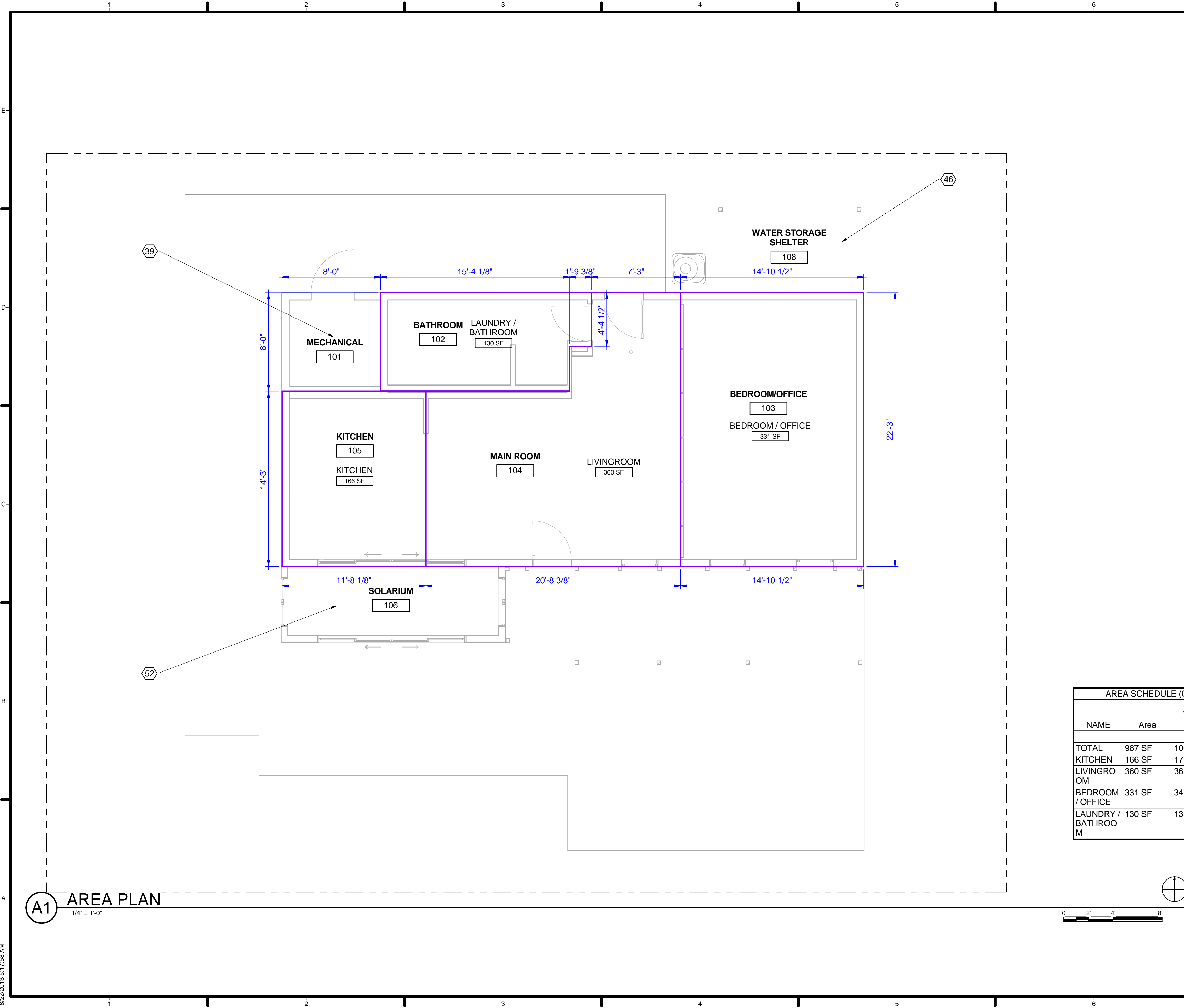


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SHEET TITLE
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GENERAL SHEET NOTES

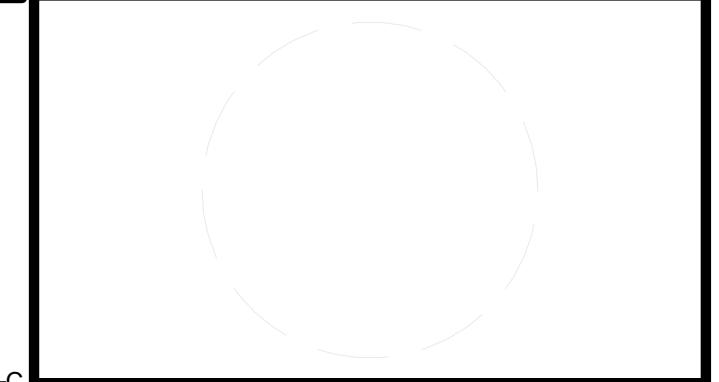
- 1 FINISHED SQUARE FOOTAGE IS BASED ON PLAN DRAWINGS OF THE HOUSE AND MAY VARY FROM THE ACUTAL BUILDING
- 2 SQUARE FOOTAGE BASED OF EXTERIOR DIMENSIONS AS PER ANSI Z765 2003

SHEET KEYNOTES

- 39 MECHANICAL SPACE IS OUTSIDE OF MAIN THERMAL BARRIER (SIP) AND HAS NO MEANS OF HEATING OR COOLING. IT DOES NOT FULFILL ANSI Z765-2003 DEFINITION OF FINISHED (CONDITIONED) SPACE AND IS NOT INCLUDED IN FINAL SQUARE FOOTAGE
- 46 WATER STORAGE SHELTER IS A STRUCTURE PROTECTING THE WATER STORAGE TANKS. IT WILL BE DETACHED FROM THE HOUSE AND REST ON GRADE WITH NO FLOOR. IT IS NOT COUNTED IN THE FINISHED SQUARE FOOTAGE.
- 52 THE SOLARIUM IS OUTSIDE OF MAIN THERMAL BARRIER (SIP) AND HAS NO MEANS OF HEATING OR COOLING (OTHER THAN THAT OF THE SUN). IT IS NOT INTENDED AS YEAR ROUND OCCUPATION OR USE. IT IS INTENDED TO BE USED ON MODERATE DAYS IN THE SPRING OR FALL. IT IS NOT COUNTED IN THE FINISHED SQUARE FOOTAGE.



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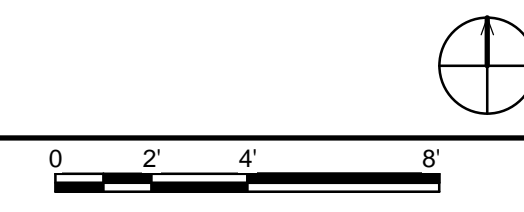


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AREA SCHEDULE (Gross Building)			
NAME	Area	% OF TOTAL AREA	Perimeter
TOTAL	987 SF	100	139'-0 1/8"
KITCHEN	166 SF	17	51'-10 3/16"
LIVINGROOM	360 SF	36	85'-10 3/8"
BEDROOM / OFFICE	331 SF	34	74'-3"
LAUNDRY / BATHROOM	130 SF	13	50'-1 9/16"

A1 AREA PLAN
 1/4" = 1'-0"



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SHEET TITLE
FINISHED SQUARE FOOTAGE COMPLIANCE PLAN

G-101

8/22/2013 5:17:58 AM

SHEET KEYNOTES

- 33 EMERGENCY EGRESS WINDOW OPENINGS (3 TOTAL ON SOUTH WALL) ARE APPROXIMATELY 5.79 SQFT SILL HEIGHT LOCATED 1' 5" ABOVE INTERIOR FLOOR
- 36 HINGED DOOR 36" WIDE AS PER IRC R311.4.1



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 ADDRESS: 1051 NORTH BISHOP AVENUE
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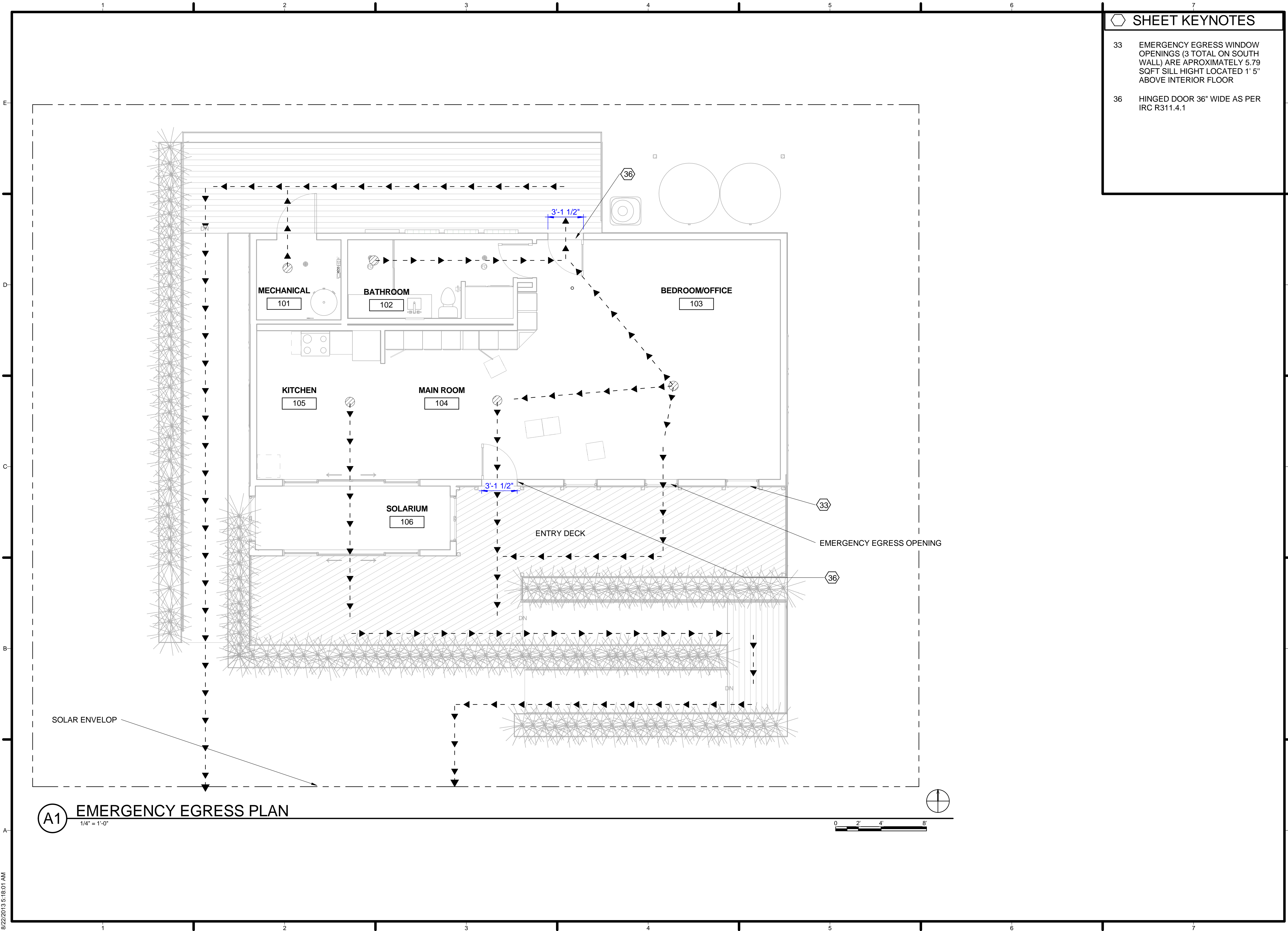


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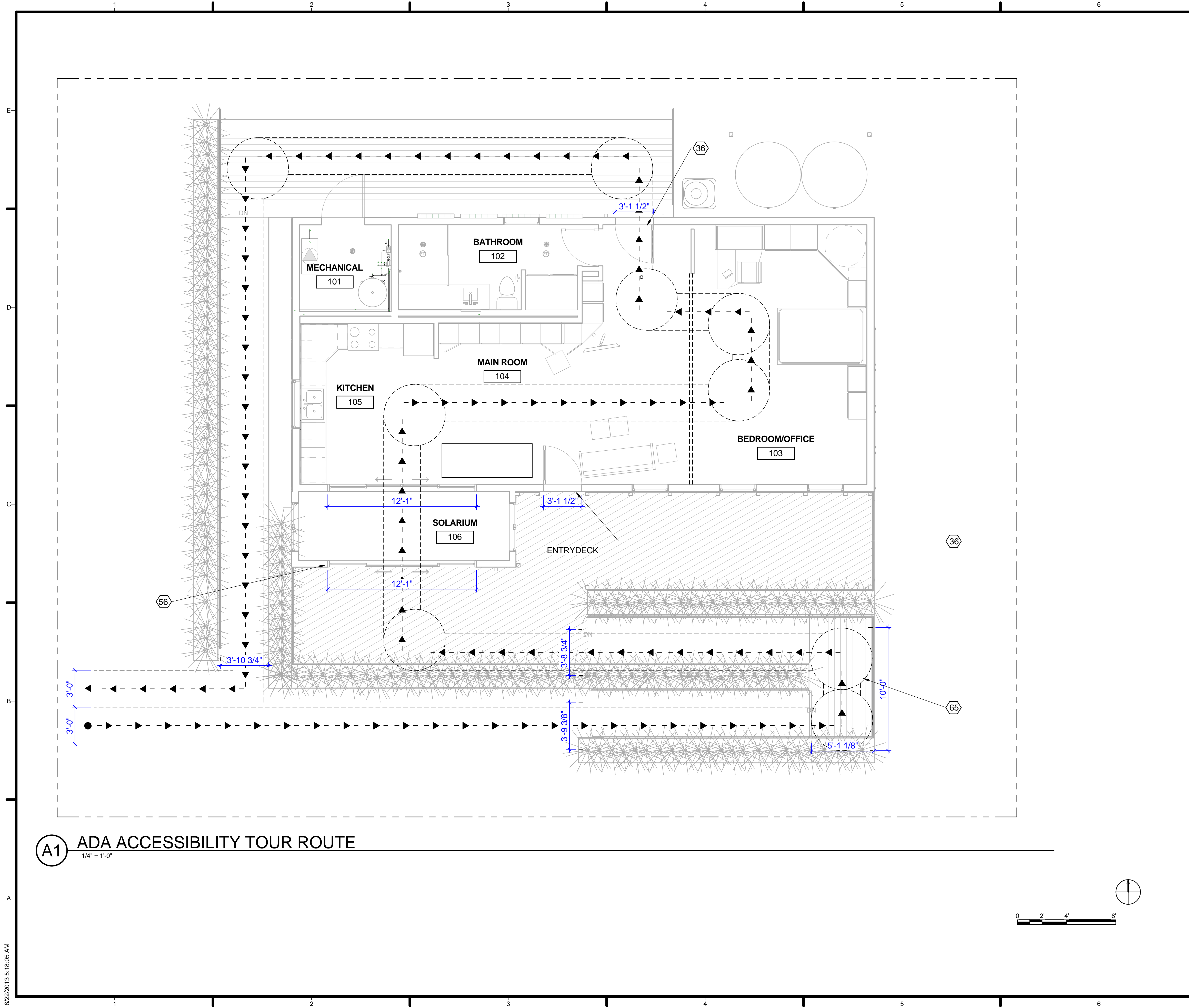
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SHEET TITLE
 EGRESS PLAN

G-102



(A1) EMERGENCY EGRESS PLAN
 1/4" = 1'-0"



GENERAL SHEET NOTES

- 1 ALL RAMPS HAVE 1:12 SLOPES
- 2 ALL RAILINGS/GUARDS WILL BE 36" HIGH AND GO AROUND THE EXPOSED PERIMETER OF DECK AND RAMPS

SHEET KEYNOTES

- 36 HINGED DOOR HAVING 36" WIDTH PER IRC SECTION R311.4.1
- 56 WHEN OPENED, SLIDING DOORS MAY REQUIRE DROP-IN PIECES OF MATERIAL TO SPAN TRACK
- 67 60" DIAMETER DIRECTION CHANGE



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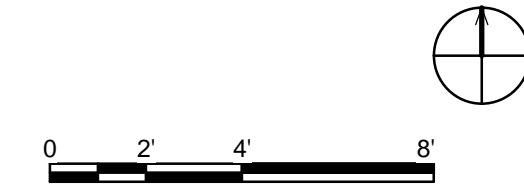
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SHEET TITLE
ADA TOUR ROUTE COMPLIANCE PLAN

G-103

(A1) ADA ACCESSIBILITY TOUR ROUTE
 1/4" = 1'-0"



8/22/2013 5:18:05 AM

GENERAL SHEET NOTES

1 COMPLIANCE WITH THE SOLAR ENVELOPE WILL BE VERIFIED ON THE COMPETITION SITE



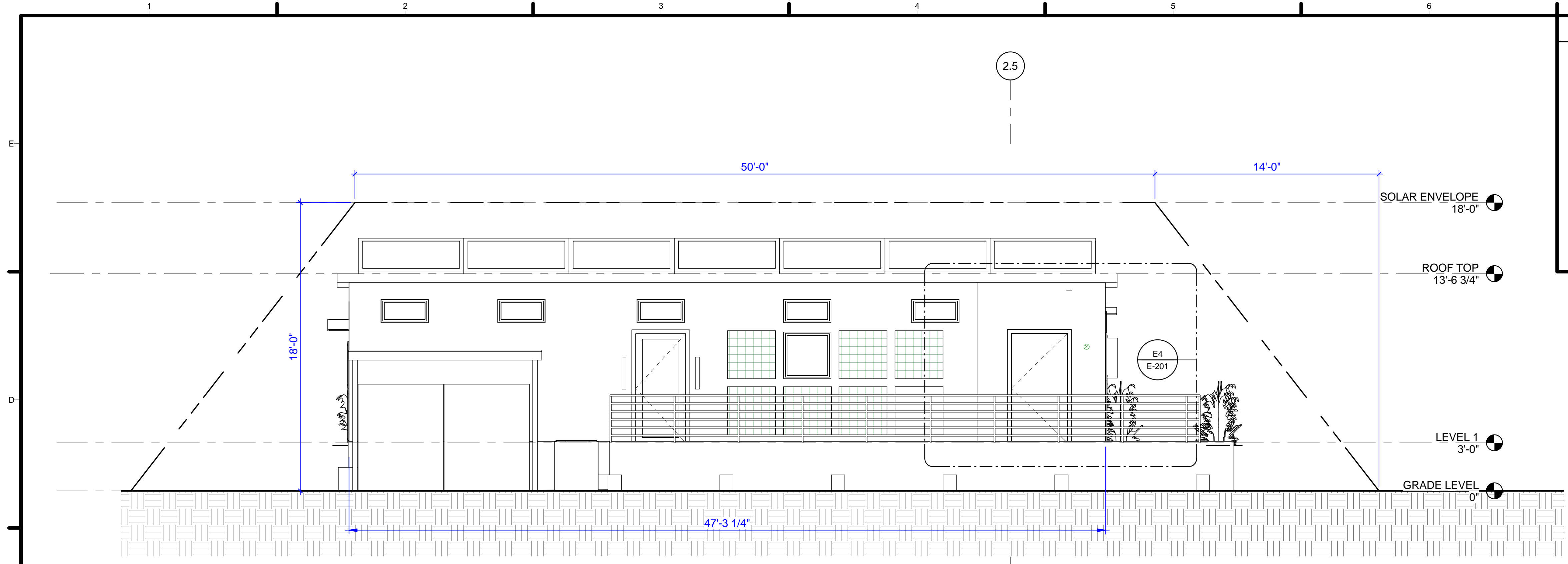
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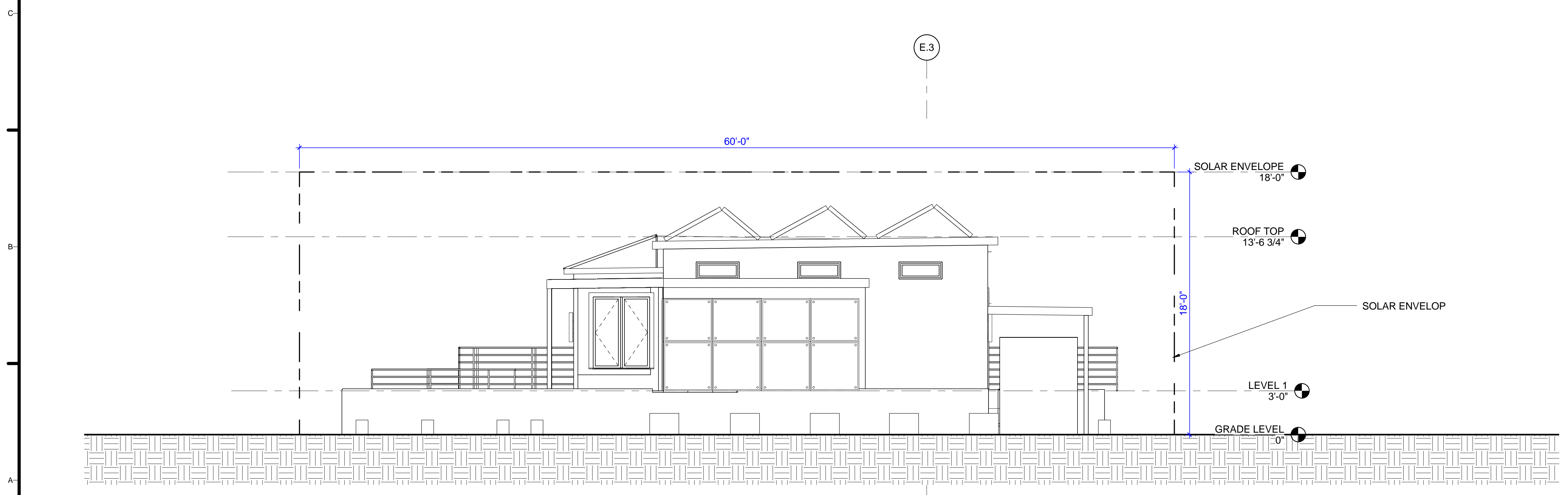


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SHEET TITLE
SOLAR ENVELOPE COMPLIANCE ELEVATIONS
G-201



C1 SOLAR ENVELOPE NORTH
 1/4" = 1'-0"



A1 SOLAR ENVELOPE EAST
 1/4" = 1'-0"

8/22/2013 5:18:09 AM



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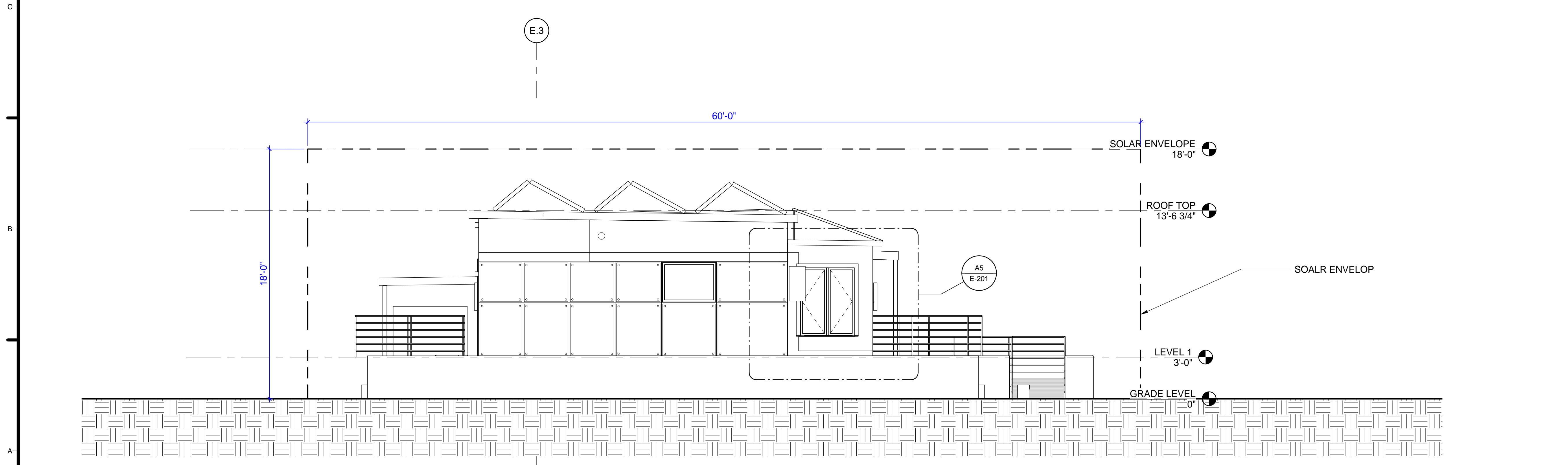
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SHEET TITLE
 SOLAR ENVELOPE
 COMPLIANCE
 ELEVATIONS

G-202



D1 SOLAR ENVELOPE SOUTH
 1/4" = 1'-0"



A1 SOLAR ENVELOPE WEST
 1/4" = 1'-0"

8/22/2013 5:18:12 AM

GENERAL SHEET NOTES

1 ALL SHADOWS ARE APPROXIMATE RENDERINGS FROM REVIT CALCULATIONS BASED ON THE LATTITUDE OF IRVINE CALIFORNIA ON OCTOBER 8



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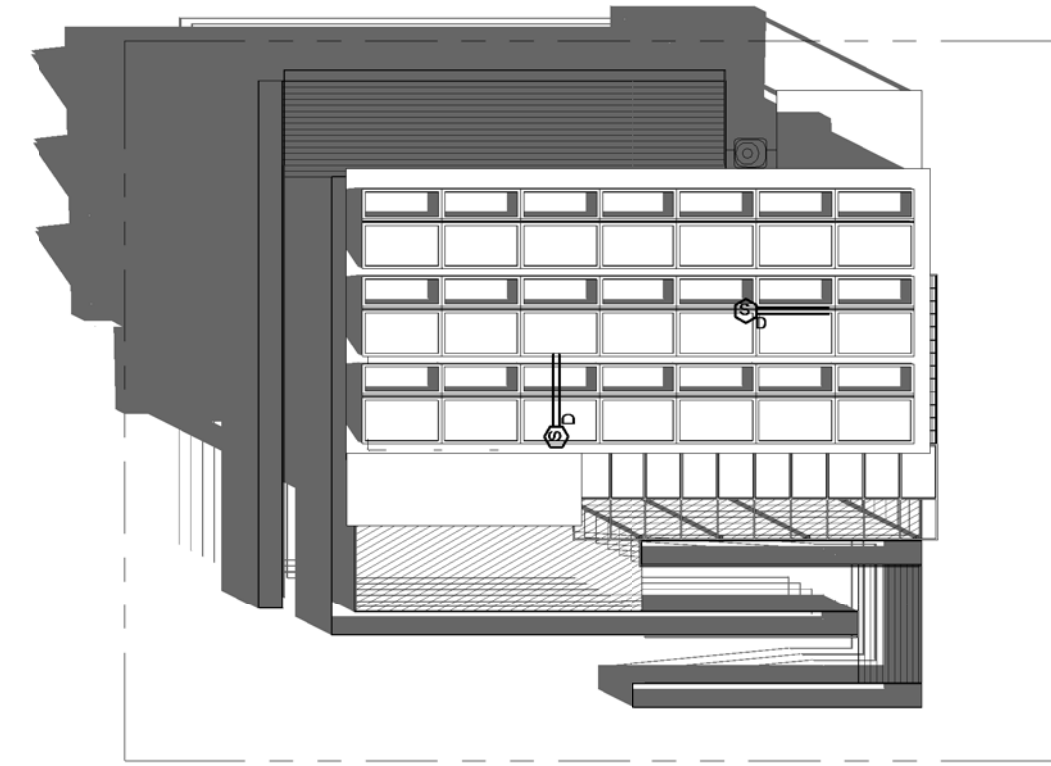
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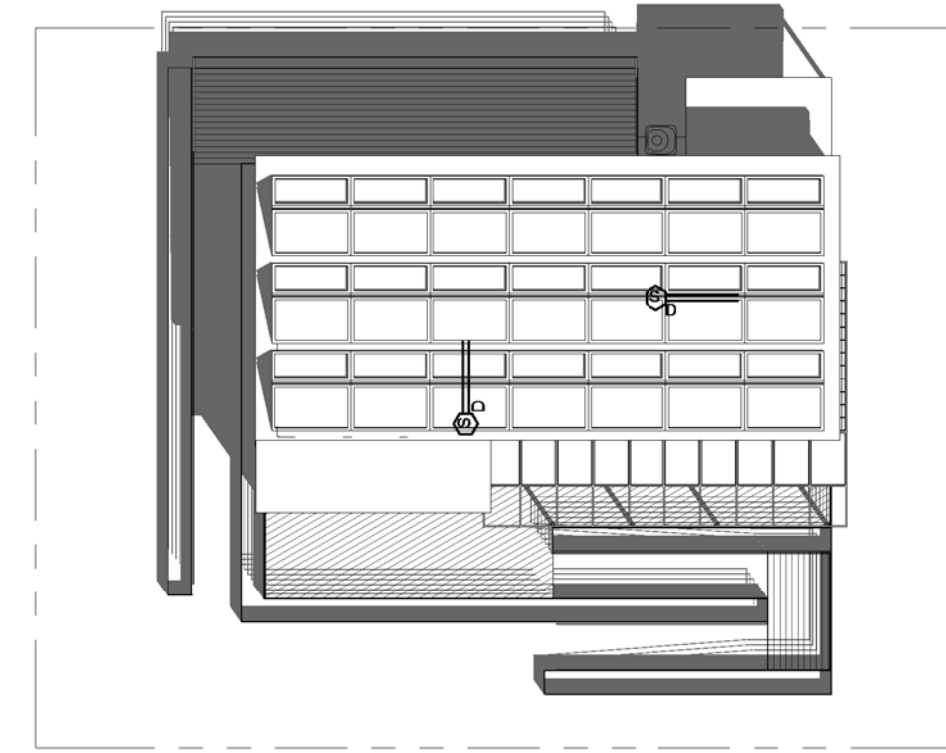
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SHEET TITLE
 SHADING DIAGRAMS

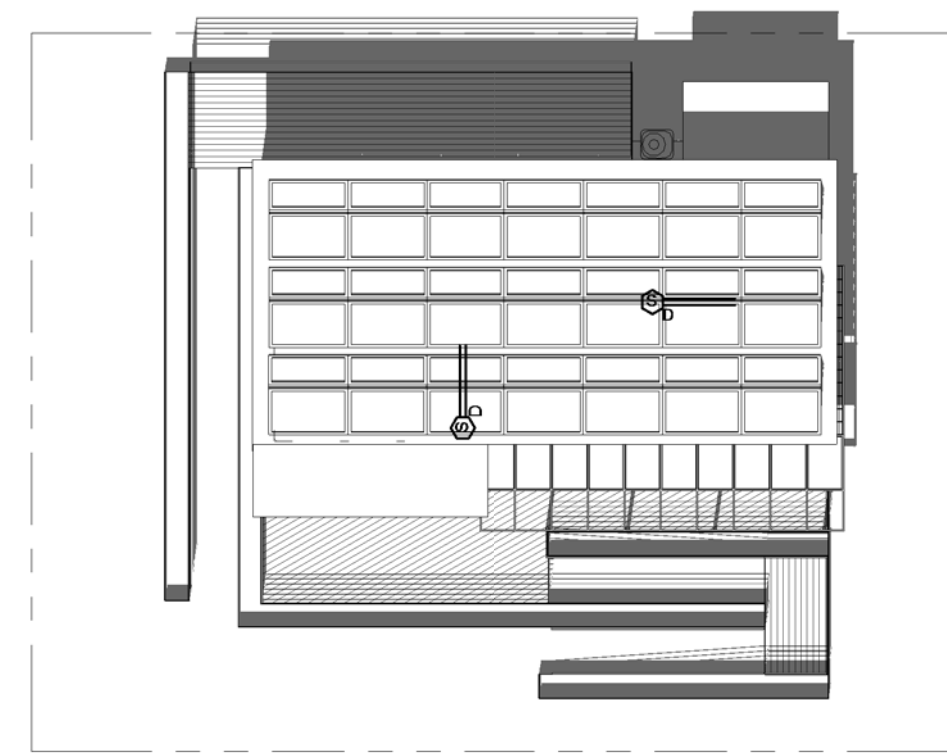
G-601



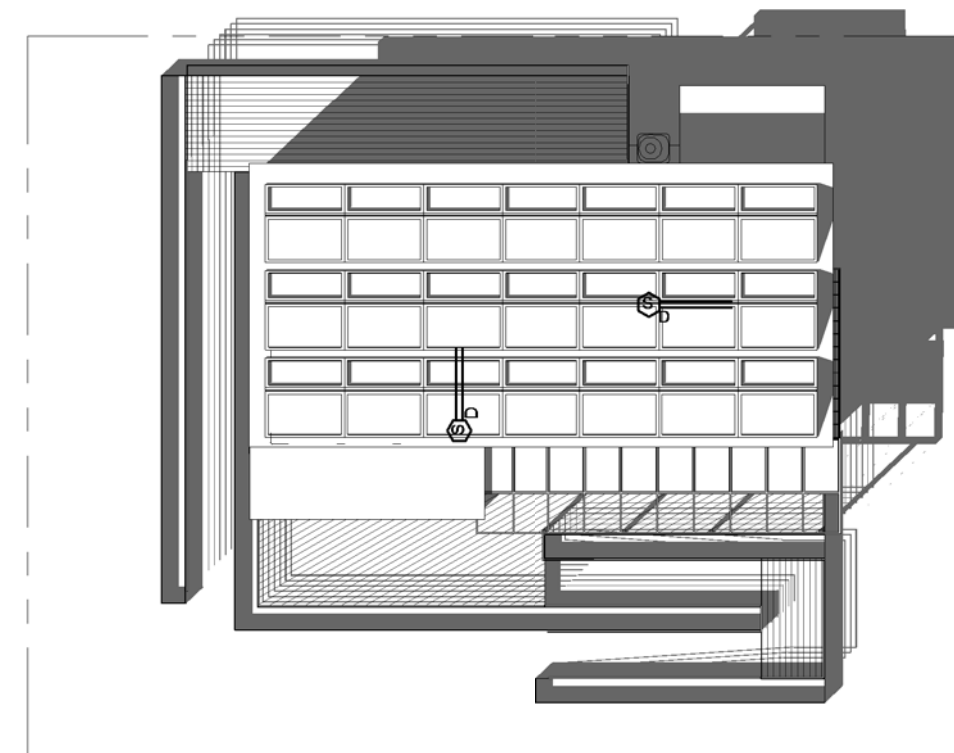
A1 SHADING 8 AM
 1/16" = 1'-0"
 0 8' 16' 32'



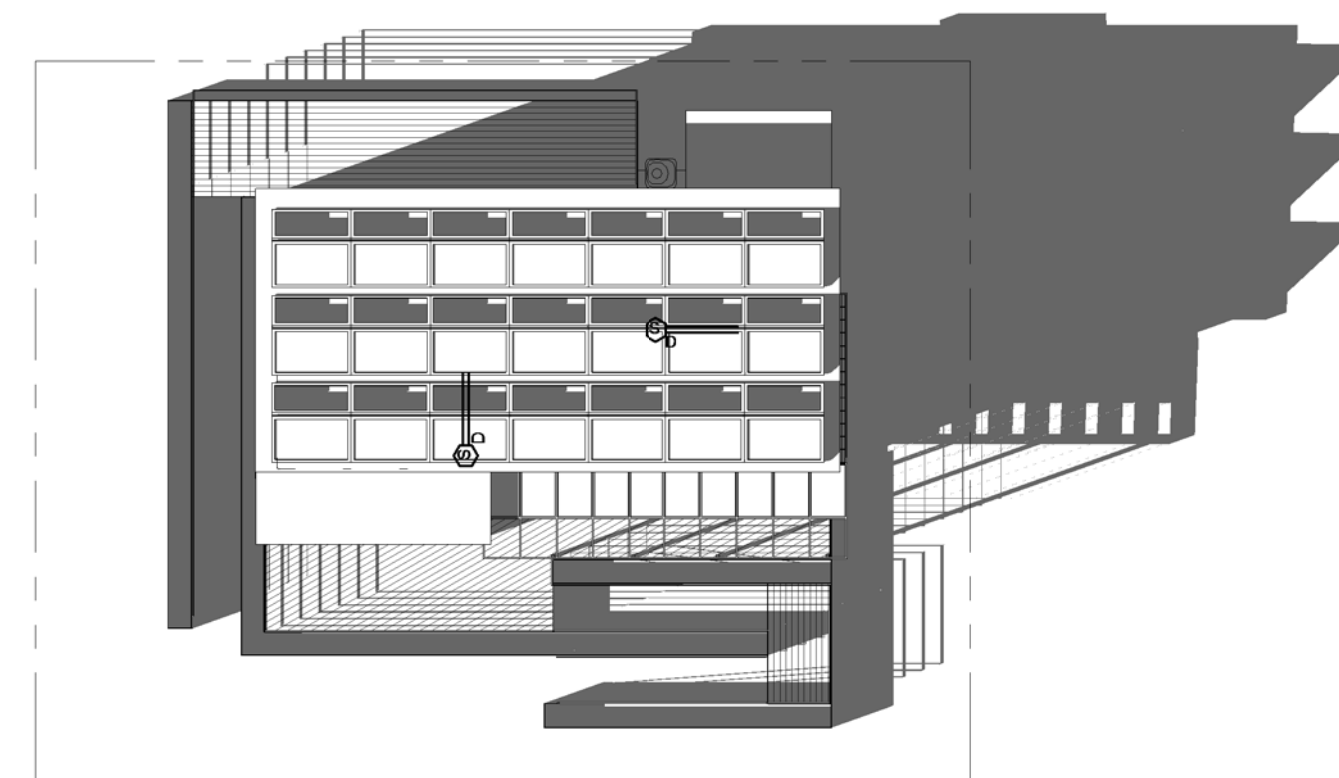
D4 SHADING 10 AM
 1/16" = 1'-0"
 0 8' 16' 32'



B3 SHADING 12 PM
 1/16" = 1'-0"
 0 8' 16' 32'



A1 SHADING 2 PM
 1/16" = 1'-0"
 0 8' 16' 32'



A4 SHADING 4 PM
 1/16" = 1'-0"
 0 8' 16' 32'



INSTALLATION OF PRODUCTS WILL BE FOLLOWED BY MANUFACTURER'S REQUIREMENTS AS SEEN ON INSTALLATIONS DOCUMENTS, MANUFACTURER'S SHOP DRAWINGS, ETC. THEREFORE SUCH DOCUMENTS WITHIN THE DOCUMENT SET WILL TAKE PRECEDENCE OVER MISSOURI S&T DETAIL DRAWINGS OF SUCH PRODUCTS.

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SHEET TITLE
 PROJECT SHOP DRAWINGS

G-801

FRIGIDAIRE

GALLERY®



Built-In Cooktop

FGIC3067M B

30" Induction



Product Dimensions

Width	30-3/4"
Depth	21-1/2"
Height	4-3/8"

More Easy-To-Use Features

Cooktop Stays Cooler

With induction cooking, heat is transferred directly to the cookware, so the cooktop stays cooler to the touch – making it easier to clean.

Power Assist Function

Generates rapid heat for a faster boil.

Cooking Versatility

Gentle enough to melt chocolate and powerful enough to boil water, so it's great for entertaining or getting dinner on the table quickly.

Express-Select® Controls

Easily go from warm to boil.

Smoothtop Ceramic Glass Cooking Surface

Hot Surface Indicators

Available in:



Black
(B)

Elements	Size	Watts
Right Front	10"	2,500 / 3,400
Right Rear	6"	1,450 / 2,000
Left Front	7"	1,800 / 2,600
Left Rear	8"	2,300 / 3,200

Signature Features



More Responsive

Cooking with induction is more responsive than gas or electric so you can easily go from simmer to boil.



Versatile Induction Elements

With up to five powerfully efficient induction elements, the Induction Cooktop offers the superior cooking flexibility. And the 10" induction element offers up to 3,400 watts of power, so you can bring water to a boil quickly.



Exceptional Temperature Control

Adjust heat with greater accuracy than on gas or electric cooktops especially at lower settings.



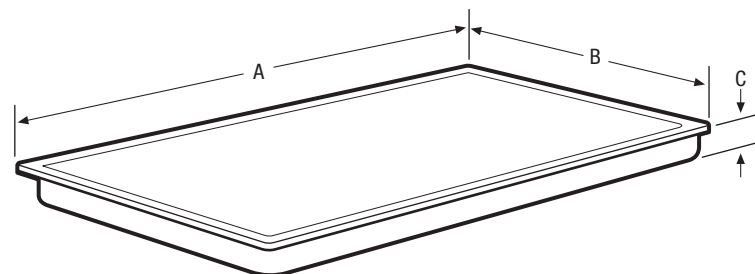
More Energy-Efficient

Cooking with induction is 70% more efficient than gas and 20% more efficient than electric.

Features	
Controls	Express-Select*
Surface Type	Black Ceramic Glass
Right Front Element (Watts)	10" - 2,500 / 3,400
Right Rear Element (Watts)	6" - 1,450 / 2,000
Left Front Element (Watts)	7" - 1,800 / 2,600
Left Rear Element (Watts)	8" - 2,300 / 3,200
Hot Surface Indicators	Yes
Control Location	Center Front
Specifications	
Power Supply Connection Location	Right Rear
Voltage Rating	240V / 208V / 60Hz
Connected Load (kW Rating) @ 240/208 Volts ¹	8.4 / 7.3
Amps @ 240/208 Volts	35.1 / 35.0
Minimum Circuit Required (Amps)	40
Approved for Electric Single Wall Oven Combination Installation ²	Yes
Shipping Weight (Approx.)	48 Lbs.

¹Single phase 3- or 4-wire cable, 120/240 or 120/208 Volt, 60 Hertz AC only electrical supply with ground required on separate circuit fused on both sides of line.

²Cooktops are approved for installation above any of our Electric Single Wall Ovens.



NOTE: For planning purposes only. Always consult local and national electric codes. Refer to Product Installation Guide for detailed installation instructions on the web at frigidaire.com.

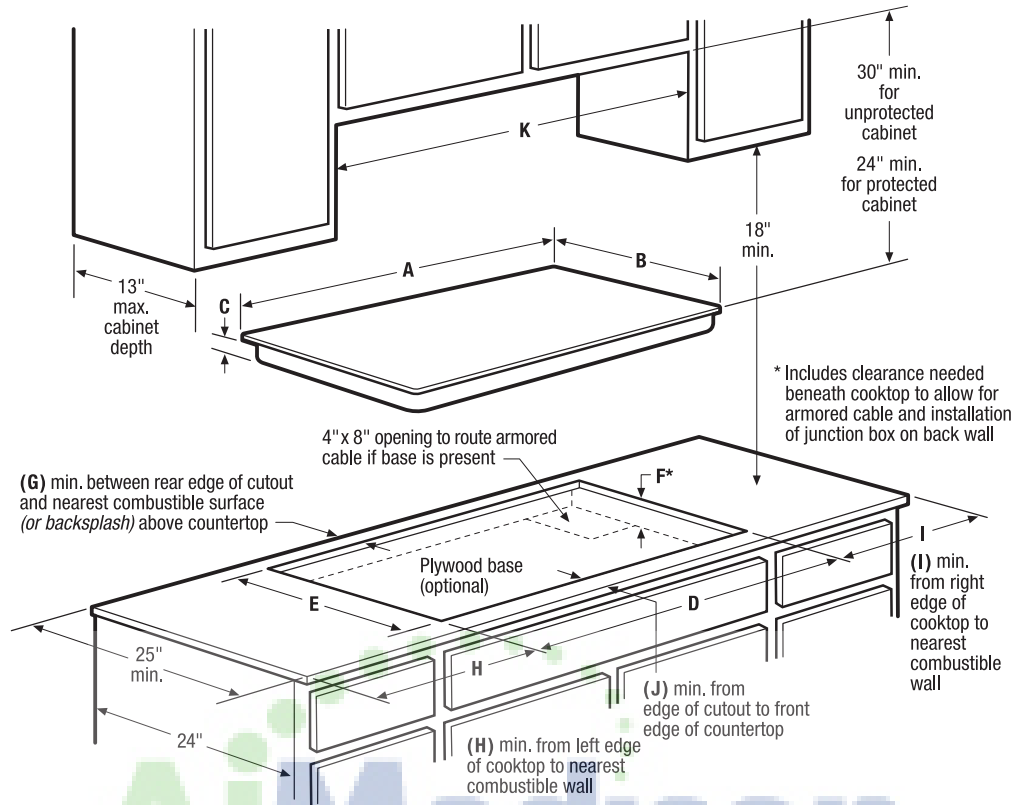


Product Dimensions		Cutout Dimensions	
A - Width	30-3/4"	Width (Min.)/(Max.)	29-5/8" / 29-3/4"
B - Depth	21-1/2"	Depth (Min.)/(Max.)	20-3/8" / 20-1/2"
C - Height	4-3/8"	Height	4-1/2"

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Granite Countertop Installation Kit available.

Accessories information available on the web at frigidaire.com



Product Dimensions			Required Clearances			
A - Width	B - Depth	C - Height	G (min.)	H (min.)	I (min.)	J (min.)
30-3/4"	21-1/2"	4-3/8"	1-1/2"	7-1/2"	7-1/2"	2-1/2"
Product Cutout Dimensions			K - Cabinet Opening Width (min.)	Utility Connection Locations		
D - Width (min. - max.)	E - Depth (min. - max.)	F - Height (min.)*		Power Supply		
29-5/8" - 29-3/4"	20-3/8" - 20-1/2"	4-1/2"	30-3/4"	Right Rear		

Built-In Cooktop Specifications

- Product Shipping Weight (approx.) - 48 Lbs.
- Single phase 3- or 4-wire cable, 120/240 or 120/208 Volt, 60 Hertz AC only electrical supply with ground required on separate circuit fused on both sides of line.
- Connected Load (kW Rating) @ 240/208 Volts = 8.4/7.3 kW
- Amps @ 240/208 Volts = 35.1/35.0 Amps
- Recommended Circuit Breaker - 40 Amps
- Always consult local and national electric codes.
- Cooktop cutout height includes clearance needed beneath cooktop to allow for armored cable and installation of junction box on back wall. Position center of junction box 10" inward from right side of cooktop cutout, and 12" down from underside of countertop.
- Overhead cabinetry should not exceed a 13" maximum depth.
- Absolute minimum horizontal distance between overhead cabinets installed to either side of appliance must be no less than 30-3/4".
- Allow 30" minimum clearance between top of cooktop platform and bottom of unprotected wood or metal overhead cabinet; or 24" minimum clearance when bottom of wood or metal overhead cabinet is protected by not less than 1/8" flame-retardant millboard covered with not less than No. 28 MSG sheet steel, 0.015" stainless steel, 0.024" aluminum or 0.020" copper.
- Allow 1-1/2" minimum clearance between rear edge of cutout and nearest combustible surface (or backsplash) above countertop.

- Allow 7-1/2" minimum required clearance from left edge of cooktop to nearest combustible wall and 7-1/2" minimum from right edge of cooktop to nearest combustible wall.
- Installation of drawer not recommended beneath cooktop.
- To reduce risk of fire when using overhead cabinetry, install range hood that projects horizontally a recommended minimum of 5" beyond bottom of cabinets.
- Electric Built-In Cooktop model FGIC3067M is approved to be used over any Frigidaire® Electric Single Wall Oven. (Refer to *Electric Cooktop Installation Over 30"/27" Electric Single Wall Oven Specifications page on web.*)
- Electric Built-In Cooktop model FGIC3067M is approved to be used in combination with Frigidaire® 30" Downdraft Vent E30DD75ESS or PL30DD50EC. (Refer to *model-specific Downdraft Vent product page on web for detailed countertop preparation specifications.*)

Note: For planning purposes only. Refer to Product Installation Guide on the web at frigidaire.com for detailed instructions.

Optional Accessories

- Granite Countertop Installation Kit - (PN # 903061-9010).

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FGIC3067M 06/11

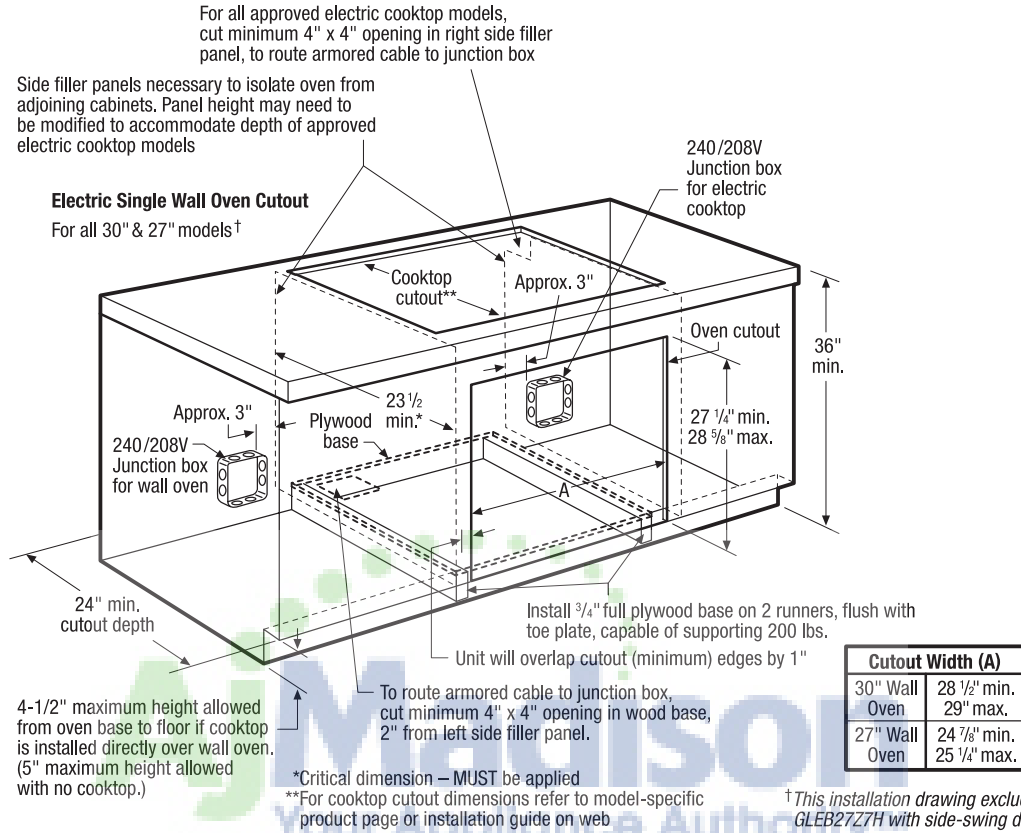
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Accessories information available on the web at frigidaire.com



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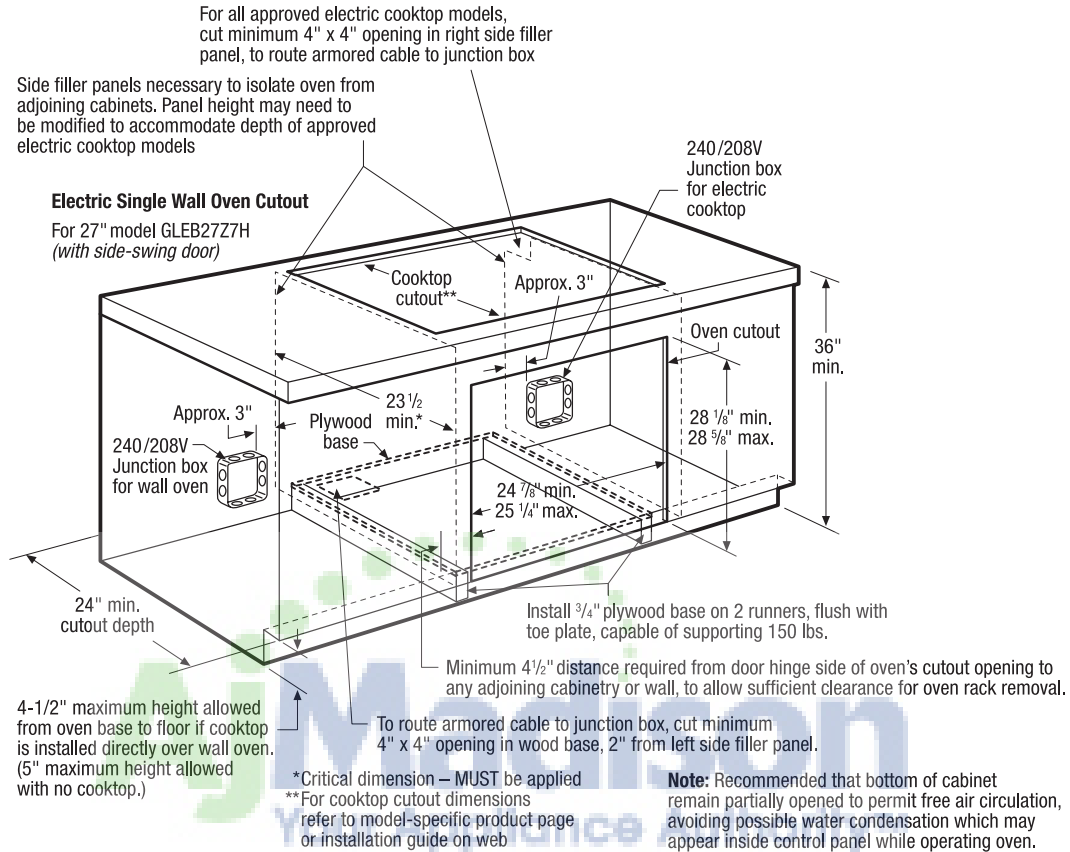
30"/27" Electric Single Wall Oven Under-Counter Installation Specifications

- Single phase 3- or 4-wire cable, 120/240 or 120/208 Volt, 60 Hertz AC only electrical supply with ground required on separate circuit fused on both sides of line.
- For detailed electrical requirements, refer to model-specific product page and installation guide on web.
- Always consult local and national electric codes.
- Minimum 21" clearance for oven door depth when open.
- Minimum 23-1/2" deep cutout dimension is critical for proper installation, to ensure that oven's faceplate will fit flush against cabinet front.
- Side filler panels necessary to isolate oven from adjoining cabinets.
- Full oven base of solid plywood or similar material required, capable of supporting 200 Lbs. (30" models) or 150 Lbs. (27" models). Install over two runners and flush with toe plate.
- Base must be level and cabinet front must be square.
- Allow 5" maximum height from oven base to floor, if NO cooktop is installed directly over wall oven.

Electric Cooktop Installation Over 30"/27" Electric Single Wall Oven Specifications

- All Frigidaire® Electric Single Wall Ovens are approved to be used beneath any approved Frigidaire® Electric Cooktop. (This installation page excludes approved wall oven model GLEB27Z7H. For model-specific installation details, refer to Electric Cooktop Installation Over 27" Electric Single Wall Oven GLEB27Z7H Specifications pages on web.)
- For detailed Electric Cooktop installation, refer to model-specific product page and installation guide on web.
- Side filler panel height may need to be modified to accommodate the depth of approved electric cooktop models.
 - To route armored cable to junction box, cut minimum 4" x 4" opening in right side filler panel.
 - Allow 4-1/2" maximum height from oven base to floor, if cooktop is installed directly over wall oven.

Note: For planning purposes only. Refer to Product Installation Guide on the web at frigidaire.com for detailed instructions.



800-570-3355

27" Electric Single Wall Oven (GLEB27Z7H) Under-Counter Installation Specifications

- Single phase 3- or 4-wire cable, 120/240 or 120/208 Volt, 60 Hertz AC only electrical supply with ground required on separate circuit fused on both sides of line.
- For detailed electrical requirements, refer to model-specific product page and installation guide on web.
- Always consult local and national electric codes.
- Minimum 27-1/4" clearance for oven door depth when open.
- Minimum 23-1/2" deep cutout dimension is critical for proper installation, to ensure that oven's faceplate will fit flush against cabinet front.
- Minimum 4-1/2" distance required from door hinge side of oven's cutout opening to any adjoining cabinetry or wall, to allow sufficient clearance for oven rack removal.
- Side filler panels necessary to isolate oven from adjoining cabinets.
- Oven base of solid plywood or similar material required, capable of supporting 150 Lbs. Install over two runners and flush with toe plate.
- Base must be level and cabinet front must be square.
- Recommended that bottom of cabinet remain partially opened to permit free air circulation, avoiding possible water condensation which may appear inside control panel while operating oven.
- Allow 5" maximum height from oven base to floor, if NO cooktop is installed directly over wall oven.

Electric Cooktop Installation Over 27" Electric Single Wall Oven (GLEB27Z7H) Specifications

- Frigidaire® Single Wall Oven model GLEB27Z7H is approved to be used beneath any approved Frigidaire® Electric Cooktop.
- For detailed Electric Cooktop installation, refer to model-specific product page and installation guide on web.
- Side filler panel height may need to be modified to accommodate the depth of approved electric cooktop models.
 - To route armored cable to junction box, cut minimum 4" x 4" opening in right side filler panel.
 - Allow 4-1/2" maximum height from oven base to floor, if cooktop is installed directly over wall oven.

Note: For planning purposes only. Refer to Product Installation Guide on the web at frigidaire.com for detailed instructions.



Dishwasher

FPHD2491K F

24" Built-In



Product Dimensions

Height (Adjustable)	34"–35"
Width	23-3/4"
Depth (Including Door)	25-3/8"

More Easy-To-Use Features

Real Stainless Steel

Real stainless steel with a protective coating that reduces fingerprints and smudges so it's easy to clean.

Largest Silverware Basket²

There's room for over 180 items in our largest, multicompartiment silverware basket.

Energy Saver Plus Cycle

Eco-friendly cycle uses less energy without compromising cleaning performance.

DishSense™ Technology

Sensors select the cycle for you based on your cleaning needs.

Pro-Select™ Controls

Easily select options with the touch of a button.

Professional/Solid Dish Racks

Adjustable Upper Dish Rack

Flexible racking system lets you adjust the top rack to fit taller items.

Stay-Put Door

The door stays put at whatever angle you open it.

Most Adaptable Delay Start

1- to 24-hour options.

Low-Rinse Aid Indicator

Signature Features



Best Drying Performance¹

Our PowerPlus™ dry cycle offers the best drying performance.



SpaceWise™ Organization System

Our SpaceWise™ Organization system features adjustable racks and the Largest Silverware Basket² so there's a place for virtually anything.



Stainless Steel Interior

Premium stainless steel interior for maximum durability.



PowerPlus™ Cycle

For an extra-heavy wash performance.

ENERGY STAR®
NSF® International
Certification



Available in:



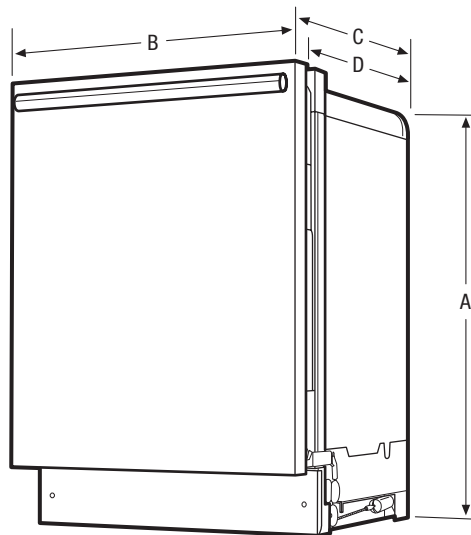
Stainless
(F)

¹Based on industry standard dryability testing using PowerPlus™ Dry.

²Among leading brands.

Features	
Control Design	Fully-Integrated Pro-Select™
Digital Display	Yes
Door Latch/Stay-Put Door Hinge Design	Yes/Yes
Low Rinse-Aid Indicator Light	Yes
Interior Design/Interior Color	Tall Tub/Stainless Steel
Wash System	Direct
Wash Levels/Wash Speeds	5/1
DishSense™ Technology	Yes
Sound Package	SilentDesign™
Filter/Filter Trap	S. Steel/Removable
Soft Food Disposer	Yes
dB Level	51
Drying System	PowerPlus™ Dry
Cycles	
Number of Cycles	6
Heavy	Yes
Normal	Yes
Light	Yes
Quick	
Favorite	
China Crystal	Yes
Rinse Only	Yes
Energy Saver Plus	Yes
Upper Rack Wash Only	
Cycle Indicator Light/Control Lock	No/Yes
Options	
Heat/No Heat Dry	Yes
Hi-Temp Wash	Yes
NSF® Certified Sanitize Rinse	Yes
Delay Start	1-24 Hour
Rack System	
Rack Design	Maximum
Rack Coating	Nylon TufRacks™
Upper Rack -	
Rack Handles	Yes
Stemware/Champagne Glass Holders	Yes
Fold-Down Tines	Yes
Cup Shelves	2
Utensil Tray	
Adjustable Rack Height	Yes
Lower Rack -	
SpaceWise™ Silverware Basket	3-Piece Split
Fold-Down Tines	2 Full Rows
Small Items Cover	3
Certifications	
ENERGY STAR®	Yes
NSF® International Certification	Yes
Specifications	
Water Inlet Location	Left Bottom Front
Water Usage (Gallons)	4.9 - 8.5
Water Pressure (PSI)	20 - 120
Integral Air Gap on Supply	Yes
Leveling Legs	4
Power Supply Connection Location	Right Bottom Front
Voltage Rating	120V / 60 Hz / 15A
Connected Load (kW Rating) @ 120 Volts ¹	1.44
Amps @ 120 Volts	10
Shipping Weight (Approx.)	90

¹ For use on adequately wired 120V, dedicated circuit having 2-wire service with a separate ground wire. Appliance must be grounded for safe operation.



NOTE: For planning purposes only. Always consult local and national electric and plumbing codes. Refer to Product Installation Guide for detailed installation instructions on the web at frigidaire.com.



Product Dimensions		Cutout Dimensions	
A - Height (Adjustable)	34" - 35"	Height (Min.)	34-1/4"
B - Width	23-3/4"	Height (Max.)	35-1/4"
C - Depth (Including Door)	25-3/8"	Width (Min.)	24"
D - Depth (To Tub Flange)	23"	Depth (Min.)	24"
Depth with Door Open 90°	50-3/8"		

Accessories information available on the web at frigidaire.com

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Dishwasher

Installation Instructions

Printed in U.S.A.
67500800908
08/09

INSTALLER: Leave *Installation Instructions* with owner.

OWNER: Read your dishwasher *Use and Care Manual*. It contains important safety information for operating this appliance. It also has many suggestions for getting the best results from your dishwasher.

Before You Begin

Read all instructions before installing dishwasher.

For your safety, please read and observe all safety instructions. This guide will help you anticipate drain, water, and electrical connections, and help you select the best location for the dishwasher.

WARNING

Tip Over Hazard

Do not use dishwasher until completely installed.

Do not push down on open door.

Failure to follow this warning can result in serious injury.

WARNING

Cut Hazard

To prevent serious injury from sharp edges, wear work gloves when handling, unpacking or disassembling unit.

Installation Tips

1

Tools and Materials Needed for Installation (Not Included)

- Drill, Electric
- Driver, Socket $\frac{5}{32}$ " , $\frac{1}{4}$ " , $\frac{5}{16}$ "
- Flaring Tool / Tube Cutter (for copper tubing)
- Flashlight
- Level
- Pipe Joint Compound (for iron pipe plumbing) or Pipe Thread Tape (for sealing threads)
- Pliers
- Safety Glasses
- Saw, Keyhole or $\frac{1}{2}$ " , $1\frac{1}{2}$ " to 2" Hole Cutters
- Screw Drivers, Slotted and #2 Phillips (magnetic tip preferred)
- Tape, Electrical or Duct
- Tape, Measuring
- Wire Stripper or Utility Knife
- Wrench, Hex-end
- Wrenches, 2 Adjustable (for copper tubing) or 2 Pipe wrenches (for iron pipe plumbing)

Parts You Will Need* (Not Included)

- Brass Elbow, 90° with a $\frac{3}{8}$ " National Pipe Thread
- Conduit Connector (UL Listed)
- Wire Nuts, three (3) for 12-14 gauge wire (UL Listed)

* If required:

- "Y" Branch Tailpiece and Connector Kit (See Step 4)
- Air Gap Kit (See Step 4)

All the parts can be found at local hardware, electrical and plumbing supply stores.

WARNING

Electric Shock Hazard

Disconnect electrical power at the fuse box or circuit breaker box before beginning installation. Failure to follow this warning could result in death or serious injury.

Installation Preparation

2

NOTE: Put unit on its back being careful not to pinch the Water Drain Hose.

1. Remove two (2) screws at front of the kickplate using a #2 Phillips screw driver.
2. Tilt and pull forward to remove see figure 1a.

NOTE: It is not necessary to remove the outer door for installation.

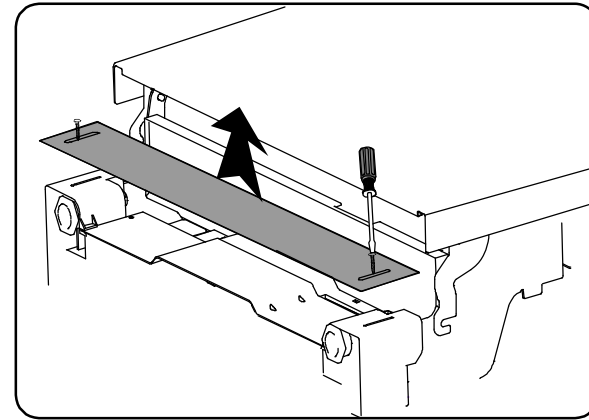


Figure 1a

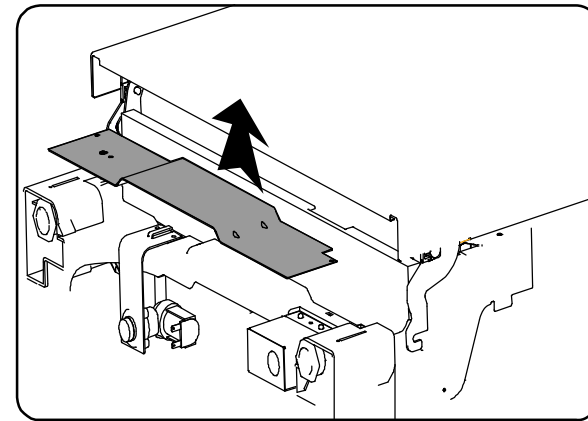


Figure 1b

3. Remove two (2) screws at front of the kickplate brace using a #2 Phillips screw driver. Slide up and pull off.
4. Locate water inlet valve behind kickplate on bottom left underside of unit. See Figure 4. The valve has a $\frac{3}{8}$ " NPT female fitting.
5. Wrap 90° elbow (not included) with pipe thread tape (or apply joint compound) and thread it into water inlet valve. When tightened, elbow should point toward the left. To prevent bending of bracket or breaking of valve, avoid overtightening. See Figure 4.

Cabinet Preparation:

As a precaution, it is recommended, but not required that the cabinets enclosing all sides of the dishwasher (including the underside of the countertop) be sealed with an oil based paint or moisture-proof polyurethane to prevent possible steam/moisture damage.

Roughing In

3

WARNING

Electric Shock Hazard

Observe all local codes and ordinances for electrical and plumbing connections. All electrical and plumbing work should be performed by qualified persons. Failure to follow this warning could result in death or serious injury.

1. Make sure your location has the correct drain, water, and electrical outlets to make the connections. Do not install unit under a cooktop range. Damage to tub or other components will occur.
2. Floor should be flat and free of any obstruction.

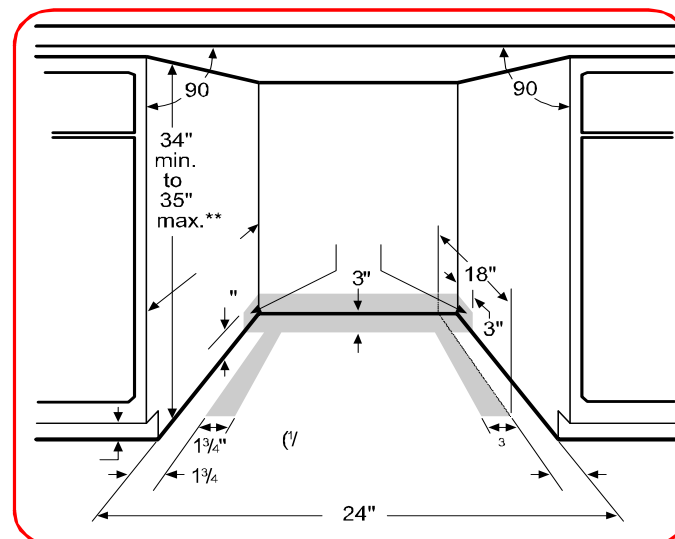
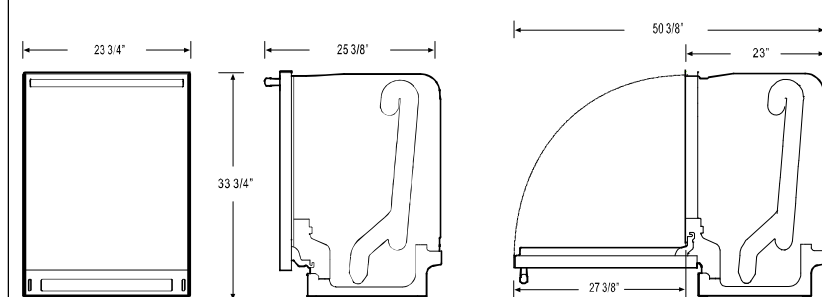


Figure 2



Front

Left

Right

Figure 3

*DIMENSIONS DO NOT INCLUDE INSULATION

IMPORTANT: For proper operation and appearance of unit, cabinet opening should have dimensions as shown in Figure 2. If unit is to be placed in a corner, there must be at least a 2-inch side clearance to open door.

IMPORTANT: Drain, water, and electrical lines should be roughed-in before going any further.

WARNING

Electric Shock Hazard

Electrical, water, and drain lines must be confined to shaded areas in Figure 2. Electric conductors, water, and drain could be damaged. Failure to follow these instructions could result in fire or electric shock.

NOTE: If dishwasher is installed at end of a cabinet, sides and back must be fully enclosed.

Connections For Electrical, Water, and Drain

4

Locating the Connections

1. Review dimensions in Figure 2 to locate dishwasher's drain, water, and electrical connections.
2. All utilities must be routed in shaded area in the Figure 2.

IMPORTANT: Disconnect power before starting installation.

Note: Locate the electrical supply and dishwasher's electrical

junction box on right underside of unit behind kickplate assembly. See Figure 4. Determine where you will connect to hot water supply. Review Figure 4 and note the location of water inlet valve. Determine where you will connect the drain hose.

3. Cut access holes for the Electrical, Water and Drain hoses in the shaded areas as shown in Figure 2.
4. The dishwasher operates on a 120 volt, 60 Hz electrical supply. Provide a separate circuit with a fuse or circuit breaker rated for at least 15 amps (20 amps if connected with disposer) but not more than 20 amps.
5. Pull electrical cable through hole into installation area.
6. Be sure water inlet valve is protected from freezing. If valve freezes and ruptures, flooding may occur.
7. Determine amount of tubing needed to connect hot water supply to the unit's water inlet valve. **Extra hose length is necessary.** High-pressure and high-temperature Stainless Flexible hose with a minimum inner diameter of $\frac{1}{4}$ " may be used. A shut-off valve installed **outside** dishwasher cabinet is best.
8. Route water supply line into installation area.
9. Stand dishwasher back upright for further installation.

IMPORTANT: Incoming hot water temperature should be at least 120°F (49°C). Water pressure should be between 20–90 psi.

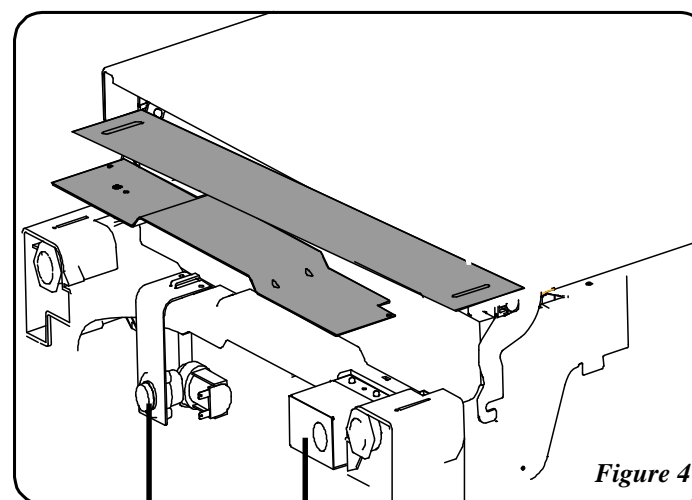


Figure 4

WATER LINE (NOT INCLUDED) ELECTRICAL BOX

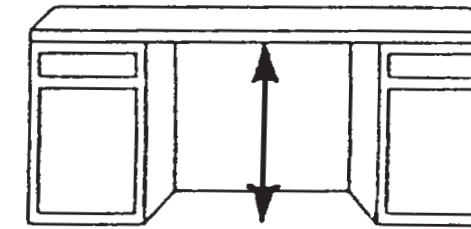
CAUTION

Property Damage

Do not use the furnished drain hose or a rubber garden hose for the water supply line. Either of these hoses can burst. Flooding may occur and cause property damage.

Leveling and Securing Dishwasher within Cabinets

5



1. Measure height of cabinet opening from underside of countertop to floor.
2. Move dishwasher to front of installation area.
3. Loosen the rear leveling legs by turning counterclockwise.

Dishwasher Anchoring

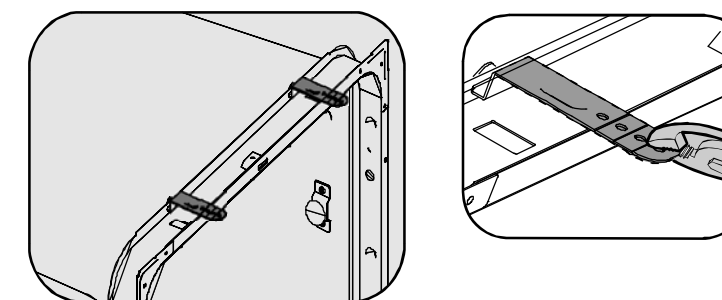
5. Choose one of the methods of attachment below to secure unit, holes need to be pre-drilled using a #5 drill bit regardless of the option chosen:
 - a. Top Mount Cabinet Clips (Preferred Method of attachment)
 - b. Side Mount Cabinet Clips (to be used when Side Mount is not an available option)

CAUTION: Use extreme care in mounting the dishwasher as to not scratch, bump or otherwise damage the console or tub.

To install using Top Mount Cabinet Clips:

Depending on the depth of cabinet, the Top Mount Clip have a break off point that can be removed if necessary.

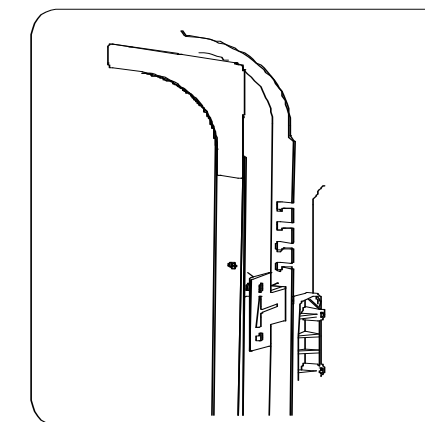
NOTE: Install Top Mount Clips before unit is installed into the cabinet. Insert the installation brackets to the front top slots of the dishwasher. (See image below)



To install the Side Mounting Clips.

Depending on space allowed in cabinet the Side Mounting Clips can be installed with the holes for the screw up (preferred method) or down as shown in the illustrations below.

NOTE: Install Side Mount Brackets before unit is installed into the cabinet. Insert the installation brackets to the side slots of the dishwasher. (See image below)



6. If levelers need to be removed, make sure that the floor is free of all obstructions.

7. Carefully place dishwasher inside cabinet area such that is centered in opening. Use caution when moving dishwasher to prevent damage to cabinet, dishwasher and floor.

8. Front of door needs to be even with the front of adjoining cabinets. Front levelers should allow $\frac{5}{16}$ " below underside of countertop to top of console.

9. Check that dishwasher is level from side to side by placing a level against the top front section of the tub. See Figure 5a.

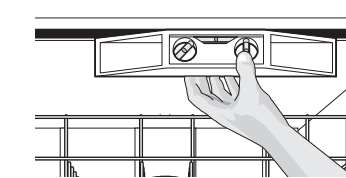


Figure 5a

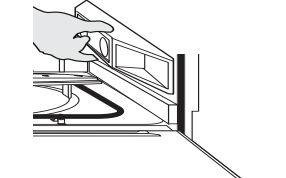


Figure 5b

10. Check that the dishwasher is level from front to back by taking out the lower rack, place level on the lower rack wheel support at the bottom of the tub. See Figure 5b.

11. Adjust levelers up or down until dishwasher is level.

Holes need to be pre-drilled using a #5 drill to secure unit.

12. Screw mounting brackets firmly to cabinet using screws provided in literature packet. See Image Below.

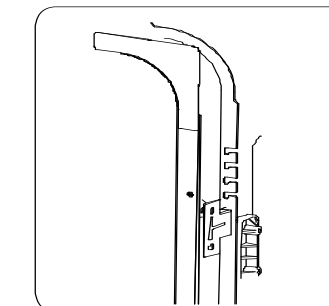


Figure 5c

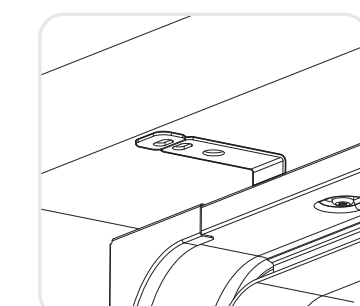
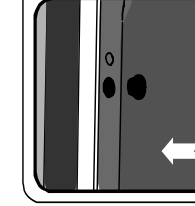
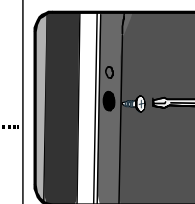
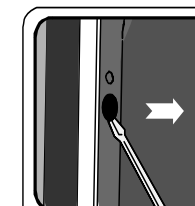
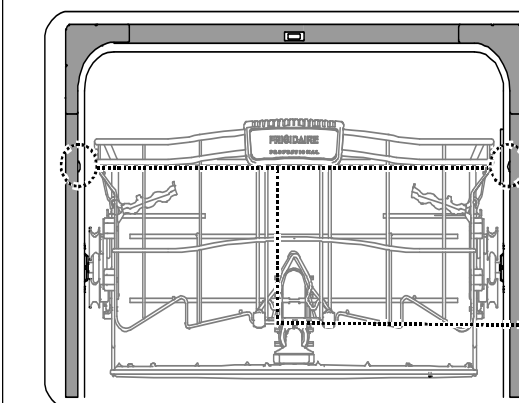


Figure 5d

13. Open the door remove the tub cap on both sides of the tub. Install screw through the dishwasher side hole to the wall of cabinet. Reinstall tub cap.



14. Open and close dishwasher door slowly. Ensure that there is clearance to the console. Adjust accordingly until door opens and closes freely.

Finishing the Water and Electrical Connection 6

CAUTION

Property Damage

Do not solder within 6" of the water inlet valve. Damage to the plastic parts in the valve may occur.

Use care that no sealer, dirt, or other objects enter the valve. Damage to the filter screen may occur.

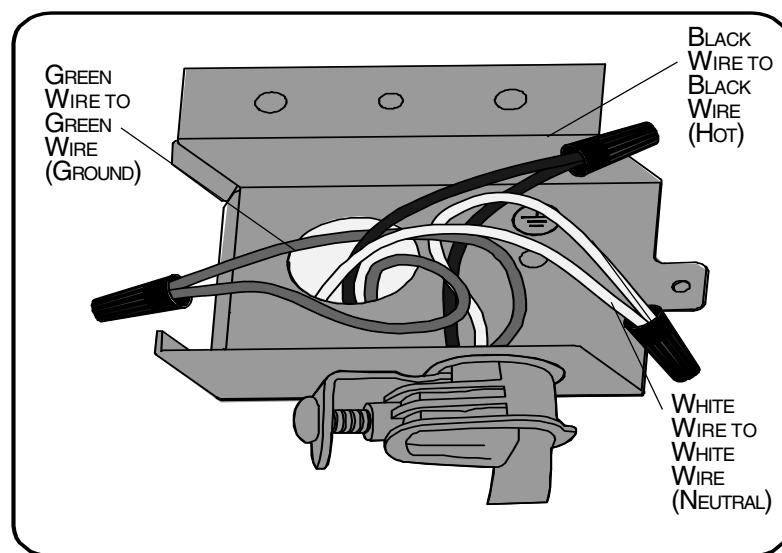
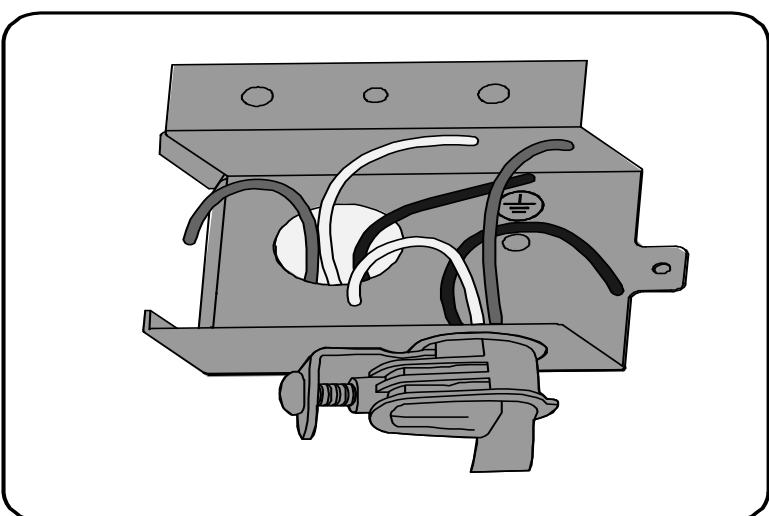
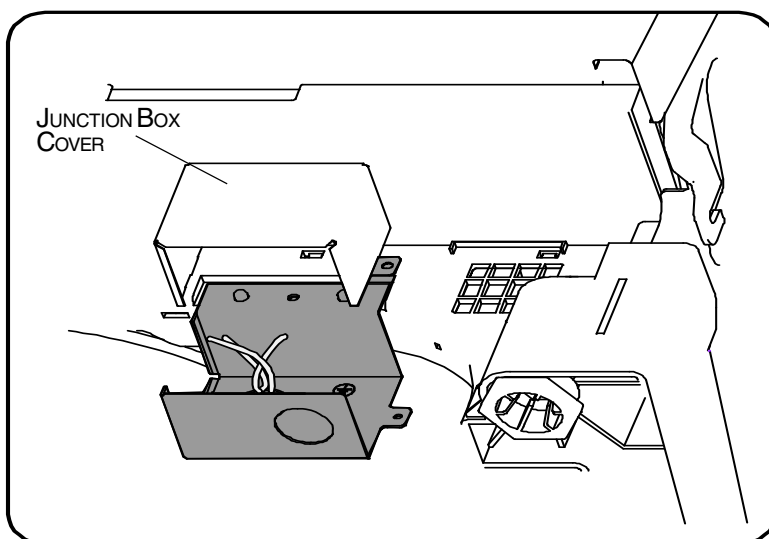
Be sure the dishwasher is placed where the water inlet valve will be kept from freezing. If the valve freezes, it may rupture and flooding may occur.

Water Line

1. Flush water line before connecting it to water inlet valve to prevent early clogging of filter screen. Place a bunched towel over end of line to prevent splashing. Open water supply valve for a few seconds and let water drain into a pan. **Turn off water supply at shut-off valve.**
2. Route water line to water inlet valve as shown in **Figure 4**.
3. While firmly pulling water supply line into 90° elbow, tightly connect water supply to water inlet valve. Supply line must be free of kinks, scales, chips, and lubricants.
4. Turn on water supply and check for leaks.

Electrical Supply

1. Remove junction box cover and pull house wiring into junction box. **See Figures Below.**
2. Use a UL listed conduit connector (not included) at box to stabilize wiring.
3. Connect incoming black lead to dishwasher's black lead, incoming white lead to dishwasher's white lead and incoming green lead to dishwasher's green lead with wire nuts. (See Grounding Instruction Warning). Wire nuts must be tight.



Figures 6a

4. Replace junction box cover.

check these items:

- Water and electrical lines are hooked up to dishwasher.
- All four leg levelers are positioned properly.
- Cabinet Seals are positioned on the sides and top of the dishwasher.
- Cabinet Attachment Clips are attached to the cabinet or countertop and kickplate brace.
- Replace Toe and Kickplate. **Note: When replacing Kickplate and kickplate brace hand tighten screws.**

WARNING



Electric Shock Hazard

Grounding Instructions:

The dishwasher must be connected to a grounded metal, permanent wiring system or an equipment-grounding conductor must be run with the circuit conductors and connected to the appliance's equipment grounding terminal or lead. It is the consumer's responsibility to contact a qualified installer to make sure the electrical installation conforms with the National Electrical Code and local codes and ordinances.

Do not connect the dishwasher to the power supply until the appliance is permanently grounded.

All wiring connections must be enclosed in the junction box. This unit has copper lead wires.

Joining aluminum building wire to stranded copper wire should be done by a qualified electrician using materials recognized by UL and local codes.

Do not use an extension cord. Such use can result in fire, electrical shock, or other personal injury.

Failure to follow these instructions could result in death or serious injury.

Finishing the Drain Connection 7

1. Review **Figures 7, 8 and 9** to see the different ways to connect dishwasher to drain system. Choose method that best suits your need.

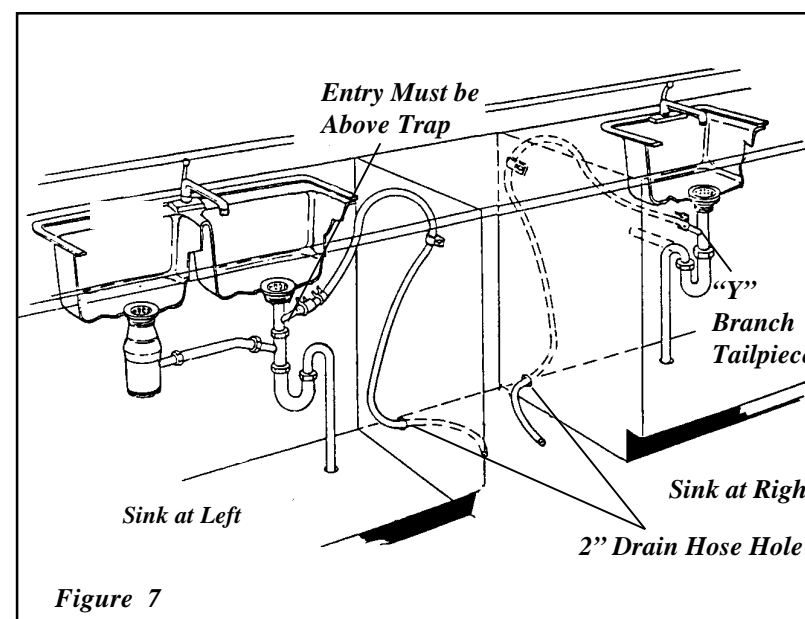


Figure 7

The drain hose loop must be at least 32" high from the floor to insure proper drainage.

2. If you connect to a sink drain, entry will need to be above trap. A "Y" branch tailpiece and connector kit, not included, will make this method easier and includes all needed fittings and instructions. **See Figure 7.**

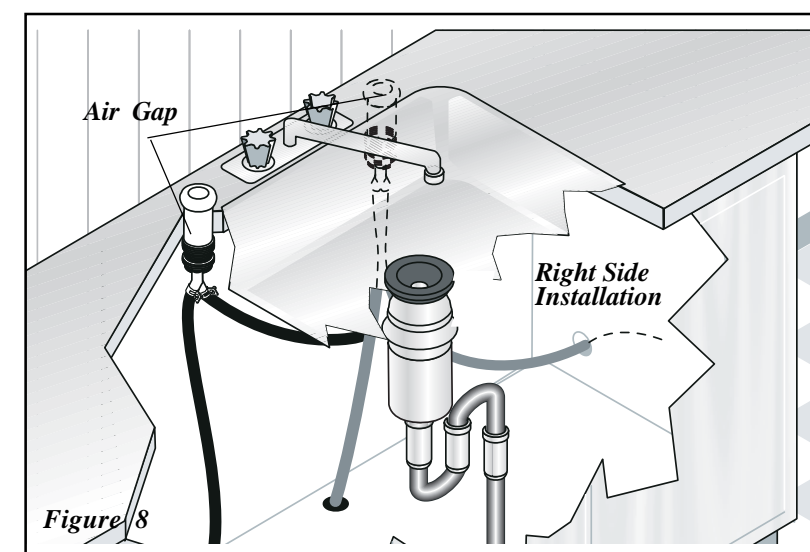


Figure 8

3. If you connect to a sink trap, local codes may require you to install an air gap kit, (not included). The drain hose will be routed from dishwasher to air gap inlet as shown in **Figure 8**. An air gap kit is available from a plumbing supply store. (If the drain hose is installed through the floor, an air gap is necessary).
4. If you connect to a disposer, the large end of drain hose will fit. **Figure 9(a). The knock out plug must be removed from inside disposer inlet before making the final fit to drain hose.** See **Figure 9(b).**

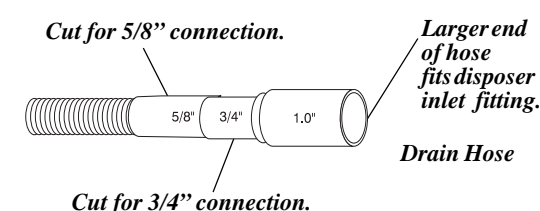


Figure 9(a)

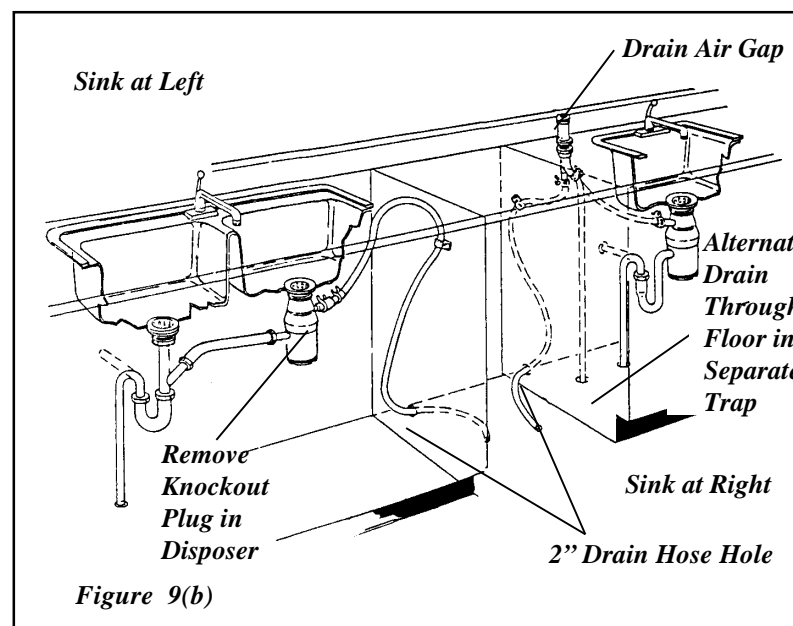


Figure 9(b)

The drain hose loop must be at least 32" high from the floor to insure proper drainage.

5. If the cabinet wall is wood, sand edges of hole until smooth and rounded. If cabinet wall is metal, cover all sharp edges with electrical or duct tape to avoid cutting drain hose.
6. Move unit back in place while routing drain hose through access hole. Use caution to prevent damage to the dishwasher, floor and cabinets. **IMPORTANT: Make sure there are no sharp bends or kinks that might restrict drain flow.**
7. Secure drain hose to sink drain, disposer, or separate trap with a clamp. **IMPORTANT: Be careful not to overtighten clamp or you may damage end of hose.** Do not connect hose to horizontal pipe between sink drain and disposer.
8. Be sure unit does not rest on drain hose. It should be free of electrical components and door springs. Do not cut corrugated drain hose. Pull excess through cabinet and place under sink. Make sure hose does not come in contact with any sharp edges.

WARNING



Electric Shock Hazard
Disconnect electrical power at the fuse box or circuit breaker box before beginning installation.
Failure to follow this warning could result in death or serious injury.

CAUTION



Cut Hazard
Metal color panels are sharp and should be handled with care. Wear gloves to protect hands.
Failure to follow this warning may result in injury.

WARNING



Electric Shock Hazard
If all connections are correct, there are no leaks, and unit runs properly, replace the kickplate assembly before placing unit into operation.
Failure to follow this warning could result in electric shock.

check these items:

- Water and drain lines have no kinks and move freely behind the dishwasher.
- Water supply is turned on.
- Joints are free of leaks.
- Wiring connections to junction box are tight all access panels are secured back in place.
- Replace kickplate and kickplate brace. (See **Figure 1**)
- Drain hose is assembled to Drain Hose Connector.
- All packing materials and consumer literature have been removed from inside unit.
- Dishwasher is level and securely fastened.
- Open and close door to make sure it does not hit surrounding cabinet or countertop.
- Make sure that all tape is removed from the Silverware Baskets.

Checking the Installation 8

Operate the machine through at least one fill and pump-out, checking the following items:

- At first fill, approximately 1 minute make sure water completely covers filter surface.
- At pump-out: (pump-out is either when the cycle is completed or canceled. refer to the Use and Care Manual for Start/Cancel), make sure all water is pumped out.
- Check water connections again for leaks.

FRIGIDAIRE

affinity



Front Load Dryers

FA5E7073L R/N/A/W

10 Dry Cycles
7.0 Cu. Ft. Electric



Optional SpaceWise™ Pedestal Drawer Shown

Signature Features



Ready Steam™

Removes wrinkles and refreshes clothes.



Ultra-Capacity Dryer

The largest in its class¹, so you can finish more laundry, even faster.



DrySense™ Technology

Dries your clothes more precisely, reducing wrinkles.



Specialty Cycles

Dry everything from teddy bears to pet beds and active wear.

Product Dimensions

Height	36"
Width	27"
Depth	30-5/16"

More Easy To Use Features

Specialty Options

Dry special items, prevent static and reduce allergens.

Energy Saver Option

Reduces energy use up to 35%.²

Useful Dryer Options

Anti-Static, Line Dry, Delay Start and Wrinkle Release Technology.

Allergen Cycle

SilentDesign™ Ultra

for quiet operation.

Moisture Sensor

Optional SpaceWise™ Pedestal Drawer

Express-Select™ Controls

Easily select options with the touch of a button.

Delay Start 1 to 12 Hours

Sanitize Option

Sanitize without washing.

Triple Element Heat

Reversible Door



NSF® International Certification

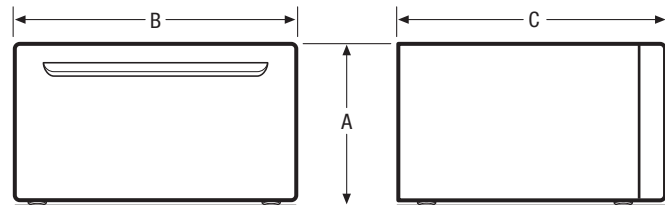
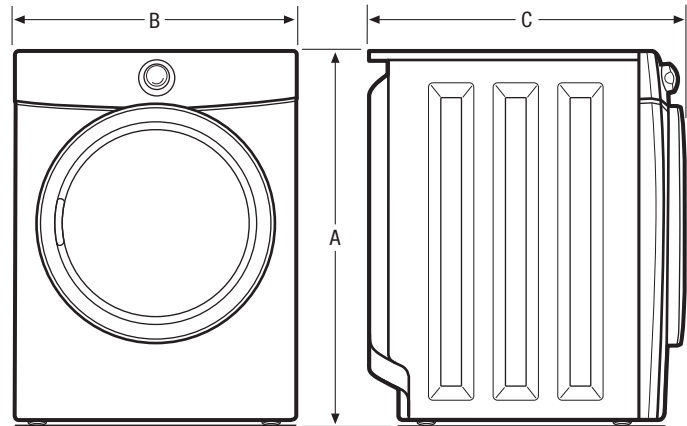
Available in:



¹Based on I.E.C. std. 60456 4th Edition for dryers 37" or less in height and 27" or less in width.

²Based on a 3 lb. delicate AHAM load as compared to not using energy saver option for the same model.

Features	
Total Capacity (Cu.Ft.)	7.0
Controls	Express-Select™
Dryer Drum Interior	Stainless Steel
Interior Light	Yes
Door Trim	Chrome
Ready Steam™	Yes
DrySense™ Technology	Yes
Wrinkle Release Technology	
TimeWise™ Technology	Yes
Moisture Sensor	Yes
Time Remaining Indicator	Yes
Cycle Status Lights	Yes
Cycle Signal	Music
Cycle Signal "On/Off"	
Cycle Signal Volume Control	Yes
Control Lock	Yes
Start/Pause/Cancel Buttons	Yes
Energy Saver Option	Yes
Delay Start	1 to 12 Hours
Tumble Speed (RPM)	50
Reversible Door	Yes
Lint Screen	Yes
Sound Package	SilentDesign™ Ultra
Adjustable Leveling Legs	Yes
Cycles	
Dry Cycles	13
Specialty Cycles	4
Options	
Temperature Selections	5
Dryness Level Selections	5
Timed Dry	15, 30, 45, 90
Optional Accessories	
Dryer Stacking Kit	PN# STACKIT4X
15" Frigidaire Affinity® Pedestal Drawers	
Classic Red (R)	(R) PN# CFPWD15R
Classic Blue (N)	(N) PN# CFPWD15N
Classic Silver (A)	(A) PN# CFPWD15A
Classic Black (B)	
Classic White (W)	(W) PN# CFPWD15W
Mobile Home Installation Kit	PN# 137067200
Drying Rack	PN# 137067300
Certifications	
NSF® Certified Sanitize	Yes
Specifications	
Power Supply Connection Location	Right Bottom Rear
Voltage Rating	240V/60Hz/30A
Connected Load (kW Rating) @ 240 Volts	5.0
Amps @ 240 Volts	24
Heating Element @ 240 Volts (Watts)	5,500
Shipping Weight (Approx.)	140 Lbs.



NOTE: For planning purposes only. Always consult local and national electric and plumbing codes. Refer to Product Installation Guide for detailed installation instructions on the web at frigidaire.com.



Product Dimensions	
A - Height (Single)	36"
Height (Stacked)	71-1/2"
B - Width	27"
C - Depth	30-5/16"
Depth with Door Open 90°	51-7/16"
Pedestal Dimensions	
A - Height	15-1/4"
B - Width	27"
C - Depth	26-1/4"

Accessories information available on the web at frigidaire.com

All about the

Installation

of your Dryer



TABLE OF CONTENTS

Important Safety Instructions.....	2-3	Reversing Door	18-21
Installation Requirements	4-10	Accessories	22
Installed Dryer Dimensions	11	Español	23
Installation Instructions	12-17		

IMPORTANT SAFETY INSTRUCTIONS

WARNING

For your safety the information in this manual must be followed to minimize the risk of fire or explosion or to prevent property damage, personal injury or loss of life. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WARNING - RISK OF FIRE

Read all of the following instructions before installing and using this appliance:

- Destroy the carton and plastic bags after the dryer is unpacked. Children might use them for play. Cartons covered with rugs, bedspreads, or plastic sheets can become airtight chambers causing suffocation. Place all materials in a garbage container or make materials inaccessible to children.
- Clothes dryer installation and service must be performed by a qualified installer, service agency or the gas supplier.
- Install the clothes dryer according to the manufacturer's instructions and local codes.
- The electrical service to the dryer must conform with local codes and ordinances and the latest edition of the National Electrical Code, ANSI/NFPA 70, or in Canada, the Canadian electrical code C22.1 part 1.
- The gas service to the dryer must conform with local codes and ordinances and the latest edition of the National Fuel Gas Code ANSI Z223.1, or in Canada, CAN/ACG B149.1-2000.
- The dryer is designed under ANSI Z 21.5.1 or ANSI/UL 2158 - CAN/CSA C22.2 No. 112 (latest editions) for HOME USE only. This dryer is not recommended for commercial applications such as restaurants, beauty salons, etc.
- Do not install a clothes dryer with flexible plastic venting material. Flexible venting materials are known to collapse, be easily crushed and trap lint. These conditions will obstruct clothes dryer airflow and increase the risk of fire.
- Do not stack a dryer on top of washer already installed on pedestal. Do not stack dryer on top of another dryer. Do not stack washer on top of another washer.
- The instructions in this manual and all other literature included with this dryer are not meant to cover every possible condition and situation that may occur. Good safe practice and caution MUST be applied when installing, operating and maintaining any appliance.

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Clear the room, building or area of all occupants.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

Save these instructions for future reference.

Pre-Installation Requirements

Tools and materials needed for installation:

- | | | |
|--|--|--|
| • Adjustable pliers | • Carpenter's level | • Gas line shutoff valve (gas dryer) |
| • Phillips, straight, & square bit screwdrivers | • External vent hood | • ½ NPT union flare adapters (x2) and flexible gas supply line (gas dryer) |
| • Adjustable wrench | • 4-inch (102 mm), rigid metal or semi-rigid metal exhaust duct work | • Metal foil tape (not duct tape) |
| • Pipe wrench for gas supply (gas dryer) | • 3-wire or 4-wire 240 volt cord kit (electric dryer) | |
| • LP-resistant thread tape (for natural gas or LP supply, gas dryer) | • 4 in. (10.2 cm) clamp | |

IMPORTANT SAFETY INSTRUCTIONS


WARNING

Please read all instructions before using this dryer.

Recognize safety symbols, words and labels

Safety items throughout this manual are labeled with a WARNING or CAUTION based on the risk type as described below:

Definitions

 This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

IMPORTANT

IMPORTANT indicates installation, operation or maintenance information which is important but not hazard-related.

Installation Checklist

Exhaust Venting

- Free-flowing, clear of lint buildup
- 4 inch (102 mm) rigid or semi-rigid ducting of minimal length and turns
- NO foil or plastic venting material
- Approved vent hood exhausted to outdoors

Leveling

- Dryer is level, side-to-side and front-to-back
- Cabinet is setting solid on all corners

Gas Supply (Gas Dryer)

- Manual shutoff valve present in supply
- All connections sealed with approved sealer and wrench tight
- Conversion kit for LP system
- Gas supply turned on
- No leaks present at all connections - check with soapy water, NEVER check with flame

240v Electric Supply (Electric Dryer)

- Approved NEMA 10-30R or 14-30R service cord with all screws tight on terminal block
- Approved strain relief installed
- Terminal access cover installed before initial operation

Door Reversal

- Follow detailed instructions in this guide
- Test hinge and latch for function

Electrical Power

- House power turned on
- Dryer plugged in

Final Checks

- Installation Instructions*** and ***Use and Care Guide*** read thoroughly
- Door latches and drum tumbles when cycle starts
- Registration card sent in

INSTALLATION REQUIREMENTS

NOTE

Because of potentially inconsistent voltage capabilities, the use of this dryer with power created by gas powered generators, solar powered generators, wind powered generators or any other generator other than the local utility company is not recommended.

Electrical requirements for electric dryer

CIRCUIT - Individual 30 amp. branch circuit fused with 30 amp. time delay fuses or circuit breakers. Use separately fused circuits for washer and dryer. DO NOT operate a washer and a dryer on the same circuit.

POWER SUPPLY - 3-wire or 4-wire, 240 volt, single phase, 60 Hz, Alternating Current.

IMPORTANT

This dryer is internally grounded to neutral unless it was manufactured for sale in Canada.

Only a 4-conductor cord shall be used when the appliance is installed in a location where grounding through the neutral conductor is prohibited. Grounding through the neutral link is prohibited for: (1) new branch circuit installations, (2) mobile homes, (3) recreational vehicles, and (4) areas where local codes do not permit grounding through the neutral.

OUTLET RECEPTACLE - NEMA 10-30R or NEMA 14-30R receptacle to be located so the power supply cord is accessible when the dryer is in the installed position.

GROUNDING CONNECTION - See "Grounding requirements" in Electrical Installation section.

3-WIRE POWER SUPPLY CORD KIT (not supplied)



3-wire receptacle
(NEMA type 10-30R)

The dryer **MUST** employ a 3-conductor power supply cord NEMA 10-30 type SRDT rated at 240 volt AC minimum, 30 amp, with 3 open end spade lug connectors with upturned ends or closed loop connectors and marked for use with clothes dryers. For 3-wire cord connection instructions see **ELECTRICAL CONNECTIONS FOR A 3-WIRE SYSTEM**.

4-WIRE POWER SUPPLY CORD KIT (not supplied)



4-wire receptacle
(NEMA type 14-30R)

The dryer **MUST** employ a 4-conductor power supply cord NEMA 14-30 type SRDT or ST (as required) rated at 240 volt AC minimum, 30 amp, with 4 open end spade lug connectors with upturned ends or closed loop connectors and marked for use with clothes dryers. For 4-wire cord connection instructions see **ELECTRICAL CONNECTIONS FOR A 4-WIRE SYSTEM**.

NOTE

Dryers manufactured for sale in Canada have factory-installed, 4-wire power supply cord (NEMA 14-30R).

INSTALLATION REQUIREMENTS

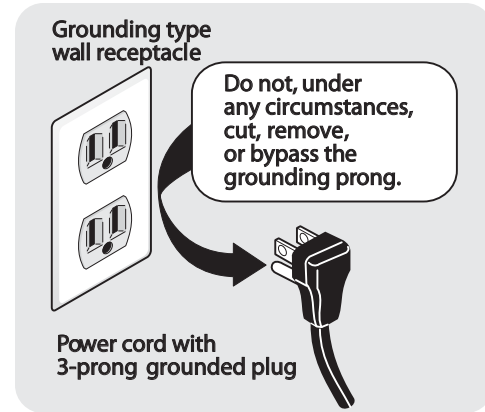
Electrical requirements for gas dryer

CIRCUIT - Individual, properly polarized and grounded 15 amp. branch circuit fused with 15 amp. time delay fuse or circuit breaker.

POWER SUPPLY - 2-wire, with ground, 120 volt, single phase, 60 Hz, Alternating Current.

POWER SUPPLY CORD - The dryer is equipped with a 120 volt 3-wire power cord.

GROUNDING CONNECTION - See "Grounding requirements" in Electrical Installation section.



Gas supply requirements

WARNING

EXPLOSION HAZARD

Uncoated copper tubing will corrode when subjected to natural gas, causing gas leaks. Use **ONLY** black iron, stainless steel, or plastic-coated brass piping for gas supply.

- 1 Installation **MUST** conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1 (latest edition).
- 2 The gas supply line should be 1/2 inch (1.27 cm) pipe.
- 3 If codes allow, flexible metal tubing may be used to connect your dryer to the gas supply line. The tubing **MUST** be constructed of stainless steel or plastic-coated brass.

- 4 The gas supply line **MUST** have an individual shutoff valve.
- 5 A 1/8 inch (0.32 cm) N.P.T. plugged tapping, accessible for test gauge connection, **MUST** be installed immediately upstream of the gas supply connection to the dryer.
- 6 The dryer **MUST** be disconnected from the gas supply piping system during any pressure testing of the gas supply piping system at test pressures in excess of 1/2 psig (3.45 kPa).
- 7 The dryer **MUST** be isolated from the gas supply piping system during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.45 kPa).
- 8 Connections for the gas supply must comply with the Standard for Connectors for Gas Appliances, ANSI Z21.24.

INSTALLATION REQUIREMENTS

Exhaust system requirements

Use only 4 inch (102 mm) diameter rigid or flexible metal duct and approved vent hood which has a swing-out damper(s) that open when the dryer is in operation. When the dryer stops, the dampers automatically close to prevent drafts and the entrance of insects and rodents. To avoid restricting the outlet, maintain a minimum of 12 inches (30.5 cm) clearance between the vent hood and the ground or any other obstruction.

WARNING

FIRE HAZARD

Failure to follow these instructions can create excessive drying times and fire hazards.

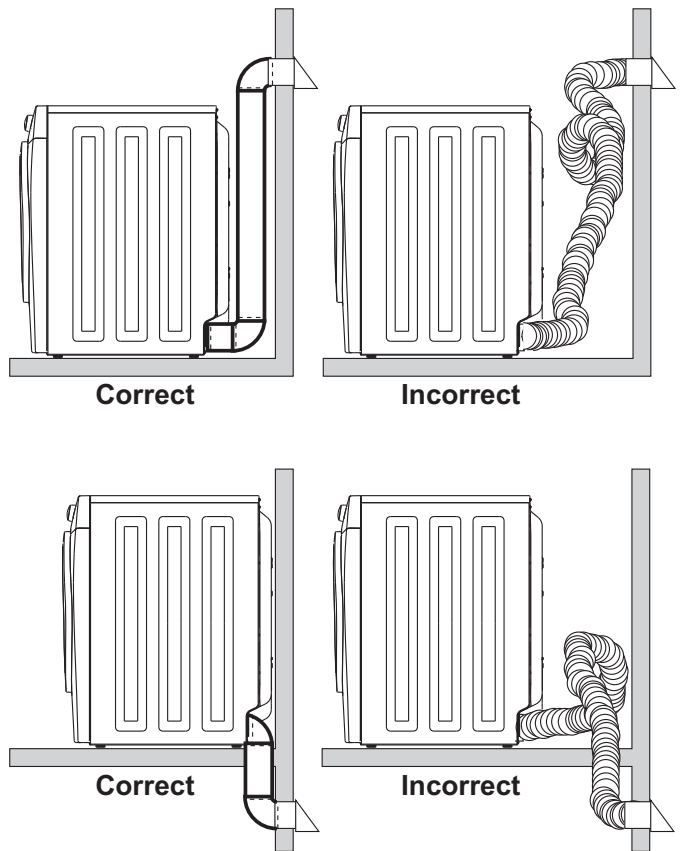
The following are specific requirements for proper and safe operation of your dryer.

WARNING

FIRE HAZARD

Do not install a clothes dryer with flexible plastic or metal foil venting materials. Flexible venting materials are known to collapse, be easily crushed and trap lint. These conditions will obstruct clothes dryer airflow and increase the risk of fire.

If your present system is made up of plastic duct or metal foil duct, replace it with a rigid or semi-rigid metal duct. Also, ensure the present duct is free of any lint prior to installing dryer duct.



INSTALLATION REQUIREMENTS

Exhaust system requirements, continued

WARNING

FIRE HAZARD

A clothes dryer must be exhausted outdoors. Do not exhaust dryer into a chimney, a wall, a ceiling, an attic, a crawl space or any concealed space of a building. A clothes dryer produces combustible lint. If the dryer is not exhausted outdoors, some fine lint will be expelled into the laundry area. An accumulation of lint in any area of the home can create a health and fire hazard.

The dryer must be connected to an exhaust outdoors. Regularly inspect the outdoor exhaust opening and remove any accumulation of lint around the outdoor exhaust opening and in the surrounding area.

WARNING

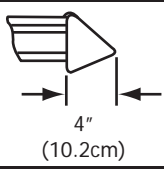
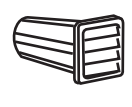
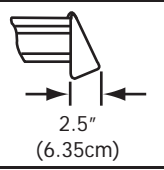
FIRE HAZARD

- Do not allow combustible materials (for example: clothing, draperies/curtains, paper) to come in contact with exhaust system. The dryer **MUST NOT** be exhausted into a chimney, a wall, a ceiling, or any concealed space of a building which can accumulate lint, resulting in a fire hazard.
- Do not screen the exhaust ends of the vent system, or use any screws, rivets or other fasteners that extend into the duct to assemble the exhaust system. Lint can become caught in the screen, on the screws or rivets, clogging the duct work and creating a fire hazard as well as increasing drying times. Use an approved vent hood to terminate the duct outdoors, and seal all joints with metal foil duct tape. All male duct pipe fittings **MUST** be installed downstream with the flow of air.

WARNING

FIRE HAZARD

Exceeding the length of duct pipe or number of elbows allowed in the "MAXIMUM LENGTH" charts can cause an accumulation of lint in the exhaust system. Plugging the system could create a fire hazard, as well as increase drying times.

Number of 90° turns	MAXIMUM LENGTH of 4" (102mm) Rigid Metal Duct	
	VENT HOOD TYPE	
	(Preferred)	
	 4" (10.2cm)	 louvered
	 2.5" (6.35cm)	
0	64 ft. (19.5 m)	48 ft. (14.6 m)
1	52 ft. (15.9 m)	40 ft. (12.2 m)
2	44 ft. (13.5 m)	32 ft. (9.8 m)
3	32 ft. (9.8 m)	24 ft. (7.3 m)
4	28 ft. (9.5 m)	16 ft. (4.9 m)

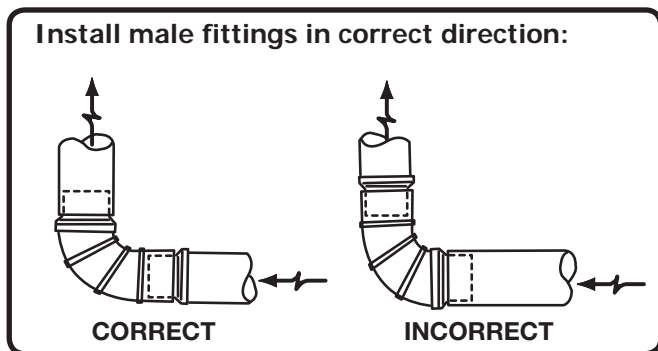
WARNING

FIRE HAZARD

- Do not install flexible plastic or flexible foil venting material.
- If installing semi-rigid venting, do not exceed 8 ft. (2.4 m) duct length.

INSTALLATION REQUIREMENTS

Exhaust system requirements, continued



In installations where the exhaust system is not described in the charts, the following method must be used to determine if the exhaust system is acceptable:

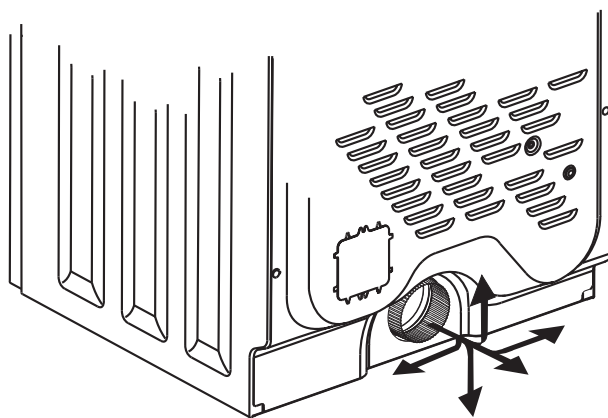
- 1 Connect an inclined or digital manometer between the dryer and the point the exhaust connects to the dryer.
- 2 Set the dryer timer and temperature to air fluff (cool down) and start the dryer.
- 3 Read the measurement on the manometer.
- 4 The system back pressure **MUST NOT** be higher than 0.75 inches of water column. If the system back pressure is less than 0.75 inches of water column, the system is acceptable. If the manometer reading is higher than .075 inches of water column, the system is too restrictive and the installation is unacceptable.

Although vertical orientation of the exhaust system is acceptable, certain extenuating circumstances could affect the performance of the dryer:

- Only the rigid metal duct work should be used.
- Venting vertically through a roof may expose the exhaust system to down drafts causing an increase in vent restriction.
- Running the exhaust system through an uninsulated area may cause condensation and faster accumulation of lint.
- Compression or crimping of the exhaust system will cause an increase in vent restriction.
- The exhaust system should be inspected and cleaned a minimum of every 18 months with normal usage. The more the dryer is used, the more often you should check the exhaust system and vent hood for proper operation.

Exhaust direction

Directional exhausting can be accomplished by installing a quick-turn 90° dryer vent elbow directly to exhaust outlet of dryer. Dryer vent elbows are available through your local parts distributor or hardware store.



See also CLEARANCE REQUIREMENTS on the next page.

NOTE

Use of 90° quick-turn elbow required to meet minimum installation depth of free-standing dryer:

- Straight back venting allows for 0" (0 cm) installation.
- Venting right with 90° elbow allows for 0.75" (2 cm) installation.
- Venting downward with 90° elbow allows for 0.75" (2 cm) installation.
- Venting left with short, straight adapter and 90° elbow allows for 3.75" (9.5 cm) installation.
- Venting upward with short, straight adapter and 90° elbow allows for 4" (10.5 cm) installation.

INSTALLATION REQUIREMENTS

Manufactured or mobile home installation

- 1 Installation MUST conform to current Manufactured Home Construction & Safety Standard, Title 24 CFR, Part 32-80 (formerly the Federal Standard for Mobile Home Construction and Safety, Title 24, HUD Part 280) or Standard CAN/CSAZ240 MH.
- 2 Dryer MUST be exhausted outside (outdoors, not beneath the mobile home) using metal ducting that will not support combustion. Metal ducting must be 4 inches (10.16 cm) in diameter with no obstructions. Rigid metal duct is preferred.
- 3 If dryer is exhausted through the floor and area beneath the mobile home is enclosed, the exhaust system MUST terminate outside the enclosure with the termination securely fastened to the mobile home structure.
- 4 Refer to previous sections in this guide for other important exhaust venting system requirements.
- 5 When installing a gas dryer into a mobile home, a provision must be made for outside make up air. This provision is to be not less than twice the area of the dryer exhaust outlet.
- 6 Installer MUST anchor this (1) dryer or (2) dryer mounted on pedestal to the floor with approved Mobile Home Installation Kit - P/N 137067200.

Clearance requirements



WARNING

EXPLOSION HAZARD

Do not install the dryer where gasoline or other flammables are kept or stored. If the dryer is installed in a garage, it must be a minimum of 18 inches (45.7 cm) above the floor. Failure to do so can result in death, explosion, fire or burns.



IMPORTANT

DO NOT INSTALL YOUR DRYER:

- 1 In an area exposed to dripping water or outside weather conditions.
- 2 In an area where it will come in contact with curtains, drapes, or anything that will obstruct the flow of combustion and ventilation air.
- 3 On carpet. Floor MUST be solid with a maximum slope of 1 inch (2.54 cm).

INSTALLATION REQUIREMENTS

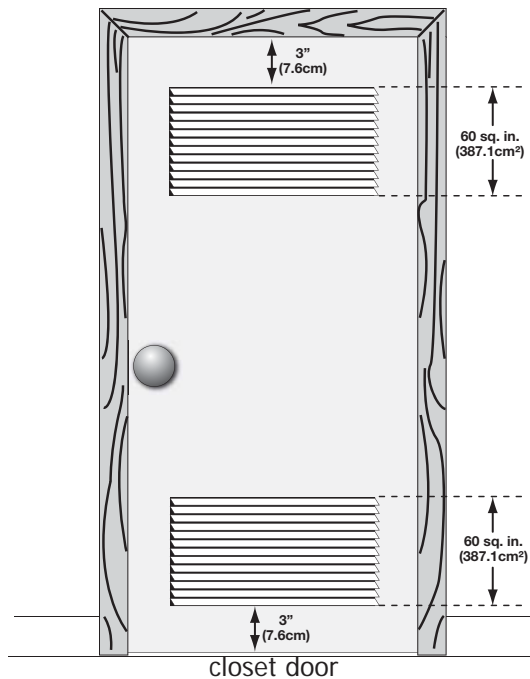
Clearance requirements, continued

Installation in a Recess or Closet

- 1 A dryer installed in a bedroom, bathroom, recess or closet, **MUST** be exhausted outdoors.
- 2 No other fuel burning appliance shall be installed in the same closet as the gas dryer.
- 3 Your dryer needs the space around it for proper ventilation.

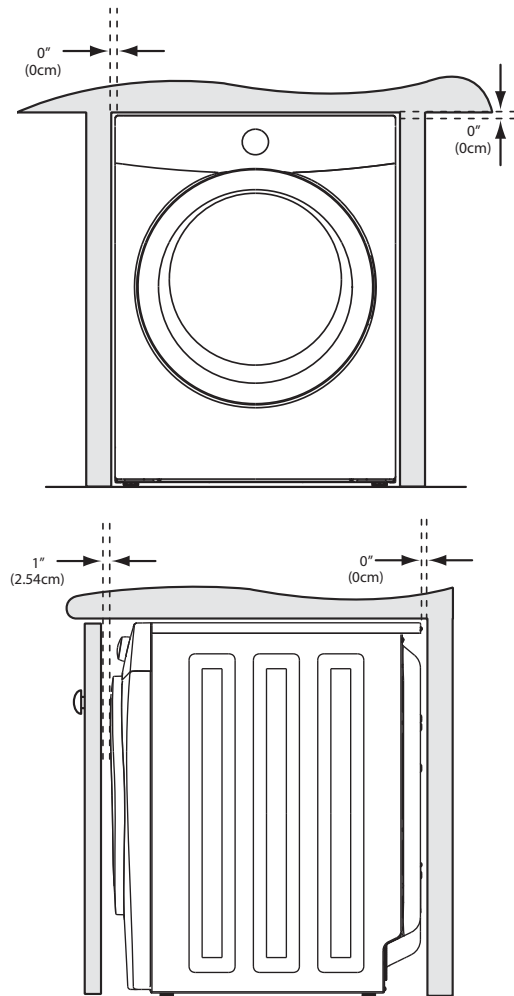
DO NOT install your dryer in a closet with a solid door.

- 4 Closet door ventilation required: A minimum of 120 square inches (774.2 cm²) of opening, equally divided at the top and bottom of the door, is required. Openings should be located 3 inches (7.6 cm) from bottom and top of door. Openings are required to be unobstructed when a door is installed. A louvered door with equivalent air openings for the full length of the door is acceptable.

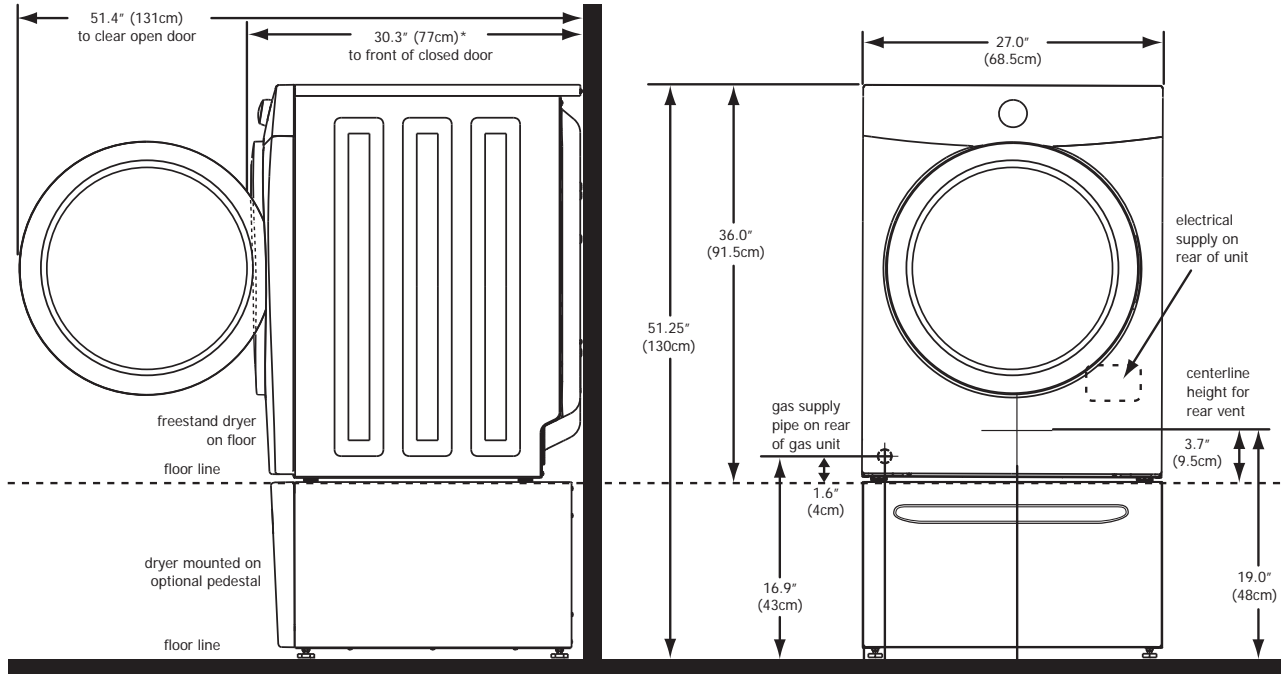


MINIMUM INSTALLATION CLEARANCES - Inches (cm)				
	SIDES	REAR	TOP	FRONT
Alcove	0" (0 cm)	0" (0 cm)*	0" (0 cm)	n/a
Under-Counter	0" (0 cm)	0" (0 cm)*	0" (0 cm)	n/a
Closet	0" (0 cm)	0" (0 cm)*	0" (0 cm)	1" (2.54 cm)

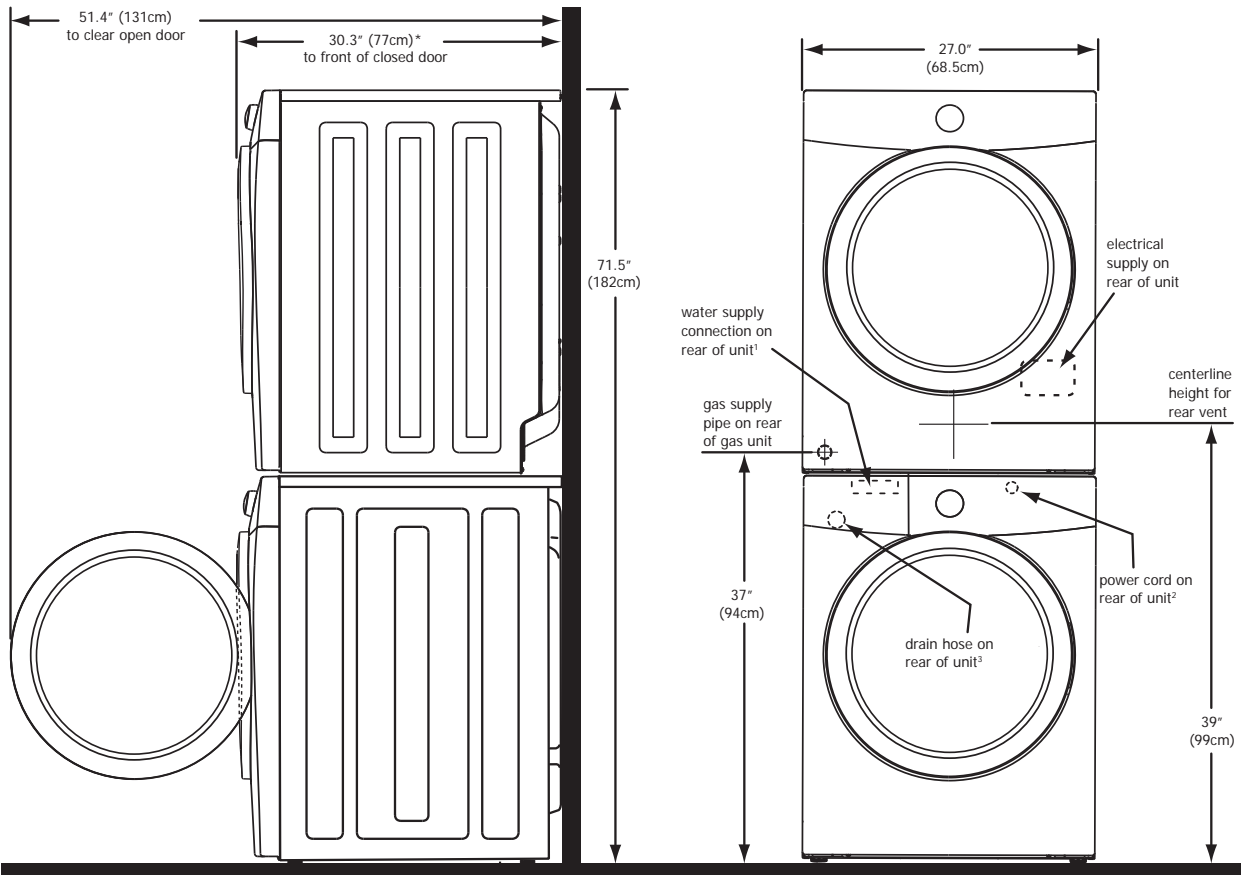
* Dryer must be vented straight back to achieve 0" (0 cm) rear installation.



INSTALLED DIMENSIONS



* To obtain these minimal depth dimensions, dryer must be vented straight back. Using a quick-turn 90° elbow (right or down on freestanding dryer) adds approximately 0.75 in. (2.0 cm) to installation depth. Upward venting of exhaust on pedestal-mounted or freestanding dryer adds approximately 4 in. (10.2 cm) to installation depth. Leftward venting on pedestal-mounted or freestanding dryer adds approximately 3.75 in. (9.5 cm) to installation depth. Downward venting of exhaust on pedestal-mounted dryer adds approximately 2.25 in. (5.7 cm) to installation depth.



* To obtain these minimal depth dimensions, dryer must be vented straight back. Using a quick-turn 90° elbow (right) adds approximately 0.75 in. (2 cm) to installation depth. Upward venting of exhaust on stacked dryer adds approximately 4 in. (10.2 cm) to installation depth. Downward venting of exhaust on stacked dryer adds approximately 2.25 in. (6.5 cm) to installation depth. Leftward venting of exhaust on stacked dryer adds approximately 3.75 in. (9.5 cm) to installation depth.

¹Hot and cold inlet hose length approximately 43 inches (109cm)

²Power supply cord length approximately 60 inches (152.5cm).

³Drain hose length approximately 52 inches (132cm).

INSTALLATION INSTRUCTIONS

Electrical installation

The following are specific requirements for proper and safe electrical installation of your dryer. Failure to follow these instructions can create electrical shock and/or a fire hazard.

WARNING

ELECTRICAL SHOCK HAZARD

- This appliance **MUST** be properly grounded. Electrical shock can result if the dryer is not properly grounded. Follow the instructions in this manual for proper grounding.
- Do not use an extension cord with this dryer. Some extension cords are not designed to withstand the amounts of electrical current this dryer utilizes and can melt, creating electrical shock and/or fire hazard. Locate the dryer within reach of the receptacle for the length power cord to be purchased, allowing some slack in the cord. Refer to the pre-installation requirements in this manual for the proper power cord to be purchased.

WARNING

ELECTRICAL SHOCK HAZARD

- A U.L.-approved strain relief must be installed onto power cord. If the strain relief is not attached, the cord can be pulled out of the dryer and can be cut by any movement of the cord, resulting in electrical shock.
- Do not use an aluminum wired receptacle with a copper wired power cord and plug (or vice versa). A chemical reaction occurs between copper and aluminum and can cause electrical shorts. The proper wiring and receptacle is a copper wired power cord with a copper wired receptacle.

NOTE

Dryers operating on 208 volt power supply will have longer drying times than dryers operating on 240 volt power supply.

Grounding requirements - Electric dryer (USA)

WARNING

ELECTRICAL SHOCK HAZARD

Improper connection of the equipment grounding conductor can result in a risk of electrical shock. Check with a licensed electrician if you are in doubt as to whether the appliance is properly grounded.

For a grounded, cord-connected dryer:

- 1 The dryer **MUST** be grounded. In the event of a malfunction or breakdown, grounding will reduce the risk of electrical shock by a path of least resistance for electrical current.
- 2 After you purchase and install a 3 wire or 4 wire power supply cord having an equipment-grounding conductor and a grounding plug that matches you

wiring system, the plug **MUST** be plugged into an appropriate, copper wired receptacle that is properly installed and grounded in accordance with all local codes and ordinances. If in doubt, call a licensed electrician.

- 3 **DO NOT** modify the plug you've installed on this appliance. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.

For a permanently connected dryer:

- 1 The dryer **MUST** be connected to a grounded metal, permanent wiring system; or an equipment grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal or lead on the appliance.

Grounding requirements - Electric dryer (Canada)

WARNING

ELECTRICAL SHOCK HAZARD

Improper connection of the equipment grounding conductor can result in a risk of electrical shock. Check with a licensed electrician if you are in doubt as to whether the appliance is properly grounded.

For a grounded, cord-connected dryer:

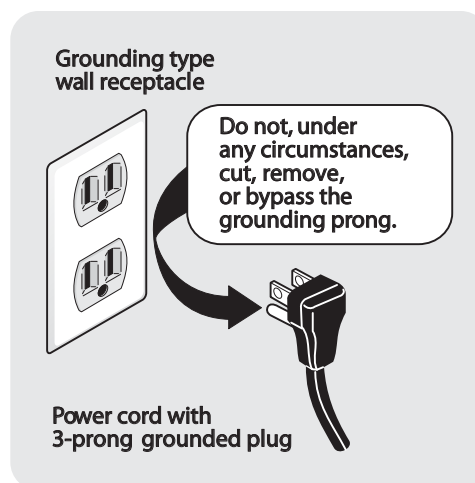
- 1 The dryer **MUST** be grounded. In the event of a malfunction or breakdown, grounding will reduce

the risk of electrical shock by a path of least resistance for electrical current.

- 2 Since your dryer is equipped with a power supply cord having an equipment-grounding conductor and a grounding plug, the plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances. If in doubt, call a licensed electrician.
- 3 **DO NOT** modify the plug provided with this appliance. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.

Grounding requirements - Gas dryer (USA and Canada)

- 1 The dryer is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle.
- 2 The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances. If in doubt, call a licensed electrician.
- 3 **DO NOT** modify the plug provided with this appliance. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.



INSTALLATION INSTRUCTIONS

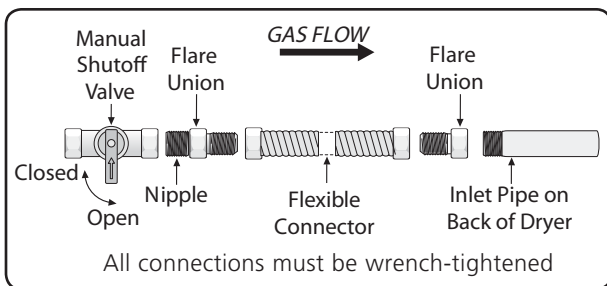
Gas connection

- 1 Remove the shipping cap from gas pipe at the rear of the dryer.

➔ IMPORTANT

DO NOT connect the dryer to L.P. gas service without converting the gas valve. An L.P. conversion kit must be installed by a qualified gas technician.

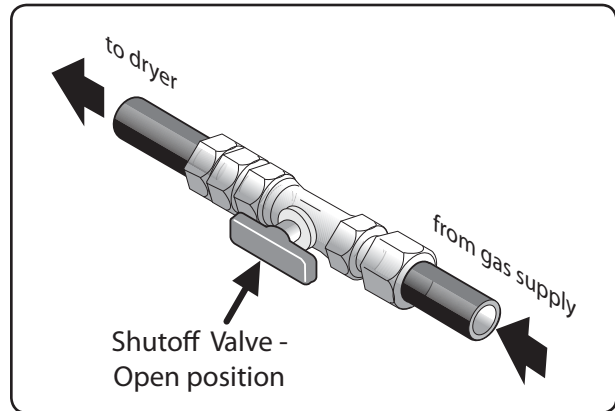
- 2 Connect a 1/2 inch (1.27 cm) I.D. semi-rigid or approved pipe from gas supply line to the 3/8 inch (0.96 cm) pipe located on the back of the dryer. Use a 1/2 inch to 3/8 inch (1.27 cm to 0.96 cm) reducer for the connection. Apply an approved thread sealer that is resistant to the corrosive action of liquefied gases on all pipe connections.



➔ IMPORTANT

The supply line must be equipped with an approved manual shutoff valve. This valve should be located in the same room as the dryer and should be in a location that allows ease of opening and closing. Do not block access to the gas shutoff valve.

- 3 Open the shutoff valve in the gas supply line to allow gas to flow through the pipe. Wait a few minutes for gas to move through the gas line.



- 4 Check for gas system leaks with a manometer. If a manometer is not available, test all connections by brushing on a soapy water solution.

⚠ WARNING

EXPLOSION HAZARD

NEVER test for gas leaks with an open flame.

INSTALLATION INSTRUCTIONS

Electrical connection (non-Canada) - 3 wire cord



3-wire receptacle
(NEMA type 10-30R)

! WARNING

ELECTRICAL SHOCK HAZARD

Failure to disconnect power source before servicing could result in personal injury or even death.

- 1 Turn off power supply to outlet.
- 2 Remove the screw securing the terminal block access cover in the lower corner on the back of the dryer.
- 3 Install a UL-approved strain relief according to the power cord/strain relief manufacturer's instructions in the power cord entry hole below the access panel. At this time, the strain relief should be loosely in place.
- 4 Thread an UNPLUGGED, UL-approved, 30 amp. power cord, NEMA 10-30 type SRDT, through the strain relief.
- 5 Attach the power cord neutral (center wire) conductor to the SILVER colored center terminal on the terminal block. Tighten the screw securely.
- 6 Attach the remaining two power cord outer conductors to the outer, BRASS colored terminals on the terminal block. Tighten both screws securely.

! WARNING

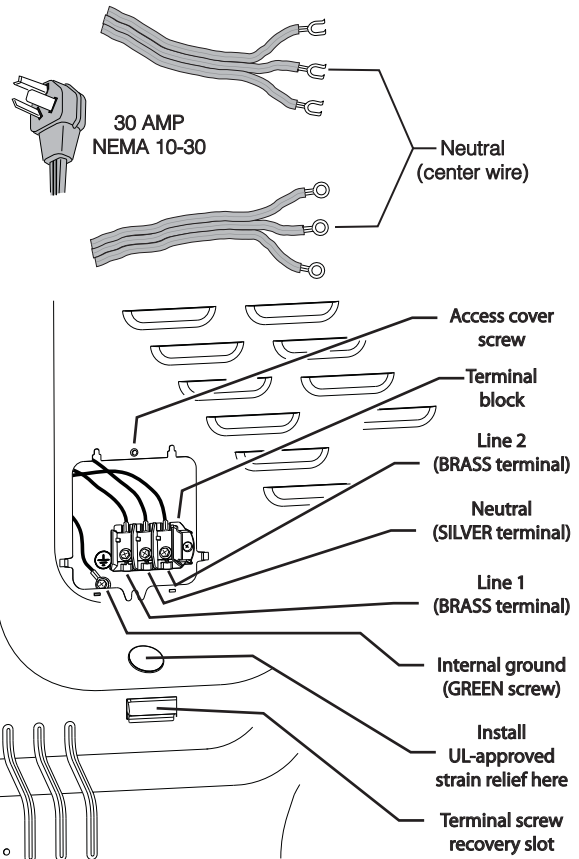
ELECTRICAL SHOCK HAZARD

Do not make a sharp bend or crimp wiring/conductor at connections.

- 7 Follow manufacturer's guidelines for firmly securing the strain relief and power cord.
- 8 Reinstall the terminal block cover.

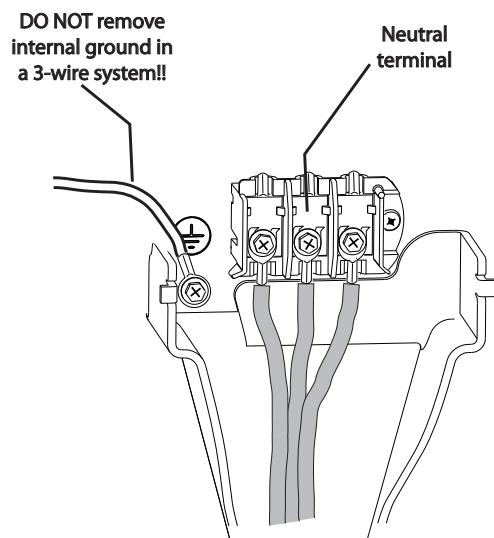
➔ IMPORTANT

If moving dryer from a 4-wire system and installing it in a 3-wire system, move the internal ground from the center terminal back to the GREEN screw next to the terminal block.



📌 NOTE

If a terminal screw falls during cord installation, it can be retrieved in the terminal screw recovery slot below the access panel.



INSTALLATION INSTRUCTIONS

Electrical connection (non-Canada) - 4 wire cord



4-wire receptacle
(NEMA type 14-30R)

WARNING

ELECTRICAL SHOCK HAZARD

Failure to disconnect power source before servicing could result in personal injury or even death.

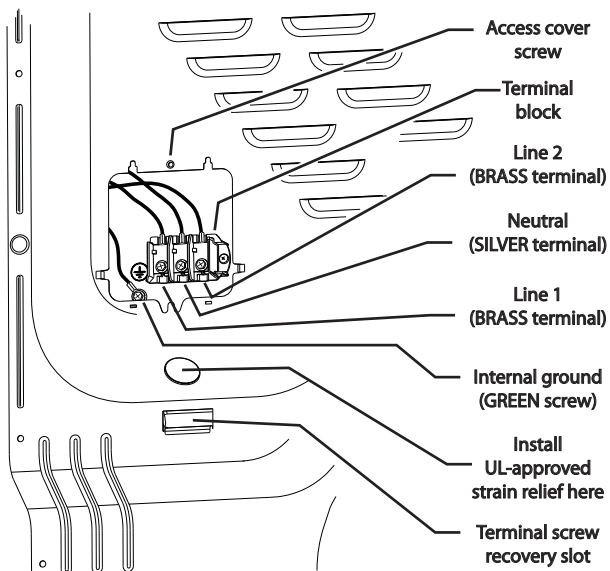
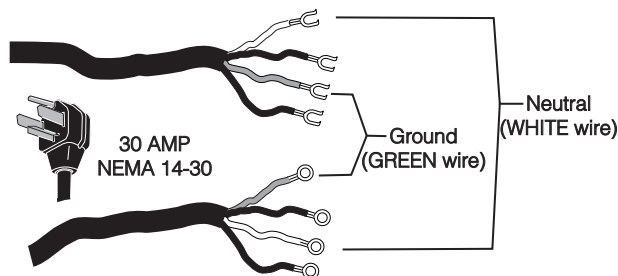
- 1 Turn off power supply to outlet.
- 2 Remove the screw securing the terminal block access cover in the lower corner on the back of the dryer.
- 3 Install a UL-approved strain relief according to the power cord/strain relief manufacturer's instructions in the power cord entry hole below the access panel. At this time, the strain relief should be loosely in place.
- 4 Thread an UNPLUGGED, UL-approved, 30 amp. power cord, NEMA 14-30 type ST or SRDT, through the strain relief.
- 5 Disconnect the internal (BLACK) dryer harness ground wire from the (GREEN) ground screw next to the terminal block.
- 6 Attach the ground (GREEN) power cord wire to the cabinet with the ground (GREEN) screw. Tighten the screw securely.
- 7 Move the internal dryer harness ground (BLACK) wire to the terminal block and attach it along with the neutral (WHITE) power cord wire conductor to the center, SILVER colored terminal on the terminal block. Tighten the screw securely.
- 8 Attach the RED and BLACK power cord conductors to the outer, BRASS colored terminals on the terminal block. Tighten both screws securely.

WARNING

ELECTRICAL SHOCK HAZARD

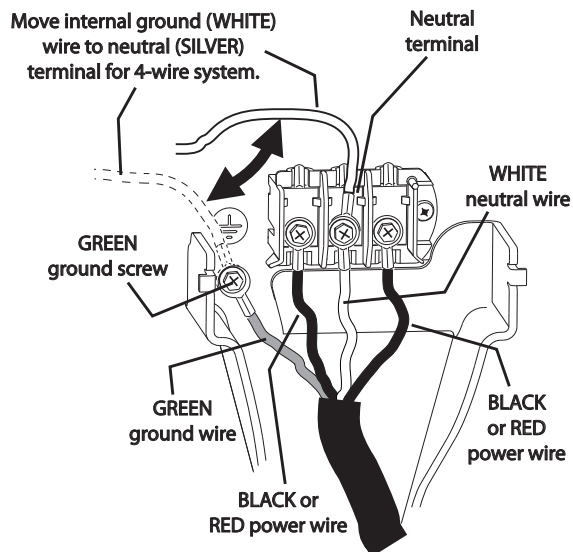
Do not make a sharp bend or crimp wiring/conductor at connections.

- 9 Follow manufacturer's guidelines for firmly securing the strain relief and power cord.
- 10 Reinstall the terminal block cover.



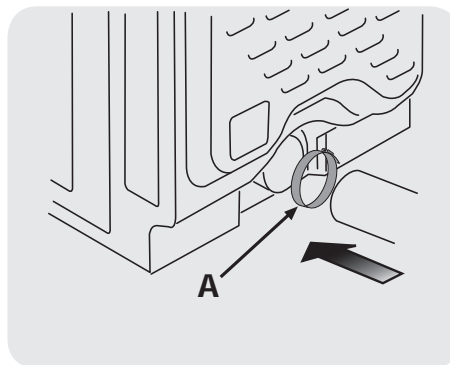
NOTE

If a terminal screw falls during cord installation, it can be retrieved in the terminal screw recovery slot below the access panel.



General installation

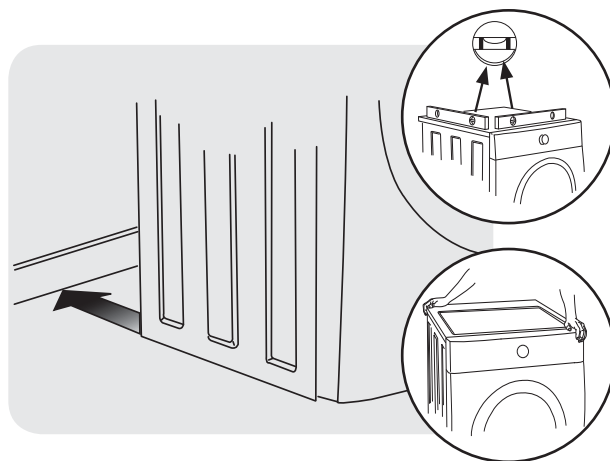
- 1 Connect the exhaust duct to the outside exhaust system (see pages 6 through 8). Use of a 4" (102 mm) clamp (item A) is recommended to connect the dryer to the exhaust vent system. Use metal foil tape to seal all other joints.
- 2 Carefully slide the dryer to its final position. Adjust one or more of the legs until the dryer is resting solidly on all four legs. Place a level on top of the dryer. The dryer **MUST** be level and resting solidly on all four legs. Rock alternating corners to check for stability. Remove and discard door tape.



➔ IMPORTANT

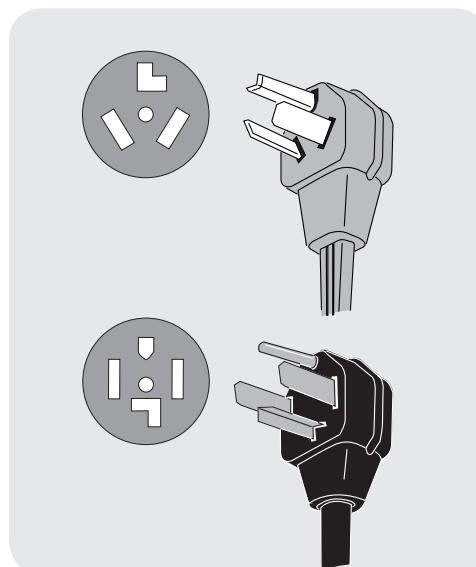
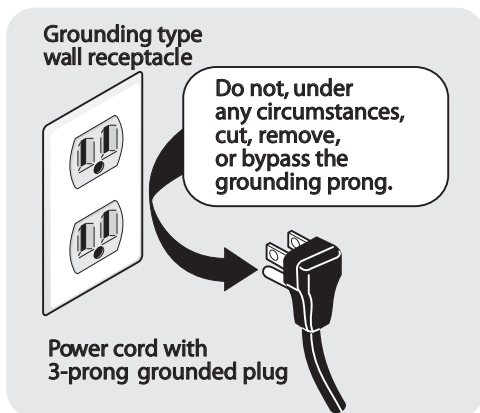
Be sure the power is off at a circuit breaker/fuse box before plugging the power cord into an outlet.

- 3 Plug the power cord into a grounded outlet.
- 4 Turn on the power at the circuit breaker/fuse box.
- 5 Read the Use & Care Guide provided with the dryer. It contains valuable and helpful information that will save you time and money.
- 6 If you have any questions during initial operation, please review the "Avoid Service Checklist" in your Use & Care Guide before calling for service.
- 7 Place these instructions in a location near the dryer for future reference.



📌 NOTE

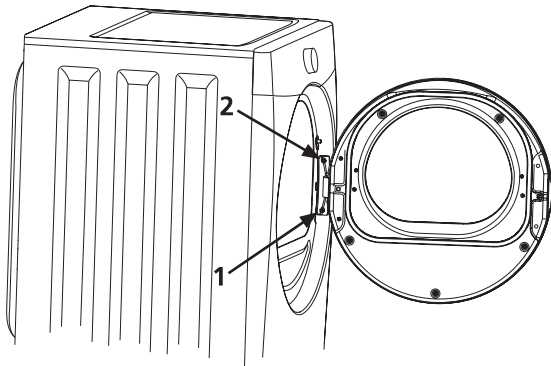
A wiring diagram and technical data sheet are located inside the dryer console.



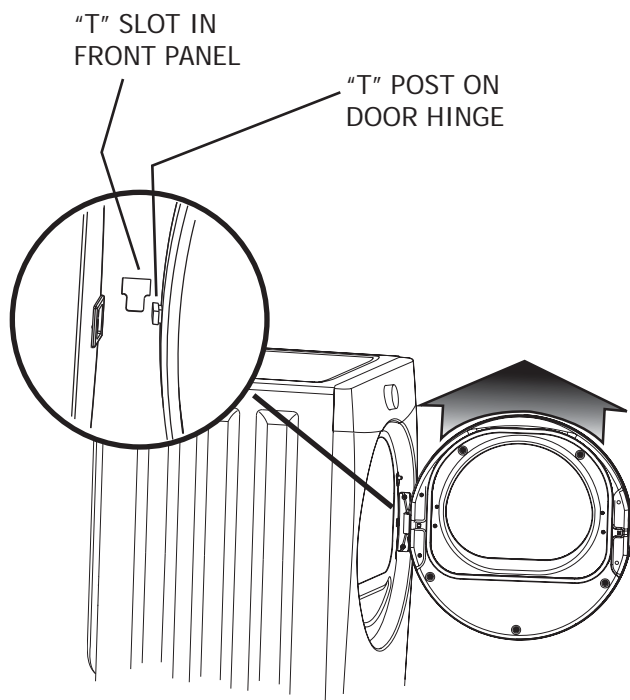
REVERSING DOOR

Removing the door

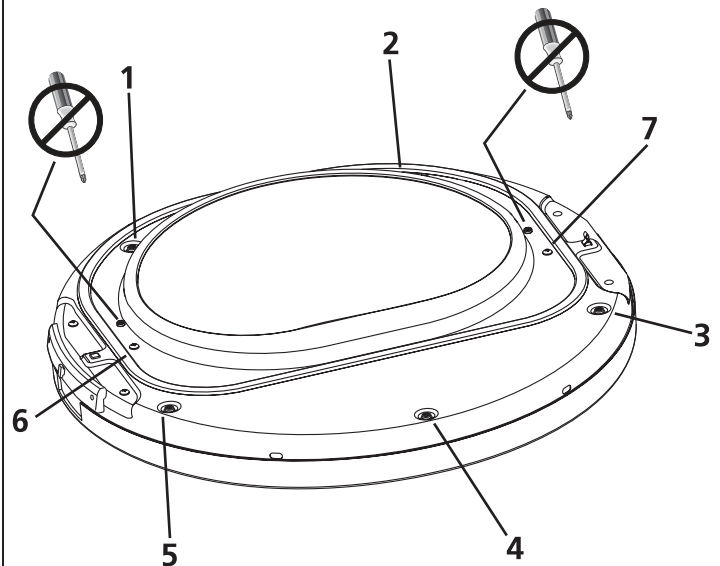
- 1 Protect flat work surface, such as top of dryer or floor near dryer, with a soft cloth or towel.
- 2 Open dryer door and remove the two hinge screws. Remove lower screw first, then upper screw.



- 3 Supporting door with both hands, squarely lift door and hinge upward approximately 3/8" (10 mm) so "T" post on back of hinge can slide out through "T" slot on front panel.



- 4 Gently place dryer door face down on flat, covered work surface.
- 5 Locate the 5 indented head screws (no. 1-5) in the small, circular recesses (at 11, 1, 4, 6, and 8 o'clock positions) of the inner door. Remove and save these 5 screws.



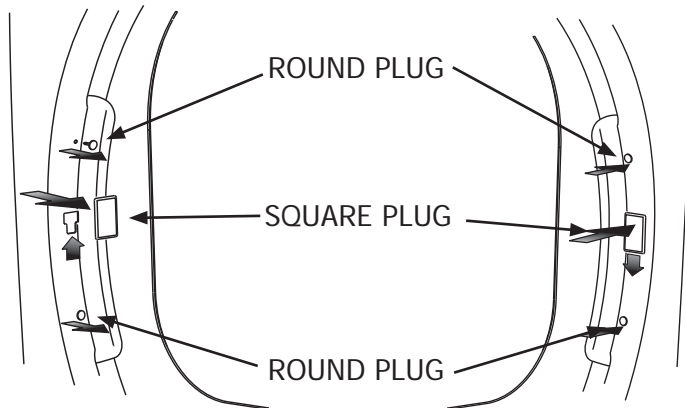
➔ IMPORTANT

Do not attempt to remove the 2 "tamper-resistant" screws that hold the inner glass in place.

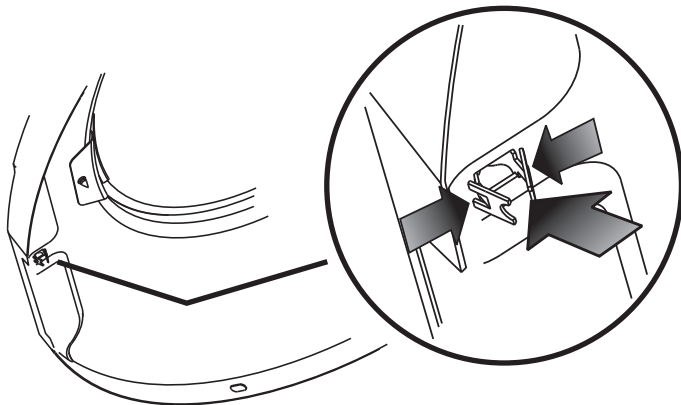
- 6 Locate the 2 pan head screws (no. 6-7) on the inner door nearest the metal strike and center of hinge (9 and 3 o'clock positions). Remove and save these 2 screws.
- 7 Separate inner door assembly from outer door assembly.

Reversing the hinge

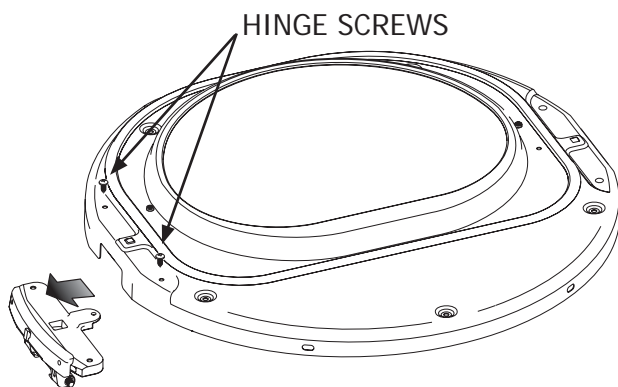
- 1 Carefully pull out the 2 small round hole plugs from the front panel and save. Remove and save the square "T" slot cover by sliding it up and pulling it out. Move all 3 plugs to the opposite side of the front panel and insert.



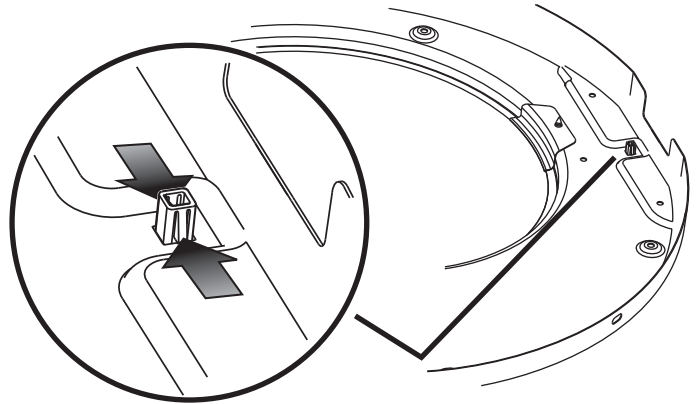
- 2 Turn inner door assembly over to expose retaining tabs of metal strike. Grip tabs fully with pliers to remove. Discard old metal strike.



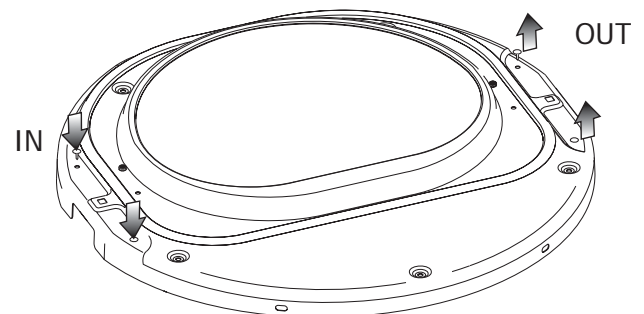
- 3 Turn the inner door assembly back over and locate the 2 pan head hinge screws. Remove and save the 2 screws and separate the hinge from inner door assembly.



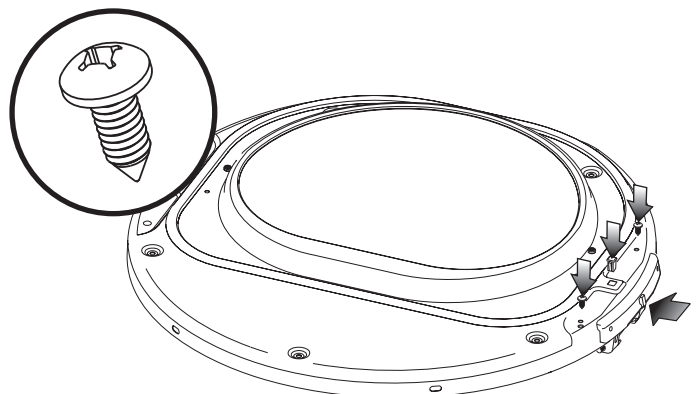
- 4 From the back side of the inner door, pinch the retaining tabs of the plastic square plug to release it. Save square plug for reinstallation.



- 5 Carefully remove the 2 round plugs from the inner door and move them to the opposite holes and reinstall.



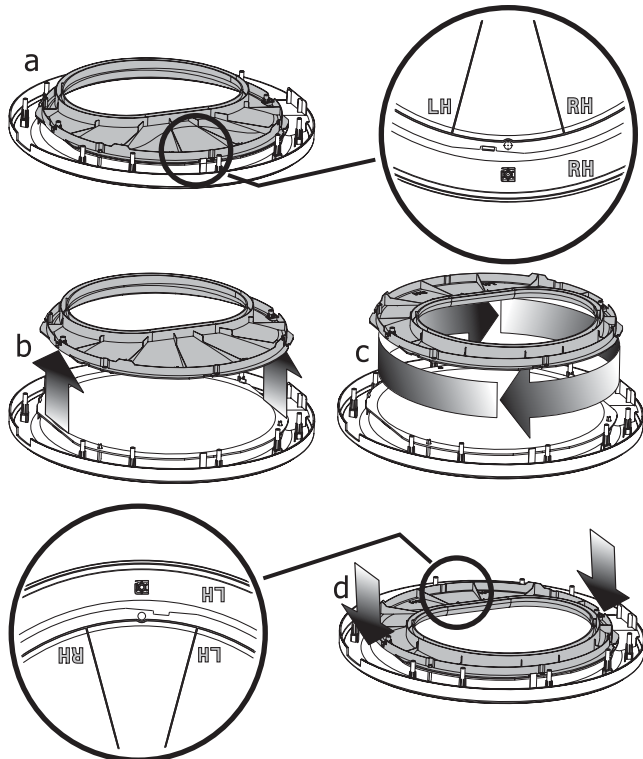
- 6 Rotate the hinge and move it to the opposite side of the inner door. Attach it with the 2 pan head screws removed previously. Reinstall plastic plug in the square hole next to the hinge.



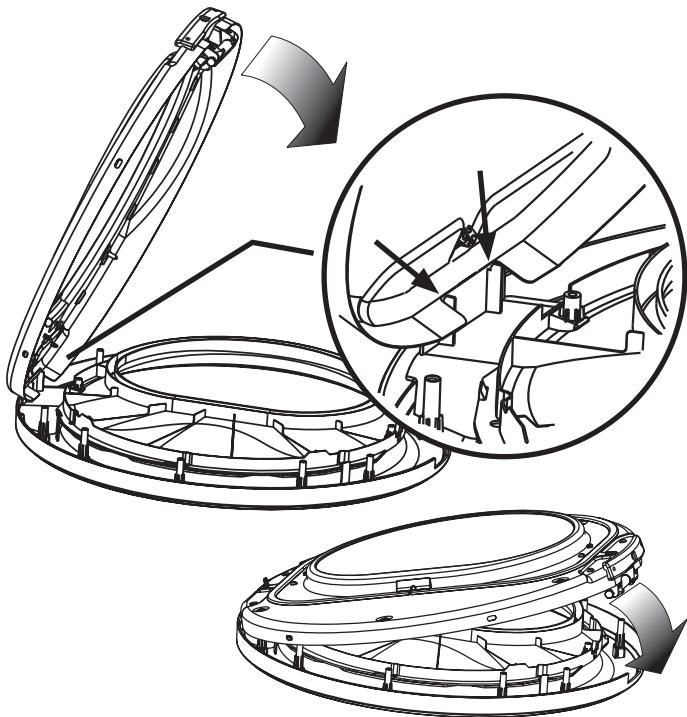
REVERSING DOOR

Reassembling the door

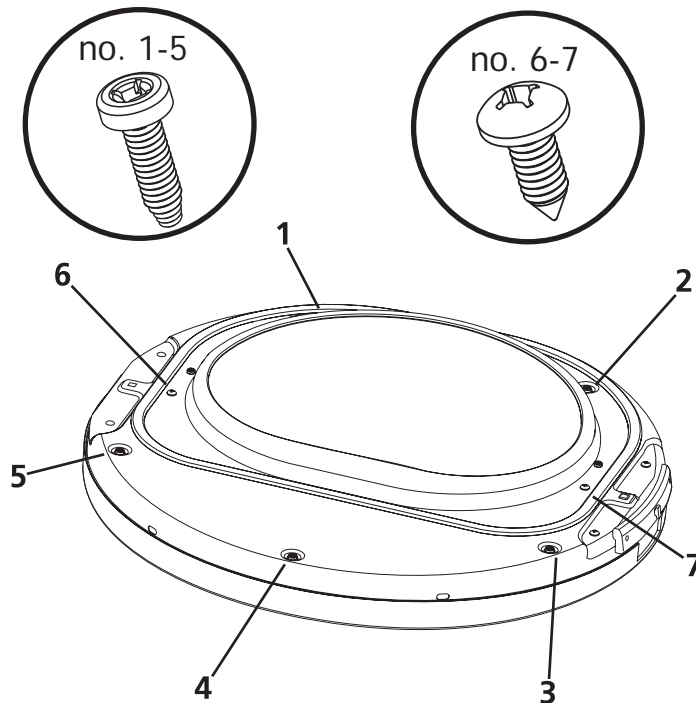
- 1 Lift the inner glass ring. Rotate it 180 degrees, reinstall on outer door, lining up indicators - "LH" for left-hand hinge or "RH" for right-hand hinge.



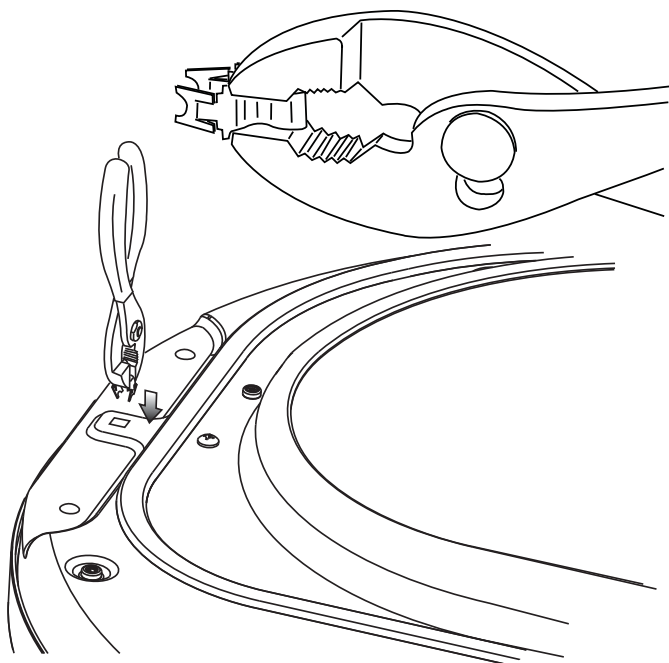
- 2 Rest the opening of the inner door at a 90 degree angle on the supports for the hinge cutout cover. Pivot the inner door down onto the outer door.



- 3 Replace indented head screws (no. 1-5) removed earlier. Take care not to strip out the plastic holes.
- 4 Replace pan head screws (no. 6-7) removed earlier. Take care not to strip out the plastic holes.

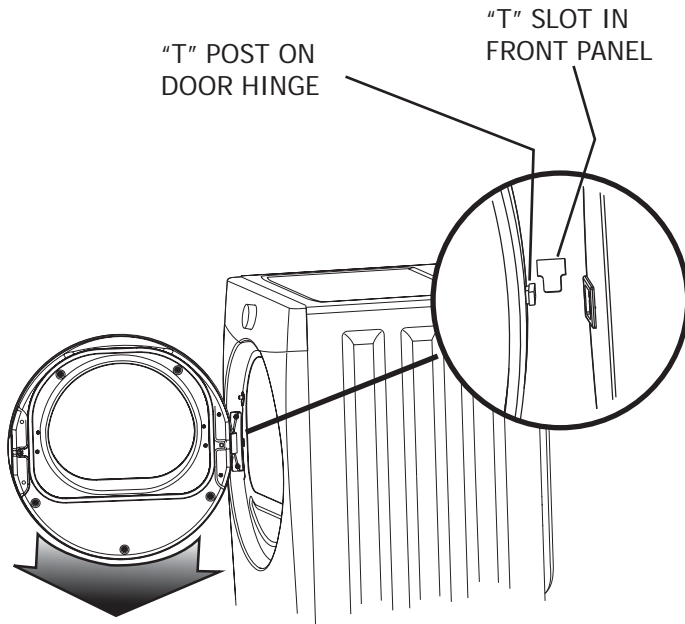


- 5 Locate new metal strike supplied with dryer manuals. Grip new strike with pliers as shown below. Firmly insert the strike so it is oriented vertically.

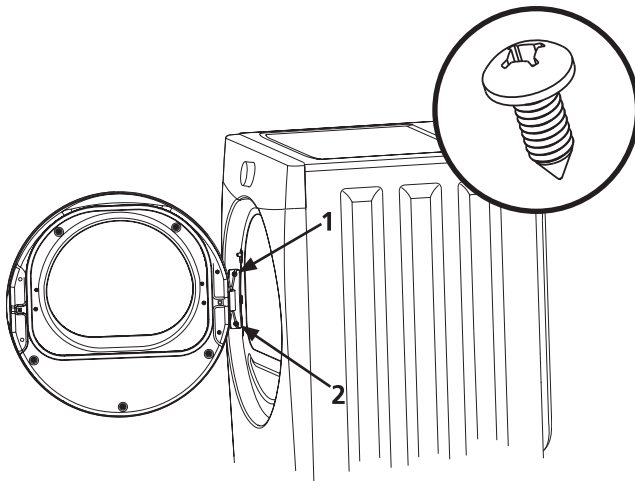


Reattaching the door

- 1 Holding the door in both hands, squarely insert the "T" post on the back of the hinge into the "T" slot on the front panel and lower it to align the mounting holes.



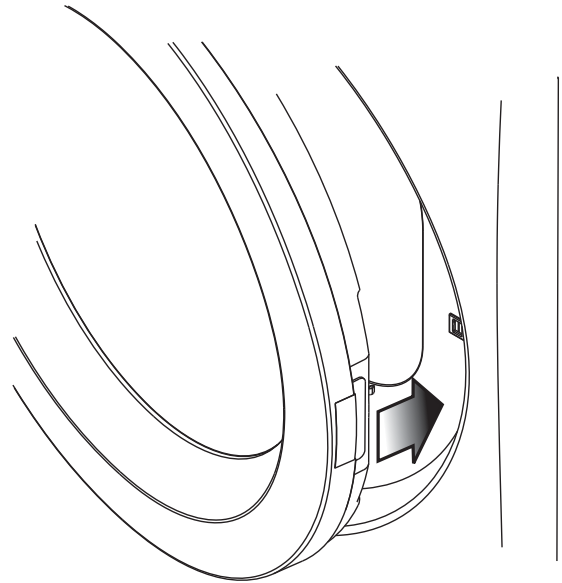
- 2 While supporting the door, install the upper pan head screw first and then the lower one.



NOTE

Correctly installed hinge screws will press hinge flush to front panel. Any gap between hinge and front panel will cause misalignment of strike to latch.

- 3 Close the door and test operation of hinge, strike and latch.



ACCESSORIES

MATCHING STORAGE PEDESTAL*

- Classic White Pedestal - P/N CFPWD15W
- Classic Blue Pedestal - P/N CFPWD15N
- Classic Red Pedestal - P/N CFPWD15R
- Classic Silver Pedestal - P/N CFPWD15A
- Classic Black Pedestal - P/N CFPWD15B

A storage pedestal accessory, specifically designed for this dryer may be used to elevate the dryer for ease of use. This pedestal will add about 15" (38 cm) to the height of your unit for a total height of 51.25" (130 cm).

*Other colors may be available. Contact the source where you purchased your dryer.

DRYER STACKING KIT

P/N 134700400

Depending on the model you purchased, a kit for stacking this dryer on top of matching washer may have been included in the initial purchase of your dryer. If your model did not include a stacking kit or you desire another stacking kit, you may order one.

LP CONVERSION KIT

P/N PCK4200

Gas dryers intended for use in a location supplied with LP must use a conversion kit prior to installation.

MOBILE HOME INSTALLATION KIT

P/N 137067200

Installation in a mobile home requires the use of a MOBILE HOME INSTALLATION KIT.

DRYING RACK

P/N 137067300

Depending on the model you purchased, a drying rack may have been included in the initial purchase of your dryer. If your model did not include a drying rack or you desire another drying rack, you may order one.

UNIVERSAL APPLIANCE WRENCH

P/N 137019200

A UNIVERSAL APPLIANCE WRENCH is available to aid in dryer/washer/pedestal feet adjustment.

TOUCH UP PAINT PENS*

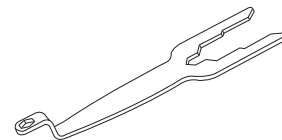
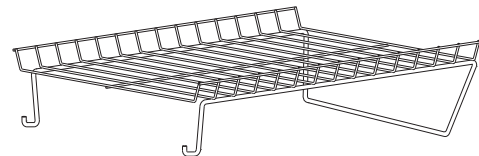
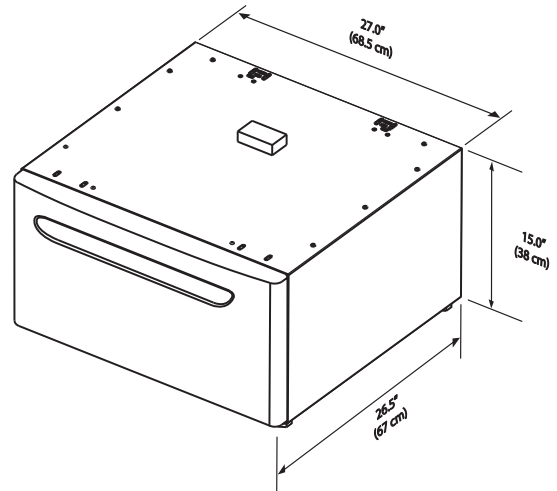
- Classic White Touch Up Pen - P/N 5304468812
- Classic Red Touch Up Pen - P/N 5304471227
- Classic Blue Touch Up Pen - P/N 5304471229
- Classic Silver Touch Up Pen - P/N 5304471228
- Classic Black Touch Up Pen - P/N 5304458932

*Other colors may be available. Contact the source where you purchased your dryer.



CAUTION

Failure to use accessories manufactured by (or approved by) the manufacturer could result in personal injury, property damage or damage to the dryer.



Replacement parts:

If replacement parts are needed for your washer, contact the source where you purchased your washer or refer to your *Use and Care Guide* for more information.



WARNING

ELECTRICAL SHOCK HAZARD

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

FRIGIDAIRE

Todo acerca del

Instalación

de su Secadora



ÍNDICE

Instrucciones importantes de seguridad	24-25	Instrucciones de instalación	34-39
Requisitos de instalación	26-32	Inversión de la puerta	40-43
Dimensiones de la secadora instalada	33	Accesorios	44

INSTRUCCIONES IMPORTANTES DE SEGURIDAD

ADVERTENCIA

Para su seguridad, debe seguir la información de esta guía para minimizar el riesgo de incendio o explosión o para evitar daños a la propiedad, lesiones personales o incluso la muerte. No almacene ni utilice gasolina ni otros líquidos o vapores inflamables cerca de este o de cualquier otro electrodoméstico.

ADVERTENCIA - PELIGRO DE INCENDIO

Lea las siguientes instrucciones antes de instalar y utilizar este electrodoméstico:

- Después de desembalar la secadora, destruya los cartones y las bolsas de plástico. Los niños podrían utilizarlos para jugar. Los cartones cubiertos con alfombras, cubrecamas, o láminas de plástico pueden convertirse en cámaras de aire herméticamente cerradas y provocar asfixia. Coloque todos los materiales en un basurero o manténgalos fuera del alcance de los niños.
- La instalación y el servicio de la secadora de ropa deben ser llevados a cabo por un instalador calificado, agencia de servicios o proveedor de gas.
- Instale la secadora de ropa de acuerdo con las instrucciones del fabricante y los códigos locales.
- La reparación eléctrica de la secadora debe cumplir con los códigos y las ordenanzas locales y la última edición del Código Eléctrico Nacional (National Electrical Code), el ANSI/NFPA 70, o bien en Canadá, el CSA C22.1 del Código Eléctrico de Canadá (Canadian Electrical Code) Parte 1.
- El servicio de gas de la secadora debe cumplir con los códigos y las ordenanzas locales, y la última edición del Código de Gas Nacional (National Fuel Gas Code), el ANSI Z223.1, o bien en Canadá, el CAN/CGA B149,1-2000.
- La secadora se diseñó conforme a los códigos ANSI Z 21.5.1 o ANSI/UL 2158 - CAN/CSA C22.2 N.º 112 (últimas ediciones) solo para USO DOMÉSTICO. No se recomienda esta secadora para uso comercial, como por ejemplo, en restaurantes, salones de belleza, etc.
- No utilice materiales de ventilación de plástico ni de papel de aluminio flexibles para instalar la secadora de ropa. Por lo general, dichos materiales se desarmen, se deterioran con facilidad y acumulan pelusa. Estas condiciones obstruyen el flujo de aire de la secadora y aumentan el riesgo de incendio.
- No apile la secadora sobre la lavadora si ya está instalada sobre un pedestal. No apile la lavadora sobre la secadora. No apile la lavadora sobre otra lavadora.
- Las instrucciones de esta guía y todo el material que se incluye con esta secadora no tienen como propósito cubrir todas las condiciones y situaciones que puedan presentarse. Cuando instale, opere o repare cualquier artefacto DEBE tener cuidado y hacer uso de buenas prácticas de seguridad.

QUÉ HACER SI SIENTE OLOR A GAS:

- No intente encender ningún electrodoméstico.
- No toque ningún interruptor eléctrico; no utilice ningún teléfono en la vivienda.
- Despeje la habitación, el edificio o el área de todos los ocupantes.
- Llame inmediatamente a su proveedor de gas desde el teléfono de un vecino. Siga las instrucciones del proveedor de gas.
- Si no puede ponerse en contacto con el proveedor de gas, llame a los bomberos.

Conserve estas instrucciones para referencia futura.

Requisitos de preinstalación

Herramientas y materiales necesarios para la instalación:

- | | | |
|---|---|---|
| • Pinzas ajustables | • Nivel de carpintero | • Válvula de cierre de línea de gas (secadora a gas) |
| • Destornilladores Philips con punta derecha y cuadrada | • Capucha de ventilación externa | • Adaptadores NPI de unión acampada (x2) y línea flexible de suministro de gas (secadora a gas) de ½' (15,2 cm) |
| • Llave ajustable | • Conducto de escape de metal rígido o semirígido de 4 pulgadas (102 mm) | • Cinta de papel aluminio (no cinta adhesiva aislante) |
| • Llave para tubos de suministro de gas | • Kit de cables de alimentación trifilar o tetrafililar de 240 voltios (secadora eléctrica) | |
| • Cinta aislante resistente al gas LP (para suministro de gas natural o LP) | • abrazadera de 4" (10,2 cm) | |

INSTRUCCIONES IMPORTANTES DE SEGURIDAD


ADVERTENCIA

Lea todas las instrucciones antes de usar este secadora.

Identificación de los símbolos, palabras y avisos de seguridad

Las indicaciones de seguridad incluidas en este manual aparecen precedidas de un aviso titulado "ADVERTENCIA" o "PRECAUCIÓN", de acuerdo con el nivel de riesgo.

Definiciones

 Este es el símbolo de alerta de seguridad. Se usa para alertar sobre peligros potenciales de lesiones personales. Obedezca todos los mensajes de seguridad que tengan este símbolo para evitar posibles lesiones personales o la muerte.

PELIGRO

PELIGRO indica una situación de peligro inminente que, si no se evita, podría causar lesiones graves o la muerte.

ADVERTENCIA

ADVERTENCIA indica una situación potencialmente peligrosa que, si no se evita, podría causar lesiones personales graves o la muerte.

PRECAUCIÓN

PRECAUCIÓN indica una situación potencialmente peligrosa que, si no se evita, podría causar lesiones personales leves o moderadas.

IMPORTANTE

IMPORTANTE indica información de instalación, funcionamiento o mantenimiento que es importante, pero que no está relacionada con la seguridad.

Lista de verificación de instalación

Ventilación de escape

- De flujo libre y sin acumulación de pelusa
- Conductos rígidos o semirígidos de 4" (102 mm) de distancias y giros mínimos
- SIN materiales de ventilación de aluminio o de plástico
- El sistema de evacuación debe ventilar al exterior y contar con una capucha de ventilación aprobada

Nivelación

- La secadora está nivelada de lado a lado y de adelante hacia atrás
- El secadora descansa firmemente sobre sus cuatro esquinas

Suministro de gas (secadora a gas)

- Válvula de cierre manual instalada en la tubería de suministro
- Todas las conexiones selladas con un sellante aprobado y bien apretadas con una llave
- Kit de conversión para el sistema de gas LP
- Suministro de gas abierto
- No hay escapes en ninguna conexión: verifique con agua jabonosa, NUNCA con una llama

Suministro eléctrico de 240V (secadora eléctrica)

- Corden de servicio eléctrico 10-30R o 10-40R aprobado por la NEMA con todos los tornillos bien apretados en el tablero de terminales
- Dispositivo de liberación de tensión aprobado
- Tapa de acceso a los terminales instalada antes del primer uso

Inversión de la puerta

- Siga las instrucciones detalladas en esta guía
- Pruebe la bisagra y el gancho para asegurarse de que funcionen

Suministro eléctrico

- El suministro eléctrico del hogar está activado
- La secadora está enchufada

Inspección final

- Lea bien las **instrucciones de instalación** y la **guía de uso y cuidado**
- La puerta se cierra y el tambor gira cuando se inicia el ciclo
- Tarjeta de registro enviada

REQUISITOS DE INSTALACIÓN

NOTA

Debido a posibles variaciones en el voltaje, no se recomienda utilizar esta secadora con electricidad generada a partir de generadores a gas, solares, eólicos ni de ninguna otra clase que no sean los empleados por su empresa de electricidad local.

Requisitos eléctricos de la secadora eléctrica:

CIRCUITO: circuito independiente individual de 30 amp. con fusibles de acción retardada o disyuntores. Use circuitos con fusibles separados para la lavadora y la secadora. NO haga funcionar una lavadora y una secadora en el mismo circuito.

SUMINISTRO ELÉCTRICO: trifilar o tetrafilar, 240 V, 1 fase, 60 Hz, corriente alterna.

IMPORTANTE

A menos que haya sido fabricada para la venta en Canadá, esta secadora está conectada a tierra internamente a través de un enlace a un conductor neutro. La conexión a tierra a través del neutro está prohibida para: (1) instalaciones de circuitos de bifurcación nuevos; (2) casas rodantes; (3) vehículos recreativos; y (4) áreas cuyas leyes locales no permiten la puesta a tierra a través del neutro.

RECEPTÁCULO DEL TOMACORRIENTE - receptáculo NEMA 10-30 R o NEMA 14-30 R que debe estar ubicado en un lugar al que pueda acceder el cable de alimentación eléctrica cuando la secadora esté instalada.

CONEXIÓN A TIERRA: consulte "Requisitos de conexión a tierra" en la sección Instalación eléctrica.

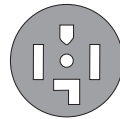
CABLE DE ALIMENTACIÓN ELÉCTRICA TRIFILAR (no incluido)



Receptáculo trifilar
(tipo NEMA 10-30R)

La secadora DEBE emplear un cable de alimentación eléctrica de 3 conductores tipo NEMA 10-30, SRDT calificado para CA mínima de 240 voltios, 30 amp., con 3 conectores de terminal horquilla con extremos doblados hacia arriba o de bucle cerrado y calificados para uso en secadoras de ropa. Para obtener instrucciones sobre la conexión trifilar, consulte CONEXIONES ELÉCTRICAS PARA UN SISTEMA TRIFILAR.

CABLE DE ALIMENTACIÓN ELÉCTRICA TETRAFILAR (no incluido)



Receptáculo tetrafilar
(tipo NEMA 14-30R)

La secadora DEBE emplear un cable de alimentación eléctrica de 4 conductores tipo NEMA 14-30, SRDT o ST (según se especifique) calificado para CA mínima de 240 voltios, 30 amp., con 4 conectores de terminal horquilla con extremos doblados hacia arriba o de bucle cerrado y calificados para uso en secadoras de ropa. Para obtener instrucciones sobre la conexión tetrafilar, consulte CONEXIONES ELÉCTRICAS PARA UN SISTEMA TETRAFILAR.

NOTA

Las secadoras fabricadas para la venta en Canadá vienen con un cable de alimentación eléctrica tetrafilar (NEMA 14-30R) de fábrica.

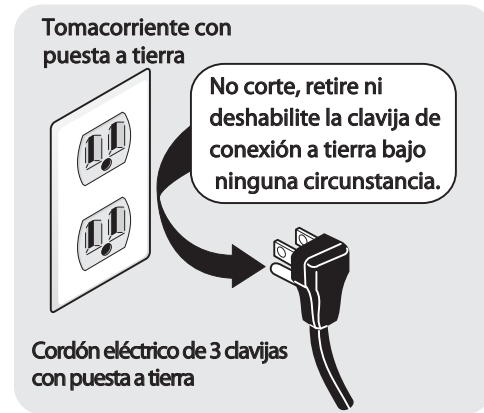
Requisitos eléctricos de la secadora a gas:

CIRCUITO - Circuito individual de bifurcación de 15 amp., correctamente polarizado y con conexión a tierra con fusible de retardo de 15 amp. o con interruptor automático.

SUMINISTRO ELÉCTRICO: corriente alterna de 2 cables, con conexión a tierra, 120 voltios, monofásica, 60 Hz.

CABLE DE ALIMENTACIÓN ELÉCTRICA: la secadora está equipada con un cable de alimentación trifilar de 120 voltios.

CONEXIÓN A TIERRA: consulte "Requisitos de conexión a tierra" en la sección Instalación eléctrica.



Requerimientos del suministro de gas



ADVERTENCIA

PELIGRO DE EXPLOSIÓN

Las tuberías de cobre sin recubrimiento se corroen al exponerse al gas natural, lo que provoca pérdidas de gas. Utilice SOLAMENTE tuberías de hierro negro, acero inoxidable o latón plastificado para el suministro de gas.

- 1 La instalación DEBE realizarse de acuerdo con los códigos locales o, en ausencia de ellos, con el Código de Gas Nacional (National Fuel Gas Code), ANSI Z223.1 (última edición).
- 2 La línea de suministro de gas debe ser un tubo de 1,27 cm (1/2 pulgada).
- 3 Si los códigos lo permiten, se puede utilizar un tubo de metal flexible para conectar la secadora a la línea de suministro de gas. La tubería DEBE ser de acero inoxidable o de latón plastificado.
- 4 La línea de suministro de gas DEBE tener una válvula de cierre individual.
- 5 Se DEBE instalar una derivación N.P.T de 0,32 cm (1/8 pulgadas) con tapón roscado, que permita conectar un medidor de prueba, inmediatamente después de la conexión de suministro de gas a la secadora, en contracorriente al flujo de gas.
- 6 La secadora DEBE estar desconectada de la tubería de gas durante cualquier prueba en la que la presión exceda los 3,45 kPa (1/2 psig).
- 7 La secadora DEBE estar aislada de la tubería de gas durante cualquier prueba en la que la presión sea igual o inferior a 3,45 kPa (1/2 psig).
- 8 Las conexiones del suministro de gas deben cumplir con la norma de conexiones de electrodomésticos a gas, ANSI Z21.24.

REQUISITOS DE INSTALACIÓN

Requisitos del sistema de escape

Utilice solo un conducto de metal flexible o rígido de 102 mm (4 pulgadas) de diámetro (mínimo) y una capucha de ventilación aprobada que tenga uno o más reguladores de tiro que se abran cuando la secadora esté en funcionamiento. Cuando la secadora se detiene, el regulador de tiro se cierra automáticamente para evitar la corriente de aire y el ingreso de insectos y roedores. Para evitar restringir la salida del conducto, mantenga un espacio mínimo de 30,5 cm (12 pulgadas) entre la capucha de ventilación y el suelo, o cualquier otra obstrucción.



ADVERTENCIA

PELIGRO DE INCENDIO

El no seguir estas instrucciones puede producir tiempos de secado excesivos y peligro de incendio.

Los siguientes son requisitos necesarios para el funcionamiento seguro y correcto de su secadora.

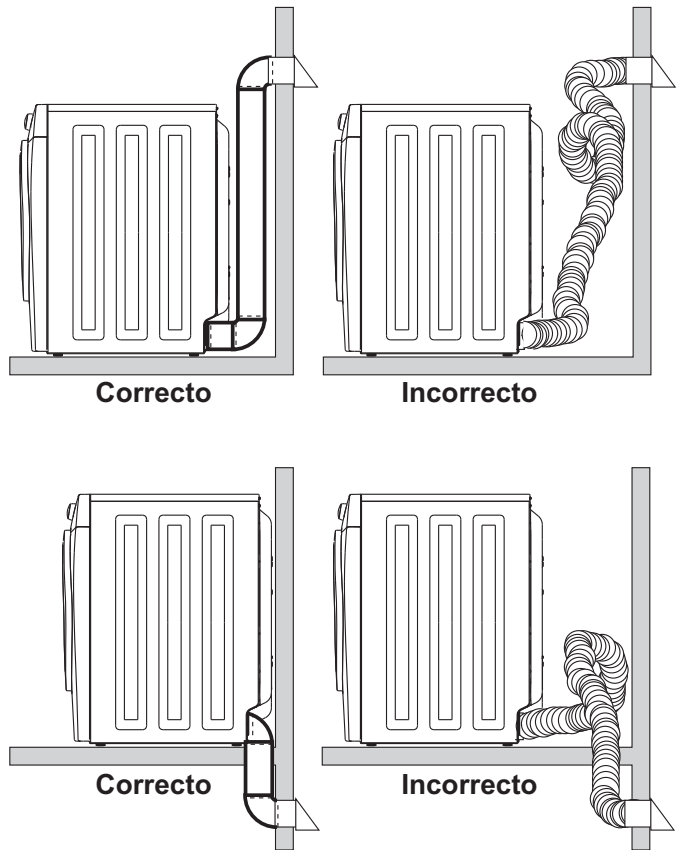


ADVERTENCIA

PELIGRO DE INCENDIO

No utilice materiales de ventilación de plástico ni de papel de aluminio flexibles para instalar la secadora de ropa. Por lo general, dichos materiales se desarman, se deterioran con facilidad y acumulan pelusa. Estas condiciones obstruyen el flujo de aire de la secadora y aumentan el riesgo de incendio.

Si su sistema actual está compuesto de un conducto de plástico o papel de aluminio, reemplácelo por un conducto de metal rígido o semirígido. Asegúrese de que el conducto existente no tenga pelusas antes de instalar el conducto de la secadora.



Requisitos del sistema de escape (continuación)

ADVERTENCIA

PELIGRO DE INCENDIO

Una secadora de ropa debe tener ventilación al exterior. No ventile la secadora a una chimenea, pared, techo, ático, pasajes entre pisos ni ningún espacio oculto de la vivienda. Las secadoras de ropa producen pelusa combustible. Si la secadora no tiene ventilación al exterior, algunas pelusas finas se expulsarán en el área de lavandería. La acumulación de pelusa en cualquier área de la vivienda puede constituir un peligro sanitario y un riesgo de incendio.

La secadora debe estar conectada a un sistema de escape que termine en el exterior de la vivienda. Inspeccione la abertura de escape al exterior con frecuencia y elimine cualquier acumulación de pelusa en la abertura y en el área que la rodea.

ADVERTENCIA

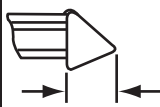
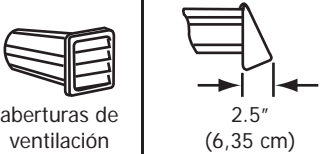
PELIGRO DE INCENDIO

- No permita que materiales combustibles (por ejemplo: ropa, tapicería/cortinas, papel) entren en contacto con el sistema de escape. La secadora **NO DEBE** tener escape a una chimenea, una pared, un techo ni ningún espacio cerrado de un edificio que pueda acumular pelusa y constituir un peligro de incendio.
- No bloquee los extremos de escape del sistema de ventilación, ni utilice tornillos, remaches ni otros sujetadores que se extiendan hacia la parte interna del conducto para ensamblarlo. Es posible que la pelusa quede atrapada en el filtro, los tornillos o los remaches, lo que puede obstruir la red de conductos y constituir un peligro de incendio, así como también aumentar los tiempos de secado. En la salida del conducto al exterior, utilice una capucha de ventilación aprobada y selle todas las uniones con cinta de papel aluminio. Todos los accesorios macho para tubos **DEBEN** instalarse teniendo en cuenta el flujo de aire.

ADVERTENCIA

PELIGRO DE INCENDIO

Si se excede la longitud del tubo del conducto o el número de codos permitidos en las tablas de "LONGITUD MÁXIMA", se pueden acumular pelusas en el sistema de escape. La obstrucción del sistema podría constituir un peligro de incendio, así como aumentar los tiempos de secado.

Cantidad de codos de 90°	LONGITUD MÁXIMA	
	Conducto de metal rígido de 102 mm (4 pulgadas)	
	TIPO DE CAPUCHA DE VENTILACIÓN	
	(recomendada)	
	 4" (10,2 cm)	 2.5" (6,35 cm)
	aberturas de ventilación	
0	64 ft. (19.5 m)	14.6 m (48 pies)
1	15.9 m (52 pies)	12.2 m (40 pies)
2	13.5 m (44 pies)	9.8 m (32 pies)
3	9.8 m (32 pies)	7.3 m (24 pies)
4	9.5 m (28 pies)	4.9 m (16 pies)

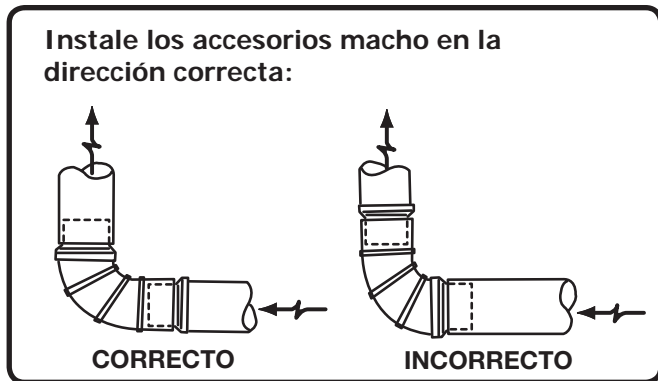
ADVERTENCIA

PELIGRO DE INCENDIO

- No utilice material de ventilación flexible de plástico o aluminio.
- Si va a instalar conductos de ventilación semirrígidos, no exceda una longitud de 8 pies (2,4 m).

REQUISITOS DE INSTALACIÓN

Requisitos del sistema de escape (continuación)



En instalaciones en las que el sistema de escape no se describa en las tablas, se debe utilizar el siguiente método para determinar si dicho sistema es aceptable:

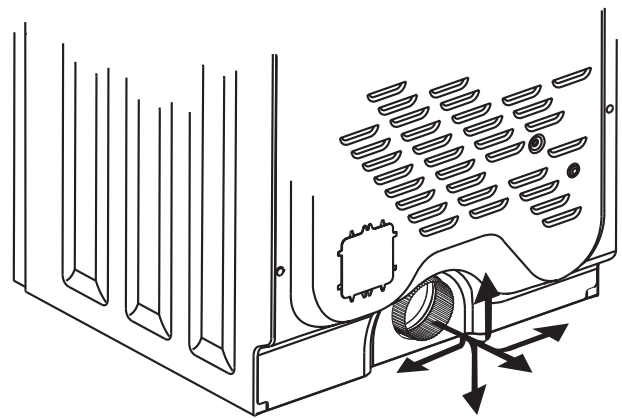
- 1 Conecte un manómetro inclinado o digital entre la secadora y el punto donde el tubo de escape se conecta con la secadora.
- 2 Coloque el temporizador y la temperatura de la secadora en la opción Air fluff - cool down (Esponjado con aire, enfriamiento) y ponga en marcha la secadora.
- 3 Lea la medición del manómetro.
- 4 La contrapresión del sistema **NO DEBE** ser mayor que 2,5 cm (1 pulgada) de columna de agua. Si la contrapresión del sistema es menor que 2,5 cm (1 pulgada) de columna de agua, el sistema es aceptable. Si la lectura del manómetro es mayor que 2,5 cm (1 pulgada) de columna de agua, el sistema es demasiado restrictivo y la instalación es inaceptable.

Si bien la orientación vertical del sistema de escape es aceptable, ciertas circunstancias atenuantes podrían afectar el funcionamiento de la secadora:

- Sólo se debe utilizar una red de conductos de metal rígido.
- Si la ventilación se efectúa en forma vertical a través del techo, es posible que el sistema de escape se vea expuesto a ráfagas descendentes que restringirán la ventilación.
- Si el sistema de escape se extiende a través de un área que no está aislada, puede producirse condensación y una acumulación más rápida de pelusa.
- La compresión o los pliegues del sistema de escape aumentarán la restricción de la ventilación.
- Se debe inspeccionar y limpiar el sistema de escape cada 18 meses como mínimo cuando se le da un uso normal. Cuanto más utilice la secadora, más a menudo deberá comprobar que el sistema de escape y la capucha de ventilación funcionan correctamente.

Dirección del escape

El escape direccional se puede lograr mediante la instalación de un codo de ventilación de giro rápido de 90° directamente en la salida de la secadora. Los codos de ventilación de la secadora se encuentran disponibles a través de su distribuidor de repuestos o ferretería local.



Consulte también los REQUISITOS DE DESPEJE en la siguiente página.

📌 NOTA

Utilice un codo de giro rápido de 90° para cumplir con la profundidad mínima de instalación de la secadora independiente.

- La ventilación derecho hacia atrás permite la instalación de la secadora a 0" (0 cm) de la pared.
- La ventilación hacia la derecha con un codo de 90° permite la instalación de la secadora a 0.75" (2 cm) de la pared.
- La ventilación hacia abajo con un codo de 90° permite la instalación de la secadora a 0.75" (2 cm) de la pared.
- La ventilación hacia la izquierda con un adaptador recto corto y un codo de 90° permite la instalación a 3.75" (9.5 cm) de la pared.
- La ventilación hacia arriba con un adaptador recto corto y un codo de 90° permite la instalación a 4" (10.2 cm) de la pared.

Instalación en una casa rodante

- 1 La instalación DEBE cumplir con la actual Norma de Seguridad y Construcción de Casas Rodantes, título 24 CFR, Parte 32-80 (que anteriormente se conocía como la Norma Federal de Seguridad y Construcción de Casas Rodantes [Federal Standard for Mobile Home Construction and Safety], título 24, HUD parte 280) o la Norma CAN/CSAZ240 MH.
- 2 La secadora DEBE tener evacuación al exterior (no a la parte de abajo de la casa rodante) mediante conductos metálicos que no admitan combustión. Los conductos metálicos deben tener un diámetro de 10,16 cm (4 pulgadas) y no deben presentar obstrucciones. Se recomiendan los conductos de metal rígido.
- 3 Si la secadora tiene evacuación a través del piso, y el área debajo de la casa rodante es cerrada, el sistema de evacuación DEBE terminar fuera del espacio cerrado y el extremo debe quedar sujetado firmemente a la estructura de la casa rodante.
- 4 Para obtener información sobre otros requisitos importantes del sistema de escape, consulte las secciones anteriores de esta guía.
- 5 Cuando se instale una secadora a gas en una casa rodante, se debe dejar espacio en el exterior para la salida de aire. Este espacio debe ser por lo menos el doble del área de la salida de escape de la secadora.
- 6 El técnico de instalación DEBE anclar esta secadora (1) o secadora sobre pedestal (2) al piso usando un kit de instalación para casas rodantes, pieza número 137067200.

Requisitos de despeje



ADVERTENCIA

PELIGRO DE EXPLOSIÓN

No instale la secadora en el mismo lugar en el que haya o se almacene gasolina u otros productos inflamables. Si la secadora se instala en un garaje, debe estar a una altura mínima de 45,7 cm (18 pulgadas) por encima del suelo. De lo contrario, podría producirse una explosión, un incendio, quemaduras o incluso la muerte.



IMPORTANTE

NO INSTALE LA SECADORA:

- 1 En una zona expuesta a la humedad o a las condiciones climáticas externas.
- 2 En un área en la que esté en contacto con cortinas, telas colgantes o cualquier otra cosa que pueda obstruir el flujo de aire de ventilación y combustión.
- 3 Sobre una alfombra. El piso DEBE ser firme con una pendiente máxima de 2,54 cm (1 pulgada).

REQUISITOS DE INSTALACIÓN

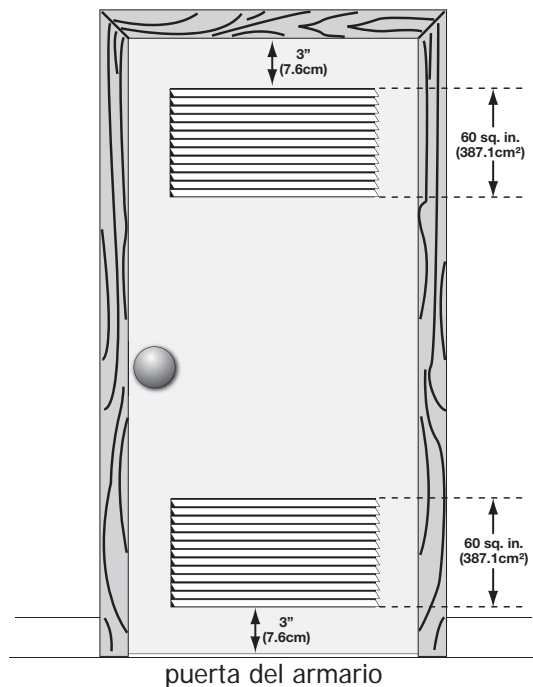
Requisitos de despeje (continuación)

Instalación en un Nicho o Armario

- 1 Una secadora instalada en un dormitorio, baño, nicho o armario, DEBE tener ventilación al exterior.
- 2 No se debe instalar ningún otro artefacto de combustión en el mismo armario que la secadora a gas.
- 3 La secadora necesita espacio a su alrededor para que la ventilación sea adecuada.

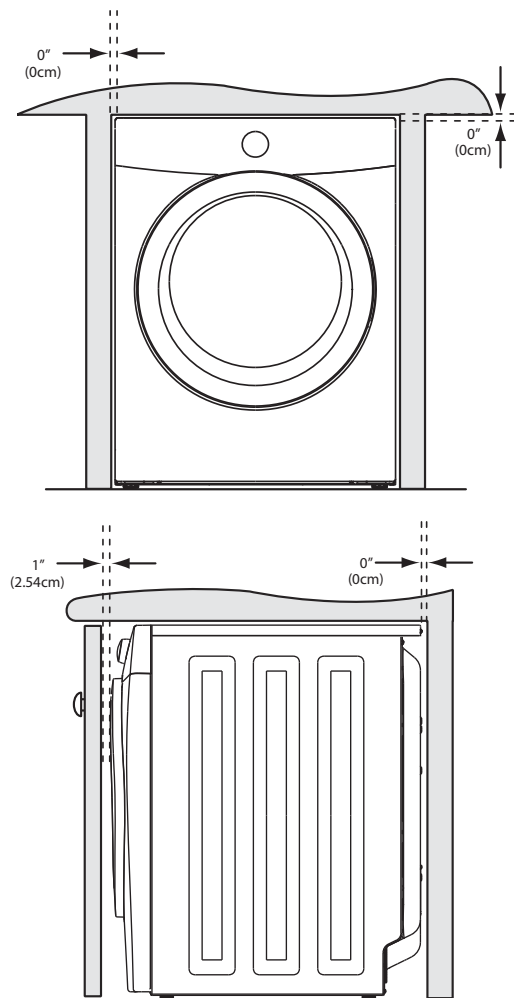
NO instale la secadora en un armario con puerta maciza.

- 4 Ventilación requerida en la puerta del armario: Se necesita un mínimo de 774,2 cm² (120 pulgadas²) de abertura, dividido en partes iguales en la parte superior e inferior de la puerta. Las aberturas de ventilación deben estar ubicadas a 7,6 cm (3 pulgadas) de la parte superior e inferior de la puerta. Es necesario que las aberturas de aire no estén obstruidas al instalar una puerta. Se acepta una puerta que tenga aberturas de ventilación distribuidas uniformemente en toda la superficie.

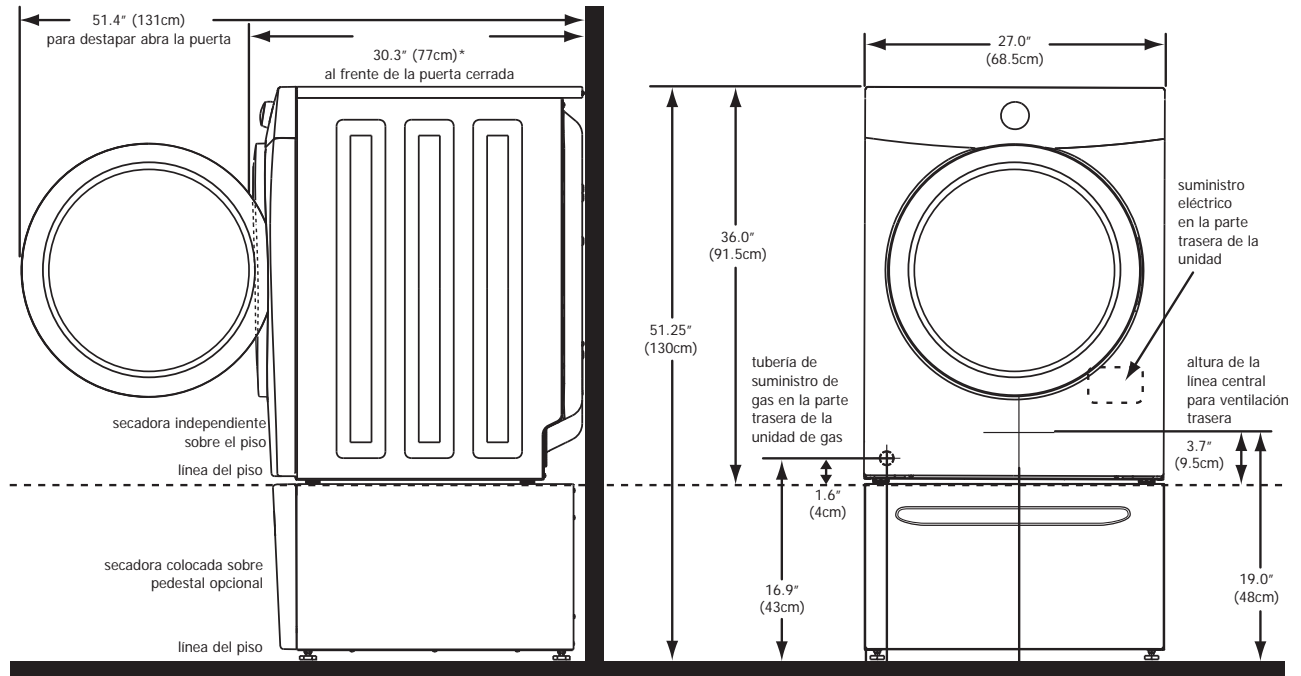


ESPACIOS MÍNIMOS PARA LA INSTALACIÓN: cm (pulgadas)				
	LATERALES	PARTE TRASERA	PARTE SUPERIOR	PARTE DELANTERA
Alcôve	0 cm (0")	0 cm (0")	0 cm (0")	n/d
Sous le comptoir	0 cm (0")	0 cm (0")	0 cm (0")	n/d
Placard	0 cm (0")	0 cm (0")	0 cm (0")	2,54 cm (1")

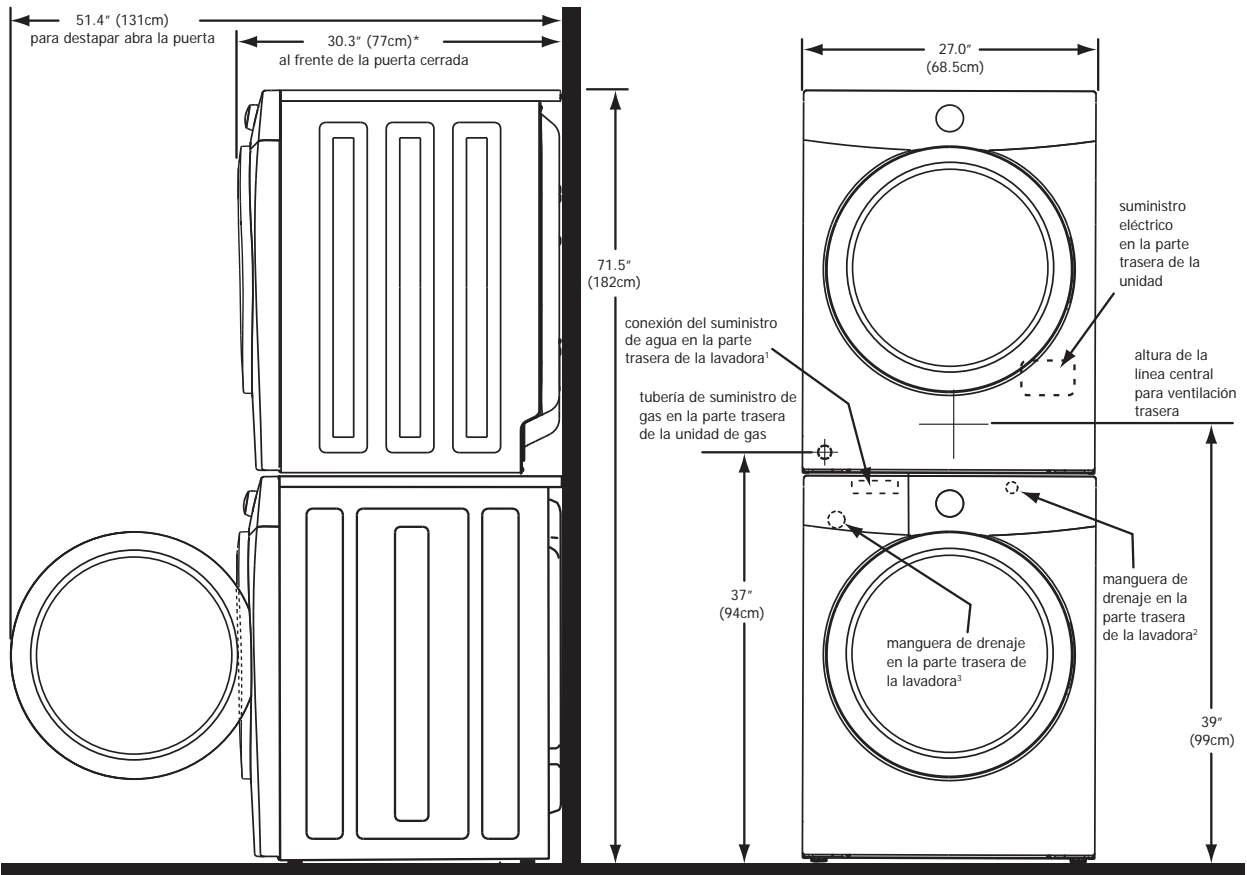
* La ventilación derecho hacia atrás permite la instalación de la secadora a 0" (0 cm) de la pared.



DIMENSIONES DE LA SECADORA INSTALADA



* Para obtener estas dimensiones mínimas de profundidad, la secadora debe ser ventilada derecho hacia atrás. Si se usa un codo de giro rápido de 90° (hacia la derecha o hacia abajo en la secadora independiente), se agregan aproximadamente 0.75" (2 cm) a la profundidad de instalación. Si se orienta el escape de la secadora independiente o sobre un pedestal hacia arriba, la profundidad de instalación aumentará aproximadamente en 4" (10.2 cm). Si se orienta el escape de la secadora independiente o sobre un pedestal hacia la izquierda, la profundidad de instalación aumentará aproximadamente en 3.75" (9.5 cm). Si se orienta el escape de la secadora sobre un pedestal hacia abajo, la profundidad de instalación aumentará aproximadamente en 2.25" (5.7 cm).



* Para obtener estas dimensiones mínimas de profundidad, la secadora debe ser ventilada derecho hacia atrás. Si se usa un codo de 90° (hacia la derecha), se agregan aproximadamente 0.75" (2 cm) a la profundidad de instalación. Si se orienta el escape de la secadora instalada sobre la lavadora hacia arriba, la profundidad de instalación aumentará aproximadamente en 4" (10.2 cm). Si se orienta el escape de la secadora instalada sobre la lavadora hacia abajo, la profundidad de instalación aumentará aproximadamente en 2.25" (6.5 cm). Si se orienta el escape de la secadora instalada sobre la lavadora hacia la izquierda, la profundidad de instalación aumentará aproximadamente en 3.75" (9.5 cm).

¹La longitud de las mangueras de admisión de agua caliente y fría es de aproximadamente 48,5" (123 cm).

²La longitud del cable de alimentación es de aproximadamente 60" (152.5 cm).

³La longitud de la manguera de desagüe es de aproximadamente 59" (150 cm).

INSTRUCCIONES DE INSTALACIÓN

Instalación eléctrica

Los siguientes son requisitos necesarios para la instalación eléctrica segura y correcta de su secadora. El no seguir estas instrucciones puede producir una descarga eléctrica y/o incendio.



ADVERTENCIA

PELIGRO DE DESCARGA ELÉCTRICA

- Este electrodoméstico DEBE estar debidamente conectado a tierra. Si la secadora no está conectada a tierra correctamente, se pueden producir descargas eléctricas. Siga las instrucciones de esta guía para ver cómo se realiza una correcta conexión a tierra.
- No utilice un cable de extensión con esta secadora. Algunos cables de extensión no están diseñados para soportar la cantidad de corriente eléctrica que utiliza esta secadora y pueden derretirse, lo que constituye un peligro de descarga eléctrica y/o incendio. Ubique la secadora en un lugar donde el cable de alimentación que compre esté al alcance del receptáculo, permitiendo que el cable quede holgado. Consulte los requisitos de preinstalación de esta guía para ver cuál es el cable de alimentación correcto que se debe comprar.



ADVERTENCIA

PELIGRO DE DESCARGA ELÉCTRICA

- Debe instalarse, en el cable de alimentación, un dispositivo de liberación de tensión aprobado por U.L. Si no se coloca un dispositivo de liberación de tensión, el cable podría desenchufarse de la secadora y cortarse por cualquier movimiento, y provocar así una descarga eléctrica.
- No utilice un receptáculo con cableado de aluminio para un enchufe y cable de alimentación con cables de cobre (o viceversa). La reacción química que tiene lugar entre el cobre y el aluminio puede causar cortocircuitos eléctricos. El receptáculo y el cableado correcto consiste en un cable de alimentación con alambres de cobre con un receptáculo de cables de cobre.



NOTA

Las secadoras que funcionan con 208 voltios de corriente eléctrica tendrán tiempos de secado más prolongados que las que funcionan con 240 voltios de corriente eléctrica.

Requisitos de conexión a tierra: secadora eléctrica (Estados Unidos)



ADVERTENCIA

PELIGRO DE DESCARGA ELÉCTRICA

Una conexión incorrecta del conductor de conexión a tierra del equipo puede provocar un peligro de descarga eléctrica. Si no está seguro de haber realizado correctamente la conexión a tierra del artefacto, consulte a un electricista autorizado.

Para una secadora conectada a tierra:

- 1 La secadora DEBE tener conexión a tierra. En el caso de que la secadora no funcione correctamente o se descomponga, la conexión a tierra reduce el riesgo de descarga eléctrica porque ofrece una trayectoria de menor resistencia para la corriente eléctrica.
- 2 Después de comprar e instalar un cable de alimentación trifilar o tetrafilar con un conductor de conexión a tierra, el enchufe DEBE estar conectado

a un receptáculo adecuado con cable de cobre correctamente instalado y con conexión a tierra, de acuerdo con todos los códigos y las ordenanzas locales. Ante cualquier duda, comuníquese con un electricista autorizado.

- 3 NO realice modificaciones al enchufe que se proporciona con este artefacto. Si no calza en el tomacorrientes, pídale a un electricista calificado que instale un tomacorrientes adecuado.

Para una secadora conectada de forma permanente:

- 1 La secadora DEBE estar conectada a un sistema de cableado permanente de metal conectado a tierra, o bien se debe colocar un conductor de conexión a tierra con los conductores del circuito y debe estar conectado al terminal de conexión a tierra del equipo o al cable a tierra del artefacto.

Requisitos de conexión a tierra: secadora eléctrica (Canadá)



ADVERTENCIA

PELIGRO DE DESCARGA ELÉCTRICA

Una conexión incorrecta del conductor de conexión a tierra del equipo puede provocar un peligro de descarga eléctrica. Si no está seguro de haber realizado correctamente la conexión a tierra del artefacto, consulte a un electricista autorizado.

Para una secadora conectada a tierra:

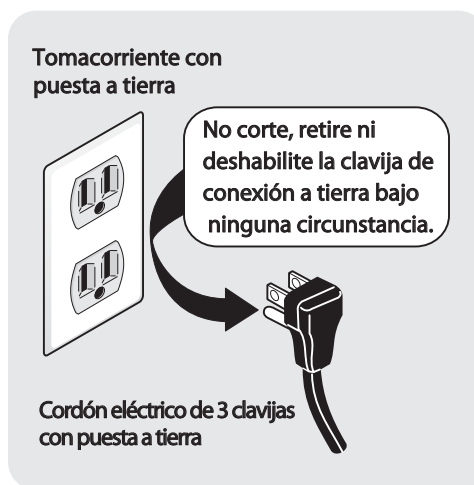
- 1 La secadora DEBE tener conexión a tierra. En el caso de que la secadora no funcione correctamente o se descomponga, la conexión a tierra reduce el riesgo de descarga eléctrica porque ofrece una trayectoria

de menor resistencia para la corriente eléctrica.

- 2 Debido a que la secadora está equipada con un cable de alimentación eléctrica que cuenta con un conductor de conexión a tierra, el enchufe debe estar conectado a un tomacorriente correctamente instalado y con conexión a tierra, de acuerdo con todos los códigos y las ordenanzas locales. Ante cualquier duda, comuníquese con un electricista autorizado.
- 3 NO realice modificaciones al enchufe que se proporciona con este artefacto. Si no calza en el tomacorrientes, pídale a un electricista calificado que instale un tomacorrientes adecuado.

Requisitos de conexión a tierra: secadora a gas (Estados Unidos y Canadá)

- 1 La secadora está equipada con un enchufe de tres patas (conexión a tierra) para evitar el peligro de electrocución y debe estar conectada directamente a un receptáculo de enchufe de tres patas que cuente con una conexión a tierra adecuada.
- 2 El enchufe debe estar conectado a un tomacorriente correctamente instalado y con conexión a tierra, de acuerdo con todos los códigos y las ordenanzas locales. Ante cualquier duda, comuníquese con un electricista autorizado.
- 3 NO realice modificaciones al enchufe que se proporciona con este artefacto. Si no calza en el tomacorrientes, pídale a un electricista calificado que instale un tomacorrientes adecuado.



INSTRUCCIONES DE INSTALACIÓN

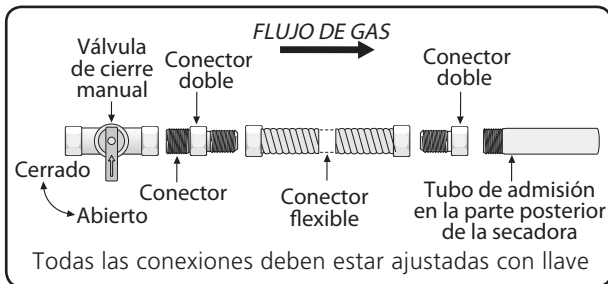
Conexión de gas

- 1 Quite el tapón del tubo de gas en la parte trasera de la secadora.

➔ IMPORTANTE

NO conecte la secadora al servicio de gas LP sin convertir la válvula de gas. El kit de conversión a gas LP debe ser instalado por un técnico calificado.

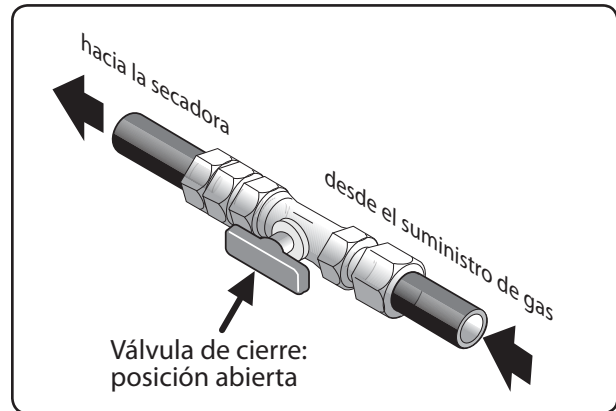
- 2 Conecte un tubo aprobado o uno semi-rígido de 1,27 cm (1/2 pulgada) de diámetro interior desde la línea de suministro de gas al tubo de 0,96 cm (3/8 pulgada) ubicado en la parte trasera de la secadora. Utilice un reductor de 1,27 cm a 0,96 cm (1/2 pulgada a 3/8 pulgada) para realizar la conexión. Aplique un sellador para roscas que sea resistente a la acción corrosiva de los gases licuados en todas las conexiones de los tubos.



➔ IMPORTANTE

La línea de suministro de gas debe estar equipada con una válvula de cierre manual aprobada. Esta válvula debe estar ubicada en la misma habitación que la secadora, en una ubicación que permita la facilidad de apertura y cierre. No bloquee el acceso a la válvula de cierre de gas.

- 3 Abra la válvula de cierre de la línea de suministro de gas para que el gas fluya a través de la tubería. Espere unos minutos a que el gas fluya a través de la línea de suministro de gas.



- 4 Utilice un manómetro para verificar que no haya fugas en el suministro de gas. Si no cuenta con un manómetro, pruebe todas las conexiones aplicando agua jabonosa en estas.



ADVERTENCIA

PELIGRO DE EXPLOSIÓN

NUNCA compruebe si hay fugas de gas con una llama abierta.

Conexión eléctrica (fuera de Canadá): trifilar



Receptáculo trifilar
(tipo NEMA 10-30R)



ADVERTENCIA

PELIGRO DE DESCARGA ELÉCTRICA

El no desconectar el suministro eléctrico antes de realizar cualquier reparación puede ocasionar lesiones personales o incluso la muerte.

- 1 Desconecte el suministro eléctrico del tomacorriente.
- 2 Extraiga el tornillo que sujeta la cubierta de acceso del bloque terminal que se encuentra en la esquina inferior de la parte trasera de la secadora.
- 3 Instale un dispositivo de liberación de tensión aprobado por U.L., de acuerdo con las instrucciones relativas al cable de alimentación/dispositivo de liberación de tensión del fabricante, en el orificio de entrada del cable de alimentación debajo del panel de acceso. En este momento, el dispositivo de liberación de tensión debe estar holgadamente en su lugar.
- 4 Pase un cable de alimentación aprobado por U.L. DEENCHUFADO, de 30 amp. tipo NEMA 10-30, SRDT a través del dispositivo de liberación de tensión.
- 5 Conecte el conductor neutro (cable del centro) del cable de alimentación al terminal PLATEADO del centro del bloque terminal. Ajuste el tornillo con firmeza.
- 6 Conecte los dos conductores externos restantes del cable de alimentación a los terminales externos de color LATÓN del bloque terminal. Ajuste los dos tornillos con firmeza.



ADVERTENCIA

PELIGRO DE DESCARGA ELÉCTRICA

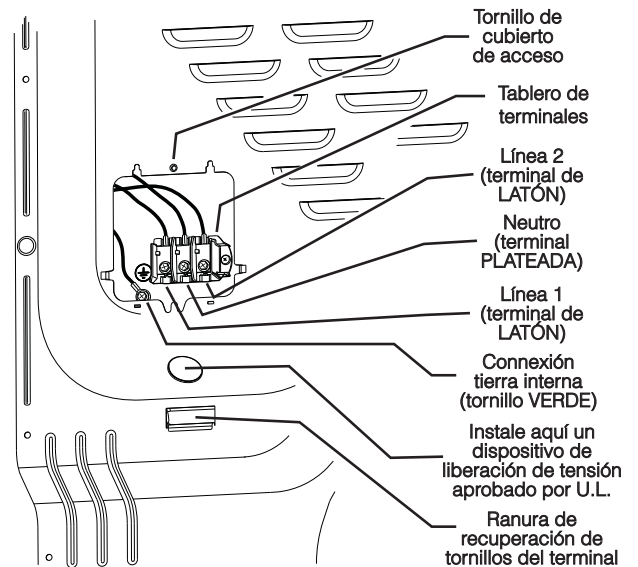
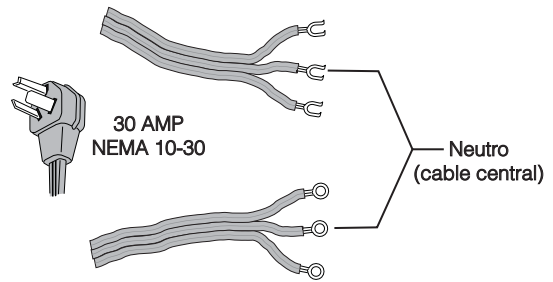
No forme un ángulo agudo con el cableado/conductor, ni los doble en el punto de conexión.

- 7 Siga las pautas del fabricante para sujetar firmemente el dispositivo de liberación de tensión y el cable de alimentación.
- 8 Vuelva a instalar la cubierta del bloque terminal.



IMPORTANTE

Para mover la secadora desde un sistema tetrafilar e instalarla en un sistema trifilar, mueva la conexión a tierra interna del terminal central nuevamente hacia el tornillo VERDE que se encuentra junto al bloque terminal.

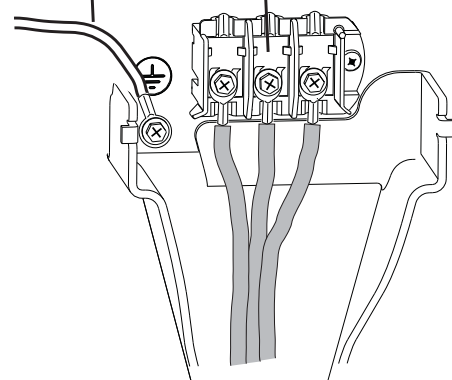


NOTA

Si un tornillo del terminal se cae durante la instalación del cable, se puede recuperar en la ranura de recuperación de tornillos del terminal que se encuentra debajo del panel de acceso.

¡NO retire la conexión interna a tierra en los sistemas trifilares!

Terminal neutro



INSTRUCCIONES DE INSTALACIÓN

Conexión eléctrica (fuera de Canadá): tetrafilar



Receptáculo tetrafilar
(tipo NEMA 14-30R)



ADVERTENCIA

PELIGRO DE DESCARGA ELÉCTRICA

El no desconectar el suministro eléctrico antes de realizar cualquier reparación puede ocasionar lesiones personales o incluso la muerte.

- 1 Desconecte el suministro eléctrico del tomacorriente.
- 2 Extraiga el tornillo que sujeta la cubierta de acceso del bloque terminal que se encuentra en la esquina inferior de la parte trasera de la secadora.
- 3 Instale un dispositivo de liberación de tensión aprobado por U.L., de acuerdo con las instrucciones relativas al cable de alimentación/dispositivo de liberación de tensión del fabricante, en el orificio de entrada del cable de alimentación debajo del panel de acceso. En este momento, el dispositivo de liberación de tensión debe estar holgadamente en su lugar.
- 4 Pase un cable de alimentación aprobado por U.L. DESENCHUFADO, de 30 amp. tipo NEMA 14-30, SRDT o ST a través del dispositivo de liberación de tensión.
- 5 Desconecte el cable interno (NEGRO) de conexión a tierra que integra el enchufe preformado de la secadora del tornillo de conexión a tierra (VERDE) que está junto al bloque terminal.
- 6 Conecte el cable de conexión a tierra (VERDE) del cable de alimentación al gabinete utilizando el tornillo (VERDE) de conexión a tierra. Ajuste el tornillo con firmeza.
- 7 Mueva el cable interno (NEGRO) de conexión a tierra que integra el enchufe preformado de la secadora al bloque terminal y conéctelo junto con el conductor neutro (BLANCO) del cable de alimentación al terminal PLATEADO del centro del bloque terminal. Ajuste el tornillo con firmeza.
- 8 Conecte los conductores ROJO y NEGRO del cable de alimentación a los terminales externos de color LATÓN del bloque terminal. Ajuste los dos tornillos con firmeza.

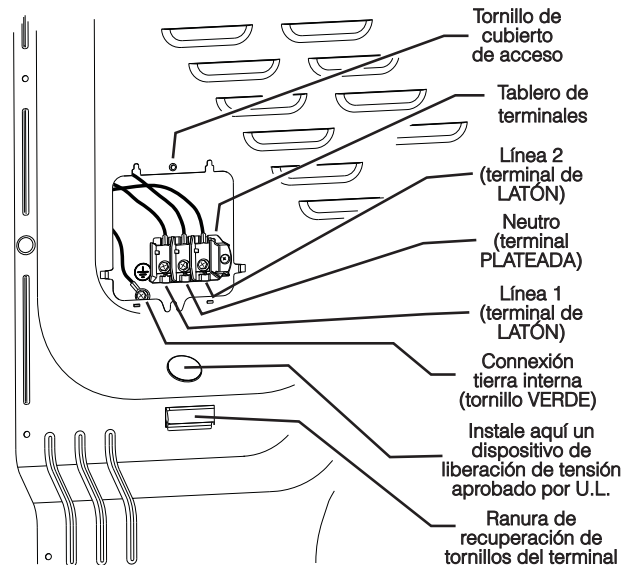
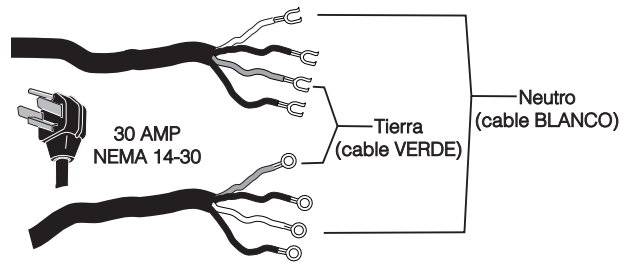


ADVERTENCIA

PELIGRO DE DESCARGA ELÉCTRICA

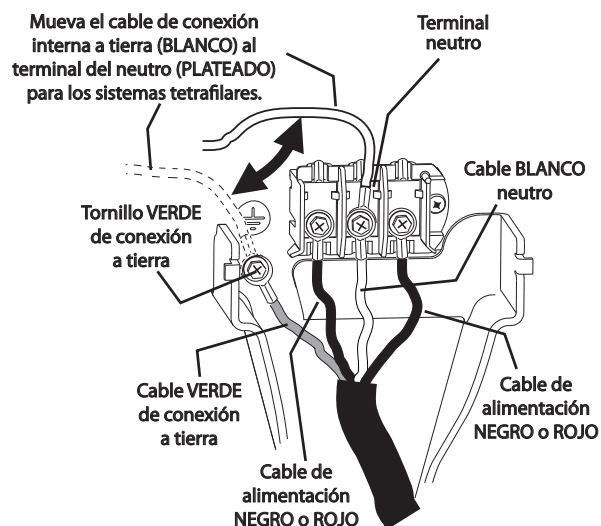
No forme un ángulo agudo con el cableado/conductor, ni los doble en el punto de conexión.

- 9 Siga las pautas del fabricante para sujetar firmemente el dispositivo de liberación de tensión y el cable de alimentación.
- 10 Vuelva a instalar la cubierta del bloque terminal.



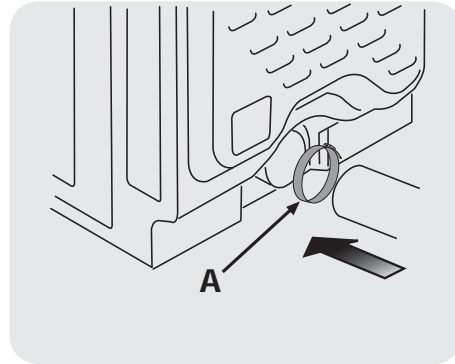
NOTA

Si un tornillo del terminal se cae durante la instalación del cable, se puede recuperar en la ranura de recuperación de tornillos del terminal que se encuentra debajo del panel de acceso.



Instalación general

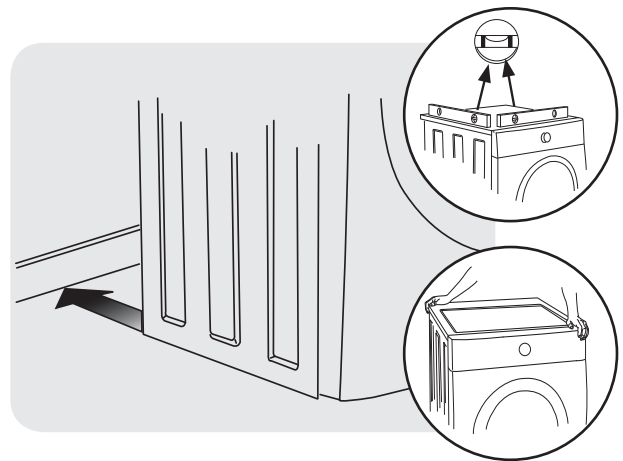
- 1 Conecte el tubo de escape al sistema de escape exterior (consulte las páginas 28 a 30). Se recomienda usar una abrazadera (pieza A) de 4" (10,2 cm) para conectar la secadora al sistema de ventilación de escape. Utilice cinta de papel de aluminio para sellar las demás uniones.
- 2 Deslice la secadora a su posición final cuidadosamente. Ajuste una o varias de las patas de la secadora hasta que se encuentre firme sobre las cuatro patas. Coloque un nivel en la parte superior de la secadora. La secadora DEBE estar nivelada y firme sobre las cuatro patas. Presione las distintas esquinas para asegurarse de que la secadora está estabilizada. Retire y deseche la cinta de la puerta.



➔ IMPORTANTE

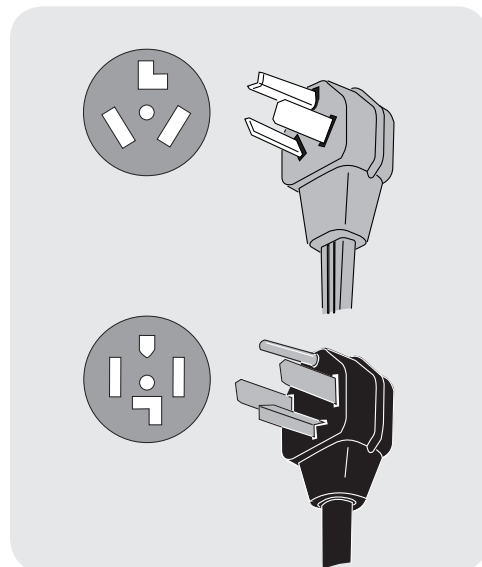
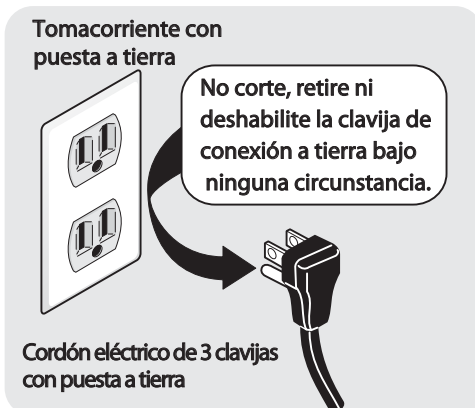
Revise la caja del interruptor automático/fusibles para asegurarse de que la electricidad esté desconectada antes de conectar el cable de alimentación al tomacorriente.

- 3 Conecte el cable de alimentación a un tomacorriente con conexión a tierra.
- 4 Conecte la electricidad desde la caja del interruptor automático/fusibles.
- 5 Consulte la Guía de uso y cuidado que se proporciona con la secadora. Dicha guía contiene información útil y valiosa que le ahorrará tiempo y dinero.
- 6 Si tiene alguna pregunta durante el funcionamiento inicial, repase la "Lista de control para evitar el servicio técnico" de su Guía de uso y cuidado antes de llamar al servicio técnico.
- 7 Guarde estas instrucciones cerca de la secadora para referencia futura.



📌 NOTA

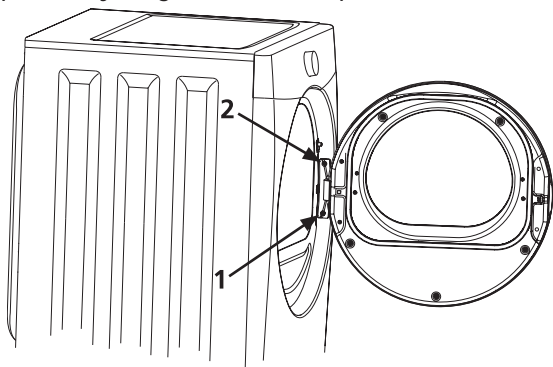
Dentro de la consola de la secadora, encontrará una hoja de información técnica y un diagrama de cableado.



INVERSIÓN DE LA PUERTA

Cómo extraer la puerta

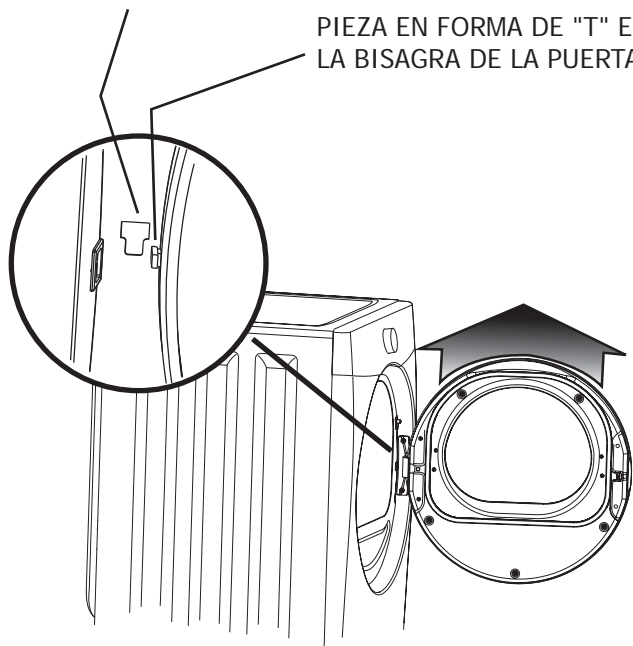
- 1 Proteja las superficies de trabajo planas, como la parte superior de la secadora o el piso cerca de ésta utilizando un paño o toalla suave.
- 2 Abra la puerta de la secadora y retire los dos tornillos de la bisagra. Retire el tornillo inferior primero y luego el tornillo superior.



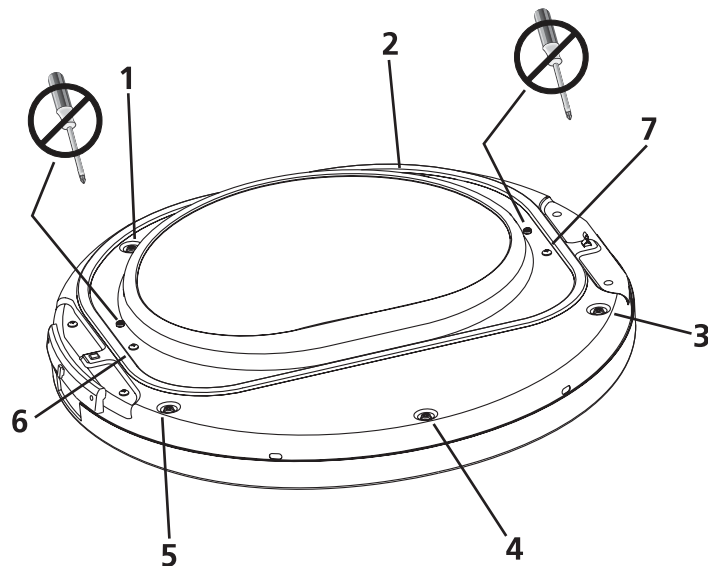
- 3 Mientras sostiene la puerta con ambas manos, levante la puerta y la bisagra derecho hacia arriba aproximadamente 3/8" (10 mm) de manera que la pieza en forma de "T" pueda pasar por la ranura en forma de "T" en el panel delantero.

RANURA EN FORMA DE "T"
EN EL PANEL DELANTERO

PIEZA EN FORMA DE "T"
EN LA BISAGRA DE LA PUERTA



- 4 Coloque cuidadosamente la puerta de la secadora sobre una superficie de trabajo plana y protegida con la superficie exterior hacia abajo.
- 5 Ubique los 5 tornillos de cabeza corrugada (no. 1-5) en las muescas circulares pequeñas (en las posiciones relativas al reloj de las 11, 1, 4, 6, y 8) de la puerta interior. Retire y guarde estos 5 tornillos.



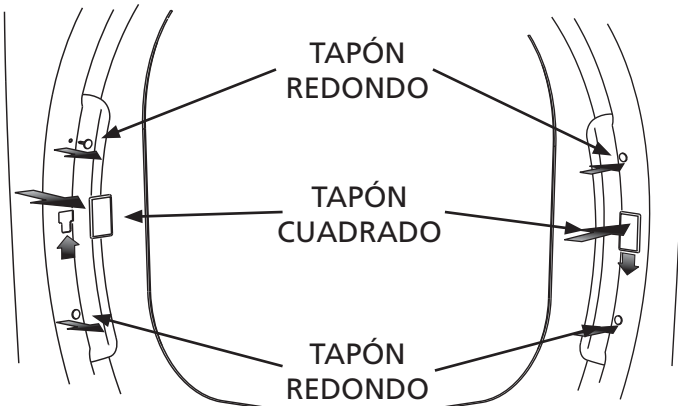
➔ IMPORTANTE

No intente retirar los 2 tornillos "irremovibles" que sostienen el vidrio en su lugar.

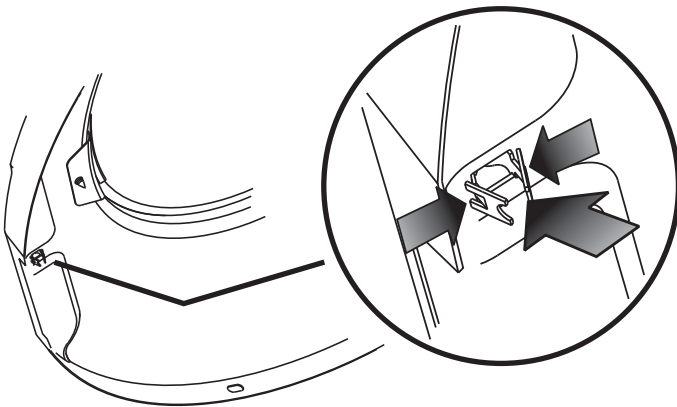
- 6 Ubique los 2 tornillos de cabeza alomada (no. 6-7) en la puerta interior cerca del pestillo de metal y del centro de la bisagra (en las posiciones relativas al reloj de las 9 y 3). Retire y guarde estos 2 tornillos.
- 7 Separe el conjunto de la puerta interior del conjunto de la puerta exterior.

Inversión de la bisagra

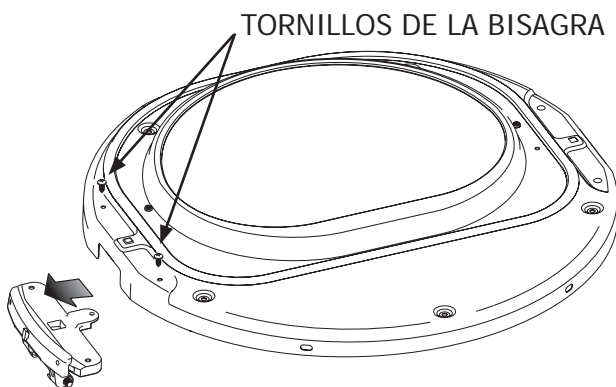
- 1 Retire cuidadosamente los dos tapones redondos del panel delantero y guárdelos. Retire y guarde la cubierta cuadrada de la ranura en forma de "T" deslizando hacia arriba y tirando de ella para retirarla. Mueva los 3 tapones al lado opuesto del panel delantero.



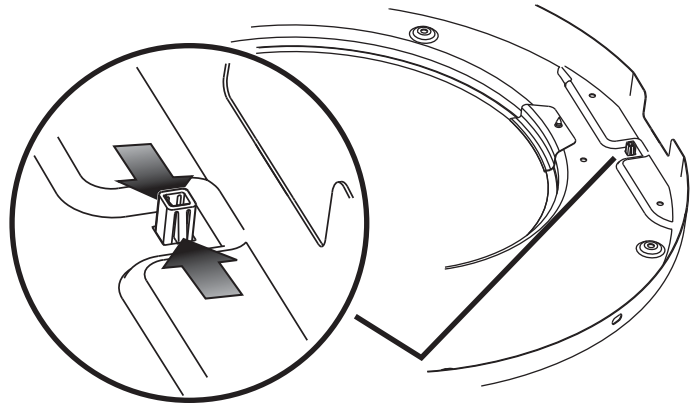
- 2 Voltee el conjunto de la puerta para exponer las lengüetas restantes del pestillo de metal. Sostenga las lengüetas completamente con alicates para retirarlas. Deseche el pestillo de metal viejo.



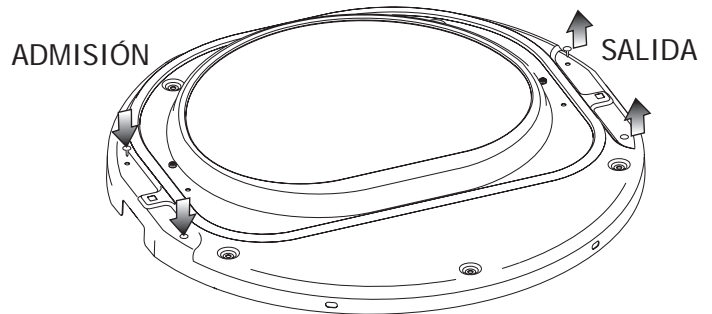
- 3 Vuelva a voltear el conjunto de la puerta interior y ubique los 2 tornillos de cabeza alomada de la bisagra. Retire y guarde estos 2 tornillos y separe la bisagra del conjunto de la puerta interior.



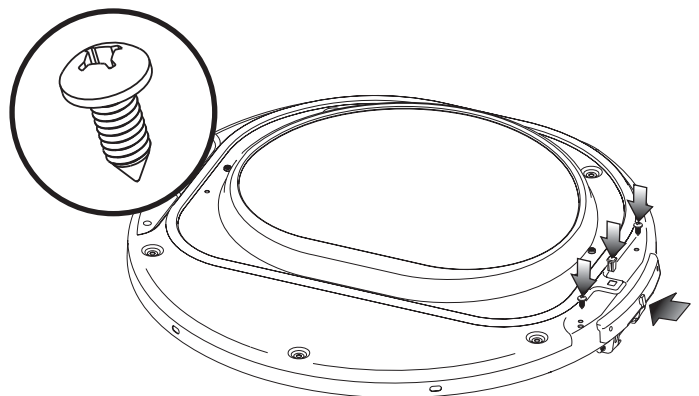
- 4 Desde la parte trasera de la puerta interior, presione las lengüetas de retención del tapón de plástico cuadrado para liberarlo. Guarde el tapón cuadrado para volver a instalarlo más adelante.



- 5 Retire cuidadosamente los 2 tapones redondos de la puerta interior y muévalos a los agujeros opuestos para reinstalarlos.



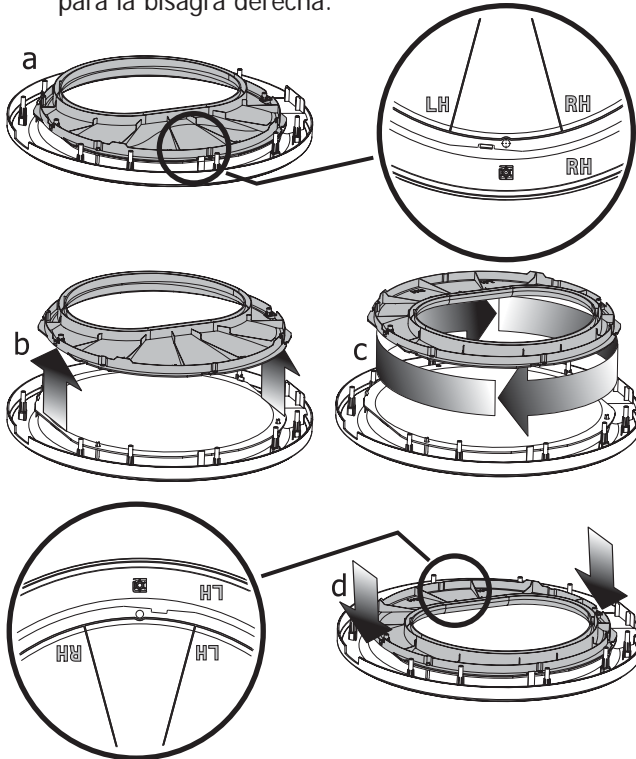
- 6 Gire la bisagra y muévala al lado opuesto de la puerta interior. Fijela con los 2 tornillos de cabeza alomada que retiró anteriormente. Vuelva a instalar el tapón plástico en el agujero cuadrado junto a la bisagra.



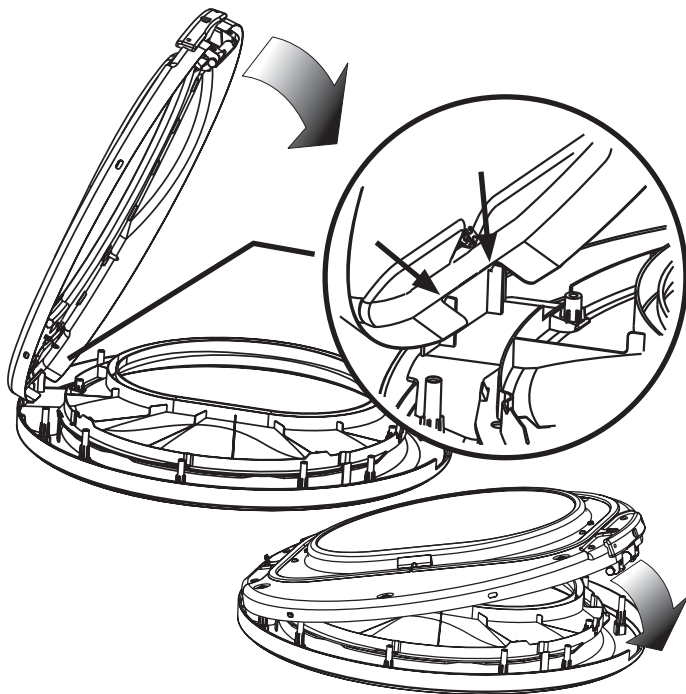
INVERSIÓN DE LA PUERTA

Reensamblaje de la puerta

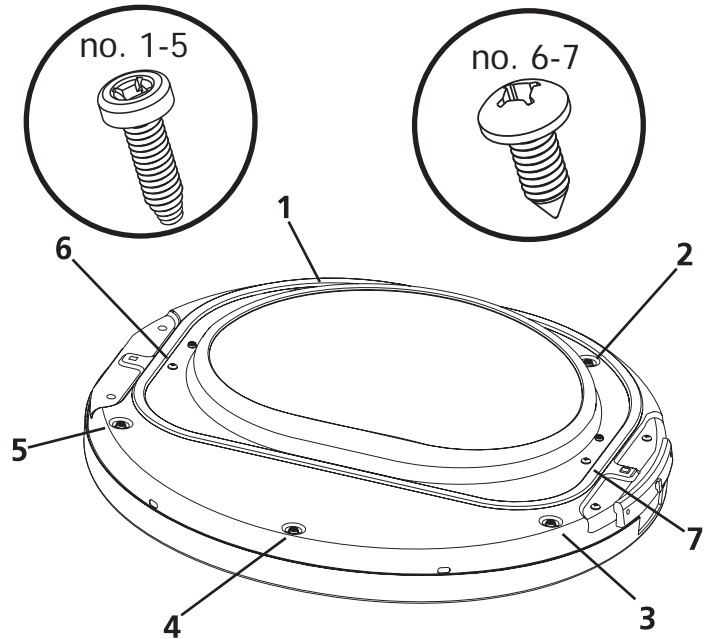
- 1 Levante el anillo interior de vidrio. Gírelo 180 grados, vuelva a instalarlo en la puerta exterior alineando los indicadores: "LH" para la bisagra izquierda o "RH" para la bisagra derecha.



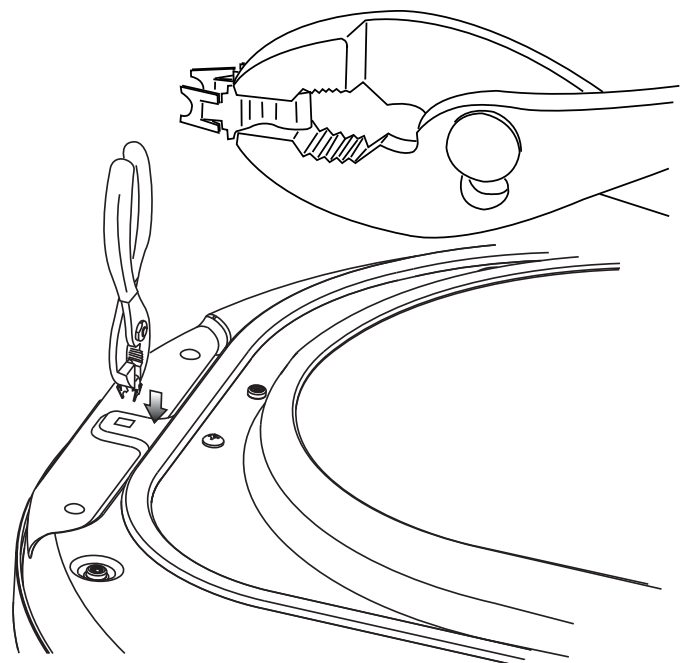
- 2 Recueste la abertura de la puerta interior a un ángulo de 90 grados sobre los soportes de la compuerta de la cubierta de la bisagra. Gire la puerta interior hacia abajo sobre la puerta exterior.



- 3 Vuelva a instalar los tornillos de cabeza corrugada (no. 1-5) retirados anteriormente. Tenga cuidado de no dañar la rosca de los agujeros de plástico.
- 4 Vuelva a instalar los tornillos de cabeza alomada (no. 6-7) retirados anteriormente. Tenga cuidado de no dañar la rosca de los agujeros de plástico.



- 5 Ubique el nuevo pestillo de metal proporcionado con los manuales de la secadora. Sostenga el pestillo nuevo con alicates como se muestra abajo. Inserte firmemente el pestillo de manera que quede en posición vertical.

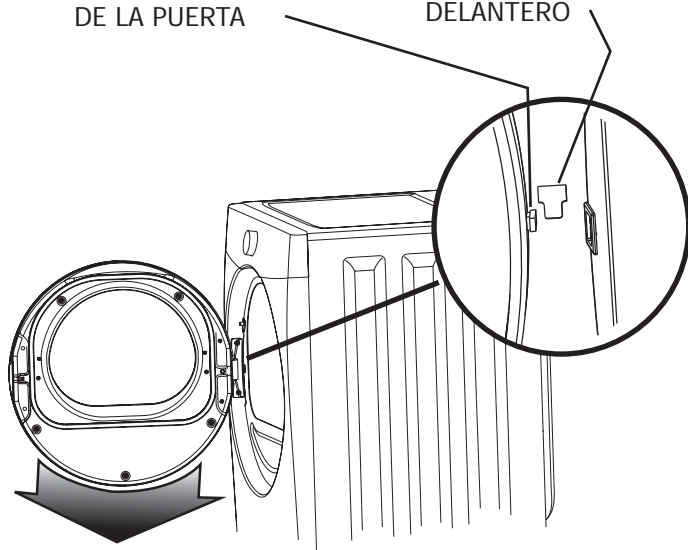


Reinstalación de la puerta

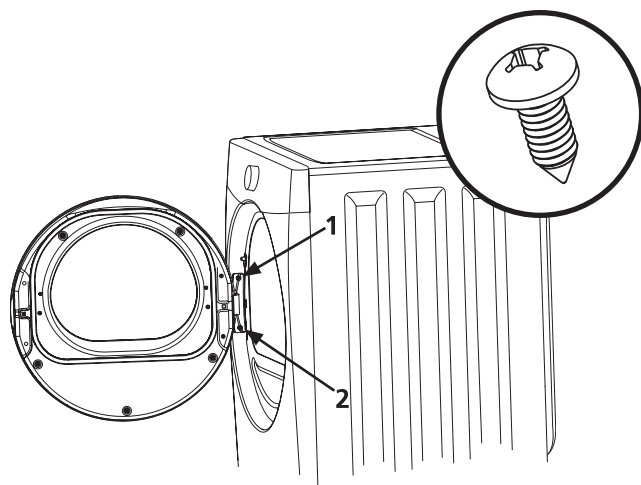
- 1 Mientras sostiene la puerta con ambas manos, introduzca la pieza en forma de "T" que se encuentra en la parte trasera de la bisagra en la ranura en forma de "T" del panel delantero y baje la puerta para alinear los agujeros de instalación.

PIEZA EN FORMA DE "T" EN LA BISAGRA DE LA PUERTA

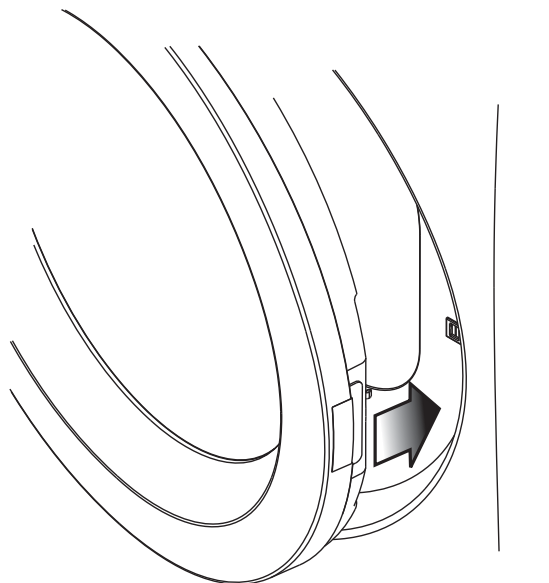
RANURA EN FORMA DE "T" EN EL PANEL DELANTERO



- 2 Mientras apoya la puerta, instale el tornillo de cabeza alomada superior primero y luego el inferior.



- 3 Cierre la puerta y verifique que la bisagra, el pestillo y el gancho funcionan correctamente.



NOTA

Los tornillos instalados correctamente presionarán la bisagra hasta que quede al ras del panel delantero. Cualquier espacio que quede entre la bisagra y el panel delantero hará que el pestillo y el gancho queden desalineados.

ACCESORIOS

PEDESTAL DE ALMACENAMIENTO CONCORDANTE*

- Pedestal de color blanco - P/N CFPWD15W
- Pedestal de color azul - P/N CFPWD15N
- Pedestal de color rojo - P/N CFPWD15R
- Pedestal de color plateada - P/N CFPWD15A
- Pedestal de color negra - P/N CFPWD15B

Un accesorio de pedestal de almacenamiento, especialmente diseñado para esta secadora, se puede utilizar para elevar la secadora y facilitar su uso. Dicho pedestal agregará aproximadamente 38,1 cm (15 pulgadas) a la altura de su unidad para una altura total de 134,62 cm (53 pulgadas).

*Es posible que hayan otros colores disponibles. Póngase en contacto con el distribuidor donde adquirió la secadora.

KIT DE SECADORA PARA CENTRO DE LAVADO

Pieza No.. 134700400

Dependiendo del modelo que haya comprado, es posible que esta secadora incluya un kit para instalarla sobre la lavadora correspondiente. Si el modelo que adquirió no incluye un kit de instalación sobre la lavadora o desea un kit diferente, puede pedir uno.

KIT DE CONVERSIÓN A GAS LP

Pieza No.. PCK4200

Las secadoras a gas diseñadas para el uso en lugares con suministro de LP requieren utilizar un kit de conversión antes de la instalación.

KIT DE INSTALACIÓN EN UNA CASA RODANTE

Pieza No.. 137067200

La instalación en una casa rodante requiere utilizar el KIT DE INSTALACIÓN EN UNA CASA RODANTE.

REJILLA DE SECADO

Pieza No.. 1370067300

Dependiendo del modelo que haya comprado, es posible que esta secadora incluya una rejilla de secado. Si el modelo que adquirió no incluye una rejilla de secado o desea una rejilla adicional, puede pedir una.

LLAVE UNIVERSAL PARA ELECTRODOMÉSTICOS

Pieza No.. 137019200

También puede pedir una LLAVE UNIVERSAL PARA ELECTRODOMÉSTICOS para ayudarlo a ajustar las patas de las secadoras, lavadoras o pedestales.

MARCADORES DE PINTURA DE RETOQUE*

- Marcador de retoque de pintura blanca - Pieza N° 5304468812
- Marcador de retoque de pintura rojo - Pieza N° 5304471227
- Marcador de retoque de pintura azul - Pieza N° 5304471229
- Marcador de retoque de pintura plateada - Pieza N° 5304471228
- Marcador de retoque de pintura negra - Pieza N° 5304458932

*Es posible que hayan otros colores disponibles. Póngase en contacto con el distribuidor donde adquirió la secadora.

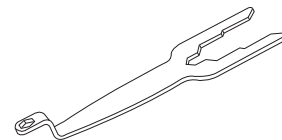
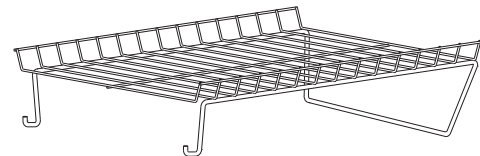
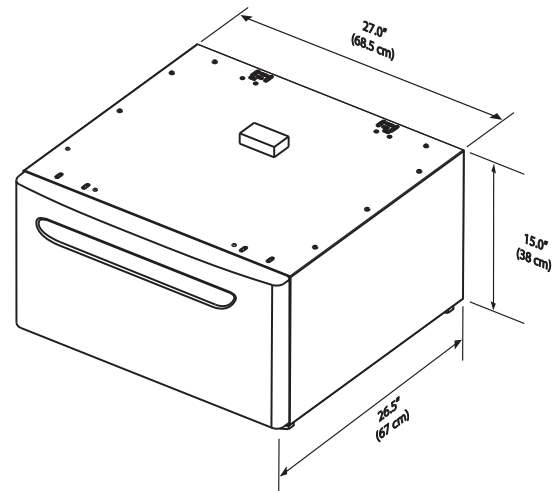
Piezas de repuesto:

Si su secadora necesita piezas de repuesto, comuníquese con el sitio donde la adquirió, o consulte la Guía de uso y cuidado para obtener más información.



PRECAUCIÓN

El no utilizar accesorios fabricados (o aprobados) por el fabricante puede ocasionar lesiones personales, daños a la propiedad o daños a la secadora.



ADVERTENCIA

PELIGRO DE DESCARGA ELÉCTRICA

Cuando se reparen los controles, rotule todos los cables antes de desconectarlos. Los errores de cableado pueden producir un funcionamiento incorrecto y peligroso. Verifique que el funcionamiento es correcto después de realizar las reparaciones.

Microwave

FFCM1134L S



Signature Features

Easy-Set™ Start

Quickly start cooking - one to six minutes - with just one touch.

Auto One-Touch Options

Our microwaves feature easy-to-use one-touch buttons so you can cook beverages, baked potatoes, popcorn, fresh veggies or even add thirty seconds with the touch of a button.

Ready-Select™ Controls

Easily select options with the touch of a button.

Effortless™ Defrost

Makes it easy to defrost almost anything, quickly and evenly.

Countertop

Product Dimensions

Height	12-3/4"
Width	20-3/8"
Depth	16-1/8"

More Easy-To-Use Features

Effortless™ Reheat

Reheat almost anything at the touch of a button.

Multi-Stage Cooking

Our Multi-Stage Cooking option allows you to program power levels and cooking times in advance, so you can program it to defrost, cook and keep a meal warm all at once.

10 Cooking Power Levels

Provides the versatility needed to prepare everything from frozen pizza to pot roast quickly and easily.

Control Lock Option

Electronic Clock/Timer

Helps you keep track of cook times.

Attractive Stainless Steel Exterior

Interior Light

Illuminates the contents of the microwave for increased visibility.

Large Glass Turntable

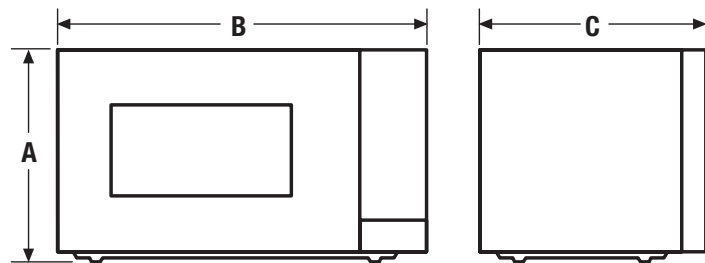
Even large items fit on our large glass turntable.

Available in:



Stainless
(S)

Features	
Control/ Timing System	Ready-Select™
Exterior Door Finish	Stainless Steel
Handle Design	Push Button
Microwave Features	
Microwave Capacity (Cu.Ft.)	1.1
Watts (IEC-705 Test Procedure)	1,100
Interior Light	Yes
Interior Color	White
Turntable Diameter	12-3/8"
Turntable On/Off	
Control Lock	Yes
Clock	Yes
Touch Pad Buttons	23
Power Levels	10
Accessory Metal Rack	
Microwave Control Options	
Easy-Set™ Start	Yes
Popcorn Button	Yes
Chicken Nugget Button	
Baked Potato Button	Yes
Sensor Reheat Button	
Snack Button	
Beverage	Yes
Melt & Soften Options	
Auto Reheat Options	4
Snack Menu Options	
Auto Cook Options	5
Auto Defrost Options	Yes
Keep Warm	
Add-30-Seconds	Yes
Sensor Cooking Options	
Vegetable Cook Sensor	
Delay Start	
User Preferences	
Power Ratings	
Frequency (Mhz)	2,450
Watts @ 120 Volts	1,000
Amps @ 120 Volts	14
Specifications	
Oven Interior Height	9-1/4"
Oven Interior Width	19-27/32"
Oven Interior Depth	14-13/32"
Power Supply Connection Location	Rear
Voltage Rating	120V / 60Hz / 15A
Minimum Circuit Required (Amps)	14
Shipping Weight (Approx.)	38



NOTE: For planning purposes only. Always consult local and national electric codes. Refer to Product Installation Guide for detailed installation instructions on the web at frigidaire.com.



Product Dimensions ¹	
A - Height	12-3/4"
B - Width	20-3/8"
C - Depth	16-1/8"

¹A minimum clearance of 3 inches is required between microwave oven and adjacent walls. Leave a minimum clearance of 12 inches above microwave oven.

Accessories information available on the web at frigidaire.com

FRIGIDAIRE

USA • 10200 David Taylor Drive • Charlotte, NC 28262 • 1-800-FRIGIDAIRE • frigidaire.com
 CANADA • 5855 Terry Fox Way • Mississauga, ON L5V 3E4 • 1-800-265-8352 • frigidaire.ca

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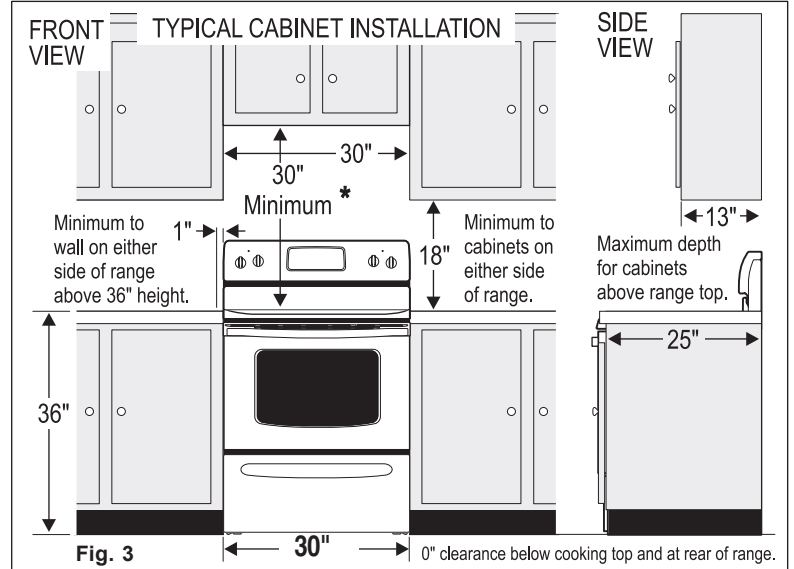
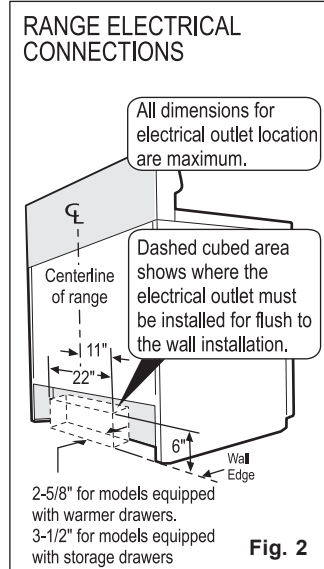
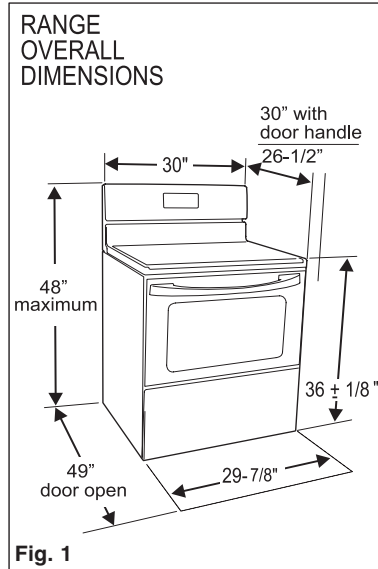
Specifications subject to change.
 Printed in the U.S.A.

INSTALLATION INSTRUCTIONS FOR FREESTANDING ELECTRIC RANGE

**INSTALLATION AND SERVICE MUST BE PERFORMED BY A QUALIFIED INSTALLER.
IMPORTANT: SAVE FOR LOCAL ELECTRICAL INSPECTOR'S USE.
READ AND SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.**

Clearances and Dimensions

1. **Provide adequate clearances** between the range and adjacent combustible surfaces.
2. **Location—Check location where the range will be installed.** Check for proper electrical supply, and the stability of the floor.
3. **Dimensions that are shown must be used.** Given dimensions provide minimum clearance. Contact surface must be solid and level.



*30" MINIMUM CLEARANCE BETWEEN THE TOP OF THE COOKING SURFACE AND THE BOTTOM OF AN UNPROTECTED WOOD OR METAL CABINET; OR 24" MINIMUM WHEN BOTTOM OF WOOD OR METAL CABINET IS PROTECTED BY NOT LESS THAN 1/4" FLAME RETARDANT MILLBOARD COVERED WITH NOT LESS THAN NO. 28 MSG SHEET STEEL, 0.015" STAINLESS STEEL, 0.024" ALUMINUM OR 0.020" COPPER. 0" CLEARANCE IS THE MINIMUM FOR THE REAR OF THE RANGE. FOLLOW ALL DIMENSION REQUIREMENTS PROVIDED ABOVE TO PREVENT PROPERTY DAMAGE, POTENTIAL FIRE HAZARD, AND INCORRECT COUNTERTOP AND CABINET CUTS.

TO ELIMINATE THE RISK OF BURNS OR FIRE BY REACHING OVER HEATED SURFACE UNITS, CABINET STORAGE SPACE LOCATED ABOVE THE SURFACE UNITS SHOULD BE AVOIDED. IF CABINET STORAGE IS TO BE PROVIDED, THE RISK CAN BE REDUCED BY INSTALLING A RANGE HOOD THAT PROJECTS HORIZONTALLY A MINIMUM OF 5" BEYOND THE BOTTOM OF THE CABINETS.

IMPORTANT SAFETY INSTRUCTIONS

WARNING If the information in this manual is not followed exactly, a fire or electrical shock may result causing property damage, personal injury or death.

Important Notes to the Installer

- Read all instructions contained in these installation instructions before installing range.
- Remove all packing material from the oven compartments before connecting the gas & electrical supply to the range.
- Observe all governing codes and ordinances.
- Be sure to leave these instructions with the consumer.

Important Note to the Consumer

Keep these instructions with your owner's guide for future reference.

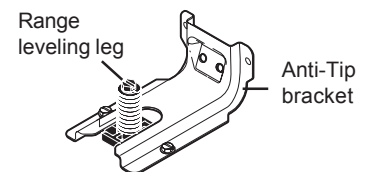
- As when using any appliance generating heat, there are certain safety precautions you should follow. These are listed in the Use & Care Guide, read it carefully.
- Be sure your range is installed and grounded properly by a qualified installer or service technician.
- Make sure the wall coverings around the range can withstand the heat generated by the range.
- To eliminate the need to reach over the surface elements, cabinet storage space above the elements should be avoided.

WARNING

Tip Over Hazard



- A child or adult can tip the range and be killed.
- Verify the anti-tip device has been installed to floor or wall.
- Ensure the anti-tip device is re-engaged when the range is moved to floor or wall.
- Do not operate the range without the anti-tip device in place and engaged.
- Failure to follow these instructions can result in death or serious burns to children and adults.



To check if the anti-tip bracket is installed properly, use both arms and grasp the rear edge of range back. Carefully attempt to tilt range forward. When properly installed, the range should not tilt forward. Refer to the anti-tip bracket **installation instructions** supplied with your range for proper installation.

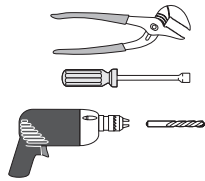
INSTALLATION INSTRUCTIONS FOR FREESTANDING ELECTRIC RANGE

BEFORE STARTING

Tools You Will Need

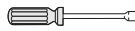
For leveling legs and Anti-Tip Bracket:

- Adjustable wrench or channel lock pliers
- 5/16" Nutdriver or Flat Head Screwdriver
- Electric Drill & 1/8" Diameter Drill Bit (Masonry Drill Bit if installing in concrete)



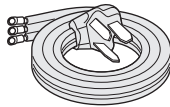
For electrical supply connection:

- 1/4" & 3/8" Socket driver or Nutdriver



Additional Materials You Will Need:

- Power Supply Cord or
- Copper Electrical Wiring & Metal Conduit (for hard wiring)



NORMAL INSTALLATION STEPS

1. ANTI-TIP BRACKET INSTALLATION INSTRUCTIONS - IMPORTANT SAFETY WARNING

To reduce the risk of tipping of the range, the range must be secured to the floor by properly installed Anti-Tip Bracket and screws packed with the range. Failure to install the anti-tip bracket will allow the range to tip over if excessive weight is placed on an open door or if a child climbs upon it. Serious injury might result from spilled hot liquids or from the range itself.

If range is ever moved to a different location, the Anti-Tip Bracket must also be moved and installed with the range.

Instructions are provided for installation in wood or cement fastened to either the floor or wall. When installed to the wall, make sure that screws completely penetrate dry wall and are secured in wood or metal. When fastening to the floor or wall, be sure that screws do not penetrate electrical wiring or plumbing.

1a. Locate the Bracket using the Template - (Bracket may be located on either the left or right side of the range. Use the information below to locate the bracket if template is not available).

Mark the floor or wall where left or right side of the range will be located. If rear of range is against the wall or no further than 1-1/4" from wall when installed, you may use the wall or floor mount method. If molding is installed

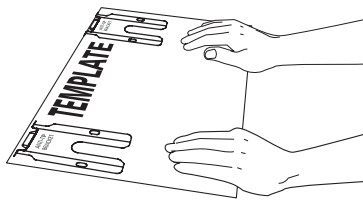


Fig. 4

and does not allow the bracket to fit flush against the wall, remove molding or mount bracket to the floor. For wall mount, locate the bracket by placing the back edge of the template against the rear wall and the side edge of template on the mark made referencing the side of the range (See Fig. 4). Place bracket on top of template and mark location of the screw holes in wall. If rear of range is further than 1-1/4" from the wall when installed, attach bracket to the floor. For floor mount, locate the bracket by placing back edge of the template where the rear of the range will be located. Mark the location of the screw holes, shown in template.

1b. Drill Pilot Holes & Fasten Bracket - Drill a 1/8" pilot hole where screws are to be located. If bracket is to be mounted to the wall, drill pilot hole at an approximate 20° downward angle (See Fig. 5).

If bracket is to be mounted to masonry or ceramic floors, drill a

3/16" pilot hole 1-3/4" deep. The screws provided may be used in wood or concrete material. Use a 5/16" nut-driver or flat head screwdriver to secure the bracket in place (See Fig. 6).

1c. Level and Position Range - Level range by adjusting the (4) leveling legs with a wrench. NOTE: A minimum clearance of 1/8" is required between the bottom of the range and the leveling leg to allow room for the bracket. Use a spirit level to check your adjustments. Slide range back into position (See Fig. 7).

Visually check that rear leveling leg is inserted into and fully secured by the Anti-Tip Bracket by removing lower panel or storage drawer. For models with a Warmer Drawer or broiler compartment, grasp the top rear edge of the range and carefully attempt to tilt it forward.

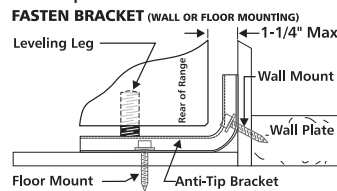


Fig. 5

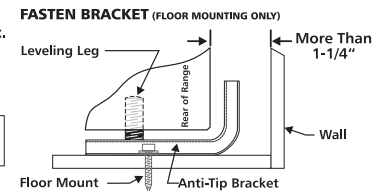


Fig. 6

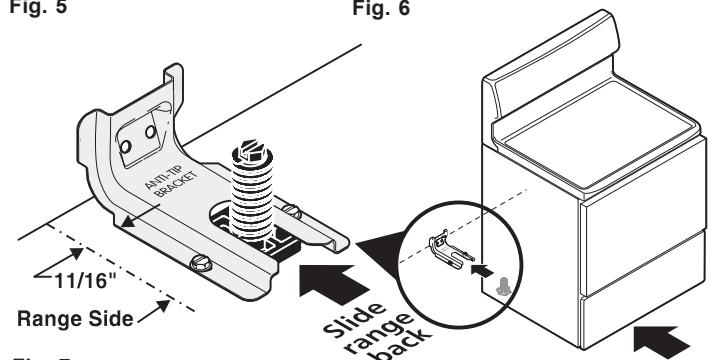


Fig. 7

2. ELECTRICAL CONNECTION REQUIREMENTS - This appliance must be properly installed and grounded by a qualified technician in accordance with the National Electrical Code ANSI/NFPA No. 70 -- latest edition -- and Local Electrical Code requirements.

This appliance may be connected by means of "Permanent Wiring" or "Power Supply Cord Kit."

When installing Permanent Wiring, do not leave excess wire in range compartment. Excess wire in the range compartment may not allow the Rear Access Cover to be replaced properly and could create a potential electrical hazard if wires become pinched. Connect only as instructed under "**Permanent Wire Connections**" in Step 4c. When using flexible conduit or range cable use flex connector or range cable strain relief (Fig. 11).

2a. Models with Factory Connected Power Supply Cord. NOTE: Some models may have a factory installed three (3) conductor Power Supply Cord.

Mobile home installations, new branch circuit installations (1996NEC) or areas where Local Codes do not permit grounding through neutral require a four (4) conductor power supply cord kit rated at 125/250 volts minimum and marked for use with ranges.

See Range Connection Opening Size Chart (Figs. 9 & 10) for cord kit ampere rating information. Terminals on end of wires must be either closed loop or open-end spade lugs with upturned ends.

INSTALLATION INSTRUCTIONS FOR FREESTANDING ELECTRIC RANGE

2b. MODELS REQUIRING POWER SUPPLY CORD KIT.

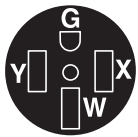
RISK OF FIRE OR ELECTRICAL SHOCK MAY OCCUR IF AN INCORRECT SIZE RANGE CORD KIT IS USED, THE INSTALLATION INSTRUCTIONS ARE NOT FOLLOWED OR STRAIN RELIEF BRACKET IS DISCARDED.

This appliance may be connected by means of a power supply cord. Only a power supply cord kit rated at 125/250 volts minimum, and marked for use with ranges shall be used. See Fig. 10 for cord kit ampere rating information. Cord must have either three (3) or four (4) conductors (See Fig. 8). Terminals on end of wires must be either closed loop or open-end spade lugs with upturned ends. Cord must have strain relief properly installed. See Steps 4a. for 4-Wire or 4b. for 3-Wire connections.

3. ELECTRICAL CONNECTION TO RANGE.

The Rear Access Cover must be removed (Fig 9). To remove, loosen center screw (one screw) and remove cover. The terminal block will then be accessible.

3 & 4 - Wire electrical wall Receptacle types & recommended mounting orientation on wall



Required for new and remodeled installations

4-Wire Wall receptacle (14-50R)



Allowed for existing installations

3 Wire Wall receptacle (10-50R)

Fig. 8

NOTE: Range is shipped from factory with 1-3/8" dia. hole as shown. To use either 7/8" dia. hole or 1-1/8" dia. knockouts refer to Fig. 9.

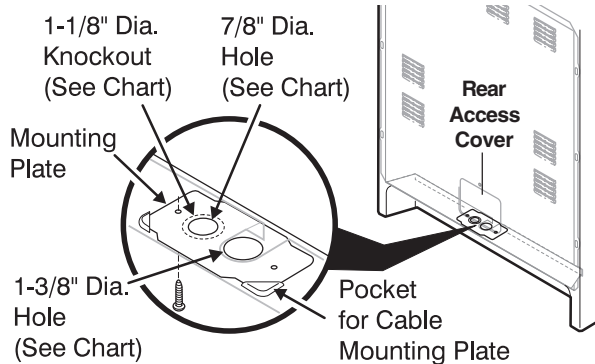


Fig. 9

Range Connection Opening Size Chart				
Supply Cord Kit ampere rating information. See serial plate on range for kilowatt rating data.				
See Serial Plate on Range for KW Rating	Cord Kit Ampere Rating	Diameter (inches) of Range connection Opening		
		Cord Kit	Permanent Wiring	
120/240 Volts 120/208 Volts			Cord Kit	Permanent Wiring
8.8-16.5 KW 16.6-22.5 KW	40/50 Amp 50 Amp	1-3/8 in. 1-3/8 in.		1-1/8 in. 1-3/8 in.

Fig. 10

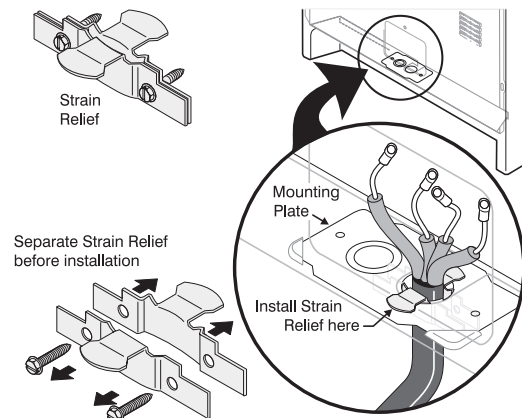


Fig. 11

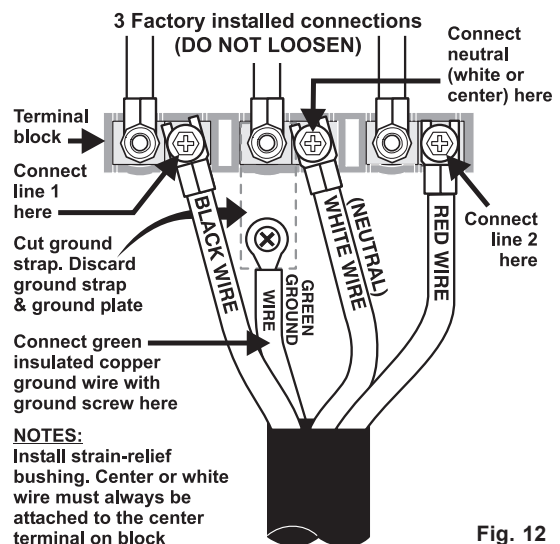
4A. POWER CORD CONNECTIONS

(4-Wire Connection Instructions - Refer to Fig.12)

Before wiring the range review the suggested power source location drawing in Fig. 3. If connecting to a 4-Wire electrical system (new branch-circuit or mobile home requires 4-Wire connection):

1. Follow the manufacturer's installation instructions supplied with the strain relief and install (Also see Figs. 9, 10 & 11).
2. Insert the end connectors for Line 1, Line 2 and Neutral and tighten securely to the terminal block.
IMPORTANT NOTE: DO NOT LOOSEN the factory installed nut connections which secure the range wiring to the terminal block. Electrical failure or loss of electrical connection may occur if these 3 nuts are loosened or removed.
3. **You must disconnect the ground strap.** Remove the factory installed ground screw & plate to release the copper ground strap from the frame of the appliance. Cut and discard the copper ground strap & plate. KEEP the ground screw.
4. Connect the ground wire (Green) lead with the eyelet to the frame of the appliance with the ground screw using the same hole in the frame where the ground screw was originally installed (See Fig. 12).
5. Make sure all screws are tightened securely and replace the rear access cover (See Fig. 9).

4-Wire Connection



NOTES:
Install strain-relief bushing. Center or white wire must always be attached to the center terminal on block

Fig. 12

INSTALLATION INSTRUCTIONS FOR FREESTANDING ELECTRIC RANGE

or 4B. POWER CORD CONNECTIONS

(3-Wire Connection Instructions . For existing installations ONLY - Refer to Fig. 13).

1. Follow the manufacturer's installation instructions supplied with the strain relief and install (Also see Figs. 9, 10 & 11).
2. Insert the end connectors for Line 1, Line 2 and Neutral and tighten securely to the terminal block (See Fig. 13).
IMPORTANT NOTE: DO NOT LOOSEN the factory installed nut connections which secure the range wiring to the terminal block. Electrical failure or loss of electrical connection may occur if these 3 nuts are loosened or removed.
3. Make sure all connections are tightened securely and replace the rear access cover (See Fig. 9).

Grounding Instructions (3-Wire Connections only): A ground strap is installed on this range which connects the center terminal of the terminal block (Neutral) to the range chassis. The ground strap is connected to the range by the center, lowest screw (See Fig. 13). The ground strap must not be removed unless National, State or Local Codes do not permit use of a ground strap.

NOTE: If the ground strap is removed for any reason, a separate ground wire must be connected to the separate ground screw attached to the range chassis and to an adequate ground source.

4c. 3 & 4-WIRE PERMANENT WIRE CONNECTIONS.

3 - Wire Permanent Connection - follow Steps 1,2 & 5 below.

4 - Wire Permanent Connection - follow Steps 1 thru 5 below.

Before wiring the range, review the suggested power source location drawings in Fig. 3. If connecting to a 4-Wire electrical system (new branch-circuit or mobile home requires 4-Wire connection):

1. **(3 & 4 - Wire Permanent Connections)** Follow the manufacturer's installation instructions supplied with the strain relief and install.
2. **(3 & 4 - Wire Permanent Connections)** Strip insulation away from the ends of the permanent wiring for Line 1, Line 2, Neutral (also strip ground wire on 4-Wire Connections). Tighten all 3 wire leads to the terminal block (Follow wire locations shown in Fig. 14).
IMPORTANT NOTE: DO NOT LOOSEN the factory installed nut connections which secure the range wiring to the terminal block. Electrical failure or loss of electrical connection may occur if these 3 nuts are loosened or removed. **NOTE: For 3-Wire Permanent Connections skip Steps 3 & 4 and continue with Step 5.**
3. **(4-Wire Permanent Connection ONLY)** Disconnect the ground strap. Remove the factory installed ground screw & plate to release the factory installed copper ground strap from frame of the appliance. Cut and discard the copper strap from the terminal block. KEEP the ground screw, ground plate and go to Step 4.
4. **(4-Wire Permanent Connection ONLY)** Connect the ground wire lead (Green) to the frame of the appliance using the ground screw & plate as shown in Fig. 15. Be sure to install using the same hole in the frame where the ground screw was originally installed.
5. **(3 & 4 - Wire Permanent Connections)** Make sure all connections are tightened securely and replace the rear access cover (See Fig. 9).

NOTE: Non-terminated field wire compression connections must be set at 22 in./lbs. or greater. Always use 10 gauge wire or larger.

5. CAREFULLY SLIDE RANGE INTO FINAL LOCATION.

Be sure to provide all the adequate clearances and dimensions shown in Figs. 1, 2 & 3 before moving appliance into final location. Carefully slide range into final position while inserting rear leveling leg into and FULLY ENGAGING THE ANTI-TIP BRACKET (See Fig. 7). Make sure the power cord folds into the remaining open floor area behind the range Warmer or storage drawer. Be sure to check the level of the range.

3-Wire Connection

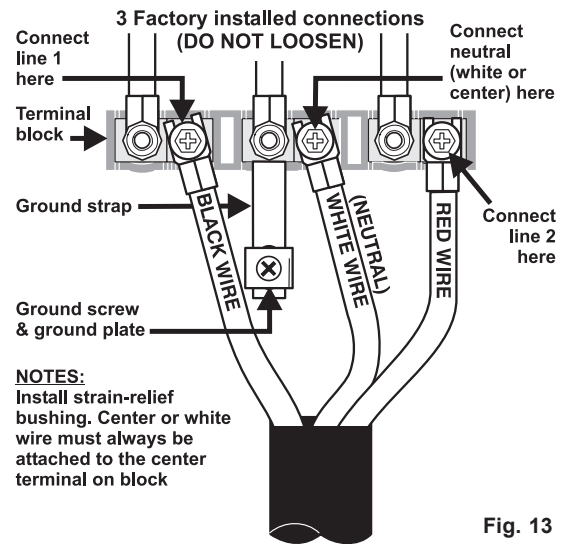


Fig. 13

FOR 3 & 4-Wire Permanent Connections

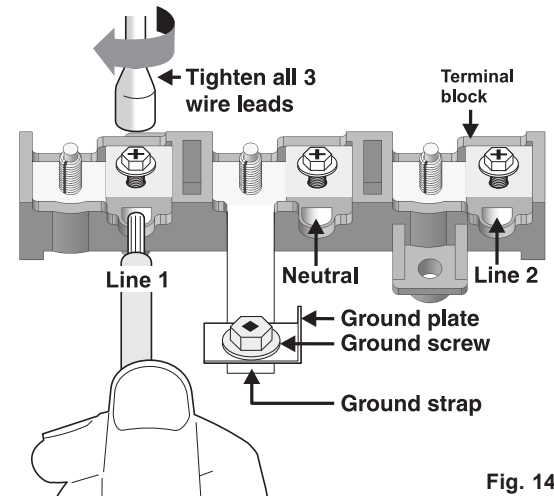


Fig. 14

Note: Non-terminated field wire compression connections must be set at approximately 22in./lbs. Always use 10 ga. wire or larger.

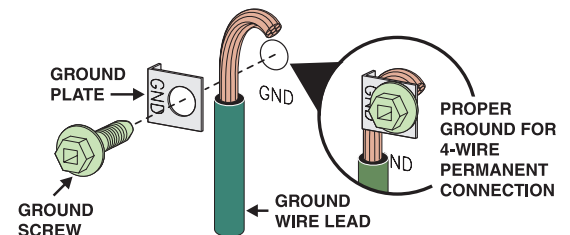


Fig. 15

Serial Plate Location



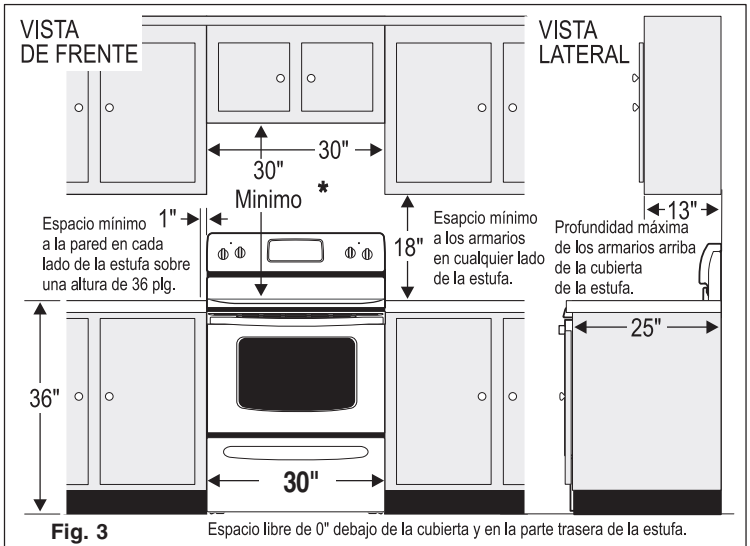
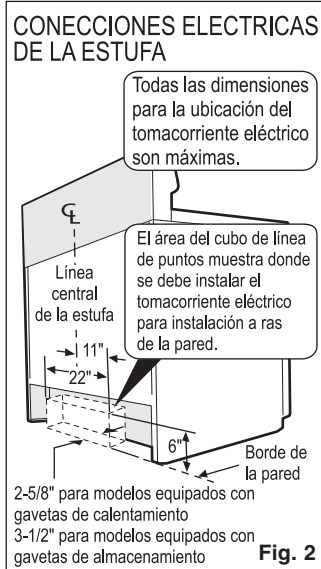
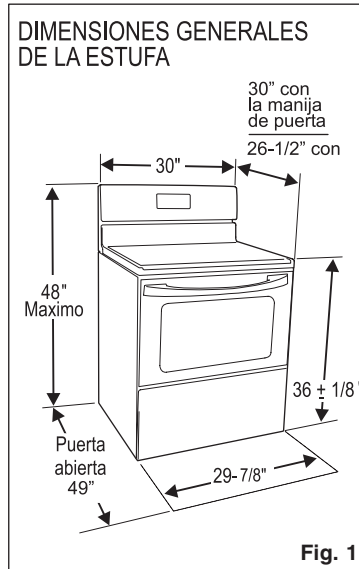
Serial plate is located on the lower right front frame of the appliance

INSTRUCCIONES DE INSTALACION PARA LA ESTUFA ELECTRICA DE 30"

LA INSTALACION Y EL SERVICIO DEBEN SER EFECTUADOS POR UN INSTALADOR CALIFICADO. IMPORTANTE: CONSERVE ESTAS INSTRUCCIONES PARA USO DEL INSPECTOR LOCAL DE ELECTRICIDAD. LEA Y CONSERVE ESTAS INSTRUCCIONES PARA REFERENCIA FUTURA.

Espacios Libres y Dimensiones

1. **Provea espacios libres adecuados** entre la estufa y las superficies combustibles adyacentes.
2. **Ubicación – Revise el lugar donde será instalada la estufa.** Verifique el suministro de energía eléctrica y la estabilidad del piso.
3. **Es esencial que se usen las dimensiones que se muestran.** Las dimensiones indicadas proveen los espacios libres mínimos. La superficie de contacto debe ser firme y nivelada.



*ESPACIO LIBRE MINIMO DE 30" ENTRE LA CUBIERTA DE COCINAR DE LA ESTUFA Y LA PARTE INFERIOR DE UN ARMARIO DE METAL O DE MADERA NO PROTEGIDO; O 24" MINIMO CUANDO LA PARTE INFERIOR DE UN ARMARIO DE METAL O DE MADERA ESTA PROTEGIDA CON CARTON RETARDANTE A LAS LLAMAS DE NO MENOS DE 1/4" CUBIERTO CON CHAPA DE ACERO NO INFERIOR AL No. 28 MSG, ACERO INOXIDABLE DE 0.015", ALUMINO DE 0.024" O COBRE DE 0.020". EL ESPACIO LIBRE DE 0" ES EL MINIMO PARA LA PARTE TRASERA DE LA ESTUFA. SIGA TODAS LAS DIMENSIONES INDICADAS ANTERIORMENTE PARA EVITAR DAÑOS MATERIALES, RIESGOS DE INCENDIO Y CORTES INCORRECTOS DE LOS ARMARIOS Y DE LAS MESADAS.

PARA ELIMINAR EL RIESGO DE QUEMADURAS O INCENDIOS AL PASAR SOBRE LOS ELEMENTOS CALIENTES, SE DEBE EVITAR COLOCAR ARMARIOS DE ALMACENAMIENTO SOBRE LA ESTUFA. SI SE INSTALAN ARMARIOS SOBRE LA ESTUFA, SE PUEDEN REDUCIR TALES RIESGOS INSTALANDO UNA CAMPANA EXTRACTORA QUE SE PROYECTE HORIZONTALMENTE UN MINIMO DE 5" MAS AFUERA DE LA PARTE INFERIOR DE LOS ARMARIOS.

INSTRUCCIONES IMPORTANTES DE SEGURIDAD

ADVERTENCIA Si no se sigue estrictamente la información de este manual, se puede producir un incendio o un choque eléctrico que cause daños materiales, lesiones corporales o fatales.

Notas importantes para el instalador

- Lea todas las instrucciones indicadas en estas instrucciones de instalación antes de instalar la estufa.
- Saque todo el material de empaque del compartimiento del horno antes de conectar el suministro de gas y de electricidad a la estufa.
- Observe todos los códigos y reglamentos vigentes.
- Asegúrese de dejar estas instrucciones con el usuario.

Aviso importante al consumidor

Mantenga estas instrucciones con su Guía de Uso y Cuidado para referencia futura.

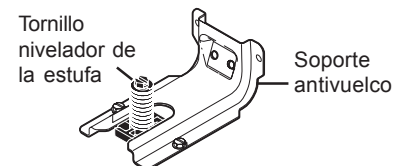
- Al igual que con cualquier electrodoméstico que genere calor, existen ciertas precauciones de seguridad que usted debe seguir. Tales precauciones se encuentran en la Guía de Uso y Cuidado, léala atentamente.
- Asegúrese de que la estufa esté bien instalada y sea puesta a tierra en forma debida por un instalador calificado o un técnico de servicio.
- Asegúrese de que el revestimiento de la pared alrededor de la estufa pueda resistir el calor generado por la estufa.
- Para eliminar la necesidad de tener que pasar sobre los elementos, se recomienda no instalar armarios arriba los elementos de la cubierta de la estufa.

ADVERTENCIA



Riesgo de volcamiento

- Un niño o adulto puede volcar la estufa y acabar muerto.
- Verifique que se haya instalado el dispositivo antivuelco en el piso o en la pared.
- Asegúrese de que el dispositivo antivuelco se haya reacomplado cuando mueva la estufa sobre el piso o a la pared.
- No utilice la estufa sin el dispositivo antivuelco instalado y acoplado.
- Si no se siguen estas instrucciones, se puede provocar la muerte o quemaduras graves en niños y adultos.



Para verificar si el soporte antivuelco está instalado correctamente, sostenga el borde trasero de la parte trasera de la estufa usando ambos brazos.

Intente inclinar la estufa hacia adelante con cuidado. Si está instalada correctamente, la estufa no debería inclinarse hacia adelante. Consulte las **instrucciones de instalación** del soporte antivuelco proporcionadas con la estufa para instalarlo adecuadamente.

INSTRUCCIONES DE INSTALACION PARA LA ESTUFA ELECTRICA DE 30"

ANTES DE COMENZAR

Herramientas Necesarias

Para los tornillos niveladores y soporte antivuelco:

- Llave ajustable o pinzas ajustables
- Llave de tuerca de 5/16" o destornillador de punta plana
- Taladro eléctrico y broca de 1/8" de diám. (broca para taladro de mampostería si está instalando en concreto)



Para la conexión al suministro eléctrico:

- Llave de cubo o llave para tuercas de 1/4" y 3/8"

Materiales adicionales que usted necesitará:

- Cordón eléctrico o
- Cableado eléctrico de cobre y conducto de metal (para el cableado)



PASOS DE LA INSTALACION NORMAL

1. INSTRUCCIONES PARA LA INSTALACION DEL SOPORTE ANTIVUELCO

- ADVERTENCIA DE SEGURIDAD IMPORTANTE

Para reducir el riesgo de que la estufa se vuelque, es necesario asegurarla al piso instalando el soporte antivuelco y los tornillos suministrados con la estufa. Si no se instala el soporte antivuelco, la estufa se puede volcar si un niño se sube a ella. Se pueden ocasionar lesiones graves causadas por los líquidos calientes derramados o por la estufa misma.

Si la estufa es movida a otro lugar, el soporte antivuelco debe también ser movido e instalado en la estufa.

Las instrucciones son adecuadas para la instalación en pisos de madera o cemento sujeto ya sea en el piso o en la pared. Cuando se instala en la pared, asegúrese de que los tornillos penetren completamente en la misma y que estén asegurados en madera o metal. Cuando se asegura al piso o en la pared, asegúrese de que los tornillos no penetren ningún cableado eléctrico o plomería.

1a. Ubicación del soporte utilizando la plantilla -

(El soporte puede ser ubicado ya sea en el lado izquierdo o derecho de la estufa. Use la información indicada a continuación para colocar el soporte si no se dispone de la plantilla.

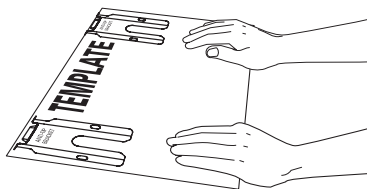


Fig. 4

Marque el piso o la pared donde se colocará el costado izquierdo o derecho de la estufa. Si la parte trasera de la estufa será colocada contra la pared o a no más de 1-1/4" de la pared cuando ya esté instalada, usted puede usar el método de instalación en el piso o en la pared. Si tiene moldura instalada y ésta no permite que el soporte quede a ras contra la pared, retire la moldura o instale el soporte en el piso. Para el montaje en la pared, ubique la plantilla colocando el borde trasero de la plantilla contra la pared trasera y el borde lateral de la plantilla en la marca hecha indicando el costado de la estufa (Ver Fig. 4). Coloque el soporte sobre la plantilla y marque la ubicación de los agujeros de los tornillos en la pared. Si la parte trasera de la estufa está a más de 1-1/4" de la pared cuando ya está instalada, instale el soporte en el piso. Para el montaje en el piso, ubique el soporte colocando el borde trasero de la plantilla donde quedará ubicada la parte trasera de la estufa. Marque la ubicación de los agujeros de los tornillos mostrados en la plantilla.

1b. Taladre agujeros pilotos e instale el soporte - Taladre un agujero piloto de 1/8" donde se vayan a instalar los tornillos. Si el soporte va a ser instalado en la pared, taladre un agujero piloto en un ángulo descendente de aproximadamente 20° (Ver Fig. 5).

Si el soporte va a ser instalado en pisos de mampostería o de cerámica, taladre un agujero piloto de 3/16" y 1-3/4" de profundidad. Los tornillos provistos pueden ser usados en materiales de madera o concreto. Use una llave de tuerca de 5/16" o un destornillador de punta plana para asegurar el soporte en su lugar (Ver Fig. 6).

1c. Nivele y ubique la estufa - Nivele la estufa ajustando los cuatro (4) tornillos niveladores con una llave. **NOTA:** Se debe dejar un espacio libre mínimo de 1/8" entre la parte inferior de la estufa y los tornillos niveladores a fin de dejar espacio para instalar el soporte. Use un nivel de burbuja de aire para verificar los ajustes. Deslice la estufa de nuevo a su lugar (Ver Fig. 7). Verifique visualmente si el tornillo nivelador trasero está insertado y firmemente asegurado por el soporte antivuelco retirando el panel inferior o la gaveta de almacenamiento. Para los modelos con una gaveta calentadora o compartimiento asador, sujete la estufa desde el borde superior trasero y trate de inclinarla hacia adelante cuidadosamente.

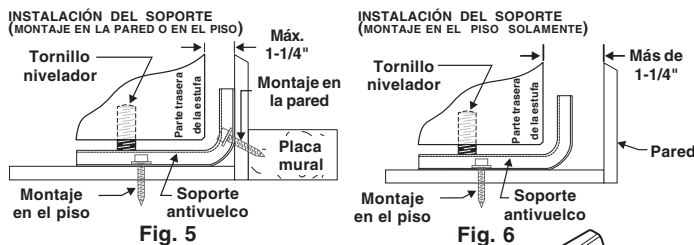


Fig. 5

Fig. 6

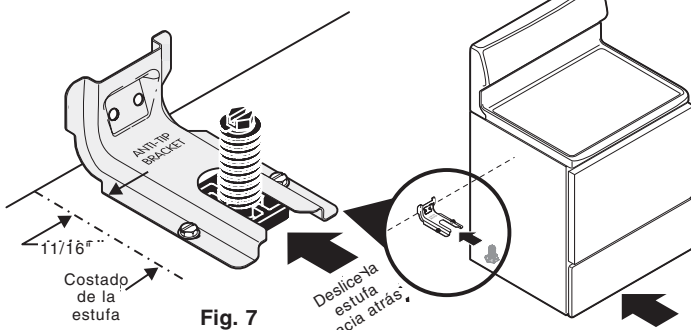


Fig. 7

2. REQUERIMIENTOS ELECTRICOS DE CONEXION - Este artefacto debe ser instalado y puesto a tierra en forma correcta por un técnico calificado de acuerdo con el Código Nacional de Electricidad ANSI/NFPA No. 70 -- última edición -- y los requerimientos del código local de electricidad.

Este artefacto debe ser conectado mediante "cableado permanente" o el "Juego de Cable de Alimentación Eléctrica."

Cuando instale el cableado permanente, no deje el exceso de cable en el compartimiento de la estufa. El exceso de cable en el compartimiento de la estufa puede impedir que la tapa de acceso sea reinstalada en forma debida y podría crear un riesgo eléctrico potencial si los alambres son apretados. Conecte solamente como se indica en la sección "CONEXIONES DEL CABLEADO PERMANENTE" en el Paso 4c. Cuando use tubo flexible o cable de estufa, use un sujetacable o conector flexible (Ver Fig. 11).

2a. Modelos con el cordón eléctrico conectado en la fábrica. **NOTA:** Algunos modelos vienen equipados con cordón eléctrico de tres (3) conductores instalado en la fábrica.

La instalación en casas rodantes, en instalaciones de circuitos de derivación (1996NEC) o en áreas donde los códigos locales no permitan la puesta a tierra a través del conductor neutro, se debe usar un juego de cordón eléctrico de cuatro (4) conductores para 125/250 voltios mínimo y marcado para uso con estufas.

INSTRUCCIONES DE INSTALACION PARA LA ESTUFA ELECTRICA DE 30"

Consulte la Tabla del Tamaño de la Abertura de Conexión de la Estufa (Figs. 9 y 10) para la información sobre los amperes del juego de cordón. Los bornes en los extremos de los alambres deben ser de anillo cerrado u horquillas abiertas con extremos dirigidos hacia arriba.

2b. MODELOS QUE REQUIEREN EL JUEGO DE CABLE DE ALIMENTACION ELECTRICA

PUEDA OCURRIR RIESGO DE INCENDIO O CHOQUE ELECTRICO SI SE USA UN JUEGO DE CABLE DE ESTUFA DE CALIBRE INCORRECTO, SI NO SE SIGUEN LAS INSTRUCCIONES DE INSTALACION O SI NO SE USA EL SOPORTE DEL SUJETACABLES.

Este artefacto puede ser conectado mediante un cable de alimentación eléctrica. Se debe usar solamente un juego de cable de alimentación eléctrica para 125/250 voltios mínimo y marcado para uso con estufas. Ver Fig. 10 para la información sobre la potencia nominal en amperios del juego de cable. El cable debe tener ya sea tres (3) o cuatro (4) conductores (Ver Fig. 8). Los bornes en los extremos de los cables deben ser ya sea en bucle cerrado o terminales de horquilla con los extremos girados hacia arriba. El cable debe tener un sujetacable debidamente instalado. Ver Paso 4a. para cables tetrafilares o 4b. para cables trifilares.

3. CONEXION ELECTRICA A LA ESTUFA.

Se debe retirar la cubierta de acceso trasera (Fig. 9). Para retirar, afloje el tornillo central (un tornillo) y retire la cubierta de acceso. Así se puede tener acceso al tablero de bornes.

3 y 4 - Tipos de tomacorrientes murales eléctricos trifilares o tetrafilares y orientación recomendada del montaje en la pared



Requerido para instalaciones nuevas y remodeladas

Tomacorriente mural tetrafilar (14-50R)



Permitido para instalaciones existentes

Tomacorriente mural trifilar (10-50R)

Fig. 8

NOTA: La estufa es embarcada de la fábrica con un agujero de 1-3/8" de diámetro como se muestra. Para usar ya sea el agujero de 7/8" de diámetro o los discos removibles de 1-1/8" de diámetro. Ver la Fig. 9.

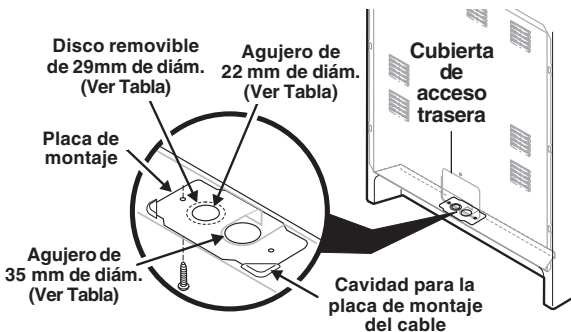


Fig. 9

Tabla del Tamaño de la Abertura de Conexión de la Estufa

Información sobre la potencia nominal en amperios del Juego de Cable de Alimentación. Ver la placa de serie en la estufa para los datos sobre la potencia nominal en kilovatios.

Ver la placa de serie en la estufa para la potencia nominal en kilovatios	Potencia Nominal del Juego de cable	Diámetro (pulg.) de la Abertura de Conexión de la Estufa	
		Juego de cable	Cableado Permanente
120/240 Voltios 120/208 Voltios	40/50 Amp. 50 Amp.	1-3/8"	1-1/8"
8,8-16,5 KW 16,6-22,5 KW	7,9-12,5 KW 12,6-18,5 KW	1-3/8"	1-3/8"

Fig. 10

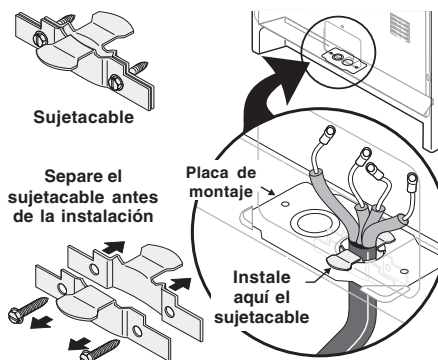


Fig. 11

4A. CONEXIONES DEL CORDON DE ALIMENTACION

(Instrucciones para Conexión Tetrafilar - Consulte la Fig. 12)

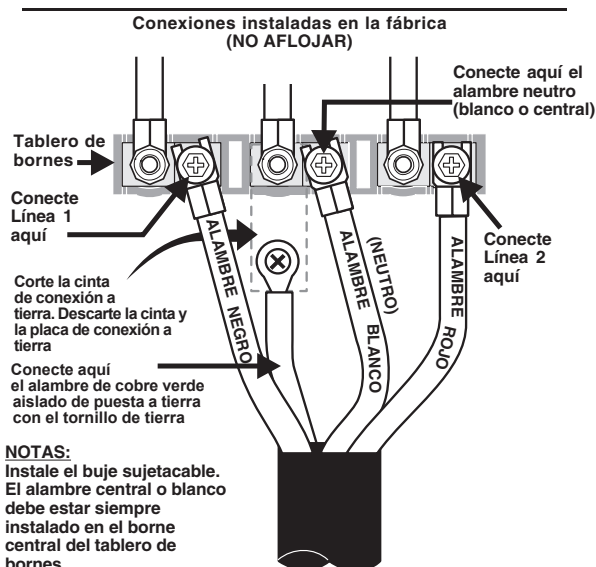
Antes del cableado de la estufa, revise los dibujos de las ubicaciones sugeridas para la fuente de alimentación en la Fig. 3. Si se va a conectar a un sistema eléctrico tetrafilar (los circuitos de derivación nuevos o las casas rodantes requieren conexión tetrafilar):

1. Siga las instrucciones de instalación del fabricante suministradas con el sujetacable e instale (Además vea las Figs. 9, 10 y 11).
2. Inserte los conectores de extremo para la Línea 1, Línea 2 y Neutro y apriete firmemente en el tablero de bornes.

NOTA IMPORTANTE: NO AFLOJE las conexiones de tuerca instaladas en la fábrica que aseguran el cableado de la estufa en el tablero de bornes. Se puede producir una falla eléctrica o pérdida de la conexión eléctrica si estas 3 tuercas son aflojadas o retiradas.

3. **Usted debe desconectar la cinta de conexión a tierra.** Retire el tornillo y placa de tierra instalada en la fábrica para soltar la cinta de conexión a tierra de cobre del marco del electrodoméstico. CONSERVE el tornillo de tierra.
4. Conecte el alambre de puesta a tierra (Verde) con el ojal en el marco del electrodoméstico con el tornillo de tierra usando el mismo agujero del marco donde estaba originalmente instalado el tornillo de tierra (Ver Fig. 12).
5. Asegúrese de que todas las tuercas estén firmemente apretadas y vuelva a colocar la cubierta de acceso trasera (Ver Fig. 9).

Conexión Tetrafilar



NOTAS:
Instale el buje sujetacable. El alambre central o blanco debe estar siempre instalado en el borne central del tablero de bornes.

Fig. 12

INSTRUCCIONES DE INSTALACION PARA LA ESTUFA ELECTRICA DE 30"

o 4B. CONEXIONES DEL CORDON DE ALIMENTACION

Instrucciones para conexión trifilar (para instalaciones existentes SOLAMENTE - Consulte la Fig. 13).

1. Siga las instrucciones de instalación del fabricante suministradas con el sujetacable e instale (Además vea las Figs. 9, 10 y 11).
2. Inserte los conectores de extremo para la Línea 1, Línea 2 y Neutro y apriete firmemente en el tablero de bornes.

NOTA IMPORTANTE: NO AFLOJE las conexiones de tuerca instaladas en la fábrica que aseguran el cableado de la estufa en el tablero de bornes. Se puede producir una falla eléctrica o pérdida de la conexión eléctrica si estas 3 tuercas son aflojadas o retiradas.

3. Asegúrese de que todas las conexiones estén firmemente apretadas y vuelva a colocar la cubierta de acceso trasera (Ver Fig. 9).

Instrucciones para la Puesta a Tierra (para conexiones trifilares solamente):

Esta estufa tiene instalada una cinta de conexión a tierra que conecta el borne central del tablero de bornes (neutro) al chasis de la estufa. La cinta de conexión a tierra está conectada a la estufa mediante el tornillo central más inferior (Ver Fig. 13). La cinta de conexión de tierra no debe retirarse a menos que el código nacional, estatal o local no permitan el uso de una cinta de conexión a tierra. **NOTA:** Si por cualquier motivo se retira la cinta de conexión a tierra, se debe conectar un alambre de tierra separado al tornillo de tierra instalado en el chasis de la estufa y a una tierra adecuada.

4c. CONEXIONES DEL CABLEADO PERMANENTE TRIFILAR Y TETRAFILAR.

- 3 - Conexión trifilar permanente - siga los pasos 1, 2 y 5 incluidos a continuación.
- 4 - Conexión tetrafilar permanente - siga los pasos 1 al 5 que se encuentran más abajo.

Antes del cableado de la estufa, examine los dibujos de la ubicación sugerida para la fuente de alimentación en la Fig. 3. Si está conectando a un sistema eléctrico tetrafilar, (un circuito de derivación nuevo o casa rodante requieren conexión tetrafilar):

1. **(Conexiones permanentes trifilares y tetrafilares)** Siga las instrucciones de instalación del fabricante suministradas con el sujetacable e instale.
2. **(Conexiones permanentes trifilares y tetrafilares)** Desforre el aislamiento de los extremos del cableado permanente para la Línea 1, Línea 2, Neutro (además desforre el alambre de conexión a tierra en las conexiones tetrafilares). Apriete los 3 conductores hacia el tablero de bornes (Siga las ubicaciones de los alambres que se muestran en la Fig. 14).

NOTA IMPORTANTE: NO AFLOJE las conexiones de tuerca instaladas en la fábrica que aseguran el cableado de la estufa en el tablero de bornes. Se puede producir una falla eléctrica o pérdida de la conexión eléctrica si estas 3 tuercas son aflojadas o retiradas. **NOTA:** Para las conexiones permanentes trifilares omita los Pasos 3 y 4 y continúe con el Paso 5.

3. **(Conexión permanente tetrafilar SOLAMENTE)** Desconecte la cinta de conexión a tierra. Retire el tornillo y placa de tierra instalada en la fábrica para soltar la cinta de conexión a tierra de cobre del marco del electrodoméstico. CONSERVE el tornillo de tierra, la placa de tierra y siga con el Paso 4.
4. **(Conexión permanente tetrafilar SOLAMENTE)** Conecte el alambre terminal de puesta a tierra (Verde) al marco del electrodoméstico usando el tornillo y la placa de conexión a tierra, como se muestra en la Fig. 15. Asegúrese de instalarlo usando el mismo agujero del marco donde estaba originalmente instalado el tornillo de tierra.
5. **(Conexiones permanentes trifilares y tetrafilares)** Asegúrese de que todas las tuercas estén firmemente apretadas y vuelva a colocar la cubierta de acceso trasera (Ver Fig. 9).

NOTA: Las conexiones de compresión no terminadas del cableado de campo deben ser ajustadas a aproximadamente 22 pulg./lbs.

5. DESLICE CON CUIDADO LA ESTUFA HASTA SU LUGAR DEFINITIVO.

Asegúrese de proveer todos los espacios libres adecuados y las dimensiones mostradas en las Figs. 1, 2 y 3 en la Página 1 antes de mover la estufa a su lugar definitivo.

Deslice cuidadosamente la estufa hacia la abertura del gabinete a la vez que inserta el tornillo nivelador trasero en el SOPORTE ANTIVUELCO VERIFICANDO QUE QUEDE BIEN ENGANCHADO (Ver Fig. 7). Asegúrese de que el cordón de alimentación quede plegado en el resto del área abierta del piso detrás de la gaveta de almacenamiento o gaveta calentadora de la estufa. Asegúrese de verificar la nivelación de la estufa.

Conexión Trifilar

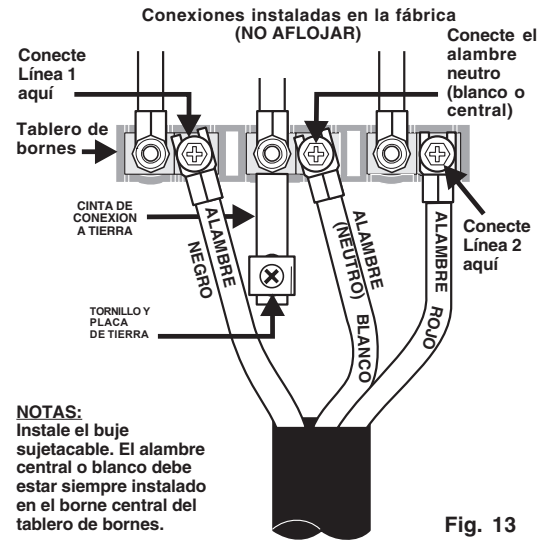


Fig. 13

PARA conexiones permanentes trifilares y tetrafilares)

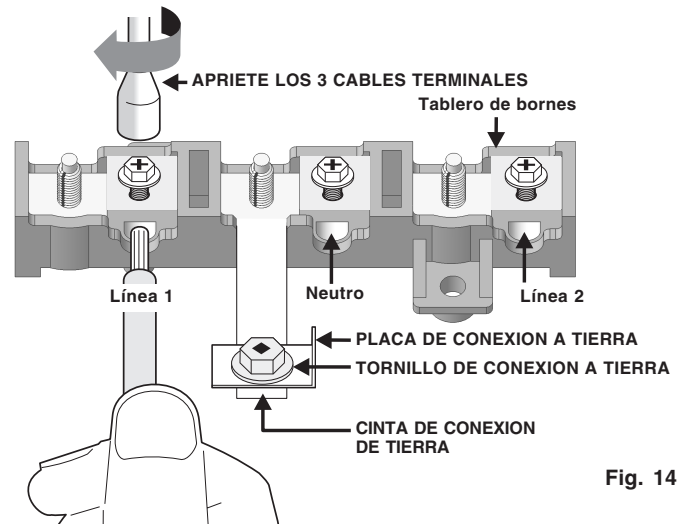


Fig. 14

NOTA: Los campos de la compresión de las conexiones de los cables no terminadas deben ser usadas utilizando un cable de 10 ga. o más grande y ajustarlos a aproximadamente 22 libras por pulgadas.

Conexión permanente tetrafilar SOLAMENTE

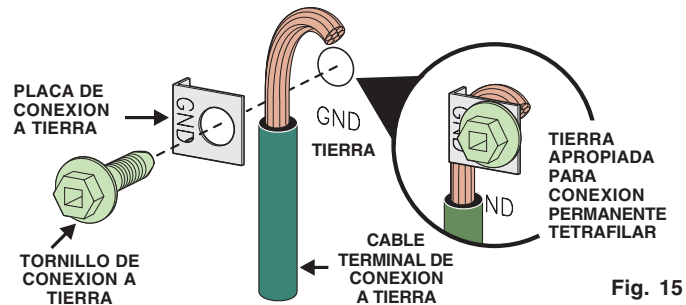
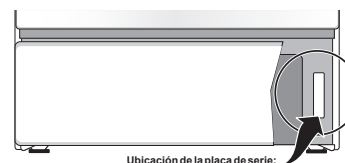


Fig. 15

Ubicación de la placa de serie:



La placa de serie está ubicada en el costado derecho del marco delantero inferior del electrodoméstico.



Freestanding Range

FPIF3093L F

30" Induction



Product Dimensions

Height (Max.)	47-3/4"
Width	29-7/8"
Depth (Including Handle)	28-7/8"

More Easy-To-Use Features

More Responsive

Cooking with induction is more responsive than gas or electric so you can easily go from simmer to boil.

Pro-Select® Controls

Precise control at your fingertips.

Cookware Compatibility

Most stainless steel and cast iron cookware is compatible with induction elements. An easy rule of thumb: if a magnet sticks to the bottom of the cookware, it's induction-friendly.

PowerPlus® Boost

Generates rapid heat for a quicker boil.

More Energy-Efficient

Cooking with induction is 70% more efficient than gas and 20% more efficient than electric.

Keep Warm Drawer

A place to keep food warm until everything — and everyone — is ready.

One-Touch Keep Warm Setting

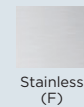
Just one touch of a button keeps food warm until everything — and everyone — is ready.

One-Touch Options

Our ovens feature easy-to-use one-touch buttons so you can cook pizza or chicken nuggets — or even add a minute to the timer — with the touch of a button.

Sabbath Mode (Star-K® Certified)

Available in:



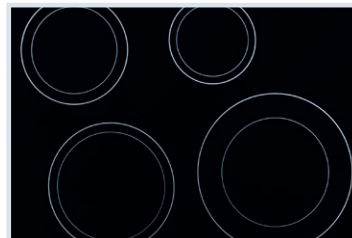
Elements	Size	Watts
Right Front	Induction 10"	2,400/3,400
Right Rear	Induction 6"	1,500/1,900
Left Front	Induction 8"	2,400/3,400
Left Rear	Induction 7"	1,900/2,600

Signature Features



Cooking Versatility

Gentle enough to melt chocolate and powerful enough to boil water, so it's great for entertaining or getting dinner on the table quickly.



Versatile Induction Elements

Features four elements with induction technology, including a powerful 10" element with up to 3,400 watts of power to bring water to a boil quickly.



Fits-More™ Oven

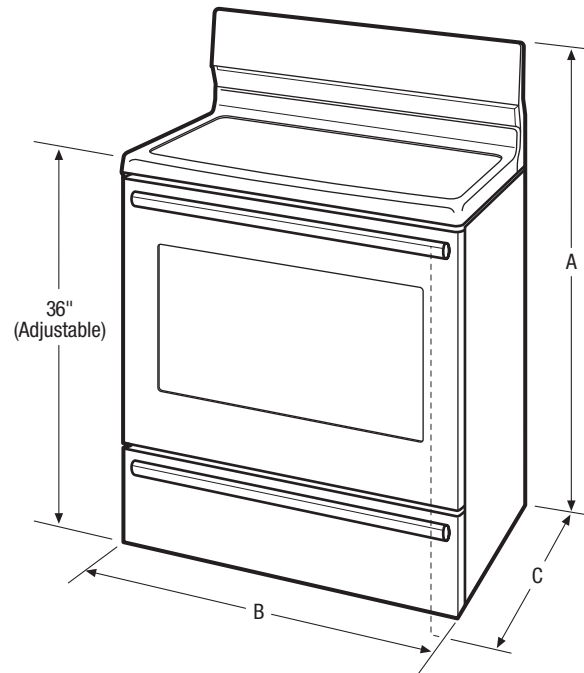
More cooking space — plus even cooking.



True Convection

Multi-rack baking is faster and more even with True Convection.

Features	
Oven Control/Timing System	Pro-Select® Controls
Surface Type	Black Ceramic Glass
Window	Wide-View with Pro-Tint Finish
Exterior Door Finish	Smudge-Proof Stainless Steel
Handle Design	Stainless Steel
Exterior Finish (Side Panels)	Black
Convection System	True Convection
Oven Cleaning System	Self Clean
Drawer Functionality	Warmer
Oven Controls	
Bake/Broil	Yes / Variable (400 - 500 °F)
Effortless™ Convection Conversion	Yes
Convection Bake/Broil/Roast	Yes/Yes/Yes
Quick Bake Convection	
PowerPlus® Preheat	Yes
My Favorite	Yes
Chicken Nugget Button	Yes
Pizza Button	Yes
Keep Warm	Yes
Add-a-Minute	Yes
Delay Bake	Yes
Self Clean	Yes
Rapid Clean Option	Yes
Delay Clean	2, 3, 4 Hours
Kitchen Timer/Timed Cook Option	Yes/Yes
Auto Oven Shut-Off	6 Hours
Oven Lock-Out	Yes
Lower Drawer Control	Warmer, Low-Med-High
Cooktop Features	
Right Front Element (Watts)	Induction 10" - 2,400/3,400
Right Rear Element (Watts)	Induction 6" - 1,500/1,900
Left Front Element (Watts)	Induction 8" - 2,400/3,400
Left Rear Element (Watts)	Induction 7" - 1,900/2,600
Bridge Element (Watts)	
Center Element (Watts)	
Oven Features	
Capacity (Cu. Ft.)	6.0
Oven Light	1
Hidden Bake Element	Yes
Rack Configuration	1 Heavy-Duty, 1 SpaceWise® Half Rack, 1 Effortless™, 1 Deep-Sump
Baking System	Even Baking Technology
Broiling System	PowerPlus® Broil
Bake Element/Broil Element (Watts)	3,500/3,900
Drawer Racks	
Certifications	
Sabbath Mode (Star-K® Cert.)	Yes
Specifications	
Oven Interior (H x W x D)	15-3/4" x 24-3/8" x 17-3/4"
Power Supply Connection Location	Middle Bottom Rear
Voltage Rating	240V / 208V / 60Hz
Connected Load (kW Rating) @ 240/208 Volts	15.0/11.5
Minimum Circuit Required (Amps)	40
Shipping Weight (Approx.)	220 Lbs.



NOTE: For planning purposes only. Always consult local and national electric codes. Refer to Product Installation Guide for detailed installation instructions on the web at frigidaire.com.



Product Dimensions		Cutout Dimensions	
A - Height (Max.)	47-3/4"	Height (Standard)	36"
B - Width	29-7/8"	Width (Min.)	30"
C - Depth (Including Handle)	28-7/8"	Depth (Min.)	24"
Depth with Door Open 90°	48-3/4"		

Accessories information available on the web at frigidaire.com

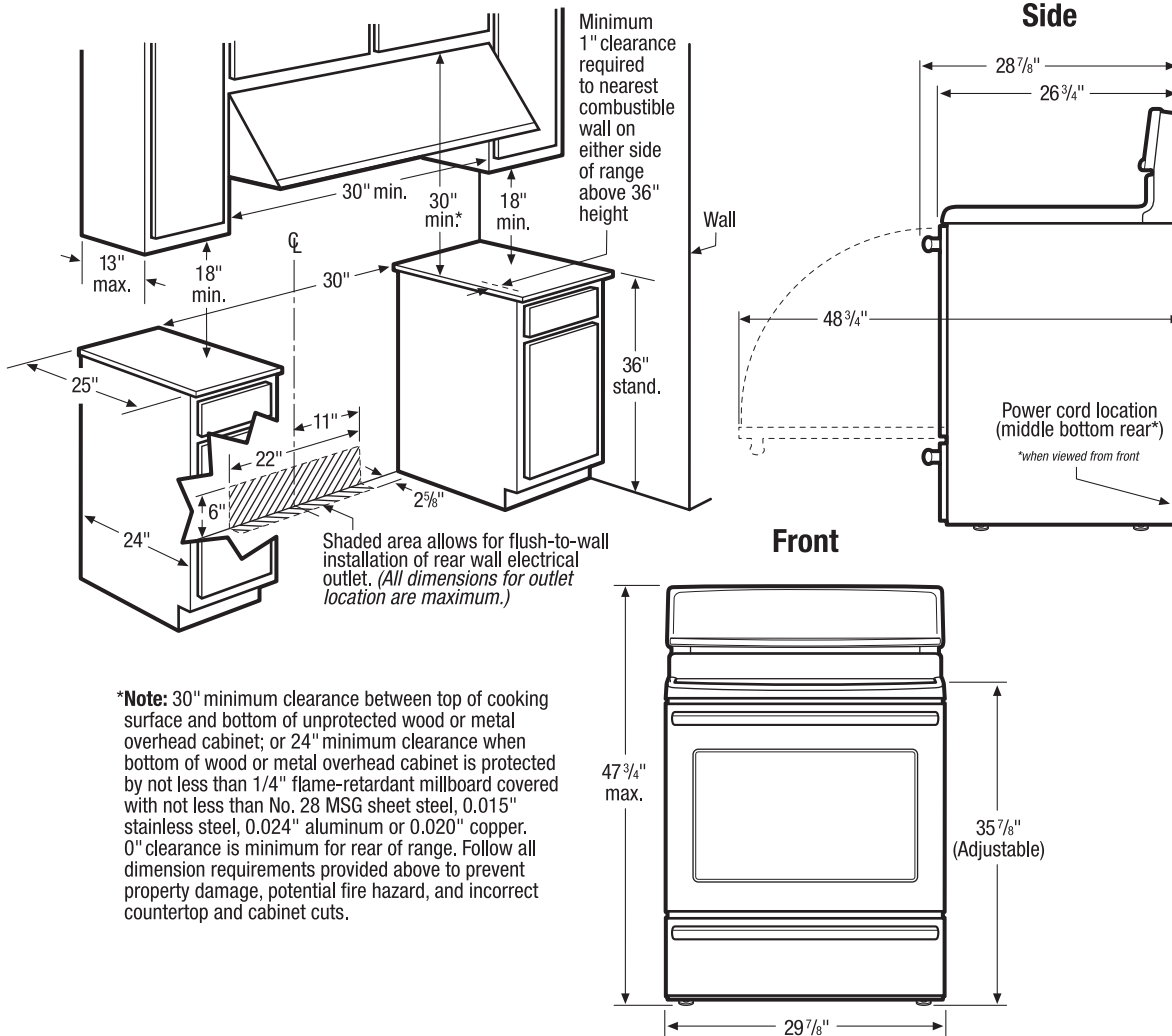
FRIGIDAIRE

USA • 10200 David Taylor Drive • Charlotte, NC 28262 • 1-800-FRIGIDAIRE • frigidaire.com
CANADA • 5855 Terry Fox Way • Mississauga, ON L5V 3E4 • 1-800-265-8352 • frigidaire.ca

FPIF3093L 10/11

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Specifications subject to change.



Freestanding Range Specifications

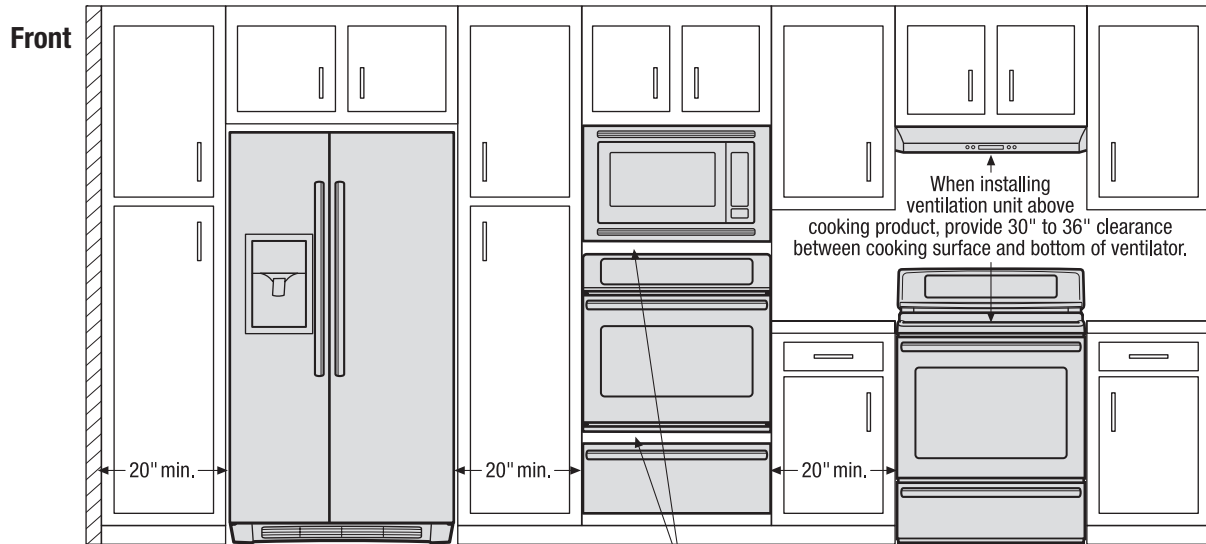
- Product Shipping Weight (approx.) - 220 Lbs.
- Single phase 3- or 4-wire cable, 120/240 or 120/208 Volt, 60 Hertz, fused on both sides of line with ground.
- Connected Load (kW Rating) @ 240/208 Volts = 15.0/11.5kW
- Recommended Circuit Breaker - 40 Amps
- Always consult local and national electric codes.
- Make sure wall coverings around range can withstand heat generated by range.
- Floor beneath range MUST be solid and level.
- Overhead cabinetry should not exceed a 13" maximum depth.
- Absolute minimum horizontal distance between overhead cabinets installed to either side of appliance must be no less than maximum width of appliance.
- Range can be installed flush to wall with 0" minimum rear clearance.
- Minimum 1" clearance required from edge of rangetop to nearest combustible wall on either side of range above 36" height.

- Allow 30" minimum clearance between top of cooking surface and bottom of unprotected wood or metal overhead cabinet; or 24" minimum clearance when bottom of wood or metal overhead cabinet is protected by not less than 1/4" flame retardant millboard covered with not less than No. 28 MSG sheet steel, 0.015" stainless steel, 0.024" aluminum or 0.020" copper.
- To reduce risk of fire when using overhead cabinetry, install range hood that projects horizontally a recommended minimum of 5" beyond bottom of cabinets.
- Follow all dimension requirements provided to prevent property damage, potential fire hazard, and incorrect countertop and cabinet cuts.

Note: For planning purposes only. Refer to Product Installation Guide on the web at frigidaire.com for detailed instructions.

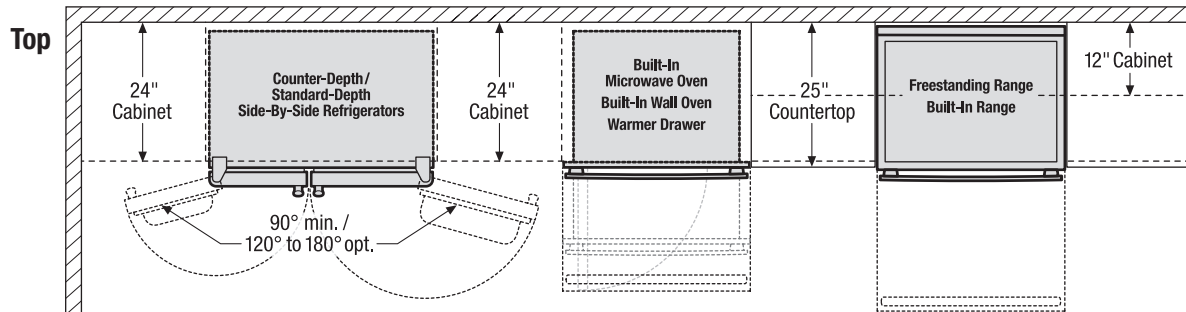


Use these dimensions and clearance instructions for planning purposes only. For detailed installation instructions, refer to installation guide, packed with product, or on the web at frigidaire.com.



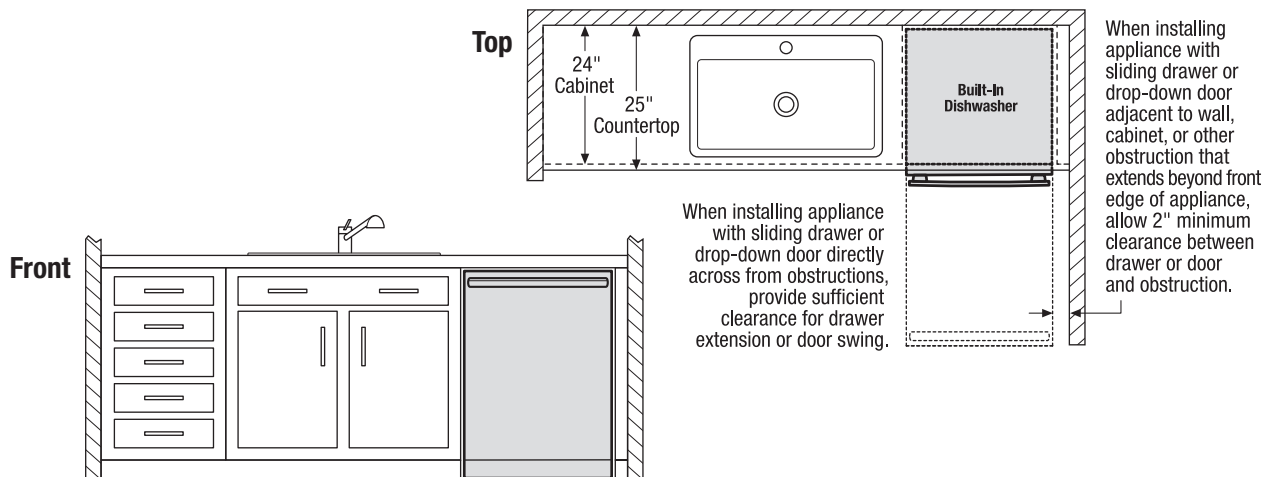
When installing appliances adjacent to each other, 20" minimum distance between each appliance required.

When installing built-in cooking appliances in combination, 2" minimum visible gap between appliance faceplates required.



When installing side-by-side refrigerator adjacent to wall, cabinet or another appliance that extends beyond front edge of unit, 20" minimum clearance recommended to allow for optimum 120° to 180° door swing, providing complete drawer/crisper access and removal.

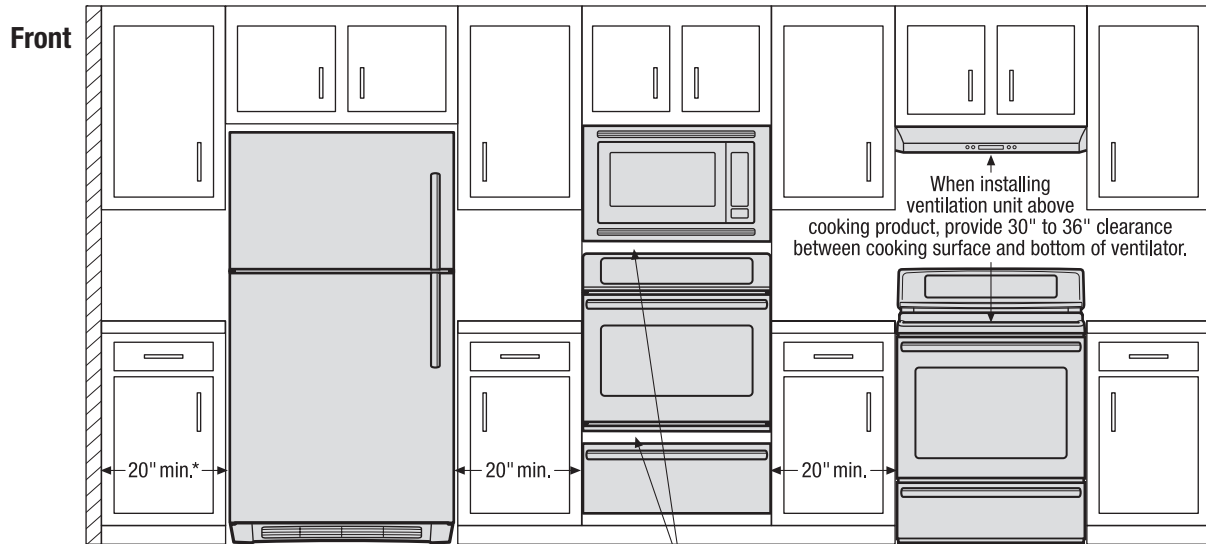
When installing appliance with sliding drawer, swinging or drop-down door directly across from obstructions, provide sufficient clearance for drawer extension or door swings.



When installing appliance with sliding drawer or drop-down door directly across from obstructions, provide sufficient clearance for drawer extension or door swing.

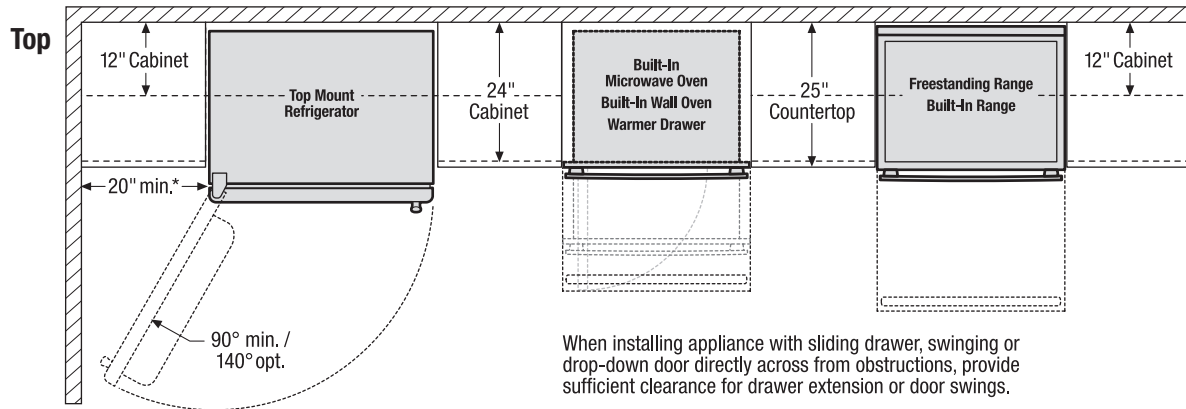
When installing appliance with sliding drawer or drop-down door adjacent to wall, cabinet, or other obstruction that extends beyond front edge of appliance, allow 2" minimum clearance between drawer or door and obstruction.

Use these dimensions and clearance instructions for planning purposes only. For detailed installation instructions, refer to installation guide, packed with product, or on the web at frigidaire.com.



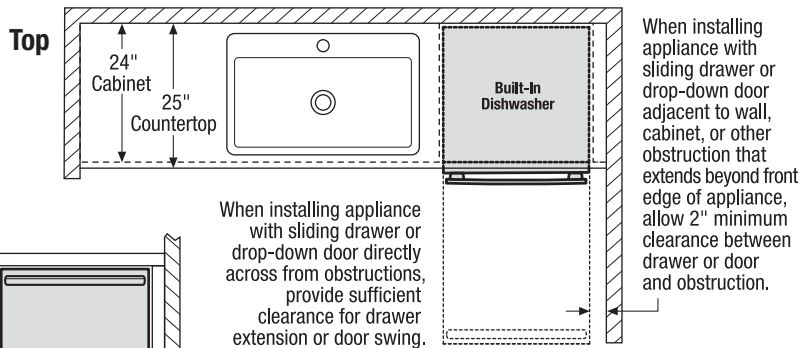
When installing appliances adjacent to each other, 20" minimum distance between each appliance required.

When installing built-in cooking appliances in combination, 2" minimum visible gap between appliance faceplates required.

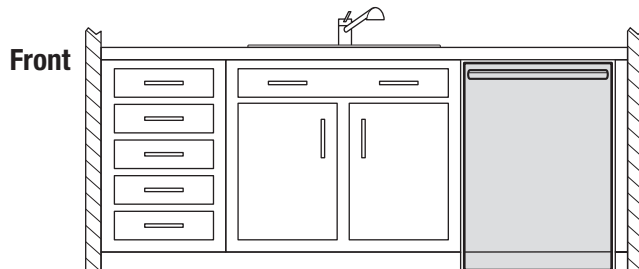


When installing appliance with sliding drawer, swinging or drop-down door directly across from obstructions, provide sufficient clearance for drawer extension or door swings.

*When installing refrigerator adjacent to wall, cabinet or other appliance that extends beyond front edge of unit, 20" minimum clearance recommended to allow for optimum 140° door swing, providing complete crisper access and removal. (Absolute 3" minimum clearance will ONLY allow for 90° door swing which will provide limited crisper access with restricted removal.)



When installing appliance with sliding drawer or drop-down door directly across from obstructions, provide sufficient clearance for drawer extension or door swing.





Top Mount Refrigerators

FFHT1513L S/W/B/Q

15 Cu. Ft. Top Mount



Product Dimensions

Height (Including Hinges & Rollers)	60-1/8"
Width	28"
Depth (Including Door)	29-3/8"

More Easy-To-Use Features

Half-Width Freezer Shelf

Bright Lighting

Our bright lighting makes it easy to see what's inside.

Attractive Stainless Steel Exterior¹

White Dairy Door

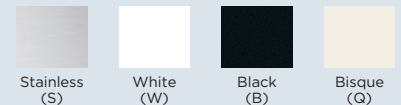
Reversible Door

Door can be installed to open left or right based on your needs.

A.D.A. Compliant²
ENERGY STAR®



Available in:



¹Select models only.

²When properly installed, meets the appliance standards in the Americans with Disabilities Act and the Architectural Barriers Act Accessibility Guidelines as published by the United States Access Board on June 23, 2004, as amended August 5, 2005.

Signature Features

SpaceWise® Adjustable Wire Shelves

Easily adjust shelves up and down to create more space for taller items.

Store-More™ Humidity-Controlled Crisper Drawers

Keep your fruits and vegetables fresh in our humidity-controlled crisper drawers.

Store-More™ Gallon Door Shelf

Door storage gives you room for larger items like a gallon of milk.

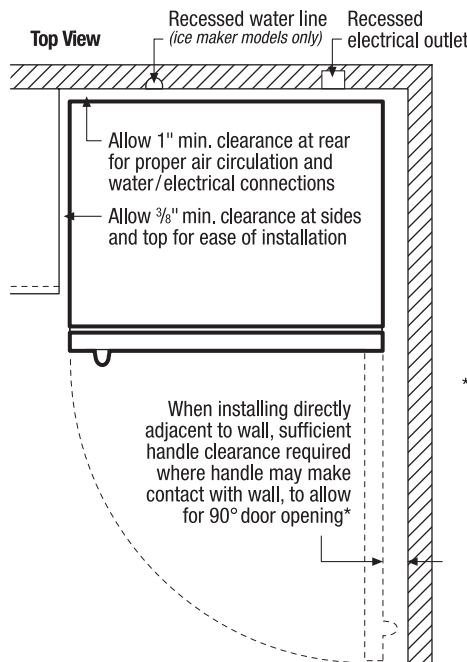
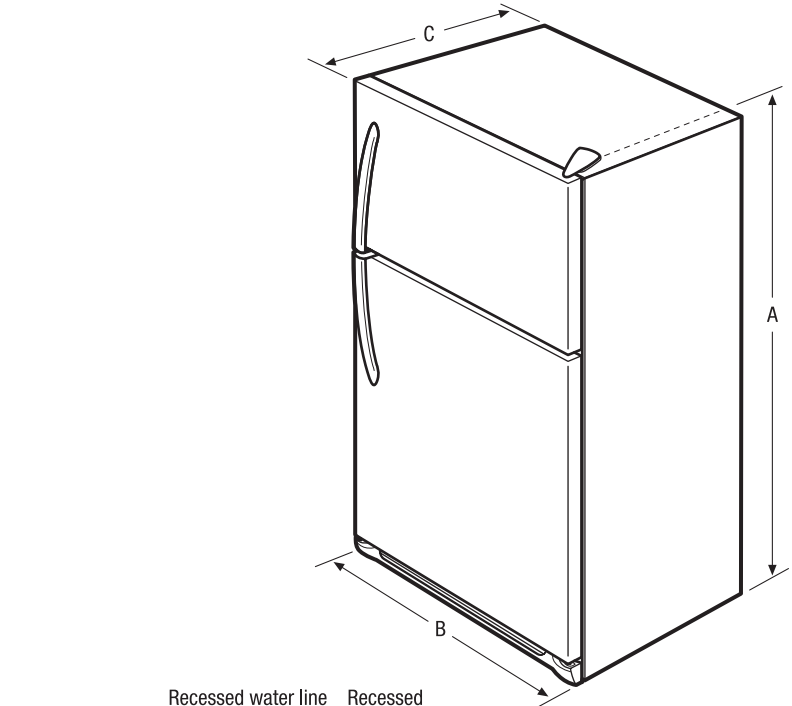
Full-Width Freezer Racks

Gives you more usable door space for accessibility.

Features	
Door Design	Square
Door Handle Design	Black (S), Color-Coordinated (W/B/Q)
Cabinet Finish (Textured)	Black (S), Color-Coordinated (W/B/Q)
Door Stops	Yes
Door Hinge Covers	Black (S), Color-Coordinated (W/B/Q)
Door Reverse Option	Yes
Left-Swing Door	
Rollers - Front/Rear	Fixed/Yes
Sound Package	
Toe Grille	Black (S), Color-Coordinated (W/B/Q)
Refrigerator Features	
Interior Lighting	Bright
Refrigerator Shelves	2 Sliding SpaceWise® Adjustable Wire
Cool Zone™ Drawer	
Wine/Can Rack	
Store-More™ Crisper Drawers	2 White
Humidity Controls	2
Dairy Compartment	White Dairy Door
Door Bins	
Door Racks	2 Full-Width White 1 Half-Width White
Non-Slip Bin Liner	
Tall Bottle Retainers	
Gallon Door Storage	1
Freezer Features	
Door Bins	
Door Racks	2 Full-Width White
Freezer Shelves	1 Half-Width Wire
Factory Ice Maker w/ Large Ice Bin	Optional (PN# IM115)
Lighting	
Certifications	
A.D.A. Compliant ¹	Yes
ENERGY STAR®	Yes
Specifications	
Total Capacity (Cu. Ft.)	14.8
Refrigerator Capacity (Cu. Ft.)	11.01
Freezer Capacity (Cu. Ft.)	3.74
Power Supply Connection Location	Right Bottom Rear
Water Inlet Connection Location	Bottom Right
Voltage Rating	120V / 60Hz / 15 or 20A
Connected Load (kW Rating) @ 120 Volts ²	.54
Amps @ 120 Volts	4.5
Minimum Circuit Required (Amps)	15
Shipping Weight (Approx.)	175 Lbs.

¹When properly installed, meets the appliance standards in the Americans with Disabilities Act and the Architectural Barriers Act Accessibility Guidelines as published by the United States Access Board on June 23, 2004, as amended August 5, 2005.

²For use on adequately wired 120V, dedicated circuit having 2-wire service with a separate ground wire. Appliance must be grounded for safe operation.



*When installing refrigerator adjacent to wall, cabinet or other appliance that extends beyond front edge of unit, 20" minimum clearance recommended to allow for optimum 140° door swing, providing complete crisper access and removal. (Absolute 3" minimum clearance will ONLY allow for 90° door swing which will provide limited crisper access with restricted removal.)

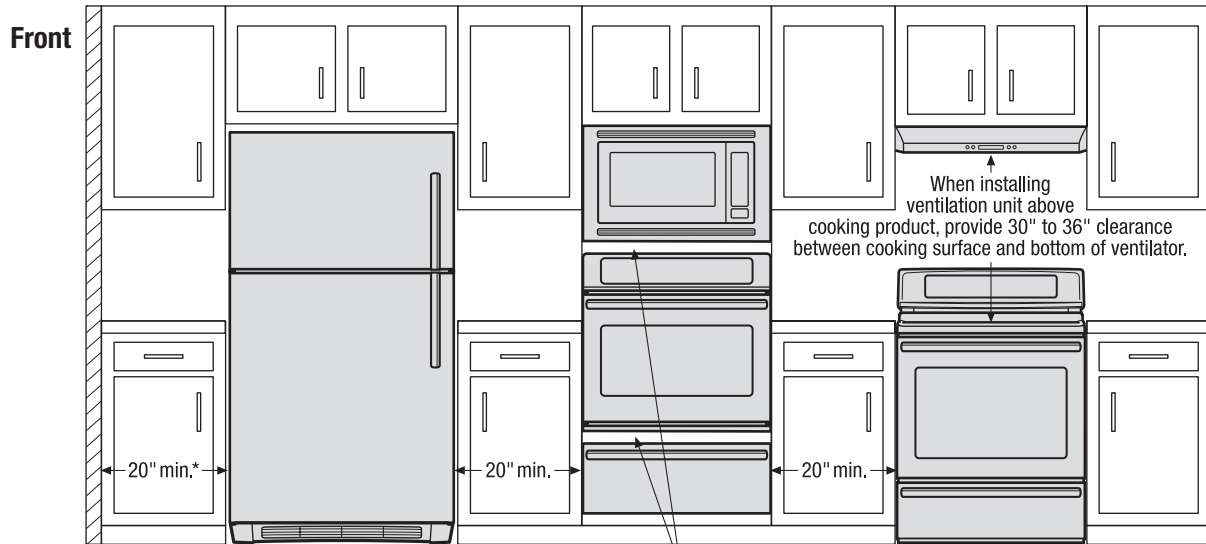
NOTE: For planning purposes only. Always consult local and national electric and plumbing codes. Refer to Product Installation Guide for detailed installation instructions on the web at frigidaire.com.



Product Dimensions	
A - Height (Incl. Hinges and Rollers)	60-1/8"
B - Width	28"
C - Depth (Incl. Door)	29-3/8"
Depth with Door Open 90°	56"

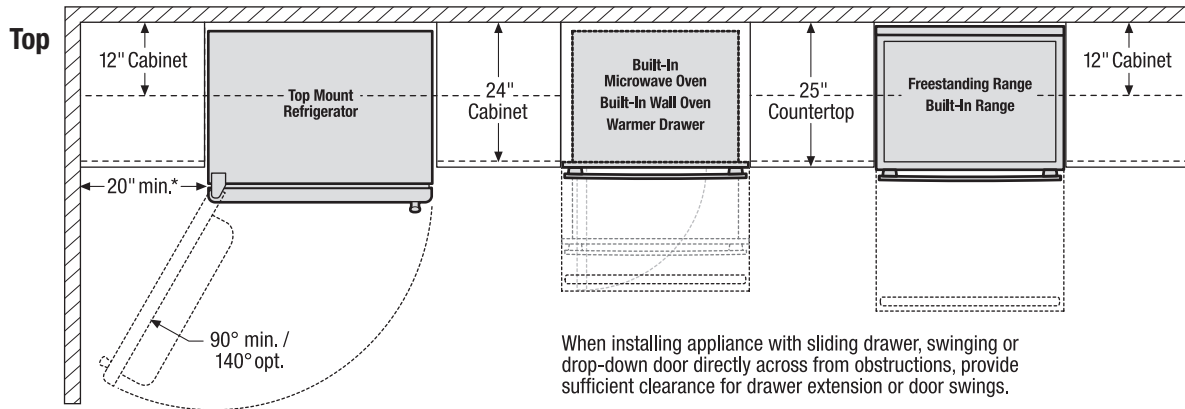
Accessories information available on the web at frigidaire.com

Use these dimensions and clearance instructions for planning purposes only. For detailed installation instructions, refer to installation guide, packed with product, or on the web at frigidaire.com.

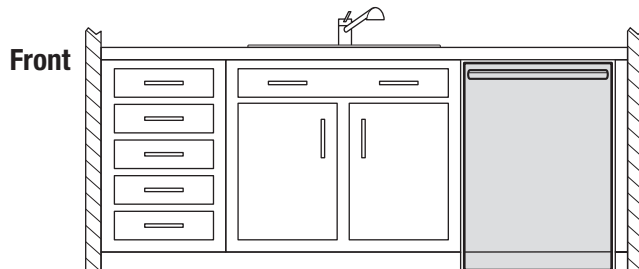
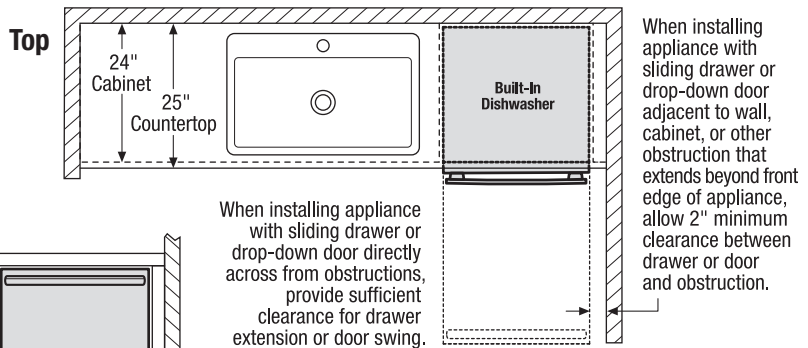


When installing appliances adjacent to each other, 20" minimum distance between each appliance required.

When installing built-in cooking appliances in combination, 2" minimum visible gap between appliance faceplates required.



*When installing refrigerator adjacent to wall, cabinet or other appliance that extends beyond front edge of unit, 20" minimum clearance recommended to allow for optimum 140° door swing, providing complete crisper access and removal. (Absolute 3" minimum clearance will ONLY allow for 90° door swing which will provide limited crisper access with restricted removal.)



When installing appliance with sliding drawer or drop-down door directly across from obstructions, provide sufficient clearance for drawer extension or door swing.

✓ INSTALLATION CHECKOFF LIST

Doors

- Handles are secure and tight
- Door seals completely to cabinet on all sides
- Freezer door is level across the top

Leveling

- Refrigerator is level, side to side and tilted 1/4" (6mm) front to back
- Toe grille is properly attached to refrigerator
- Cabinet is setting solid on all corners

Electrical Power

- House power turned on
- Refrigerator plugged in

Ice Maker

- House water supply connected to refrigerator
- No water leaks present at all connections - recheck in 24 hours
- Ice Maker is turned ON.

Final Checks

- Shipping material removed
- Fresh Food and Freezer controls set
- Crisper Humidity controls set
- Registration Card sent in

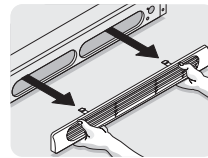
Refer to your *Owner's Use and Care Manual* for additional information about your refrigerator.

5 LEVELING AND ADJUSTING

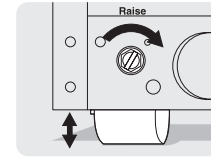
All four corners of your refrigerator must rest firmly on a solid floor. Your refrigerator is equipped with adjustable front rollers or front leveling screws to help level your unit.

To level cabinet or change door height:

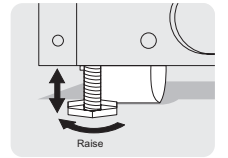
1. Remove toe grille.
2. Use flat-blade screwdriver or 3/8" socket wrench to adjust front rollers. Use adjustable wrench to adjust leveling screws.



Toe Grille



Adjustable Front Roller (some models)

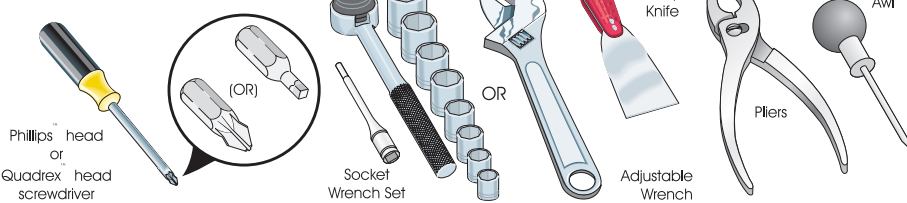


Stationary Front Roller with Leveling Screw (some models)

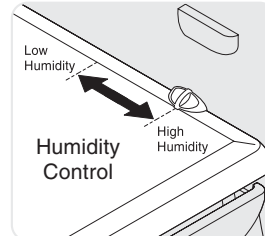
NOTE

Raise the front of the refrigerator enough so the doors close freely when opened halfway. The refrigerator should slope 1/4" to 1/2" from front to back. Then level the refrigerator from side to side.

Tools Necessary:

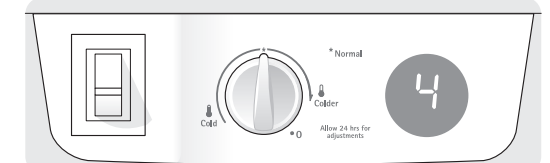
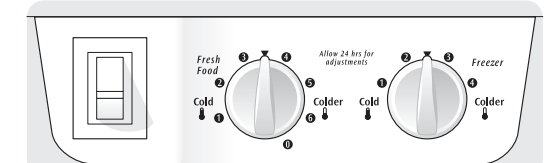


6

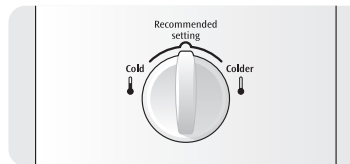
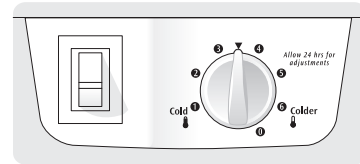


CONTROLS

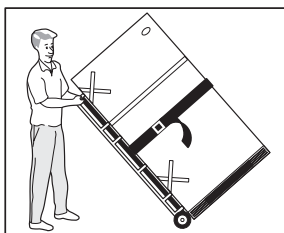
When changing controls, wait 24 hours before making additional adjustments.



(For models with LED display, 3 to 5 is normal operating range.)



1

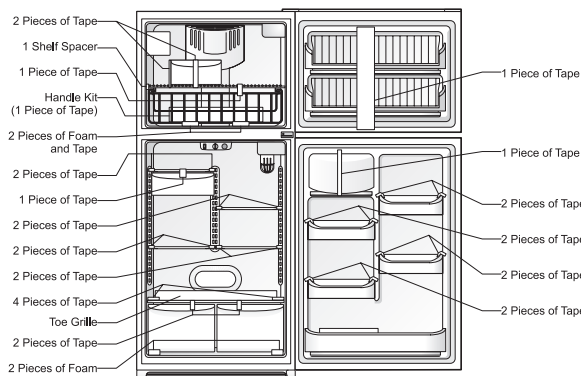


HAND TRUCKING

- Load refrigerator from side of cabinet only.
- Do not run retaining straps over handles.
- Do not over-tighten retaining straps.
- Never use refrigerator handles to move the refrigerator.
- Remove tape from doors only after unit is in place.

2

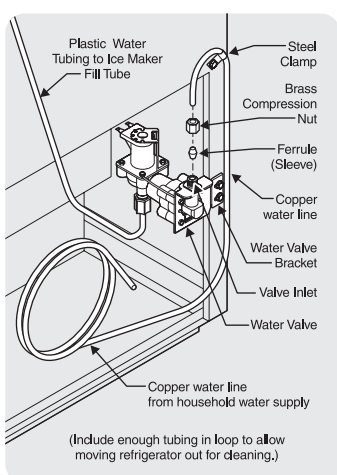
SHIPPING MATERIAL



Remove Shipping material. (Features may vary per model.)

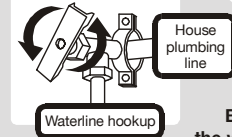
3

WATER SUPPLY



Connect water supply - check for water leaks. **Turn icemaker OFF if water supply is not connected immediately. Connecting to a reverse osmosis system is not recommended.**

The water valve on the back of the refrigerator will Click/Buzz if the water valve is closed.



Be certain the water valve is open and there are no leaks.

4

INSTALLATION CLEARANCES

Allow the following clearances for ease of installation, proper air circulation, and plumbing and electrical connections:

- Sides & Top.....3/8"
- Back.....1"

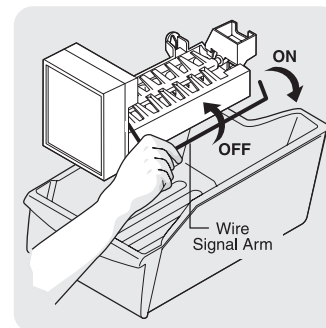
NOTE

If you are installing your refrigerator beside a wall, leave 1/2" minimum between hinges and wall to allow for the door to swing open.

7

ICEMAKER

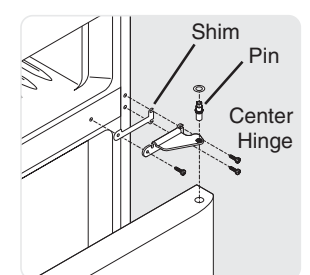
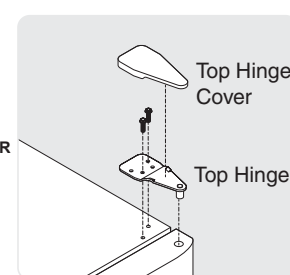
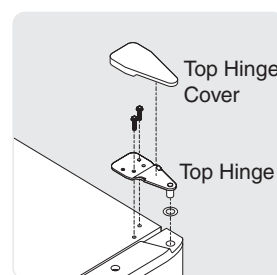
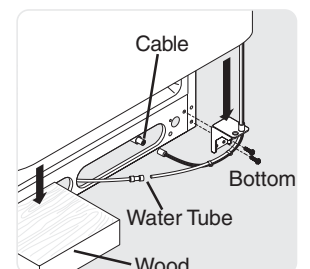
Ensure icemaker is turned ON.



8

DOOR REMOVAL (IF NECESSARY)

If you need to remove the doors to get your refrigerator into the house please see "Door Removal and Reversal Instructions" in your *Use & Care Manual*.



9

- ✓ See "Normal Operating Sights & Sounds" in the *Use & Care Manual* so you understand the sounds you may hear once your refrigerator is running.
- ✓ Please read entire *Use & Care Manual* to become aware of important safety instructions and to become familiar with your new refrigerator.
- ✓ Send in Registration card to register your refrigerator.
- ✓ Congratulations! You are ready to enjoy your new refrigerator.

IF YOU ARE DISSATISFIED WITH THE INSTALLATION, PLEASE CALL THE STORE YOU PURCHASED IT FROM.

A SER RETIRADO POR EL CLIENTE CUANDO SE COMPLETE LA INSTALACION.

✓ LISTA DE VERIFICACION DE LA INSTALACION

Puertas

- Las manijas están aseguradas y apretadas
- La puerta cierra herméticamente en todos los lados del gabinete
- Las puertas están niveladas a través de la parte superior

Nivelación

- El refrigerador está nivelado de lado a lado e inclinado 1/4" (6 mm) desde adelante hacia atrás
- La rejilla inferior está correctamente instalada en el refrigerador
- El gabinete descansa firmemente en todas las esquinas

Energía Eléctrica

- La energía eléctrica de la casa está conectada
- El refrigerador está enchufado

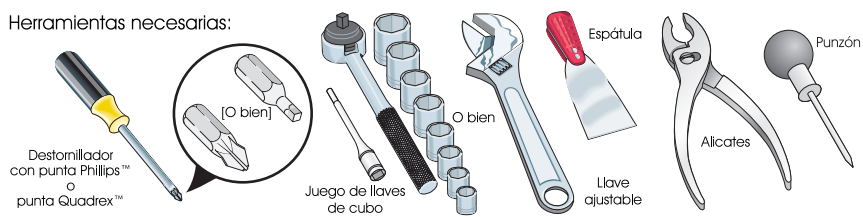
Máquina de Hacer Hielo

- El suministro de agua del hogar está conectado al refrigerador. Los acoplamientos del agua y de la energía están conectados en la puerta
- No hay escape de agua en ninguna de las conexiones - verifique nuevamente dentro de 24 horas
- La máquina de hacer hielo está ACTIVADA

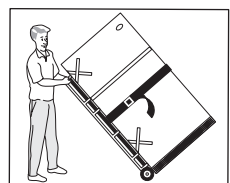
Verificaciones Finales

- Se retiraron los materiales de embarque
- Se ajustaron los controles del refrigerador y del congelador
- Se ajustaron los controles de humedad del cajón de las verduras
- Se envió la Tarjeta de Registro

Herramientas necesarias:

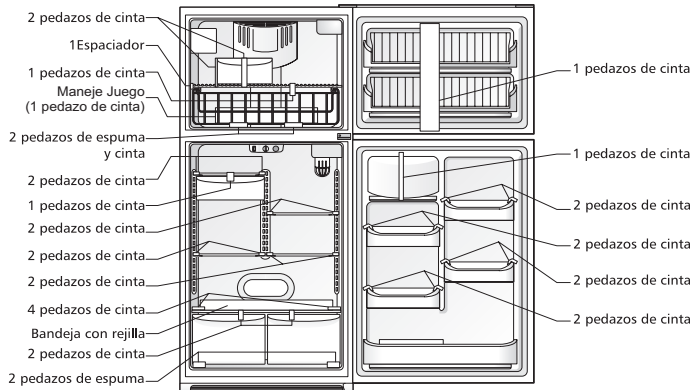


1 TRANSPORTE CON CARRETILLA



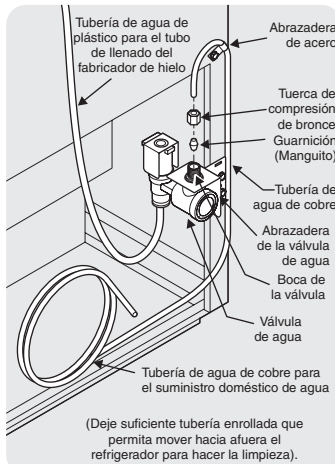
- Cargue el refrigerador por el lado del gabinete solamente.
- No pase las correas por encima de las manijas.
- No apriete demasiado las correas.
- Nunca use las manijas del refrigerador para moverlo.
- Retire la cinta de las puertas después que el refrigerador esté instalado en su lugar.

2 MATERIALES DE EMBARQUE



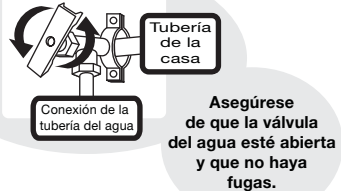
Retire los materiales de embarque.
(La características pueden variar según el modelo.)

3 SUMINISTRO DE AGUA



Conecte el suministro de agua - verifique si hay escapes de agua. **APAGUE la máquina de hacer hielo si el suministro de agua no es conectado inmediatamente. No se recomienda la conexión a un sistema de osmosis inversa.**

La válvula del agua en la parte trasera del refrigerador emitirá un ruido seco/zumbido si la válvula del agua está



4 ESPACIOS LIBRES PARA LA INSTALACION

Deje los siguientes espacios libres para facilitar la circulación de aire adecuada durante la instalación y para las conexiones eléctricas de fontanería:

- Lados y parte superior....3/8"
- Parte trasera1"

NOTA

Si instala el refrigerador junto a una pared, deje un espacio mínimo de 12,7 mm (1/2 pulg.) entre las bisagras y la pared para permitir que la puerta se pueda abrir.

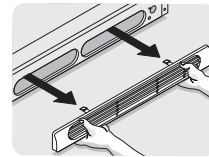
Consulte el *Manual de Uso y Cuidado* para obtener mayor información sobre su refrigerador.

5 NIVELADO Y AJUSTE

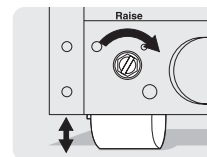
Las cuatro esquinas del refrigerador deben descansar firmemente sobre suelo firme. Su refrigerador tiene rodillos ajustables para facilitar el nivelado y para ajustar las puertas.

Para ajustar el gabinete o cambiar la altura de las puertas:

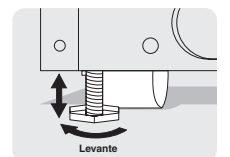
1. Retire la rejilla inferior.
2. Use un destornillador, una llave de 3/8" o una llave para tuercas para ajustar los rodillos. Para elevar el gabinete o la puerta, gire el tornillo a la derecha. Para bajar el gabinete o la puerta, gire el tornillo a la izquierda.



Grille de protection
Rejilla Inferior



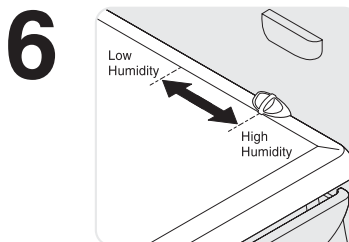
El Rodillo Anterior
ajustable
(algunos modelan)



El Rodillo Anterior inmóvil
con Nivelar el Tornillo
(algunos modelan)

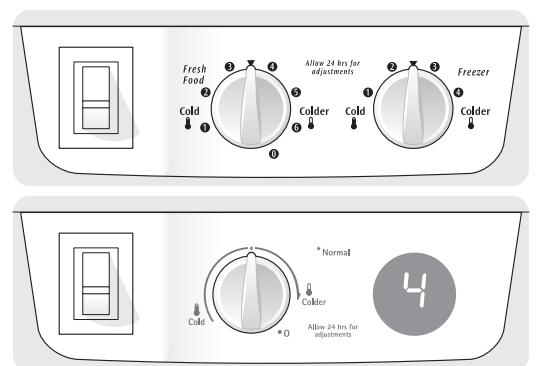
NOTA

Levante la parte delantera del refrigerador lo suficiente para permitir que las puertas cierren sin dificultad al abrirlas parcialmente. El refrigerador debe tener una inclinación de 6,4 a 12 mm (1/4 a 1/2 pulg.) en sentido de adelante hacia atrás. Luego nivélelo de lado.

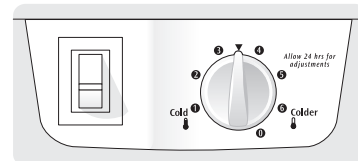


CONTROLES

Cuando ajuste de controles, espere 24 horas para que la temperatura se establezca antes de hacer cambios adicionales.

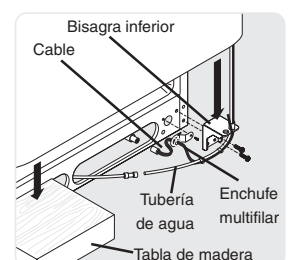


(Para modelos con el despliegue LED, 3 a 5 son operar normal la gama.)

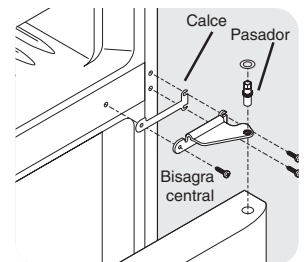
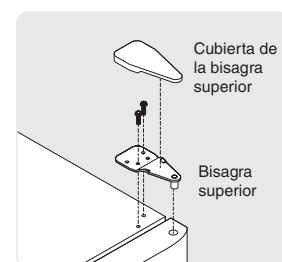
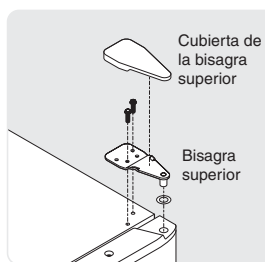


La máquina de hacer hielo está ACTIVADA

LA ELIMINACION DE LA PUERTA (si necesario)



8 Si es necesario retirar las puertas para poder entrar el refrigerador en la casa, por favor vea la sección *Instrucciones para el Desmontaje de las Puertas* en su Manual de Uso y Cuidado.



- 9 ✓ Vea la sección "Sonidos Normales del Funcionamiento" en el *Manual de Uso y Cuidado* para que se familiarice con los sonidos que pueda oír cuando su refrigerador sea puesto en funcionamiento.
- ✓ Por favor lea todo el *Manual de Uso y Cuidado* para conocer las instrucciones importantes de seguridad y para familiarizarse con su nuevo refrigerador.
- ✓ Envíe la Tarjeta de Registro para registrar su refrigerador.
- ✓ ¡Felicitaciones! Ya puede comenzar a disfrutar de su nuevo refrigerador.

SI NO ESTA SATISFECHO CON LA INSTALACION DE SU REFRIGERADOR, POR FAVOR PONGASE EN CONTACTO CON LA TIENDA DONDE LO COMPRO.



Chimney Wall-Mount Hood

FHWC3055L S

30" Stainless Steel



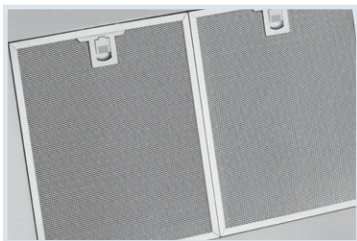
Signature Features



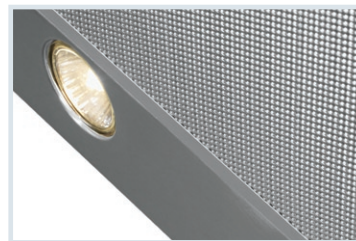
Stainless Steel Canopy Design
Classic hood design is constructed of durable stainless steel and very attractive.



Centrifugal Fan
Move air quietly and efficiently — up to 400 cu. ft. of air per minute.



Washable Filters
Dishwasher-safe for easy cleaning. The aluminum filter provides strength and durability not found in foam filters.



Halogen Lighting
For bright illumination of the cooktop surface.

Features

Nominal Width	30"
Installation Type	Wall Mount
Style	Stainless Steel / Chimney
Air Discharge	Vertical
Air Delivery (CFM)	400
Blower Type	Centrifugal
Controls	Electronic Push Button
Fan Speeds	3
Sound Level (dBA)	69.9
Dual Halogen Lights	Yes
Dishwasher-Safe Filters	Yes
Exhaust Duct	Convertible*
Duct Required	6" Round

Optional Accessories

Duct-Free Kit	PN# FHWRKT55LS
10' Flue Extension Kit	PN# FHWIOX55LS

Specifications

Product Dimensions -	
Height (With One Cover)	26-25/32" min.
(With Flue Extension)	31-11/16" min.
	45" max
Width	29-7/8"
Depth	19-11/16"
Voltage Rating	120V / 60Hz / 15A
Amps @ 120 Volts	4.0
Connected Load (kW Rating) @ 120 Volts†	0.516
Shipping Weight (Approx.)	80 Lbs.
Sones Rating	7.9

*Ventilation is convertible to be either ducted outside, or recirculated inside requiring no ducting. (Recirculated option requires use of optional Duct-Free Kit.)

†For use on adequately wired 120V, dedicated circuit having 2-wire service with a separate ground wire. Appliance must be grounded for safe operation.

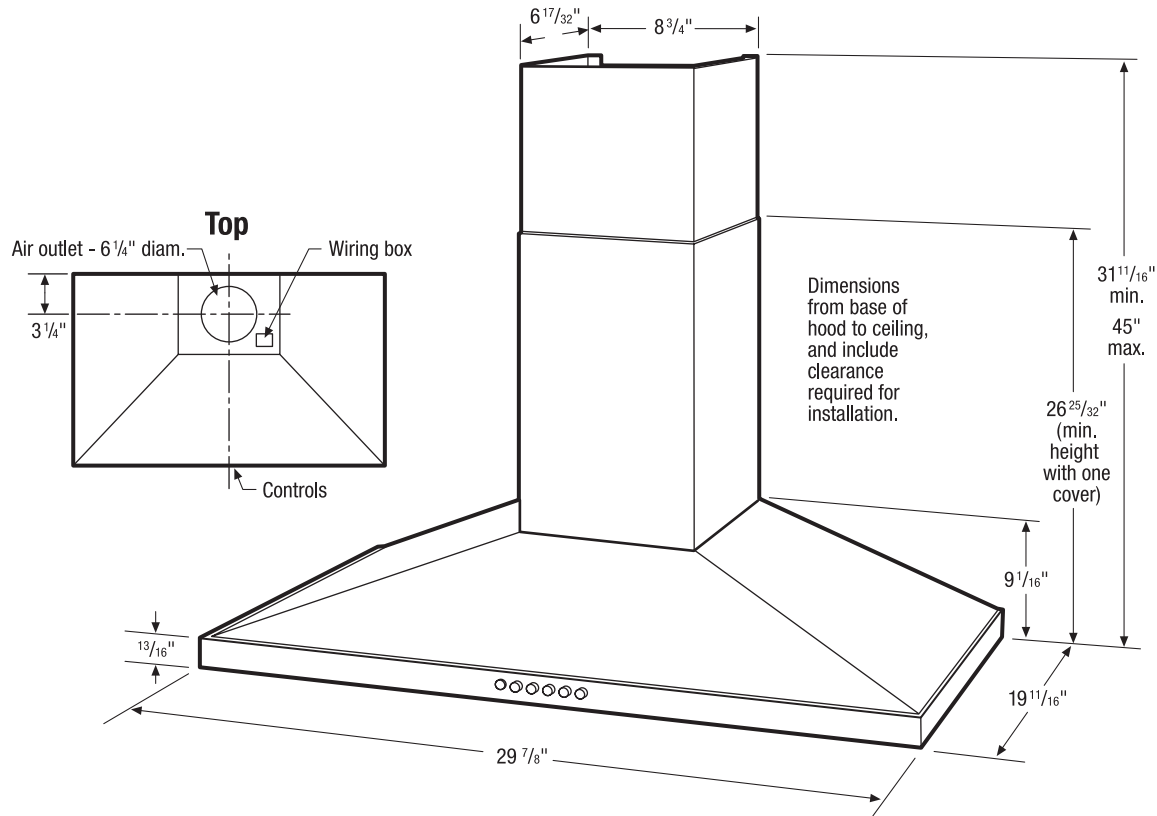
NOTE: Always consult local and national electric codes. Check local building codes for installation requirements, as they may vary per locale. Refer to Product Installation Guide for detailed installation instructions on the web at frigidaire.com.

Specifications subject to change.

Available in:



Stainless (S)



Chimney Wall-Mount Hood Specifications

- Product Shipping Weight (approx.) - 80 Lbs.
- Wall-Mount Installation
- Ventilation system is preset to exhaust air outside. If outside ducting is not possible, optional Duct-Free Recirculation Kit (PN# FHWRT55LS) is available to convert ventilation to allow air to recirculate inside. (Refer to Ducted Option Specifications for outside ventilation.)
- Sones Rating - 7.9
- Voltage Rating - 120V/60 Hz/15 Amps
- Connected Load (kW Rating) @ 120 Volts = 0.516 kW (For use on adequately wired 120V, dedicated circuit having 2-wire service with a separate ground wire. Appliance must be grounded for safe operation.)
- Amps @ 120 Volts = 4 Amps
- Always consult local and national electric codes. Check local building codes for installation requirements, as they may vary per locale.
- Minimum installation height allowed from bottom of hood to standard 36"-high electric or gas cooking surface is 26" - 35". (NOT more than 32" recommended.) For detailed instructions regarding install heights in 8', 9' and 10' ceiling applications, refer to installation guide on web.
- To prepare mounting surface, adequate structure and support must be provided, capable of supporting 100 lbs.

Ducted Option Specifications

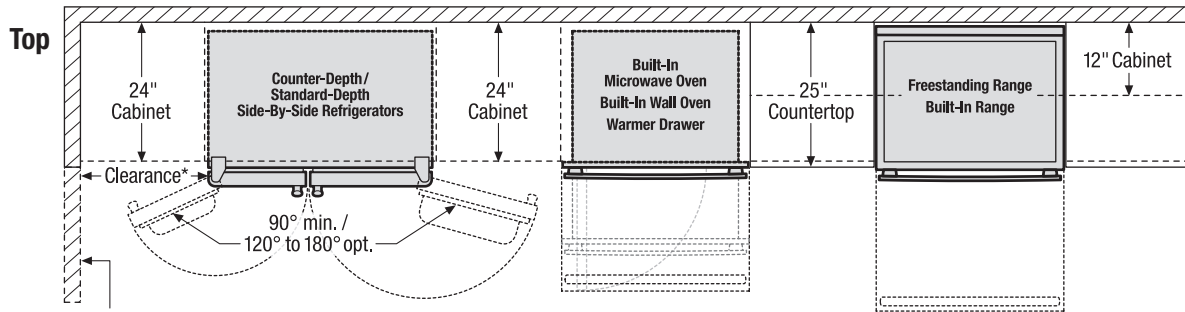
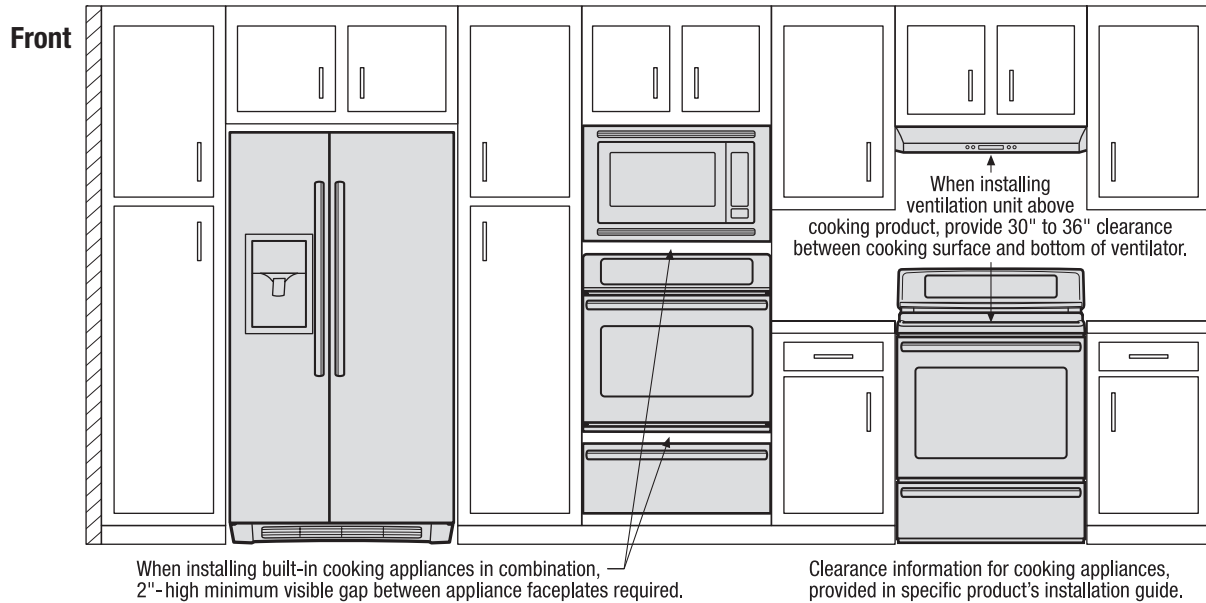
- For outside ventilation.
- Exhaust Duct Required - 6" round
- For most efficient airflow exhaust, use a straight run or as few elbows as possible.
- Use metallic flex ducting only to connect rigid duct directly to transitions (if allowed by code).
- Thermal breaks such as short section of nonmetallic duct, should be used in areas of extreme cold.
- Cold weather installations should have additional backdraft damper installed.
- Refer to installation instructions on web for detailed exhaust duct preparation and converting vent blower system for recirculating inside.

Note: For planning purposes only. Refer to Product Installation Guide on the web at frigidaire.com for detailed instructions.

Optional Accessories

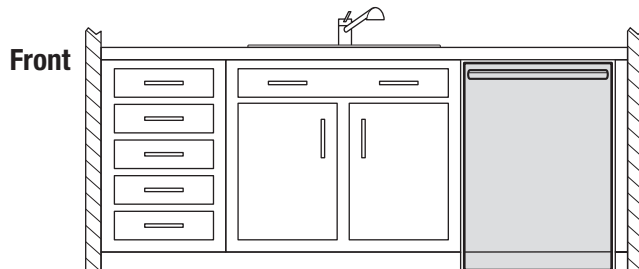
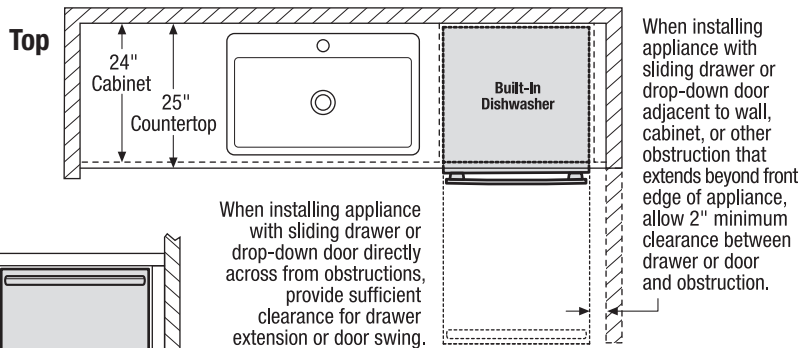
- Duct-Free Recirculation Kit - (PN# FHWRT55LS).
- 10' Flue Extension Kit - (PN# FHW10X55LS).

Use these dimensions and clearance instructions for planning purposes only. For detailed installation instructions, refer to installation guide, packed with product, or on the web at frigidaire.com.



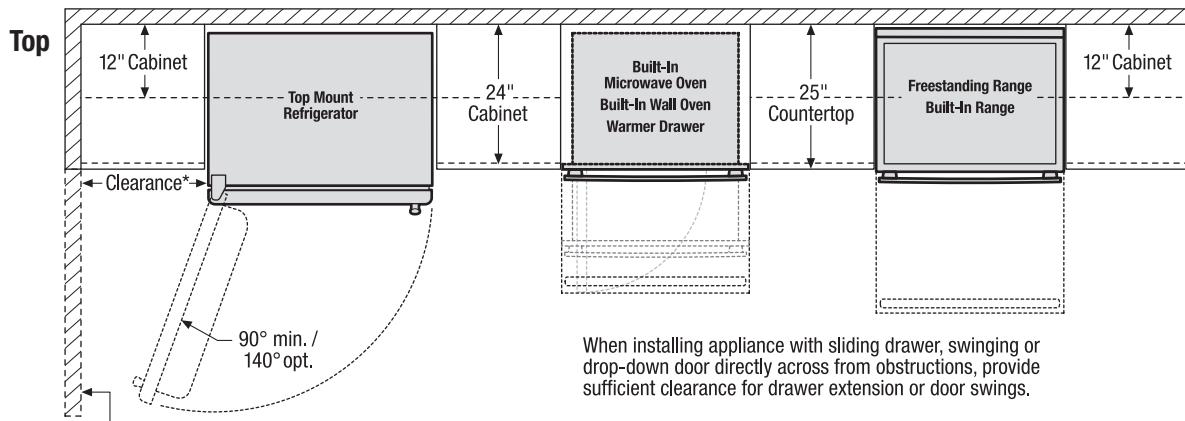
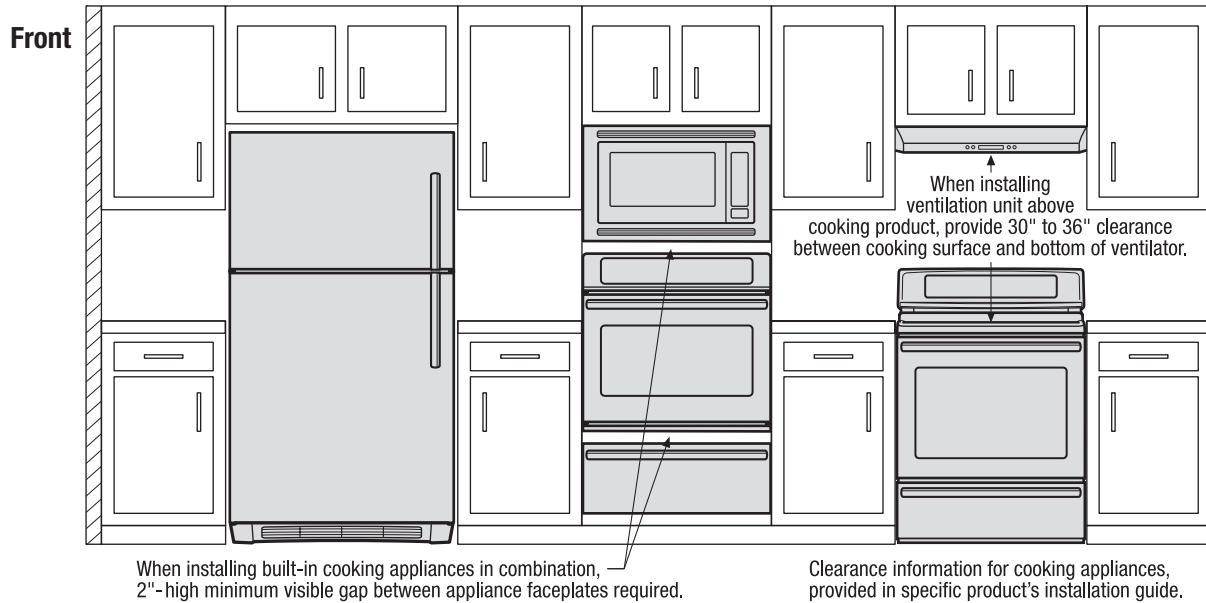
*When installing side-by-side refrigerator adjacent to wall, cabinet or another appliance that extends beyond front edge of unit, 20" minimum clearance recommended to allow for optimum 120° to 180° door swing, providing complete drawer/crisper access and removal. (Absolute 4-1/2" minimum clearance will ONLY allow for 90° door swing which will provide limited drawer/crisper access with restricted removal.)

When installing appliance with sliding drawer, swinging or drop-down door directly across from obstructions, provide sufficient clearance for drawer extension or door swings.

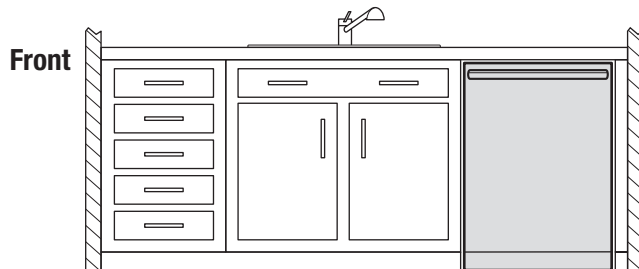
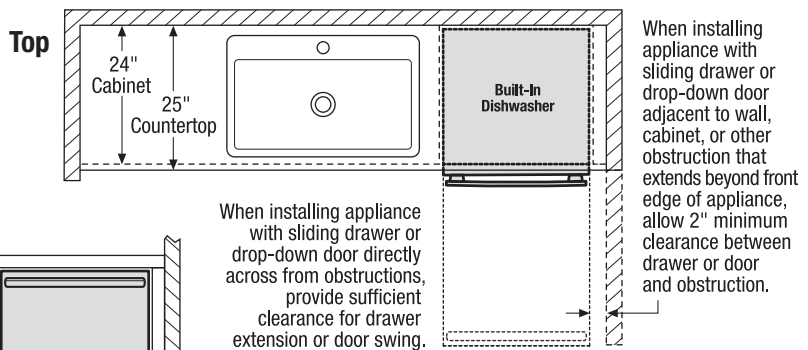


When installing appliance with sliding drawer or drop-down door directly across from obstructions, provide sufficient clearance for drawer extension or door swing.

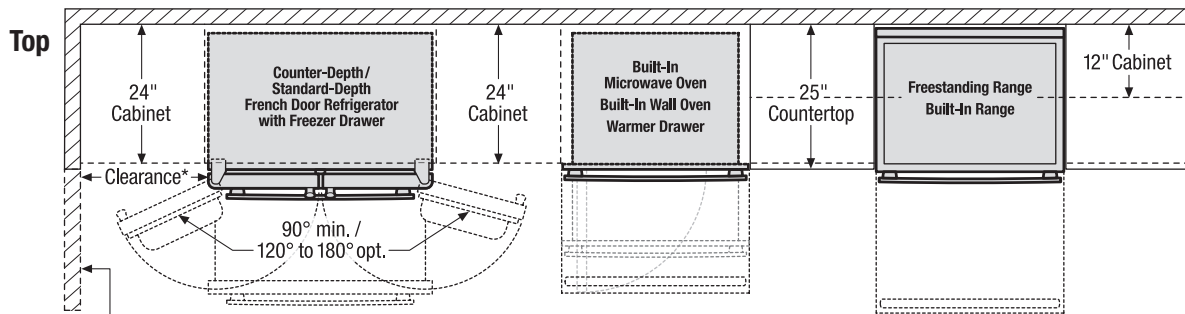
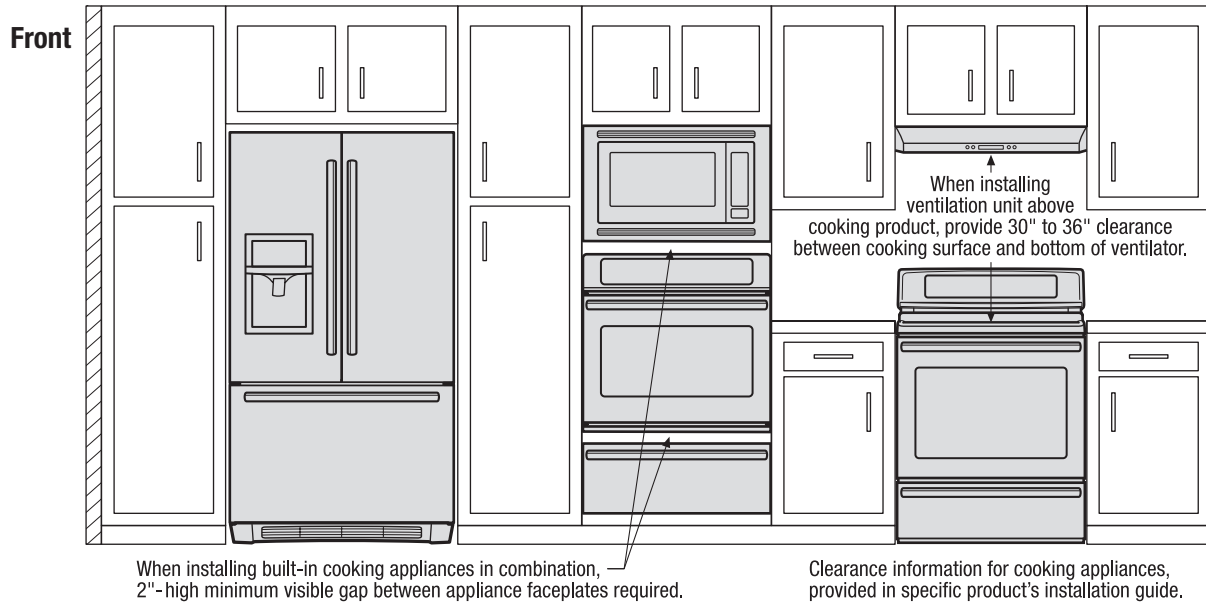
Use these dimensions and clearance instructions for planning purposes only. For detailed installation instructions, refer to installation guide, packed with product, or on the web at frigidaire.com.



*When installing top mount refrigerator adjacent to wall, cabinet or other appliance that extends beyond front edge of unit, 20" minimum clearance recommended to allow for optimum 140° door swing, providing complete crisper access and removal. (Absolute 3" minimum clearance will ONLY allow for 90° door swing which will provide limited crisper access with restricted removal.)

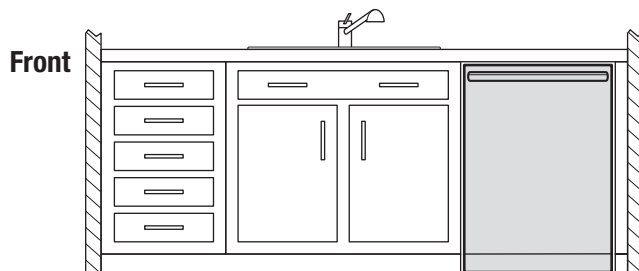
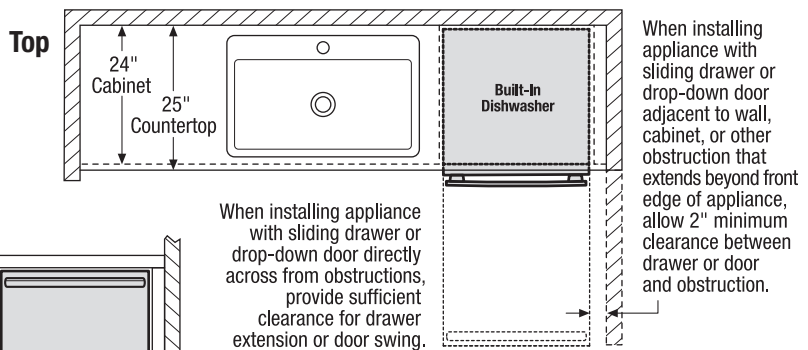


Use these dimensions and clearance instructions for planning purposes only. For detailed installation instructions, refer to installation guide, packed with product, or on the web at frigidaire.com.



*When installing French door refrigerator adjacent to wall, cabinet or another appliance that extends beyond front edge of unit, 20" minimum clearance recommended to allow for optimum 120° to 180° door swing, providing complete drawer/crisper access and removal. (Absolute 4-1/2" minimum clearance will ONLY allow for 90° door swing which will provide limited drawer/crisper access with restricted removal.)

When installing appliance with sliding drawer, swinging or drop-down door directly across from obstructions, provide sufficient clearance for drawer extension or door swings.



FRIGIDAIRE

affinity



Front Load Washers

FAFS4474L R/N/A/W

15 Wash Cycles
4.4 Cu. Ft.



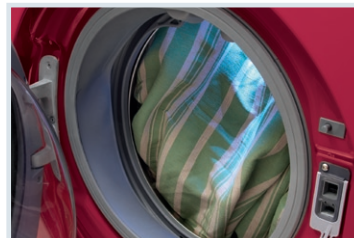
Optional SpaceWise™ Pedestal Drawer Shown

Signature Features



Ready Steam™

Ensures cleaner clothes with improved stain removal.



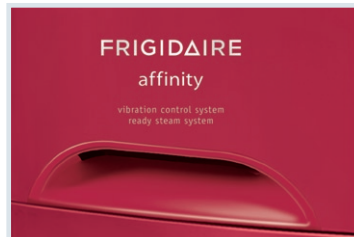
Ultra-Capacity Washer

The largest in its class¹, so you can finish more laundry even faster.



Ready Clean™

A better, gentler cleaning with up to 30% less energy and water.



Vibration Control System

Advanced vibration control technology keeps even oversized loads balanced for smooth, quiet operation. Ideal for second floor installation.

Product Dimensions

Height	36"
Width	27"
Depth	30-5/16"

More Easy To Use Features

Specialty Cycles

Clean everything from teddy bears to pet beds and active wear.

TimeWise™

Wash time equals dry time — so you don't wait for clothes to dry.

Stain Pretreat

A 10-minute special soak cycle that removes even the toughest stains.

Fresh Water Rinse

Our Advanced Rinse Technology reduces the amount of detergents and additives that may cause allergies.

Certified Allergen Cycle

Removes up to 95% of allergens.

Quick Wash

Wash a full load in just 20 minutes.

Quick Laundry

Wash and dry a full load in just 45 minutes.

Quick Sanitize

Sanitizes items in just one hour—less than half the time standard washers require.

Energy Saver Option

Further reduces energy use up to 60%.²

SilentDesign™ Premium

for quiet operation.

Stay-Fresh Antimicrobial Seal

Optional SpaceWise™ Pedestal Drawer

ENERGY STAR®

NSF® International Certification



Available in:



Classic Red (R)



Classic Blue (N)



Classic Silver (A)

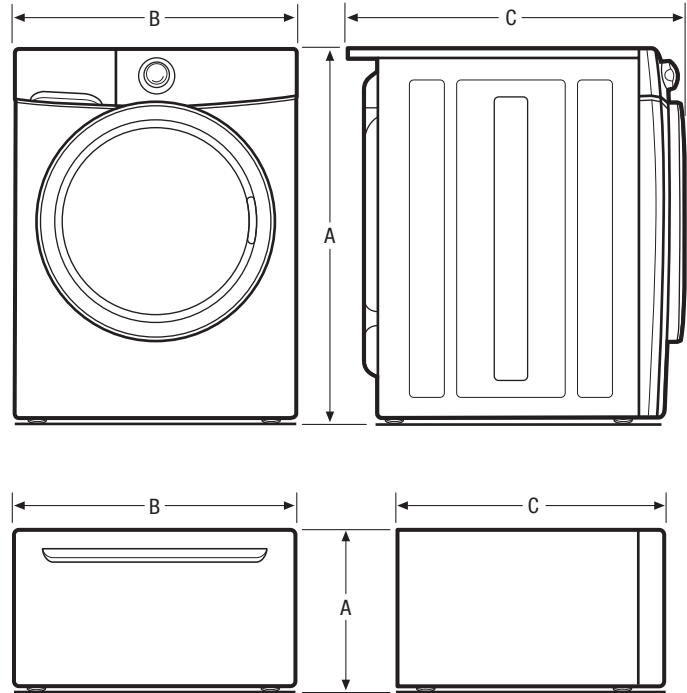


Classic White (W)

¹Based on I.E.C. std. 60456 4th Edition for washers 37" or less in height and 27" or less in width.

²Based on a 15.8 lb. load as tested per DOE Protocol 10CFR430, subpart B, App. J, cl.3.1.

Features	
Total Capacity I.E.C. (Cu.Ft.)	4.4
Controls	Express-Select™
Washer Drum Interior	Stainless Steel
Interior Light/Door Trim	Yes, LED/Chrome
Vibration Control System	Yes
Wash System	Tumble Action
Advanced Rinse Technology	Yes
TimeWise™ Technology	Yes
Ready Clean™/Ready Steam™	Yes/Yes
Freshwater Rinse	Yes
Stay-Fresh Antimicrobial Seal	Yes
Automatic Temperature Control	Yes
Automatic Water Level Adjustments	Yes
Auto Prewash Detergent Dispenser	Yes
Auto Bleach Dispenser	Yes
Auto Detergent Dispenser	Yes
Auto Fabric Softener Dispenser	Yes
Time Remaining Indicator	Yes
Cycle Status Lights	Yes
Cycle Signal/Cycle Signal "On/Off"	Chime/Yes
Cycle Signal Volume Control	Yes
Door Lock Indicator Light	Yes
Control Lock/Stay-Put Door	Yes/Yes
Start/Pause/Cancel Buttons	Yes
Energy Saver Option	Yes
Delay Start	1 to 20 Hours
Integral Water Heater	Yes, 1000 Watts
Tumble Speed (RPM)	33/47
Spin Speed (Maximum RPM)	1300
Reversible Door	
Sound Package	SilentDesign™ Premium
Adjustable Leveling Legs	Yes
Cycles	
Wash Cycles/Specialty Cycles	15/6
Options	
Water Temperature Selections	5
Water Levels	Automatic/Max Fill
Spin Speed/Soil Level Selections	5/5
Allergen	Yes
Optional Accessories	
Dryer Stacking Kit	PN# STACKIT4X
15" Frigidaire Affinity® Pedestal Drawers	
Classic Red (R)	(R) PN# CFPWD15R
Classic Blue (N)	(N) PN# CFPWD15N
Classic Silver (A)	(A) PN# CFPWD15A
Classic Black (B)	
Classic White (W)	(W) PN# CFPWD15W
Mobile Home Installation Kit	PN# 137067200
Drain Hose Extension Kit	PN# 137098000
Certifications	
ENERGY STAR®	Yes
NSF® Certified Sanitize/Allergen	Yes/Yes
Specifications	
Power Supply Connection Location	Right Top Rear
Water Inlet Connection Location	Left Top Rear
Voltage Rating	120V/60Hz/15A
Connected Load (kW Rating) @ 120 Volts¹	1.4
Watts @ 120 Volts/Amps @ 120 Volts	1,000/8
Minimum Circuit Required (Amps)	20
Shipping Weight (Approx.)	222 Lbs.



NOTE: For planning purposes only. Always consult local and national electric and plumbing codes. Refer to Product Installation Guide for detailed installation instructions on the web at frigidaire.com.



Product Dimensions	
A - Height (Single)	36"
Height (Stacked)	71-1/2"
B - Width	27"
C - Depth	30-5/16"
Depth with Door Open 90°	51-7/16"
Pedestal Dimensions	
A - Height	15-1/4"
B - Width	27"
C - Depth	26-1/4"

¹For use on adequately wired 120V, dedicated circuit having 2-wire service with a separate ground wire. Appliance must be grounded for safe operation.

Accessories information available on the web at frigidaire.com

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USA • 10200 David Taylor Drive • Charlotte, NC 28262 • 1-800-FRIGIDAIRE • frigidaire.com
 CANADA • 5855 Terry Fox Way • Mississauga, ON L5V 3E4 • 1-800-265-8352 • frigidaire.ca

FAFS4474L 08/10

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Specifications subject to change.
 Printed in the U.S.A.

All about the

Installation

of your Washer



TABLE OF CONTENTS

Important Safety Instructions.....	2-3	Installation Instructions	9-10
Installation Requirements	4-5	Accessories	11
Installed Dryer Dimensions	6	Notes	12
Unpacking Washer.....	7-8	Français.....	13

IMPORTANT SAFETY INSTRUCTIONS


WARNING

Please read all instructions before using this washer.

Recognize safety symbols, words and labels

Safety items throughout this manual are labeled with a WARNING or CAUTION based on the risk type as described below:

Definitions

 This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

IMPORTANT

IMPORTANT indicates installation, operation or maintenance information which is important but not hazard-related.

Installation Checklist

Shipping Hardware

- Foam shipping support (under wash tub) removed and stored
- Shipping bolts and spacers removed from rear of appliance and stored
- Hole plugs (shipped in bag in drum) installed in holes in backsheet

Leveling

- Washer is level, side-to-side and front-to-back
- Cabinet is setting solid on all corners

Water Supply

- Rubber washers (shipped in drum) are installed in NEW inlet hoses (shipped in drum)
- HOT supply is connected to HOT inlet and COLD supply is connected to COLD inlet
- HOT and COLD water supply turned on
- No leaks present at water supply connections or appliance inlet connections - recheck in 24 hours

Drain

- Stand pipe or wall drain height minimum 24"
- Drain hose snapped in "U" channel (shipped in drum)
- Drain hose secured in place with cable tie (shipped in drum)

Electrical Power

- House power turned on
- Washer plugged in

Final Checks

- Installation Instructions** and **Use and Care Guide** read thoroughly
- Door locks and water enters drum when cycle starts
- Registration card sent in

IMPORTANT SAFETY INSTRUCTIONS

NOTE

The electrical service to the washer must conform with local codes and ordinances and the latest edition of the National Electrical Code, ANSI/NFPA 70, or in Canada, the Canadian electrical code C22.1 part 1.

WARNING

SUFFOCATION HAZARD

Destroy the carton and plastic bags after the washer is unpacked. Children might use them for play. Cartons covered with rugs, bedspreads, or plastic sheets can become airtight chambers causing suffocation. Place all materials in a garbage container or make materials inaccessible to children.

CAUTION

EXCESSIVE WEIGHT HAZARD

To avoid back or other injury, have more than one person move or lift the washer.

WARNING

FIRE HAZARD

Do not stack a dryer on top of washer already installed on pedestal. Do not stack washer on top of dryer. Do not stack washer on top of another washer.

WARNING

FIRE HAZARD

For your safety the information in this manual must be followed to minimize the risk of fire or explosion or to prevent property damage, personal injury or loss of life. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Clear the room, building or area of all occupants.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

IMPORTANT

The instructions in this manual and all other literature included with this washer are not meant to cover every possible condition and situation that may occur. Good safe practice and caution **MUST** be applied when installing, operating and maintaining any appliance.

Maximum benefits and enjoyment are achieved when all the Safety and Operating Instructions are understood and practiced as a routine with your laundering tasks.

**Save these instructions
for future reference.**

Tools and materials needed for installation:



Adjustable
wrench

OR



3/8" or 10 mm
box wrench

OR



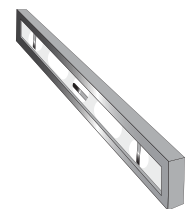
Ratchet and
socket set

AND



Adjustable
pliers

AND



Carpenter's level

INSTALLATION REQUIREMENTS

Electrical system requirements

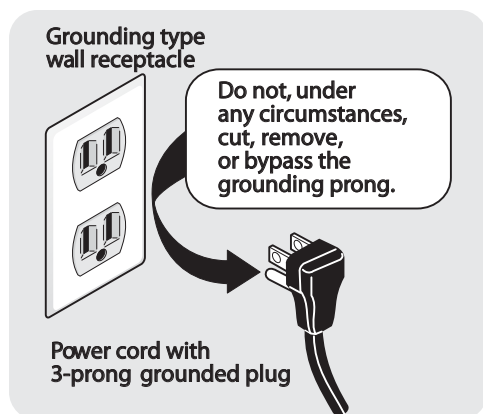
CIRCUIT - Individual, properly polarized and grounded 15 amp. branch circuit fused with 15 amp. time delay fuse or circuit breaker.

POWER SUPPLY - 2 wire, with ground, 120 volt single phase, 60 Hz, Alternating Current.

NOTE

Because of potentially inconsistent voltage capabilities, the use of this washer with power created by gas powered generators, solar powered generators, wind powered generators or any other generator other than the local utility company is not recommended.

OUTLET RECEPTACLE - Properly grounded 3-prong receptacle to be located so the power supply cord is accessible when the washer is in an installed position.



NOTE

GFI (Ground Fault Interrupter) receptacle is not required.

Ground requirements

WARNING

ELECTRICAL SHOCK HAZARD

Improper connection of the equipment grounding conductor can result in a risk of electrical shock. Check with a licensed electrician if you are in doubt as to whether the appliance is properly grounded.

- 1 The washer **MUST** be grounded. In the event of malfunction or breakdown, grounding will reduce the risk of electrical shock by a path of least resistance for electrical current.
- 2 Since your washer is equipped with a power supply

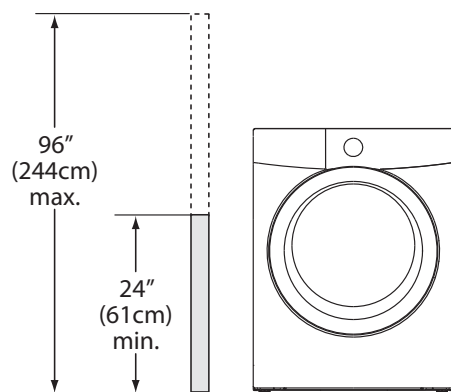
cord having an equipment-grounding conductor and a grounding plug, the plug **MUST** be plugged into an appropriate, copper wired receptacle that is properly installed and grounded in accordance with all local codes and ordinances or in the absence of local codes, with the National Electrical Codes, ANSI/NFPA 70 (latest edition). If in doubt, call a licensed electrician. **DO NOT** cut off or alter the grounding prong on the power supply cord. In situations where a two-slot receptacle is present, it is the owner's responsibility to have a licensed electrician replace it with a properly grounded three prong grounding type receptacle.

Water supply requirements

Hot and cold water faucets **MUST** be installed within 42 inches (107 cm) of your washer's water inlet. The faucets **MUST** be 3/4 inch (1.9 cm) with threading for laundry hose connection. Water pressure **MUST** be between 30 and 120 psi. Pressure difference between hot and cold cannot be more than 10 psi. Your water department can advise you of your water pressure.

Drain system requirements

- 1 Drain capable of eliminating 17 gals (64.3 L) per minute.
- 2 A standpipe diameter of 1-1/4 in. (3.18 cm) minimum.
- 3 The standpipe height above the floor should be:
Minimum height: 24 in. (61 cm)
Maximum height: 96 in. (244 cm)



NOTE

Drain hose attached to the washer can reach a 74 in. (188 cm) high standpipe. For higher standpipe, use hose P/N 137098000, available from an authorized parts distributor.

INSTALLATION REQUIREMENTS

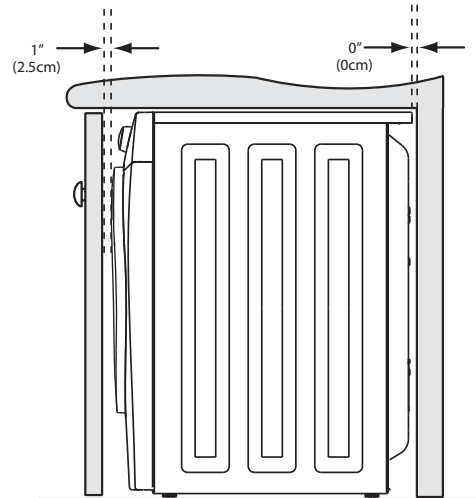
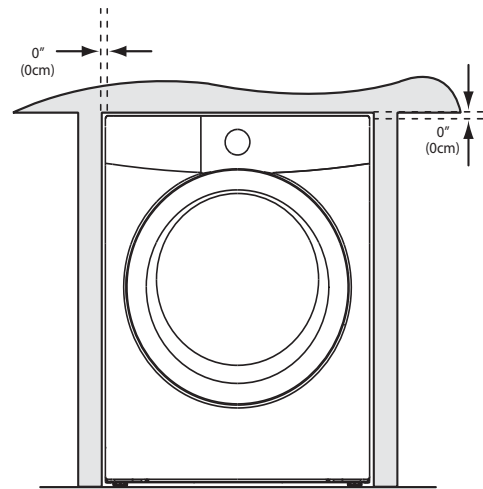
Clearance requirements

➔ IMPORTANT

DO NOT INSTALL YOUR WASHER:

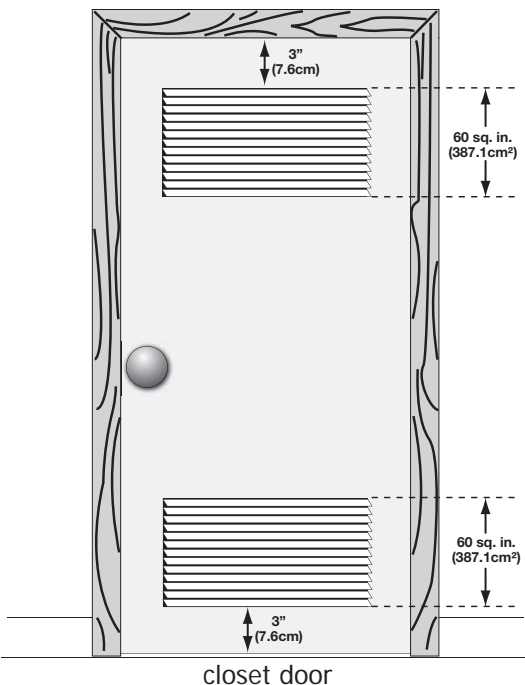
- 1 In an area exposed to dripping water or outside weather conditions. The ambient temperature should never be below 60° F (15.6° C) to maximize detergent effectiveness.
- 2 In an area (garage or garage-type building) where gasoline or other flammables (including automobiles) are kept or stored.
- 3 On carpet. Floor **MUST** be solid with a maximum slope of 1 inch (2.54 cm). To minimize vibration or movement, reinforcement of the floor may be necessary.

MINIMUM INSTALLATION CLEARANCES - Inches (cm)				
	SIDES	REAR	TOP	FRONT
Alcove	0" (0 cm)	0" (0 cm)*	0" (0 cm)	n/a
Under-Counter	0" (0 cm)	0" (0 cm)*	0" (0 cm)	n/a
Closet	0" (0 cm)	0" (0 cm)*	0" (0 cm)	1" (2.54 cm)

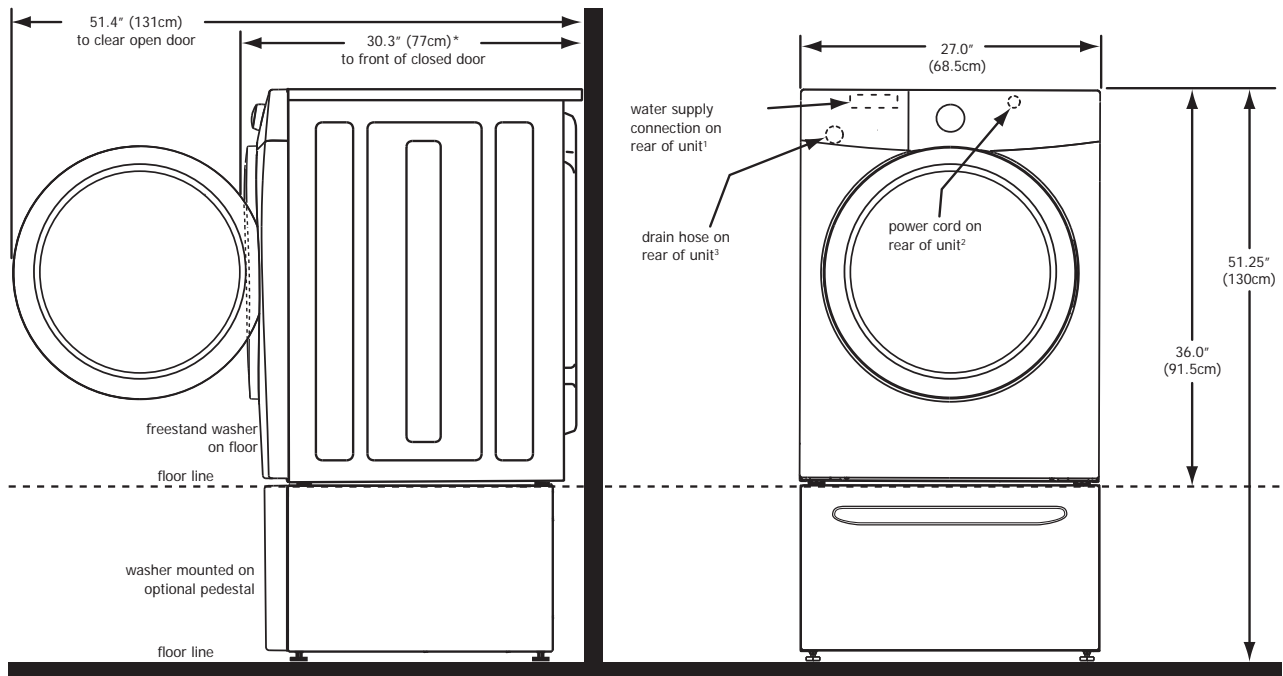


Installation in a Recess or Closet

If washer and dryer are installed in the same closet, door ventilation is required: A minimum of 120 square inches (774.2 cm²) of opening, equally divided at the top and bottom of the door, is required. Louvered openings should be located 3 inches (7.6 cm) from bottom and top of door. Air openings are required to be unobstructed when a door is installed. A louvered door with equivalent air openings for the full length of the door is acceptable.



INSTALLED WASHER DIMENSIONS

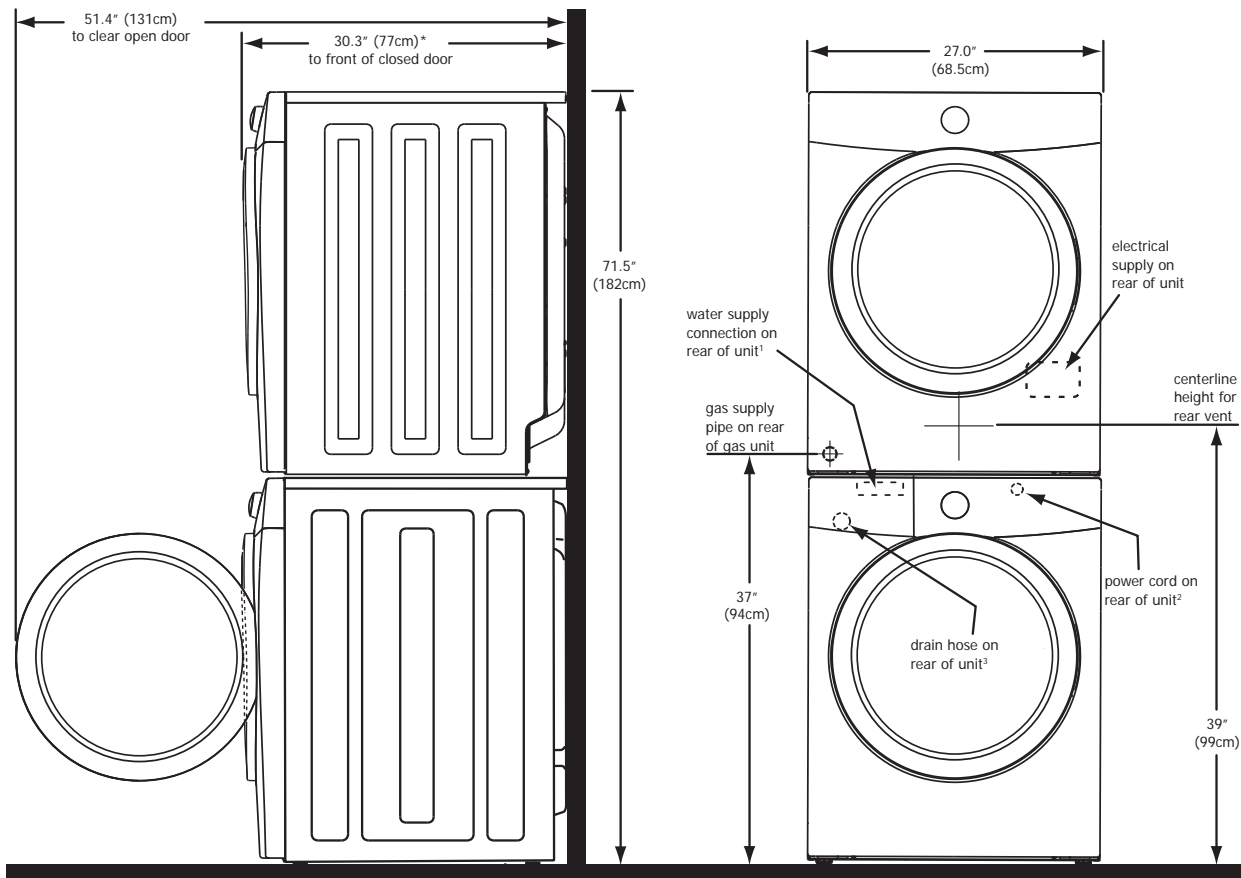


* To obtain these minimal depth dimensions, dryer must be vented straight back. Using a quick-turn 90° elbow (right or down on freestanding dryer) adds approximately 0.75 in. (2.0 cm) to installation depth. Upward venting of exhaust on pedestal-mounted or freestanding dryer adds approximately 4 in. (10.2 cm) to installation depth. Leftward venting on pedestal-mounted or freestanding dryer adds approximately 3.75 in. (9.5 cm) to installation depth. Downward venting of exhaust on pedestal-mounted dryer adds approximately 2.25 in. (5.7 cm) to installation depth.

¹Hot and cold inlet hose length approximately 43 inches (109cm).

²Power supply cord length approximately 60 inches (152.5cm).

³Drain hose length approximately 52 inches (132cm).



* To obtain these minimal depth dimensions, dryer must be vented straight back. Using a quick-turn 90° elbow (right) adds approximately 0.75 in. (2 cm) to installation depth. Upward venting of exhaust on stacked dryer adds approximately 4 in. (10.2 cm) to installation depth. Downward venting of exhaust on stacked dryer adds approximately 2.25 in. (5.7 cm) to installation depth. Leftward venting of exhaust on stacked dryer adds approximately 3.75 in. (9.5 cm) to installation depth.

¹Hot and cold inlet hose length approximately 43 inches (109cm)

²Power supply cord length approximately 60 inches (152.5cm).

³Drain hose length approximately 52 inches (132cm).

Removing foam packaging

WARNING

SUFFOCATION HAZARD

Destroy the carton and plastic bags after the washer is unpacked. Children might use them for play. Cartons covered with rugs, bedspreads, or plastic sheets can become airtight chambers causing suffocation. Place all materials in a garbage container or make materials inaccessible to children.

- 1 Temporarily remove door tape.
- 2 Open washer door and remove everything from the drum.
- 3 Close door and reapply door tape.
- 4 Using a rug, blanket or piece of cardboard to protect the floor, carefully lay the washer on its back.

CAUTION

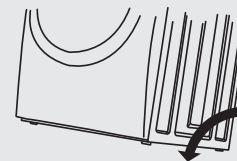
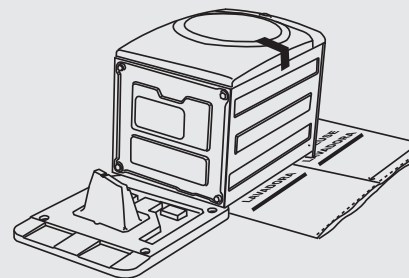
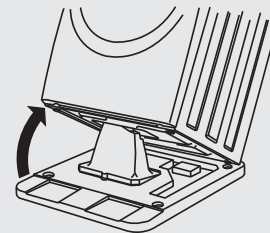
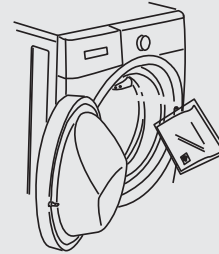
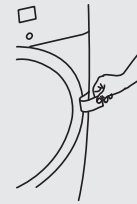
EXCESSIVE WEIGHT HAZARD

To avoid back or other injury, have more than one person move or lift the washer.

- 5 Remove styrofoam base and shipping plug and set them aside.
- 6 Carefully return the washer to an upright position.
- 7 Carefully move the washer to within 4 feet (1 m) of its final location.

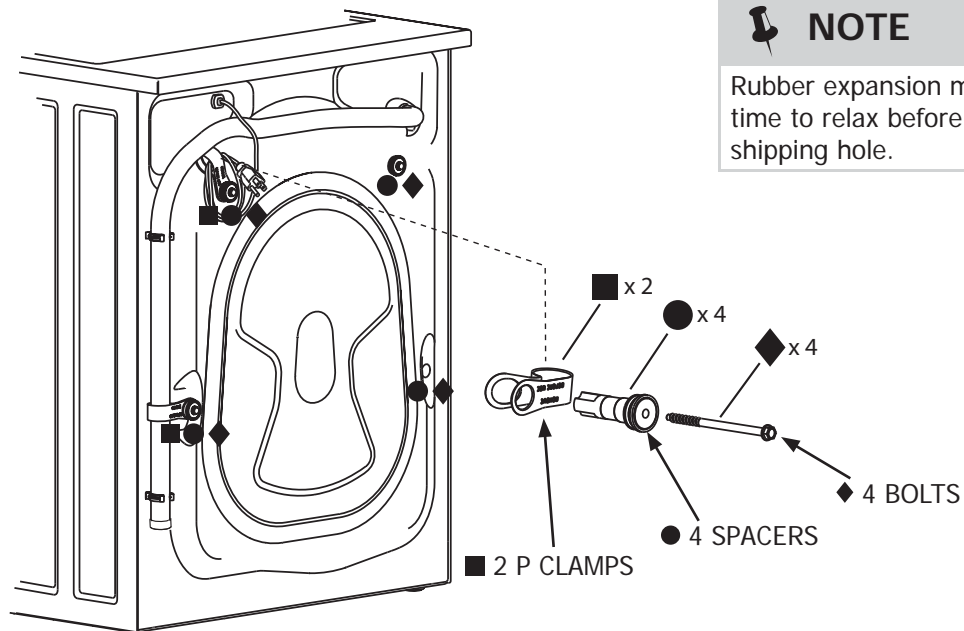
IMPORTANT

Save styrofoam base and shipping plug for use to help prevent washer damage during any future moves.



UNPACKING WASHER

Removing shipping hardware



NOTE

Rubber expansion material on spacers may need time to relax before they can be easily pulled through shipping hole.

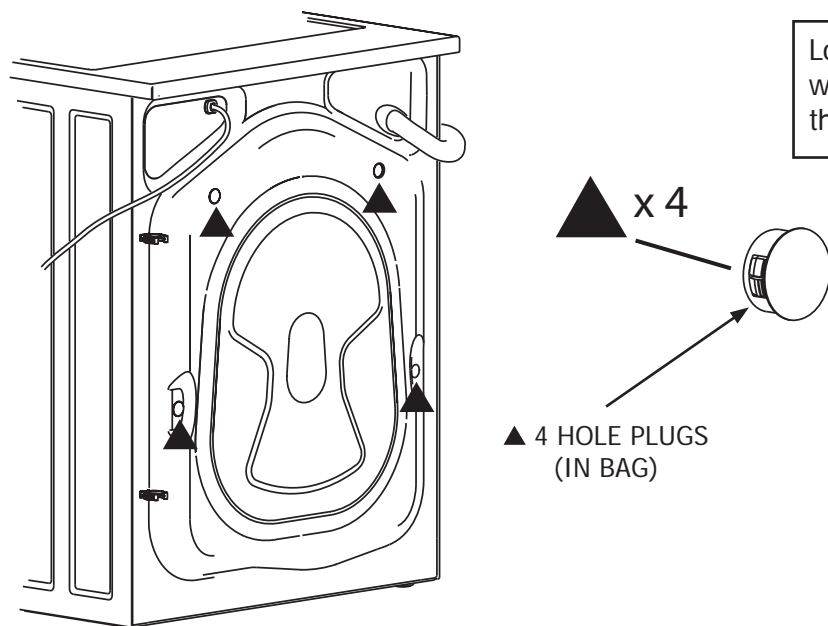
Remove all of the following:

- ◆ 4 BOLTS
- 4 SPACERS
- 2 P CLAMPS

IMPORTANT

Save all shipping bolts and spacers for future use. If the washer is to be transported at a later date, the shipping hardware must be reinstalled to help prevent shipping damage.

Installing hole plugs



Locate 4 hole plugs in the small bag supplied with washer instruction guides. Insert them in the holes in washer back panel.

INSTALLATION INSTRUCTIONS

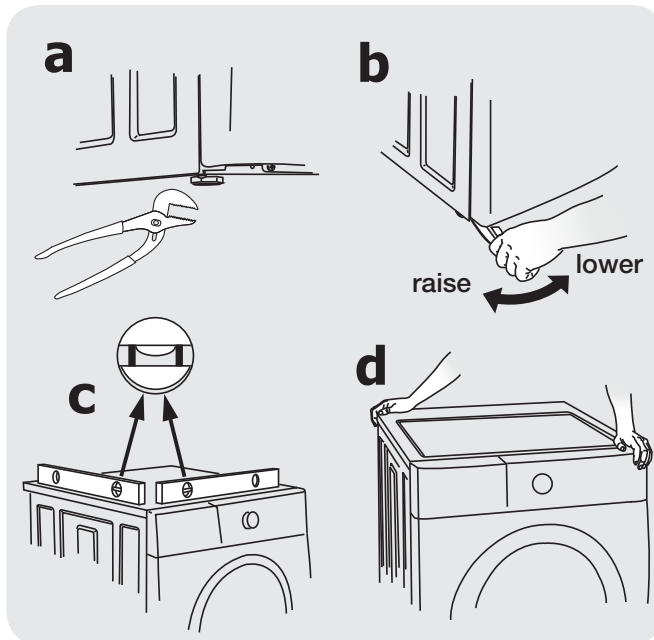
Leveling your washer

Excessive noise and vibration can be prevented by properly leveling the washer.

- 1 For free standing installation and with the washer within 4 feet (1 m) of its final location, place a level on top of the washer.
- 2 Use adjustable pliers to adjust the leveling legs so the washer is level front-to-rear and side-to-side, and stable corner-to-corner.
- 3 Press down on alternate corners and sides and feel for the slightest movement. Adjust the appropriate leg(s) so the washer sits solidly on the floor on ALL four legs. Keep the leveling leg extension at a minimum for best performance of the washer.

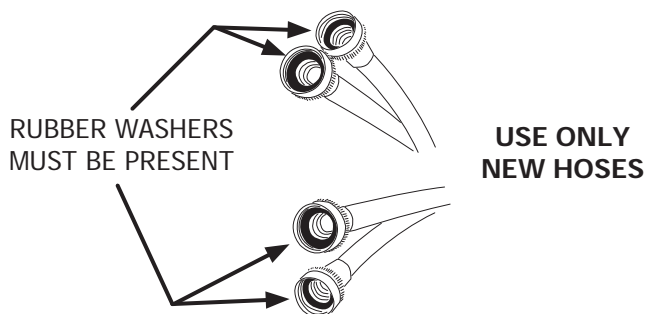
NOTE

For pedestal installations, see additional installation instructions included with the pedestal.

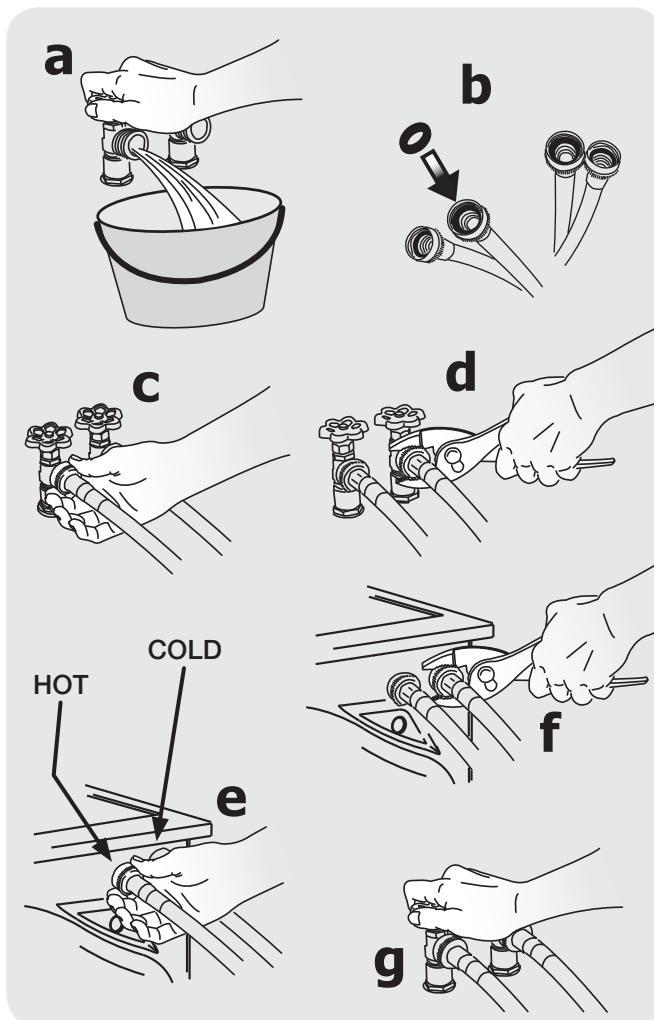


Connecting inlet water

- 1 Run some water from the hot and cold faucets to flush the water lines and remove particles that might clog the water valve screens and to determine which faucet is hot and which is cold supply.
- 2 Remove the inlet hoses and rubber washers from the plastic bag located in the drum of the washer and install the rubber washers in each end of the inlet hoses.



- 3 Connect the HOT inlet hose to the HOT inlet connection on the washer and the COLD inlet hose to the COLD inlet connection on the washer. Tighten by hand until snug. Then tighten each supply connection another 2/3 turn with pliers. **Do not cross thread or over-tighten these connections.**
- 4 Connect the HOT inlet hose to the HOT water supply and the COLD inlet hose to the COLD water supply. Tighten by hand until snug. Then tighten each supply connection another 2/3 turn with pliers. **Do not bend, kink or pinch water inlet hoses.**
- 5 Turn on the water and check for leaks.



INSTALLATION INSTRUCTIONS

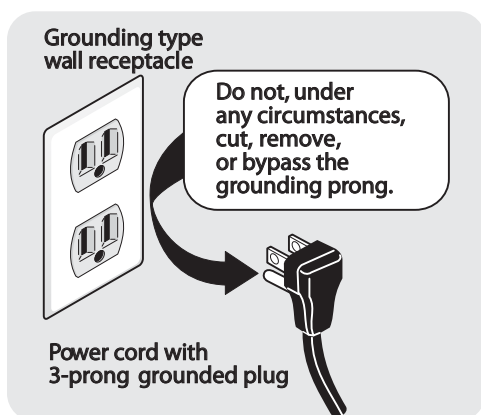
Connecting drain and electrical

- 1 Snap one end of the drain hose hanger (shipped in washer drum) onto the drain hose. Continue wrapping it around the hanger and snap it in place.
- 2 Place the hook end of the drain hose in the drain opening. Secure the drain hose with the cable tie (provided in the enclosure package) to the standpipe, inlet hose, laundry tub, etc. so the hose does not pull out from the force of the water.

➔ IMPORTANT

Check to ensure the power is off at a circuit breaker/fuse box before plugging the power cord into an outlet.

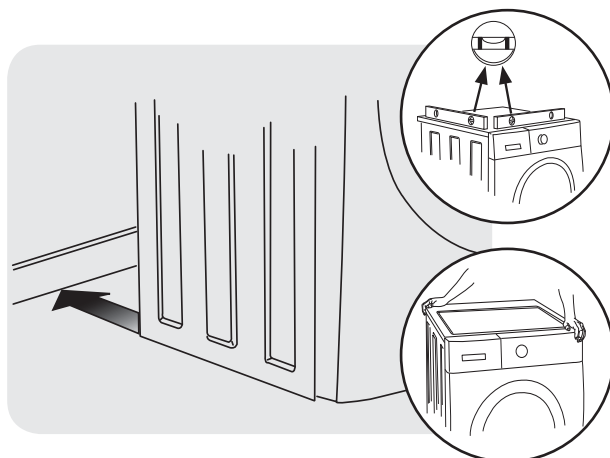
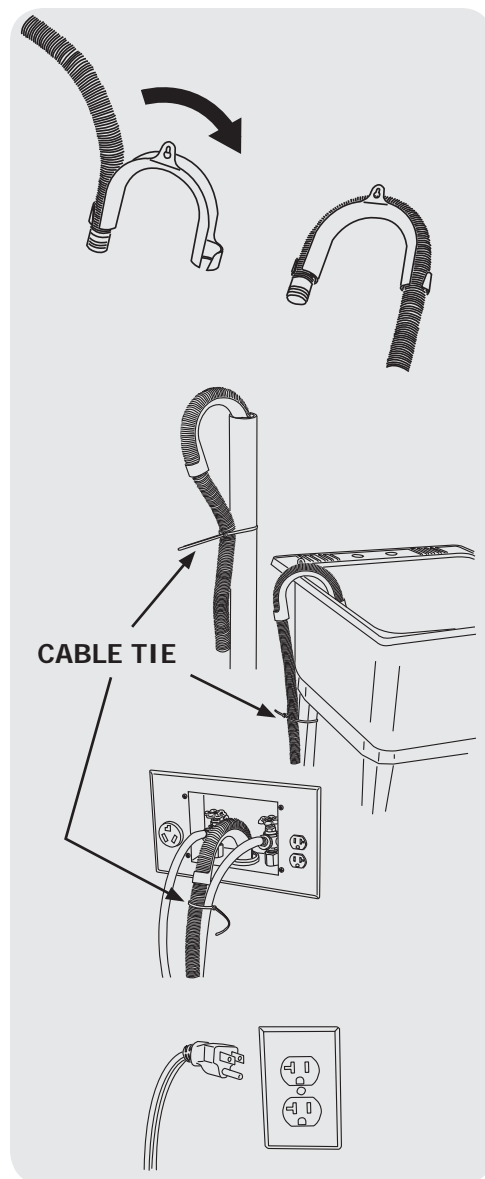
- 3 Plug the power cord into a grounded outlet.



- 4 Turn on the power at a circuit breaker/fuse box.
- 5 Carefully slide the washer to its final position. Recheck for level and rock corners for stability. Remove and discard door tape.
- 6 Read the Use & Care Guide provided with the washer. It contains valuable and helpful information that will save you time and money.
- 7 If you have any questions during initial operation, please review the "Service Prevention Checklist" in your Use & Care Guide before calling for service.
- 8 Place these instructions in a location near the washer for future reference.

📌 NOTE

A wiring diagram and technical data sheet are located under the washer top panel, on top of the detergent dispenser housing.



MATCHING STORAGE PEDESTAL*

Classic White Pedestal - P/N CFPWD15W
 Classic Blue Pedestal - P/N CFPWD15N
 Classic Red Pedestal - P/N CFPWD15R
 Classic Silver Pedestal - P/N CFPWD15A
 Classic Black Pedestal - P/N CFPWD15B

A storage pedestal accessory, specifically designed for this washer may be used to elevate the washer for ease of use. This pedestal will add about 15" (38 cm) to the height of your unit for a total height of 51.25" (130 cm).

*Other colors may be available. Contact the source where you purchased your washer.

DRYER STACKING KIT

P/N 134700400

Depending on the model you purchased, a kit for stacking a matching dryer on top of this washer may have been included in the initial purchase of your dryer. If your model did not include a stacking kit or you desire another stacking kit, you may order one.

DRAIN HOSE EXTENSION KIT

P/N 137098000

In order to reach standpipe heights or distances beyond the reach of the drain hose supplied, order the DRAIN HOSE EXTENSION KIT.

MOBILE HOME INSTALLATION KIT

P/N 137067200

Installation in a mobile home requires the use of a MOBILE HOME INSTALLATION KIT.

UNIVERSAL APPLIANCE WRENCH

P/N 137019200

A UNIVERSAL APPLIANCE WRENCH is available to aid in dryer/washer/pedestal feet adjustment.

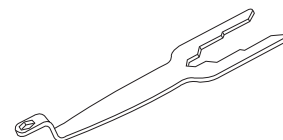
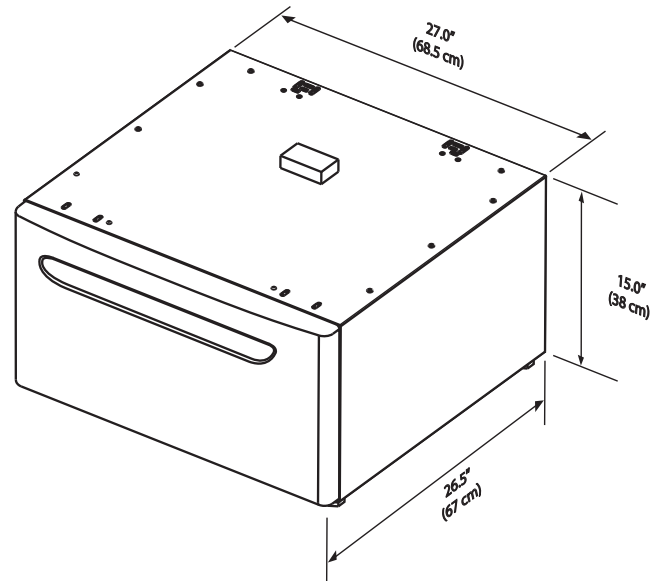
TOUCH UP PAINT PENS*

Classic White Touch Up Pen - P/N 5304468812
 Classic Red Touch Up Pen - P/N 5304471227
 Classic Blue Touch Up Pen - P/N 5304471229
 Classic Silver Touch Up Pen - P/N 5304471228
 Classic Black Touch Up Pen - P/N 5304458932

*Other colors may be available. Contact the source where you purchased your washer.

CAUTION

Failure to use accessories manufactured by (or approved by) the manufacturer could result in personal injury, property damage or damage to the washer.



Replacement parts:

If replacement parts are needed for your washer, contact the source where you purchased your washer or refer to your *Use and Care Guide* for more information.

WARNING

ELECTRICAL SHOCK HAZARD

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

Tout à propos de

Installation

de votre Laveuse



TABLE DES MATIÈRES

Mesures de sécurité importantes	14-15	Déballage de la laveuse	19-20
Exigences d'installation	16-17	Instructions d'installation	21-22
Dimensions, appareil installé	18	Accessoires	23

MESURES DE SÉCURITÉ IMPORTANTES


AVERTISSEMENT

Veillez lire ces instructions au complet avant d'utiliser le laveuse.

Sachez reconnaître les symboles, les avertissements et les étiquettes de sécurité.

Les mesures de sécurité présentées dans ce guide sont identifiées par le mot AVERTISSEMENT ou ATTENTION selon le type de risque présenté ci-dessous.

Définitions

 Voici le symbole d'avertissement concernant la sécurité. Il est utilisé pour vous avertir des risques de blessures potentiels. Respectez tous les messages qui suivent ce symbole afin de prévenir les blessures ou la mort.

DANGER

La mention DANGER indique un risque imminent qui causera la mort ou de graves blessures, s'il n'est pas évité.

AVERTISSEMENT

La mention AVERTISSEMENT indique une situation potentiellement dangereuse qui, si elle n'est pas évitée, pourrait entraîner des blessures graves ou même la mort.

ATTENTION

La mention ATTENTION signale la présence d'une situation potentiellement dangereuse susceptible de causer des blessures mineures ou moyennement graves si elle n'est pas évitée.

IMPORTANT

IMPORTANT - Cette mention précède des renseignements importants relatifs à l'installation, au fonctionnement ou à l'entretien. Toutefois, ceux-ci n'impliquent aucune notion de danger.

Liste de vérification d'installation

Matériel d'expédition

- Le support d'expédition en mousse (sous la cuve de lavage) a été enlevé et remis
- Les boulons d'expédition situés à l'arrière de l'appareil ont été enlevés et remis
- Les bouchons (inclus dans le sac situé dans la cuve) ont été insérés dans les trous situés dans la paroi arrière de la laveuse

Mise à niveau

- La laveuse est au niveau latéralement et de l'avant vers l'arrière
- Les quatre coins de la caisse reposent fermement sur le plancher

Alimentation en eau

- Les rondelles en caoutchouc (inclus dans la cuve) sont installées dans les tuyaux d'alimentation NEUFS (inclus dans la cuve)
- Le tuyau d'entrée d'eau CHAUDE est raccordé au robinet d'eau CHAUDE et le tuyau d'entrée d'eau FROIDE est raccordé au robinet d'eau FROIDE
- Les robinets d'eau CHAUDE et d'eau FROIDE sont ouverts
- Les raccords d'alimentation en eau ou les raccords d'arrivée d'eau de l'appareil ne présentent aucune fuite - refaites une vérification 24 heures plus tard

Tuyau de vidange

- La colonne montante ou le drain de mur est à une hauteur d'au moins 61 cm (24 po)
- Le tuyau de vidange est fixé dans le canal en « U » (inclus dans la cuve)
- Le tuyau de vidange est fixé avec l'attache (incluse dans la cuve)

Alimentation en électricité

- Le système électrique de la maison est sous tension
- La laveuse est branchée

Vérifications finales

- Vous avez lu entièrement les **instructions d'installation** et le **Guide d'utilisation et d'entretien**
- La porte se verrouille et l'eau entre dans la cuve lorsqu'un cycle démarre
- La carte d'enregistrement est envoyée

MESURES DE SÉCURITÉ IMPORTANTES

REMARQUE

L'installation électrique de la laveuse doit être conforme aux codes et aux règlements locaux ainsi qu'à la toute dernière édition du National Electrical Code (ANSI/NFPA 70), ou au Canada, au Code canadien de l'électricité (C22.1, article 1).

AVERTISSEMENT

RISQUE D'ÉTOUFFEMENT

Détruisez le carton d'emballage et les sacs en plastique après avoir déballé l'appareil. Les enfants pourraient les utiliser pour jouer. Le carton recouvert de tapis, les couvertures et les feuilles de plastique peuvent être étanches à l'air et provoquer la suffocation. Déposez tous les matériaux d'emballage dans un conteneur à déchets ou faites en sorte que les enfants ne puissent y avoir accès.

ATTENTION

DANGER DE POIDS EXCESSIF

Pour éviter les blessures au dos ou d'autres types de blessure, demandez l'aide d'autres personnes pour déplacer ou soulever la laveuse.

AVERTISSEMENT

RISQUE D'INCENDIE

Ne superposez pas une sècheuse sur une laveuse déjà installée sur un socle. Ne superposez pas une laveuse sur une sècheuse. Ne superposez pas une laveuse sur une autre laveuse.

AVERTISSEMENT

RISQUE D'INCENDIE

Pour votre sécurité, l'information contenue dans ces instructions doit être suivie afin de réduire les risques d'incendie ou d'explosion ou pour prévenir les dommages matériels, les blessures ou la mort. Vous ne devez ni entreposer, ni utiliser d'essence ou d'autres vapeurs ou liquides inflammables à proximité de cet appareil ou de tout autre appareil électroménager.

QUE FAIRE SI VOUS DÉTECTEZ UNE ODEUR DE GAZ :

- Ne mettez pas d'appareil en marche.
- Ne touchez à aucun commutateur électrique; n'utilisez aucun téléphone de votre domicile.
- Évacuez la pièce, le bâtiment ou la zone touchée.
- En utilisant le téléphone d'un voisin, appelez immédiatement le fournisseur de gaz. Suivez ses instructions.
- Si vous ne pouvez joindre votre fournisseur de gaz, appelez les pompiers.

IMPORTANT

Les instructions comprises dans ce guide et toute autre documentation fournie avec cet appareil ne sont pas conçues pour couvrir toutes les éventualités ou situations qui pourraient survenir. Vous DEVEZ faire preuve de bon sens et de prudence durant l'installation, l'utilisation et l'entretien de tout appareil ménager.

Vous tirerez le maximum de votre appareil lorsque toutes les instructions relatives à la sécurité et à son fonctionnement auront été bien assimilées et mises en pratique de façon routinière.

Conservez ces instructions pour vous y reporter ultérieurement.

Outils et matériel nécessaires à l'installation :



OU



OU



ET



ET



EXIGENCES D'INSTALLATION

Exigences des systèmes électriques

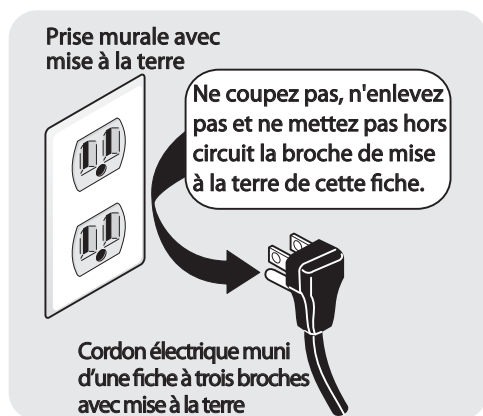
CIRCUIT - Circuit indépendant de 15 ampères, polarisé et mis à la terre, avec fusible temporisé ou disjoncteur de 15 A.

ALIMENTATION ÉLECTRIQUE - Câble monophasé à deux fils mis à la terre, 120 volts, 60 Hz; courant alternatif.

REMARQUE

Étant donné les variations de tension possibles, l'utilisation de cette laveuse avec une source d'alimentation produite par une génératrice à essence, solaire ou éolienne ou par toute autre source d'alimentation différente de celle fournie par les services publics n'est pas recommandée.

PRISE - Prise à trois alvéoles et mise à la terre située à un endroit où il est possible de raccorder le cordon d'alimentation de la laveuse une fois que cette dernière est installée.



REMARQUE

Une prise GFI (disjoncteur de fuite de terre) n'est pas nécessaire.

Exigences relatives à la mise à la terre

AVERTISSEMENT

RISQUE DE CHOC ÉLECTRIQUE

Un raccordement inadéquat du conducteur de terre de l'équipement peut accroître les risques de choc électrique. En cas de doute quant à la mise à la terre de l'appareil, consultez un électricien qualifié.

- 1 Cet appareil DOIT être mis à la terre. En cas de mauvais fonctionnement ou de panne, la mise à la terre diminue les risques de choc électrique en fournissant au courant électrique une trajectoire de moindre résistance.
- 2 Étant donné que votre laveuse est équipée d'un

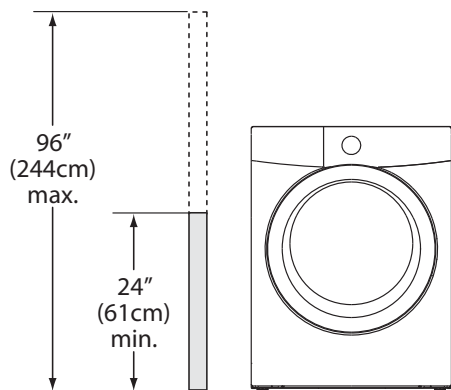
cordon d'alimentation pourvu d'un conducteur de mise à la terre et d'une fiche de mise à la terre, la fiche DOIT être raccordée à une prise appropriée (avec conducteurs en cuivre) correctement installée et mise à la terre conformément aux codes et règlements locaux ou, si aucun code local ne régit ce type d'installation, à la plus récente édition du National Electrical Code (ANSI/NFPA 70). En cas de doute, faites appel à un électricien qualifié. **NE COUPEZ PAS** et **NE MODIFIEZ PAS** la broche de mise à la terre du cordon d'alimentation. Si votre prise murale n'est pourvue que de deux fentes, il incombe au propriétaire de faire appel à un électricien qualifié pour la remplacer par une prise à trois alvéoles et mise à la terre de façon adéquate.

Exigences relatives à l'alimentation en eau

Les robinets d'eau chaude et d'eau froide DOIVENT être installés à une distance de 107 cm (42 po) ou moins de l'arrivée d'eau de votre laveuse. Les robinets DOIVENT être de 1,9 cm (3/4 po) et filetés en fonction d'un raccordement de tuyau de laveuse. La pression de l'eau DOIT se situer entre 206,8 et 827,4 kPa (30 et 120 lb/po²). La différence de pression entre l'eau chaude et l'eau froide ne doit pas dépasser 68,9 kPa (10 lb/po²). Le service des eaux de votre localité peut vous informer sur la pression de votre alimentation en eau.

Exigences relatives au système d'évacuation

- 1 Le drain doit pouvoir évacuer 64,3 L (17 gal) d'eau à la minute.
- 2 Tuyau d'évacuation d'au moins 3,18 cm (1-1/4 po) de diamètre.
- 3 Le tuyau d'évacuation doit être situé entre une hauteur minimale de 61 cm (24 po) et une hauteur maximale de 244 cm (96 po)



REMARQUE

Le tuyau de vidange raccordé à la laveuse peut convenir à un tuyau d'évacuation de 188 cm (74 po) de hauteur. Pour des tuyaux d'évacuation plus hauts, utilisez le tuyau portant le numéro de pièce 137098000 que vous pouvez obtenir auprès d'un distributeur de pièces autorisé.

Exigences de dégagement

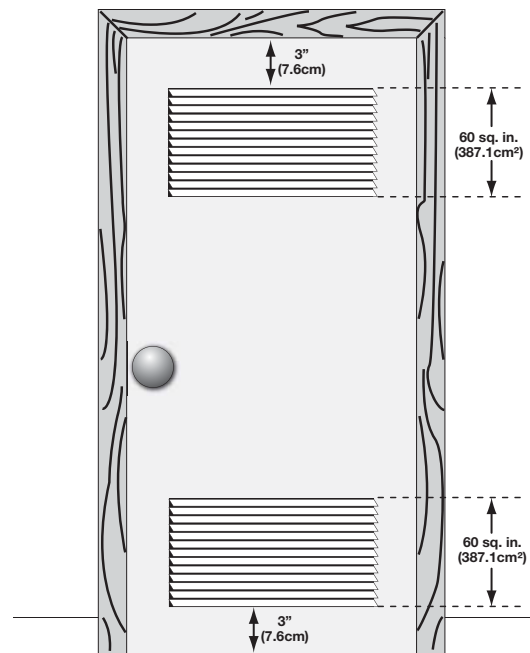
➔ IMPORTANT

N'INSTALLEZ PAS VOTRE LAVEUSE :

- 1 À un endroit exposé aux écoulements d'eau ou aux aléas des conditions météorologiques extérieures. La température ambiante ne devrait jamais tomber sous 15,6 °C (60 °F) afin d'optimiser l'efficacité du détergent.
- 2 À un endroit (garage ou bâtiment similaire) où de l'essence ou d'autres substances inflammables sont entreposées (incluant des automobiles).
- 3 Sur un tapis. Le plancher DOIT être solide et présenter une pente inférieure à 2,54 cm (1 po). Afin d'éviter les vibrations et le déplacement de l'appareil, il peut être nécessaire de renforcer le plancher.

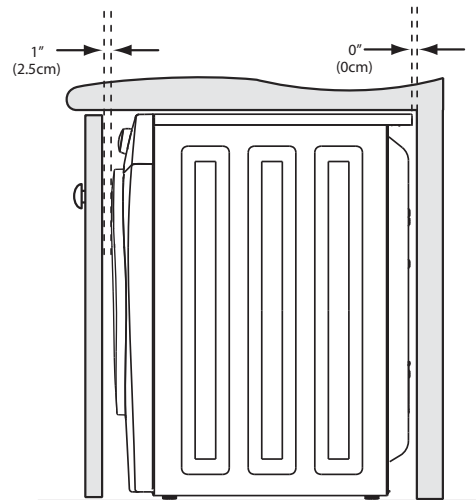
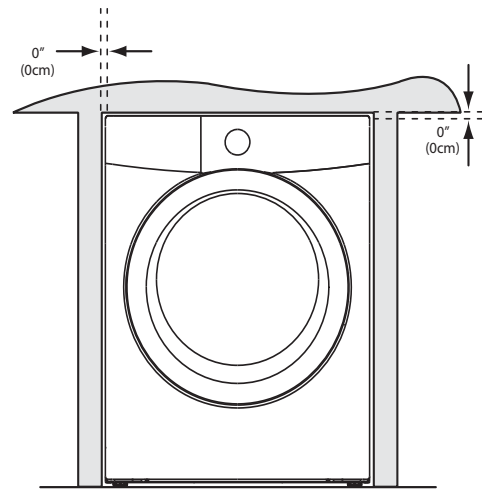
Installation dans un Endroit en Retrait ou une Armoire

Si la laveuse et la sècheuse sont installées dans le même placard, une ventilation est requise dans la porte : Une ouverture d'au moins 774,2 cm² (120 po²), divisée également au-dessus et au-dessous de la porte, est requise. Les ouvertures à persiennes doivent être situées à 7,6 cm (3 po) du haut et du bas de la porte. Les ouvertures d'aération ne doivent pas être obstruées lorsqu'une porte est installée. Une porte à persiennes dont les ouvertures sur l'ensemble de la porte sont équivalentes aux recommandations peut être utilisée.

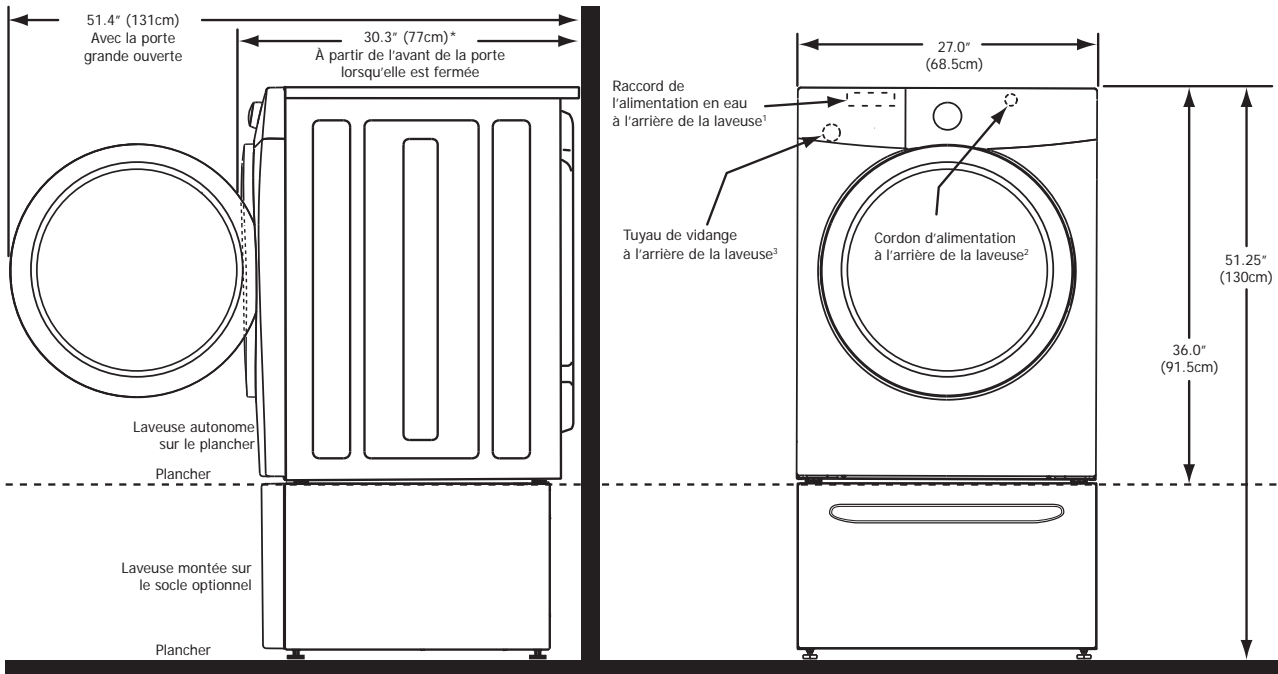


Porte de placard

DÉGAGEMENTS MINIMAUX - Centimètres (pouces)				
	CÔTÉS	ARRIÈRE	DESSUS	AVANT
Alcôve	0 cm (0 po)	0 cm (0 po)*	0 cm (0 po)	s. o.
Sous le comptoir	0 cm (0 po)	0 cm (0 po)*	0 cm (0 po)	s. o.
Placard	0 cm (0 po)	0 cm (0 po)*	0 cm (0 po)	2,54 cm (1 po)



DIMENSIONS, APPAREIL INSTALLÉ

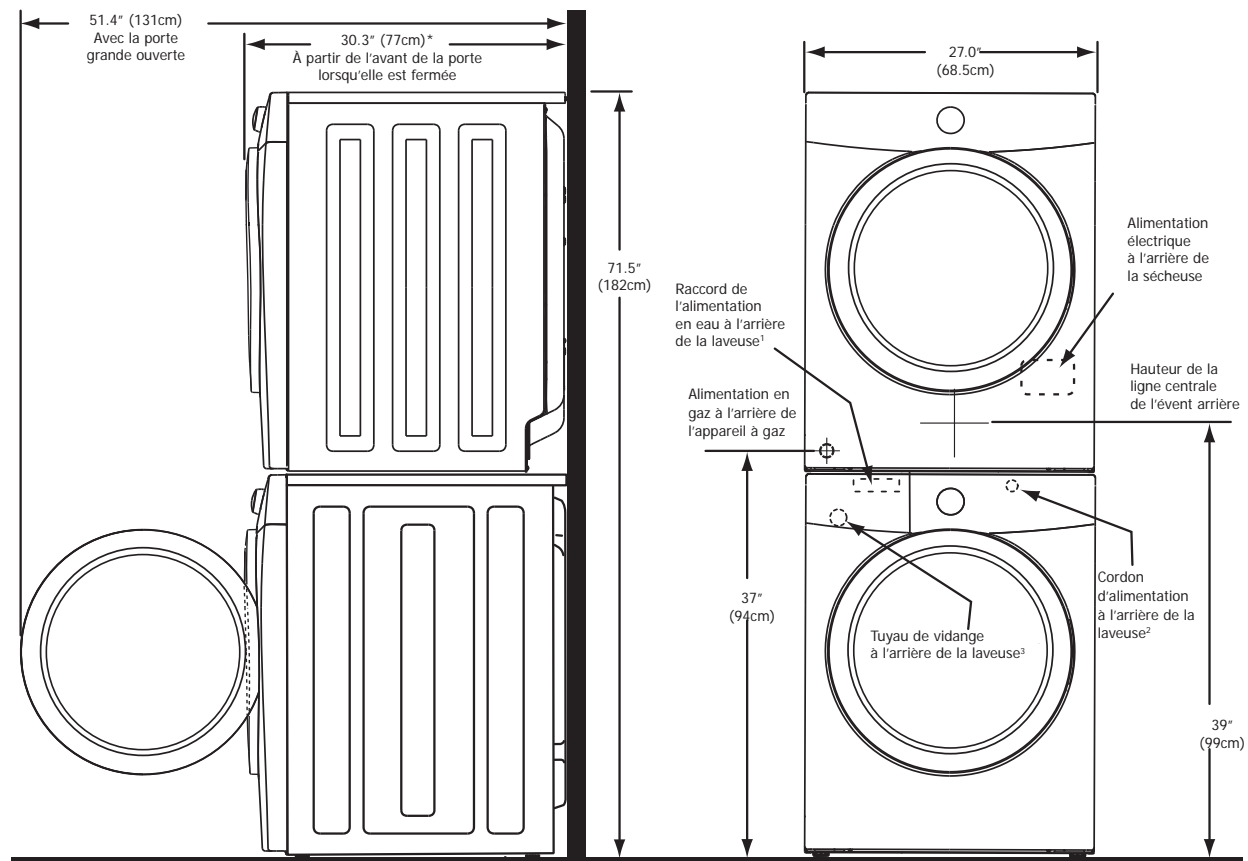


* Pour obtenir ces dimensions de profondeur minimales, la sècheuse doit être ventilée tout droit par l'arrière. L'utilisation d'un coude à 90° à courbe immédiate (vers la droite ou vers le bas sur une sècheuse autonome) nécessite environ 2 cm (0.75 po) de profondeur de plus pour l'installation. Les sècheuses montées sur un socle ou autonomes munies d'un système d'évacuation de l'air vers le haut requièrent environ 10.2 cm (4 po) de profondeur de plus pour l'installation. Les sècheuses montées sur un socle munies d'un système d'évacuation de l'air vers le bas requièrent environ 5.7 cm (2.25 po) de profondeur de plus pour l'installation.

¹Longueur des tuyaux d'entrée d'eau chaude et froide, environ 109 cm (43 po).

²Longueur du cordon d'alimentation, environ 152.5 cm (60 po).

³Longueur de tuyau de vidange, environ 132 cm (52 po).



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Retrait de l'emballage en mousse

AVERTISSEMENT

RISQUE D'ÉTOUFFEMENT

Détruisez le carton d'emballage et les sacs en plastique après avoir déballé l'appareil. Les enfants pourraient les utiliser pour jouer. Le carton recouvert de tapis, les couvertures et les feuilles de plastique peuvent être étanches à l'air et provoquer la suffocation. Déposez tous les matériaux d'emballage dans un conteneur à déchets ou faites en sorte que les enfants ne puissent y avoir accès.

- 1 Retirez temporairement le ruban de la porte.
- 2 Ouvrez la porte de la laveuse et retirez tout ce qui se trouve dans le tambour.
- 3 Fermez la porte et posez le ruban de porte à nouveau.
- 4 Pour protéger le plancher, utilisez un tapis, une couverture ou une pièce de carton et couchez la laveuse sur le côté arrière.

ATTENTION

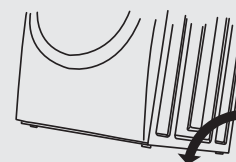
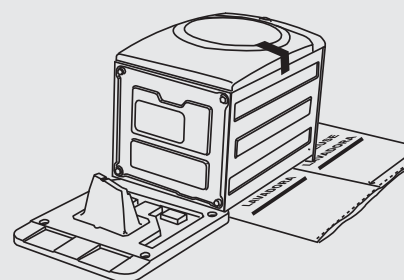
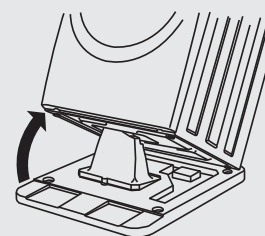
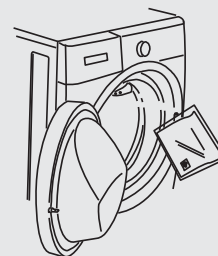
DANGER DE POIDS EXCESSIF

Pour éviter les blessures au dos ou d'autres types de blessure, demandez l'aide d'autres personnes pour déplacer ou soulever la laveuse.

- 5 Retirez la base en styromousse et le bouchon d'expédition; mettez-les de côté.
- 6 Remettez soigneusement la laveuse en position verticale.
- 7 Déplacez soigneusement la laveuse à moins de 1,2 m (4 pi) de son emplacement définitif.

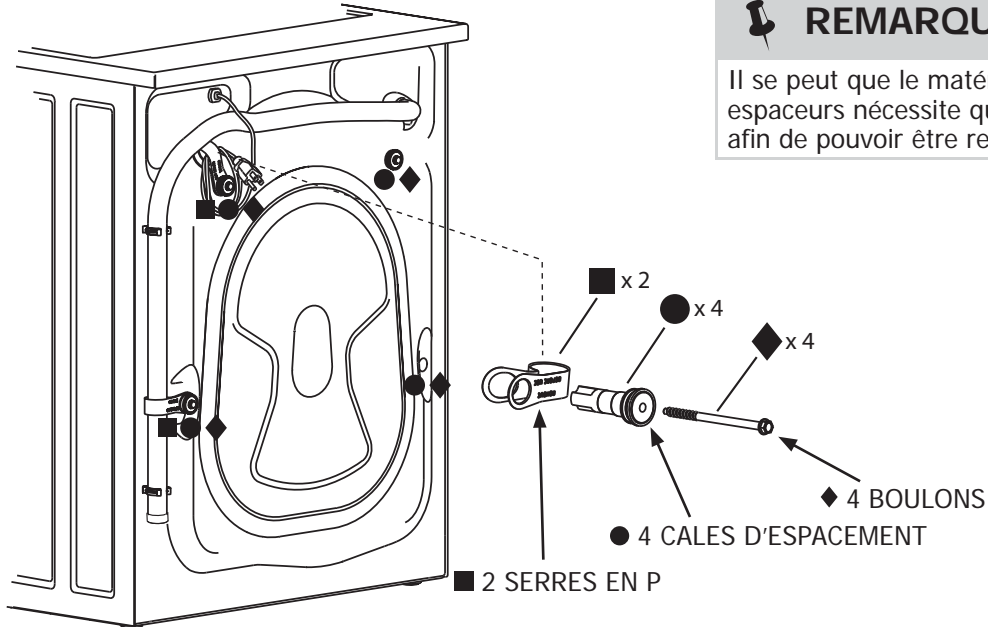
IMPORTANT

Conservez la base en styromousse et le bouchon d'expédition afin d'éviter d'endommager l'appareil dans le cas d'un déplacement éventuel.



DÉBALLAGE DE LA LAVEUSE

Retrait de la quincaillerie d'expédition



Retirez les composants suivants :

- ◆ 4 BOULONS
- 4 CALES D'ESPACEMENT
- 2 SERRES EN P

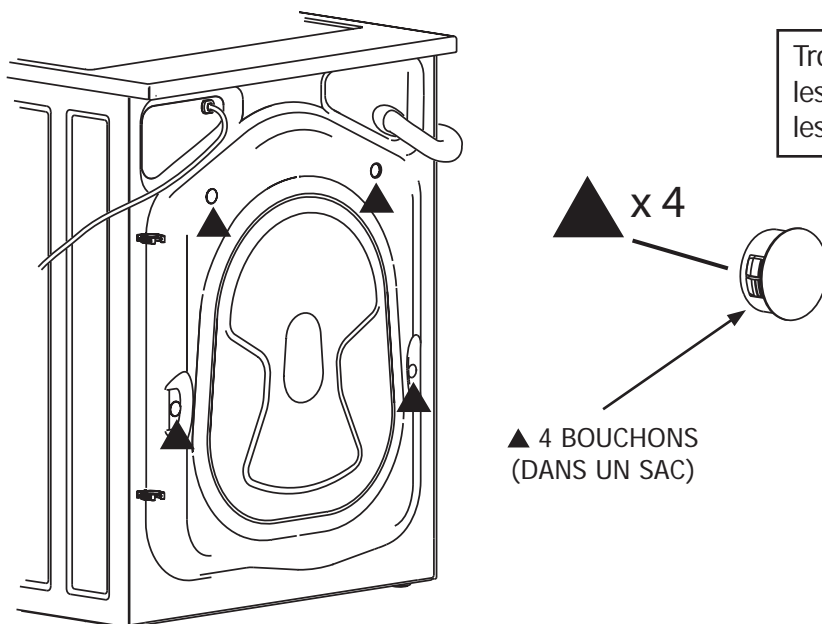
REMARQUE

Il se peut que le matériel de caoutchouc utilisé pour les espaceurs nécessite quelque temps pour se relâcher afin de pouvoir être retiré des trous d'expédition.

IMPORTANT

Conservez les boulons et cales d'espaceur d'expédition pour un usage ultérieur. Si la laveuse doit être transportée plus tard, ces pièces d'expédition doivent être installées pour éviter de l'endommager.

Pose des bouchons



Trouvez les 4 bouchons du petit sac fourni avec les guides de votre laveuse. Insérez-les dans les trous du panneau arrière de la laveuse.

INSTRUCTIONS D'INSTALLATION

Mise à niveau de votre appareil

Les bruits excessifs et les vibrations peuvent être évités en mettant correctement la laveuse à niveau.

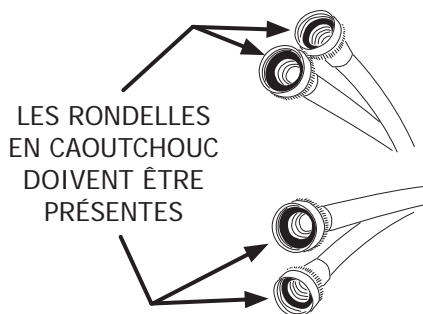
- 1 Pour une installation autonome où la laveuse est à moins de 1,2 m (4 pi) de son emplacement définitif, placez un niveau sur le dessus de l'appareil.
- 2 Utilisez la clé universelle pour ajuster les pieds de mise à niveau de façon à ce que la laveuse soit de niveau d'avant en arrière et latéralement, et qu'elle soit stable aux quatre coins.
- 3 Appuyez sur chaque coin et chaque côté pour déterminer les endroits qui nécessitent un réglage. Ajustez les pieds de mise à niveau appropriés de manière à ce que la laveuse repose solidement sur ses QUATRE pieds. Gardez les pieds de mise à niveau le plus près possible de la laveuse afin d'optimiser le rendement de la laveuse.

REMARQUE

Pour une installation sur socle, reportez-vous aux instructions d'installation complémentaires incluses avec le socle.

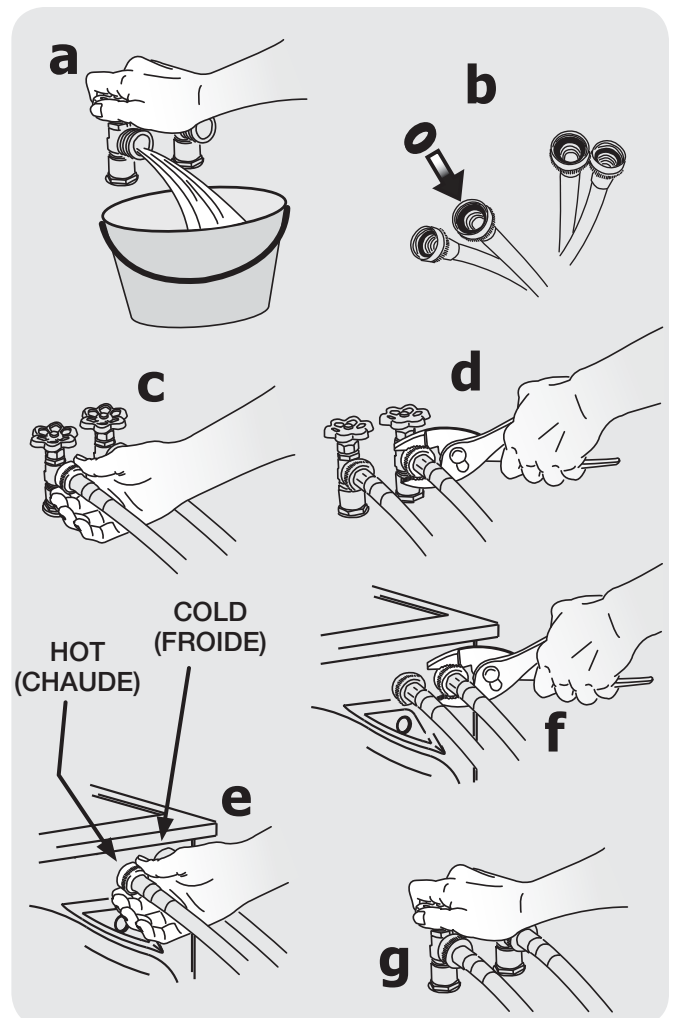
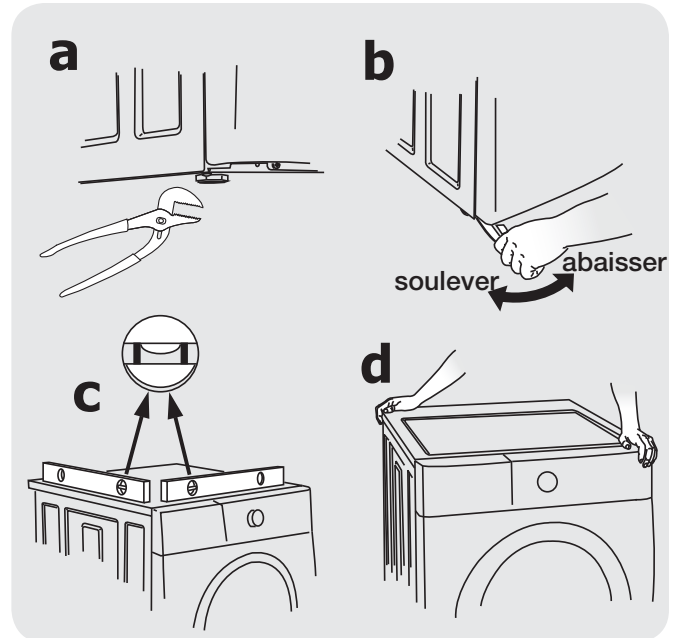
Branchement de l'entrée d'eau

- 1 Faites couler de l'eau chaude et froide des robinets pour purger les tuyaux d'eau, pour éliminer toute particule qui pourrait obstruer les grillages des robinets, et pour déterminer quels robinets fournissent l'eau chaude et l'eau froide.
- 2 Enlevez du sac en plastique les tuyaux d'arrivée et les rondelles caoutchouc installez les rondelles à chaque extrémité.



UTILISEZ SEULEMENT LES NOUVEAUX TUYAU D'ENTRÉE D'EAU

- 3 Raccordez le tuyau d'entrée d'eau CHAUDE au raccord pour l'eau CHAUDE de la laveuse et le tuyau d'entrée d'eau FROIDE au raccord pour l'eau FROIDE de la laveuse. Serrez fermement à la main. Avec des pinces, serrez chaque raccord de 2/3 de tour. **Ne faussez pas le filetage et ne serrez pas trop.**
- 4 Branchez le tuyau d'entrée d'eau CHAUDE au robinet d'eau CHAUDE, et le tuyau d'eau d'entrée d'eau FROIDE au robinet d'eau FROIDE. Serrez fermement à la main. Avec des pinces, serrez chaque raccord de 2/3 de tour. **Ne pliez pas, n'entortillez pas et ne coincez pas les tuyaux d'alimentation en eau.**
- 5 Ouvrir les robinets et s'assurer qu'il n'y a pas de fuite.



INSTRUCTIONS D'INSTALLATION

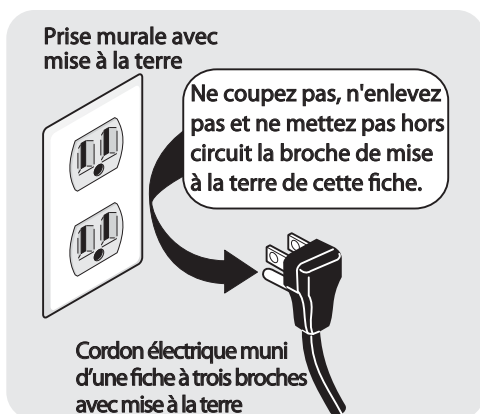
Branchement électrique et branchement du tuyau de vidange

- 1 Fixez l'une des extrémités du crochet du tuyau de vidange (inclus dans la cuve) au tuyau de vidange. Continuez de l'enrouler autour du crochet et pincez-le en position.
- 2 Placez le côté du tuyau de vidange en forme de crochet dans l'ouverture du tuyau d'évacuation. Fixez le tuyau de vidange au moyen d'une attache (incluse dans la trousse d'installation fournie) au tuyau d'évacuation, au tuyau d'entrée, à la cuve à lessive, etc. de façon à ce que le tuyau ne puisse être arraché sous la force de l'eau.

➔ IMPORTANT

Assurez-vous que l'alimentation électrique est coupée au disjoncteur ou au boîtier de fusibles avant de brancher le cordon d'alimentation dans une prise électrique.

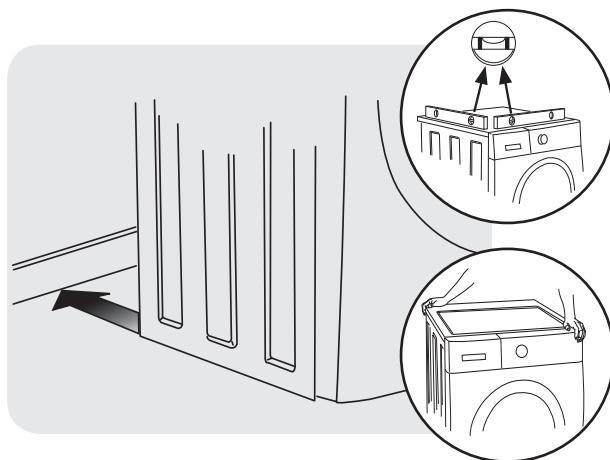
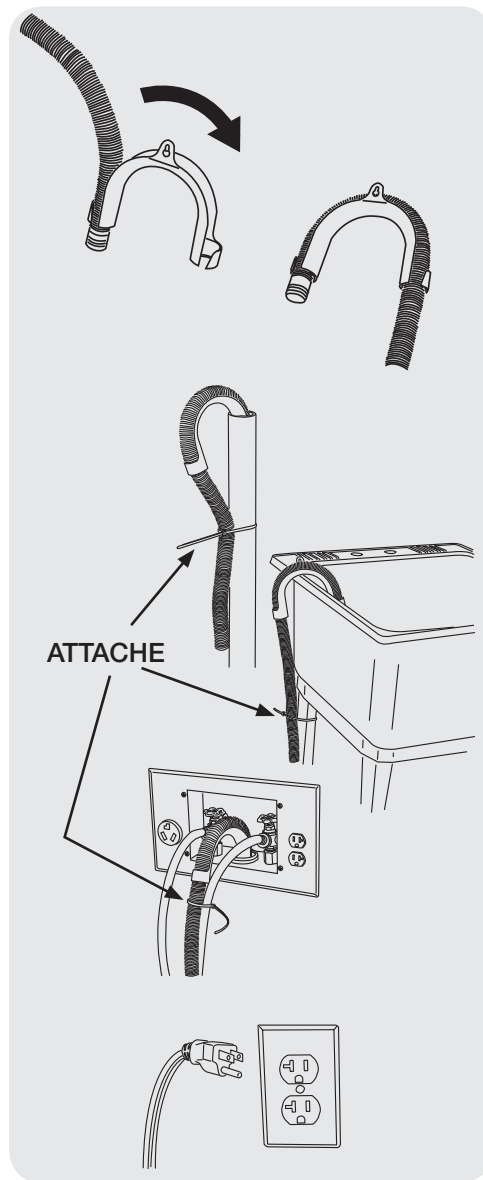
- 3 Branchez le cordon d'alimentation à la prise électrique mise à la terre.



- 4 Ouvrez l'alimentation électrique au disjoncteur ou au boîtier de fusibles.
- 5 Faites glisser soigneusement la laveuse à son emplacement définitif. Vérifiez à nouveau la stabilité de l'appareil. Retirez et jetez le ruban de la porte.
- 6 Reportez-vous au Guide d'utilisation et d'entretien fourni avec la laveuse. Il contient des renseignements très utiles qui vous permettent d'économiser temps et argent.
- 7 Pour toute question relative à l'utilisation initiale, veuillez revoir la section intitulée « Liste de vérification avant service » de votre Guide d'utilisation et d'entretien avant d'effectuer une demande de service.
- 8 Laissez ces instructions à proximité de la laveuse pour vous y reporter ultérieurement.

📌 REMARQUE

Un schéma électrique et une fiche technique sont situés sous le panneau supérieur de la laveuse, au-dessus du logement de distributeur de détergent.



SOCLE DE RANGEMENT ASSORTI *

Socle Blanc - PIÈCE N° CFPWD15W
 Socle Bleu - PIÈCE N° CFWD15RN
 Socle Rouge - PIÈCE N° CFWD15R
 Socle Argentés - PIÈCE N° CFWD15A
 Socle Noir - PIÈCE N° CFWD15B

Un socle de rangement, conçu expressément pour cette laveuse, peut être utilisé afin de soulever votre appareil, facilitant ainsi son utilisation. Le socle ajoute environ 38 cm (15 po) à votre laveuse, pour une hauteur totale de 130 cm (51.25 po).

* Il se peut que d'autres couleurs soient disponibles. Communiquez avec le marchand qui vous a vendu votre laveuse.

NÉCESSAIRE DE SUPERPOSITION DE SÈCHEUSE

PIÈCE N° 134700400

Selon le modèle que vous avez acheté, il se peut qu'un nécessaire pour superposer cette sècheuse sur une laveuse assortie ait été inclus dans l'achat initial de votre sècheuse. Si votre modèle ne comprenait pas de nécessaire de superposition ou que vous en désirez un autre, il vous est possible d'en commander un.

NÉCESSAIRE DE RALLONGE DE TUYAU DE VIDANGE

PIÈCE N° 137098000

Pour atteindre un tuyau d'évacuation qui est trop haut ou trop loin pour la longueur de tuyau fournie, commandez le NÉCESSAIRE DE RALLONGE DE TUYAU DE VIDANGE.

TROUSSE D'INSTALLATION DE MAISON MOBILE

PIÈCE N° 137067200

Toute installation dans une maison mobile nécessite l'utilisation d'une TROUSSE D'INSTALLATION DE MAISON MOBILE.

CLÉ D'APPAREIL UNIVERSELLE

PIÈCE N° 137019200

UNE CLÉ D'APPAREIL UNIVERSELLE est offerte pour faciliter le réglage des pieds de sècheuse/laveuse/socle.

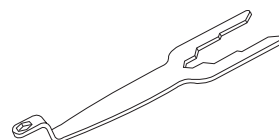
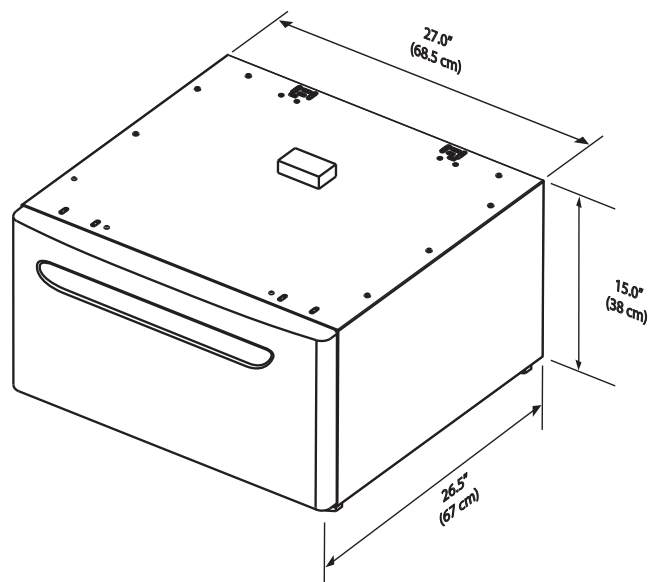
CRAYONS DE PEINTURE DE RETOUCHE *

Crayon de retouche Blanc - PIÈCE N° 5304468812
 Crayon de retouche Rouge - PIÈCE N° 5304471227
 Crayon de retouche Bleu - PIÈCE N° 5304471229
 Crayon de retouche Argentés - PIÈCE N° 5304471228
 Crayon de retouche Noir - PIÈCE N° 5304458932

* Il se peut que d'autres couleurs soient disponibles. Communiquez avec le marchand qui vous a vendu votre laveuse.

! ATTENTION

Tout défaut d'utiliser les accessoires fabriqués ou certifiés par le fabricant pourrait entraîner des blessures, des dommages aux biens ou à la laveuse.



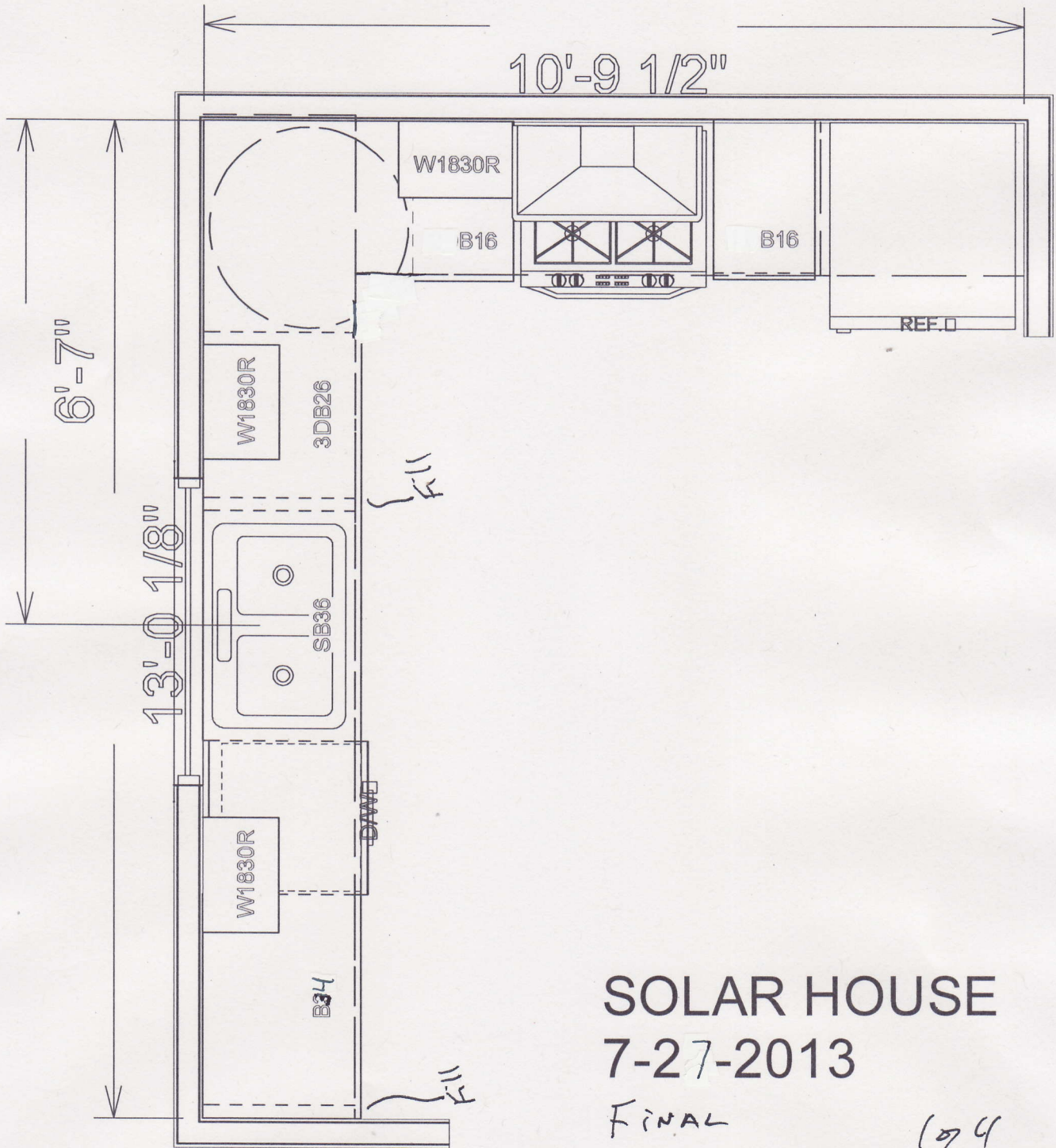
Pièces de rechange :

Si vous devez commander des pièces de rechange pour votre laveuse, communiquez avec le marchand qui vous a vendu votre appareil, ou reportez-vous au guide d'utilisation et d'entretien pour obtenir plus de détails.

! AVERTISSEMENT

RISQUE ÉLECTRIQUE

Étiquetez tous les fils avant de les débrancher pendant l'entretien des commandes. Des erreurs de câblage pourraient nuire au bon fonctionnement de l'appareil, et même être dangereuses. Vérifiez le bon fonctionnement de l'appareil après tout entretien.



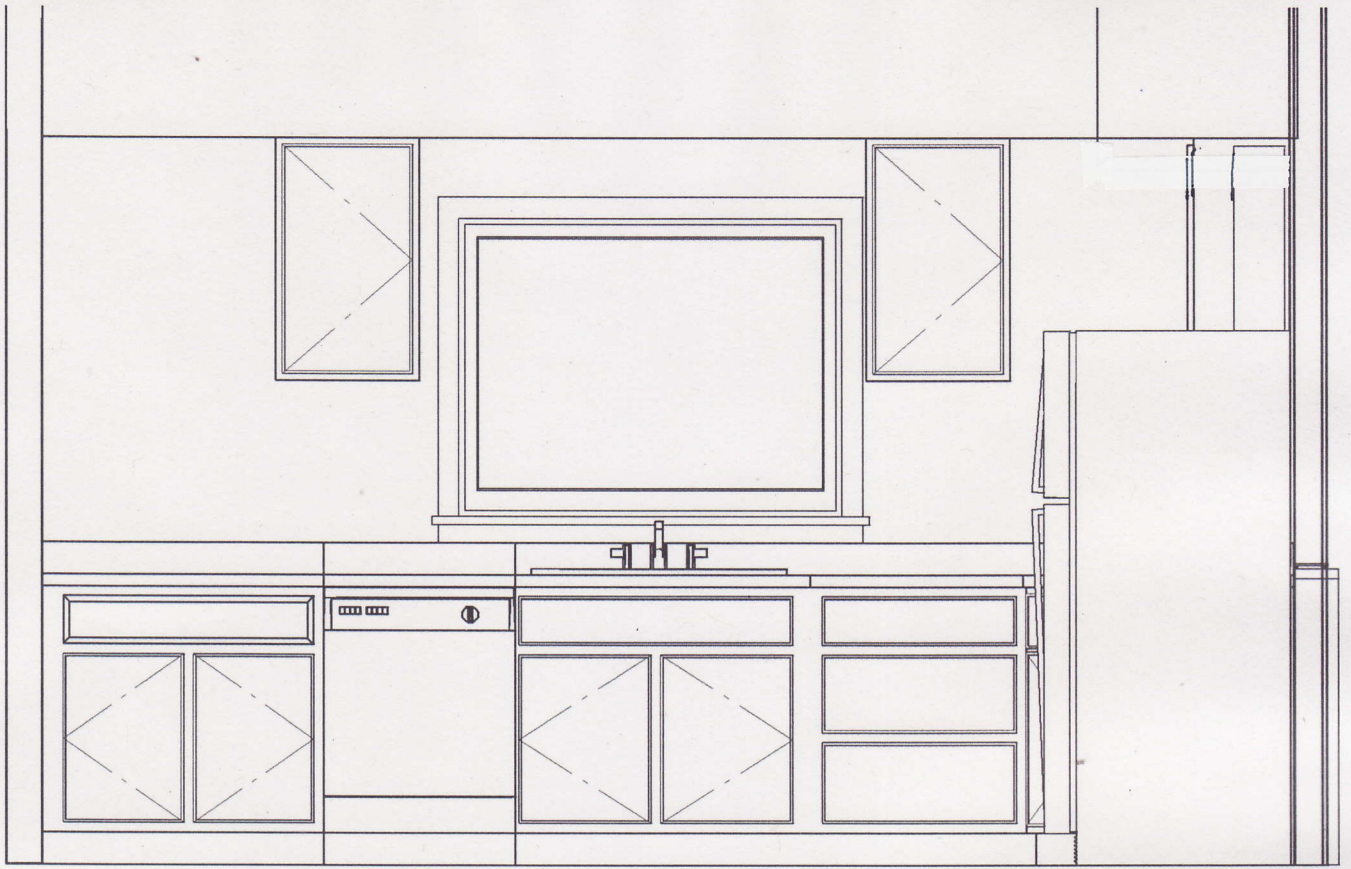
SOLAR HOUSE
7-27-2013

FINAL

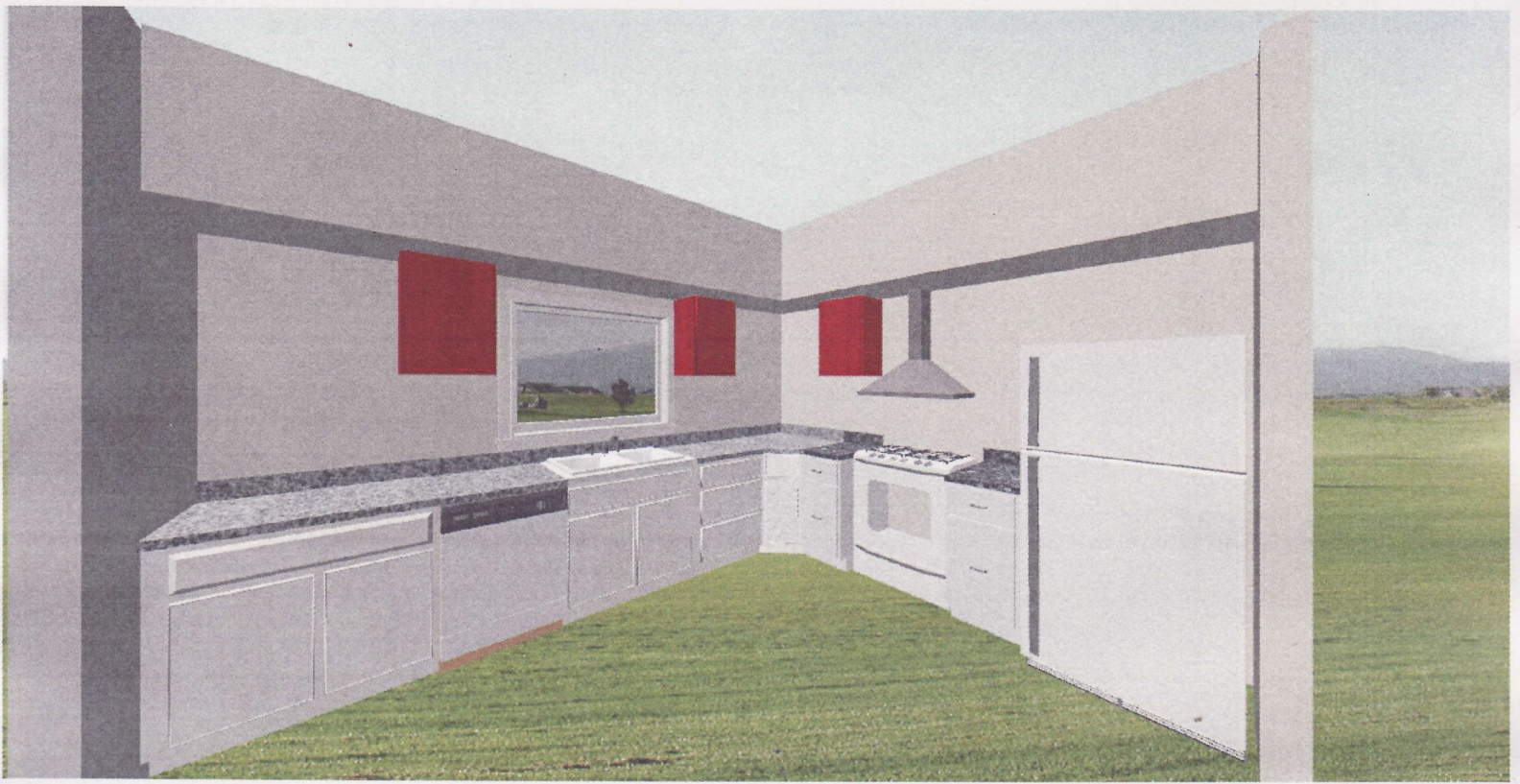
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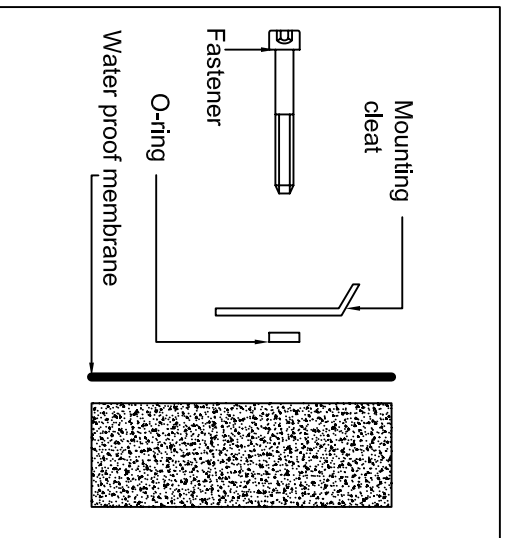
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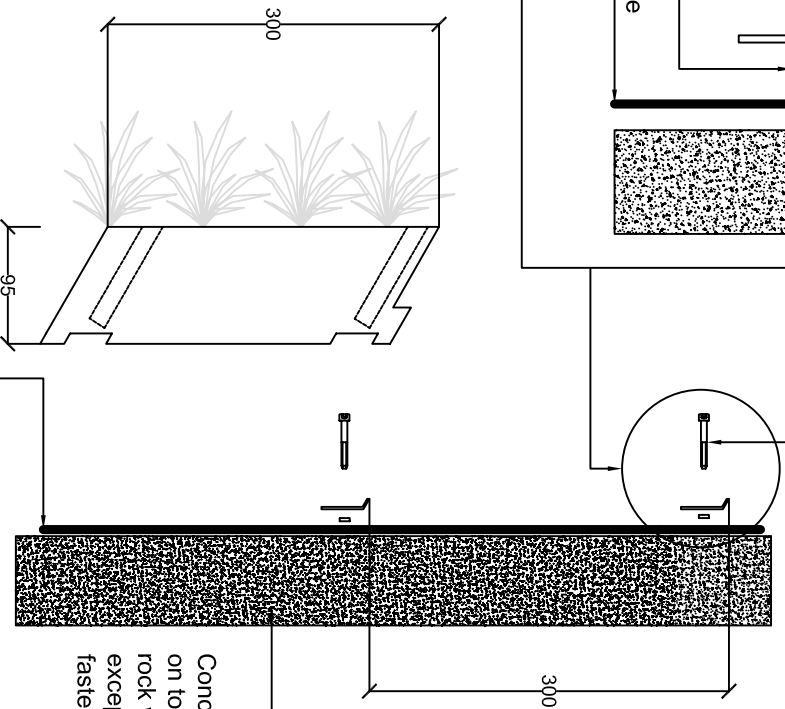


4x4
GRASS
NOT included.



For concrete wall use 1 1/2" grade 8 tap-con screws with anchors.
 For wood wall use 1 1/2" wood screws
 For sheet rock wall use 1 1/2" dry wall screws with anchors

90mm long horizontal aluminum mounting cleats are to be spaced 300mm apart for each row of panels



Concrete wall (Installation on to wood wall or sheet rock would be the same except for the type of fasteners)

Water proof membrane to be applied to structural wall prior to installing vegetated panels (EPDM, Blueskin or other approved membrane)

- An O-ring and a bead of water block mastic is applied to the back of the aluminum mounting cleat to seal each protrusion.
- Mounting cleats should be level and there should be 3 fasteners per 3 cleat.
- A space between the lower panel and the one above it should be there but should not exceed 20mm.

NOTES

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2. DRAWINGS ARE IN INTERNATIONAL METRIC SYSTEM
3. FOR PRODUCT AND COMPANY INFORMATION VISIT WWW.ELTEASYGREEN.COM



ELT EASY GREEN HEAD OFFICE
 245 King George RD, Suite 320,
 Brantford, ON, Canada
 N3R 7N7
 P: 1.416.479.0942
 F: 1.416.479.0943
 info@elteasygreen.com
 www.elteasygreen.com

SPECIFICATION / SPECIFICATION

ELT Easy Green Living Wall
 Specification / Elt Easy Green devis
 et spécifications pour mur végétal.

TITRE DU DESSIN / DRAWING TITLE

ELT Easy Green 300 x 300 Living
Wall Direct Cleat to Wall mounting
 Method

DATE	DESSINÉ PAR / DRAWN BY
2011-01-01	J.G.
ECHELLE / SCALE	VERIFIÉ PAR / CHECKED BY
not to scale	ELT Easy Green
NO DESSIN / DWG NUMBER	
LW2011-02	

Bifacial Photovoltaic Module

HIT Double 190

Photovoltaic Module

Power per Square Foot up to 18.6 Watts



High Efficiency

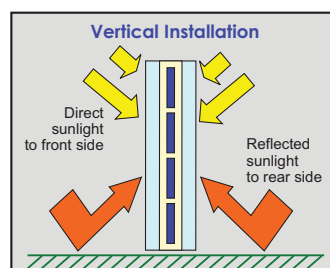
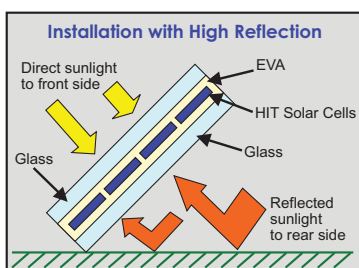
HIT® Double bifacial solar panels are the World leaders in sunlight conversion efficiency, helping customers to enjoy the maximum power per square foot from available space.

Power Guarantee

SANYO guarantees customers will receive 100% of the panel's rated power (or more) at the time of purchase, enabling owners to generate more kWh per rated watt.

Bifacial Effect

The back face of HIT Double solar panels generates electricity from ambient light reflected off surrounding surfaces, and combines with power from the front face of the panel. Dependant upon system design and site albedo, this results in up to 30% higher power generation (more kWh) per square foot.



Application Possibilities

- Architectural, Awnings, Balconies, Bus Shelters, BIPV
- Deck & Porch Coverings, Canopies, Carports, Facades
- Fences, Siding, Trellises, Tracking Systems

Proprietary Technology

HIT bifacial solar cells are hybrids of single crystalline silicon surrounded by ultra-thin amorphous silicon layers, available solely from SANYO.

High Temperature Performance

As temperatures rise, HIT Double solar panels produce more electricity than conventional solar panels at the same temperature, for good performance in high temperature sites.

Quality Products

SANYO silicon wafers are made in California USA, and assembled in Mexico at SANYO's certified factory. ISO 9001 (quality), 14001 (environment), 18001 (safety).

Valuable Features

HIT Double panels operate silently and have no moving parts. A double glass structure allows some sunlight to penetrate portions of the panel, creating brilliant light and shadows for aesthetic and architectural applications. HIT Double panels are perfect for areas with performance-based incentives and tradable energy credits.

Electrical Specifications

Model: HIP-190DA3	STC ¹	Specifications Including Backside Irradiation Contribution in ISC as a Percent of STC					
		5%	10%	15%	20%	25%	30%
Rated Power (Pmax) ¹	190 W	199 W	208 W	216 W	225 W	234 W	243 W
Maximum Power Voltage (Vpm)	55.3 V	55.30 V	55.36 V	55.42 V	55.50 V	55.52 V	55.56 V
Maximum Power Current (Ipm)	3.44 A	3.60 A	3.75 A	3.91 A	4.06 A	4.22 A	4.37 A
Open Circuit Voltage (Voc)	68.1 V	68.3 V	68.4 V	68.5 V	68.6 V	68.6 V	68.8 V
Short Circuit Current (Isc)	3.7 A	3.89 A	4.07 A	4.26 A	4.44 A	4.63 A	4.81 A
Max. System Voltage (Vsys)	600 V	—	—	—	—	—	—
Series Fuse Rating	15 A	—	—	—	—	—	—
Temperature Coefficient (Pmax)	-0.34% / °C	—	—	—	—	—	—
Temperature Coefficient (Voc)	-0.191 V / °C	—	—	—	—	—	—
Temperature Coefficient (Isc)	1.68 mA / °C	—	—	—	—	—	—
Warranted Tolerance	+10/-0%	—	—	—	—	—	—
Cell Efficiency	18.8%	—	—	—	—	—	—
Module Efficiency ²	15.7%	16.4%	17.1%	17.8%	18.6%	19.3%	20.0%
Power per Square Foot	14.6 W	15.2 W	15.9 W	16.6 W	17.2 W	17.9 W	18.6 W

Mechanical Specifications

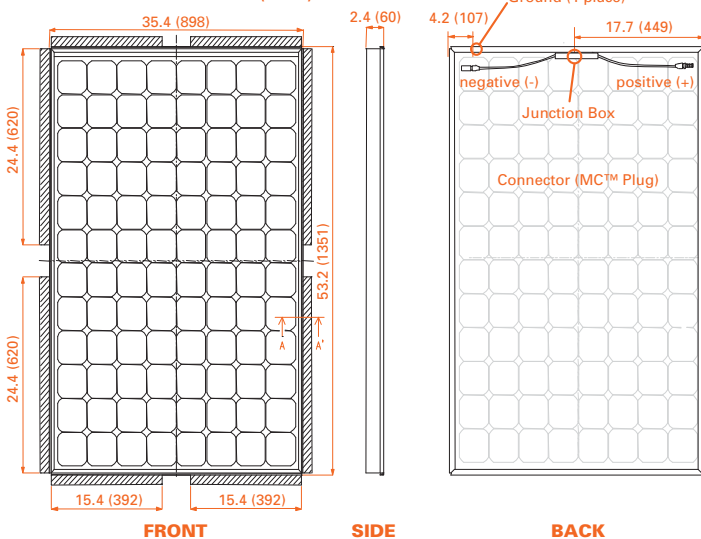
Internal Bypass Diodes	4 Bypass Diodes
Module Area	13.06 Ft ² (1.21 m ²)
Module Weight	50.7 Lbs. (23 kg)
Module Dimensions LxWxH	53.2 x 35.35 x 2.36 in. (1351 x 898 x 60 mm)
Cable Lengths	39.4 in. each (1000 mm)
Cable Size / Connector Type	No. 12 AWG / MC3™ Connectors
Static Load	50 PSF (2400 Pa)
Pallet Dimensions LxWxH	54.3 x 36 x 70.1 in. (1379 x 912 x 1781 mm)
Full Pallet Quantity & Weight	20 pcs. / 1014 Lbs. (460 kg)
Quantity per 20'/40'/53' Container	200 pcs., 420 pcs., 540 pcs.

Safety Ratings & Limited Warranty

Fire Safety Classification	Class A
Hail Safety Impact Velocity	1" hailstone (25 mm) at 52 mph (23 m/s)
NOCT (°C)	113°F (45°C)
Safety & Rating Certifications	UL 1703, cUL, CEC
Limited Warranties	2 Years Workmanship / 20 Years Power Output

¹ Standard Test Conditions: Cell Temperature 25°C, Air Mass 1.5, 1000 W/m²
² Equivalent module efficiency, including power from the back face.
Note: Specifications and information above may change without notice.

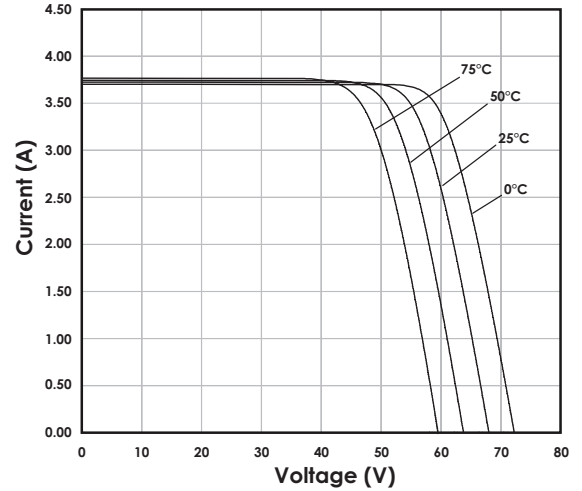
Dimensions Unit: inches (mm)



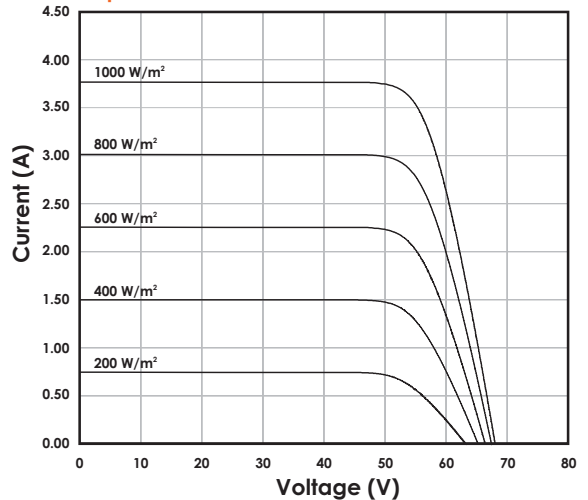
To Maximize Power

1. Elevate panels above a surface as much as possible.
2. Place panels over light-colored surfaces.
3. Do not allow support rails to shade the panel's back face.

Dependence on Temperature



Dependence on Irradiance



IMPORTANT: The rated power of HIT® Double bifacial solar panels is measured under Standard Test Conditions (STC). STC does not account for power produced from the back face of panels. Therefore, HIT Double panels will produce more power than their STC rating, up to 30% more, depending upon the system design and site albedo. Account for the additional power when sizing, selecting system components and wiring.

CAUTION! Read the operating instructions carefully before use of these products

SANYO

SANYO Energy (U.S.A.) Corp.
A Division of SANYO North America Corporation

550 S. Winchester Blvd., Suite 510
San Jose, CA 95128, U.S.A.
www.sanyo.com/solar
solar@sec.sanyo.com



RAIS[®] WAVE XT Installation Manual

TKS-F, TKS-G



About tenKsolar

tenKsolar designs, manufactures and markets unique photovoltaic systems which provide the highest kilowatt hour production per unit area at the lowest cost per kilowatt hour.

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Contact Information

tenKsolar, Inc.
9549 Penn Avenue South
Minneapolis MN 55431
USA

Tel (952) 303-7600
Fax (952) 303-7601

info@tenksolar.com
<http://www.tenksolar.com>

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Introduction

Welcome to Fundamentally Better Solar – the RAIS® Wave System is a unique system approach to solar energy. Combining the revolutionary RAIS PV module with the integrated RAIS Wave Racking system delivers the best value in commercial flat roof solar today!

This guide describes the proper installation method of the RAIS Wave™ System onto a flat commercial rooftop. Installation for ground-mount or carport applications will be similar.

The RAIS Wave system is designed for flexibility, safety, ease of installation and simple maintenance. Please be sure to follow this instruction guide carefully to meet its design goals. We are happy to partner with you in making the world a cleaner, better place!



Caution: It is important that the installer read through all instructions carefully and layout a project plan prior to beginning physical installation. Any concerns or questions the installer may have should be directed to tenKsolar. Additional information can be found at www.tenKsolar.com



Caution: The instructions contained in this installation manual are guidelines. Actual project details and considerations vary greatly. Please consult with your structural engineer or other appropriate resources in order to validate that these guidelines are acceptable for your project installation.



Installations may need to be ballasted depending on size, site location, roof construction, and other site-specific factors. You must consult with your structural engineer to determine the correct amount of ballast for your installation's particular requirements.

RAIS Wave Overview

The RAIS Wave array is comprised of RAIS PV modules and RAIS Wave spectrally selective reflectors mounted onto a rail support structure. Complete details of array assembly are provided in this document.

The PV module and the RAIS Wave spectrally selective reflector are the energy producing elements of the array; of these two, only the module is electrically active. The RAIS Wave spectrally selective reflector adds to the amount of light collected by the RAIS PV Module to increase overall energy production.

Conventional solar panels are not designed to accept reflected sunlight. As such, they are installed in linear arrays with large spacing between rows. They are attached to conventional racking systems designed to hold single rows of modules.

In contrast, tenKsolar RAIS Wave systems are designed to harvest energy from both direct and reflected sunlight. The reflector and photovoltaic module are mechanically coupled together when installed to give optimal energy generation performance over the course of the year.

As shown in Figure 1, the main components of the RAIS Wave system are the photovoltaic modules, the reflectors, and the rails. These components form a self-supporting structural unit that is replicated across the array.

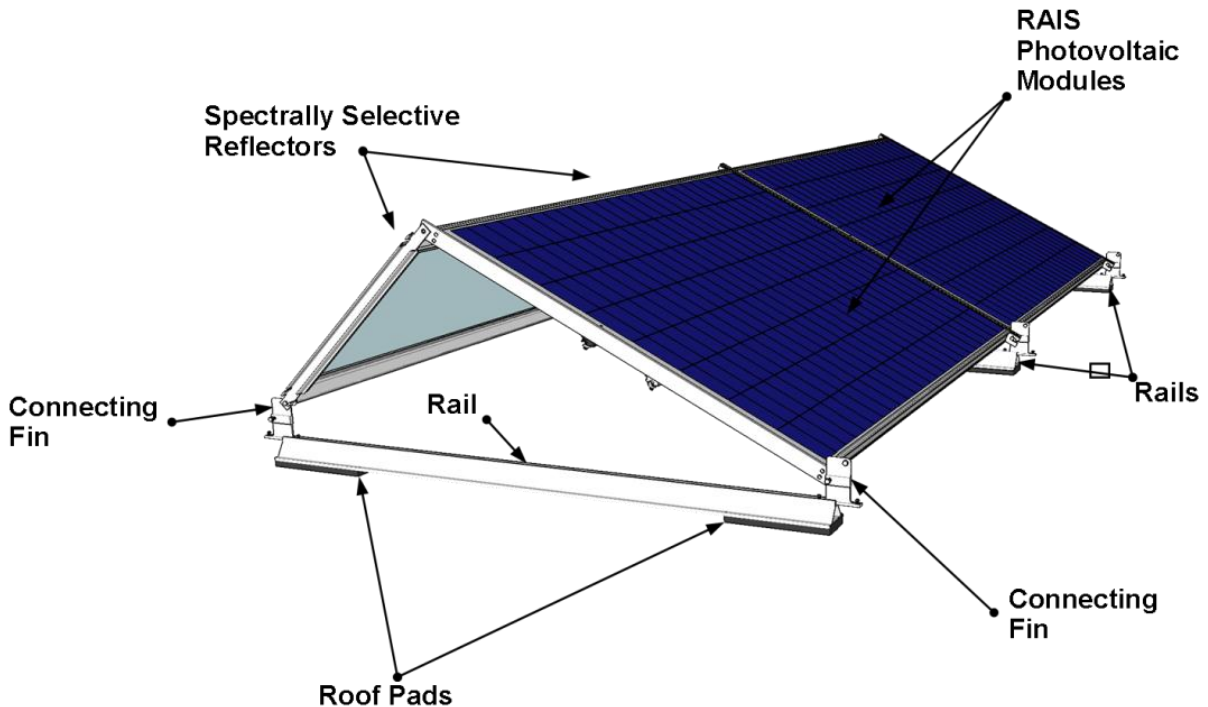


Figure 1

The parts shown in Figure 1 are shipped to you unassembled, along with necessary fastening hardware. You will need to assemble them according to your specific array layout.

Using stainless steel star washers, as indicated in UL1703 Section 11.4, connections in the RAIS Wave Array between modules, reflectors, and rails form an integrated grounding system. The module is electrically grounded to both rails, and rails in each rail column are grounded to each other. The module frames and rails thus form a web of electrical ground connections. Final connection of any point of the rails to the earth ground electrode completes the electrical grounding circuits.

RAIS Wave Fastening Hardware



Use only specified fasteners with the RAIS Wave system. Replacing the specified fasteners with unapproved fasteners could disrupt the electrical grounding circuit and could result in damage to the panels or reflectors, or to nearby personnel or property. Replacing the specified fasteners with unapproved fasteners will void the warranty.

Part Number	Description	Locations Used
3601040	1/4" Star Washer, Stainless Steel	Fin-Rail connection
3601111	1/4"-20 X 5/8" Stainless Steel Hex Head Cap Screw	Fin-Rail connection
3601134	5/16"-18 x 2" Stainless Steel Hex Head Tap Bolt Full Thread	Fin-Module connection
3601132	1/4"-20 x 2" Stainless Steel T Bolt	Rail-Inverter Shroud connection
3601136	5-16"-18 x 3/4" Stainless Steel Hex Head Cap Screw	Fin-Reflector Strut connection
3601161	3-hole chamfered aluminum pin	Module-Reflector Strut connection
3601150	Hair Pin Cotter	Module-Reflector Strut connection
3601135	5/16"-18 Stainless Steel Combination Hex Nut with Star Washer	Fin-Module connection, Fin-Reflector connection
3601190	1/4"-20 Stainless Steel Combination Hex Nut with Star Washer	Rail-Inverter Shroud connection
3201502	Module Keeper Plug	Fin-Module connection
3201586	Reflector Lock	Reflector-Reflector Strut connection

Site selection

1. The RAIS® Wave is primarily intended for commercial flat roof application. Generally, roofs with slopes of less than one inch of rise per foot of run are considered "flat". More commonly, commercial flat roofs have a slope of 1/8-1/4" per foot.
2. The array location should be relatively free of shadowing from adjacent vegetation, plumbing, HVAC equipment, or adjacent structures. Follow all applicable local codes and regulations when installing the array.
3. A commercial flat roof will have small peaks and valleys to allow for drainage. The RAIS Wave system is generally insensitive to the location of these peaks and valleys, but some care should be taken when designing the system. Rail connections allow some north-south compliance in the system and should be placed over east-west peaks or valleys. North-south peaks or valleys should generally be placed in aisles between arrays.
4. A commercial flat roof will sag slightly under loading (for example, snow loads). The RAIS Wave system can tolerate small amounts of sag in the roof under variable loading. If a roof sags more than 1-2" in a 24' span, you may have interference issues when installing the system. A roof with this much sagging may have underlying structural issues as well. Consult your structural engineer to ensure the roof has adequate strength and stiffness for the loading from the array.
5. The array can be placed over small roof obstructions like drain baskets or small plumbing vents. Larger obstructions that do not cause excessive shading can be accommodated by leaving a single module/reflector pair out of the array.

Recommended Tools

You will need the following tools for the proper installation of a RAIS Wave Solar Array. Additional tools may be required based on your specific site requirements.

Standard tools:

1. 7/16" and 1/2" hex sockets and 1/2" deep socket for 1/4" and 5/16" mechanical connections.
2. A torque wrench with an effective working range that includes 9 ft-lbs (108 in-lbs) and a minimum resolution of 1 ft-lb.
3. A 3/16" hex key that can be attached to the torque wrench.
4. Tape measures and levels may be required, depending on the site.
5. 20 oz. bulk sausage pack applicator gun

TenKsolar Special Tools, available for sale by tenKsolar

1. RAIS Wave Fin Spacing Tool - Ensures each fin is placed exactly the correct distance apart.

RAIS Wave Array Mechanical Assembly

Assembly of the RAIS® Wave array should begin at the southeast or southwest corner of the array (northeast or northwest in the Southern Hemisphere). To maximize energy production, the rails should be oriented directly North-South. Care should be taken to align the front edges of the adjacent rail columns along a true East-West line.

Step 1: Attach Roof Pads to Rails – Figures 2 and 3

Apply three self-adhering rubber buttons (supplied) to each end of the bottom of the rail. Space them 3" ($\pm \frac{1}{2}$ ") from the rail end and from each other, along the center of the rail, as shown in Figure 2.

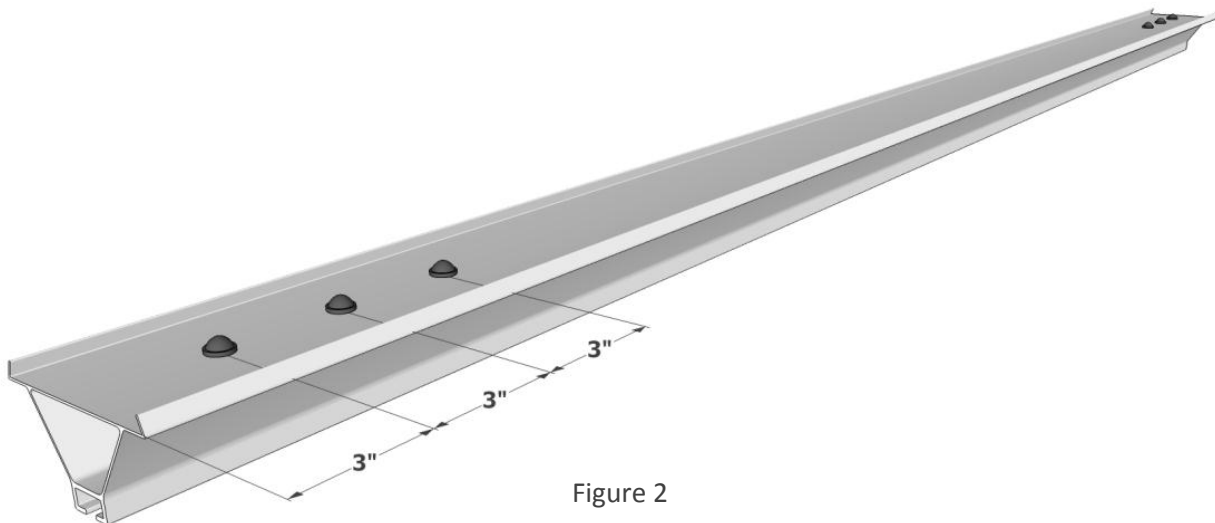


Figure 2

Snap one 4" x 12" x 1" foam pad in between the rail flanges at each end of rail as shown in Figure 3. **Note: the rubber buttons are necessary to transfer lateral wind loads to the pad (and thus the roof) and are therefore essential to the structural integrity of the system. Do not omit the rubber buttons.**

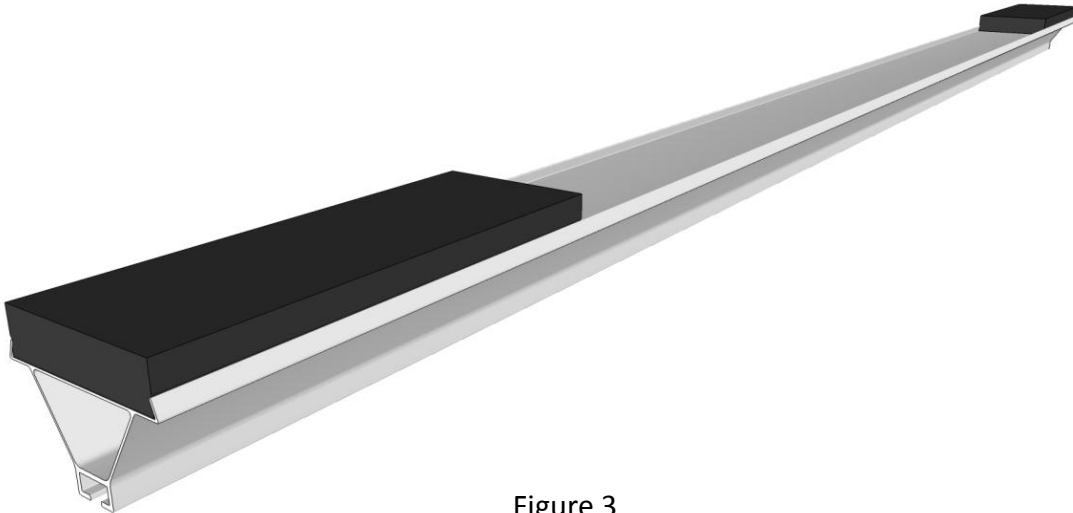


Figure 3

Additional Pads:

For rails that will support ballast, inverters, or other equipment, additional roof pads are required to distribute the weight on the roof. To the two pad configuration shown in Figure 3, add the following number of additional pads (install three additional buttons, as above, for each additional pad):

Inverter mounted on rail	Add 2 pads, under the inverter area
Ballast up to 150 lbs total touching rail	Add 1 pad, equally spaced from rail ends
Ballast of 150-250 lbs total touching rail	Add 2 pads, equally spaced from rail ends
Ballast of 250-350 lbs total touching rail	Add 3 pads, equally spaced from rail ends
Ballast over 350 lbs total touching rail	Add 4 pads, equally spaced from rail ends

Note:

- If rails support ballast trays on both sides (east and west), the combined ballast weight is used to determine number of additional pads.
- Total ballast includes weight of ballast tray plus weight of ballast blocks.
- If a rail supports both an inverter and ballast, add the combined number of pads.
- **Install additional pads as needed before building out your array.**
- Sweep away loose rock where pads contact roof before placing rails on roof.

Step 2: Insert a Fin – Figures 4 and 5

The fin comes preassembled with two 1/4"-20 x 5/8" cap screws with star washers and one 5/16"-18 x 2" tap bolt with a combo star washer-hex head nut. It is used to connect the rails. Slide the base of a fin 2-1/2" (64 mm) (about half way) into the end of a rail. See Figure 4. **The hole with the 5/16"-18 x 2" tap bolt should be to the back, north, end of the array.** Allow the star washer to slide into the rail with the fin foot. The star washer is an integral part of the electrical grounding system. Tighten the 1/4"-20 x 5/8" cap screw to 6 ft-lbs (8 N-m). Note that the screw will bottom out and form a dimple in the rail slot floor and pull the fin and star washer up as shown in Figure 5. It is not advised to tighten, loosen, and re-tighten the 1/4"-20 x 5/8" cap screw – for instance if disassembling, moving, and then re-assembling an array – more than five times without replacing the rail.

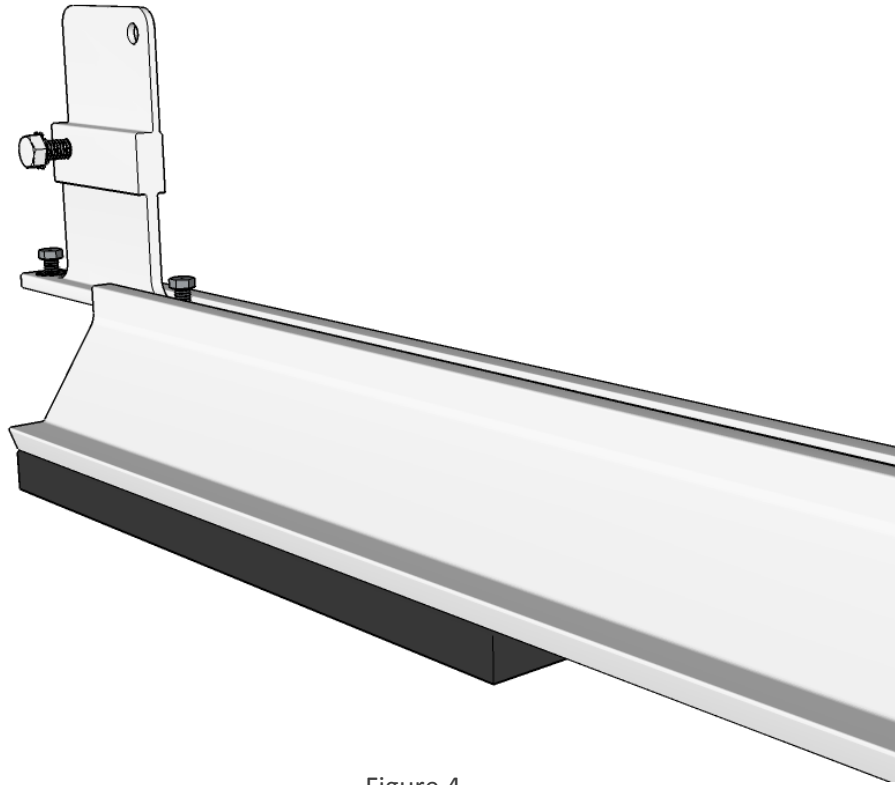


Figure 4

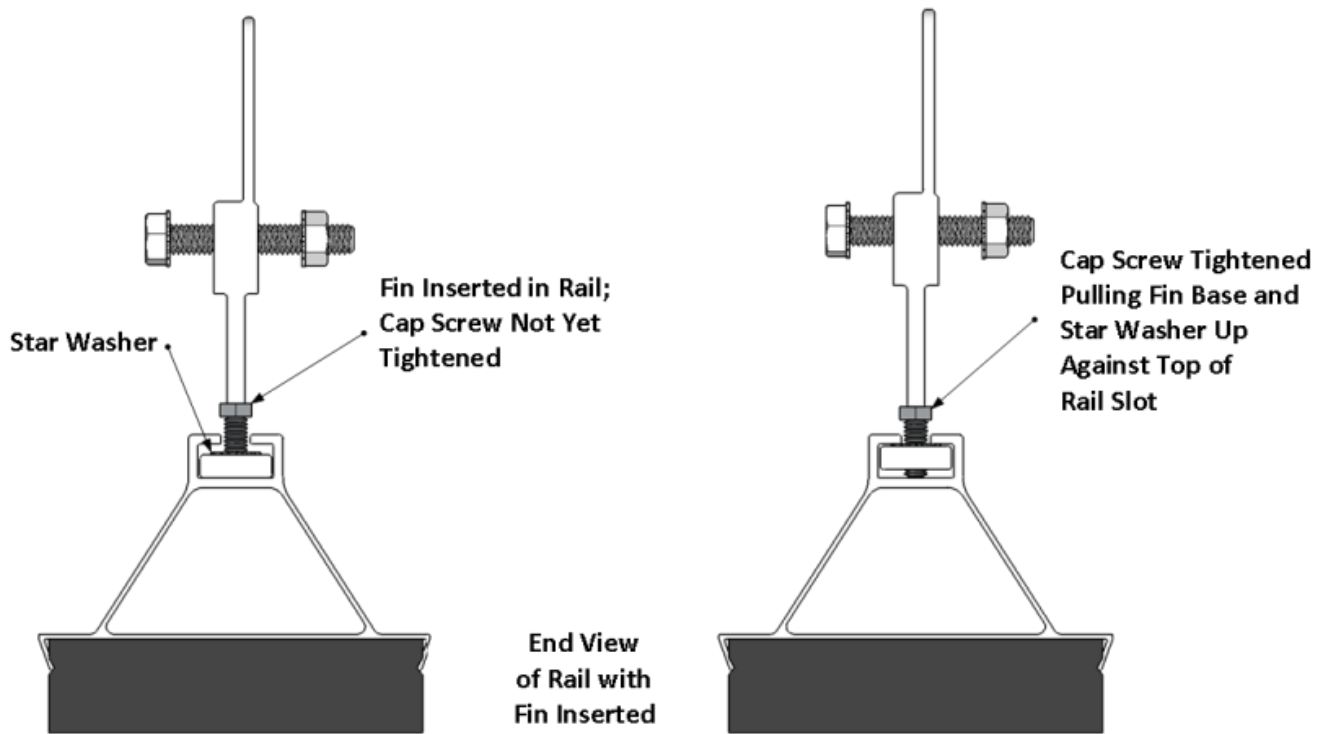


Figure 5

Step 3: Connect Two Rails – Figure 6

Slide the next rail onto the protruding remainder of the fin base. Leave a $3/8'' - 7/16''$ (10 mm) gap between rails. Tighten the $1/4''-20 \times 5/8''$ cap screw to 6 ft-lbs (8 N-m).

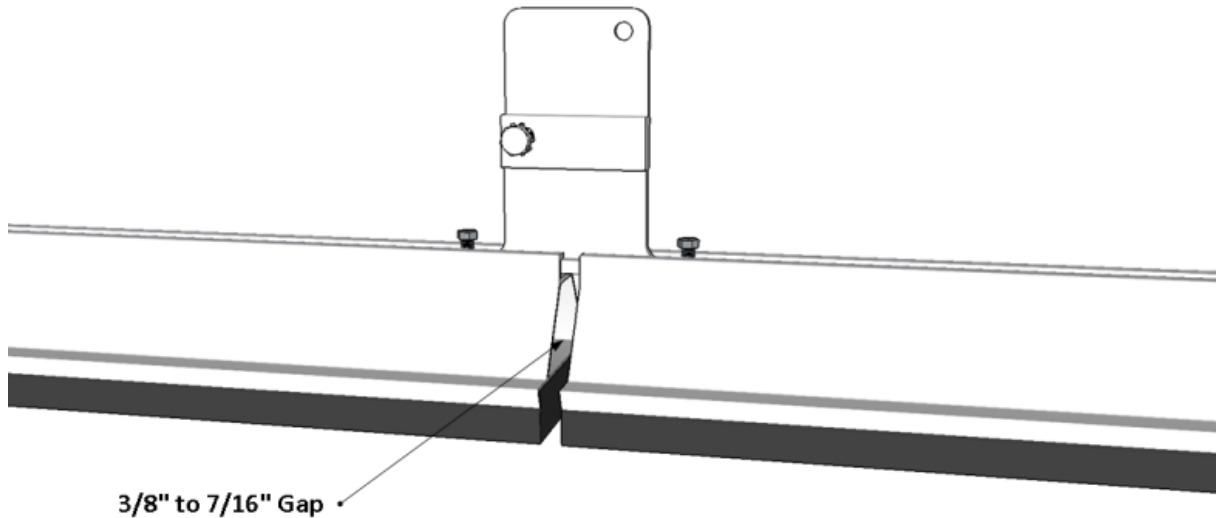


Figure 6

Step 4: Install Front Fin – Figure 7

Reverse a fin so that the hole with the $5/16''-18 \times 2''$ tap bolt is to the front, south, end of the array. Slide it into the end of the rail that will be the front (southernmost) rail in the rail column. Position it so that the end of its base plate is flush with the front (south end) of the rail. Tighten both $1/4''-20 \times 5/8''$ cap screws to 6 ft-lbs (8 N-m).



Figure 7

Step 5: Assemble and Place a Second Two-Rail Section – Figure 8

Repeat the above steps to assemble another two-rail section, place it approximately 77-7/8" (1978 mm) to the east or west of the original section.

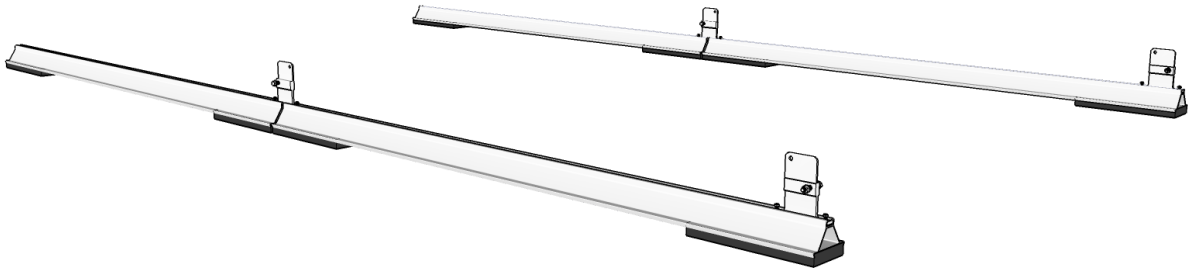


Figure 8

Step 6: Install Reflector Struts – Figure 9

Install two reflector struts to the northernmost fin on each rail. Use a 5/16" -18 x 3/4" cap screw and 5/16-18 combo nut and star washer to attach the lower ends of the struts (the end with the smaller hole in the strut's main flange) to the west side of each fin. For now do not tighten, and allow the struts to rest on the rails.

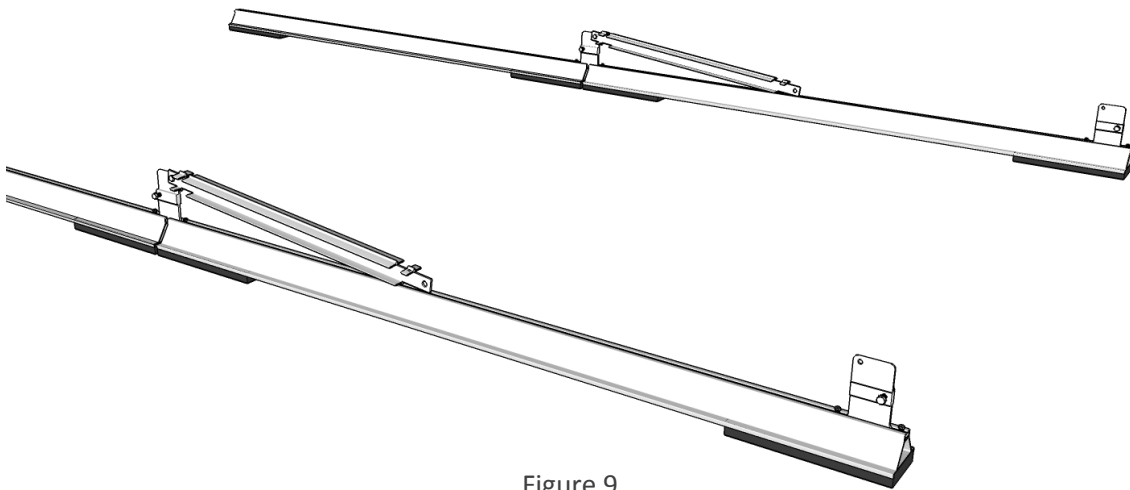


Figure 9

Step 7: Install Module – Figure 10

Orient module with electrical connector lugs to the east or west, as specified in your site wiring plan. Slip the slots in the module's frame over the fin tap bolts, in the space between the rails. Adjust the spacing between rails as necessary to accommodate the module. **Be sure that the dog-leg slot in the module frame seats properly on the fin tap bolt.** Temporarily support the top of the module on a suitable length prop until you install the reflector struts.



When installing a module on the head side of the tap bolt, be sure that the star washer is between the head of the bolt and the module, not between the module and the fin. This is necessary for a proper grounding connection.

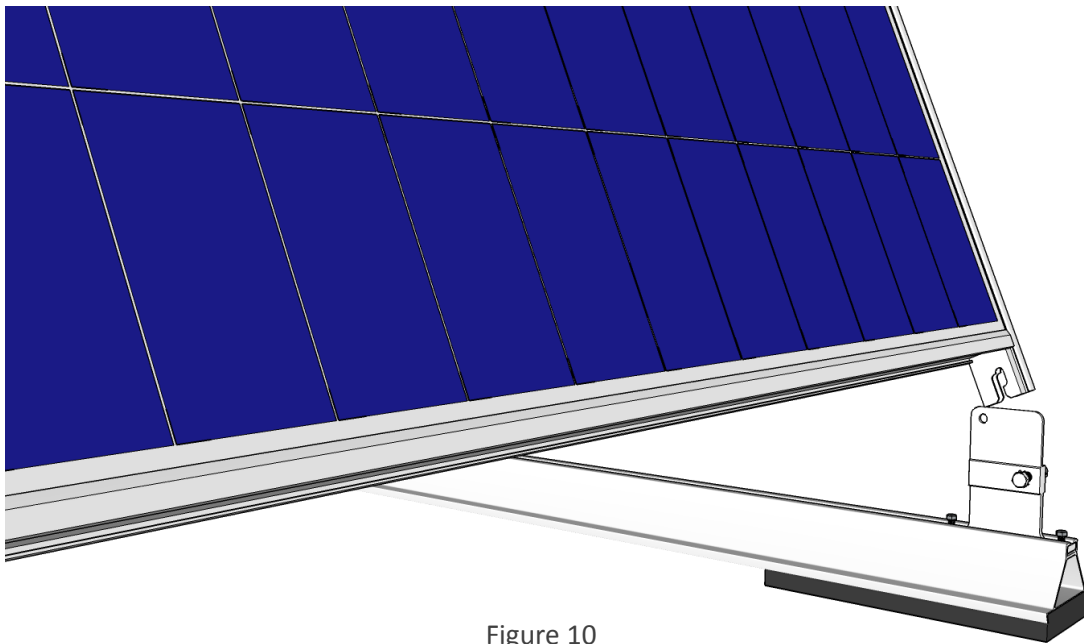


Figure 10

Step 8: Connect Module to Reflector Struts – Figure 11

Lift the reflector struts and line up the upper holes in the struts with the holes in the module frame. Use a 3-hole chamfered aluminum pin to attach the upper ends of the struts to the modules. Insert one hairpin cotter into an end hole of each 3-hole aluminum pin. Insert the second hairpin cotter into the other end hole after the adjacent module has been installed. (For struts at the east or west end of a row, use the middle hole.)

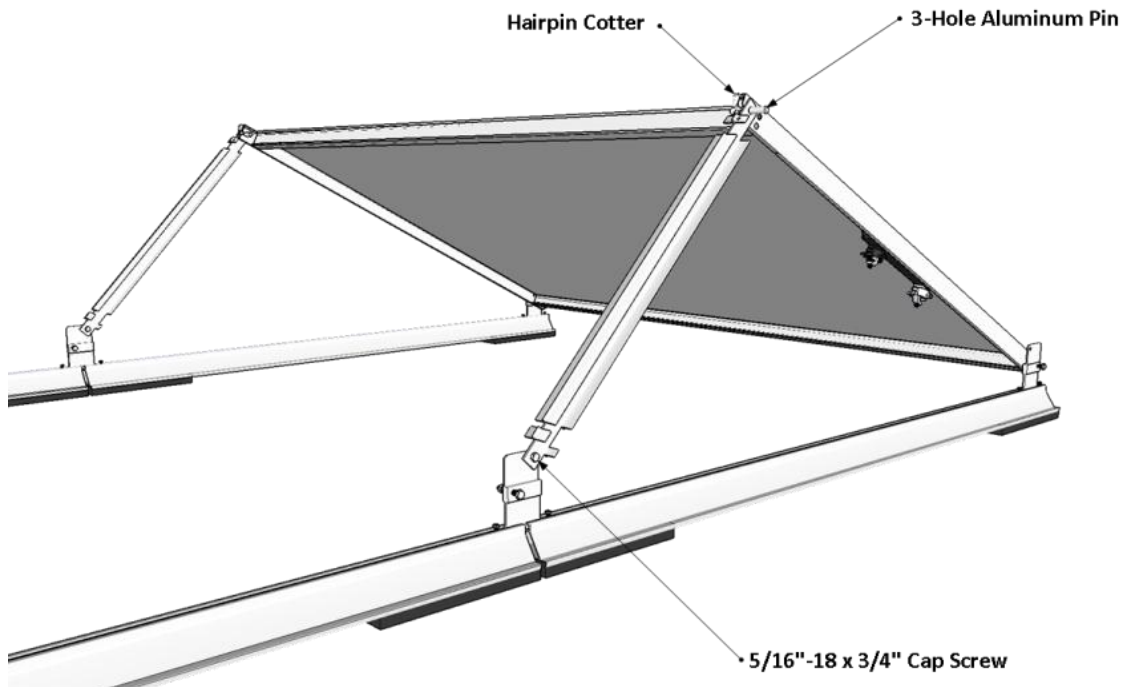


Figure 11

Step 9: Install Keeper Plugs in Module Frames – Figure 12

Insert a Module Keeper Plug in each of the lower Module frame ends. Push the Module Keeper Plug in until it clicks into place. This will mechanically lock the Module to the Fin bolt. The Module Keeper Plug can be removed simply by pulling on its stem. **Do not tighten the Fin Tap Bolts or Nuts until the Keeper Plugs are installed.**

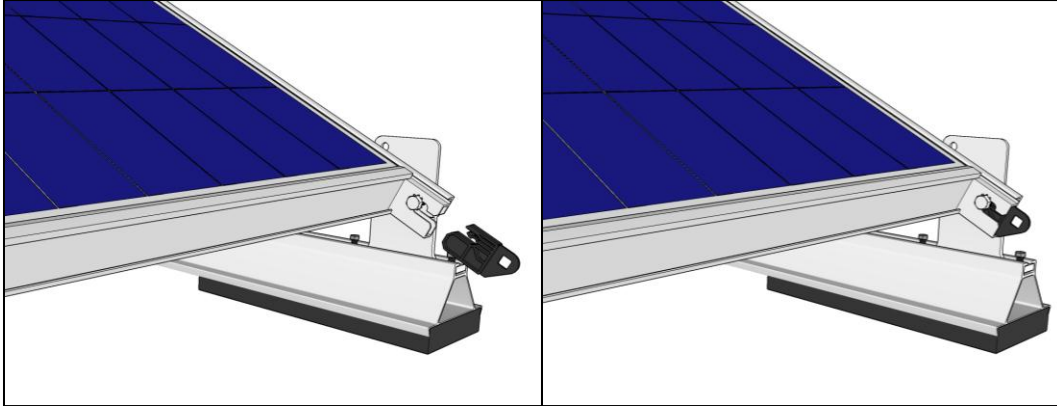


Figure 12

Once the keeper plugs are installed, use a torque wrench to torque the bolts and nuts that attach the module and the reflector struts to the fins to 9 ft-lbs (12.2 N-m). For modules at the east or west edges of an array section, and for all reflector struts, tighten the head of the 5/16" bolt all the way until the head bottoms out on the fin, and then torque the nut to 9 ft-lbs (12.2 N-m).



Proper tightening of these bolts and nuts is essential for structural integrity and for proper electrical grounding. Failure to install the Keeper Plugs, or to torque the bolts and nuts connecting the module and reflector struts to the fins to 9 ft-lbs (12.2 N-m) will void the system's warranty.

Step 10: Install Reflector – Figures 13A – 13C

The Wave XT reflector is not reversible; it has defined upper and lower sides. The upper reflector frame has a hooking channel at its outer edge and the lower reflector frame does not. See Figure 13A.

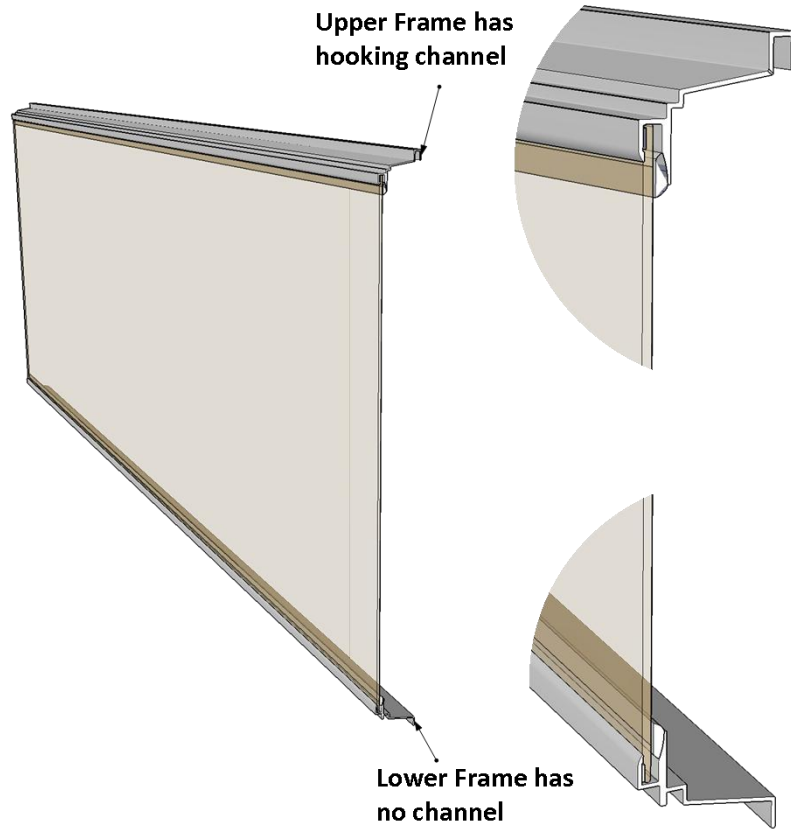


Figure 13A

Insert lower flange of reflector in the lower slots on the reflector struts; see Figure 13B.

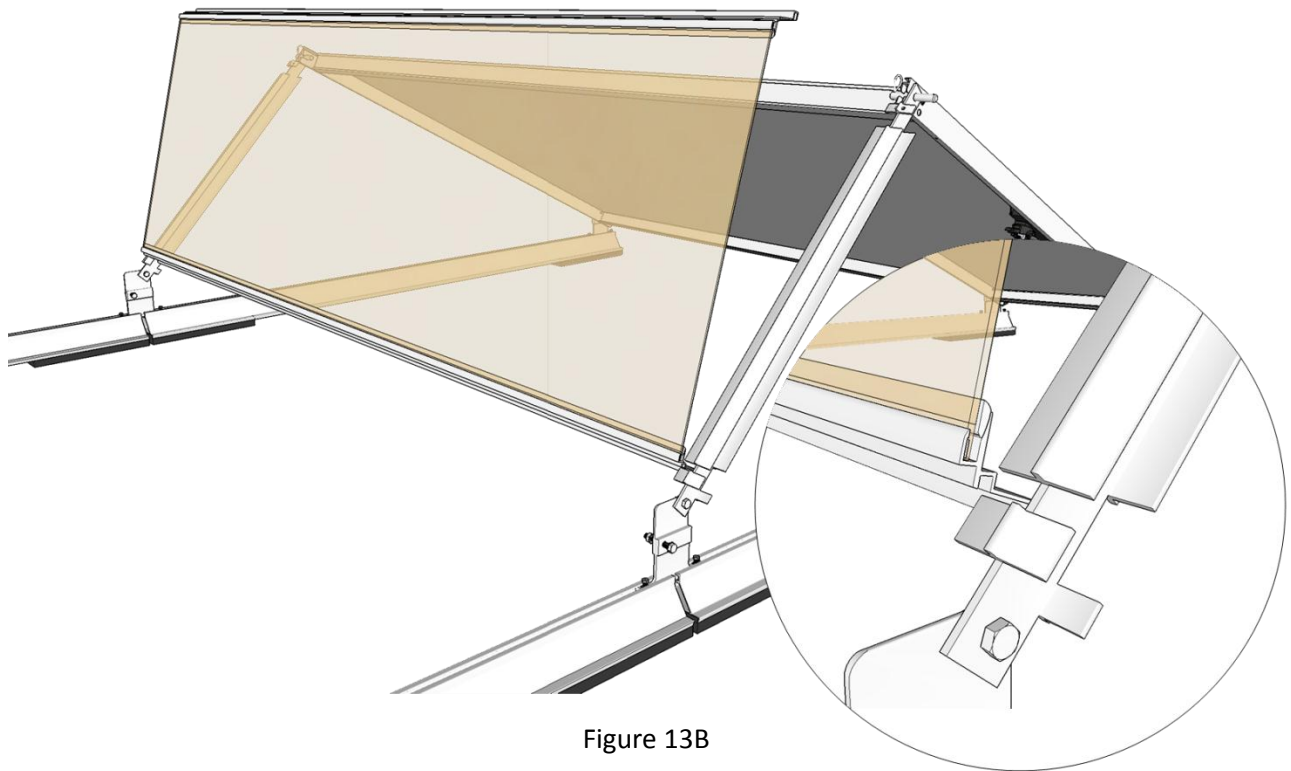


Figure 13B

Slide the lower reflector frame along the tab on the reflector strut until its groove hooks onto the tab. Then rotate the top of the reflector down until it rests on the strut. See Figure 13C. Finally, push the reflector slightly up along the strut until the hooking channel on the upper frame slips over the flange of the strut. **When properly seated, the reflector cannot be rotated up and out of place.**



Figure 13C

Step 11: Install Reflector Locks – Figure 14

Install a reflector lock on each reflector strut. Push the lock onto the strut flange until the boss on the lock's spring tab clicks into place in the hole in the strut.

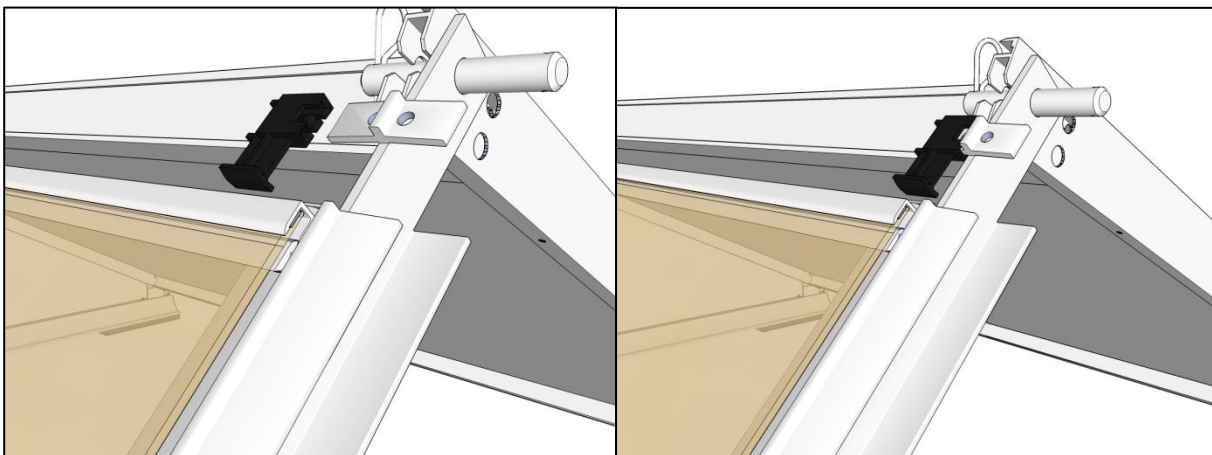


Figure 14

Step 12: Add more Rails, Modules, and Reflectors – Figures 15A-15D

There are two basic options in building out the array:

- 1) Complete one row at a time:
 - a) Build out one entire row (east-west) of adjacent modules and reflector struts;
 - b) Wire that row;
 - c) Install the reflectors on that row;
 - d) Then build the next row to the north using the same sequence.

- 2) Install modules and struts for an entire array section, then add reflectors:
 - a) Install all modules and reflector struts;
 - b) Then starting from the back row of the array section, install reflectors. Except for the back row, this will be done while standing in the unfilled adjacent reflector space;
 - c) Except for the back row, reflector locks will be installed while standing in the unfilled reflector spaces of the next row to the south by reaching over the module

Because installed modules without their reflectors are subject to much higher wind load forces than completed wavelets. **If the second option is selected, modules cannot be left overnight without reflectors installed; an entire array section must be completed within one working day.**

The following build-out instructions are based on the first option. If you choose the second option, it will be easy to adapt your procedure based on these instructions.

As in the previous pages, these instructions look only at the mechanical installation. For wiring, see page 19. Regardless of which build-out option you select, wiring is best done with modules and reflector struts installed, but before reflectors are installed.

Add more two-rail columns (see Steps 3-6, above) to the east or west of the wavelet already constructed to complete the first row of the array section; see Figure 15A. **Be sure to keep the second row of fins closely aligned along the East-West direction.**

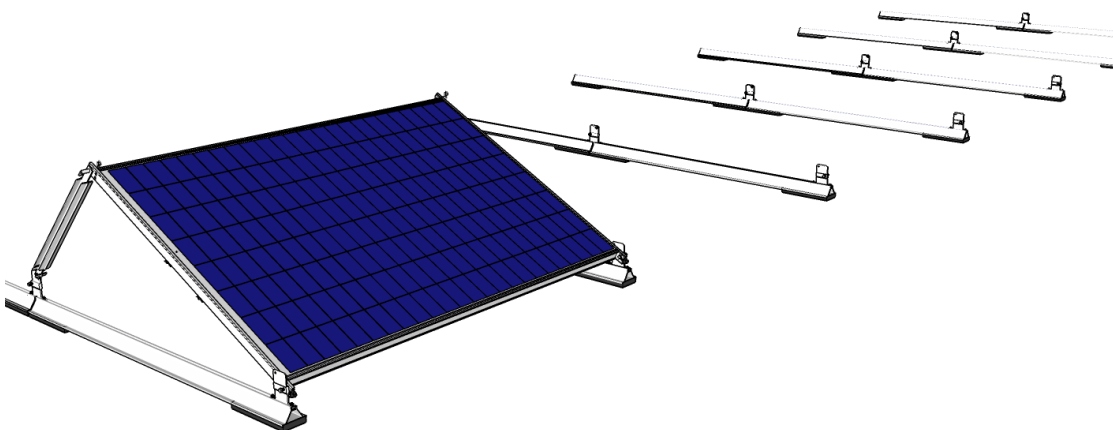


Figure 15A

Install reflector struts, modules, module keeper plugs, 2-hole aluminum pins and hairpin cotters along this front row of the array per Steps 7-10. Wire the front row of modules (see page 19), then install reflectors and reflector locks per Steps 11 and 12. See Figure 15B

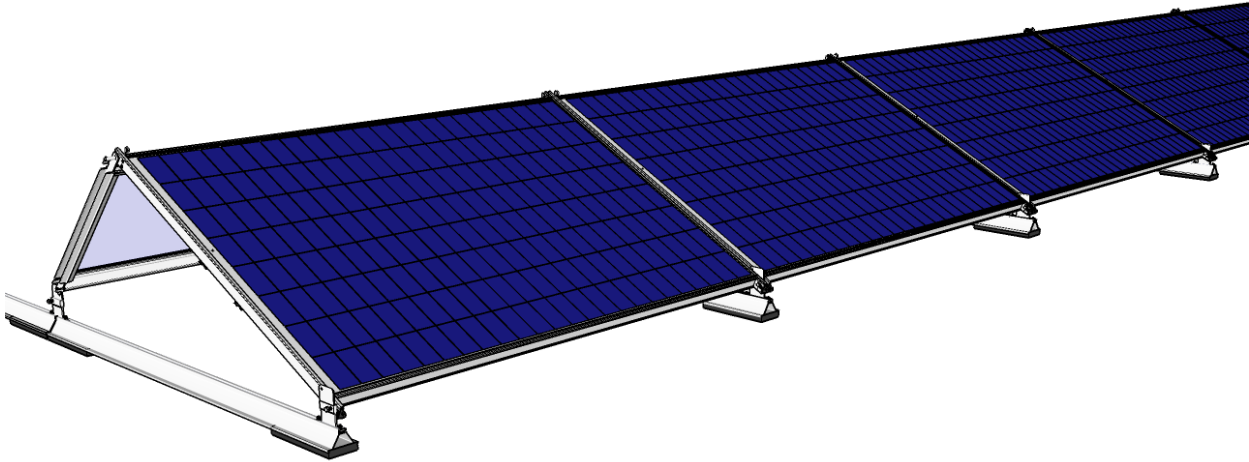


Figure 15B

Insert another fin at the back of the second rail of each rail column. Do not tighten it to the rail. Use the Fin Spacing Tool to set the correct distance between fins as shown in Figure 15C. The Fin Spacing Tool will arrive bolted in its collapsed state for easy transport; assemble it to its expanded state before use.

Once the fin has been properly located by the fin spacing tool, tighten the fin's 1/4"-20 x 5/8" cap screw to 6 ft-lbs (8 N-m). Repeat this step to add fins to the rest of the rail columns. Verify with a string or laser that the fins are closely aligned in the east-west direction. **Adjust rail columns to the north or south as necessary to ensure this alignment. Do not alter fin spacing to achieve this alignment.**

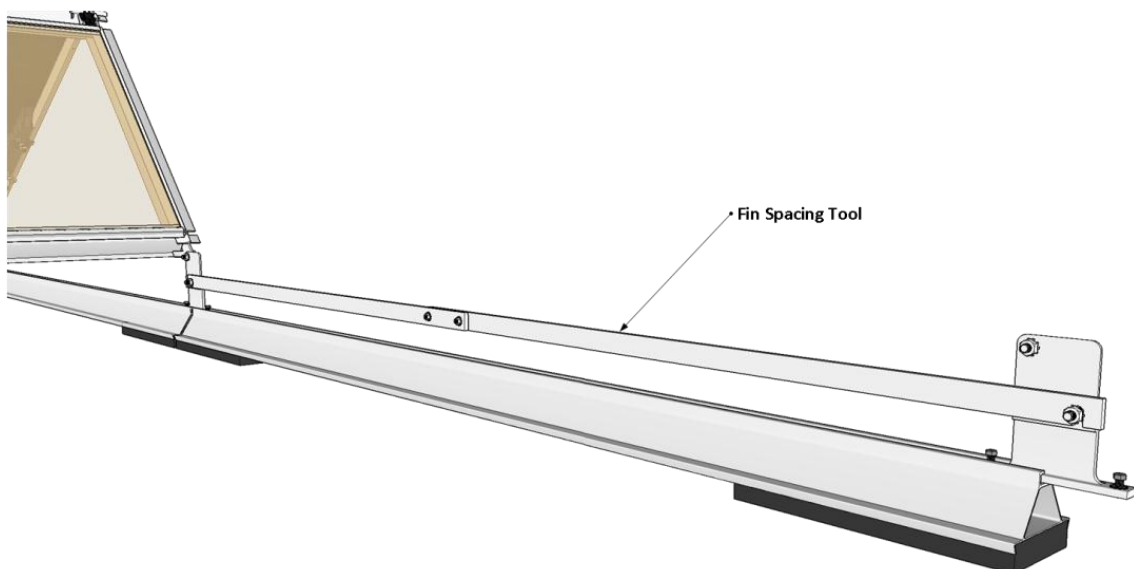


Figure 15C

Install subsequent rows of modules and reflectors in the same manner. On the final, northernmost, row there are two differences:

- Instead of locating the final, northernmost, fin in each rail column with the fin spacing tool, simply insert the fin into the rail so that the end of its base plate is flush with the back (north) end of the rail. Then tighten both 1/4"-20 x 5/8" cap screws to 6 ft-lbs (8N-m).
- Just to the south of that final fin, install C-Channel Braces across each rail pair. Use a 1/4"-20 x 2" Stainless Steel T Bolt inserted into the rail slot and a 1/4"-20 Stainless Steel Combination Hex Nut with Star Washer to secure each end of the c-channel brace. Tighten the combination hex nut with star washer to 6 ft-lbs (8N-m). Stagger the braces from one rail pair to the next. See Figure 15D. **Install a c-channel brace on every northernmost rail pair in every array section.**
- Install modules and reflectors, as above, on the back row of rails to complete the array section.

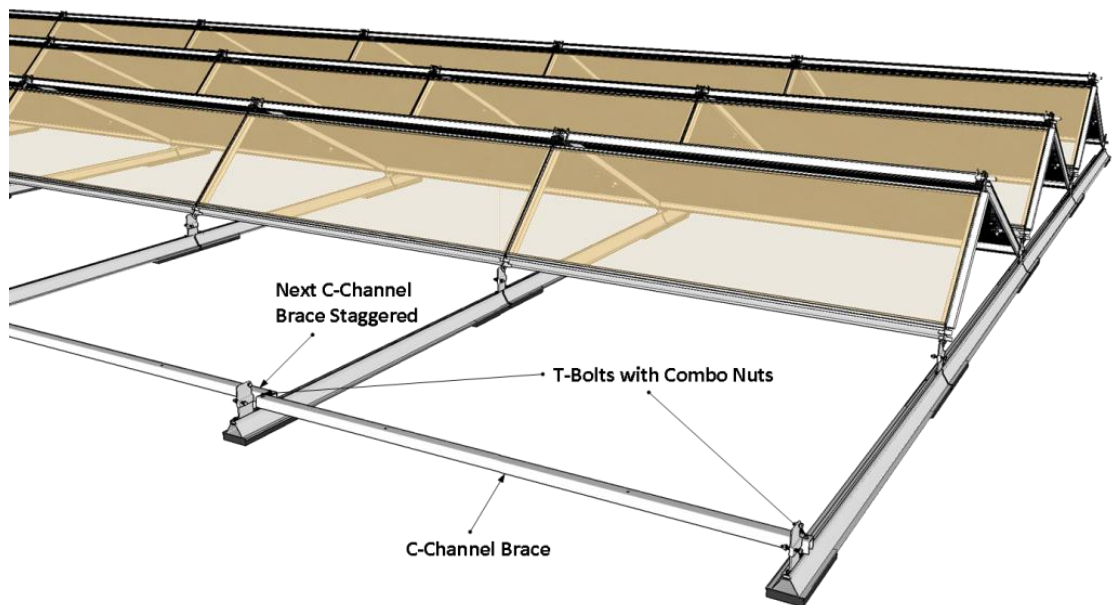


Figure 15D

Ballast Installation

If your structural engineer determines that ballast is required to meet wind or seismic performance requirements, **it should be installed after the array has been assembled. If you try to install the ballast before the modules and reflectors are installed, it may make it impossible to correctly install the modules and reflectors subsequently.** Installation of array ballast, if needed, should be completed according to the following guidelines:

1. **Determine the required amounts and locations of ballasting based on the wind loading for your site in consultation with your structural engineer and appropriate authorities.**

- Construct a ballast tray by placing two aluminum ballast rails across the top of the rails as indicated in Figure 16. The bent tabs on the ballast rails will locate them on the array rails. Place ballast blocks oriented east-west. In the event, on very small arrays, that you need more than 220 lbs of ballast under a wavelet, construct a second ballast tray. **Be sure extra rail pads have been installed under ballast locations as indicated in ‘Additional Pads’ on page 7.**

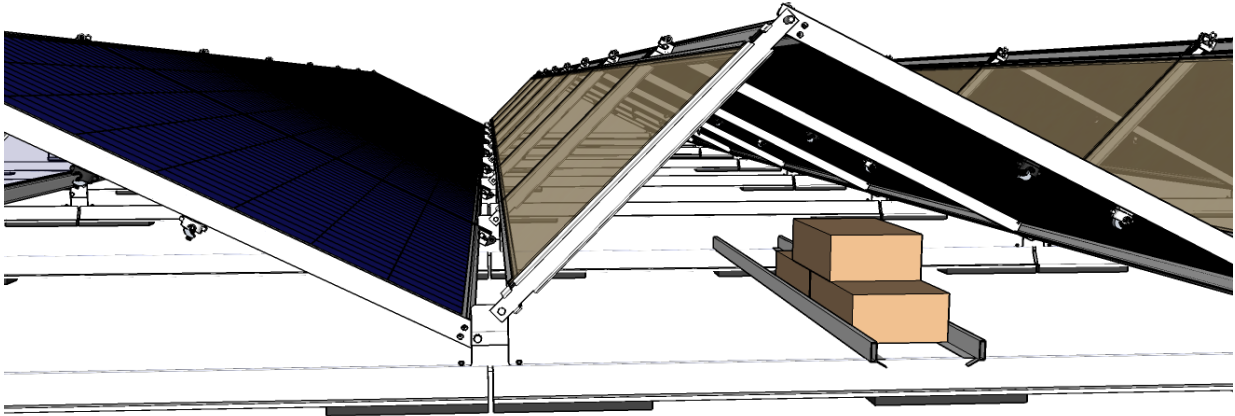


Figure 16



Caution: Always orient the longest dimension of ballast blocks east-west as shown in Figure 16. “Widening” the tray to allow north-south orientation of ballast blocks could result in blocks cracking, resulting in ballast failure.

Uneven Roof Conditions

Nominally flat roofs contain small peaks and valleys for drainage, and may also include limited amounts of sag. The RAIS® Wave system is designed to accommodate these conditions.

In the north-south direction there is some give where the rail ends are connected by the fins. To the extent possible, place rail connection points over east-west peaks and valleys.

In the east-west direction the aluminum pin connecting adjacent module-reflector peaks allows the peaks to either tip toward each other to accommodate valleys or to splay apart from each other slightly to accommodate peaks. To the extent possible, straddle north-south peaks and valleys.

Larger roof variations may require shimming some of your roof pads. You can use a 1” x 4” x 12” roof pad as a shim, or in unusual cases, cut a pad to your needed shim thickness. **Shims must be adhered to the pad they are shimming with Degaseal adhesive to ensure that wind loads are properly transferred to the roof.**

RAIS Wave DC Wiring

The design of a RAIS system does not require string computations (e.g. open-circuit voltage and short-circuit current) as does a traditional serially-connected system, as the RAIS module's output is voltage-regulated and current-limited. All modules are connected in parallel; #2 AWG copper or aluminum conductors are required. The maximum current output of the module is 9.1 A, irrespective of environmental and illumination conditions. This is a hard limit and will never be exceeded. The module's fuse rating is 80A. Thus, by using 1) the appropriate ampacity of the wire selected (dependent on the environmental exposure), 2) the maximum current output rating of the module (9.1 A) and 3) the over-current protection rating (cannot exceed 80A), the maximum number of interconnected modules may be determined using the methods outlined in the NEC (National Electric Code) or other applicable codes.



CAUTION! Do not connect RAIS modules in series! They may only be connected in parallel.



CAUTION: The maximum over-current protection rating (fuse or circuit breaker) for a group of parallel modules is 80A.

In North America, only the following DC conductor types are approved for use with the RAIS Module:

- Alcan #2AWG Compact STABILOY® AA-8030 AL Series XLPE 600 V USE-2 or RHH or RHW-2 SUN-RES, Black
- Southwire AlumaFlex™ #2AWG aluminum alloy AA8176, XLP insulated, USE-2 Black
- Southwire AlumaFlex™ #2AWG aluminum alloy AA8176, XLP insulated, USE-2 White
- Encore Wire #2AWG Copper conductor, Cross-linked polyethylene (XLPE) XHHW-2/RW90, Black

No other conductors may be used. tenKsolar can supply approved conductor, or you can purchase it locally.

The RAIS module features Insulation Displacement Split-Bolt Connectors that allow the #2 AWG conductor to be connected to the module without stripping the insulation. For the first module on a circuit (the one furthest away from the inverter), place an End Cap over the end of the approved conductor as shown in Figure 17.

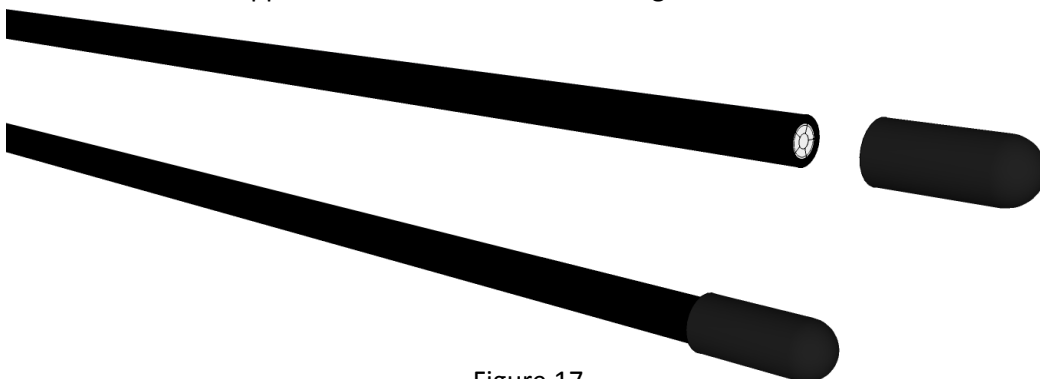


Figure 17

To connect the conductor to the first module, simply slip the conductor into the split bolt opening, leaving the End Cap one to two inches outside of the split bolt opening. **Be sure that the wire is lying flat within the boundaries of the wire channel in the plastic housing.** Using a 3/16" hex key, tighten the screw onto the conductor to 96 in-lbs (8 ft-lbs, 10.8 N-m). **Wait at least 10 seconds, then re-torque.** See Figure 18.

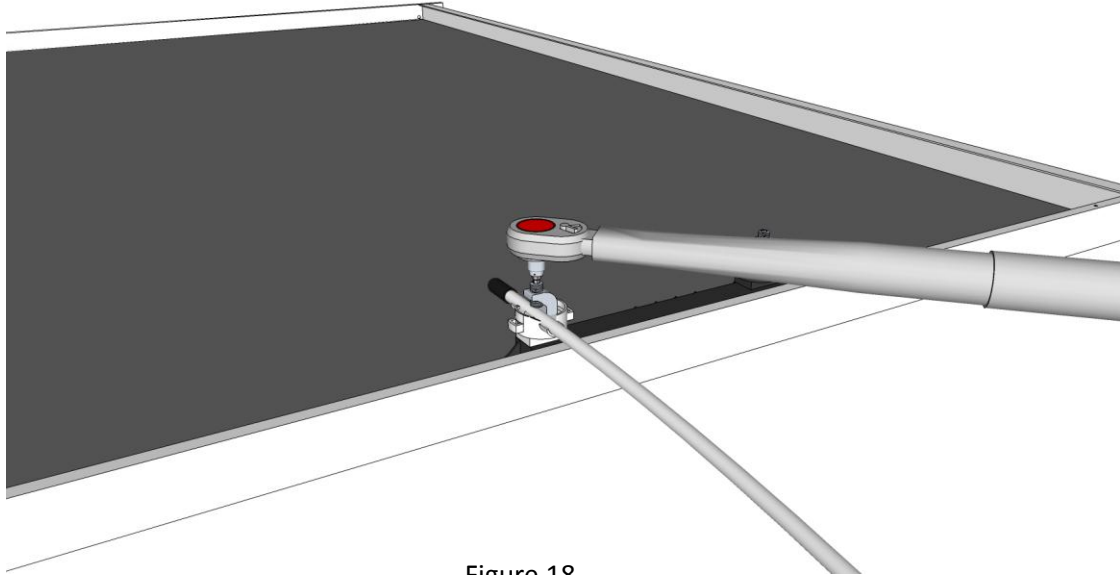


Figure 18

Repeat the above steps for the other connector. After the screws have been re-torqued to 96 in-lbs (8 ft-lbs, 10.8 N-m), install connector caps as shown in Figure 19. Note that each cap is prefilled with silicone gel. Align the cap over the split-bolt assembly and snap into place, aligning the tabs with the slots. Both positive and negative connectors must have a sealed connector cap.

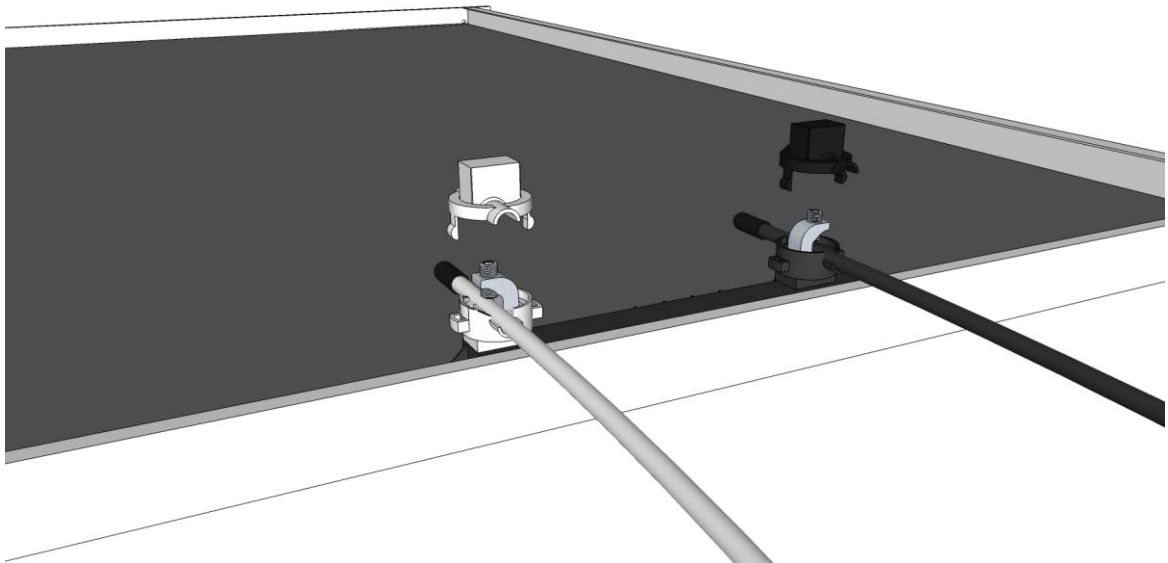


Figure 19

Connect the remaining modules on the circuit using the same method. See Figure 20. After initial torquing, be sure to wait at least 10 seconds then re-torque each connector screw to 96 in-lbs (8 ft-lbs, 10.8 N-m). Install connector caps on all connectors. Be sure to observe local codes regarding marking of conductors.

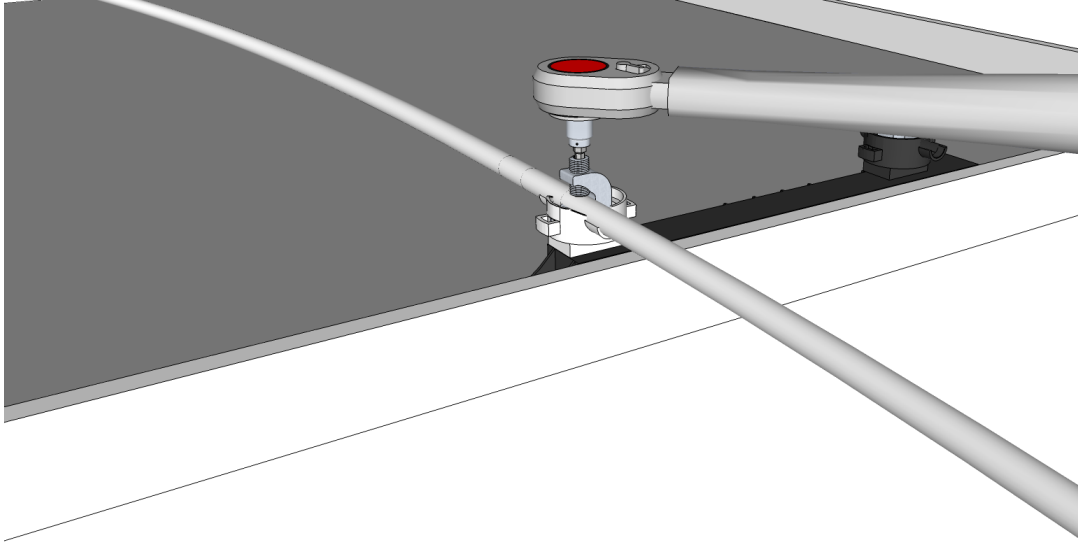


Figure 20

Note: For those modules that will be directly above an inverter (see RAIS Wave Inverter Mounting, pp 21-29), it will make installation of the inverter easier if you do not connect the conductors to those modules until after inverter installation. This will allow you to tip the module forward to work on the inverter. On these modules, it is also advised to position them so that their terminal lugs are toward the interior of the array so that the lugs do not interfere with the inverter when it is installed.

Tuck the drip loops of the DC conductors up against the back of the modules. This allows access to the tent under the modules for service or snow removal if required. The stiffness of the #2 wire will keep the drip loops in place. Tuck the end conductor runs from the modules to the inverter up tight to the inside of the outer rail and cable tie in place. This will help to ensure safe access for service.

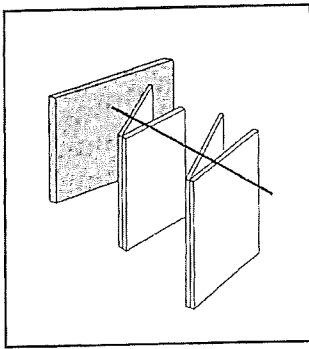
RAIS Wave Inverter Mounting

The 240/277V 5 kW inverter is typically mounted tucked under the RAIS Wave on a bracket mounted across the Wave's rails. The DC and AC disconnect boxes face into the aisle at the array's edge for immediate accessibility. The tuck-under inverter can be used only in the edge columns of arrays in order to provide ready access to the disconnects.

In its standard configuration, the inverter comes with the mounting shroud pre-assembled with the DC and AC disconnects. It comes in either a "west edge" or an "east edge" version. The following illustrations show a west edge version being installed as an example.

OPERABLE WALLS
Panelfold® Moduflex®
SERIES 400
 Paired Panels
 Model 420

PRODUCT BRIEF



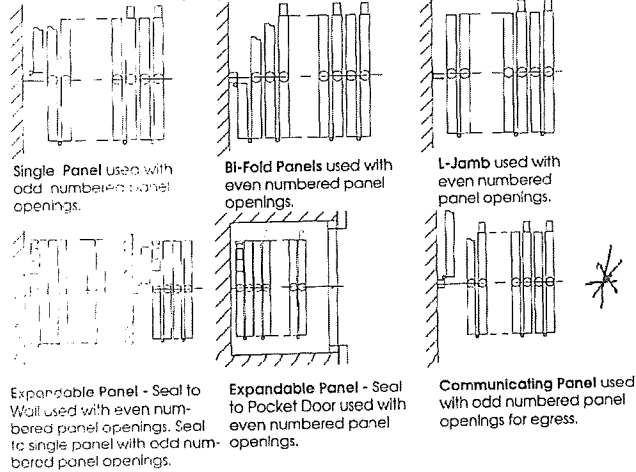
OPERATING FEATURES.
 Moduflex Model 420 panels, hinged in groups of two, each top supported by a truck of four radial type, steel ball-bearing wheels, may be conveniently manually operated and "center" stacked. Heights to 14'0" (4267).

ACOUSTICAL PERFORMANCE.
 Moduflex Series 400 operable walls have attained ratings of STC 47, STC 44, STC 37

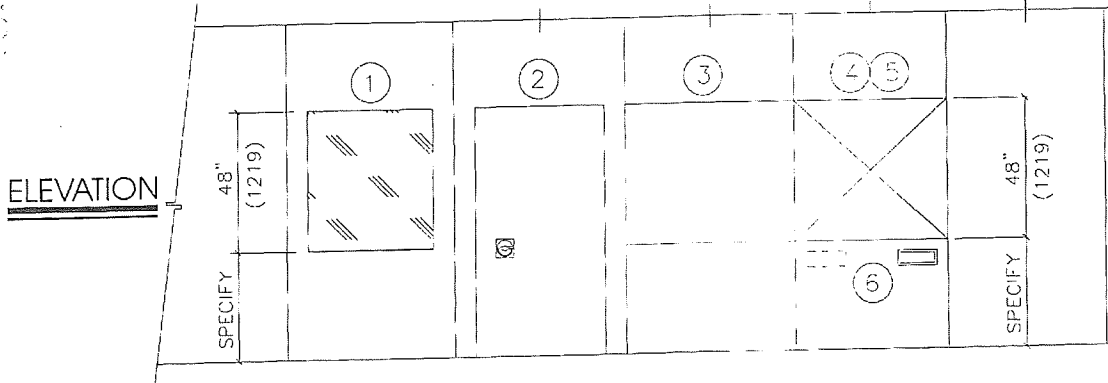
PANEL FINISHES. A full range of vinyl, panel fabric, wood veneers, plastic laminate and wall carpet as well as Customer's Own Materials is offered.

TYPES OF CLOSURES

See pages 2,3 and 4 for details.



OPTIONS AND ACCESSORIES



OPTIONS SPECIFICATIONS
 See page 6 for Product Specifications

- ① WINDOWS where indicated on the plans shall be nominally (specify: 48" (1219) high; or full panel height). Windows shall be (specify: factory glazed with 1/4" (6) clear acrylic; or unglazed, framed opening only). Windows shall be bronze trimmed.
- ② SINGLE PASS DOORS where indicated shall be nominally (specify: 3'0" (914); or 2'8" (813)) wide by (specify: 6'8" (2032); or 7'0" (2134)) high. Doors shall be manufactured of the same materials and finish as the panels and be equipped with butt-type hinges and positive latches with drop cup and ring pulls. Options: deadbolt locks; self illuminated exit signs; hydraulic door closers; A.D.A. compliant friction roller latch with flush pulls.
- ③ TACKBOARDS where indicated shall be nominally (specify: 48" (1219) high; or full panel height). Tackboards shall consist of 1/2" (6) cork surfaced with minimum 30oz per lineal yard Type II

- ④ CHALKBOARDS where indicated shall be nominally (specify: 48" (1219) high; or full panel height). Chalkboards shall be chalkable porcelain enameled steel (color to be selected from manufacturer's standards) and bronze trimmed.
- ⑤ MARKERBOARDS where indicated shall be nominally (specify: 48" (1219) high; or full panel height) and be of suitable non-porous surface porcelain enameled steel for application of write-on, wipe-off marker pens. Color of markerboards to be selected from manufacturer's standards and bronze trimmed.
- ⑥ RECESSED TRAY for storing chalk or marking pens and erasers shall be installed where indicated and shall be bronze color.

FURTHER INFORMATION. All dimensions shown in parenthesis are millimeters. Moduflex Series 400 operable walls have three inch thick panels for general purpose applications and are supplied with Autoseal™ clearance type bottom seal mechanisms that are actuated automatically by moving one panel pair against the other. Optional Manual™ available. Scale N.T.S.

Moduflex® SERIES 400 Paired Panels Model 420

PRODUCT SPECIFICATIONS: SECTION 10650 - OPERABLE WALLS

PART 1 GENERAL

(See Project Guide Specifications for Scope, Related Work, References, Submittals, Product Delivery and Acceptable Manufacturers paragraphs.)

PART 2 PRODUCTS

- 2.1 **OPERABLE WALLS** shall be manufactured by Panelfold, Inc., Miami, Florida, U.S.A. and installed by an authorized representative of the manufacturer in openings prepared by others to Moduflex® Series 400 requirements.
- 2.2 **OPERATION** shall consist of a series of manually operated flat panels, top supported. Top and bottom seals shall be as specified in paragraph 2.8.
- 2.3 **PANEL CONFIGURATION** shall be as follows for areas indicated on the plans:
- 2.3.1 **MODEL 420** shall be comprised of panels hinged in pairs, and center stacking (located in room(s)).
- 2.3.2 **Final closure** shall be effected by (specify: Single or bi-fold Panels; L-Jamb; Expandable Panels; or Jamb-Hinged Communal (ing Panels).)
- 2.4 **PANELS** shall be 3 1/2" thick and nominally 49" (1245) wide. Panel faces shall be laminated to metal frames. Panels shall have appropriate internal insulation to achieve specified STC. The tops of the panels shall be reinforced to support suspension components.
- The vertical edges of the panels shall not require trim thus minimizing the appearance of the vertical joining of the Sheer-Look® panels.
- 2.5 **PANELS** shall be factory surfaced with one of the following (colors to be selected from manufacturer's standards):
- 2.5.1 Manufacturer's standard vinyl, Class A, flame spread (specify Type I; or Type II).
- 2.5.2 Manufacturer's standard Ribtex® vertical-rib wall carpeting, Class A minimum weight 21 oz. per lineal yard, fused bonded backing.
- 2.5.3 Manufacturer's Woventex®, panel fabric, Class A, acrylic backed.
- 2.5.4 Maharam Tekwall 1000 panel fabric, Class A acrylic backed.
- 2.5.5 Genuine unfinished wood veneer shall be (specify: White Ash, Red Oak, Natural Birch, American Walnut or other species as specified).

- 2.5.6 High pressure plastic laminate, vertical grade.
- 2.5.7 Customer's Own Material to be factory applied (subject to approval by the manufacturer for suitability to standard manufacturing processes and equipment).
- 2.5.8 Unsurfaced panel skins for field finishing by others.

- 2.6 **HANGING WEIGHT** of panels shall not exceed 10 lbs./ft² (5.0).
- 2.7 **ACOUSTICAL RATING** as tested by an independent acoustical laboratory in accordance with ASTM E90-81 test procedures in a full scale 14'0" (4267) by 9'0" (2819) opening shall be (specify: STC 47, STC 44, STC 51.)
- 2.8 **SOUND SEALS** shall be as follows:
- 2.8.1 Vertical seals between panels shall consist of deep nesting, universal interlocking ESP bronze steel astragals incorporating continuous, vinyl acoustical seals. Vertical astragal vinyl seals shall be installed on the outboard edges of the panel skins in a double row with an acoustical labyrinth.
- 2.8.2 Horizontal TOP seals shall be continuous contact extruded vinyl shapes.
- 2.8.3 Horizontal BOTTOM seals shall be (specify: 1 1/2" (38) clearance-type automatically actuated by the movement of one panel-pair against the other; or 1 1/2" (38) clearance-type manually actuated at waist height on panel edges). Downward pressure of all clearance-type seal mechanisms shall assure an acoustical seal and resist panel movement.
- 2.9 **SUSPENSION SYSTEM** shall be heavy duty aluminum Type 7/8 track. Track shall be supported by (specify: adjustable steel hanger rods; or direct mount). Panels shall be supported by trolley assemblies of radial type nylon tired or carbon fiber fill tired, steel ball-bearing wheels. Trolleys shall be attached to the panels with adjustable steel pendant bolts with locks to prevent panel misalignment.
- 2.10 **PANELS** that are hinged together shall be hinged with manufacturer's standard butt-type hinges.
- 2.11 **POCKET DOORS** where indicated on the plans shall be manufactured of the same materials as the panels. Hinges shall be standard butt-type.
- PART 3 EXECUTION
(See Project Specifications Guide for Execution, Installation, Cleaning and Demonstration paragraphs).
- NOTE: The ASTM - 84 procedure Class A flame spread and other test results referenced herein are for comparison purposes only and are not intended to reflect hazards presented by this or any other materials under actual fire conditions.

For further information, or additional technical information, contact your Panelfold distributor.

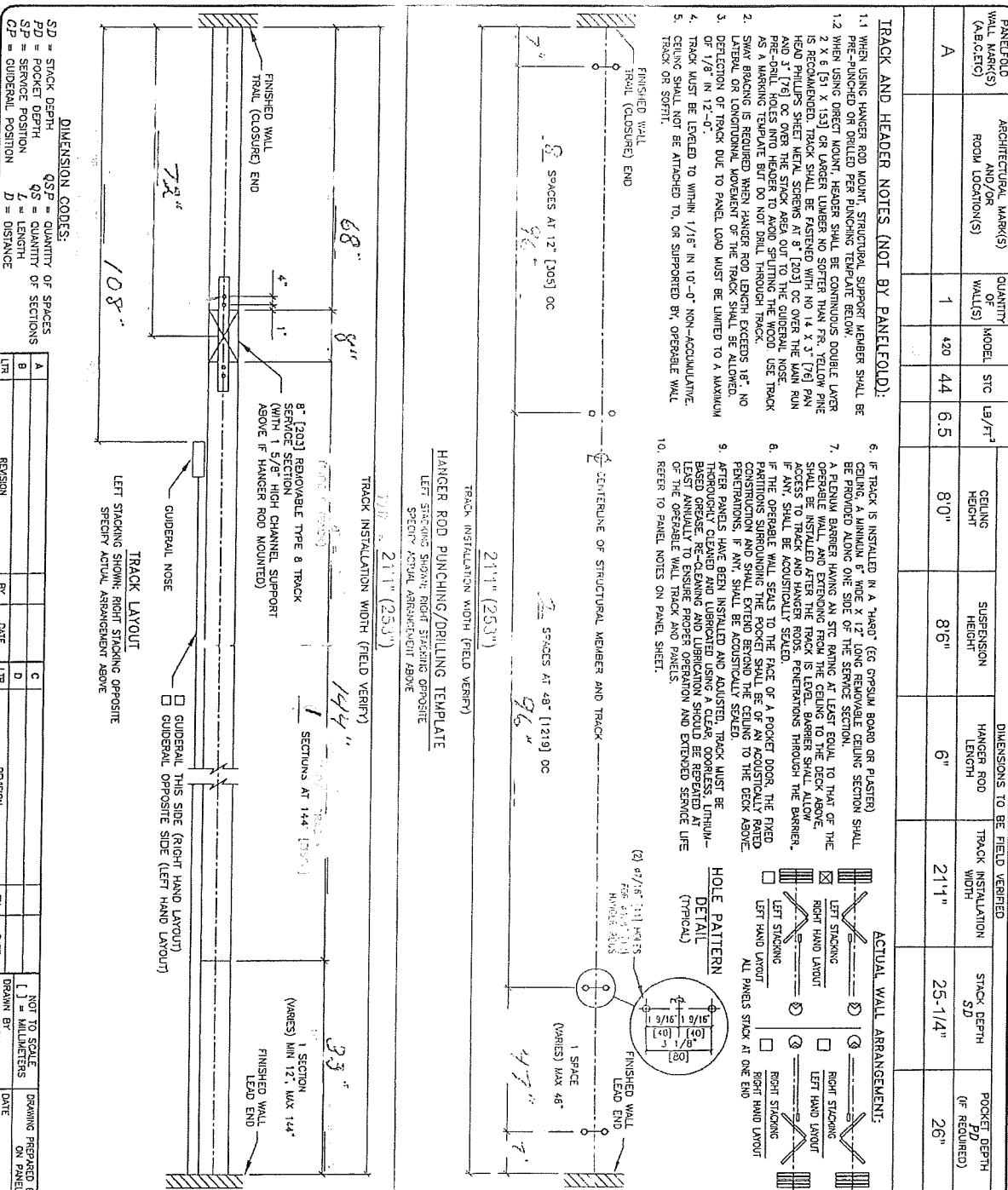
Panelfold®

FOLDING DOORS • ACOUSTICAL FOLDING PARTITIONS
OPERABLE WALLS • RELOCATABLE WALLS

Panelfold, Inc. P.O. Box 680130, Miami, Florida 33168
(305) 688-3501 • FAX: (305) 688-0185

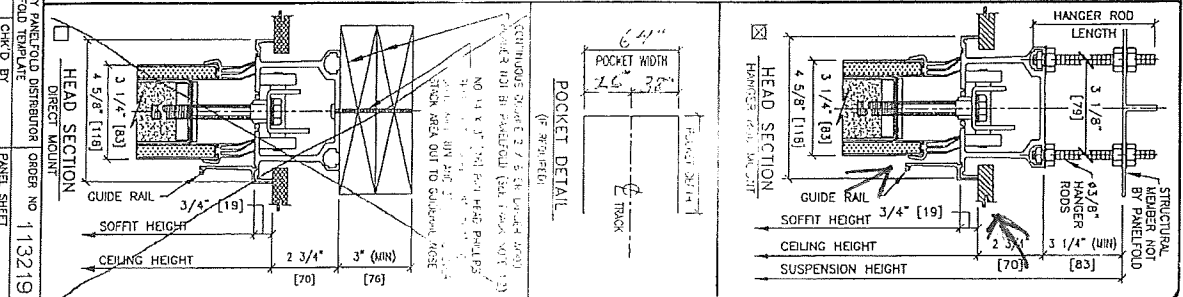
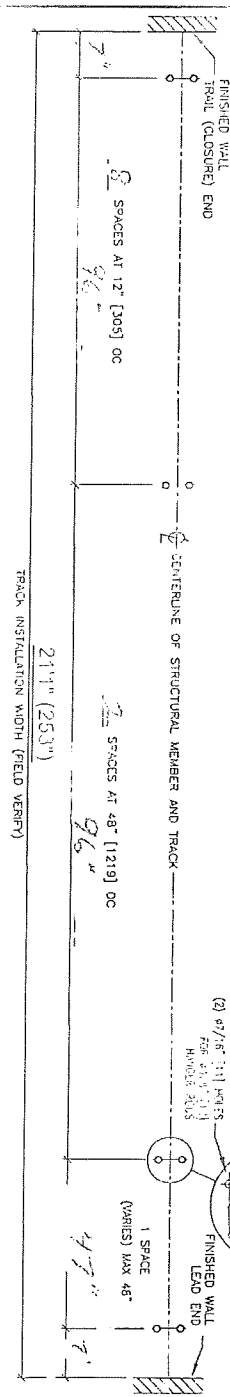
MODUFLEX® 420 - FLASH! PAIRED PANELS (SINGLE WALL)
TYPE 7/8 TRACK FROM DISTRIBUTOR'S STOCK

TEMPLATE FILE 17F42-CF - AUG 05



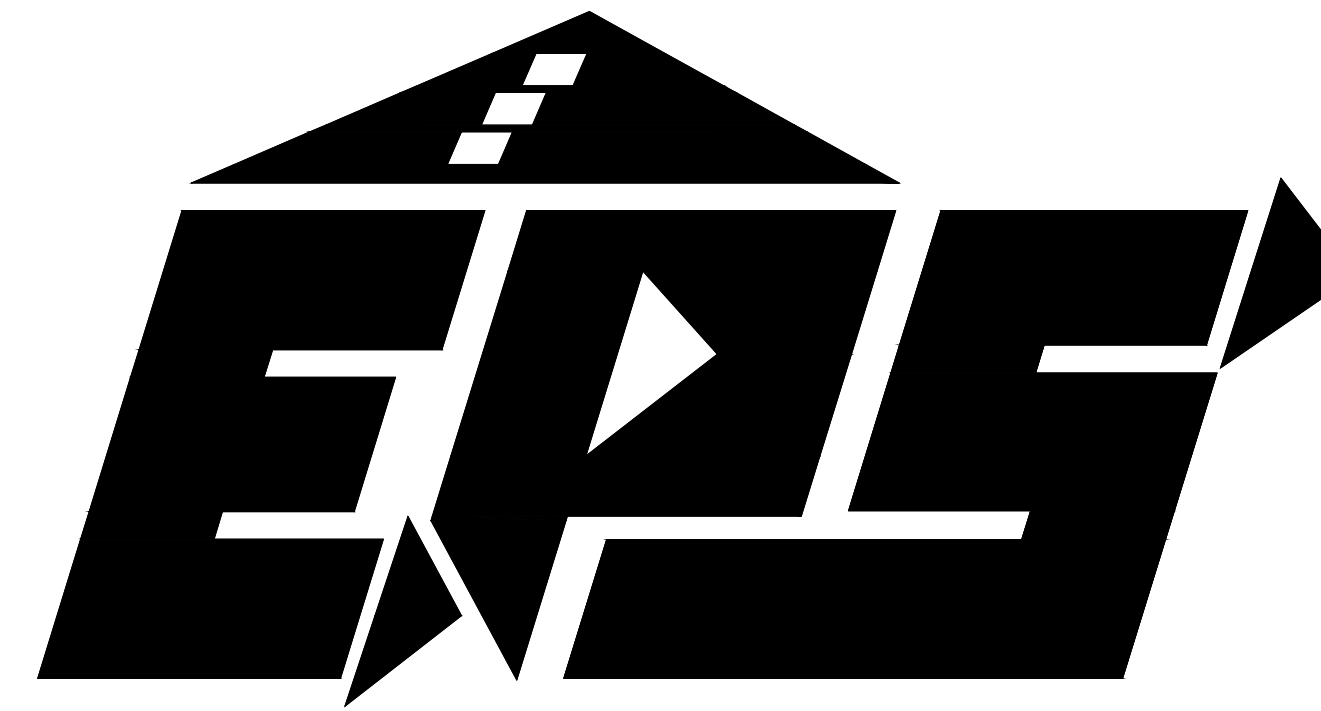
PANEL/OLD WALL MARK(S) (A,B,C,ETC)	ARCHITECTURAL MARK(S) AND/OR ROOM LOCATION(S)	QUANTITY OF WALLS	MODEL	SIC	LB/FT ²	DIMENSIONS TO BE FIELD VERIFIED					
						CEILING HEIGHT	SUSPENSION HEIGHT	HANGER ROD LENGTH	TRACK INSTALLATION WIDTH		
A		1	420	44	6.5	8'0"	8'6"	6"	21'1"	25'-1/4"	POCKET DEPTH (IF REQUIRED) PD
											26"

- TRACK AND HEADER NOTES (NOT BY PANELFOLD):**
1. WHEN USING HANGER ROD MOUNT STRUCTURAL SUPPORT MEMBER SHALL BE PRE-PUNCHED OR DRILLED PER FINISHING TRADES BEFORE INSTALLATION.
 2. WHEN USING DIRECT MOUNT, HEADER SHALL BE CONTINUOUS DOUBLE LAYER 2 X 6 (5 1/2 X 1 1/2) OR LARGER UNLESS NO SETBACK FROM FINISH FLOOR. THE HEAD PHILLIPS SHEET METAL SCREWS AT 8" (203) OC OVER THE LUMI RUN AND 3" (76) OC OVER THE STACK AREA OUT TO THE GUIDERAIL NOSE. PRE-DRILL HOLES INTO HEADER TO AVOID SPLITTING THE WOOD. USE TRACK AS A MARKING TEMPLATE BUT DO NOT DRILL THROUGH TRACK.
 3. SWAY BRACING IS REQUIRED WHEN HANGER ROD LENGTH EXCEEDS 18". NO LATERAL OR LONGITUDINAL MOVEMENT OF THE TRACK SHALL BE ALLOWED.
 4. DEFLECTION OF TRACK DUE TO PANEL LOAD MUST BE LIMITED TO A MAXIMUM OF 1/8" IN 12'-0".
 5. TRACK MUST BE LEVELLED TO WITHIN 1/16" IN 10'-0" NON-ACCUMULATIVE. CEILING SHALL NOT BE ATTACHED TO, OR SUPPORTED BY, OPERABLE WALL TRACK OR SOFFIT.
 6. IF TRACK IS INSTALLED IN A "HEAD" (EG Gypsum BOARD OR PLASTER) BEING A MINIMUM OF 1/2" LONG REMOVABLE CEILING SECTION SHALL BE PROVIDED ALONG ONE SIDE OF THE SERVICE SECTION.
 7. A FLEXIBLE BARRIER HAVING AN STC RATING AT LEAST EQUAL TO THAT OF THE TRACK SHALL BE INSTALLED EXTENDING FROM THE CEILING TO THE DECK ABOVE ACCESS TO TRACK AND HANGER RODS. PENETRATIONS THROUGH THE BARRIER, IF ANY, SHALL BE ACoustICALLY SEALED.
 8. IF THE OPERABLE WALL SEALS TO THE FACE OF A POCKET DOOR, THE FIXED PARTITIONS SURROUNDING THE POCKET SHALL BE OF AN ACoustICALLY RATED CONSTRUCTION AND SHALL EXTEND BEYOND THE CEILING TO THE DECK ABOVE. PENETRATIONS, IF ANY, SHALL BE ACoustICALLY SEALED.
 9. AFTER PARTS HAVE BEEN INSTALLED AND ADJUSTED, TRACK MUST BE PROPERLY CLEANED AND LUBRICATED USING A CLEAR, DRYLUBE, LITHIUM-BASED OIL. LUBRICATION SHOULD BE REPEATED AT LEAST ANNUALLY TO ENSURE PROPER OPERATION AND EXTENDED SERVICE LIFE OF THE OPERABLE WALL TRACK AND PANELS.
 10. REFER TO PANEL NOTES ON PANEL SHEET.



PANELFOLD DISTRIBUTOR Husmann & Assoc. ADDRESS 4015 Roland Blvd. CITY STATE ZIP St. Louis MO 63121 PHONE FAX 314-385-4401 314-571-9794	DISTRIBUTOR P.O. NUMBER 629 13-A DISTRIBUTOR APPROVAL ARCHITECT APPROVAL CONTRACTOR APPROVAL	PROJECT NAME Delta Sigma Phi Solar House CITY STATE ZIP Rolla MO 65409 ARCHITECT CONTRACTOR Solar House Team	Moduflex® Operable Walls by Panelfold® Mfg: PO Box 680130, Miami, FL 33168 Phone: 305-688-3501 Fax: 305-688-0105 www.panelfold.com
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AN EMPLOYEE-OWNED COMPANY

ENERGY PANEL STRUCTURES
 102 EAST INDUSTRIAL PARK
 GRAETTINGER, IA 51342
 PHONE: 712/859-3219
 FAX: 712/859-3275
 WWW.EPSBUILDINGS.COM

DESIGN LOADS

CODE BODY: IRC 2009
 GROUND SNOW LOAD: 20 PSF
 OCCUPANCY CATEGORY: II
 Ct:: 1.1
 Ce: 1.0
 Is: 1.0
 Cs: 1.0
 ROOF LIVE LOAD: 20 PSF
 ROOF DEAD LOAD: 18 PSF
 EXPOSURE: C
 lw: 1.0

SHEET DRAWING INDEX

S0 TITLE SHEET
 S1.0 PLANVIEW
 S2.0 BUILDING SECTIONS
 S3.0 BUILDING DETAILS
 S4.0 PANEL ELEVATIONS
 S4.1 ROOF PANEL LAYOUT
 C1.0 CONSTRUCTION DETAILS



PROJECT NUMBER:
2013/HOUSE/89539
 CUSTOMER SERVICE:
JB
 DRAWN BY:
MAB
 REVIEWED BY:
RGW

DATE:
4/1/2013
 REVISIONS:
4/10/13
4/11/13
-

GENERAL INFORMATION

DEALER:
BBL

 PERRYVILLE, MO
 PHONE: (573) 547-8363
 FAX: --

OWNER:
MISSOURI S&T
 1051 NORTH BISHOP AVE
 ROLLA, MO

BUILDING TYPE:
SOLID CORE
 BUILDING USAGE:
RESIDENTIAL

BUILDING DIMENSIONS:
47'-3"
22'-3"
 AREA:
988 SQ. FT.

- * SITEWORK: THE SITE SHALL BE GRADED TO PROVIDE DRAINAGE AWAY FROM THE BUILDING.
- * WOOD FRAMING: ALL WOOD CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE PROVISIONS OF THE 2005 EDITION OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. UNLESS NOTED OTHERWISE ALL FRAMING LUMBER SHALL BE SPF#2 GRADE.
- * SHORING AND BRACING: CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING.

- * THIS SET OF PLANS ARE INTENDED TO BE USED BY CONTRACTORS WITH BUILDING CONSTRUCTION KNOWLEDGE.
- * ENERGY PANEL STRUCTURES CAN NOT BE HELD RESPONSIBLE FOR MISUSE OR MISINTERPRETATION OF INFORMATION INCLUDED IN THESE DRAWINGS, OR THE USE OF THIS SET OF PLANS BY PEOPLE WITHOUT BUILDING CONSTRUCTION KNOWLEDGE.
- * SIP PANEL WALL CONSTRUCTION BUILDINGS ARE DESIGNED FOR MINIMAL AIR INFILTRATION. IT IS RECOMMENDED THAT GENERAL CONTRACTOR/OWNER WORKS IN CONJUNCTION WITH AN HVAC PROFESSIONAL TO DESIGN A SYSTEM TO INSURE AIR QUALITY AND MOISTURE CONTROL. AIR TO AIR EXCHANGERS ARE RECOMMENDED IN SUCH TYPE STRUCTURES.
- * RESPONSIBILITY OF THIS SET OF PLANS IS LIMITED TO THE BUILDING DESIGN SHOWN ON THE PLANS. BUILDING DESIGN IS BASED ON NUMBER, SIZE AND LOCATION OF OPENINGS SHOWN ON THE PLANS. NO RESPONSIBILITY IS ASSUMED FOR ADDITIONAL OPENINGS NOT SHOWN ON THE PLANS OR CHANGES IN THE LOCATION OR SIZE OF OPENINGS.
- * ALL DOOR AND WINDOW OPENINGS SHOWN ON THIS SET OF PLANS ARE THE ACTUAL SIZE OF THE OPENING PROVIDED. IT IS THE GENERAL CONTRACTOR/OWNER'S RESPONSIBILITY TO VERIFY ALL LOCATIONS AND SIZES OF OPENINGS PRIOR TO CONSTRUCTION.
- * EPS WALL PANELS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY CONCRETE FOUNDATION WALLS. CONCRETE WALLS TO BE DESIGNED TO ABSORB ALL LOADS IMPOSED BY EPS STRUCTURE AND 100% OF ALL MATERIAL/BACKFILL/ETC (IF ANY) STORED AGAINST THEM. CONCRETE WALL TO IMPOSE NO HORIZONTAL LOAD TO EPS STRUCTURE.
- * THIS BUILDING IS DESIGNED USING THE ROOF AS A DIAPHRAGM(DEEP THIN BEAM) TO TRANSFER SIDEWALL AND ROOF WIND LOADS TO THE ENDWALL SHEAR WALLS SHOWN. SIP PANELS AND/OR SHEATHING IS AN INTEGRAL PART OF THE BUILDING STRUCTURE AND ANY FUTURE FIELD MODIFICATIONS MADE MAY BE DETRIMENTAL TO THE BUILDING'S STRUCTURAL PERFORMANCE.
- * THIS IS A STRUCTURAL FRAMING PLAN AND IS TO BE USED FOR THAT PURPOSE ONLY, CODES REGARDING FIRE SAFTEY, PERSONAL SAFTEY & INJURY ARE NOT ADDRESSED IN THIS SET OF PLANS AND ARE THE RESPONSIBILITY OF THE CONTRACTOR/OWNER.

- * TO MINIMIZE THE POSSIBILITY OF FASTENER POPPING AND CRACKING IN AREAS ADJACENT TO A WALL AND CEILING INTERSECTION, A FLOATING GYPSUM CORNER ANGLE METHOD OF APPLICATION SHOULD BE USED. PLEASE REFER TO THE GYPSUM ASSOCIATION'S SPECIFICATIONS FOR THE APPLICATION AND FINISHING OF GYPSUM PANEL PRODUCTS.
- * THERE MAY BE SOME "BOWING" OF EXTERIOR STRUCTURAL INSULATED PANELS DUE TO A TEMPERATURE AND MOISTURE DIFFERENTIAL BETWEEN INTERIOR AND EXTERIOR OSB SKINS. WHEN THE EXTERIOR SKIN EXPERIENCES COLD TEMPERATURE, ITS MOISTURE CONTENT RISES, WHICH CAUSES THE EXTERIOR SKIN TO EXPAND. THIS MAY CAUSE THE PANEL TO BOW OUT, TO MINIMIZE THE EFFECT, YOU MAY WANT TO CONSIDER:
 A.) HIDE THE "BOW" BY USING FLOATING CORNERS ON THE INTERIOR GYPSUM BOARD.
 B.) MECHANICALLY FASTENING ONE STRUCTURAL INSULATED PANEL TO THE CROSS WALLS. THE CROSS WALL WILL HAVE TO BE DESIGNED TO RESIST FORCES OF THE BOW, AS WILL THE MECHANICAL FASTENERS.
- * INTERIOR FINISH MUST BE COVERED WITH A MINIMUM OF ½" TYPE X SHEETROCK TO PROVIDE AN ADEQUATE THERMAL BARRIER
- NOTE: WHEN APPLYING ICE & WATER OR "PEEL & SEAL" FOLLOW THE FOLLOWING INSTRUCTIONS TO PREVENT AIR INFILTRATION
 1. BE SURE TEMPERATURE OF MATERIALS AND AMBIENT TEMPERATURE ARE BOTH ABOVE 50° F.
 2. THOROUGHLY CLEAN SURFACES.
 3. APPLY ACETONE(BY OTHERS) TO METAL SURFACE TO CLEAN.
 4. ALLOW ACETONE TO FLASH OFF.
 5. APPLY "PEEL & SEAL" OR ICE & WATER, BE SURE TO APPLY PRESSURE THROUGH OUT MATERIAL TO ENSURE 100% CONTACT.
- * THIS SET OF PLANS ARE PANEL SHOP PLANS ONLY. OVERALL STRUCTURAL DESIGN OF THIS BUILDING IS BY OTHERS, AND NOT THE RESPONSIBILITY OF ENERGY PANEL STRUCTURES.

DEALER:
BBL
 PROJECT TITLE:
MISSOURI S&T
SOLID CORE BUILDING PACKAGE

SHEET TITLE:
TITLE SHEET

PROJECT STATUS:

SHEET:
S0

PROJECT NUMBER:
 2013/HOUSE/89539

CUSTOMER SERVICE:
 JB
 DRAWN BY:
 MAB
 REVIEWED BY:
 RGW

DATE:
 4/1/2013

REVISIONS:
 4/10/13
 4/11/13
 -

DEALER:
 BBL
 PROJECT TITLE:
 MISSOURI S&T
 SOLID CORE BUILDING PACKAGE

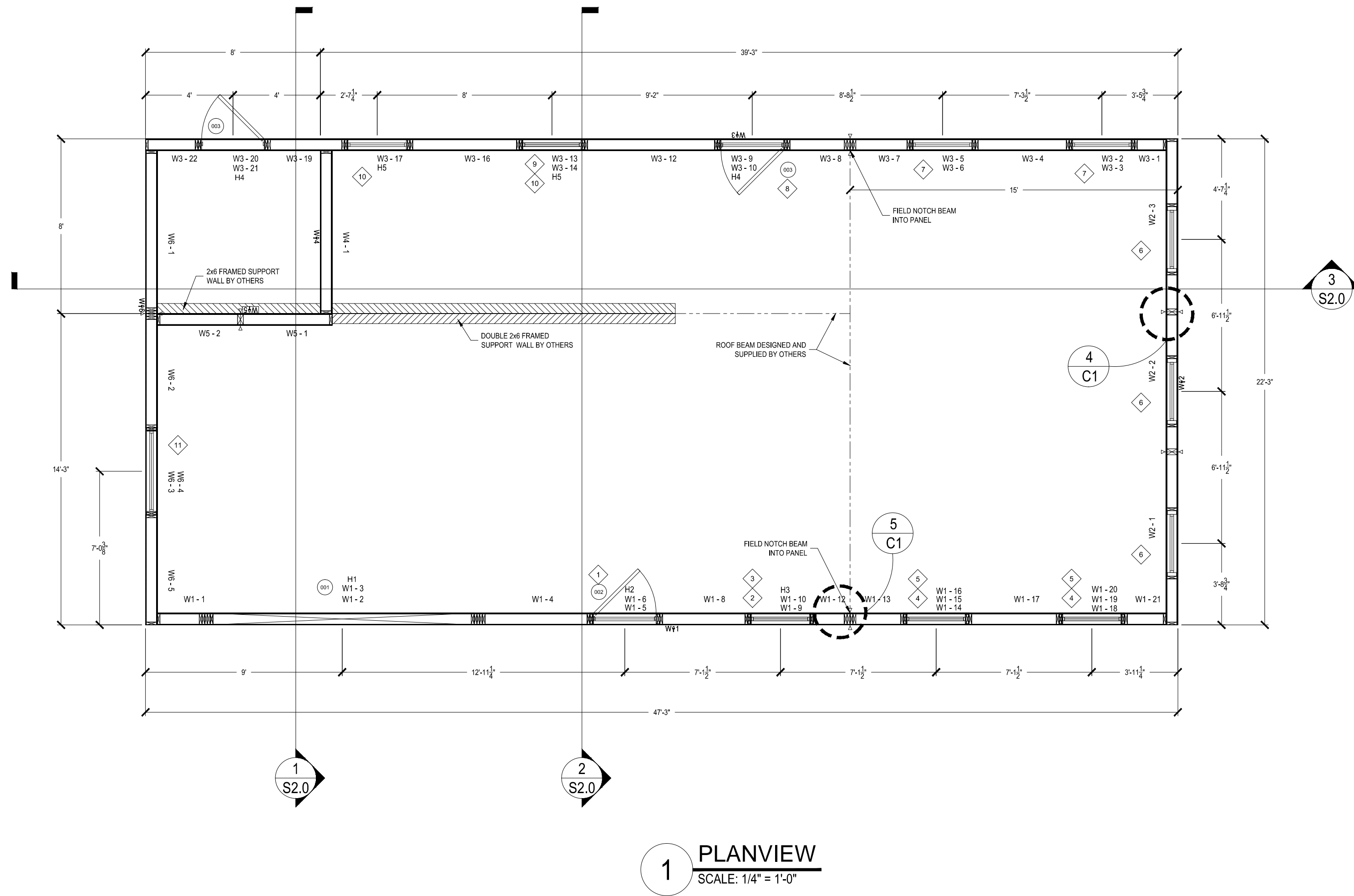
PLAN VIEW

SHEET TITLE:

PROJECT STATUS:

SHEET:

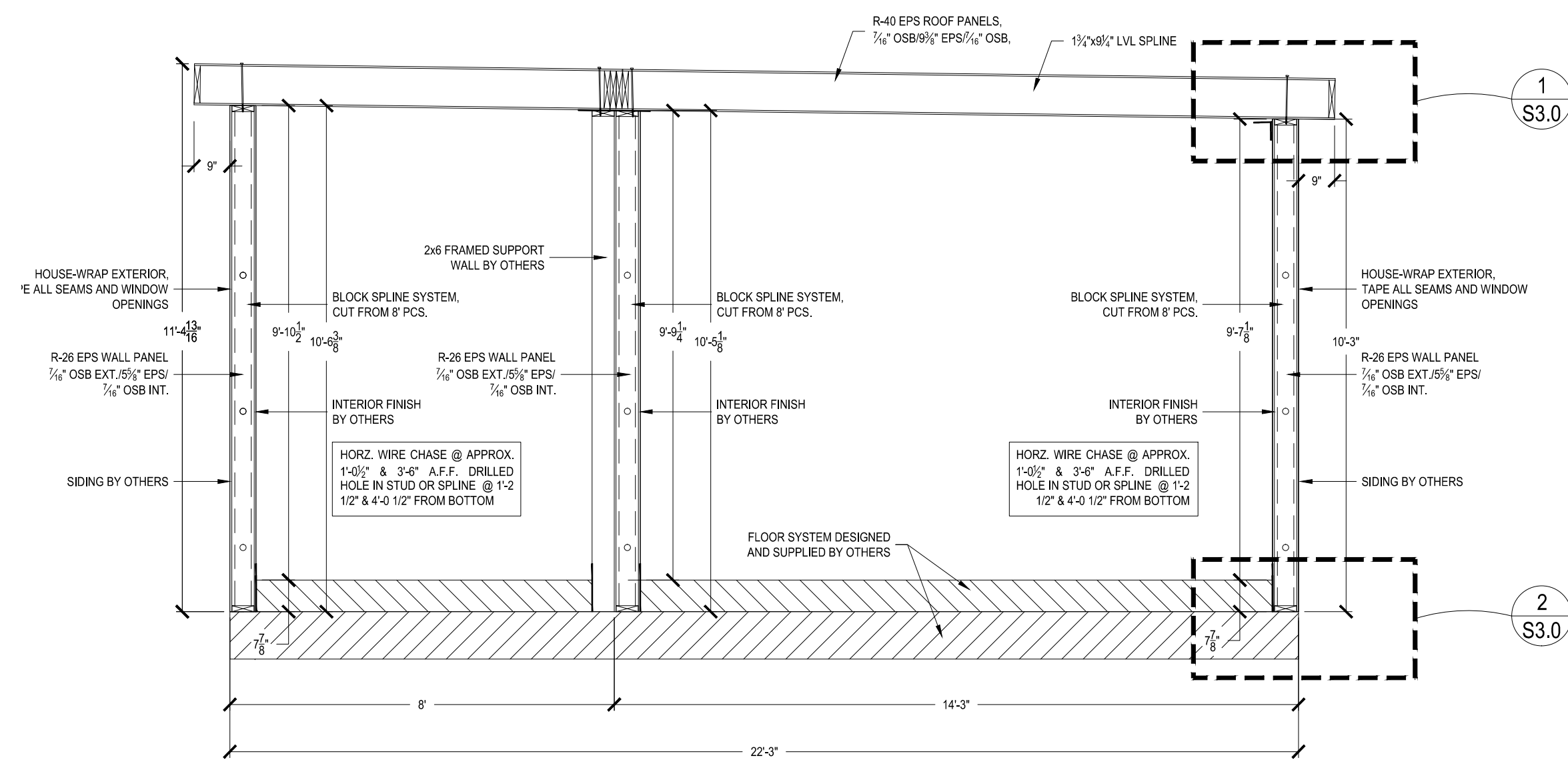
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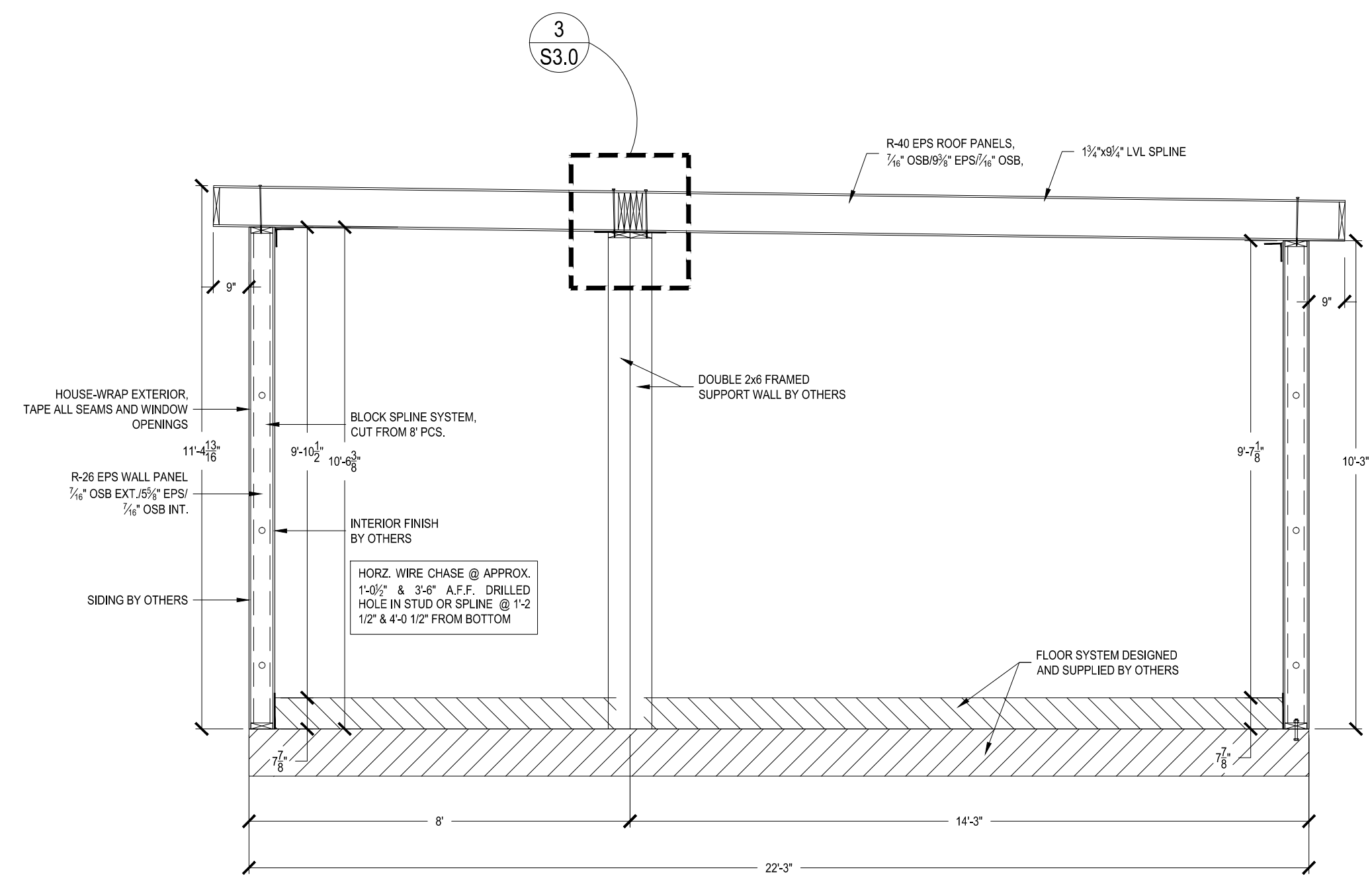
1 PLANVIEW
 SCALE: 1/4" = 1'-0"

DOOR OPENING SCHEDULE							
Number	Quantity	Rough Width	Rough Height	Head Height	Header	Bearing Studs (Each Side)	Full Studs (Each Side)
001	1	12'-1"	6'-9"	7'-4 7/8"	2-PLY 1 3/4"x11-1/4" LVL w/ 2" FOAM CORE	2	2
002	1	3'-2 3/8"	6'-10 1/2"	7'-6 3/8"	2-PLY 1 3/4"x7-1/4" LVL w/ 2" FOAM CORE	1	0
003	2	3'-2 3/8"	6'-10 1/2"	7'-6 3/8"	2-PLY 1 3/4"x11-1/4" LVL (RIPPED TO 10 3/4") w/ 2" FOAM CORE	1	0

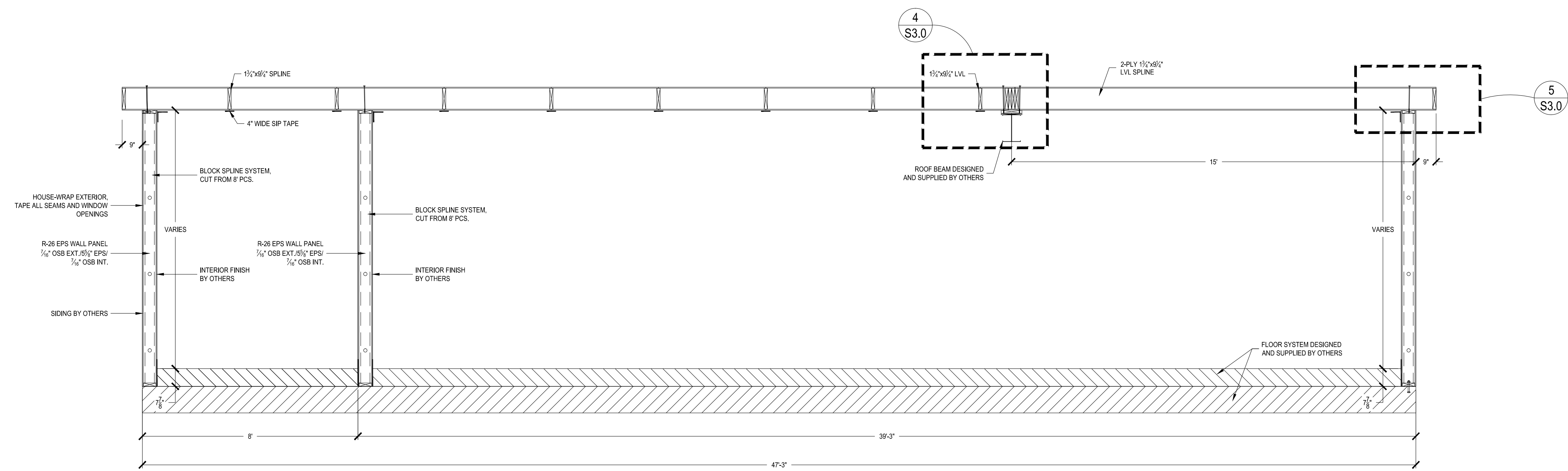
WINDOW SCHEDULE							
Number	Quantity	Rough Width	Rough Height	Head Height	Header	Bearing Studs (Each Side)	Full Studs (Each Side)
1	1	3'-2 3/8"	1'-2 1/2"	9'-6 1/8"	2-PLY 1 3/4"x7-1/4" LVL w/ 2" FOAM CORE	1	0
2	1	3'-0"	4'-11 1/2"	6'-10 1/4"	2-PLY 1 3/4"x7-1/4" LVL w/ 2" FOAM CORE	1	0
3	1	3'-0"	1'-2 1/2"	9'-6 1/8"	2-PLY 1 3/4"x7-1/4" LVL w/ 2" FOAM CORE	1	0
4	2	3'-0"	4'-11 1/2"	6'-10 1/4"	SIP HEADER	0	1
5	2	3'-0"	1'-2 1/2"	9'-6 1/8"	SIP HEADER	0	1
6	3	3'-0"	1'-2 1/2"	9'-6 1/8"	2x6 WRAPPED OPENING	0	0
7	2	3'-0"	1'-6"	9'-6 1/8"	SIP HEADER	0	1
8	1	3'-2 3/8"	1'-6"	9'-6 1/8"	2-PLY 1 3/4"x11-1/4" LVL (RIPPED TO 10 3/4") w/ 2" FOAM CORE	1	0
9	1	3'-0"	3'-0"	7'-4 7/8"	2-PLY 1 3/4"x11-1/4" LVL (RIPPED TO 10 3/4") w/ 2" FOAM CORE	1	0
10	2	3'-0"	1'-6"	9'-6 1/8"	2-PLY 1 3/4"x11-1/4" LVL (RIPPED TO 10 3/4") w/ 2" FOAM CORE	1	0
11	1	4'-0"	3'-0"	7'-4 7/8"	SIP HEADER	0	0



1 CROSS SECTION
SCALE: 3/8" = 1'-0"



2 CROSS SECTION
SCALE: 3/8" = 1'-0"



3 CROSS SECTION
SCALE: 3/8" = 1'-0"

DEALER: BBL
PROJECT TITLE: MISSOURI S&T
SOLID CORE BUILDING PACKAGE

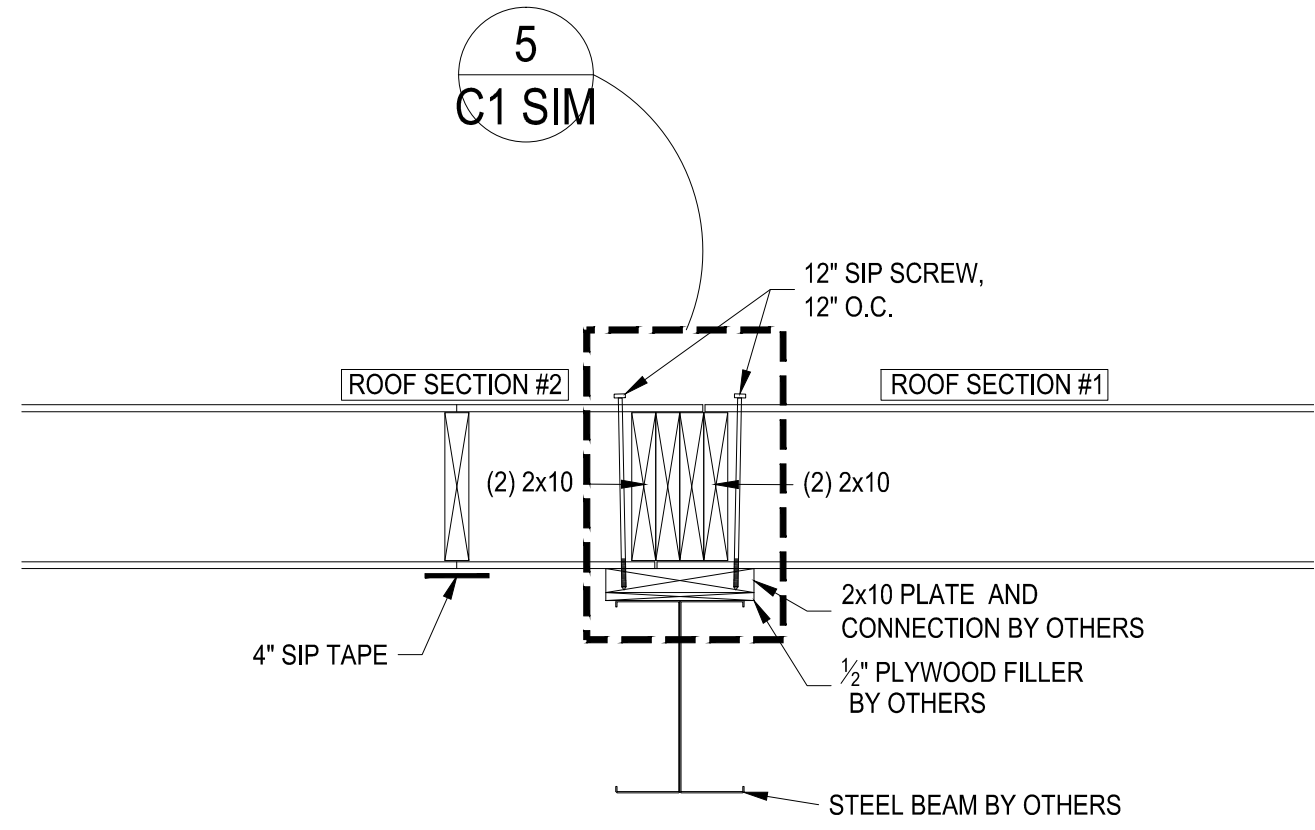
BUILDING SECTIONS

SHEET TITLE:

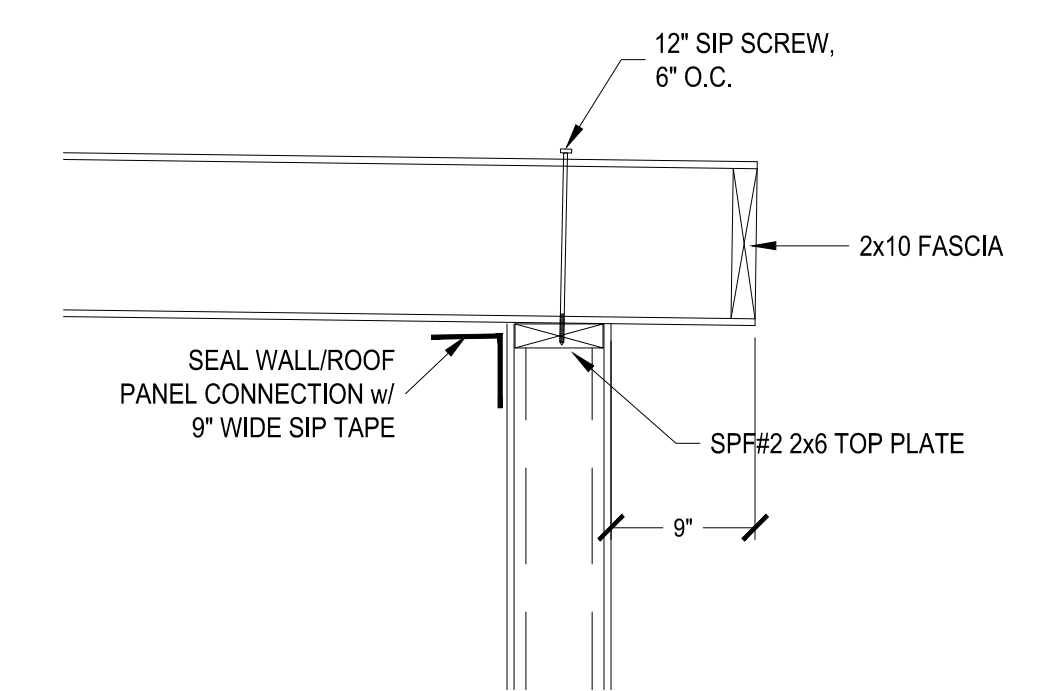
PROJECT STATUS:

SHEET:

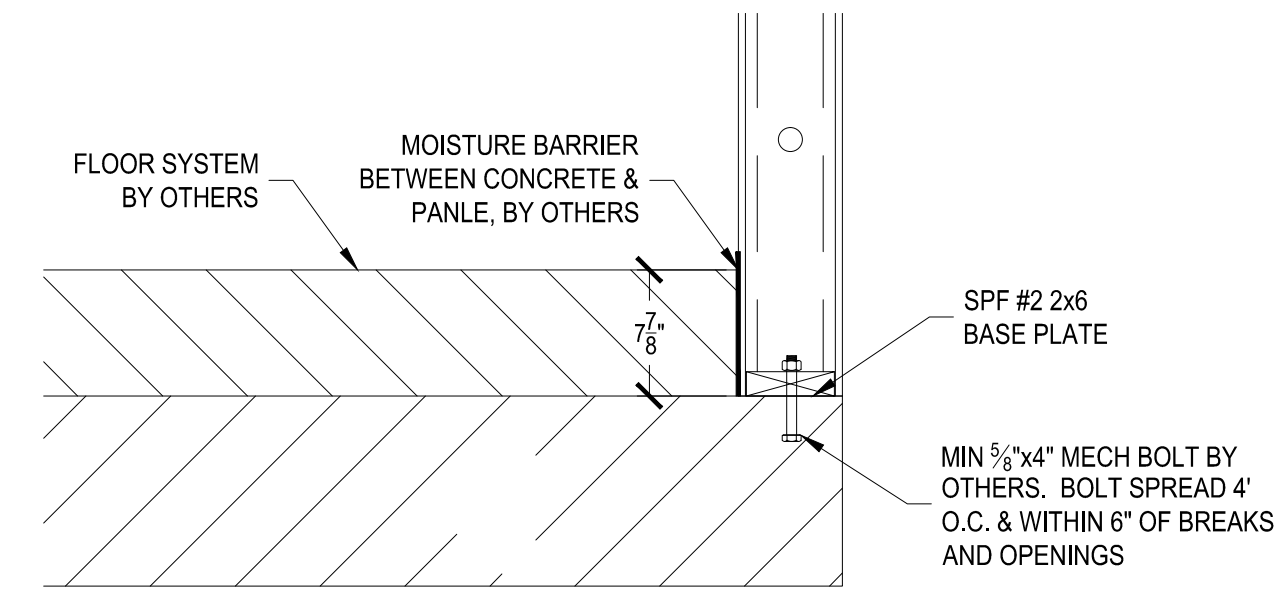
S2.0



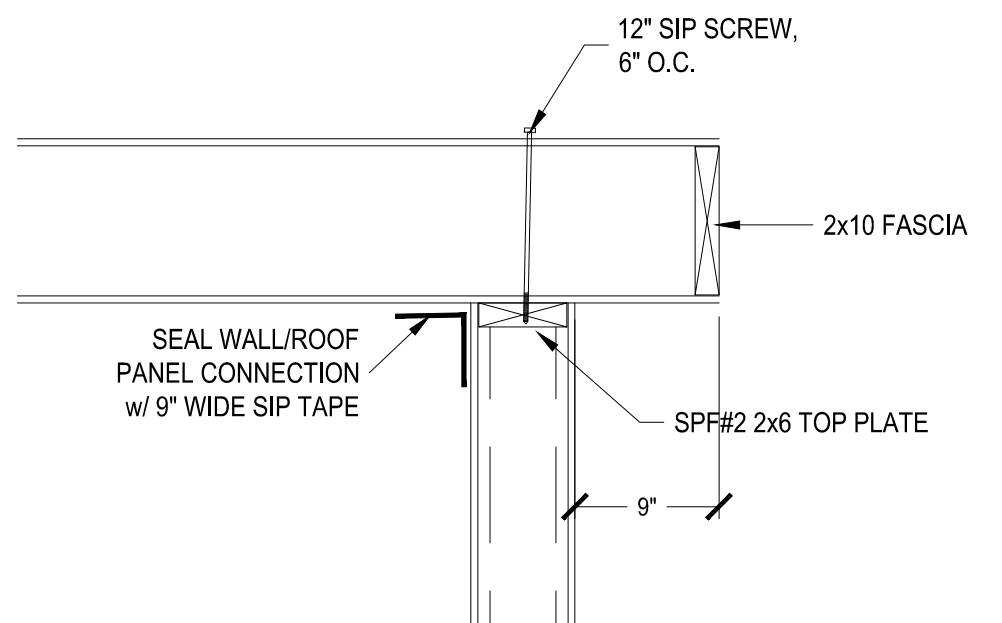
4 ROOF PANEL SECTION JOINT
SCALE: 1"=1'-0"



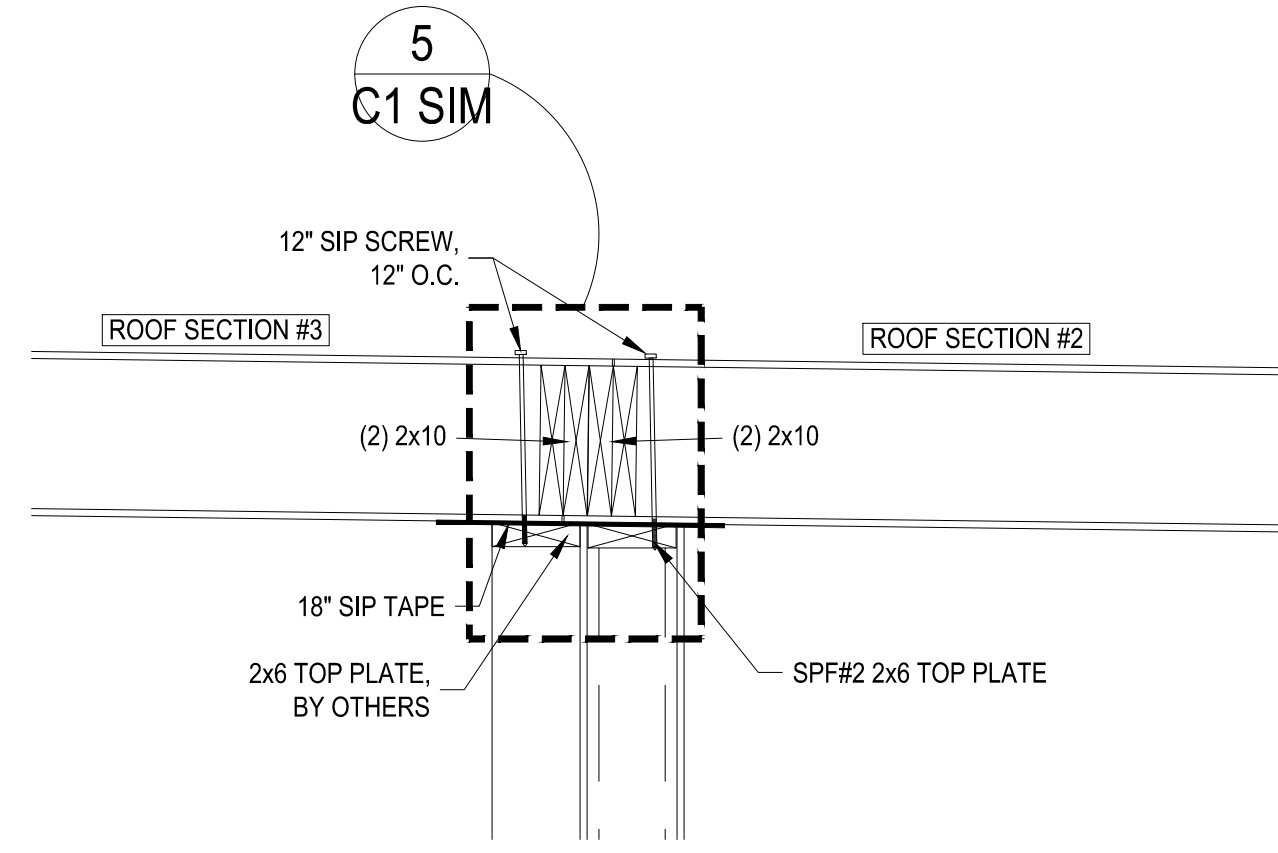
1 EAVE DETAIL
SCALE: 1"=1'-0"



2 BASE DETAIL
SCALE: 1"=1'-0"



5 RAKE DETAIL
SCALE: 1"=1'-0"



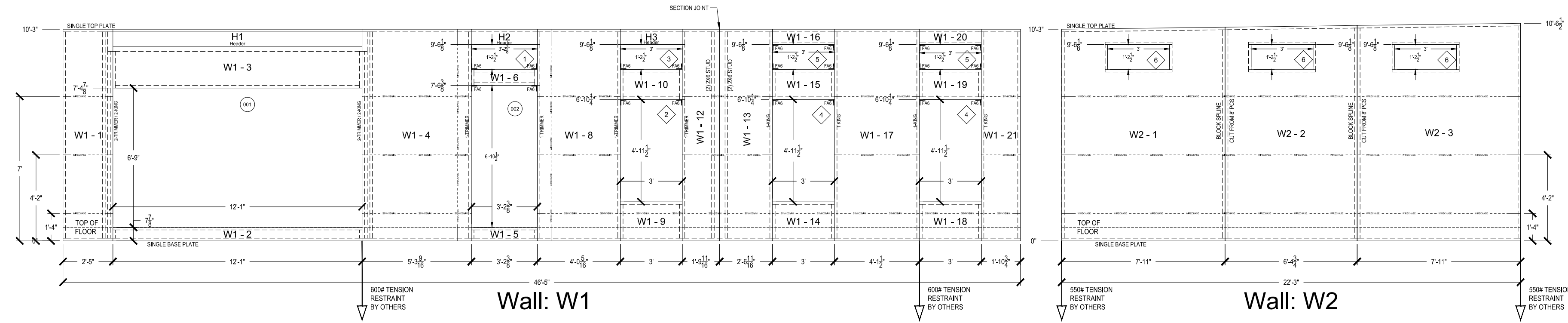
3 ROOF PANEL SECTION JOINT
SCALE: 1"=1'-0"

PROJECT NUMBER:
 2013/HOUSE/89539

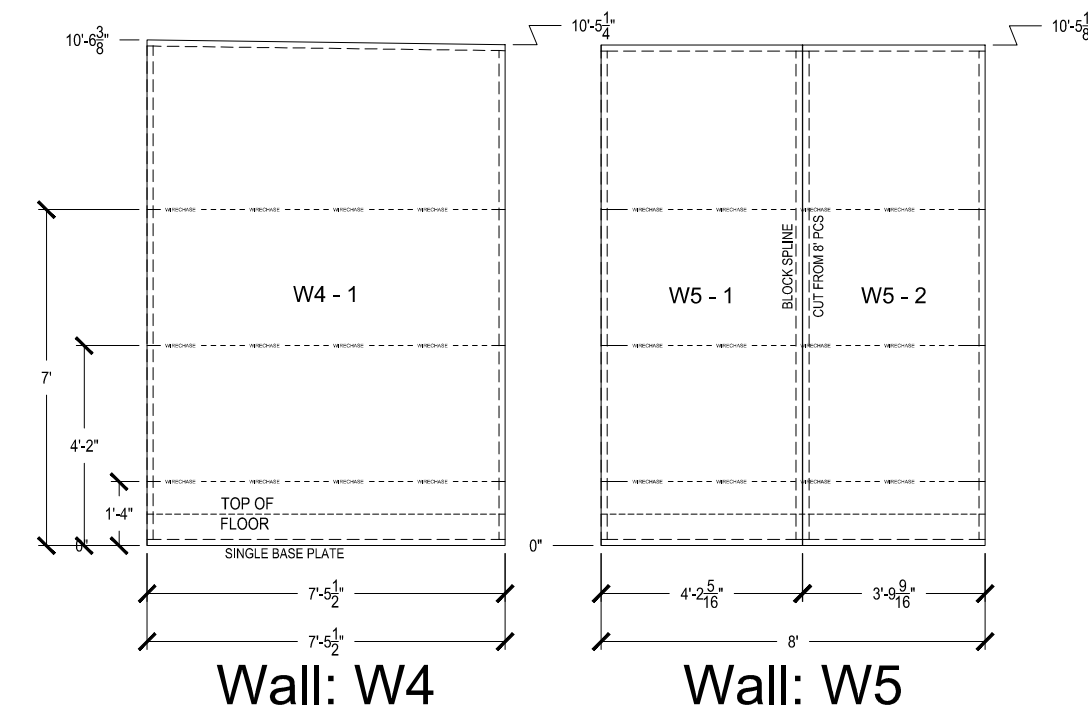
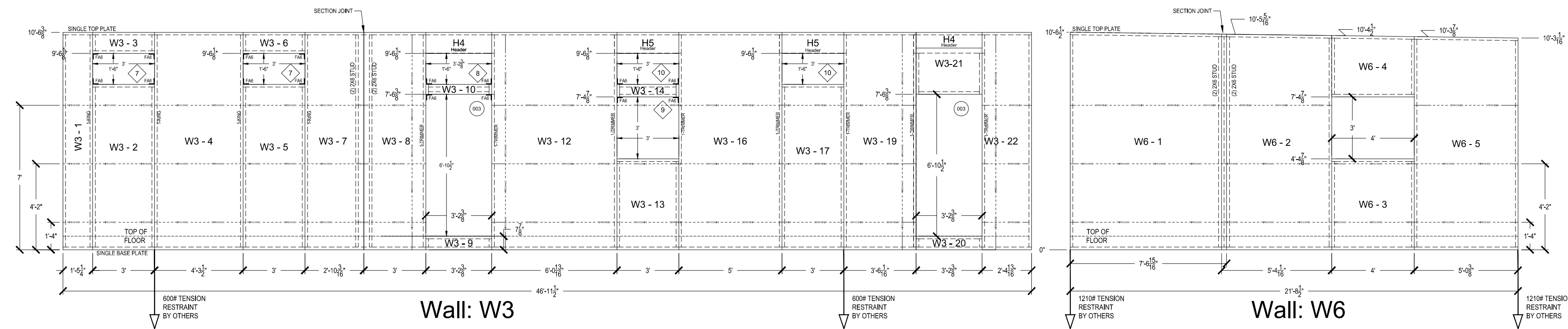
CUSTOMER SERVICE:
 JB
 DRAWN BY:
 MAB
 REVIEWED BY:
 RGW

DATE:
 4/1/2013

REVISIONS:
 4/10/13
 4/11/13
 -



1 WALL PANEL ELEVATIONS
 SCALE: 1/4" = 1'-0"



DEALER:
 BBL
 PROJECT TITLE:
 MISSOURI S&T
 SOLID CORE BUILDING PACKAGE

PANEL ELEVATIONS

SHEET TITLE:
 PROJECT STATUS:

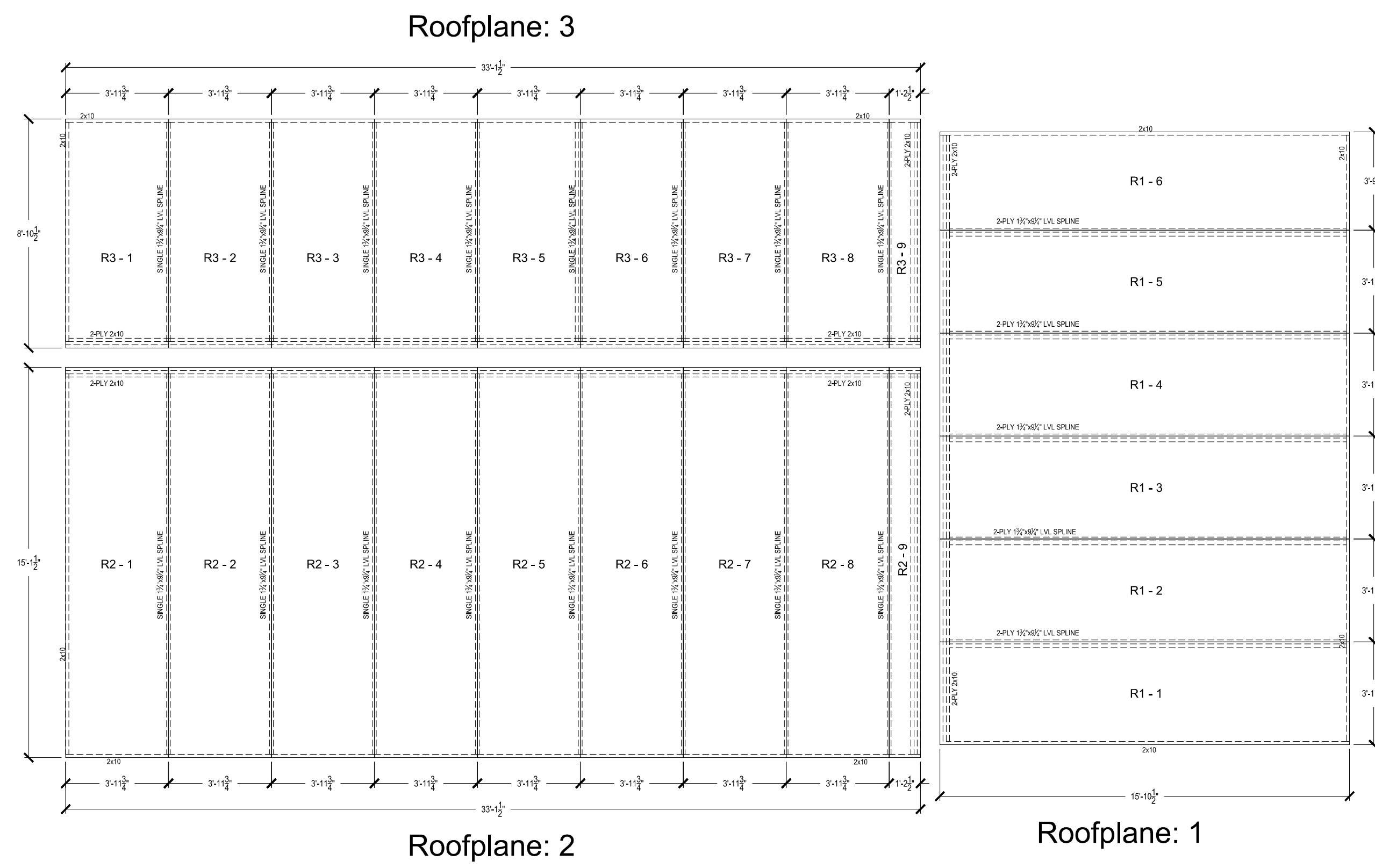
SHEET:
S4.0

PROJECT NUMBER:
 2013/HOUSE/89539

CUSTOMER SERVICE:
 JB
 DRAWN BY:
 MAB
 REVIEWED BY:
 RGW

DATE:
 4/1/2013

REVISIONS:
 4/10/13
 4/11/13
 -



1 ROOF PANEL LAYOUT
 SCALE: 1/4" = 1'-0"

DEALER:
 BBL
 PROJECT TITLE:
 MISSOURI S&T
 SOLID CORE BUILDING PACKAGE

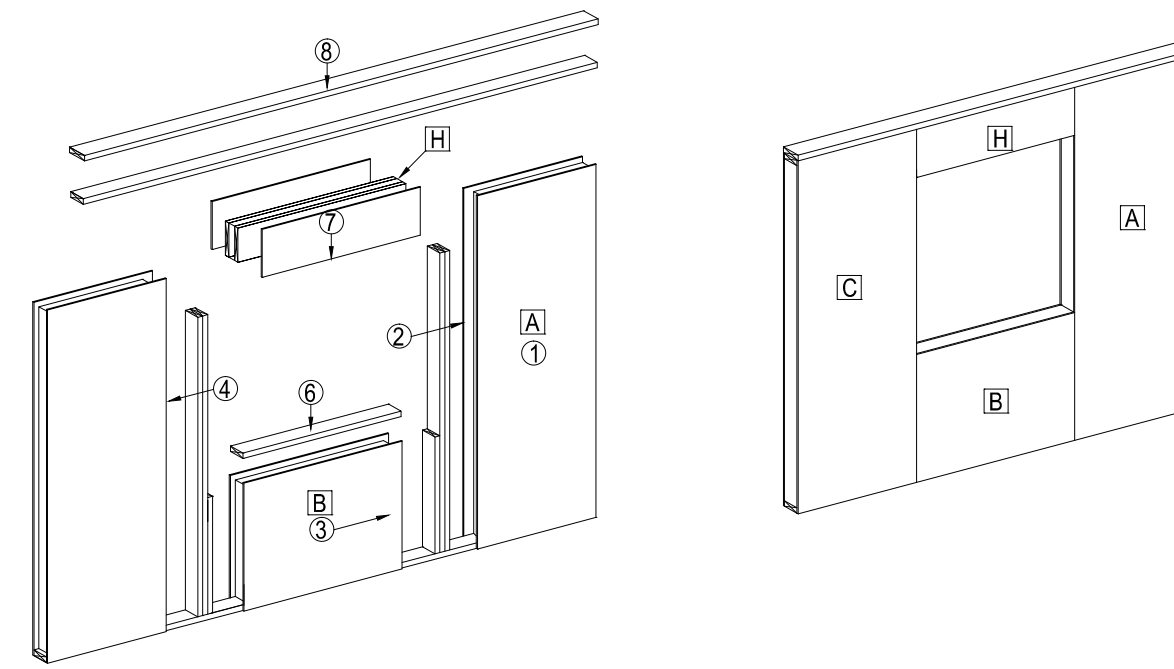
SHEET TITLE:
**PANEL
 ELEVATIONS**

PROJECT STATUS:

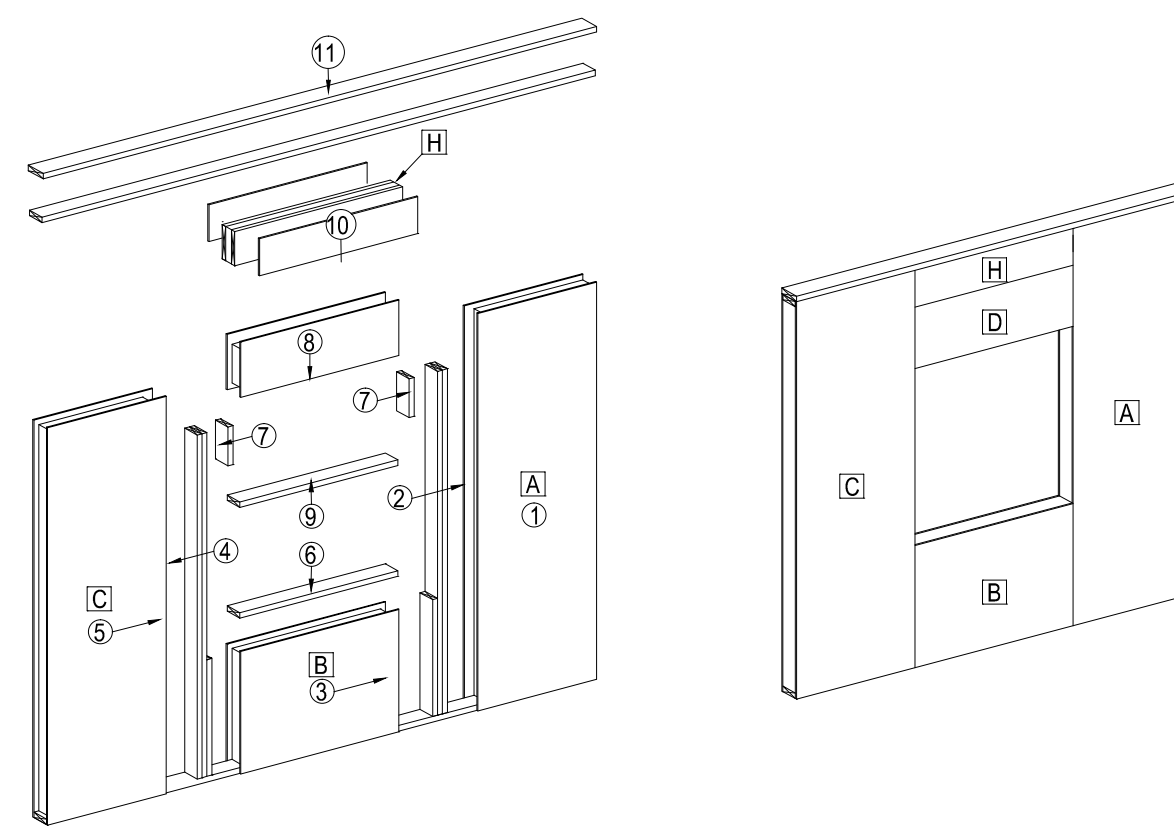
SHEET:
S4.1

NOTE: ADHERE VAPOR TAPE TO A SURFACE THAT IS FREE OF DIRT, DUST AND OILY RESIDUE. GRADUALLY PEEL AND STICK THE TAPE IN INCREMENTS OF 2' OR LESS AND WORK FROM THE CENTER OF THE TAPE TO THE OUTSIDE EDGE TO ELIMINATE WRINKLES. A WRINKLE FREE INSTALLATION IS NECESSARY TO INSURE PROPER PERFORMANCE. USING A J-ROLLER, DRYWALL BLADE OR HARD SQUEEGEE, APPLY PRESSURE TO FULLY CONTACT THE ADHESIVE TO THE BONDING SURFACE. STORE VAPOR TAPE IN ITS ORIGINAL PACKAGING AT TEMPERATURES LOWER THAN 90 DEGREES F AND FREE OF EXCESSIVE DUST AND DIRT.

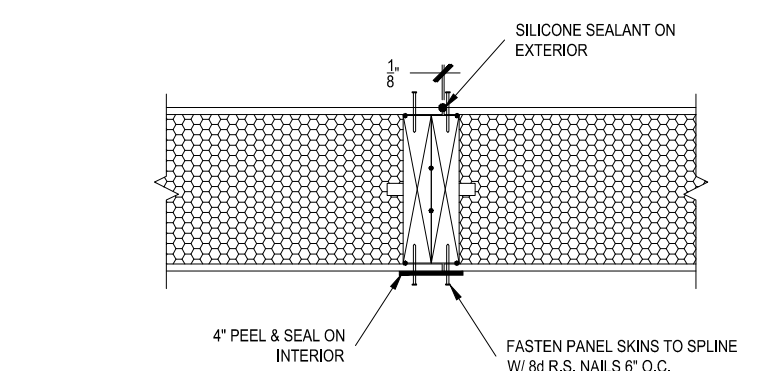
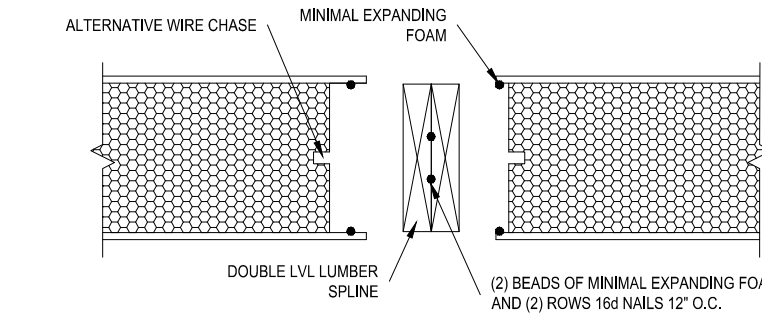
- ERECT PANEL "A"
- PRE-ASSEMBLE FULL, BEARING, AND FILLER STUDS. INSTALL INTO PANEL "A".
- SLIDE PANEL "B" INTO PLACE.
- PRE-ASSEMBLE FULL, BEARING, AND FILLER STUDS. INSTALL INTO PANEL "C".
- SLIDE PANEL "C" INTO PLACE, CHECKING HORIZONTAL R.O. DIMENSION.
- INSTALL LOWER OPENING FRAMING.
- DROP HEADER INTO OPENING. SHEATH WITH LOOSE OSB.
- CONTINUE WITH WALL. INSTALL TOP PLATES



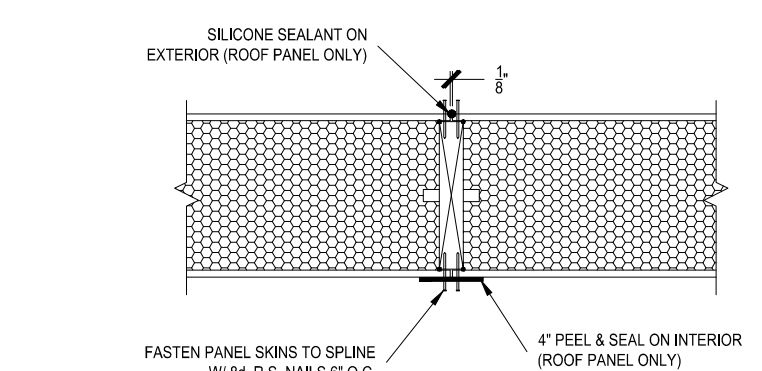
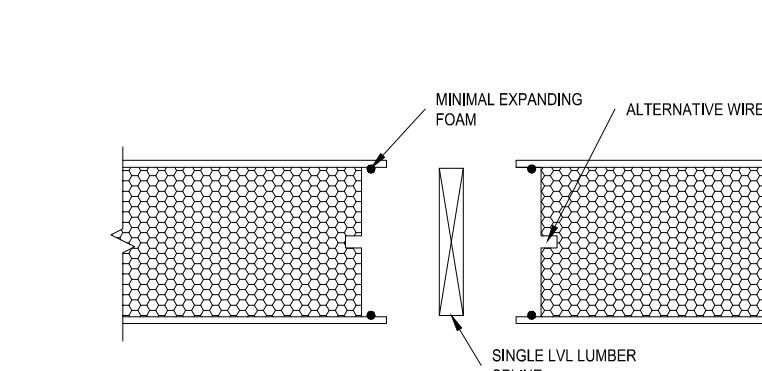
- SEE ABOVE
- INSTALL FILLER PANEL BLOCKING
- SLIDE UPPER PANEL INTO PLACE. VERIFY VERTICAL R.O.
- INSTALL UPPER OPENING FRAMING.
- DROP HEADER INTO OPENING. SHEATH WITH LOOSE OSB.
- CONTINUE WITH WALL. INSTALL TOP PLATES



8 - TYPICAL HEADER FRAMING DETAIL



10 - ROOF SPLINE DETAIL



11 - ROOF SPLINE DETAIL

ROOF PANEL FASTENING SCHEDULE		
COMONENTS	TYPE OF FASTENER	FREQUENCY
PANEL TO WALL PLATES	12" SIP SCREW	12" O.C. INTERIOR
PANEL TO WALL PLATES	12" SIP SCREW	6" O.C. PERIMETER
PANEL TO PERIMETER LUMBER	8d R.S. NAILS	6" O.C. EXT
PANEL TO SPLINE	8d R.S. NAILS	6" O.C. EXT
MULTIPLE LUMBER SPLINE	16d R.S. NAILS	(3) ROWS 12" O.C. EACH PLY

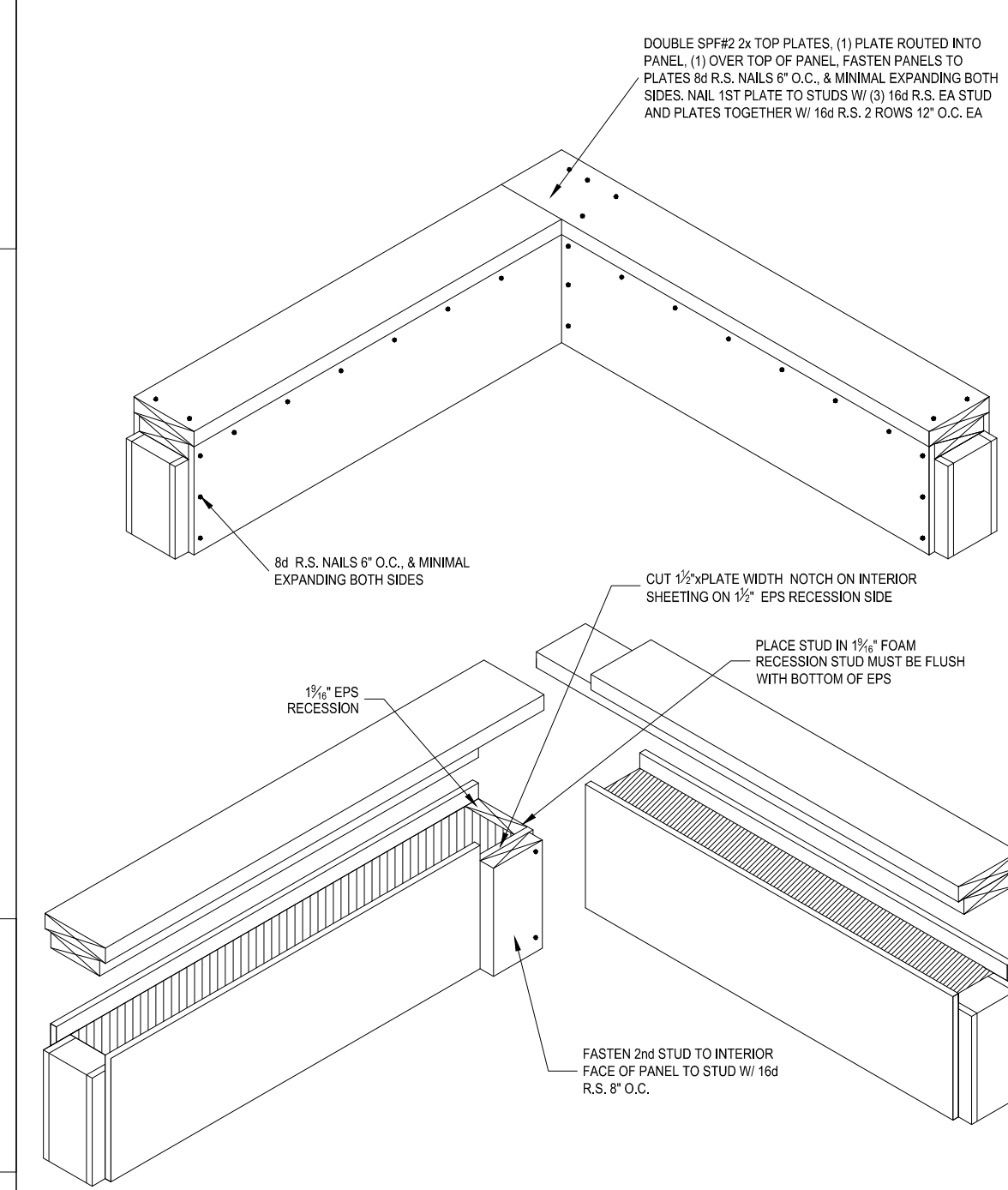
ROOF PANEL ADHESIVE SCHEDULE		
COMONENTS	TYPE OF ADHESIVE	FREQUENCY
PERIMETER BOARD	TOUCH-N-SEAL ALL SEASON GUN FOAM	(2) CONTINUOUS BEADS
SPLINES	TOUCH-N-SEAL ALL SEASON GUN FOAM	(2) CONTINUOUS BEADS

9 - FASTENING SCHEDULE

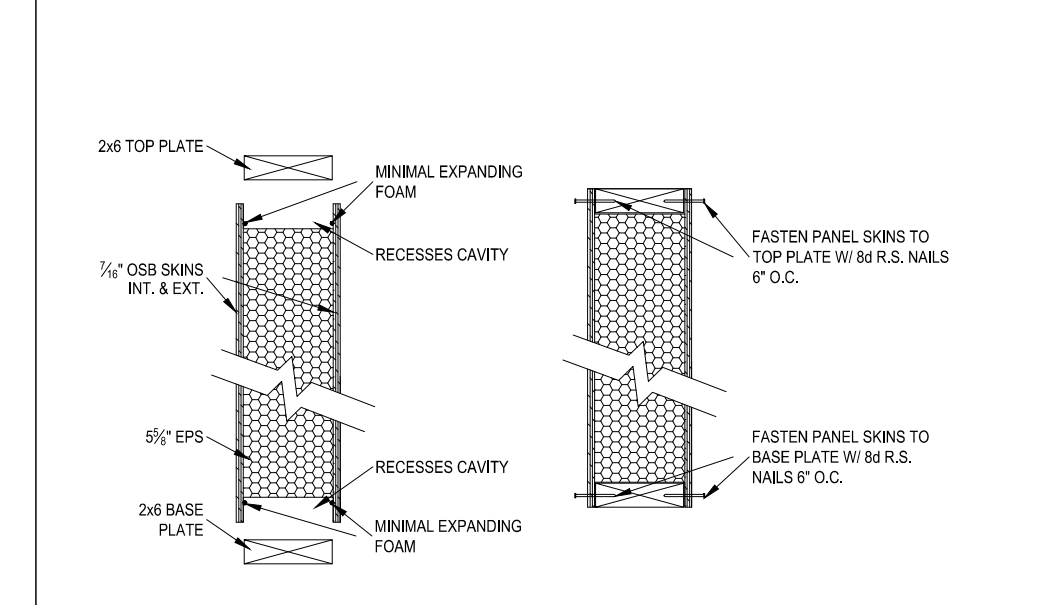
WALL PANEL FASTENING SCHEDULE		
COMONENTS	TYPE OF FASTENER	FREQUENCY
BASE PLATE TO SUBFLOOR	5/8"Ø x4" MACHINE BOLT	4' O.C. & 6' FROM BREAKS & CORNERS
PLATES TO STUDS	16d R.S.	2 PER STUD
CAP PLATE TO TOP PLATE	16d R.S.	2 ROWS 12" O.C.
PANELS TO PLATES	8d R.S.	6" O.C. INT. & EXT.
PANELS TO SPLINES / STUDS	8d R.S.	6" O.C. INT. & EXT.

WALL PANEL ADHESIVE SCHEDULE		
COMONENTS	TYPE OF ADHESIVE	FREQUENCY
PANEL TO BASE PLATE	TOUCH-N-SEAL ALL SEASON GUN FOAM	(2) CONTINUOUS BEADS
PANEL TO SPLINES	TOUCH-N-SEAL ALL SEASON GUN FOAM	(2) CONTINUOUS BEADS
PANEL TO TOP PLATE	TOUCH-N-SEAL ALL SEASON GUN FOAM	(2) CONTINUOUS BEADS
TOP PLATE TO CAP PLATE	CONSTRUCTION ADHESIVE PL-450	(2) CONTINUOUS BEADS

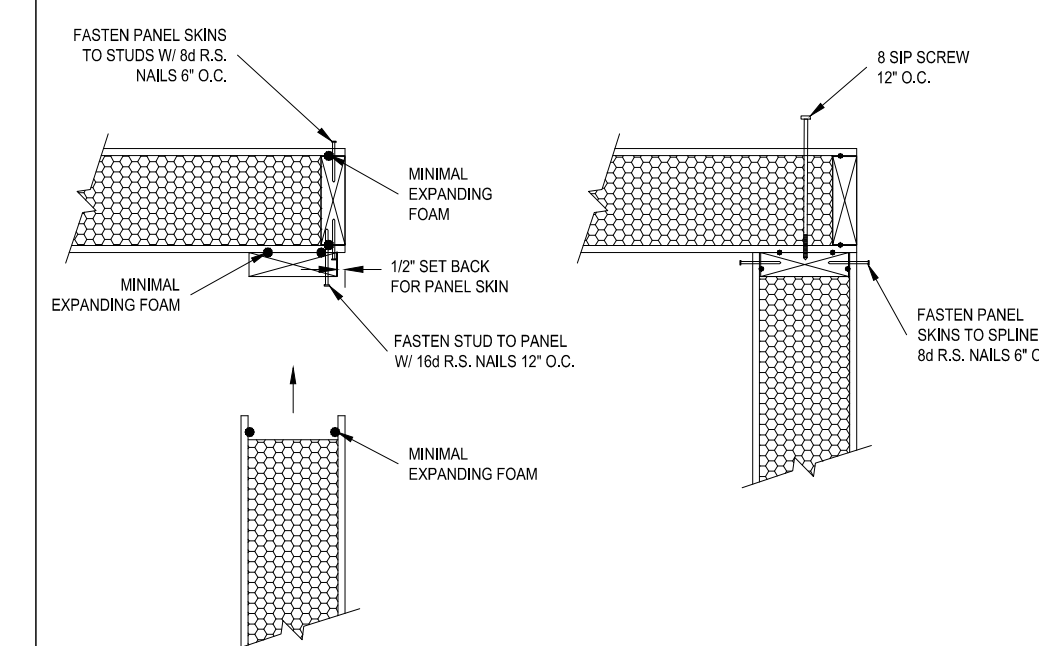
9 - FASTENING SCHEDULE



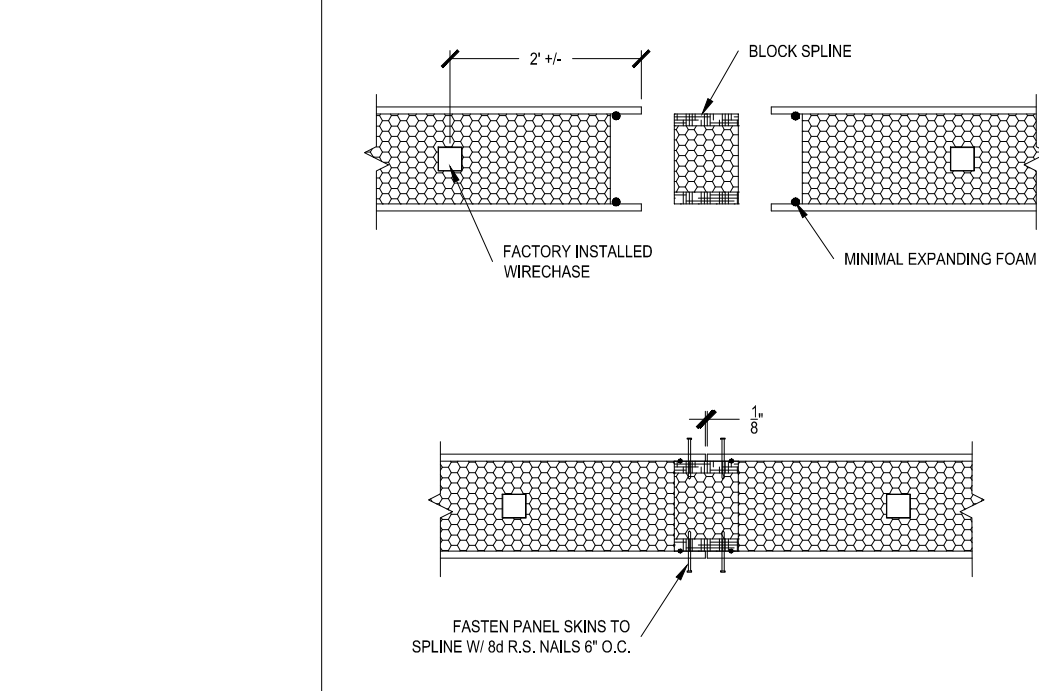
3 - CORNER CONNECTION



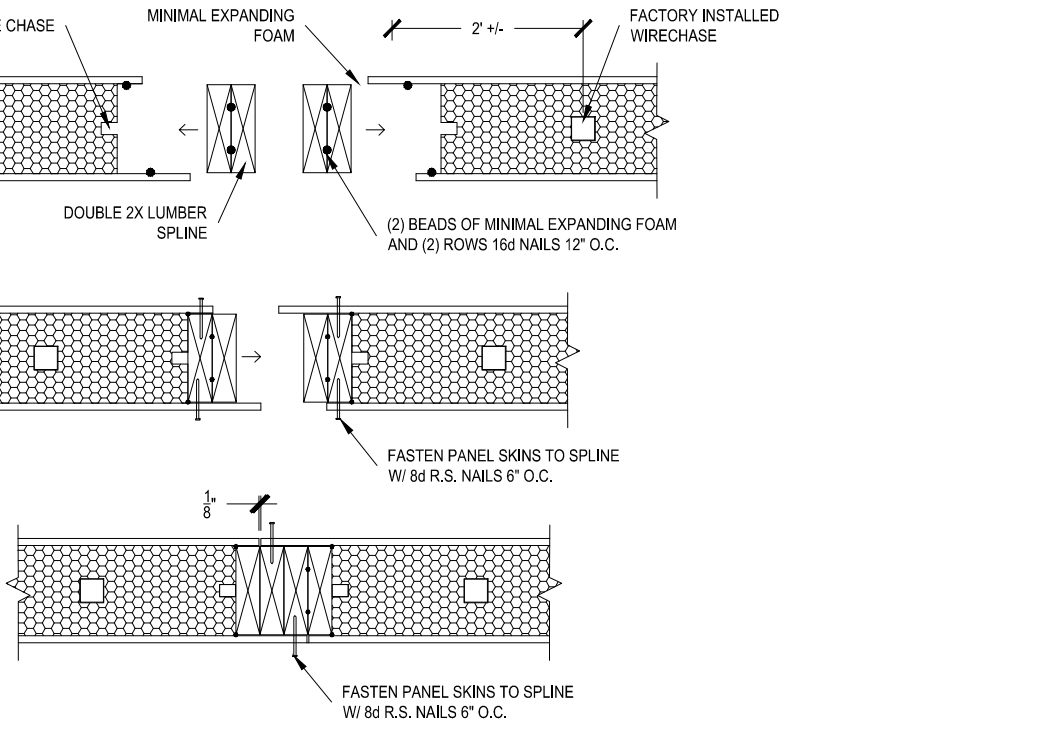
1 - WALL PANEL ASSEMBLY



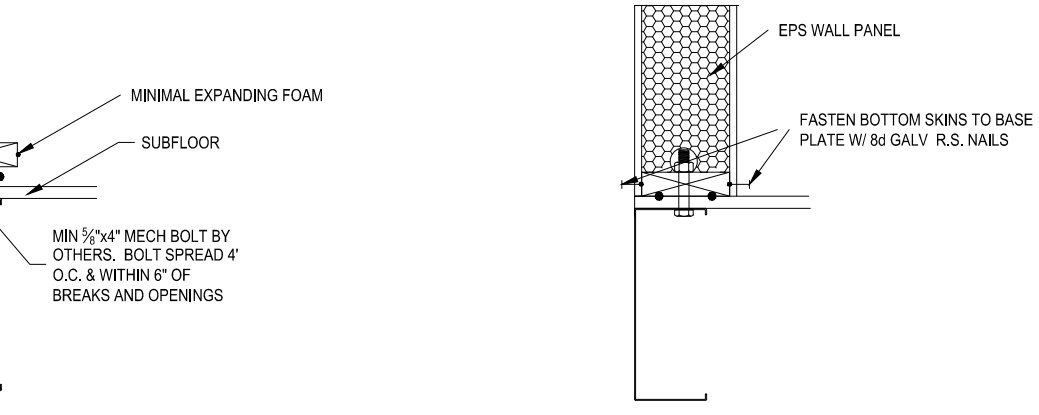
2 - CORNER CONNECTION



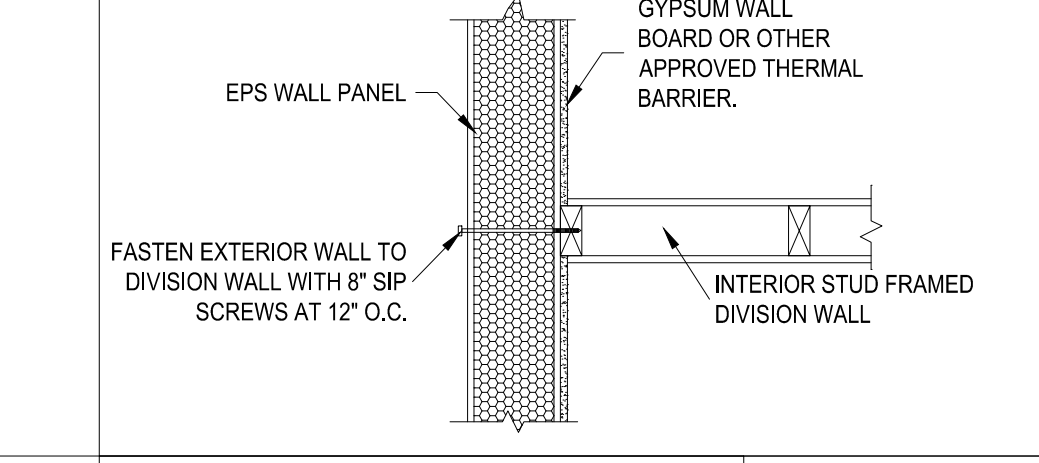
4 - PANEL / PANEL CONNECTION



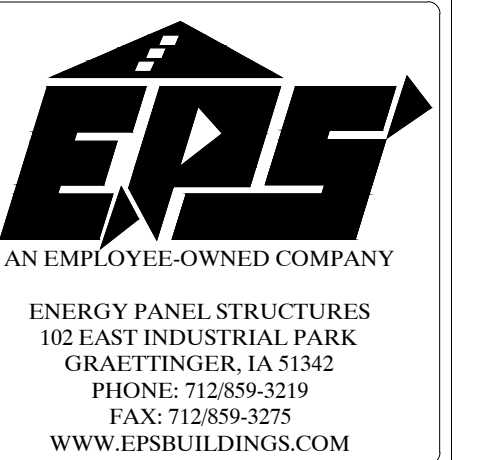
5 - PANEL CONNECTION @ UNIT JOINT



6 - BASE PLATE CONNECTION



7 - DIVISION WALL / PANEL ATTACHMENT



PROJECT NUMBER:
2013/HOUSE/89539

CUSTOMER SERVICE:
JB
DRAWN BY:
MAB
REVIEWED BY:
RGW

DATE:
4/1/2013

REVISIONS:
4/10/13
4/11/13
-

DEALER:
BBL
PROJECT TITLE:
MISSOURI S&T
SOLID CORE BUILDING PACKAGE

SHEET TITLE:
**CONSTRUCTION
DETAILS**

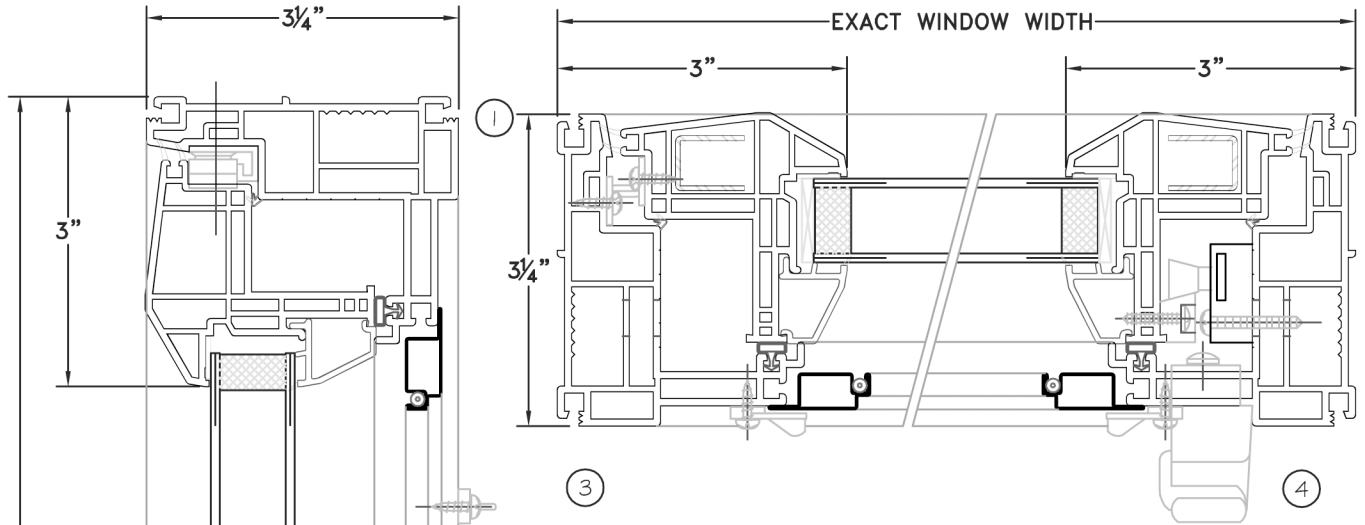
PROJECT STATUS:

SHEET:
C1.0

CVC-235 CASEMENT REPLACEMENT FULLY WELDED VINYL WINDOW

SCALE: 1:2

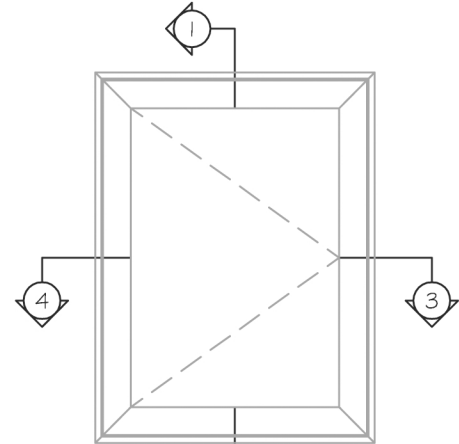
TOP VIEW



EXACT WINDOW HEIGHT

3"

SIDE VIEW



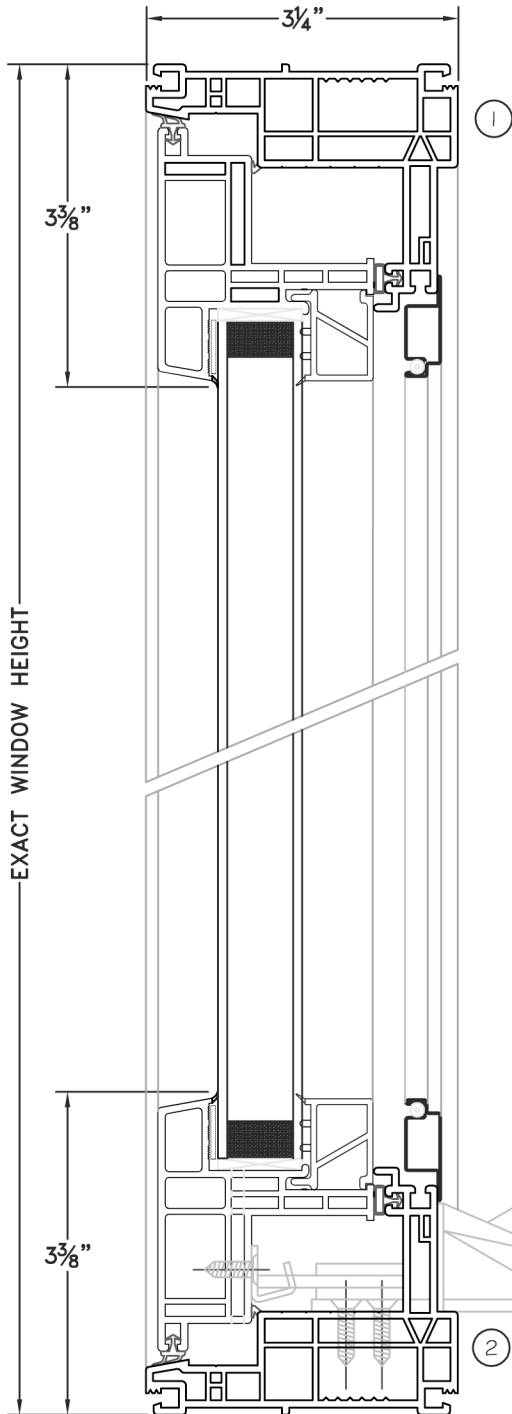
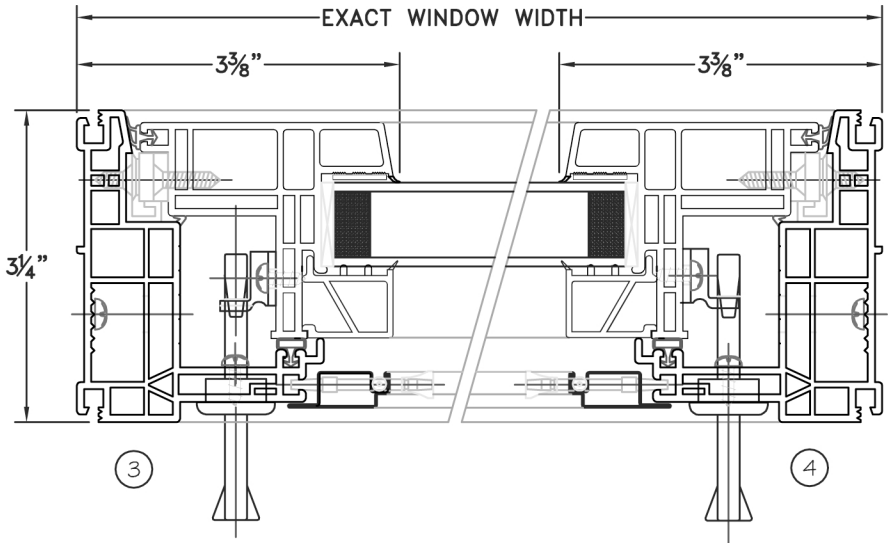
ELEVATION
SCALE: NTS



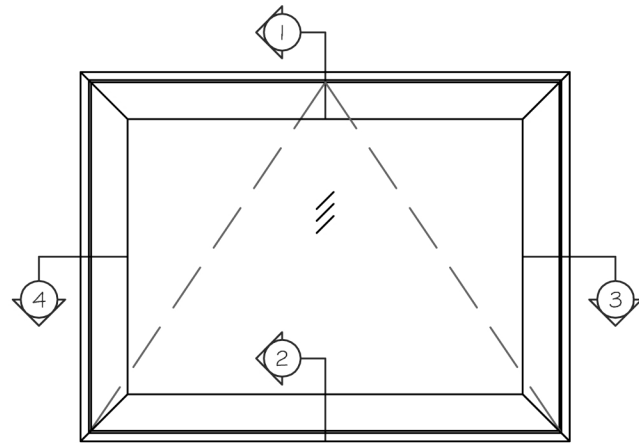
CVA-245 AWNING REPLACEMENT FULLY WELDED VINYL WINDOW

SCALE: 1:2

TOP VIEW



SIDE VIEW



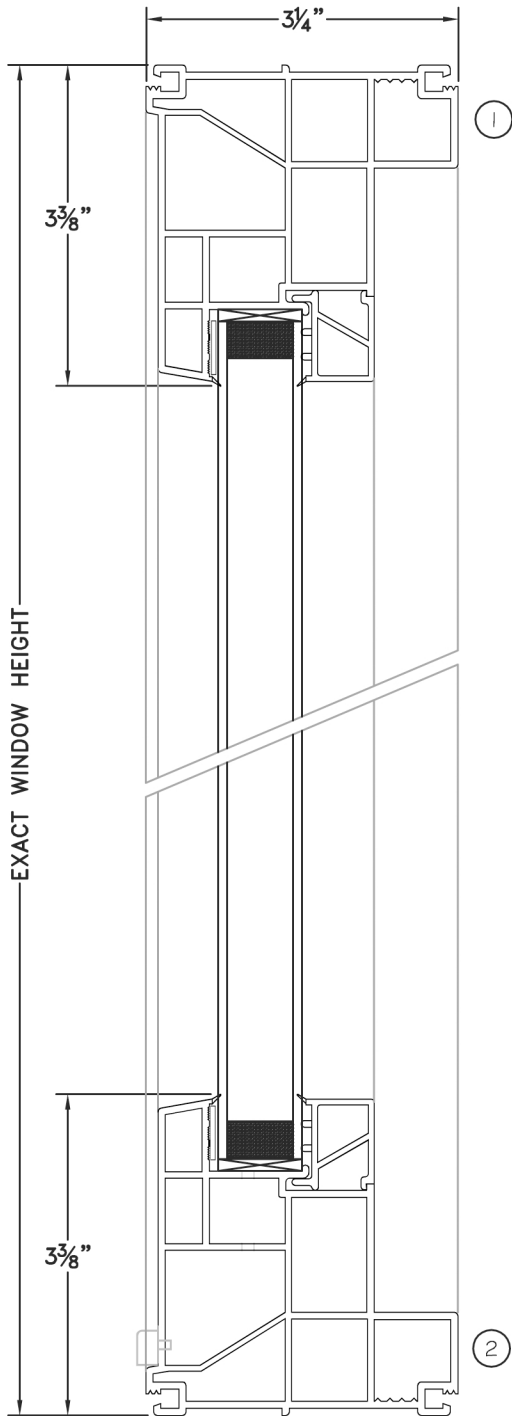
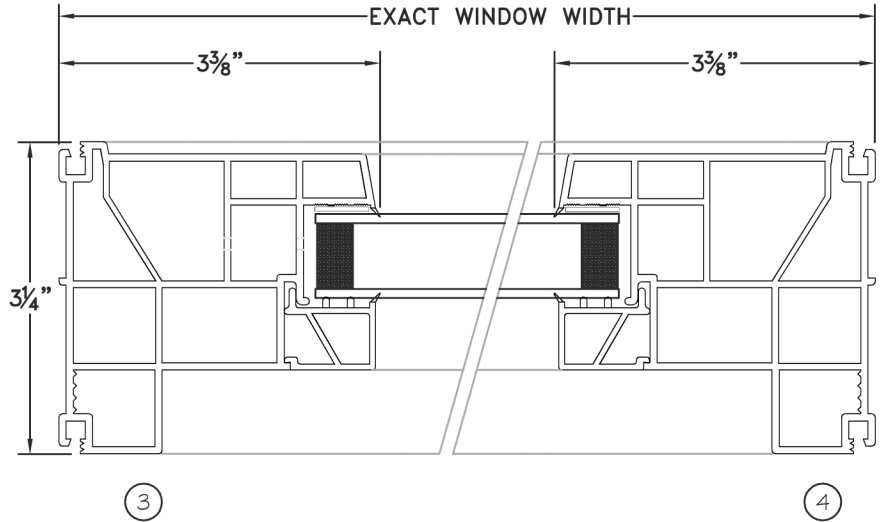
ELEVATION
SCALE: NTS



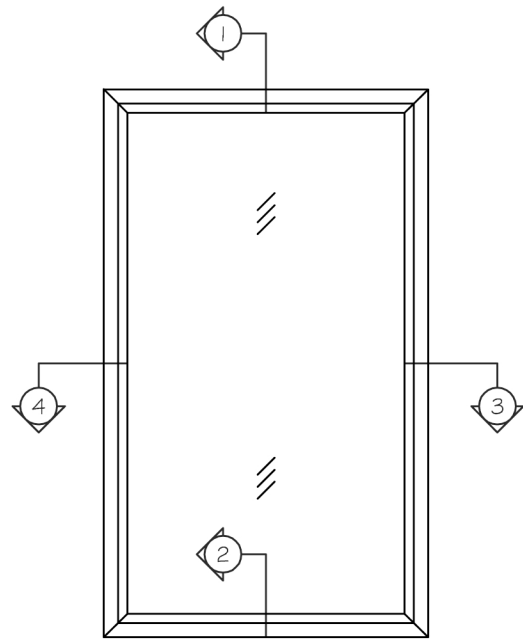
CVP-210 PICTURE / FIXED REPLACEMENT FULLY WELDED VINYL WINDOW

SCALE: 1:2

TOP VIEW

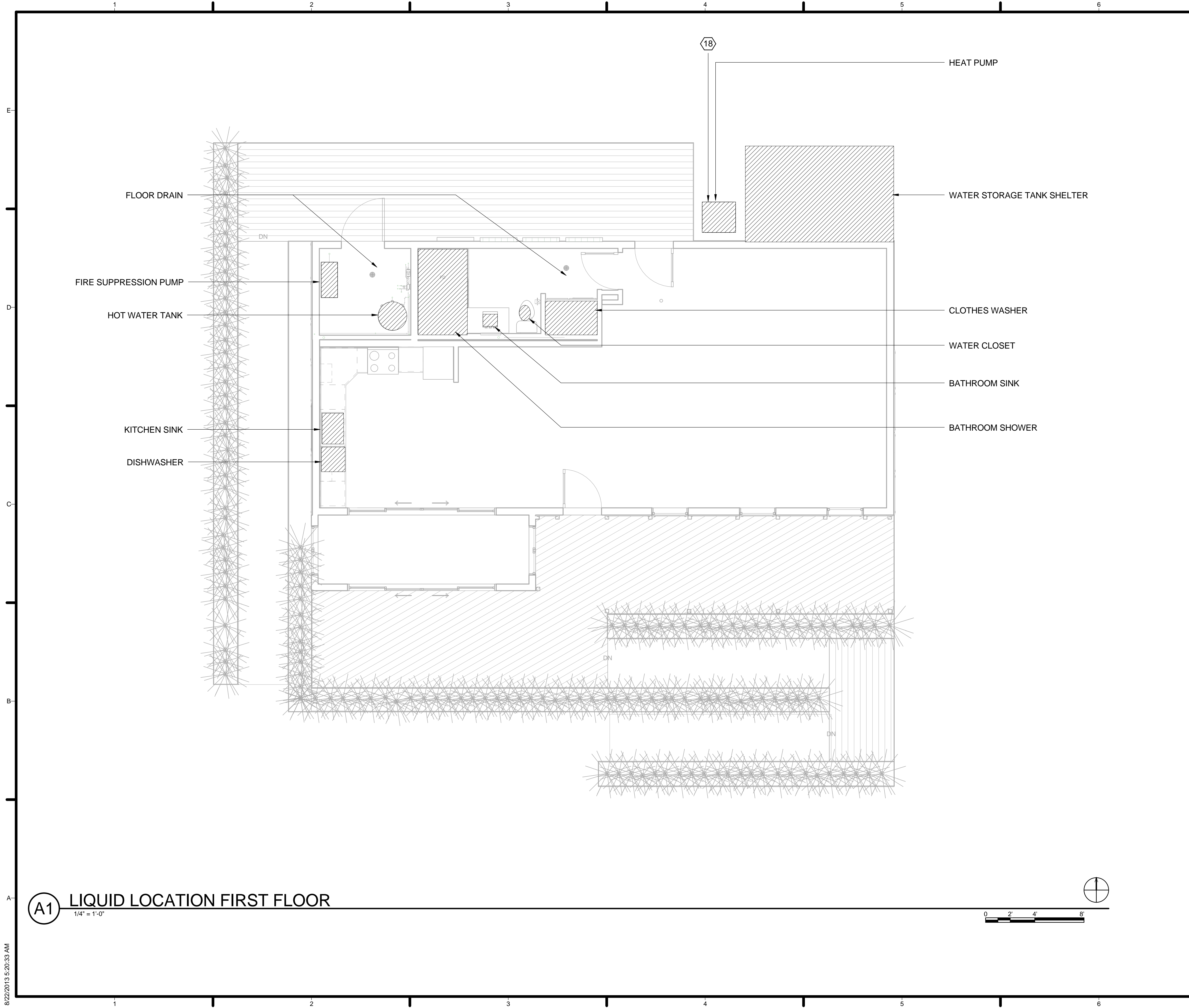


SIDE VIEW



ELEVATION
SCALE: NTS





GENERAL SHEET NOTES

1 ALL MECHANICAL SYSTEMS THAT USE LIQUIDS HAVE ONLY WATER

SHEET KEYNOTES

18 INTERNALLY, HEAT PUMP USES REFRIGERANT R407C



TEAM NAME: MISSOURI S&T SOLAR HOUSE TEAM
 ADDRESS: 1051 NORTH BISHOP AVENUE
 116 KUMER STUDENT DESIGN CENTER
 ROLLA, MO 65401-11410
 CONTACT: SOLARHOUSE@MST.EDU
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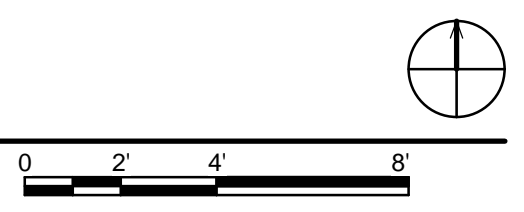


MARK	DATE	DESCRIPTION

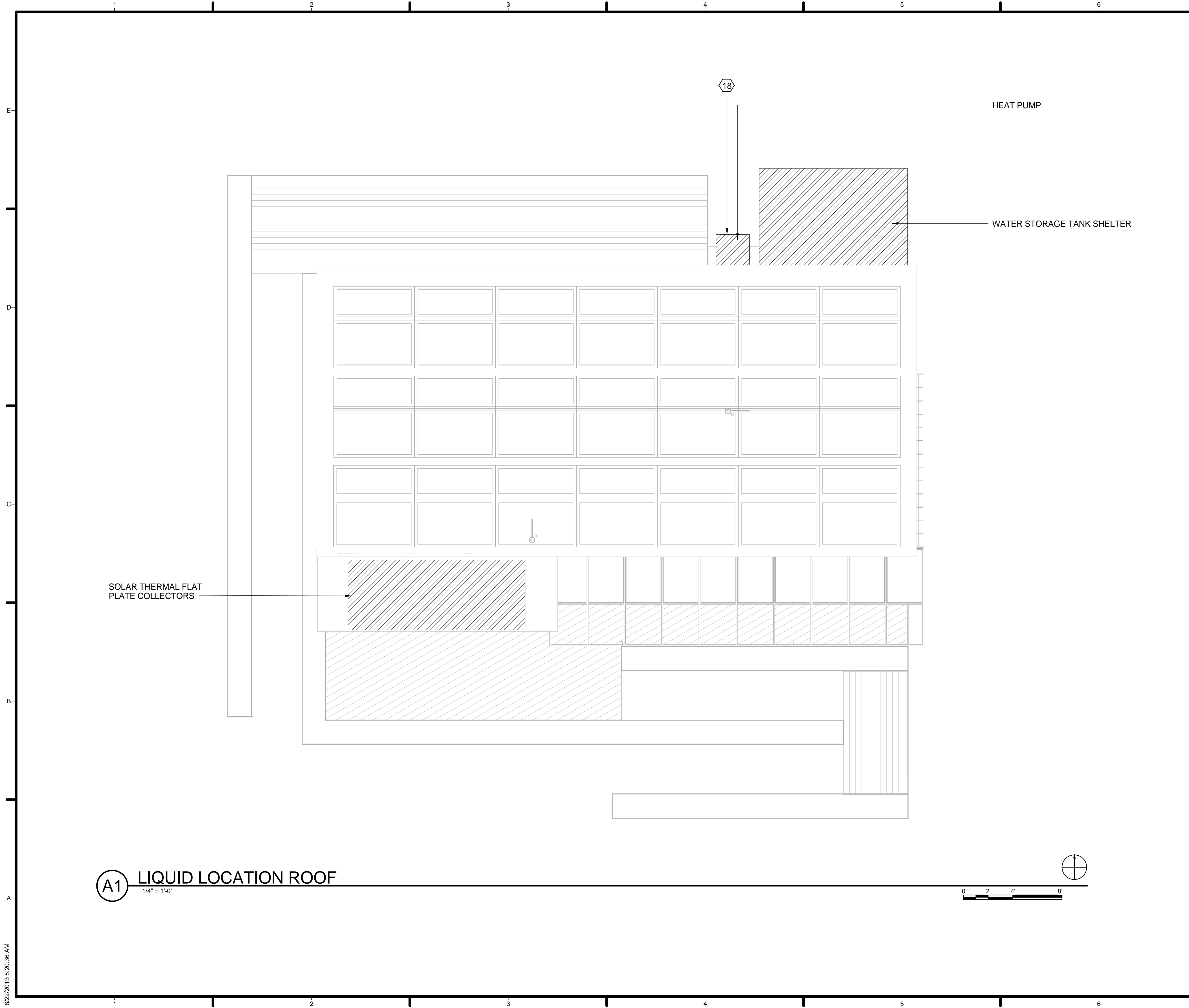
SHEET TITLE
 LIQUID LOCATION AND SPILL CONTAINMENT PLAN

H-101

A1 LIQUID LOCATION FIRST FLOOR
 1/4" = 1'-0"



8/22/2013 5:20:33 AM



GENERAL SHEET NOTES

1 ALL MECHANICAL SYSTEMS THAT USE LIQUIDS HAVE ONLY WATER

SHEET KEYNOTES

18 INTERNALLY, HEAT PUMP USES REFRIGERANT R407C



TEAM NAME: MISSOURI S&T SOLAR HOUSE TEAM
ADDRESS: 1051 NORTH BISHOP AVENUE
116 KUMER STUDENT DESIGN CENTER
ROLLA, MO 65401-11410
CONTACT: SOLARHOUSE@MST.EDU
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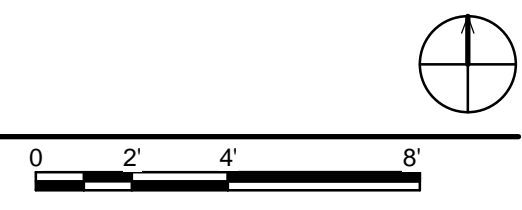
MARK	DATE	DESCRIPTION

LOT NUMBER: 107
DRAWN BY: FERDINAND
CHECKED BY: US DOE SOLAR DECATHLON 2013
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SHEET TITLE
LIQUID LOCATION AND SPILL CONTAINMENT PLAN

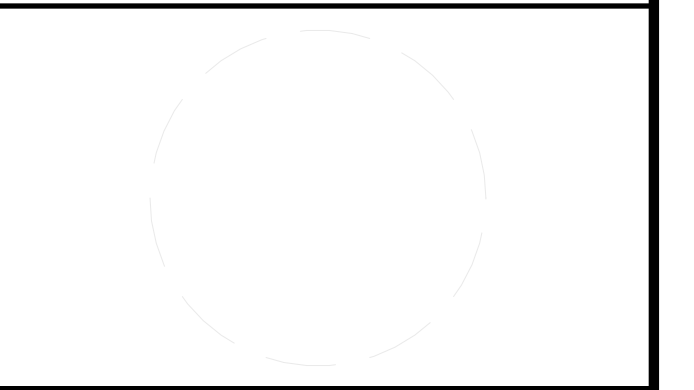
H-102

A1 LIQUID LOCATION ROOF
1/4" = 1'-0"





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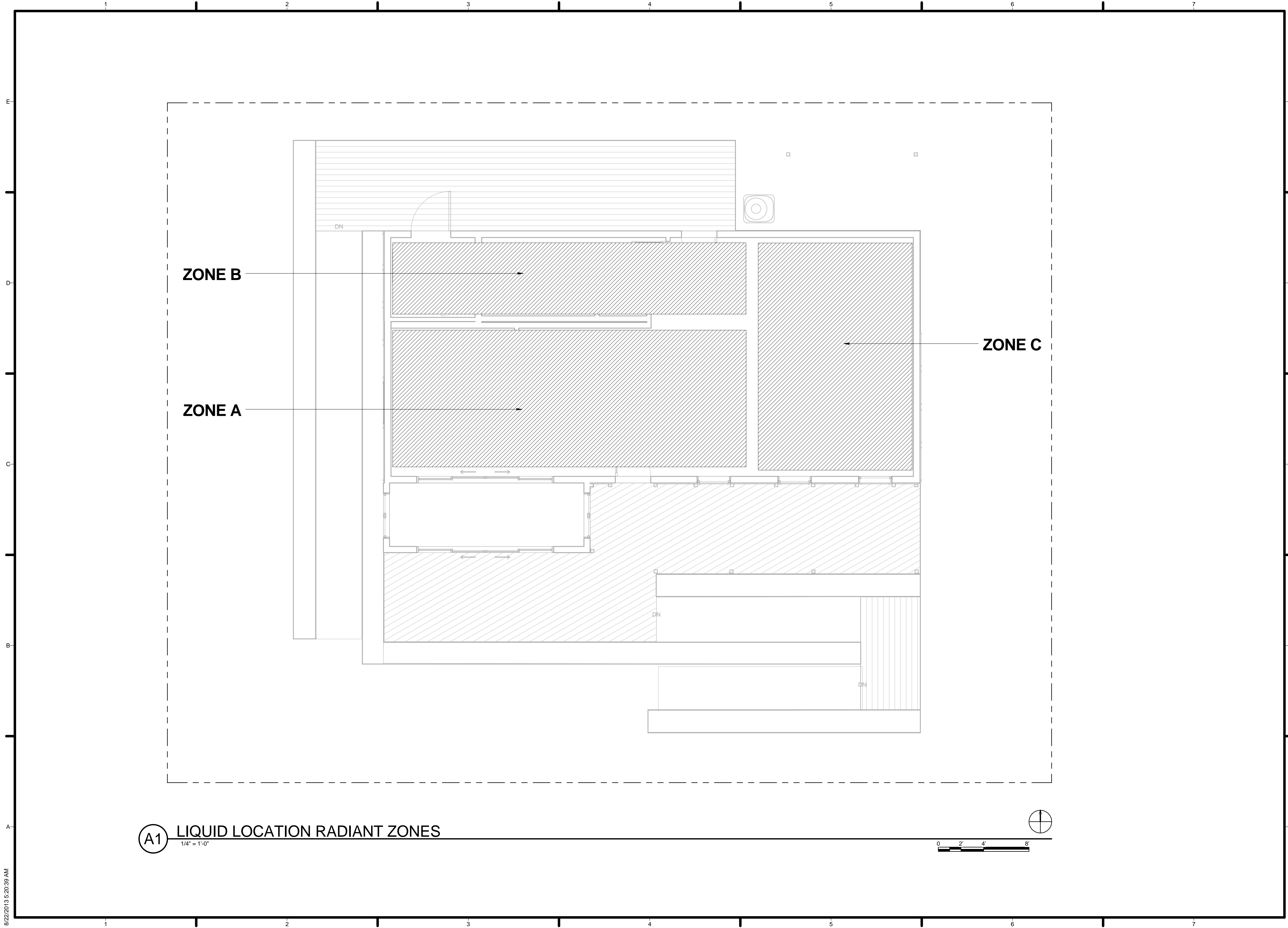


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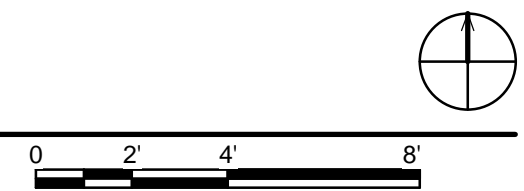
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 DRAWN BY: Author
 CHECKED BY: US DOE SOLAR DECATHLON 2013
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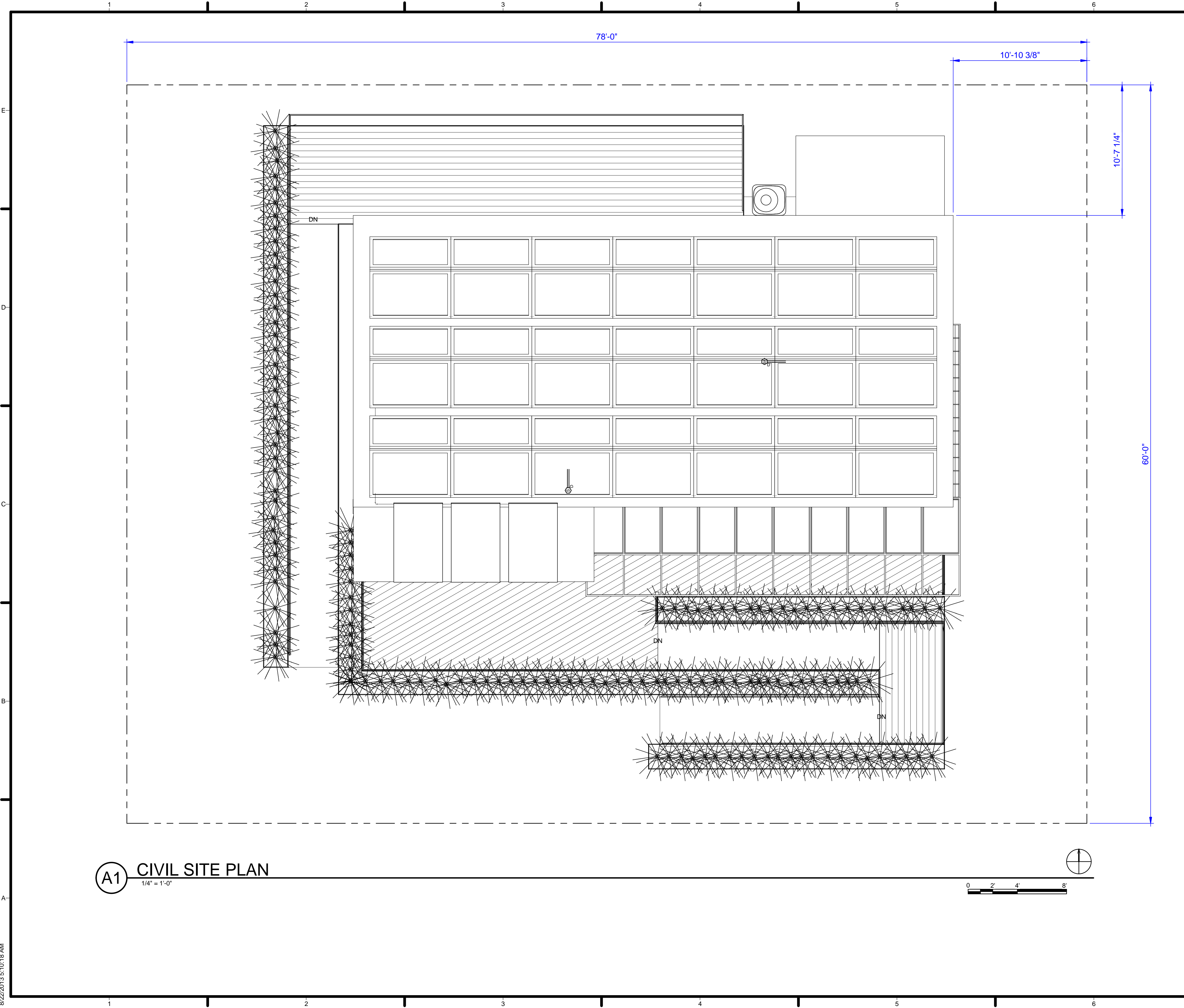
SHEET TITLE
 LIQUID LOCATION RADIANT ZONES

H-103



(A1) LIQUID LOCATION RADIANT ZONES
 1/4" = 1'-0"



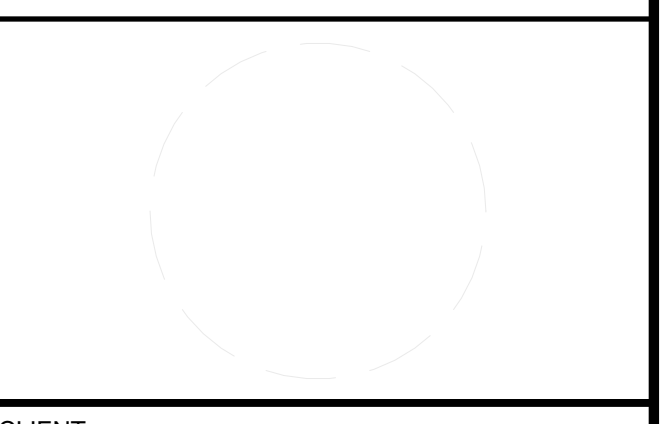


GENERAL SHEET NOTES

1 HOUSE PLACEMENT DIMENSIONS TO CORNER OF ROOF



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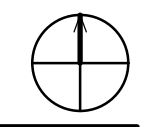
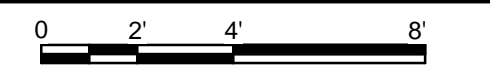
MARK	DATE	DESCRIPTION

LOT NUMBER: 107
 DRAWN BY: FERDINAND MUELLER
 CHECKED BY: US DOE SOLAR DECATHLON 2013
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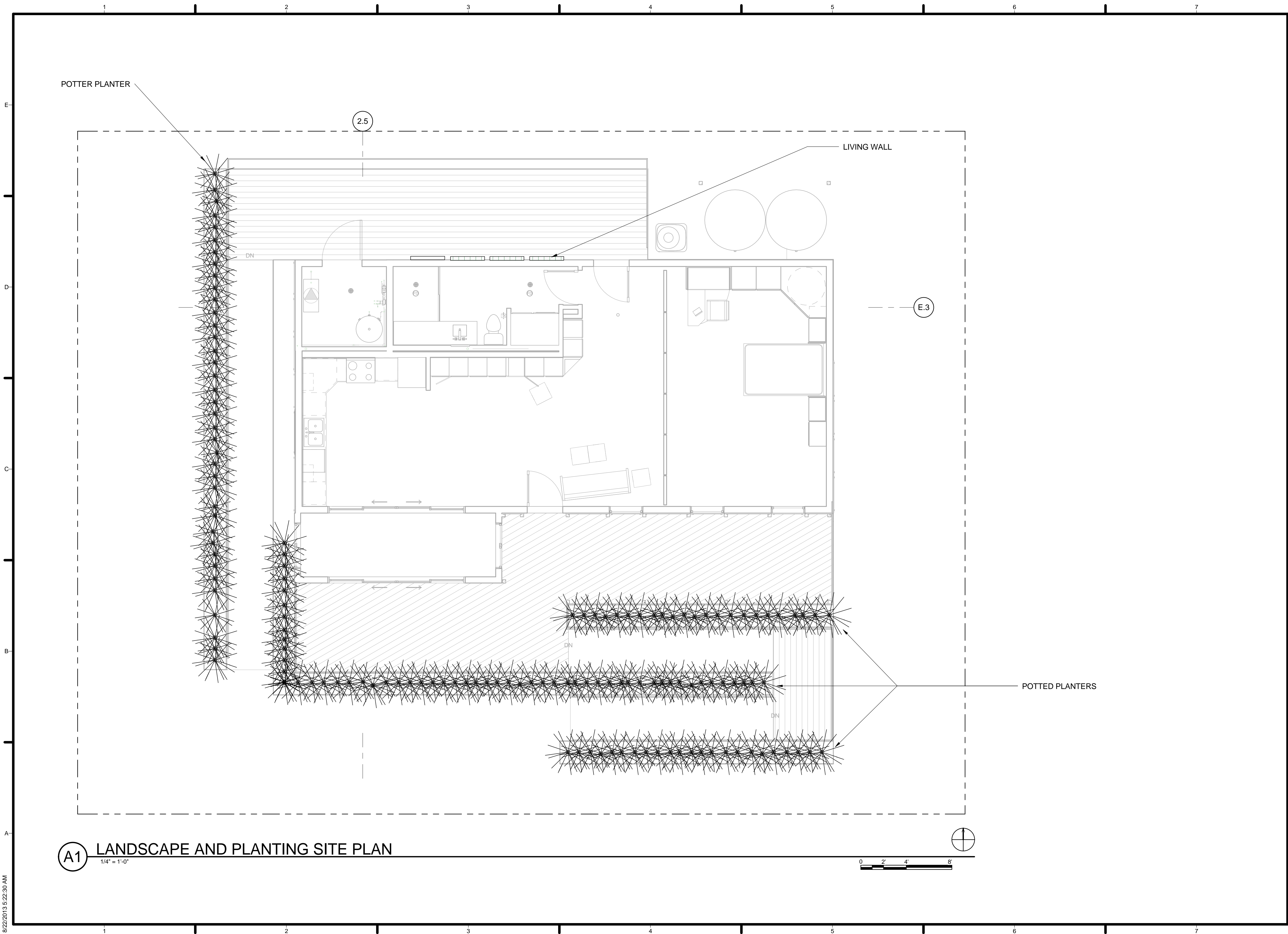
SHEET TITLE
SITE PLAN

C-102

A1 CIVIL SITE PLAN
 1/4" = 1'-0"



8/22/2013 5:10:18 AM



TEAM NAME: MISSOURI S&T SOLAR HOUSE TEAM
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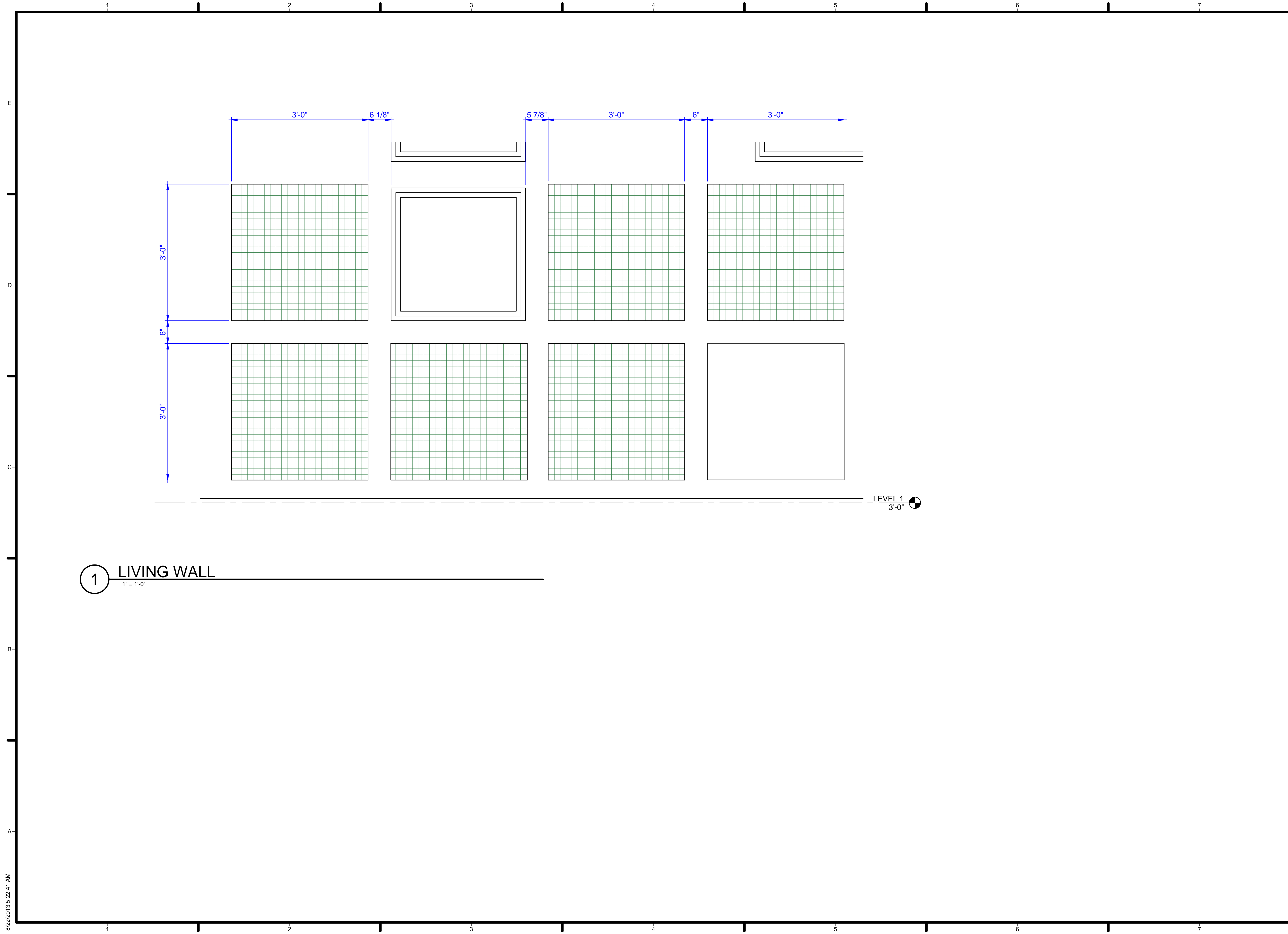
MARK	DATE	DESCRIPTION

SHEET TITLE

LANDSCAPE AND
 PLANTING SITE PLAN

L-101

8/22/2013 5:22:30 AM



TEAM NAME: MISSOURI S&T SOLAR HOUSE TEAM
 ADDRESS: 1051 NORTH BISHOP AVENUE
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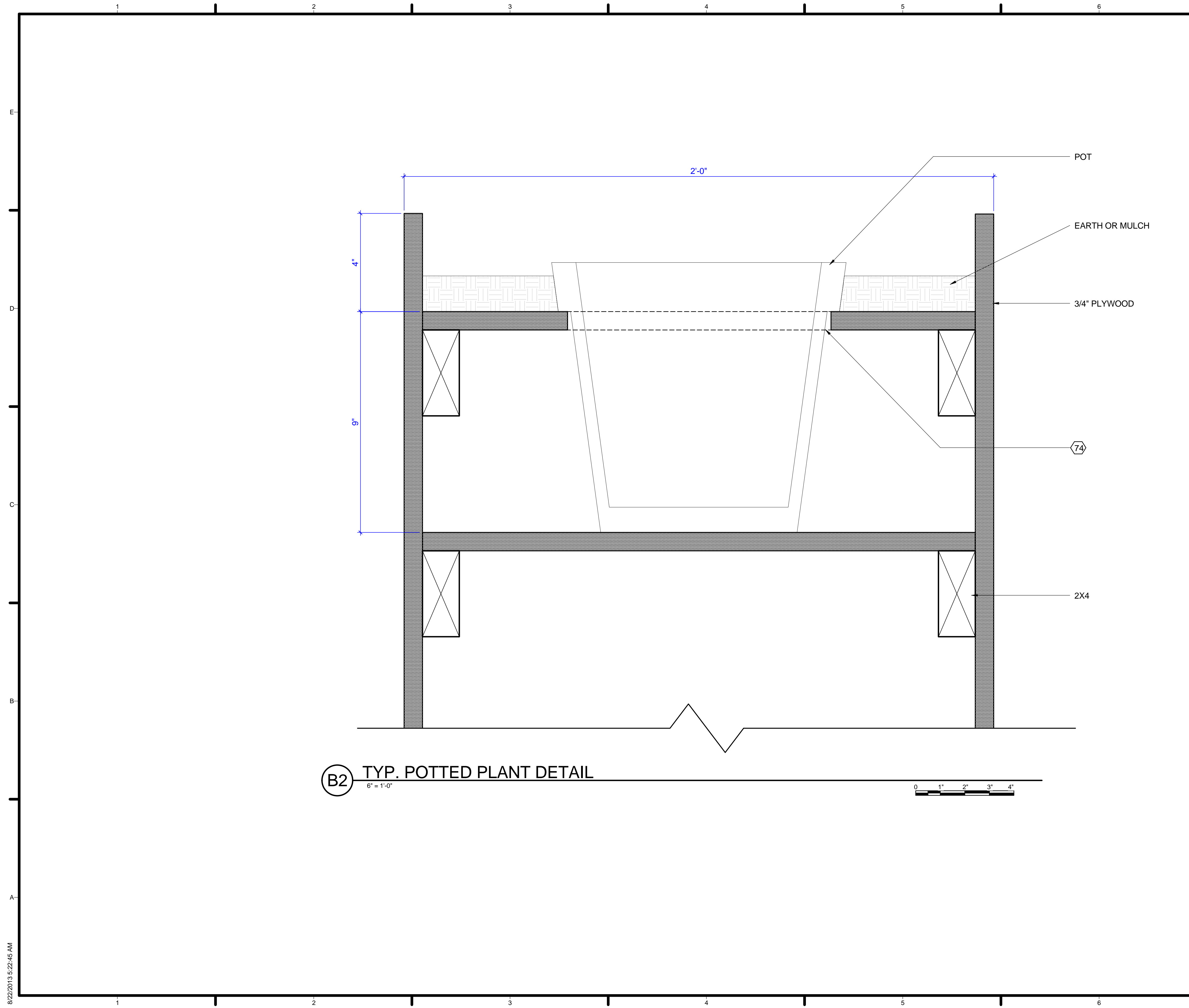


MARK	DATE	DESCRIPTION

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SHEET TITLE
 LARGE SCALE PLANTING PLAN

L-401



SHEET KEYNOTES

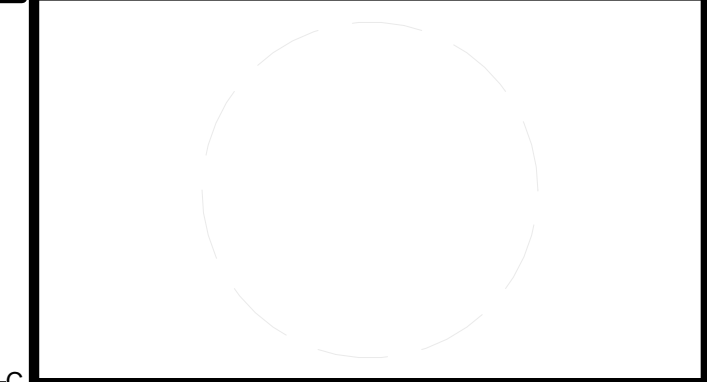
(74) 10 3/4" DIAMETER HOLE IN COVER PLYWOOD FOR POTTED PLANT



TEAM NAME: MISSOURI S&T SOLAR HOUSE TEAM

ADDRESS: 1051 NORTH BISHOP AVENUE
116 KUMER STUDENT DESIGN CENTER
ROLLA, MO 65401-11410

CONTACT: SOLARHOUSE@MST.EDU
WWW.SOLARHOUSE.MST.EDU



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MARK	DATE	DESCRIPTION

LOT NUMBER: 107

DRAWN BY: FERDINAND

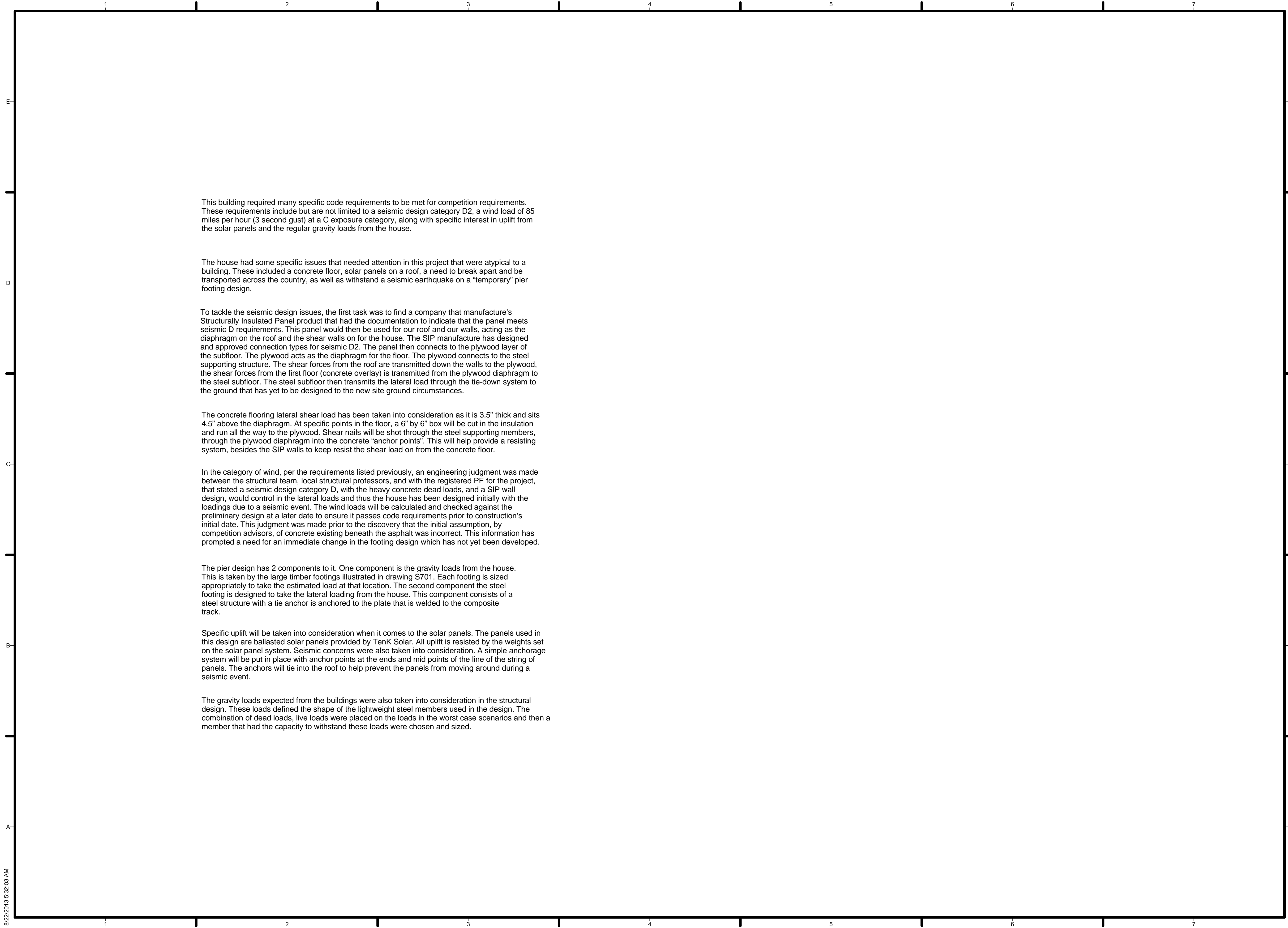
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SHEET TITLE

PLANTING DETAILS

L-601



This building required many specific code requirements to be met for competition requirements. These requirements include but are not limited to a seismic design category D2, a wind load of 85 miles per hour (3 second gust) at a C exposure category, along with specific interest in uplift from the solar panels and the regular gravity loads from the house.

The house had some specific issues that needed attention in this project that were atypical to a building. These included a concrete floor, solar panels on a roof, a need to break apart and be transported across the country, as well as withstand a seismic earthquake on a "temporary" pier footing design.

To tackle the seismic design issues, the first task was to find a company that manufacture's Structurally Insulated Panel product that had the documentation to indicate that the panel meets seismic D requirements. This panel would then be used for our roof and our walls, acting as the diaphragm on the roof and the shear walls on the house. The SIP manufacture has designed and approved connection types for seismic D2. The panel then connects to the plywood layer of the subfloor. The plywood acts as the diaphragm for the floor. The plywood connects to the steel supporting structure. The shear forces from the roof are transmitted down the walls to the plywood, the shear forces from the first floor (concrete overlay) is transmitted from the plywood diaphragm to the steel subfloor. The steel subfloor then transmits the lateral load through the tie-down system to the ground that has yet to be designed to the new site ground circumstances.

The concrete flooring lateral shear load has been taken into consideration as it is 3.5" thick and sits 4.5" above the diaphragm. At specific points in the floor, a 6" by 6" box will be cut in the insulation and run all the way to the plywood. Shear nails will be shot through the steel supporting members, through the plywood diaphragm into the concrete "anchor points". This will help provide a resisting system, besides the SIP walls to keep resist the shear load on from the concrete floor.

In the category of wind, per the requirements listed previously, an engineering judgment was made between the structural team, local structural professors, and with the registered PE for the project, that stated a seismic design category D, with the heavy concrete dead loads, and a SIP wall design, would control in the lateral loads and thus the house has been designed initially with the loadings due to a seismic event. The wind loads will be calculated and checked against the preliminary design at a later date to ensure it passes code requirements prior to construction's initial date. This judgment was made prior to the discovery that the initial assumption, by competition advisors, of concrete existing beneath the asphalt was incorrect. This information has prompted a need for an immediate change in the footing design which has not yet been developed.

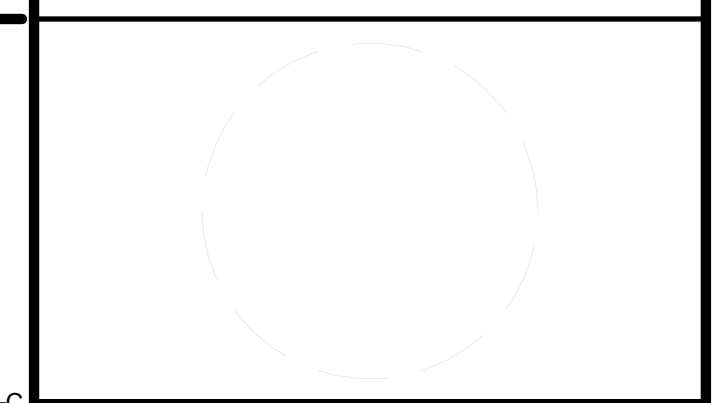
The pier design has 2 components to it. One component is the gravity loads from the house. This is taken by the large timber footings illustrated in drawing S701. Each footing is sized appropriately to take the estimated load at that location. The second component the steel footing is designed to take the lateral loading from the house. This component consists of a steel structure with a tie anchor is anchored to the plate that is welded to the composite track.

Specific uplift will be taken into consideration when it comes to the solar panels. The panels used in this design are ballasted solar panels provided by TenK Solar. All uplift is resisted by the weights set on the solar panel system. Seismic concerns were also taken into consideration. A simple anchorage system will be put in place with anchor points at the ends and mid points of the line of the string of panels. The anchors will tie into the roof to help prevent the panels from moving around during a seismic event.

The gravity loads expected from the buildings were also taken into consideration in the structural design. These loads defined the shape of the lightweight steel members used in the design. The combination of dead loads, live loads were placed on the loads in the worst case scenarios and then a member that had the capacity to withstand these loads were chosen and sized.



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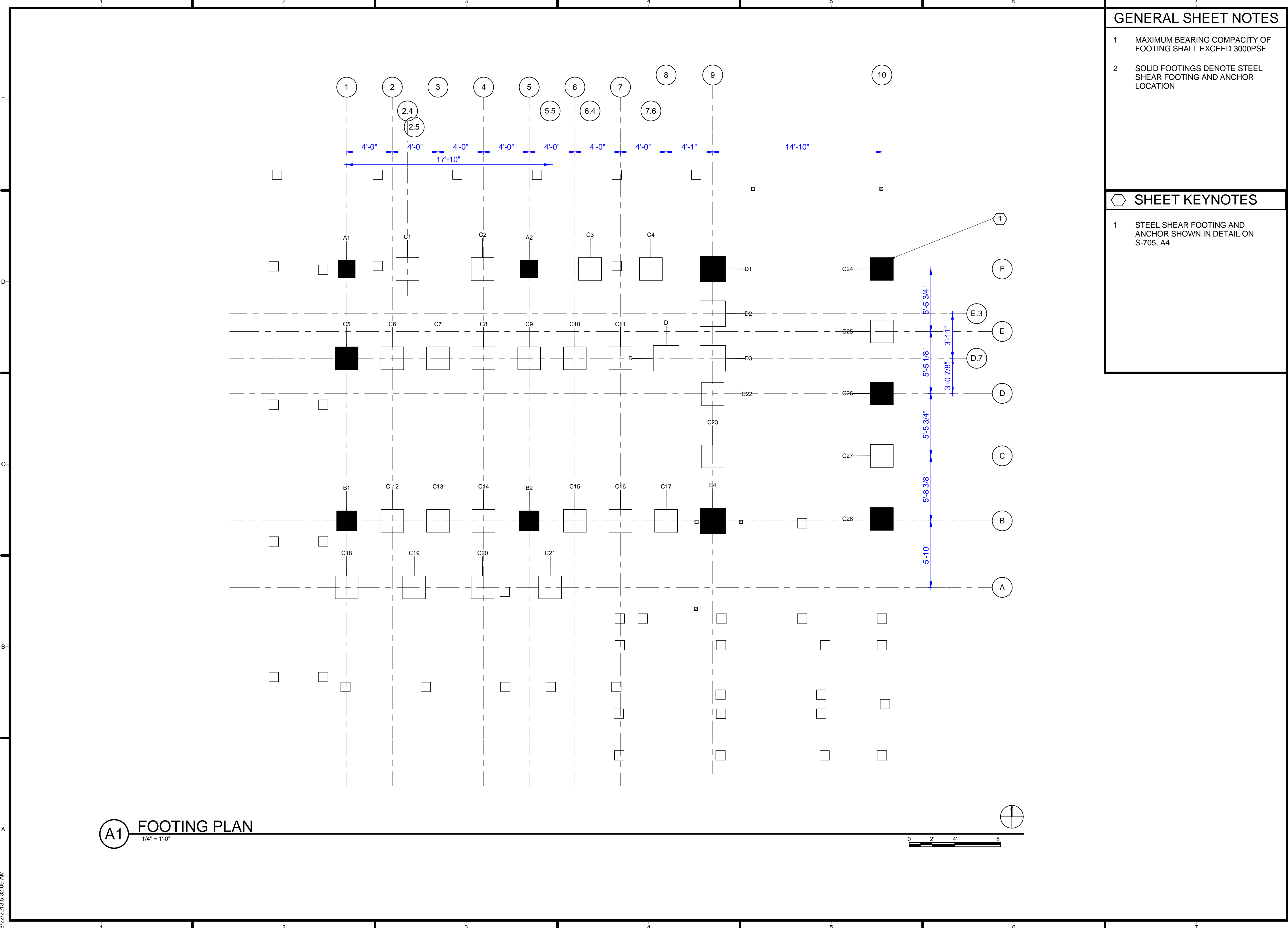


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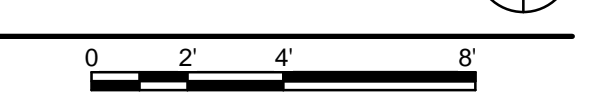
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SHEET TITLE
STRUCTURAL NOTES
AND SYMBOLS

S-001



A1 FOOTING PLAN
1/4" = 1'-0"



GENERAL SHEET NOTES

- MAXIMUM BEARING CAPACITY OF FOOTING SHALL EXCEED 3000PSF
- SOLID FOOTINGS DENOTE STEEL SHEAR FOOTING AND ANCHOR LOCATION

SHEET KEYNOTES

- STEEL SHEAR FOOTING AND ANCHOR SHOWN IN DETAIL ON S-705, A4



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 116 KUMER STUDENT DESIGN CENTER
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SHEET TITLE
 FOUNDATION PLAN

S-101

8/22/2013 5:32:06 AM

GENERAL SHEET NOTES

- 1 COLD FORM STEEL FY=50 KSI
- 2 THICKNESS OF STEEL = 0.1017 INCH
- 3 ALL LINES ARE CENTER LINES OF BEAMS



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 ADDRESS: 1051 NORTH BISHOP AVENUE
 116 KUMER STUDENT DESIGN CENTER
 ROLLA, MO 65401-11410
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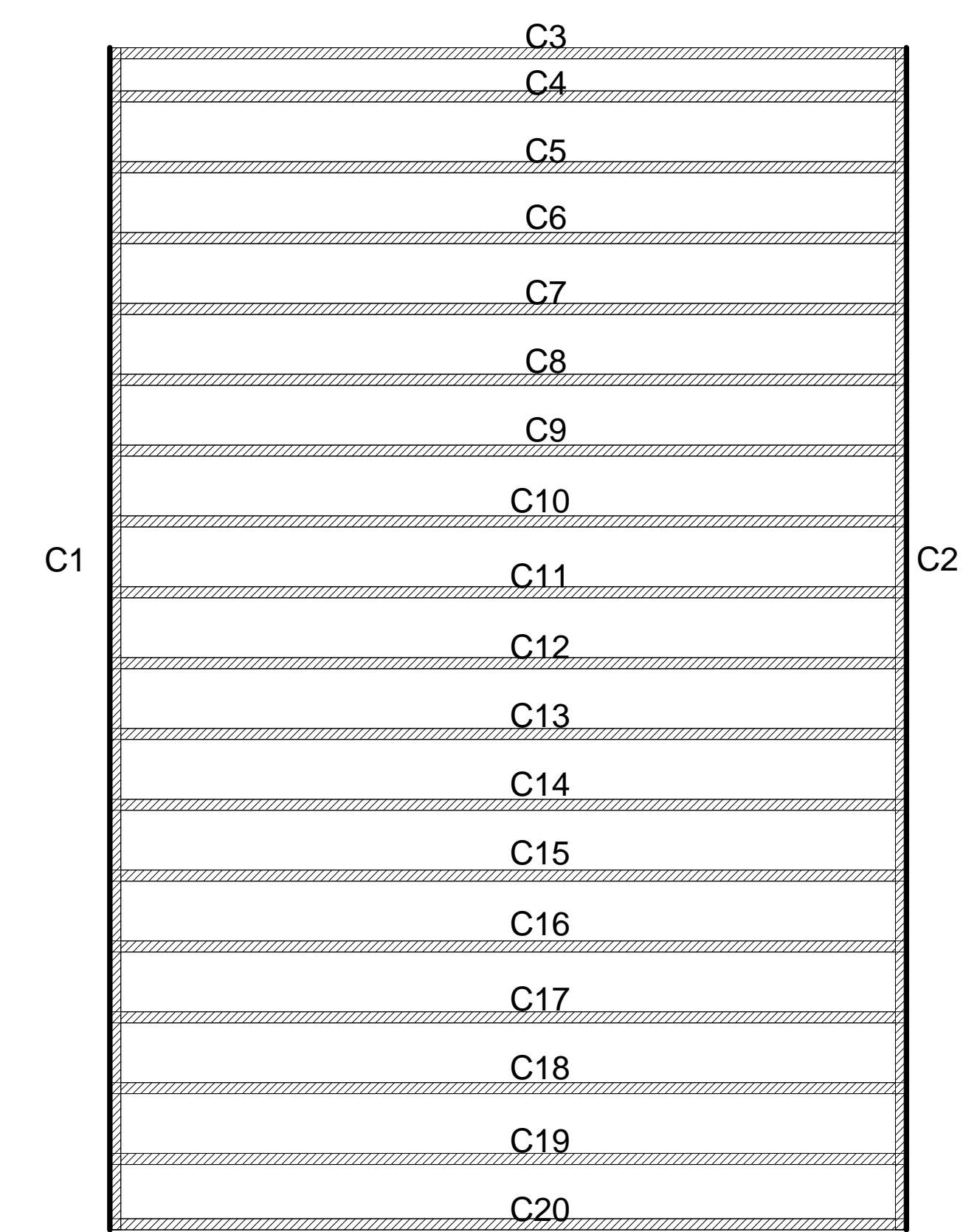
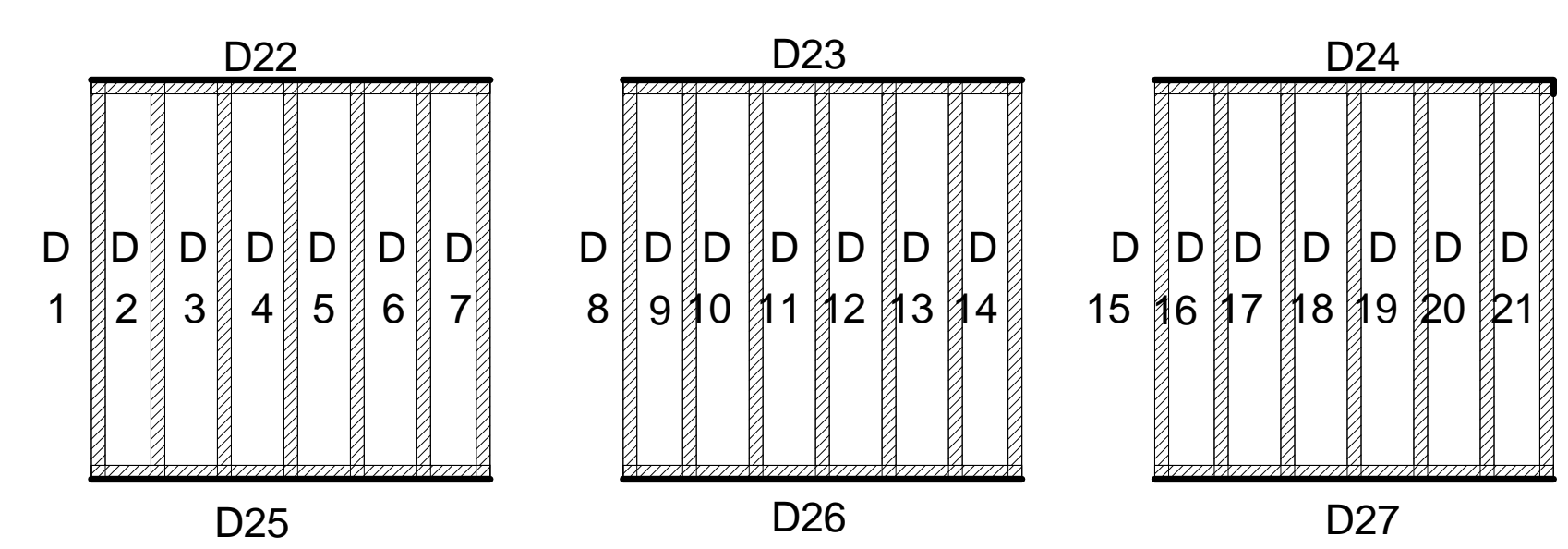
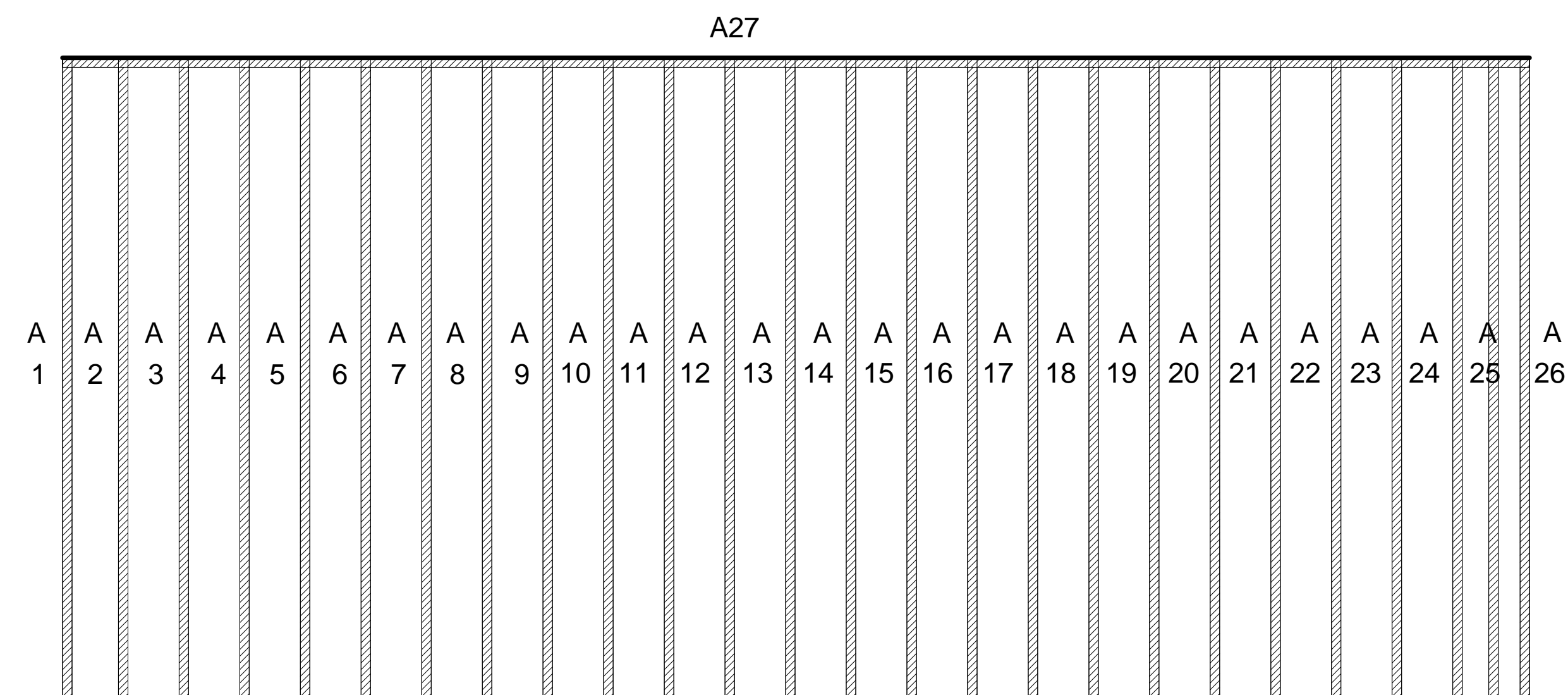
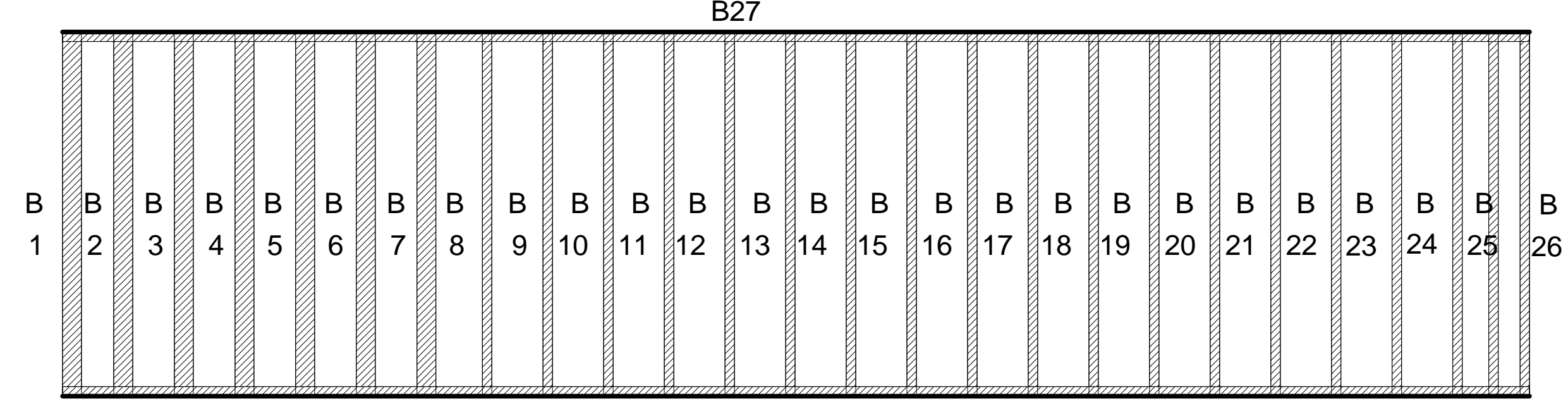


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SHEET TITLE
FIRST FLOOR FRAMING PLAN

S-102



(A1) FIRST FLOOR FRAMING PLAN TEMPORARY
 3/8" = 1'-0"



GENERAL SHEET NOTES

- 1 COLD FORM STEEL FY=50 KSI
- 2 THICKNESS OF STEEL = 0.1017 INCH
- 3 ALL LINES ARE CENTER LINES OF BEAMS



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 ADDRESS: 1051 NORTH BISHOP AVENUE
 116 KUMER STUDENT DESIGN CENTER
 ROLLA, MO 65401-11410
 CONTACT: SOLARHOUSE@MST.EDU
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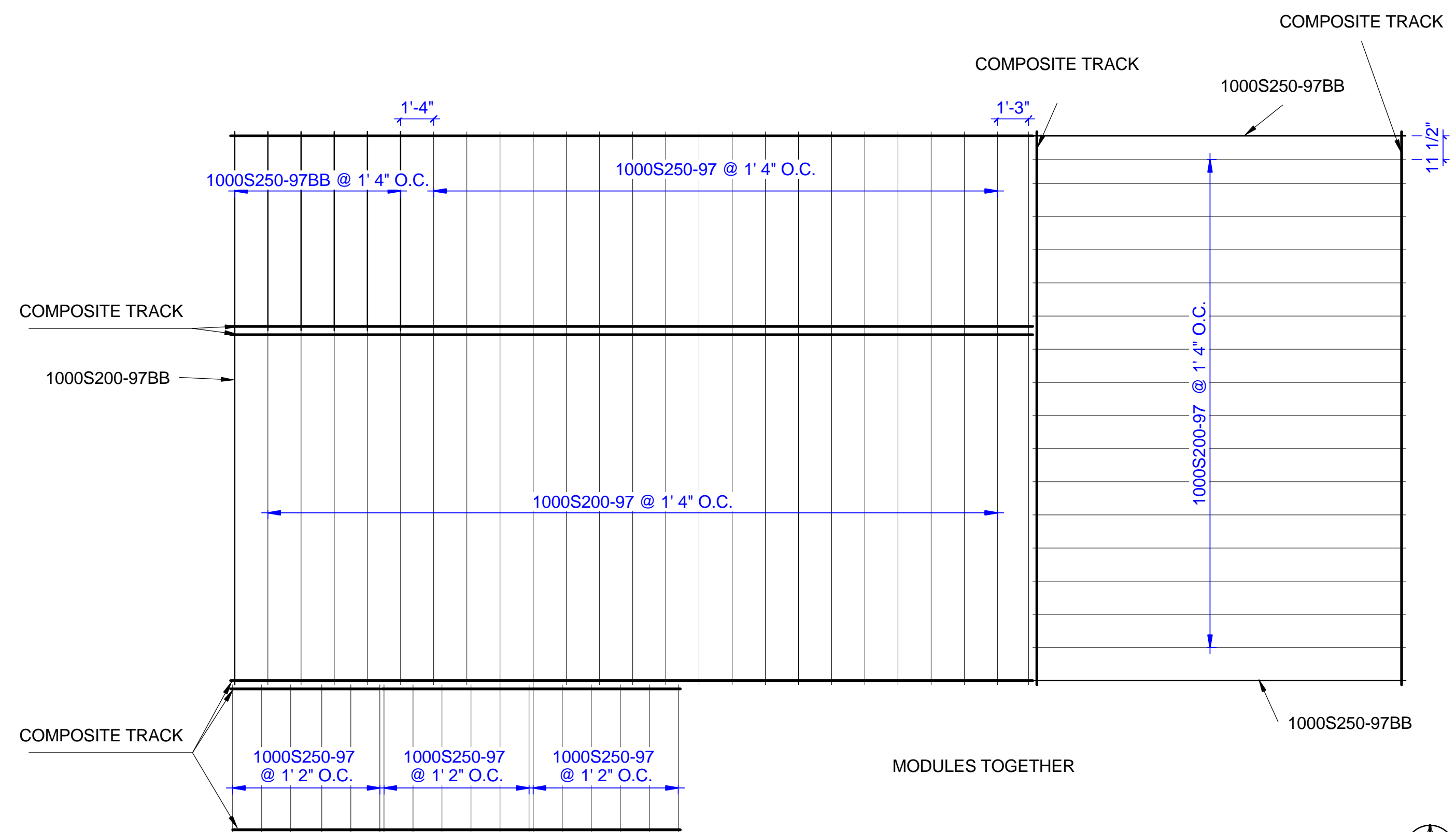
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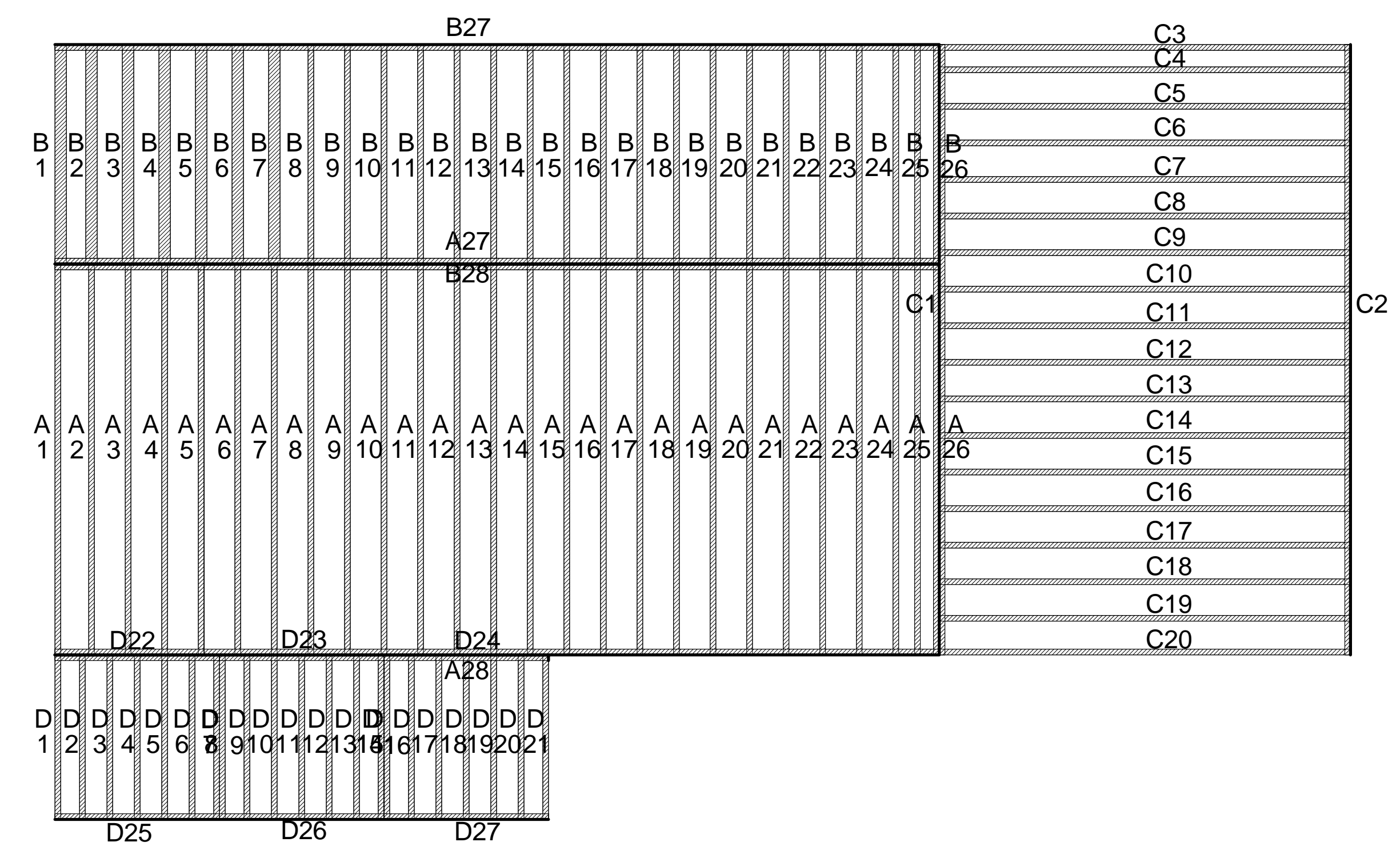
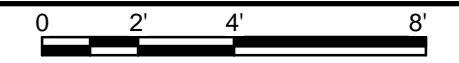
SHEET TITLE
FIRST FLOOR FRAMING PLAN

S-103



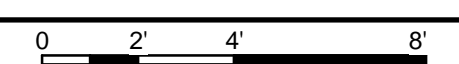
C1 FIRST FLOOR FRAMING PLAN TOGETHER

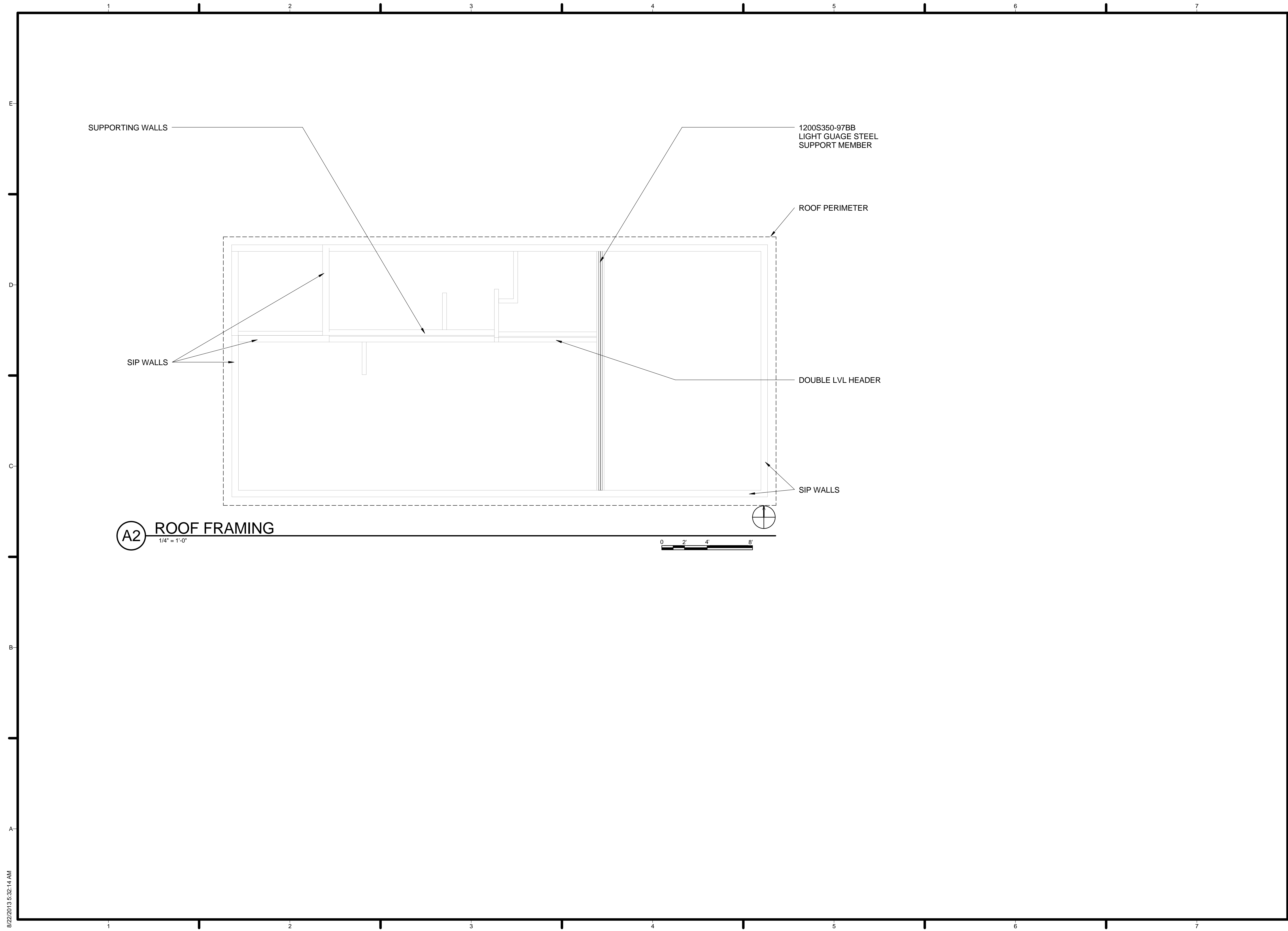
1/4" = 1'-0"



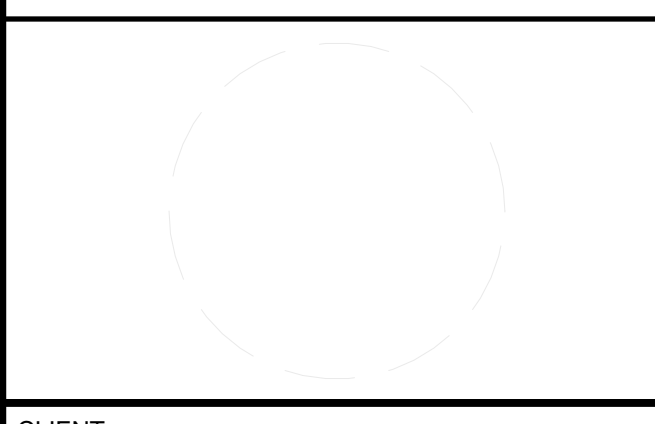
A1 FIRST FLOOR FRAMING PLAN DESIGNATION

1/4" = 1'-0"





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 ADDRESS: 1051 NORTH BISHOP AVENUE
 116 KUMER STUDENT DESIGN CENTER
 ROLLA, MO 65401-11410
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SHEET TITLE
 ROOF FRAMING PLAN

S-104

8/22/2013 5:32:14 AM

GENERAL SHEET NOTES

- 1 PRELIMINARY DECK DESIGN. SUBJECT TO CHANGE
- 2 DECK JOISTS 2X6 LUMBER
- 3 DECK GIRDERS 2X10 LUMBER
- 4 16" O.C. SPACING BETWEEN JOISTS



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 ADDRESS: 1051 NORTH BISHOP AVENUE
 116 KUMER STUDENT DESIGN CENTER
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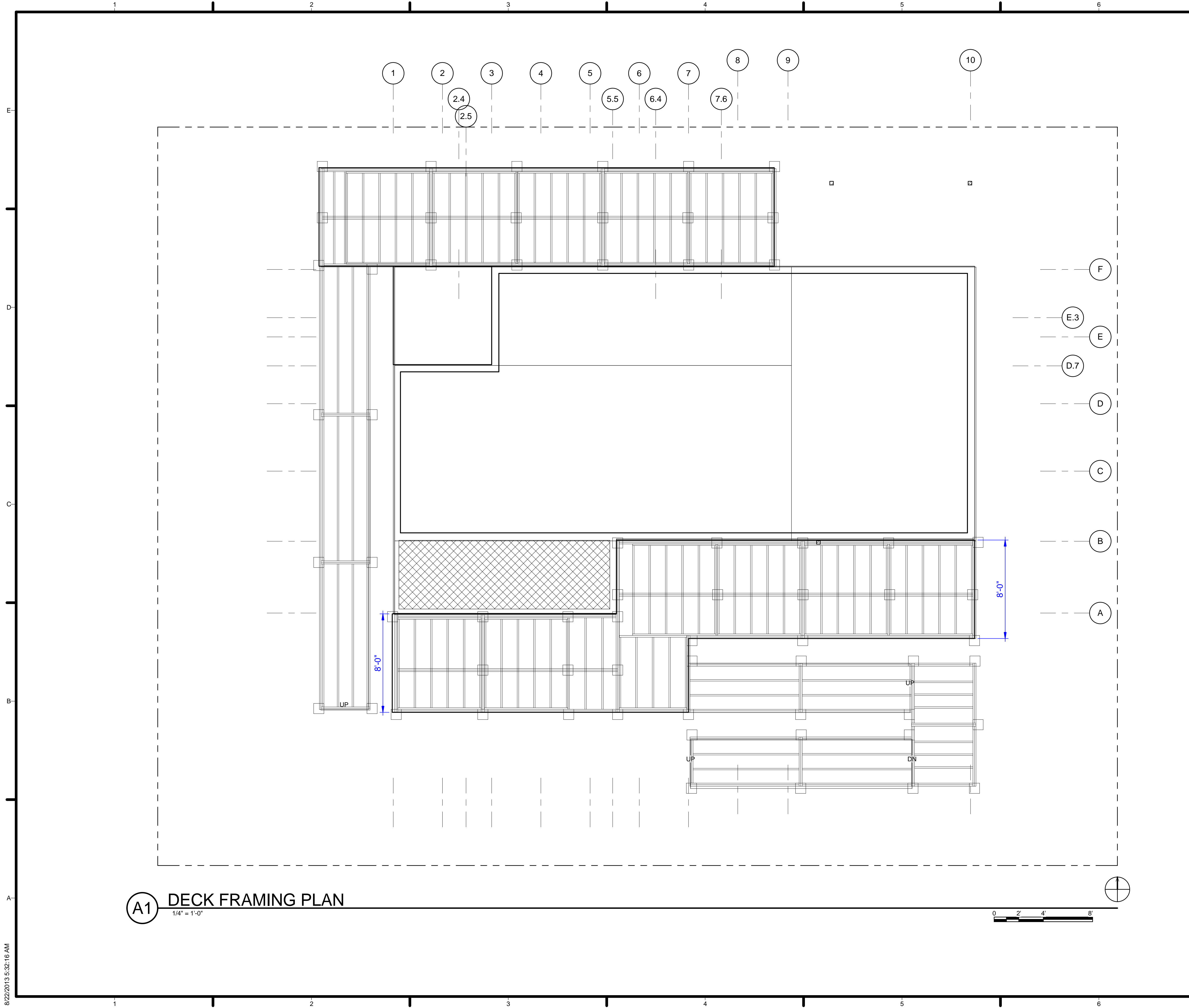


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SHEET TITLE
DECK FRAMING PLAN

S-105

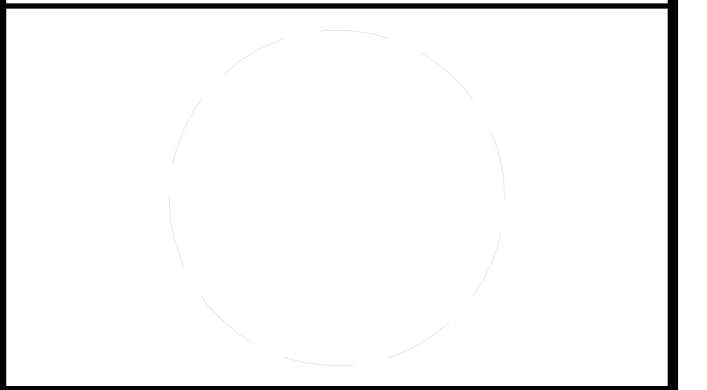


A1 DECK FRAMING PLAN
 1/4" = 1'-0"

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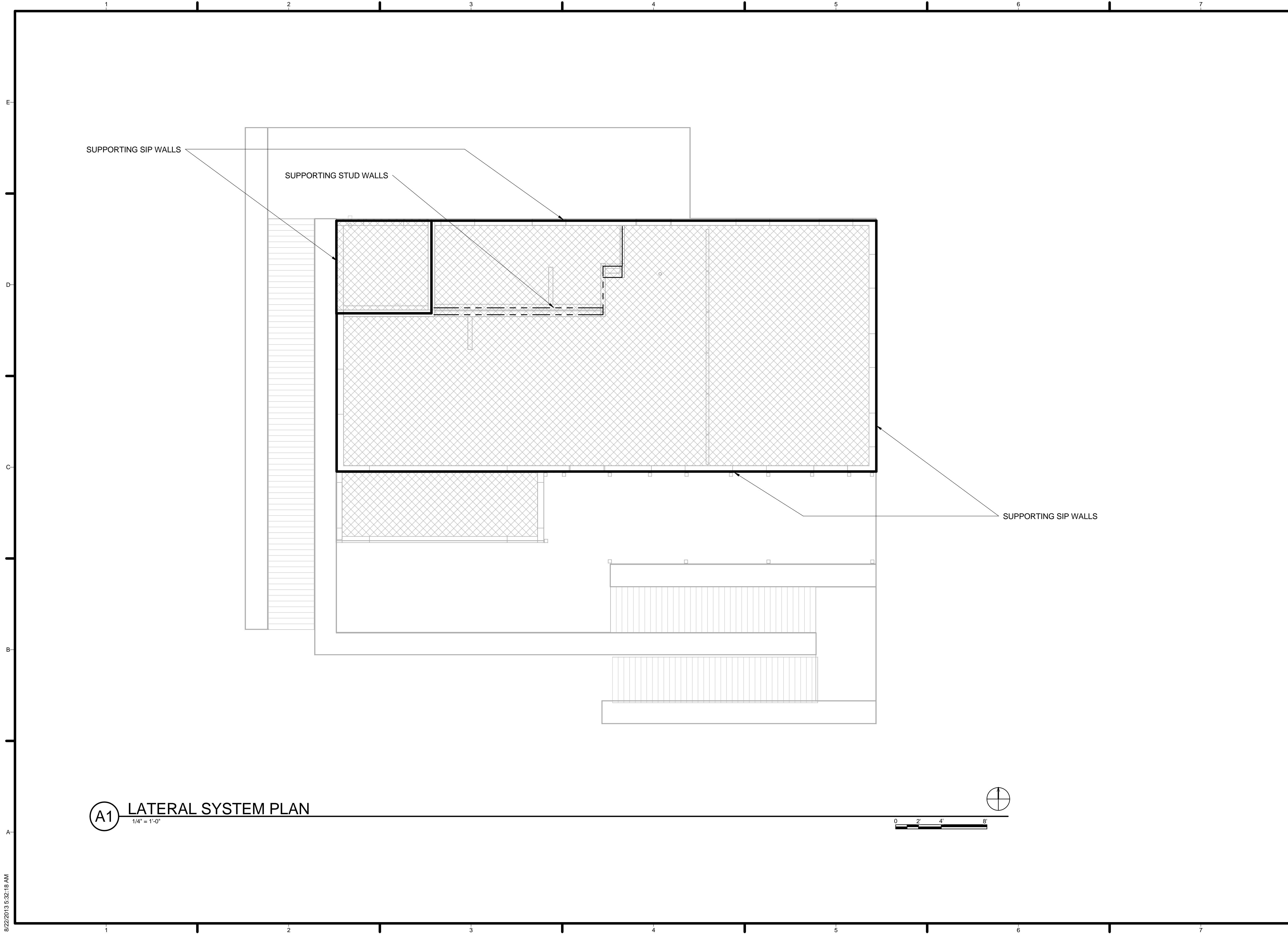


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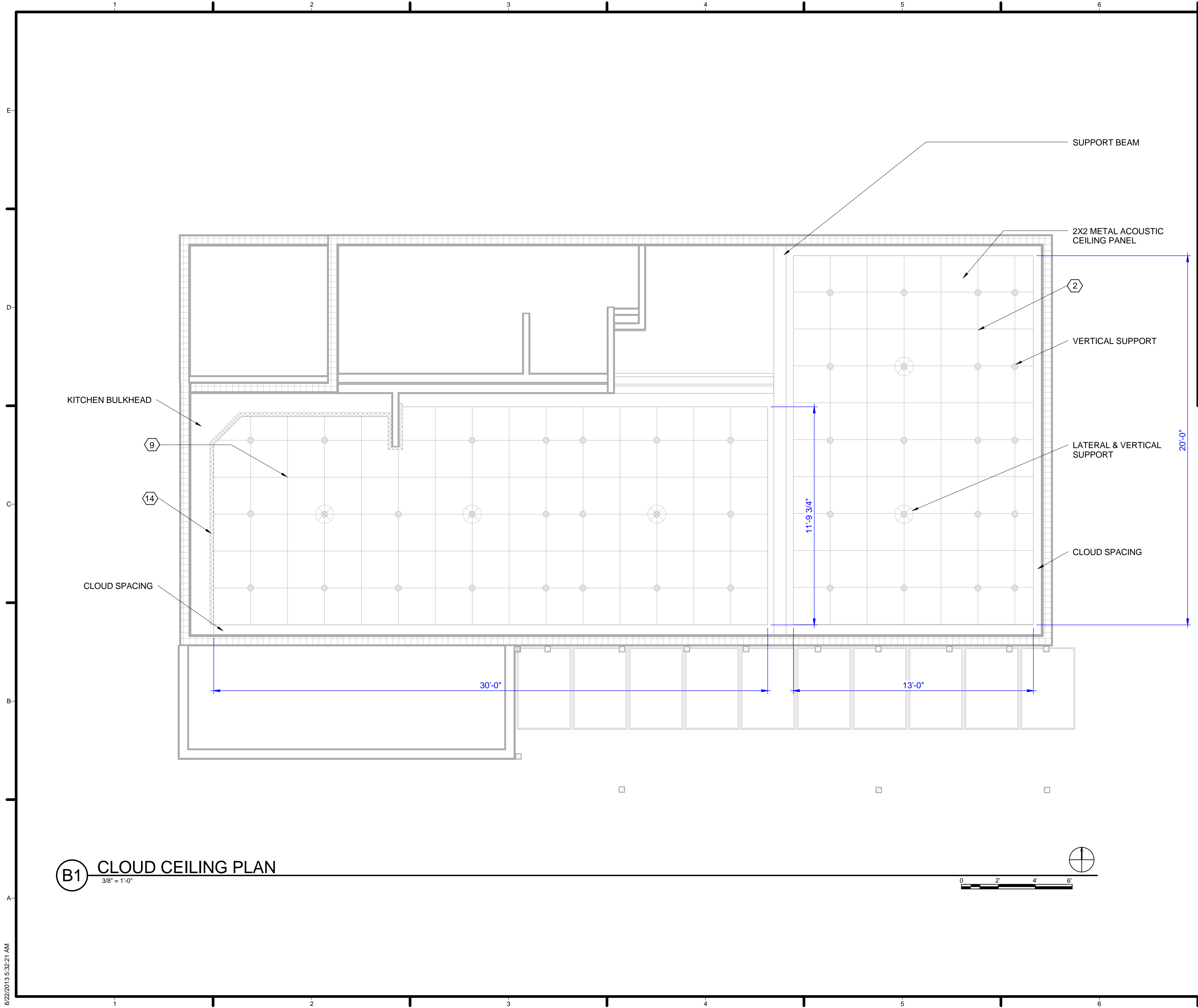
SHEET TITLE
 LATERAL SYSTEM PLAN

S-107



(A1) LATERAL SYSTEM PLAN
 1/4" = 1'-0"

8/22/2013 5:32:18 AM



GENERAL SHEET NOTES

- 1 SUSPENDED CLOUD CEILING DESIGNED TO COMPLY WITH ASTM E580 WITH SEISMIC DESIGN CATEGORIES D,E,F.
- 2 VERTICAL SUPPORT WILL CONSIST OF NO. 12 GUAGE HANGER WIRE HOWEVER, THOSE LOCATIONS WITH LATERAL BRACING WILL USE STEEL STUD FOR COMPRESSION POST AND VERTICAL SUPPORT.
- 3 LATERAL BRACING WILL CONSIST OF 4 NO. 12 GUAGE HANGER WIRES SPLAYED 90° FROM EACH OTHER AT AN ANGLE NOT MORE THAN 45° FROM THE MAIN BEAM OR CROSS TEE

SHEET KEYNOTES

- 2 BEDROOM CLOUD: MAIN BEAMS RUN NORTH TO SOUTH, CROSS TEES RUN EAST TO WEST
- 9 MAIN ROOM: MAIN BEAMS RUN EAST TO WEST, CROSS TEES RUN NORTH TO SOUTH
- 14 MAIN ROOM CLOUD WILL BE ATTACHED TO KITCHEN BULK HEAD AND WALL ALONG DIAGONAL CROSS HATCH



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 ADDRESS: 1051 NORTH BISHOP AVENUE
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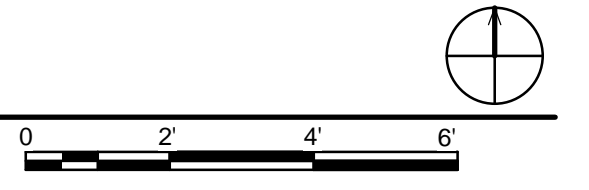


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SHEET TITLE
 CLOUD CEILING
 ANCHOR LOCATIONS

S-108

B1 CLOUD CEILING PLAN
 3/8" = 1'-0"



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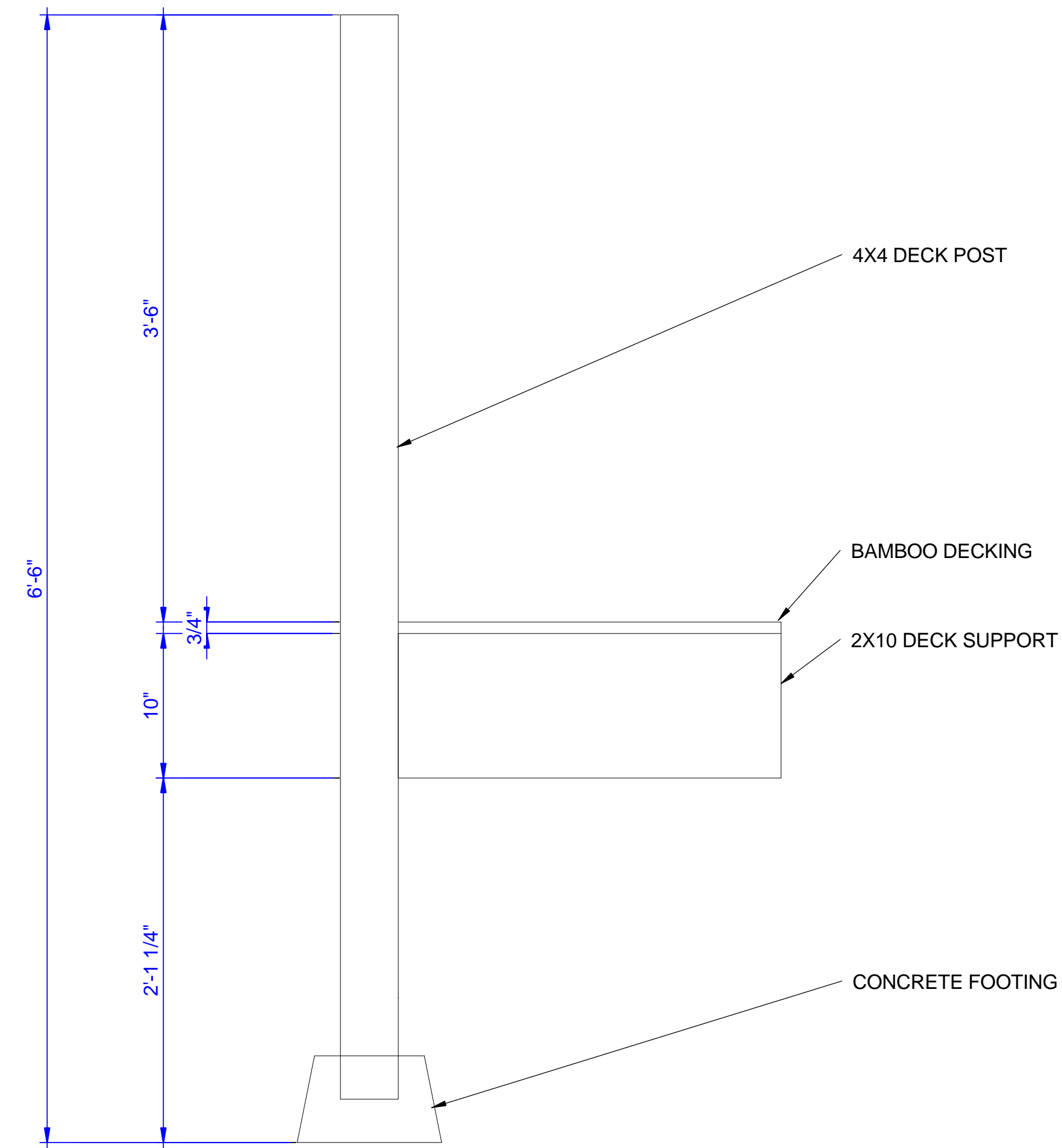
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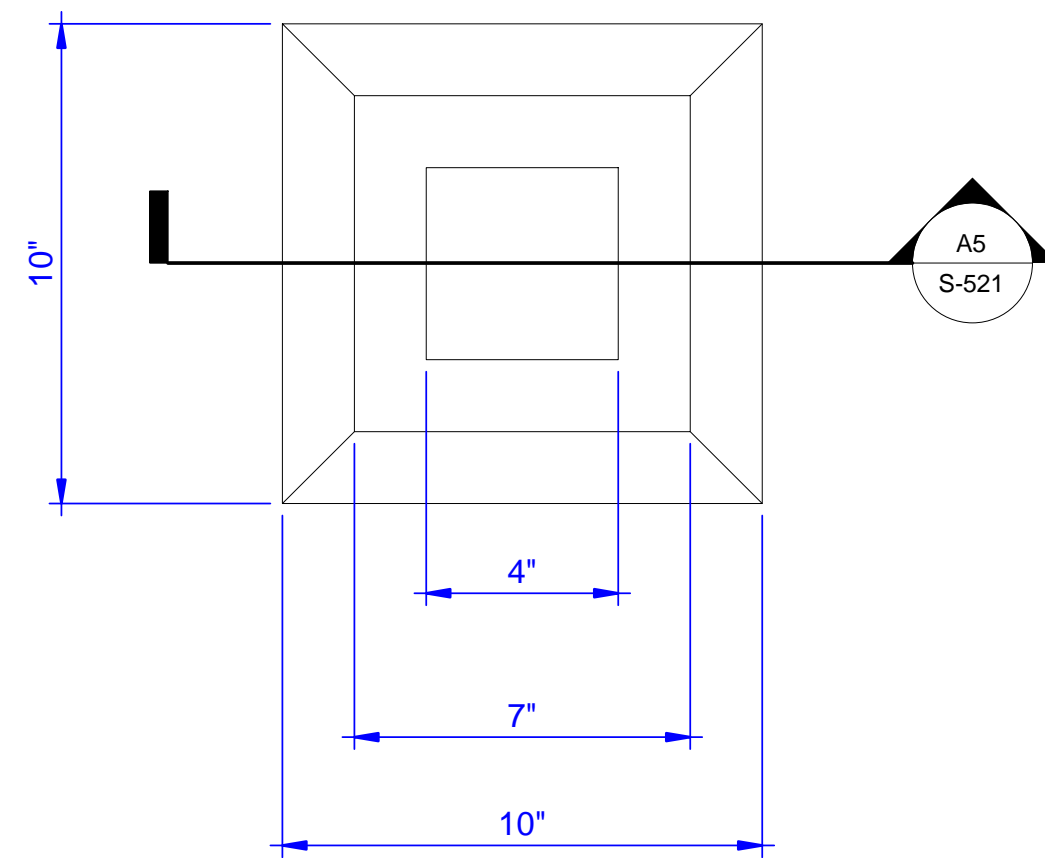
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DECK DETAILS

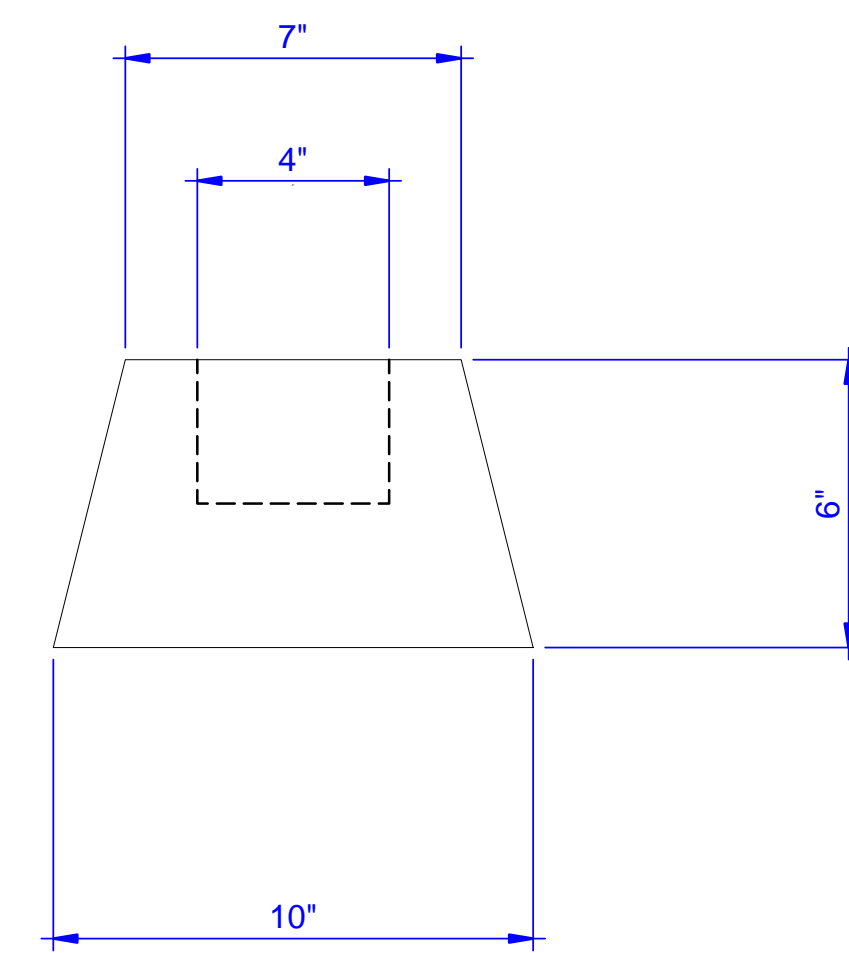
S-521



C1 DECK DETAIL
 1 1/2" = 1'-0"



A1 DECK FOOTING PLAN VIEW
 3" = 1'-0"



A5 DECK FOOTING SECTION
 3" = 1'-0"



SHEET KEYNOTES

1 SLOPE ON PERGOLA TO EQUAL THAT OF ROOF OF HOUSE (1:80).



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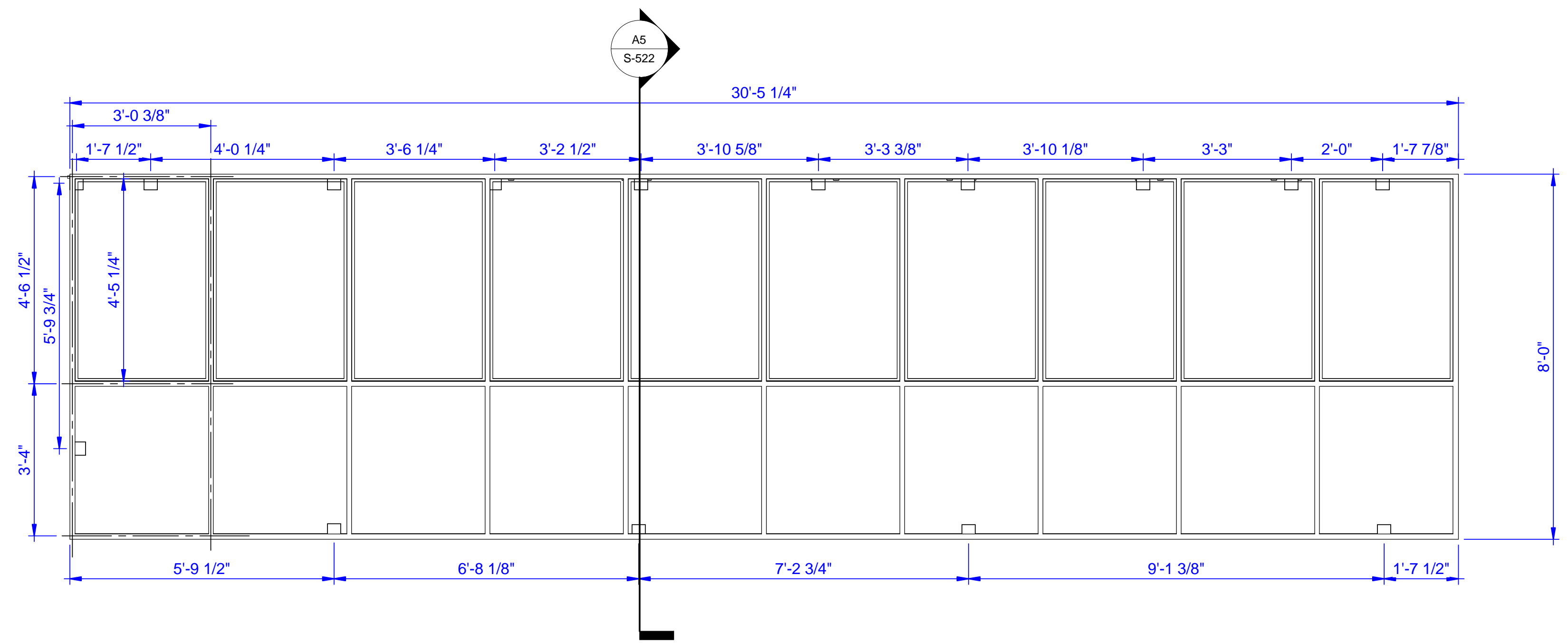
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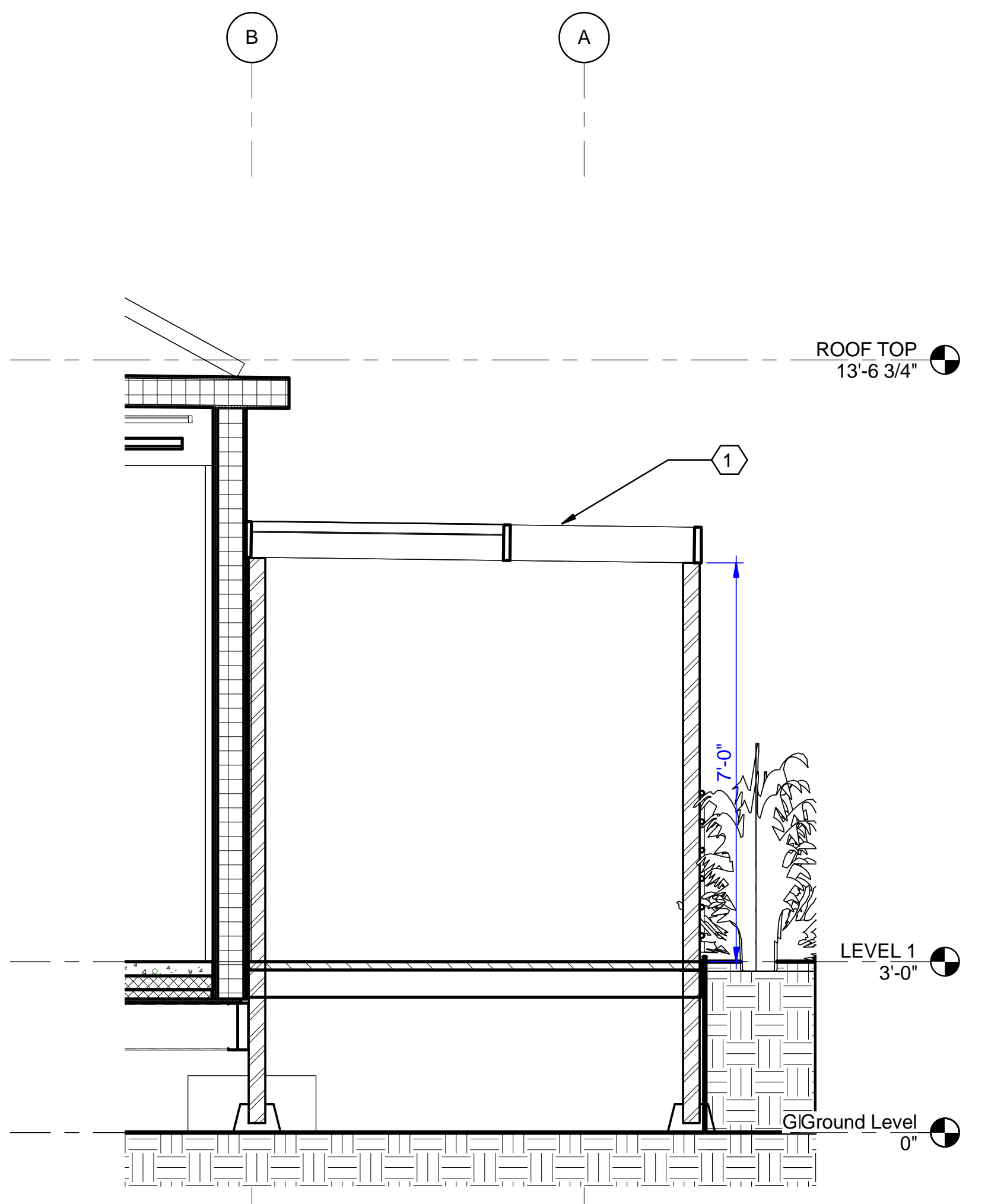
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SHEET TITLE
BIFACIAL PERGOLA

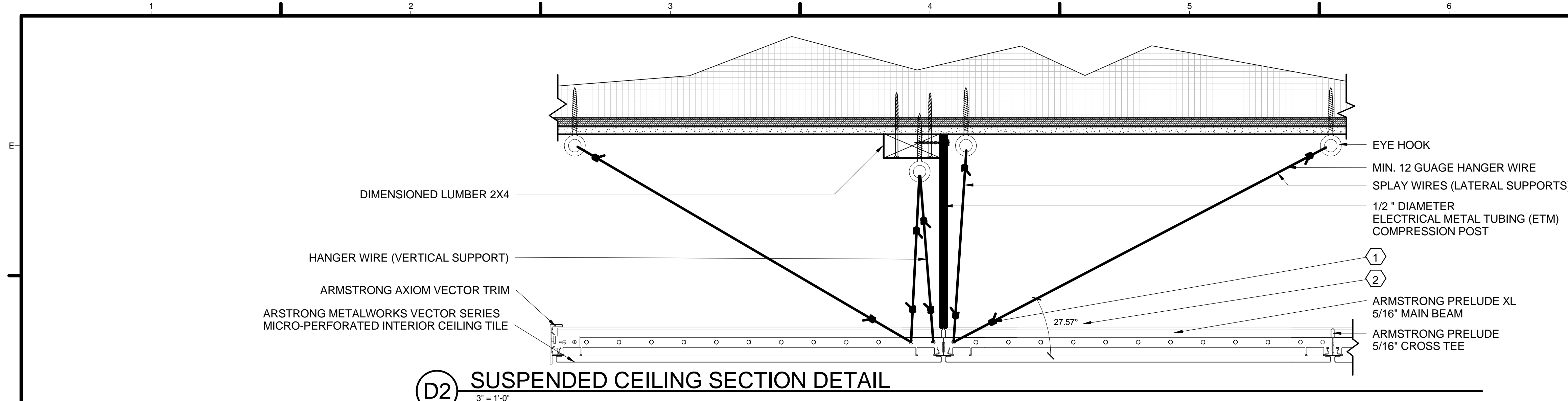
S-522



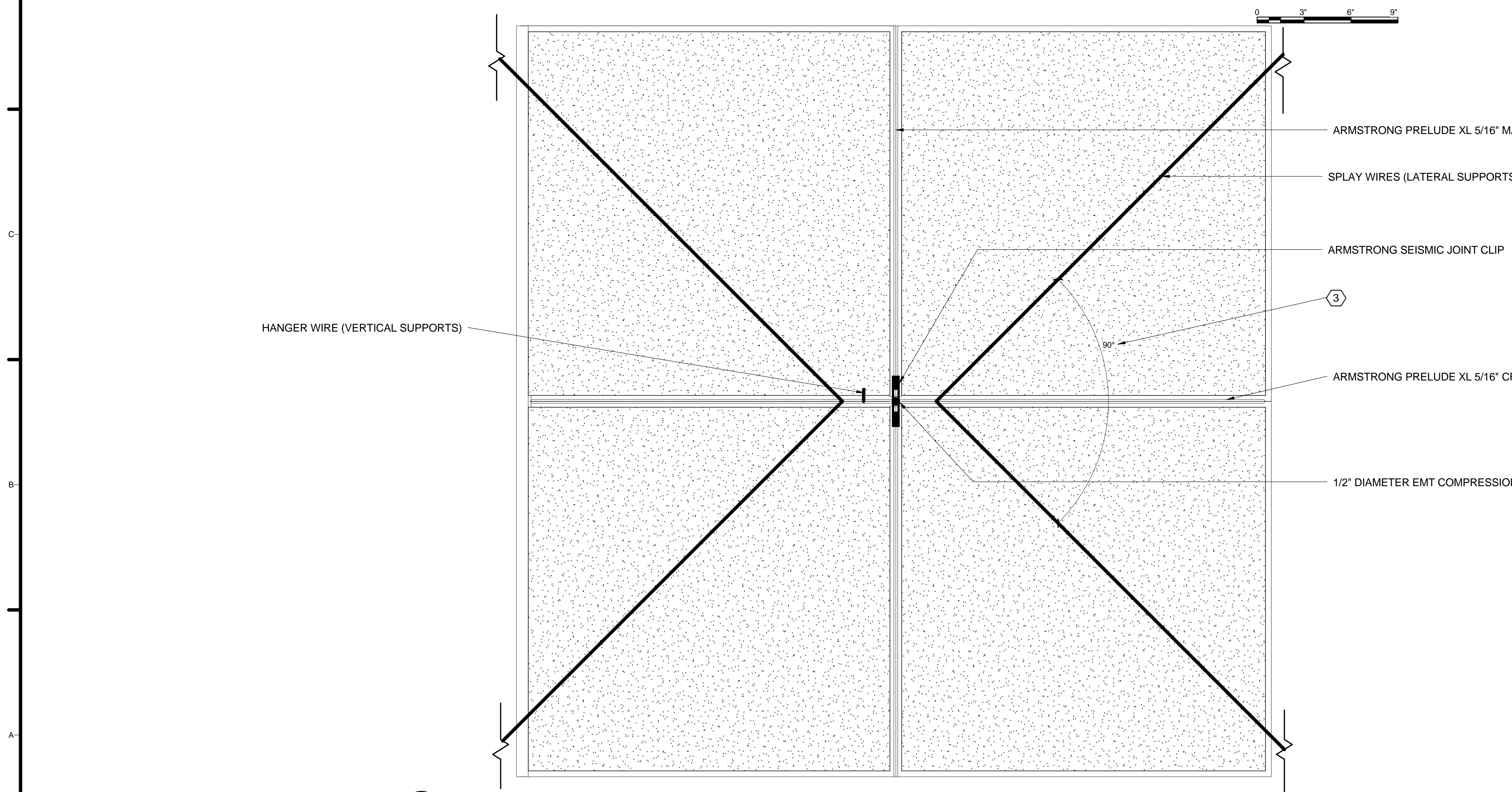
B1 BIFACIAL PERGOLA
 1/2" = 1'-0"



A5 BIFACIAL PERGOLA SECTION
 1/2" = 1'-0"



D2 SUSPENDED CEILING SECTION DETAIL
3" = 1'-0"



A2 SUSPENDED CEILING PLAN DETAIL
3" = 1'-0"

GENERAL SHEET NOTES

- 1 HANGER WIRES (VERTICAL SUPPORTS) MUST BE POSITIONED EVERY 4'
- 2 COMPRESSION POSTS MUST BE POSITIONED EVERY 12'
- 3 SPLAY WIRES (LATERAL SUPPORTS) MUST BE POSITIONED EVERY 12'

SHEET KEYNOTES

- 1 ALL SUPPORT WIRES MUST BE SECURED WITH A MINIMUM OF 3 TWISTS
- 2 SPLAY WIRES (LATERAL SUPPORTS) MUST MAKE AN ANGLE OF 45° OR LESS WITH THE CEILING PLANE
- 3 SPLAY WIRES (LATERAL SUPPORTS) MUST MAKE AN ANGLE OF 90° WITH EACHOTHER WHEN MEASURED IN PLAN VIEW



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SHEET TITLE
SUSPENDED CEILING DETAILS

S-541

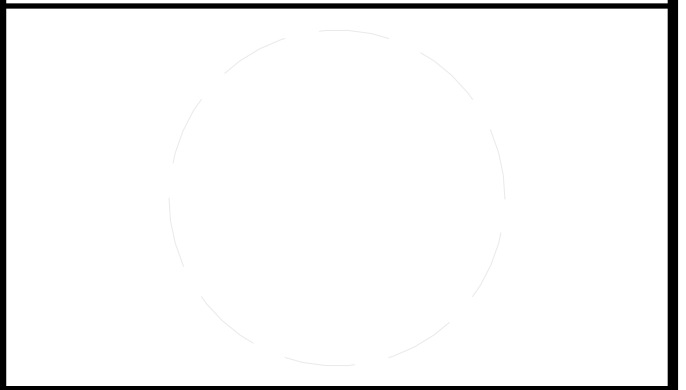


STRUCTURAL FOUNDATION SCHEDULE					
DESIGNATOR	TYPE	WIDTH	LENGTH	AREA	LOAD
B1	STRUCTURAL FOOTING 1' 9"	1'-9"	1'-9"	3 SF	7529
B2	STRUCTURAL FOOTING 1' 9"	1'-9"	1'-9"	3 SF	7529
A1	STRUCTURAL FOOTINGS 1' 6"	1'-6"	1'-6"	2 SF	2948
A2	STRUCTURAL FOOTINGS 1' 6"	1'-6"	1'-6"	2 SF	5803
C1	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	
C2	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	5803
C3	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	5803
C4	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	5803
C5	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	8380
C6	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	10851
C7	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	10851
C8	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	7279
C9	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	6989
C10	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	11311
C11	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	11311
C12	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	7529
C13	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	7529
C14	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	7529
C15	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	7529
C16	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	7529
C17	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	5052
C18	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	5803
C19	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	
C20	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	
C21	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	
C22	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	8380
C23	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	8380
C24	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	10851
C25	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	11311
C26	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	11311
C27	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	11311
C28	STRUCTURAL FOOTINGS 2'	2'-0"	2'-0"	4 SF	11311
D	STRUCTURAL FOOTINGS 2' 3"	2'-3"	2'-3"	5 SF	INCLUDED IN AF9-BF8
D1	STRUCTURAL FOOTINGS 2' 3"	2'-3"	2'-3"	5 SF	9669
D2	STRUCTURAL FOOTINGS 2' 3"	2'-3"	2'-3"	5 SF	14673
D3	STRUCTURAL FOOTINGS 2' 3"	2'-3"	2'-3"	5 SF	14343
E4	STRUCTURAL FOOTINGS 2' 3"	2'-3"	2'-3"	5 SF	15346
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	

STRUCTURAL FOUNDATION SCHEDULE					
DESIGNATOR	TYPE	WIDTH	LENGTH	AREA	LOAD
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
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	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	

STRUCTURAL FOUNDATION SCHEDULE					
DESIGNATOR	TYPE	WIDTH	LENGTH	AREA	LOAD
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
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	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	
	STURCTURAL FOOTINGS DECK	10"	10"	1 SF	

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SHEET TITLE
FOUNDATION PIER SCHEDULE

S-601

GENERAL SHEET NOTES

- 1 ALL STEEL IS DIETRICH LIGHT WEIGHT STEEL
- 2 COMPOSITE TRACK MADE OF 1000S250-97 STIFFENER WITH 1000T250-97 RIM TRACK
- 3 TIE DOWN ANCHOR SET AT 30 TO 40 DEGREES ATTACHED TO STEEL PLATE FOR LATERAL SUPPORT
- 4 ALL FOOTINGS ARE 12.5 INCHES HIGH AND SQUARE BASE DIMENSIONS



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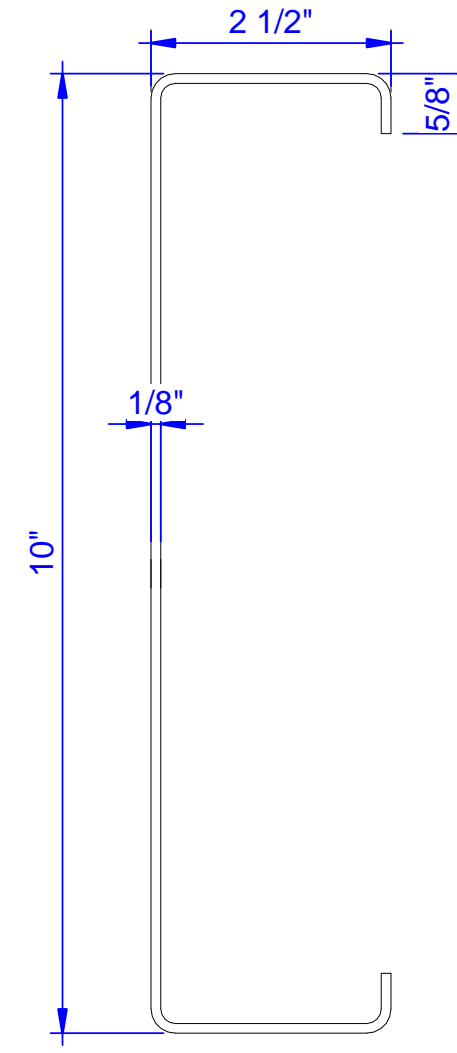


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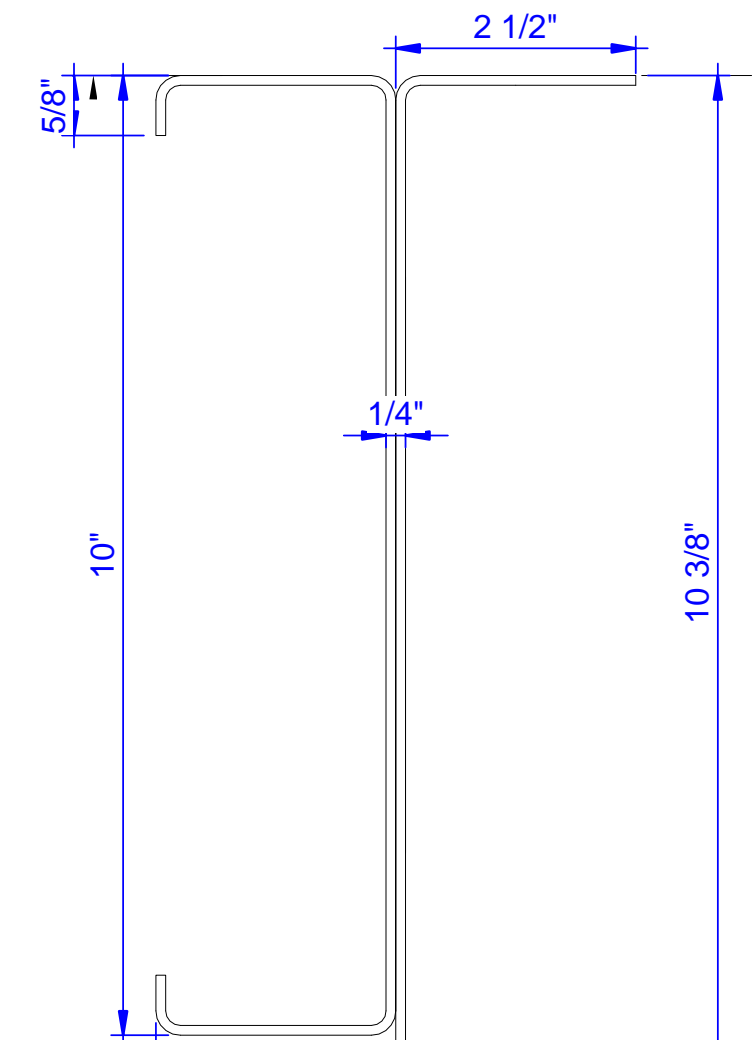
SHEET TITLE
TYPICAL DETAILS

S-701



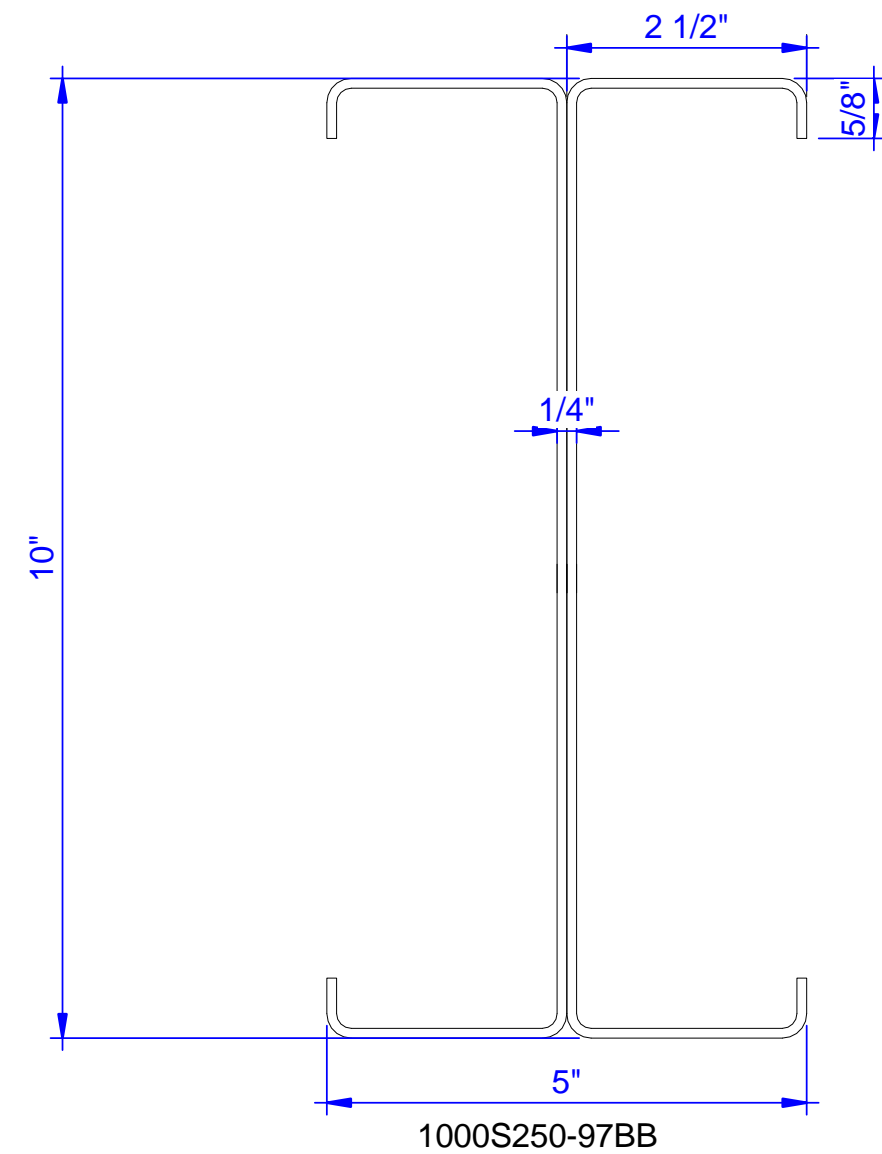
1000S250-97

C2 STEEL CROSS SECTION-D1
6" = 1'-0"



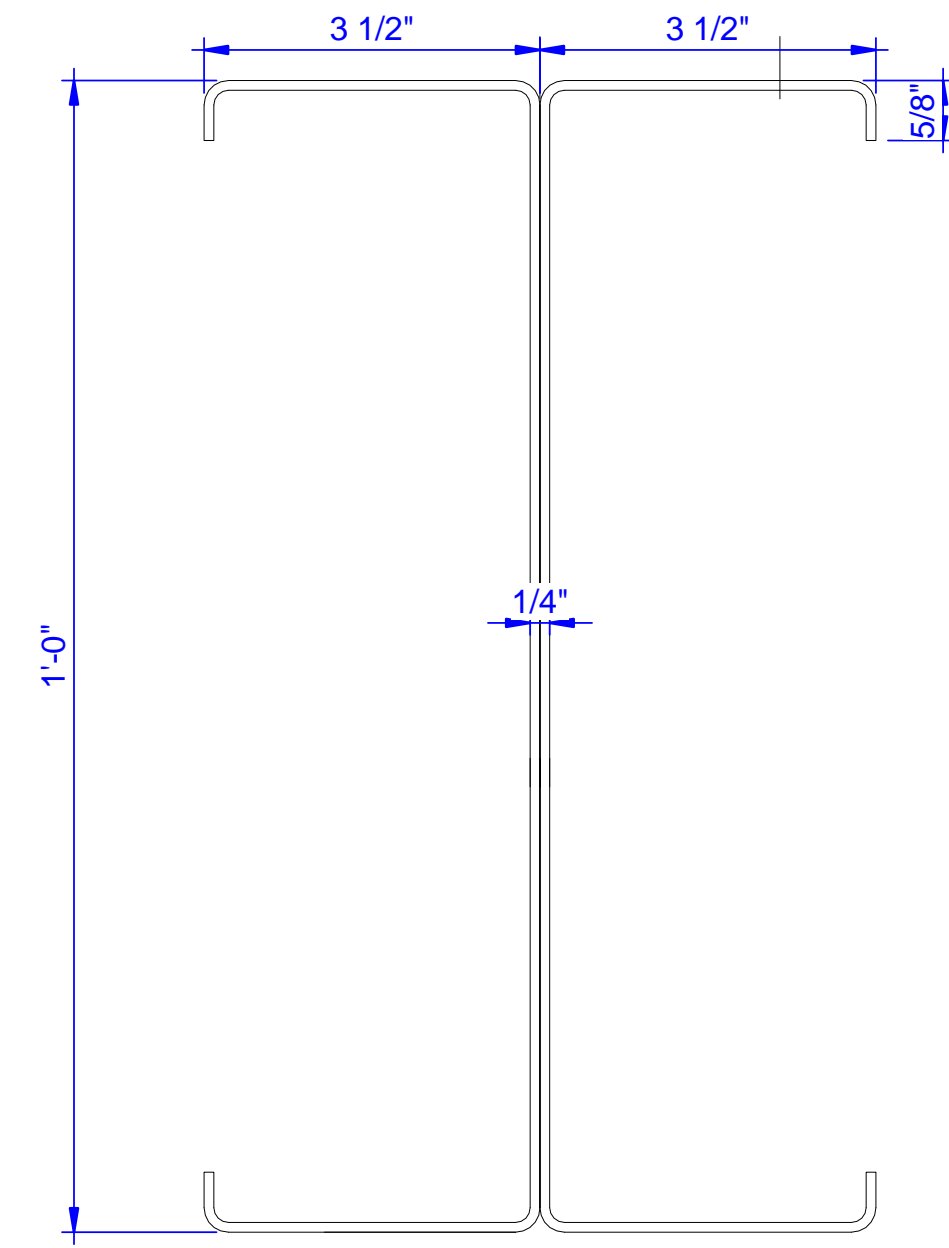
COMPOSITE TRACK

C5 STEEL CROSS SECTION-D2
6" = 1'-0"



1000S250-97BB

A2 STEEL CROSS SECTION-D3
6" = 1'-0"



12000S350-97BB

A5 STEEL CROSS SECTION-D4
6" = 1'-0"



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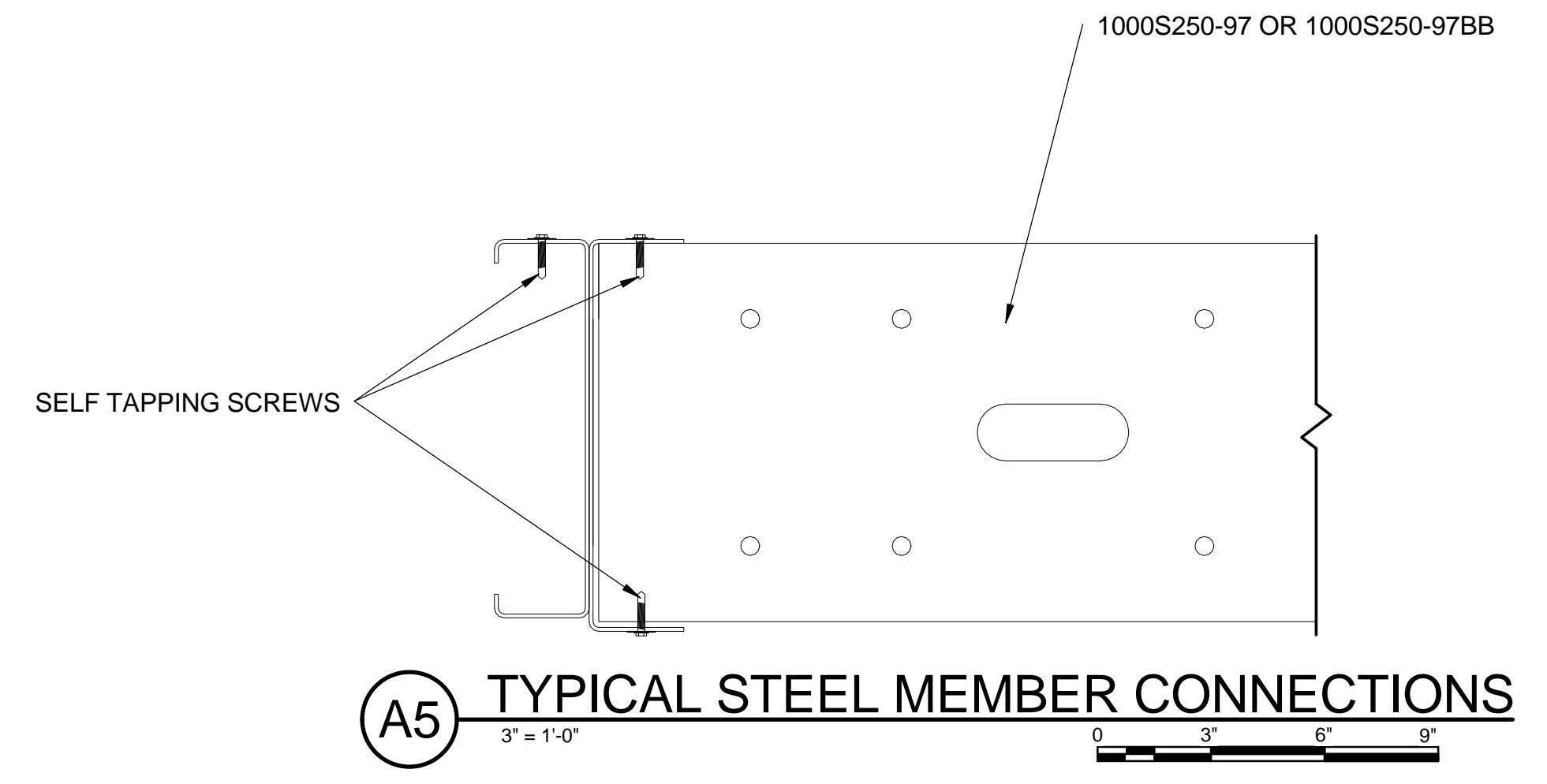
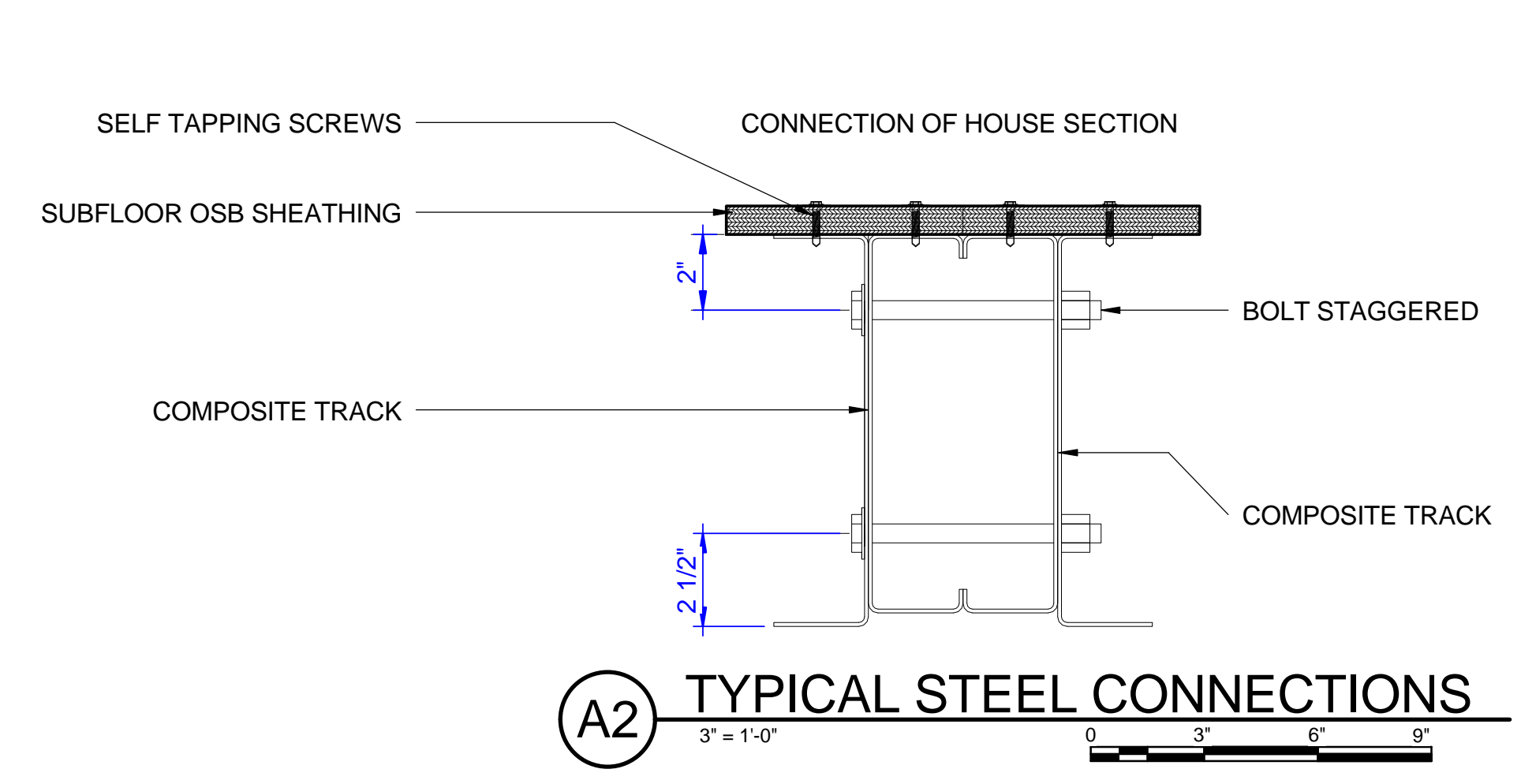
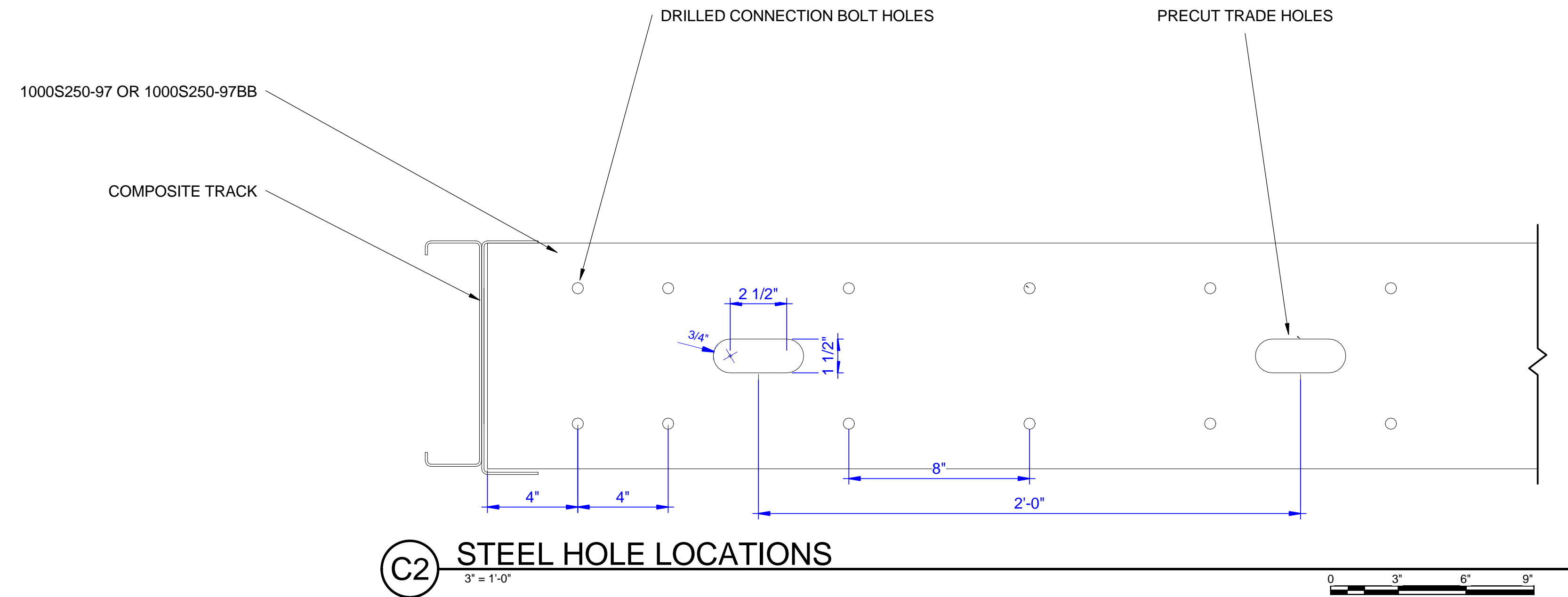


MARK	DATE	DESCRIPTION
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SHEET TITLE
TYPICAL DETAILS

S-702





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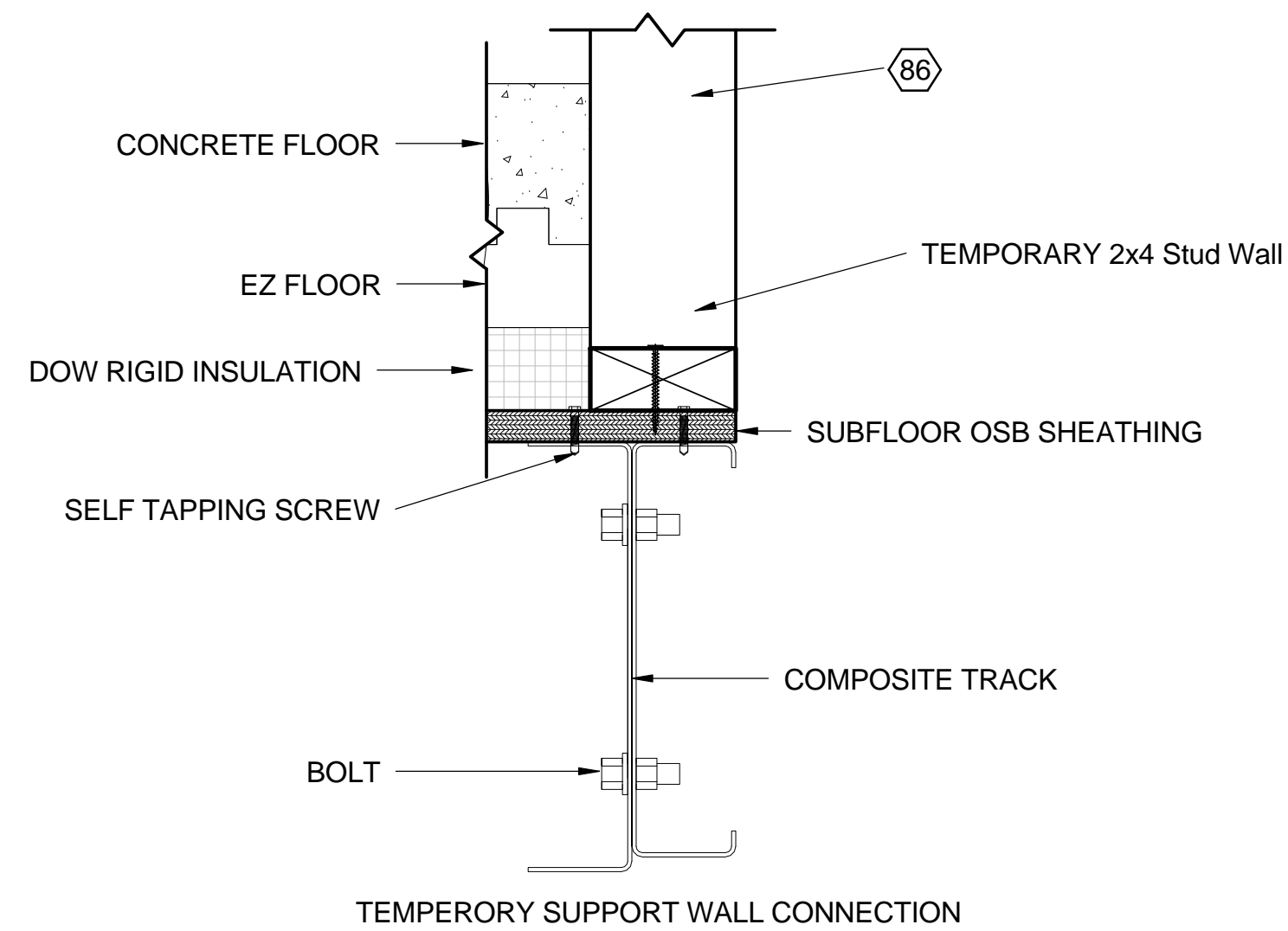
SHEET TITLE

TYPICAL DETAILS

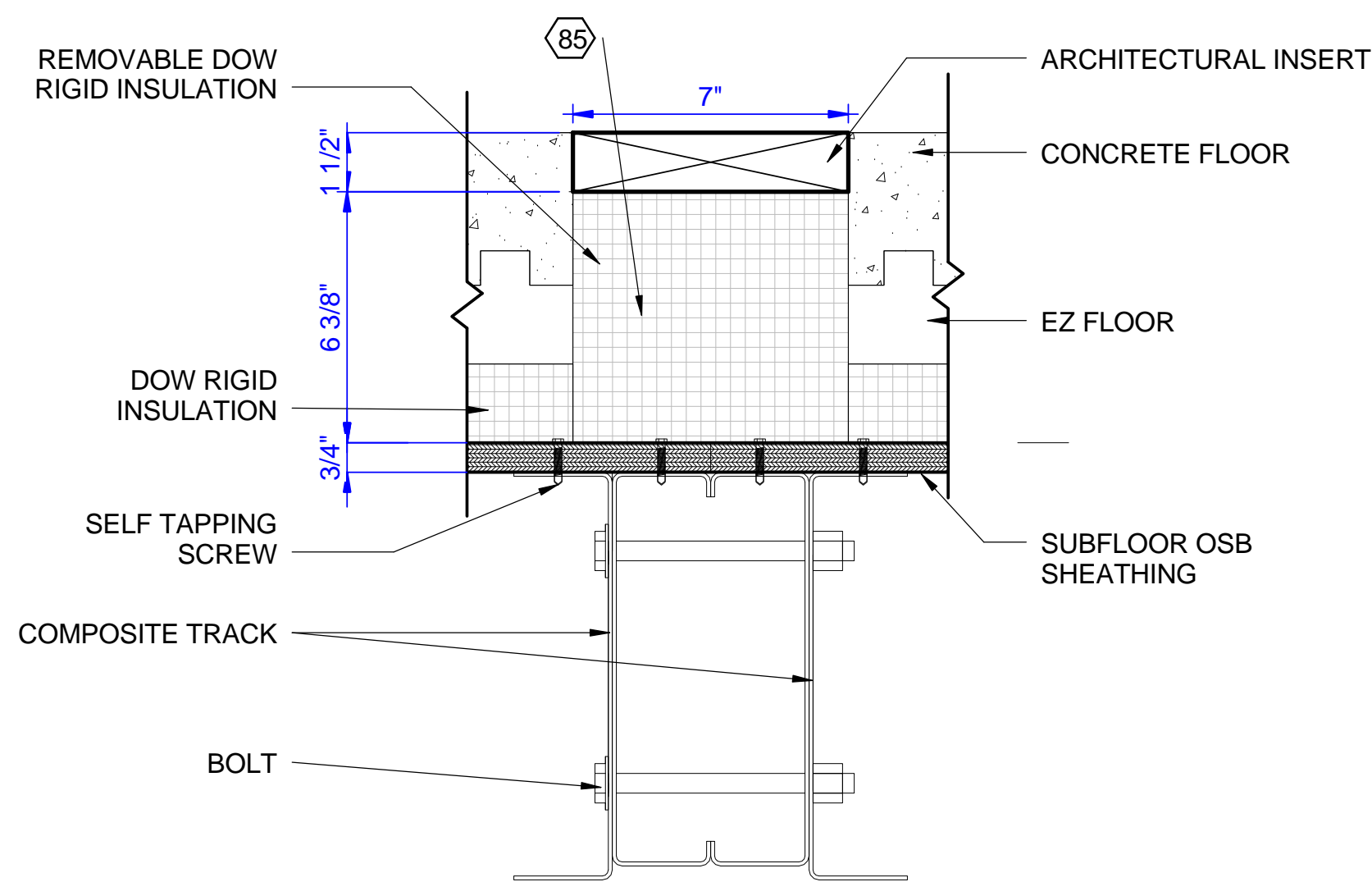
S-703

SHEET KEYNOTES

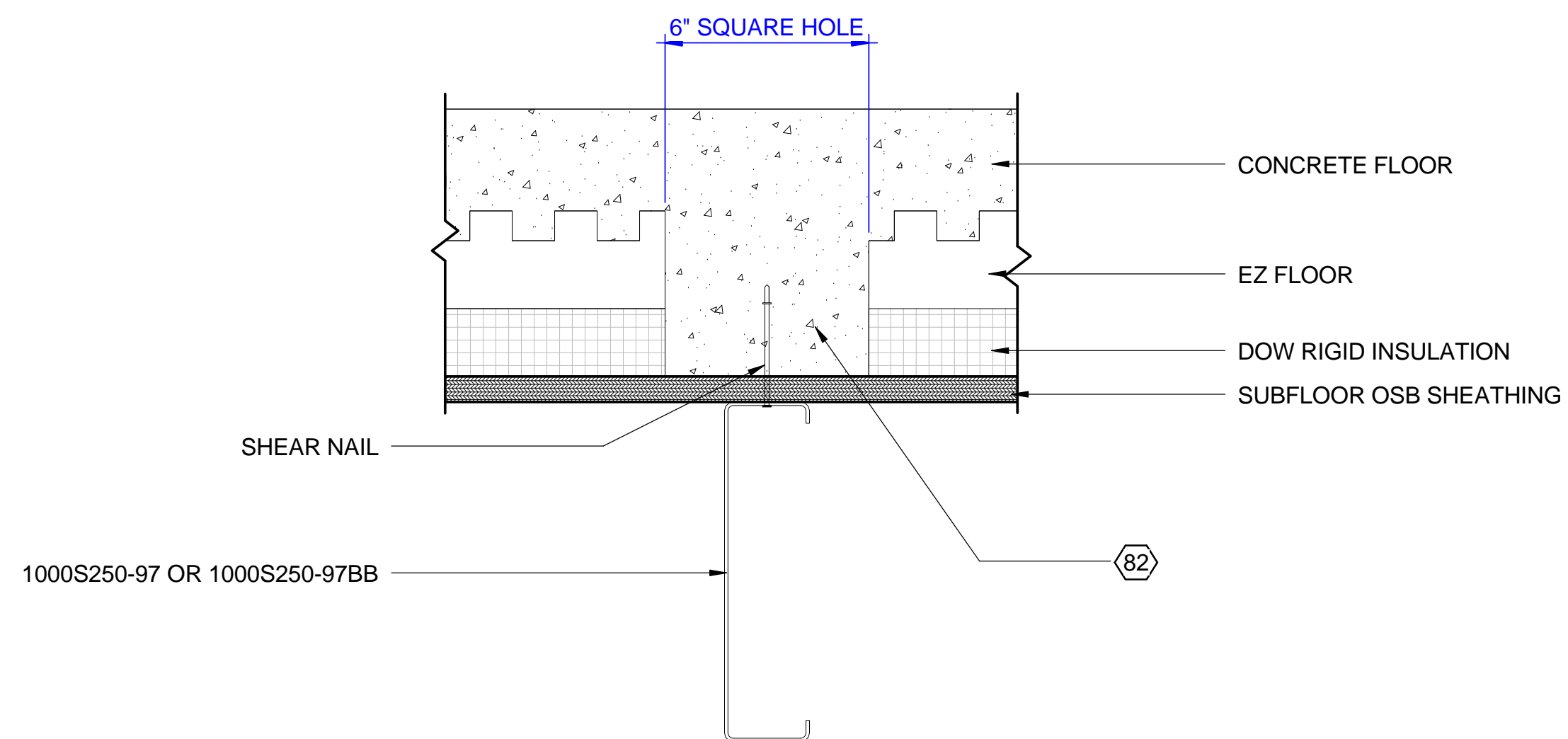
- 82 CONCRETE ANCHORS WILL BE EVERY 4 FEET IN A GRID PATTERN IN ORDER TO LATERALLY STABILIZE CONCRETE FLOOR
- 85 CUT BACK 3.5" FOR SHIPPING ALLOWING TEMPORARY 2X4 WALLS TO CONTACT SUPPORTS IN OPEN AREAS WHEN SECTIONS ARE BROKEN APART.
- 86 TEMPORARY STUD WALLS WILL SUPPORT ROOF OF EACH SECTION DURING TRANSPORTATION
- 88 FOUNDATION STRAPPING WILL BE USED PER LOCAL CODE FOR EACH SIP SECTION



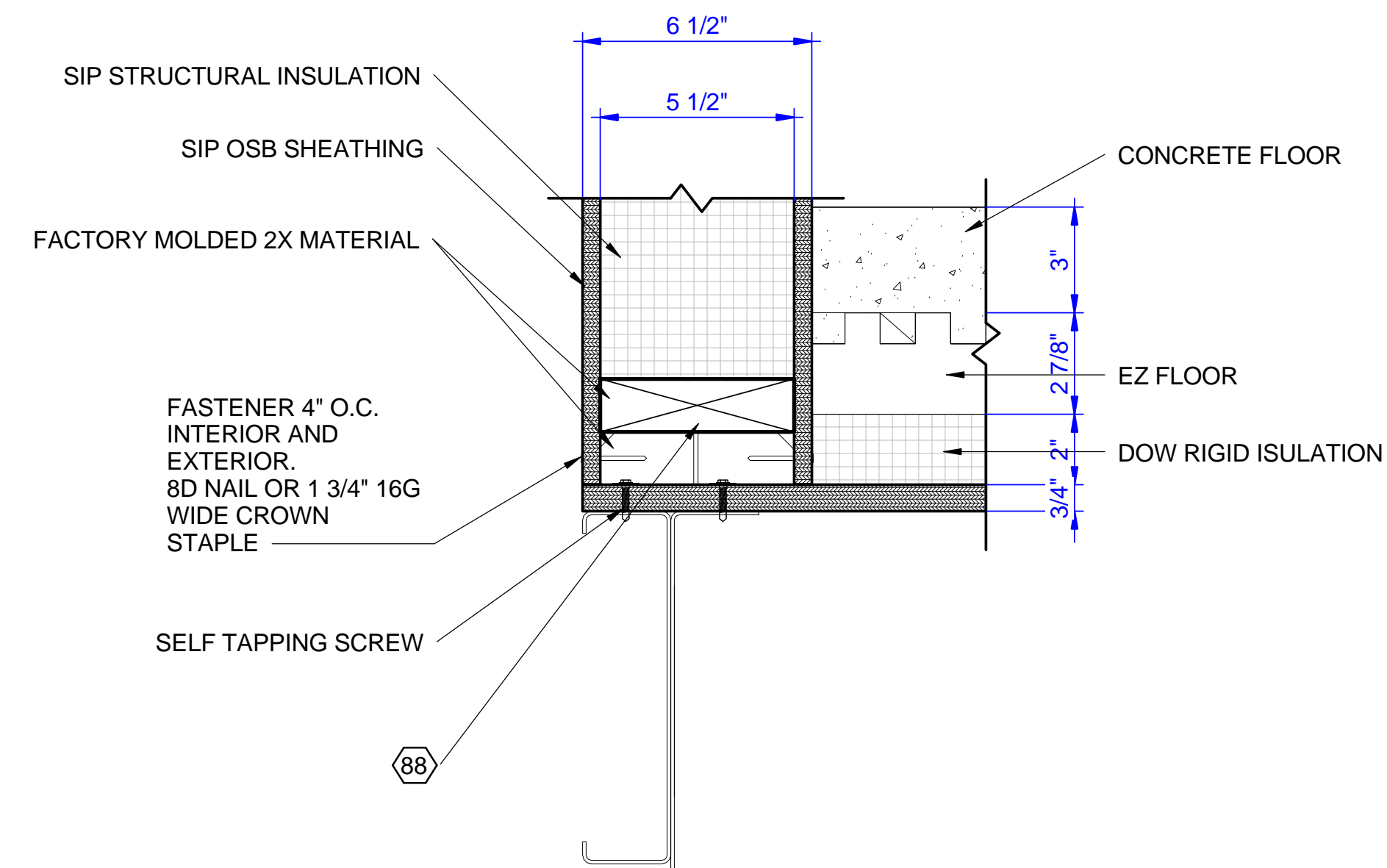
D1 3" = 1'-0" 0 3 6 9



D4 3" = 1'-0" 0 3 6 9



A1 3" = 1'-0" 0 3 6 9



A4 3" = 1'-0" 0 3 6 9

SHEET KEYNOTES

1 UN-USED HOLES MAY BE USED TO FASTEN HOUSE SECTIONS TOGETHER AS SEEN IN SHEET S-703



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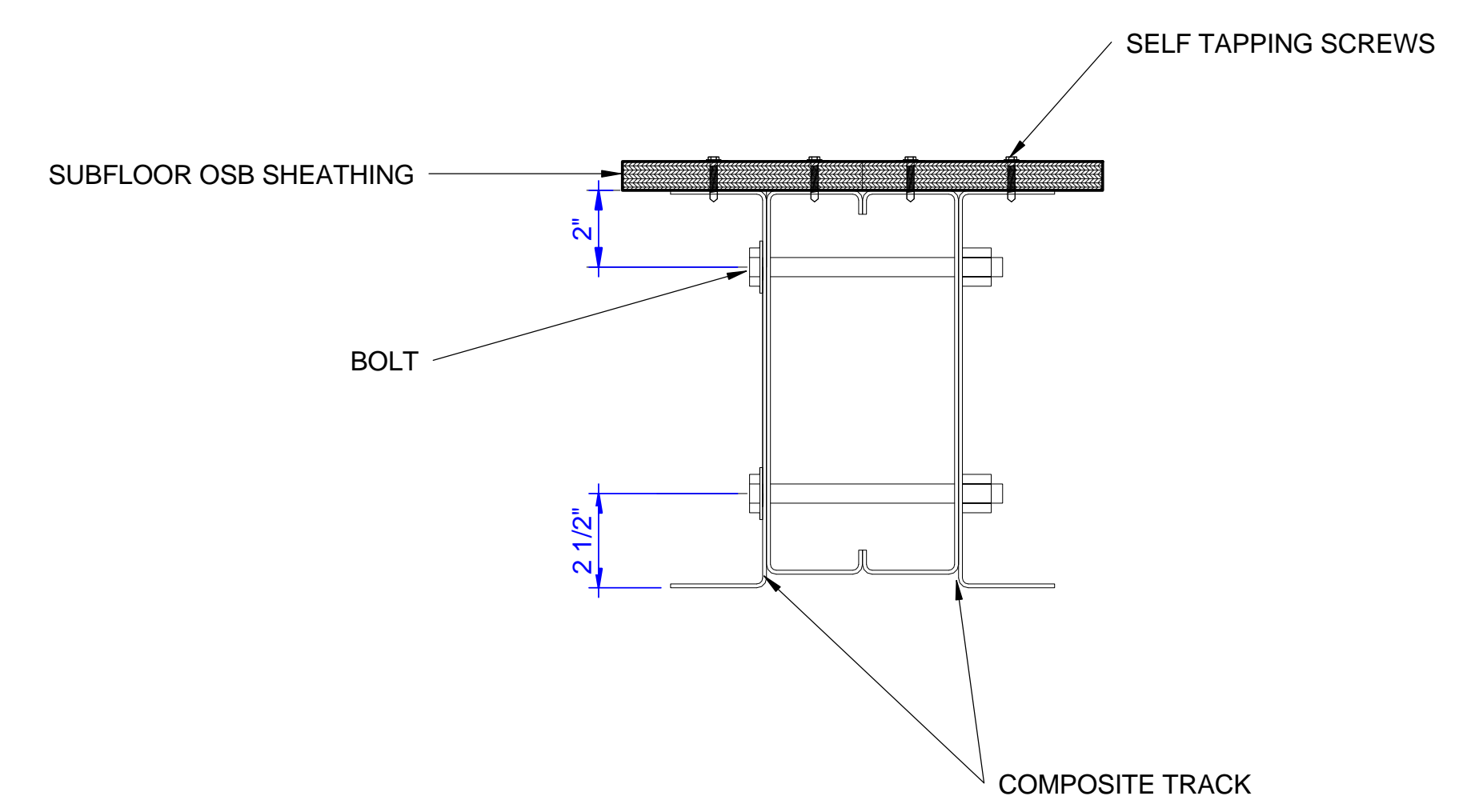
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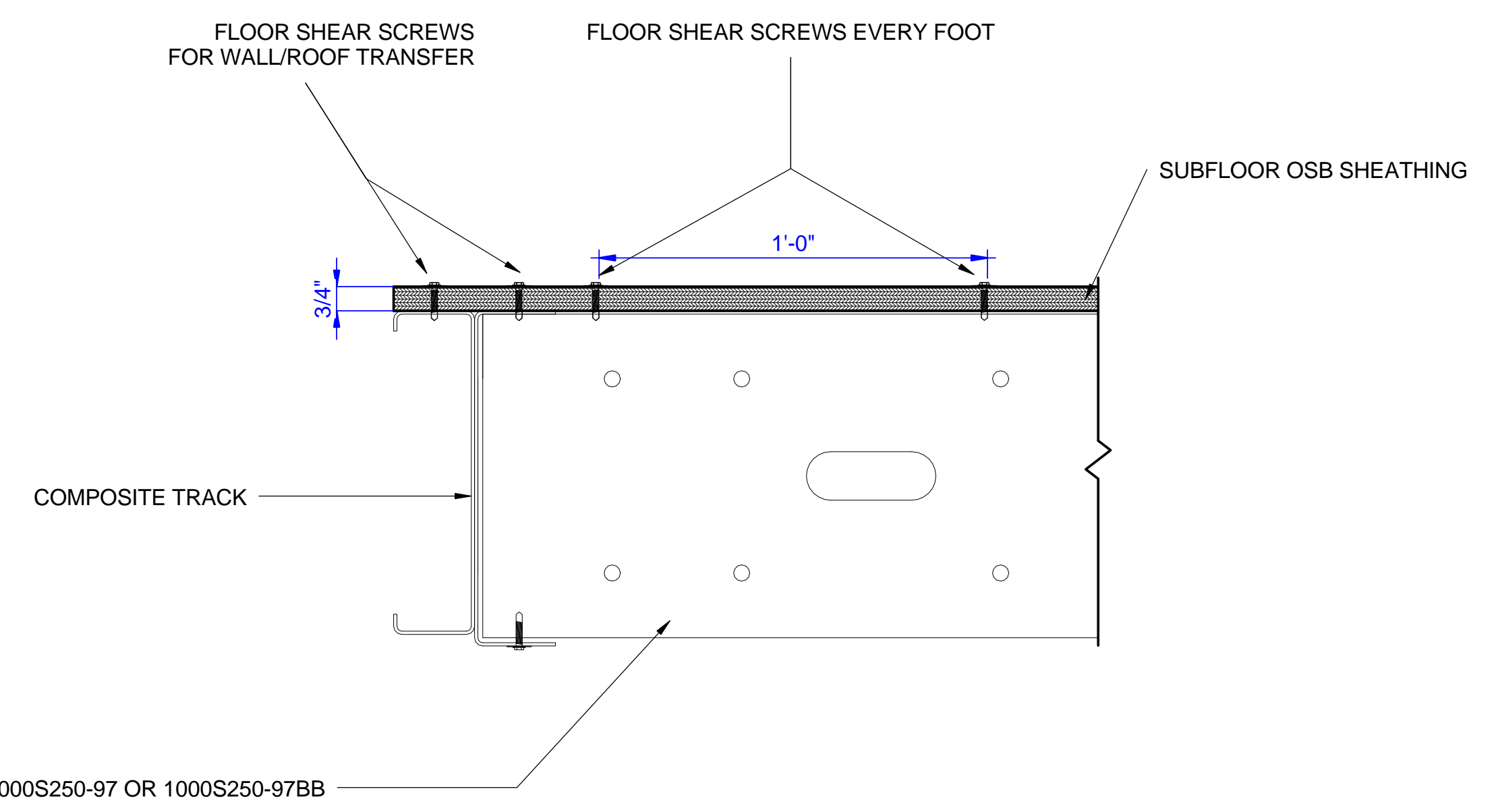
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SHEET TITLE
TYPICAL DETAILS

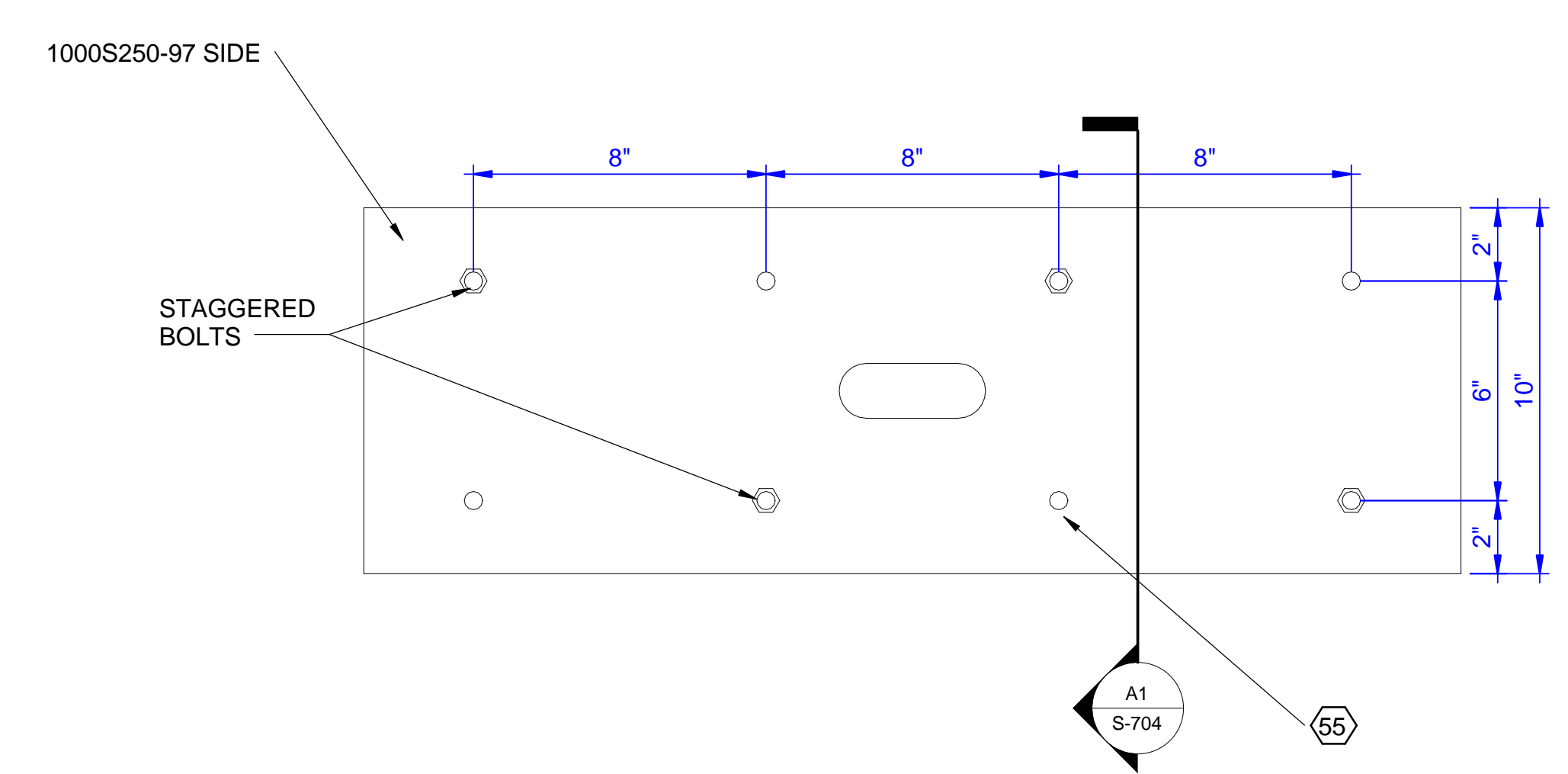
S-704



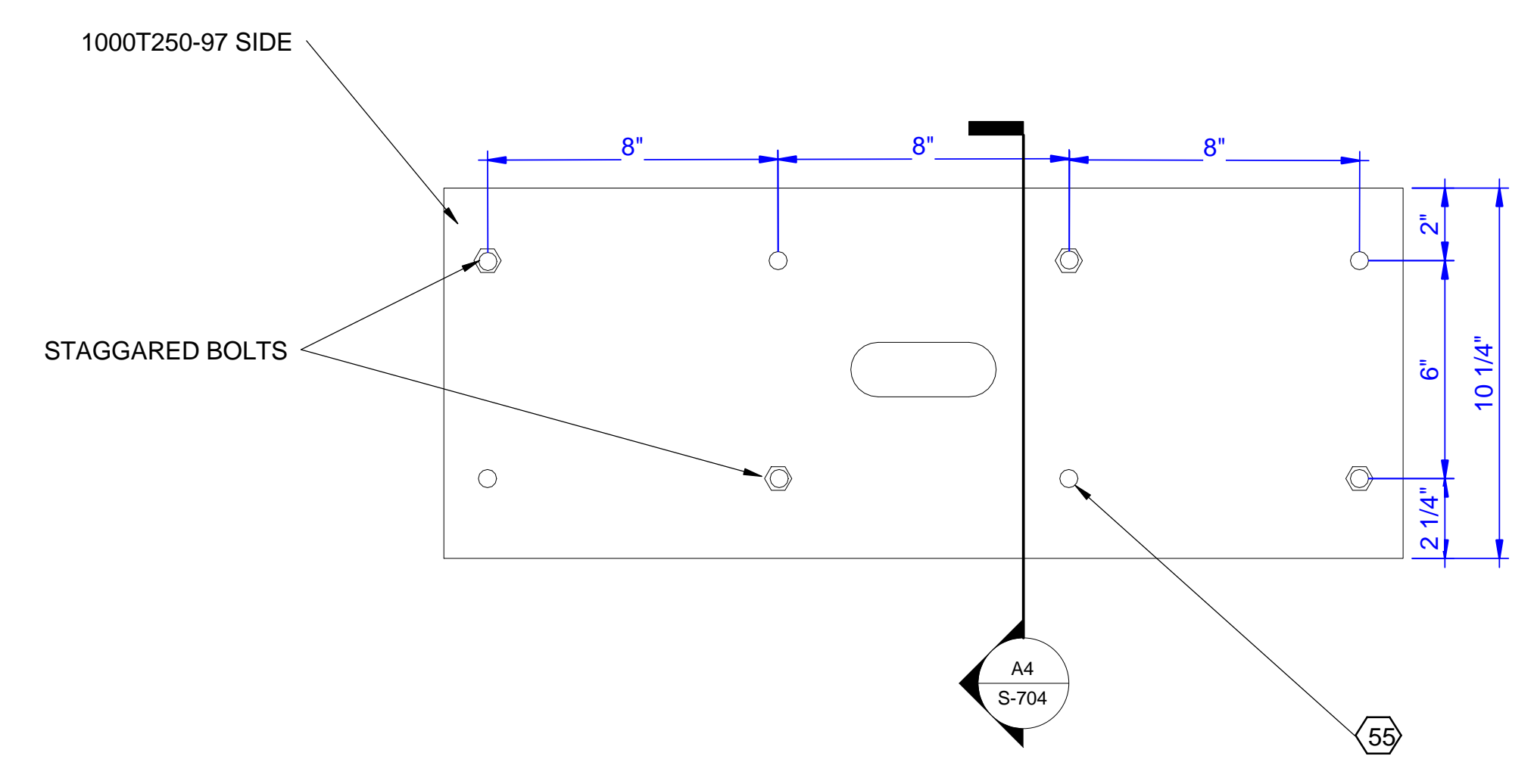
D1 SUB-FLOOR TO STEEL CONNECTION AT MODULE JOINT
 3" = 1'-0" 0 3' 6' 9"



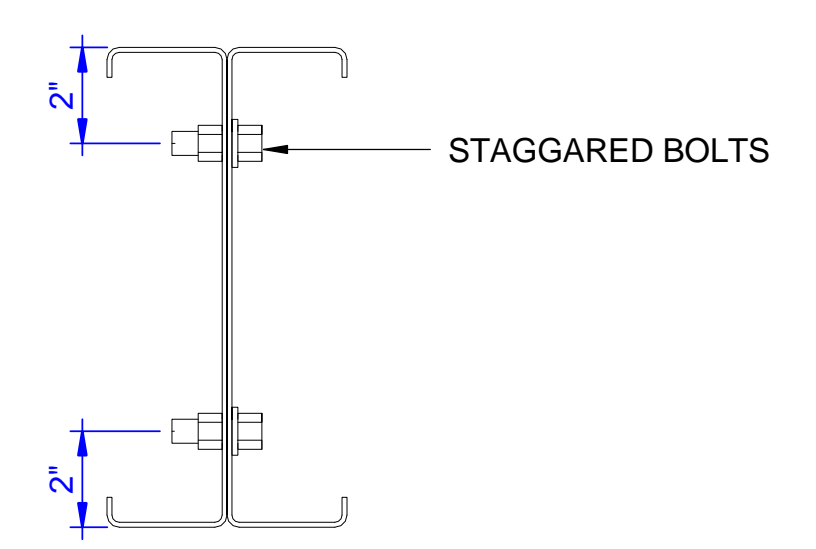
D3 TYPICAL SUB-FLOOR TO STEEL CONNECTION
 3" = 1'-0" 0 3' 6' 9"



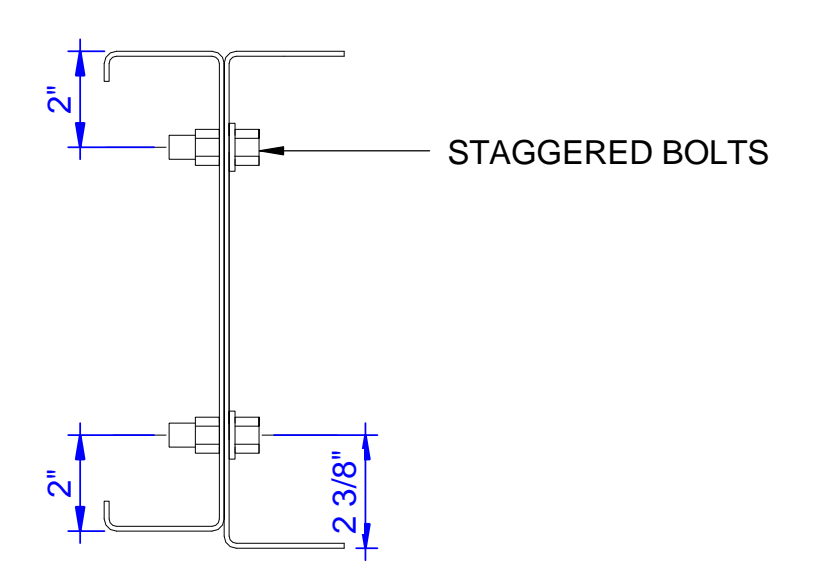
B1 BUILT UP STEEL 1000S250-97BB
 3" = 1'-0" 0 3' 6' 9"



B4 BUILT UP COMPOSITE TRACK
 3" = 1'-0" 0 3' 6' 9"



A1 BUILT UP STEEL 1000S250-97BB SECTION
 3" = 1'-0" 0 3' 6' 9"



A4 BUILT UP COMPOSITE TRACK SECTION
 3" = 1'-0" 0 3' 6' 9"

SHEET KEYNOTES

17 WOODEN PIERS ARE CONSTRUCTED WITH 2X4 AND 5/8" PLYWOOD



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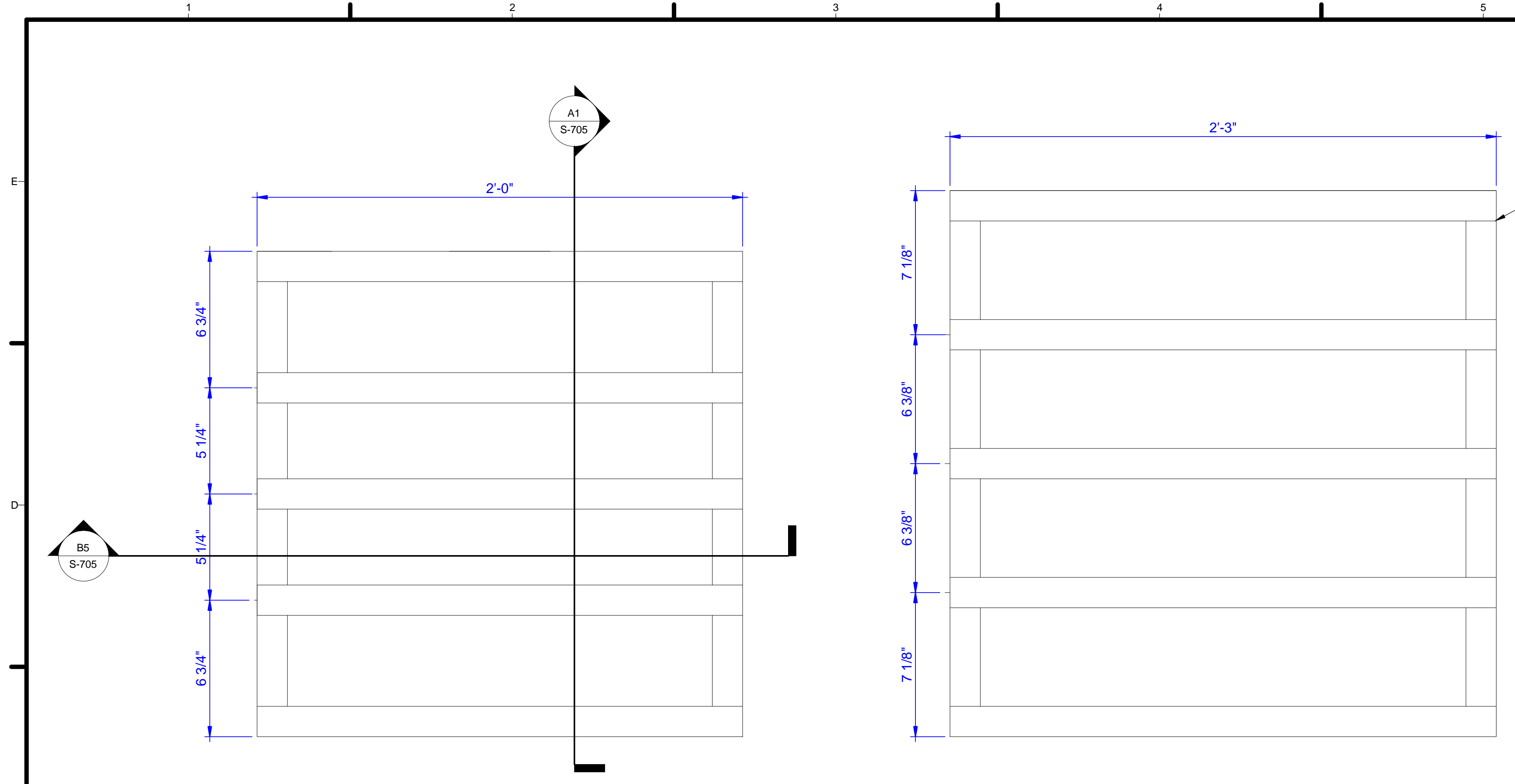
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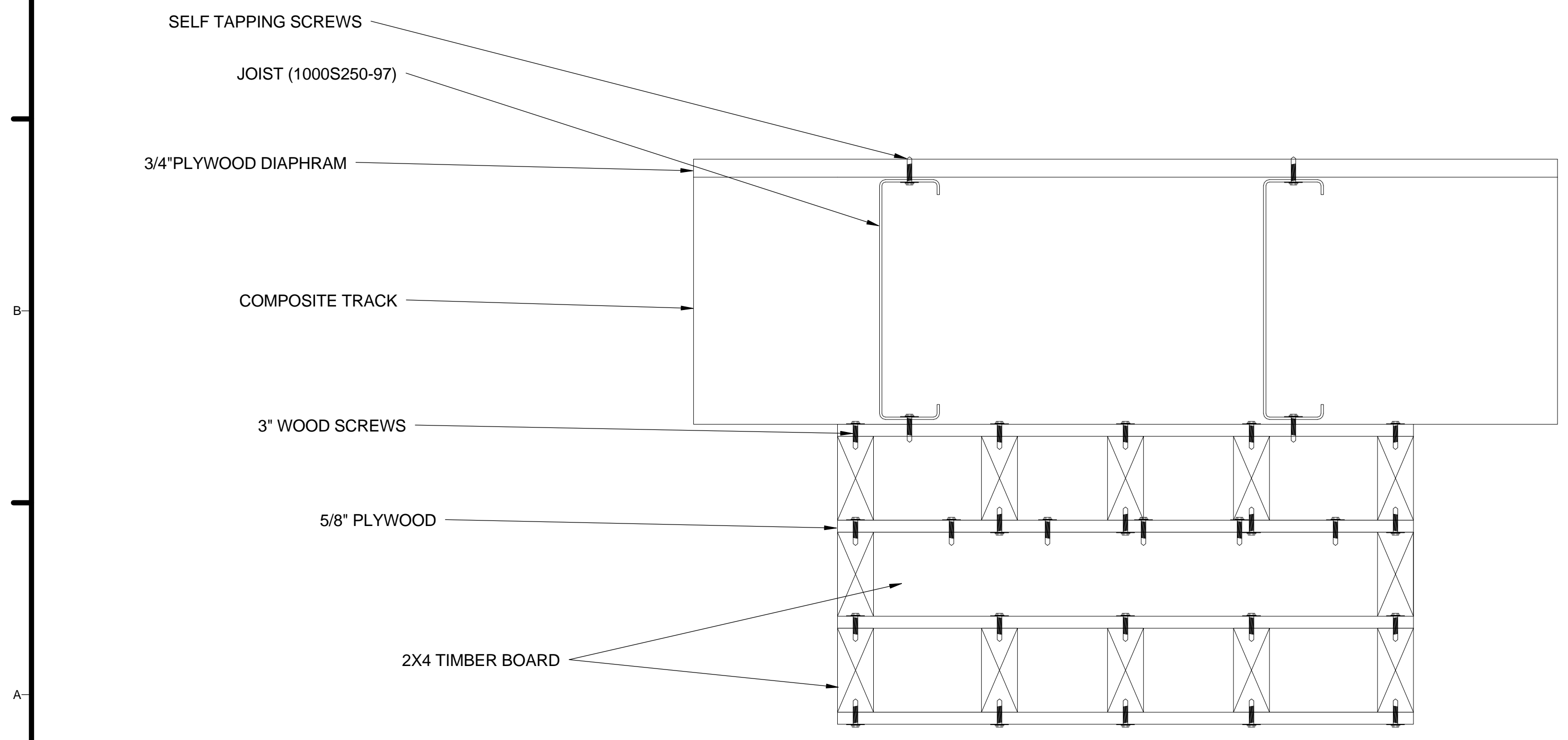
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TYPICAL PIER DETAILS

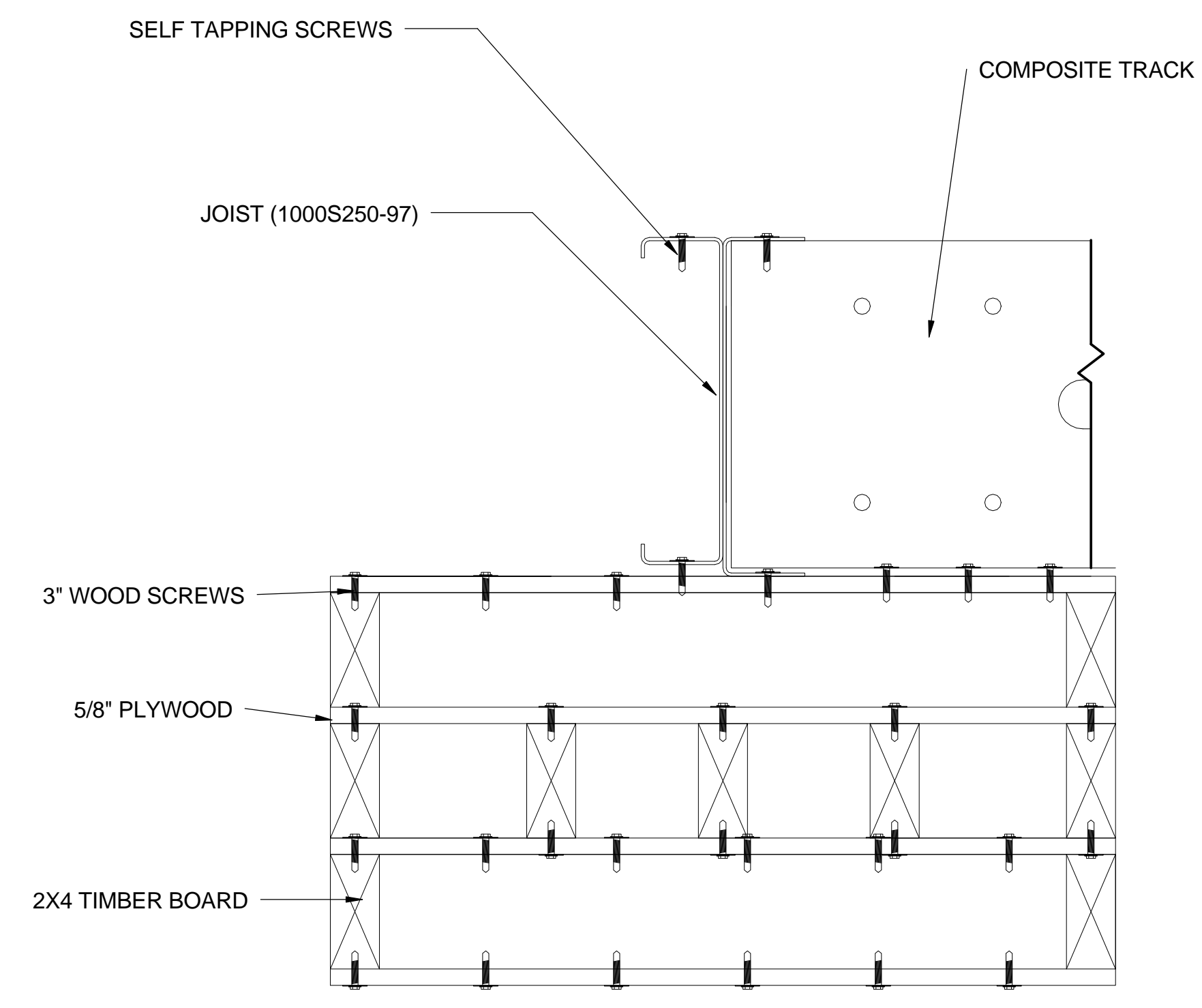
S-705



C1 TYPICAL PIER LAYER PLAN VIEW (2' & 2' 3")
 3" = 1'-0"

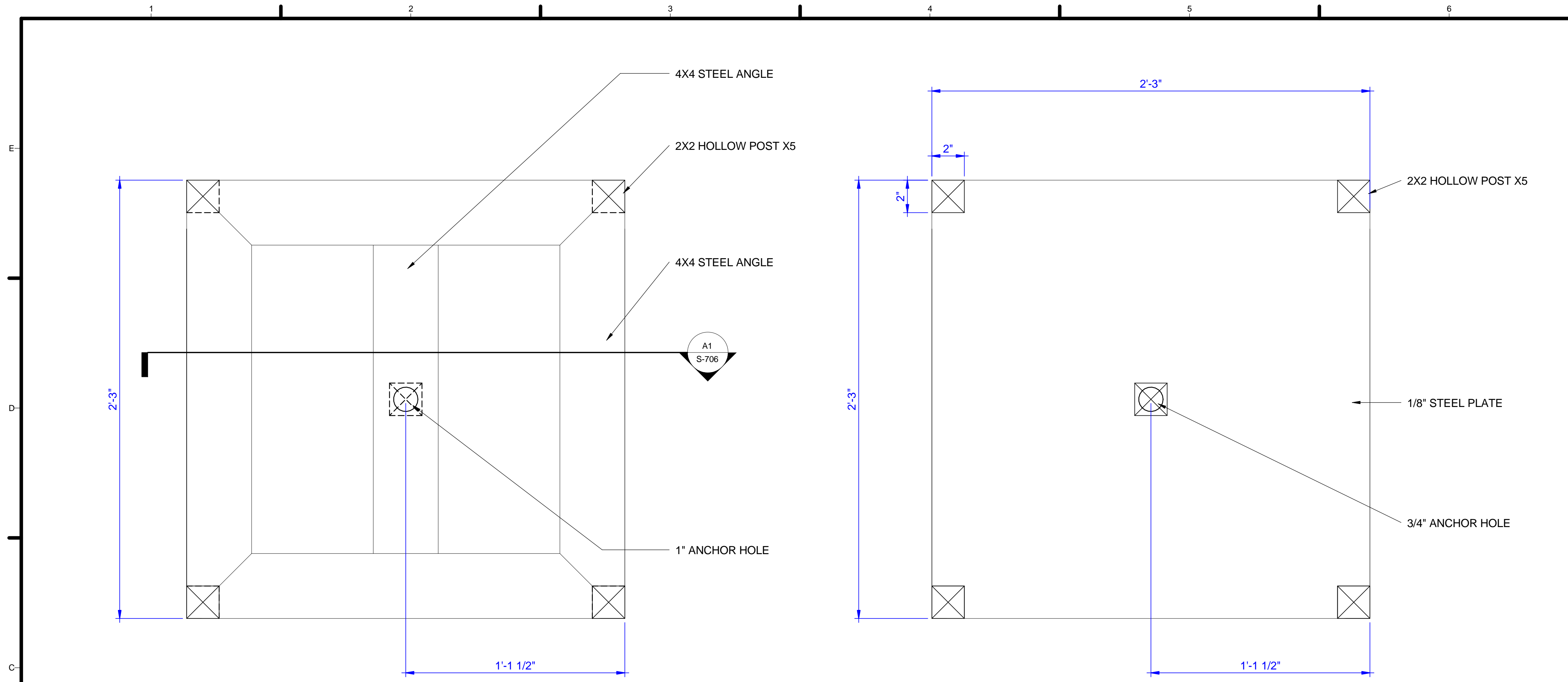


A1 TYPICAL PIER LAYER SECTION 2 (2' & 2' 3")
 3" = 1'-0"



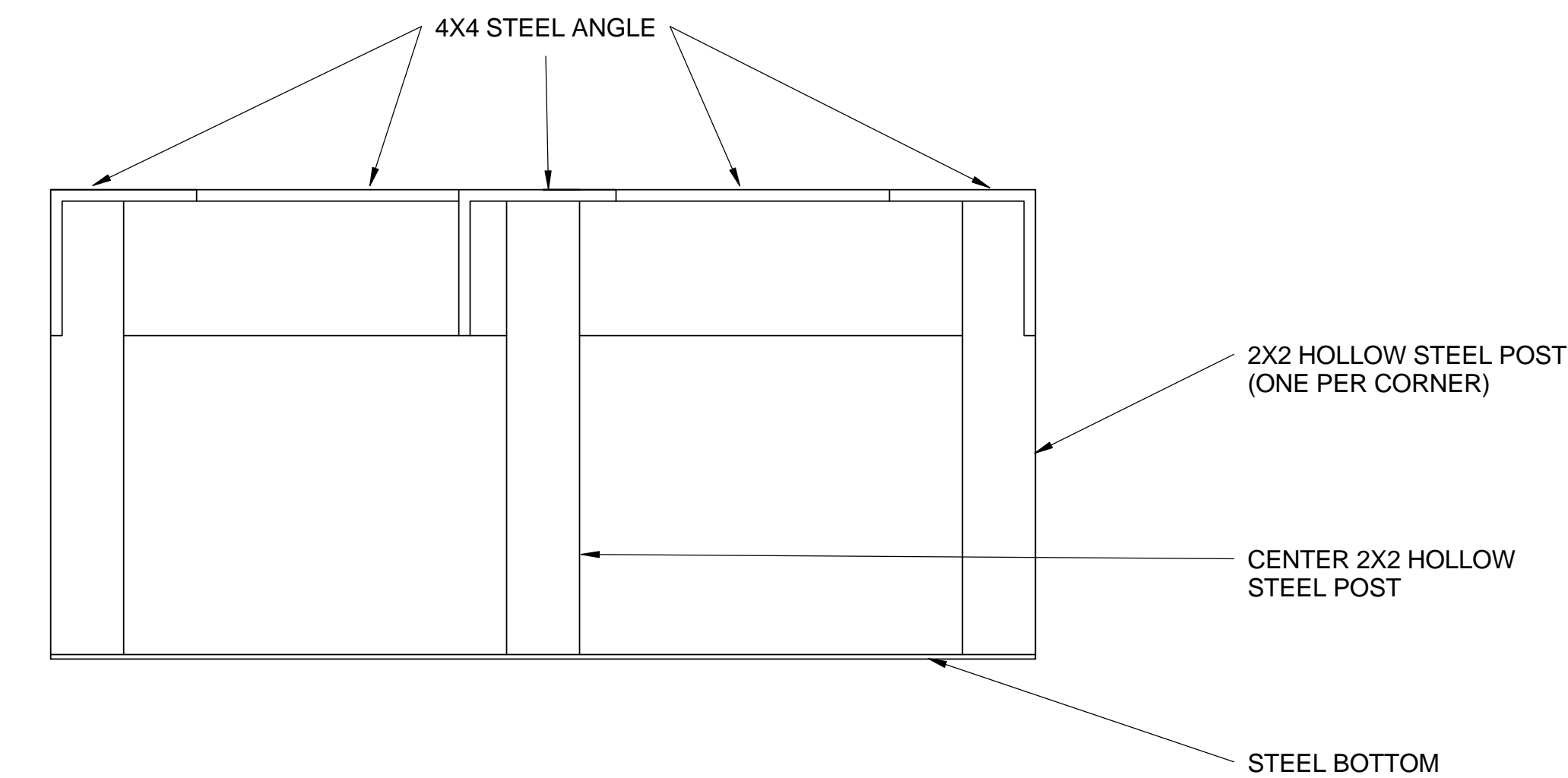
B5 TYPICAL PIER LAYER SECTION 1 (2' & 2' 3")
 3" = 1'-0"

8/22/2013 5:33:01 AM



C1 TYPICAL STEEL PIER TOP
3" = 1'-0"

C4 TYPICAL STEEL PIER BOTTOM
3" = 1'-0"



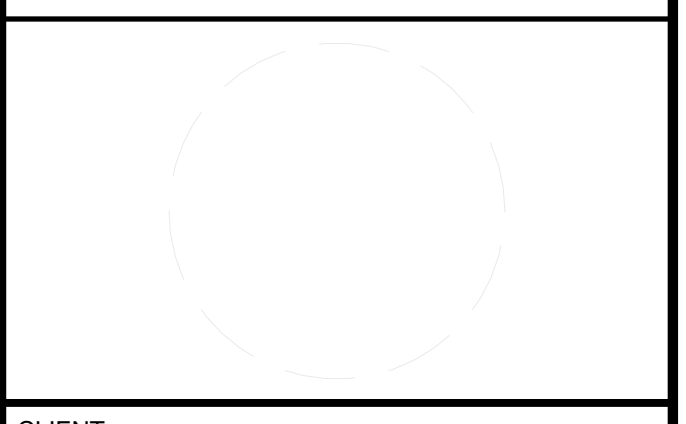
A1 TYPICAL STEEL PIER SECTION
3" = 1'-0"

GENERAL SHEET NOTES

- SIP WALL CONNECTS TO PLYWOOD DIAPHRAGM
- SIP CONNECTION TO PLYWOOD MUST MEET SDC D
- WOODEN GRAVITY PIER SECTION ARE TO BE NAILED TOGETHER
- 1" DIAMETER STEEL RODS WILL BE USED TO ANCHOR THE PIERS TO THE GROUND
- ALL STEEL PIERS ARE WELDED



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SHEET TITLE
 TYPICAL STEEL PIER DETAILS

S-706



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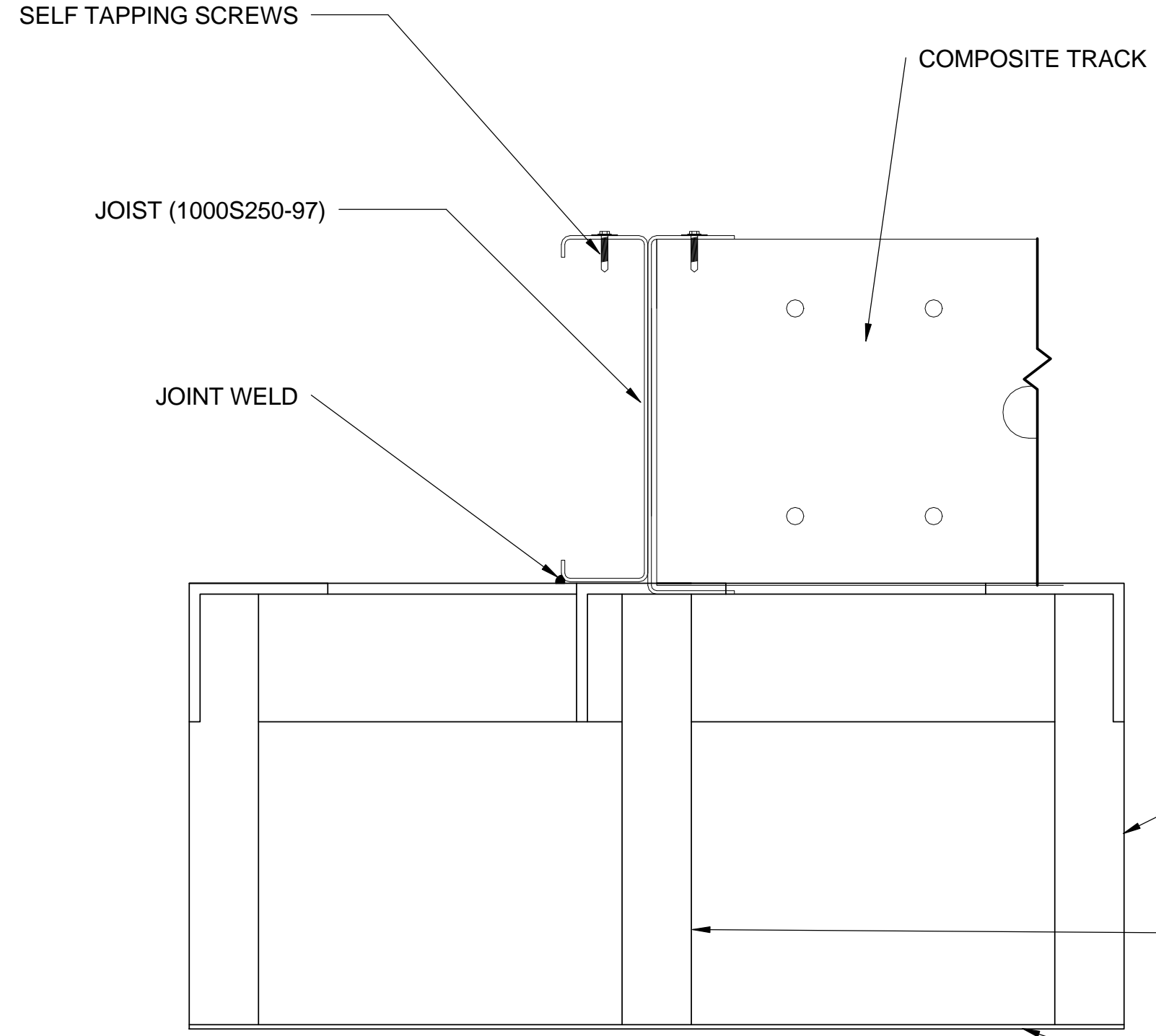
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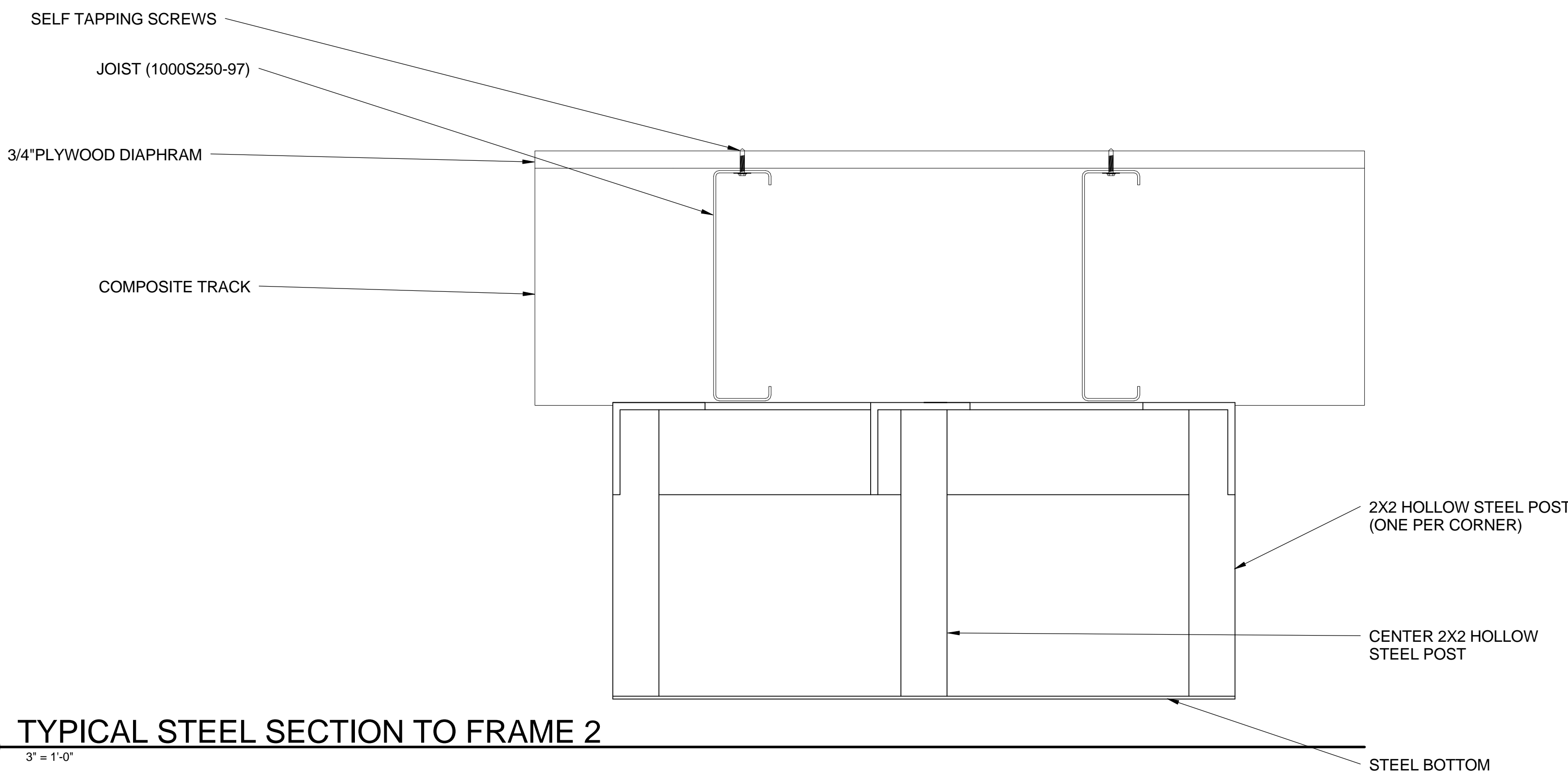
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SHEET TITLE
 TYPICAL STEEL PIER
 DETAILS

S-707

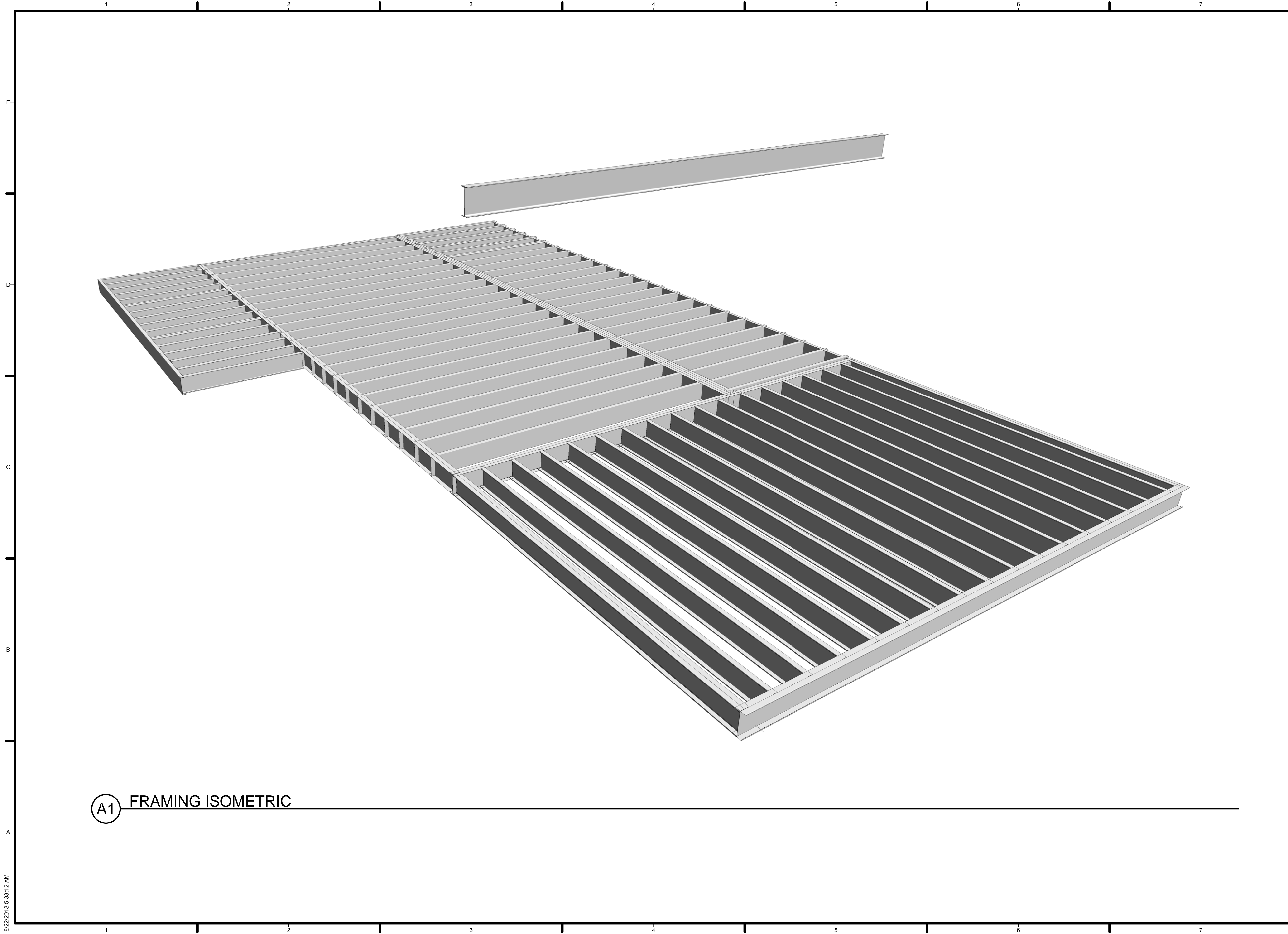


C1 TYPICAL STEEL SECTION TO FRAME 1
 3" = 1'-0"



A1 TYPICAL STEEL SECTION TO FRAME 2
 3" = 1'-0"

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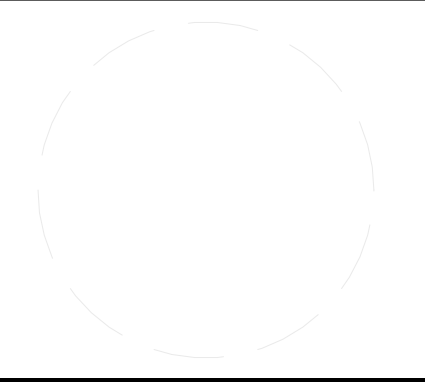


(A1) FRAMING ISOMETRIC

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SHEET TITLE
FRAMING ISOMETRICS

S-901

	1	2	3	4	5	6	7
E							
D							
C							
B							
A							
	1	2	3	4	5	6	7

NAME	ABBREVIATION
GYPSUM WALL BOARD	GWB
POLYVINYLCHLORIDE	PVC
LAMINATED VENEER LUMBER	LVL
ORIENTED STRAND BOARD	OSB
STRUCTURAL INSULATED PANEL	SIP

GENERAL SHEET NOTES

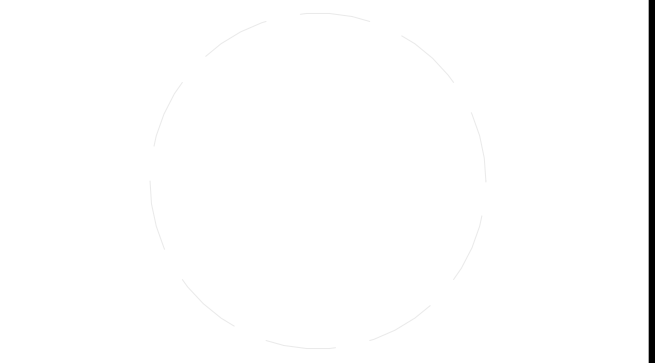
REFERENCE KEYNOTES

SHEET KEYNOTES



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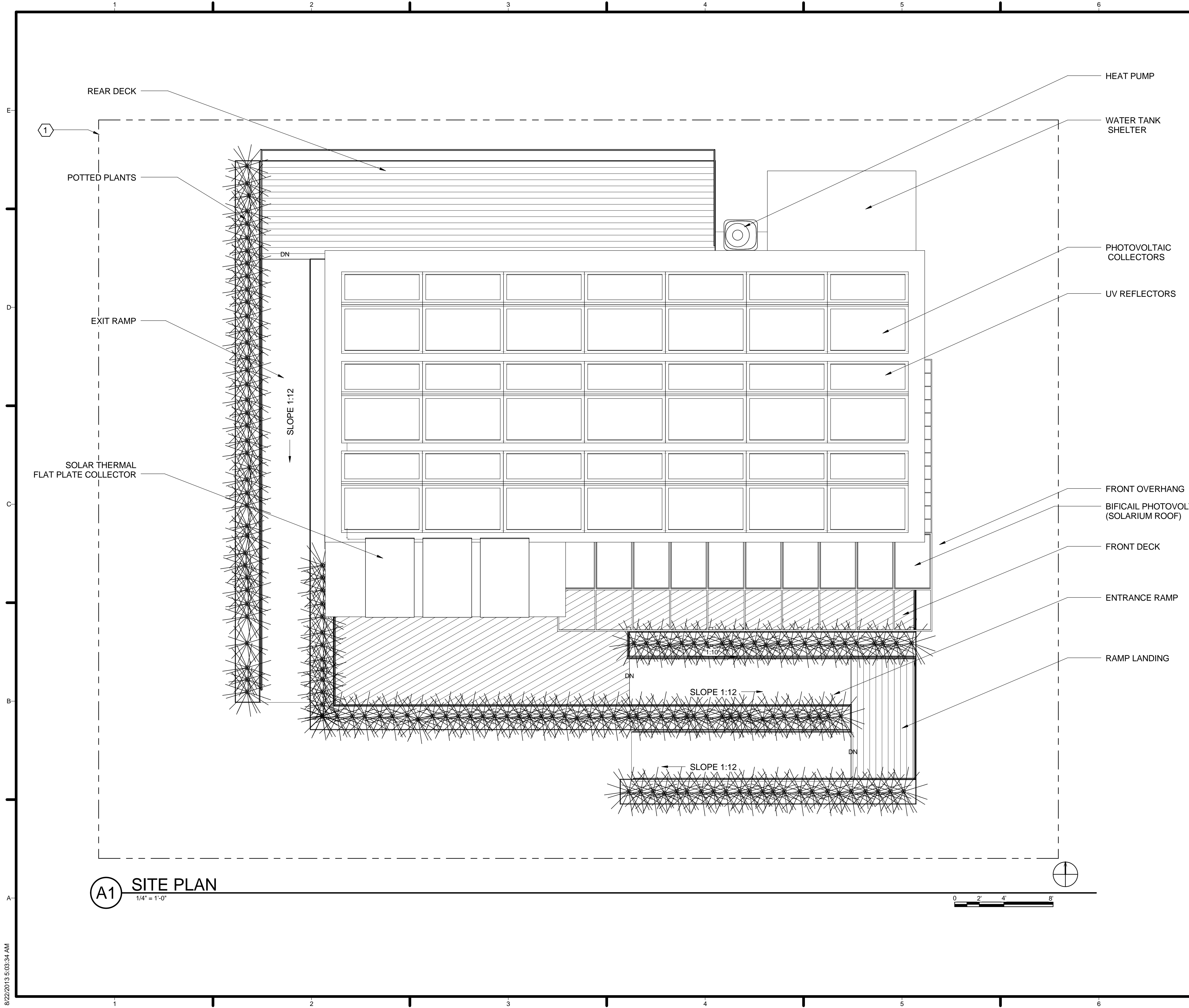


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SHEET TITLE
 ARCHITECTURAL SYMBOLS AND NOTES

A-001



A1 SITE PLAN
1/4" = 1'-0"

GENERAL SHEET NOTES

REFERENCE KEYNOTES

SHEET KEYNOTES

- 1 SOLAR ENVELOPE



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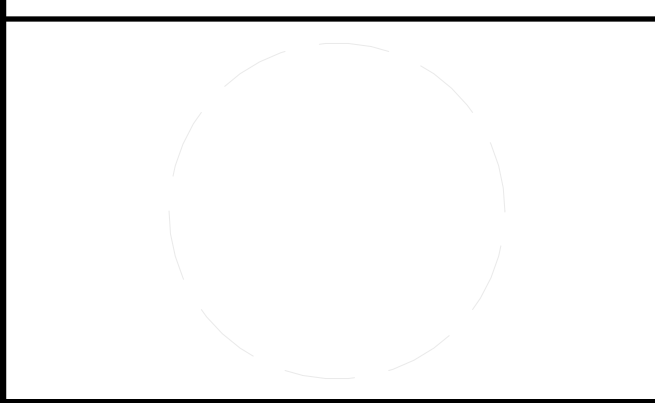
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SHEET TITLE
 SITE PLAN

A-101



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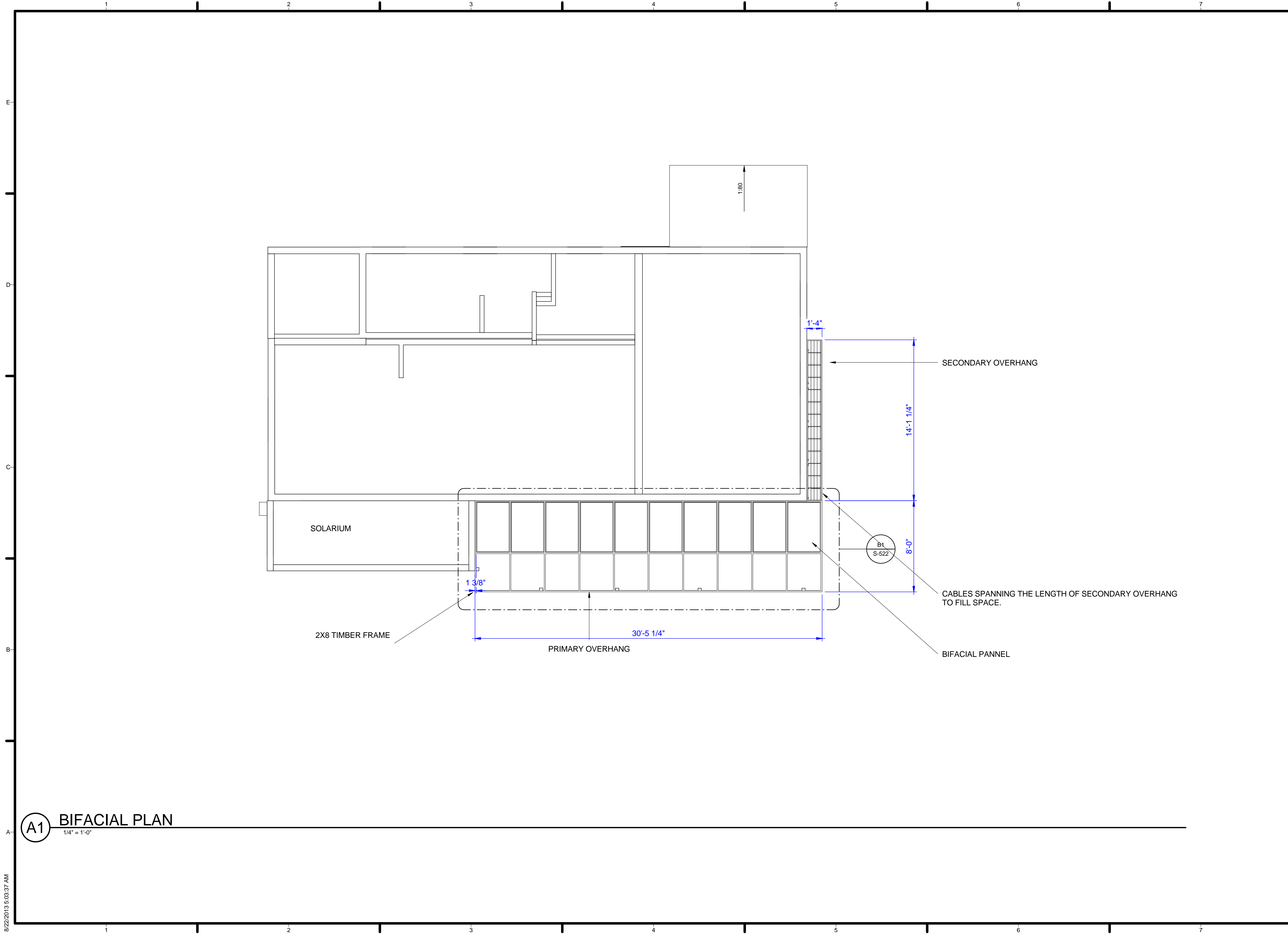


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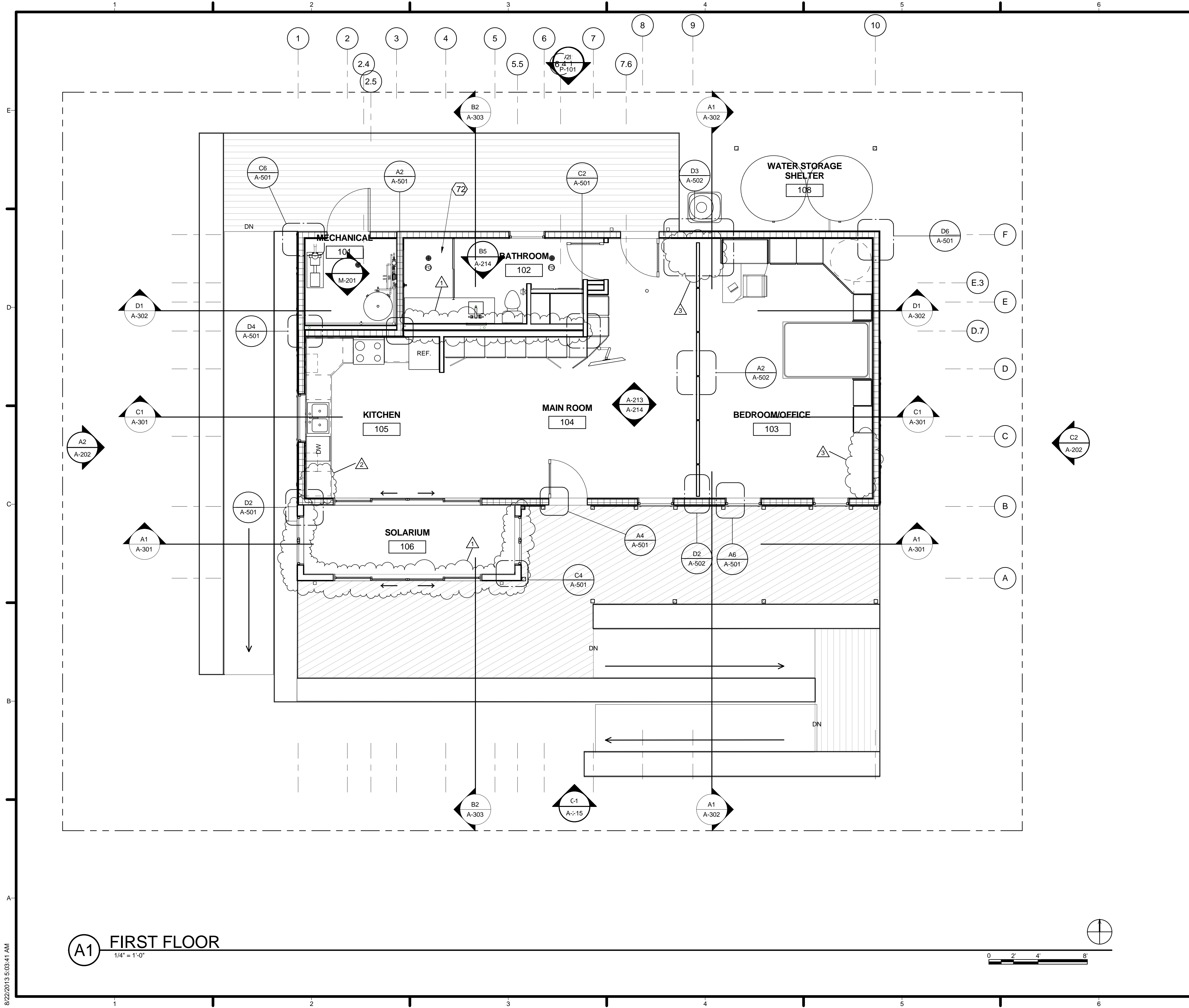
SHEET TITLE
 BIFACIAL OVERHANG
 FRAMING PLAN

A-109



(A1) BIFACIAL PLAN
 1/4" = 1'-0"

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GENERAL SHEET NOTES

REFERENCE KEYNOTES

SHEET KEYNOTES

72 SHOWER COMPARTMENT
COMPLIES WITH IRC P2708.1



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1	7-23-13	
	5-15-13	2X6 STUD WALL REPLACE 2X4 STUD WALL

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SHEET TITLE
 FIRST FLOOR PLAN

A-111

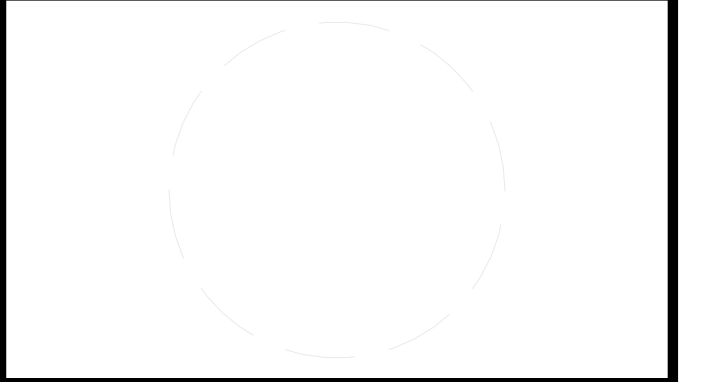
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GENERAL SHEET NOTES

1 NORTH CLERESTORY WINDOW WILL BE ABLE TO OPEN BY AUTOMATION ALL OTHER WILL NOT OPEN



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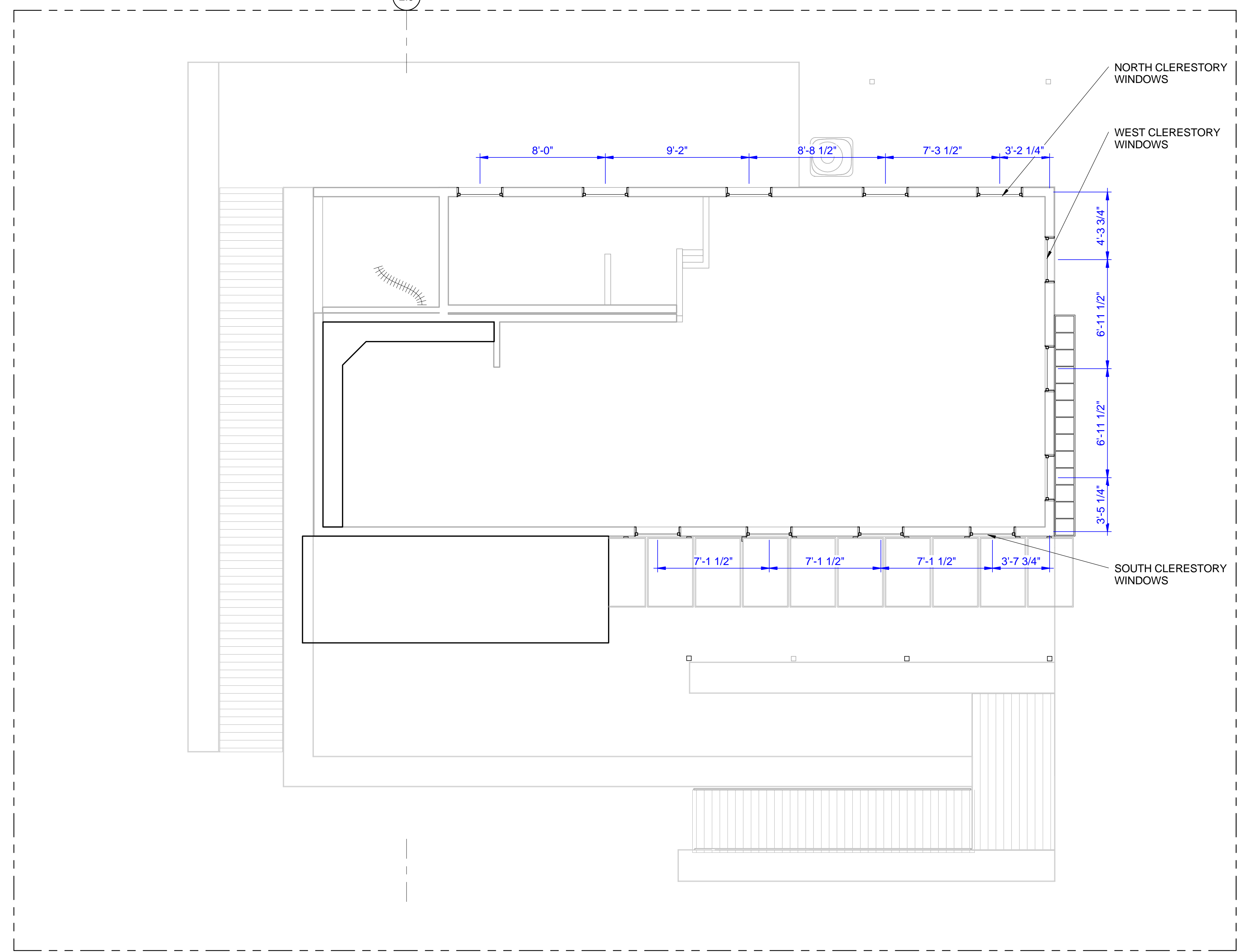


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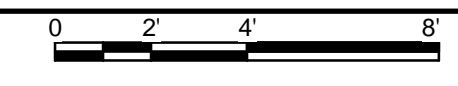
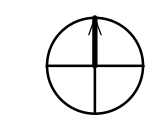
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SHEET TITLE
CLERESTORY PLAN

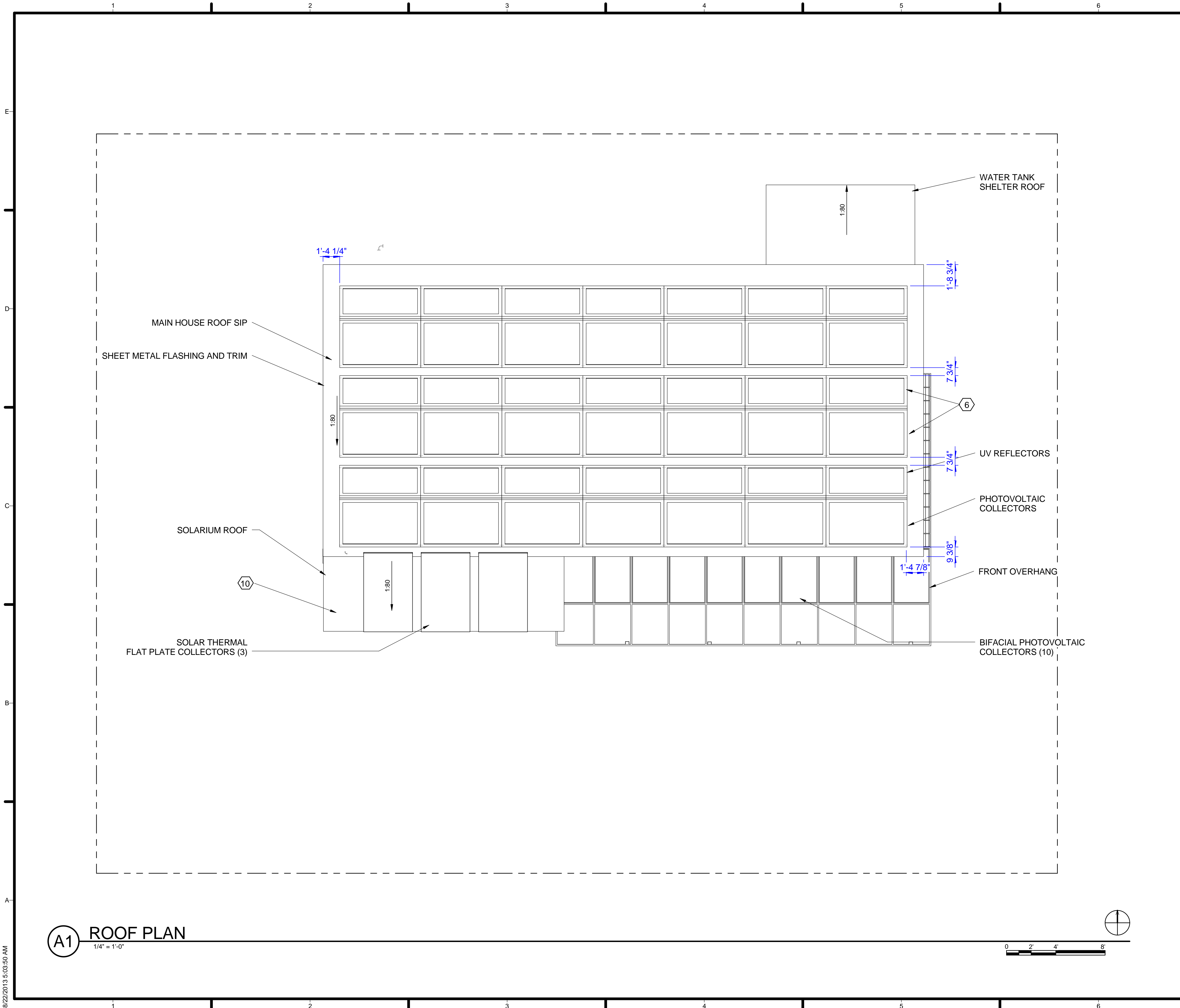
A-112



(A1) CLERESTORY PLAN
 1/4" = 1'-0"



8/22/2013 5:03:46 AM



GENERAL SHEET NOTES

- 1 MAIN HOUSE ROOF IS SIP ALL OTHERS ARE BUILT UP WOOD CONSTRUCTION WITH PLYWOOD SHEATHING
- 2 ALL WATER BARRIER ROOFING MATERIAL IS MODIFIED PVC MEMBRANE
- 3 ALL PHOTOVOLTAIC COLLECTORS WILL BE BUTTED AGAINST EACH OTHER FROM EAST TO WEST AND WILL BE SPACED ACCORDINGLY FROM NORTH TO SOUTH TO MINIMIZE OBSTRUCTION FROM SUN
- 4 NO GUTTERS WILL BE INSTALLED

SHEET KEYNOTES

- 6 3 ROWS OF 19 (2 ROWS CONSISTING OF 7 AND 1 ROW CONSISTING OF 5) UV REFLECTORS EACH PAIRED WITH A SOLAR PHOTOVOLTAIC COLLECTOR ON A BALLAST MOUNTING SYSTEM
- 10 BIFACIAL PHOTOVOLTAIC COLLECTORS APART OF ROOF NEED TO BE PROPERLY SEALED, LIGHT MUST BE ABLE TO PASS INTO SOLARIUM



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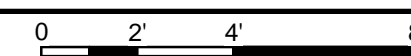
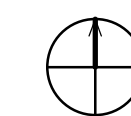


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SHEET TITLE
ROOF PLAN

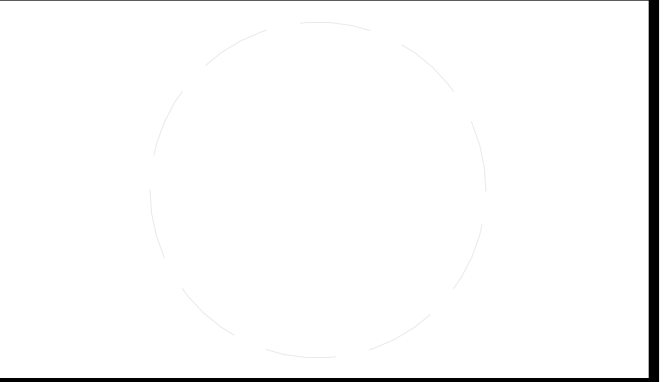
A-113

A1 ROOF PLAN
 1/4" = 1'-0"





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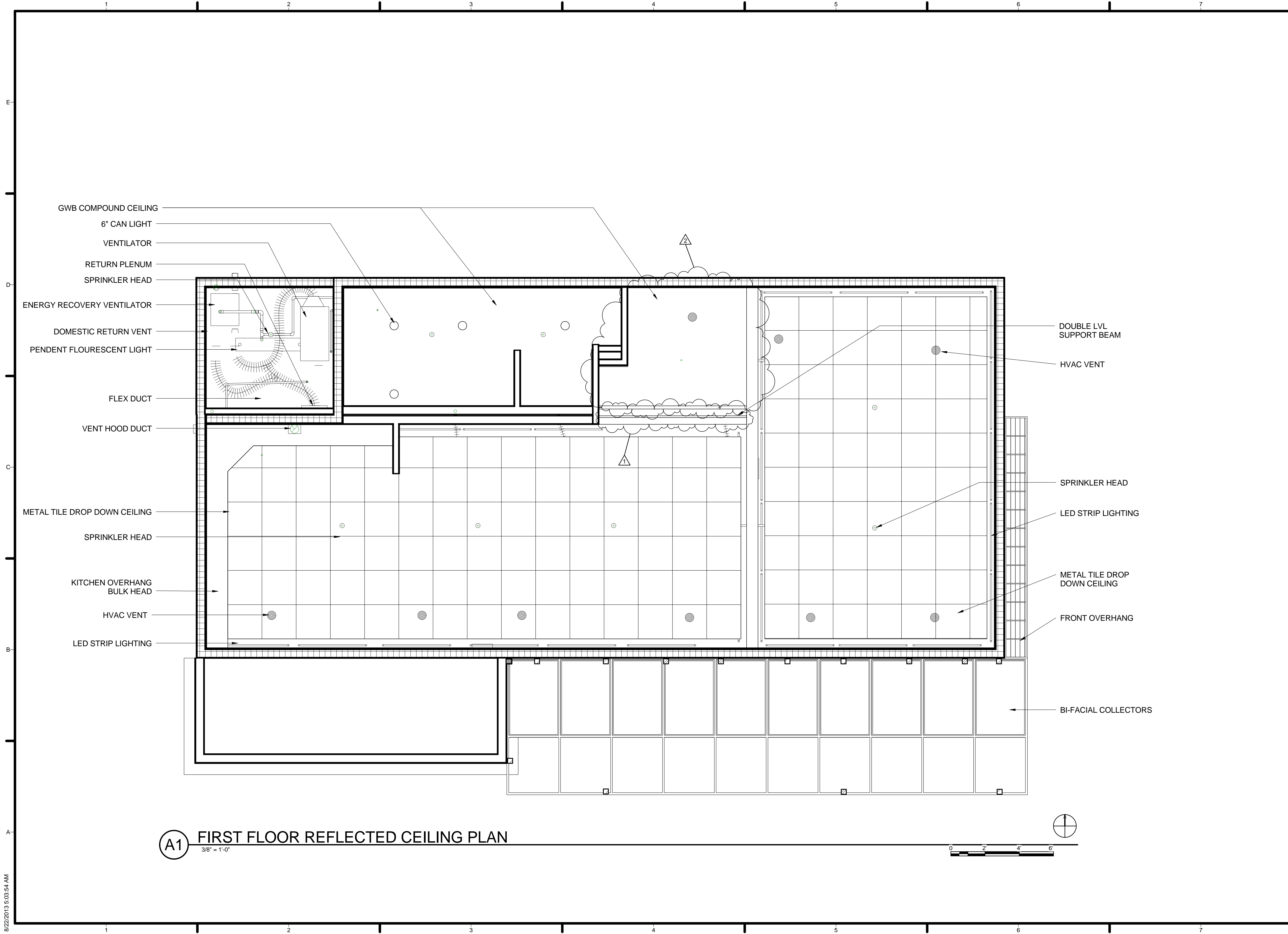


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2	8-19-13	COMPOUND GWB IN LIEU OF CLOUD CEILING
1	5-15-13	LVL STRUCTURAL SUPPORT BEAM

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SHEET TITLE
 FIRST FLOOR REFLECTED CEILING PLAN

A-121



A1 FIRST FLOOR REFLECTED CEILING PLAN
 3/8" = 1'-0"

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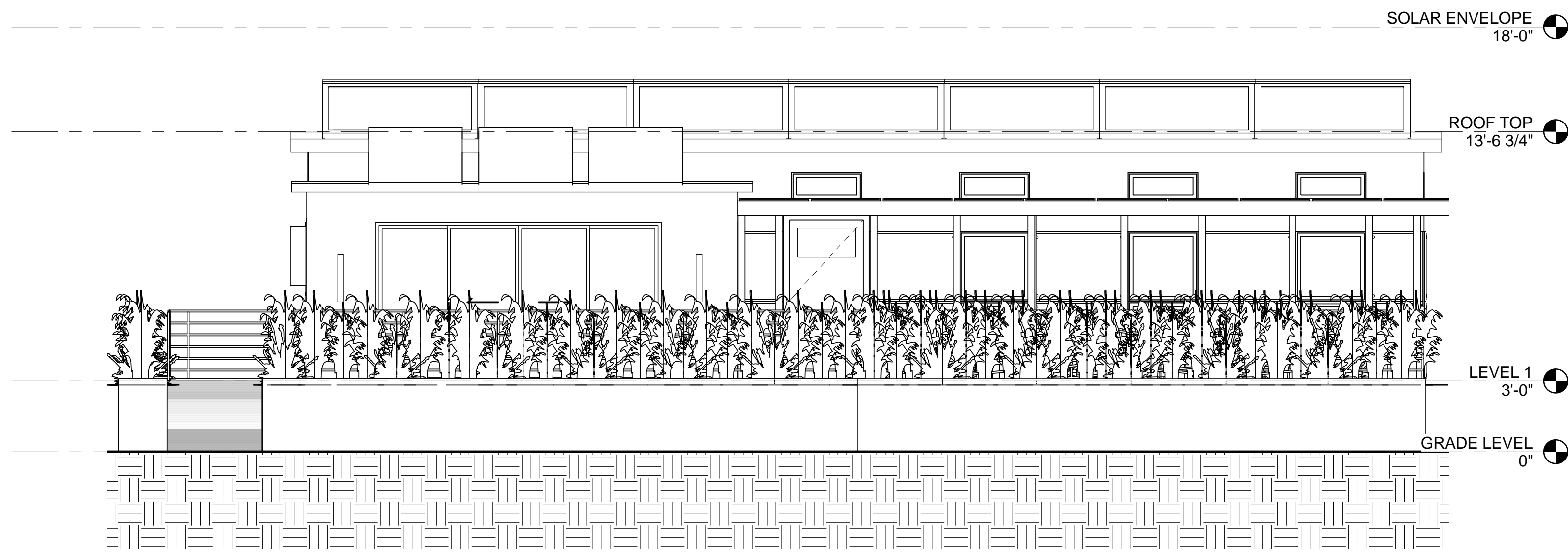
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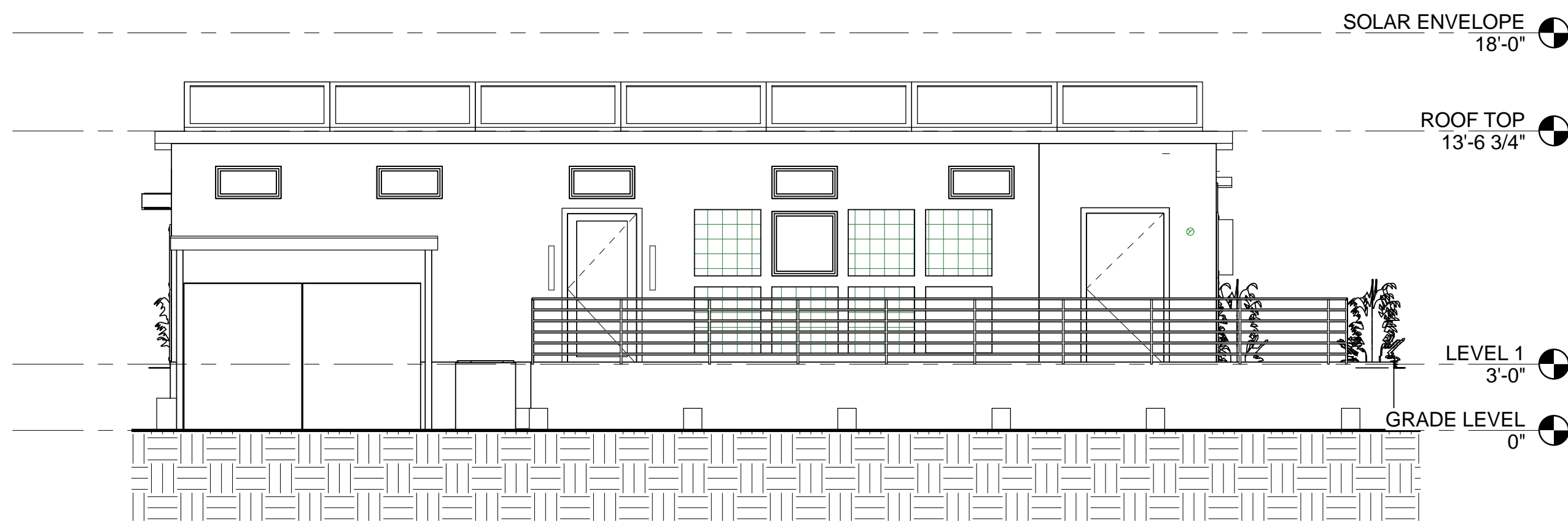
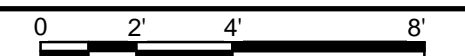
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SHEET TITLE
 SITE ELEVATIONS

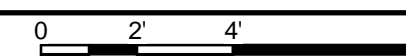
A-201



C2 SOUTH SITE ELEVATION
 1/4" = 1'-0"



A2 NORTH SITE ELEVATION
 3/16" = 1'-0"



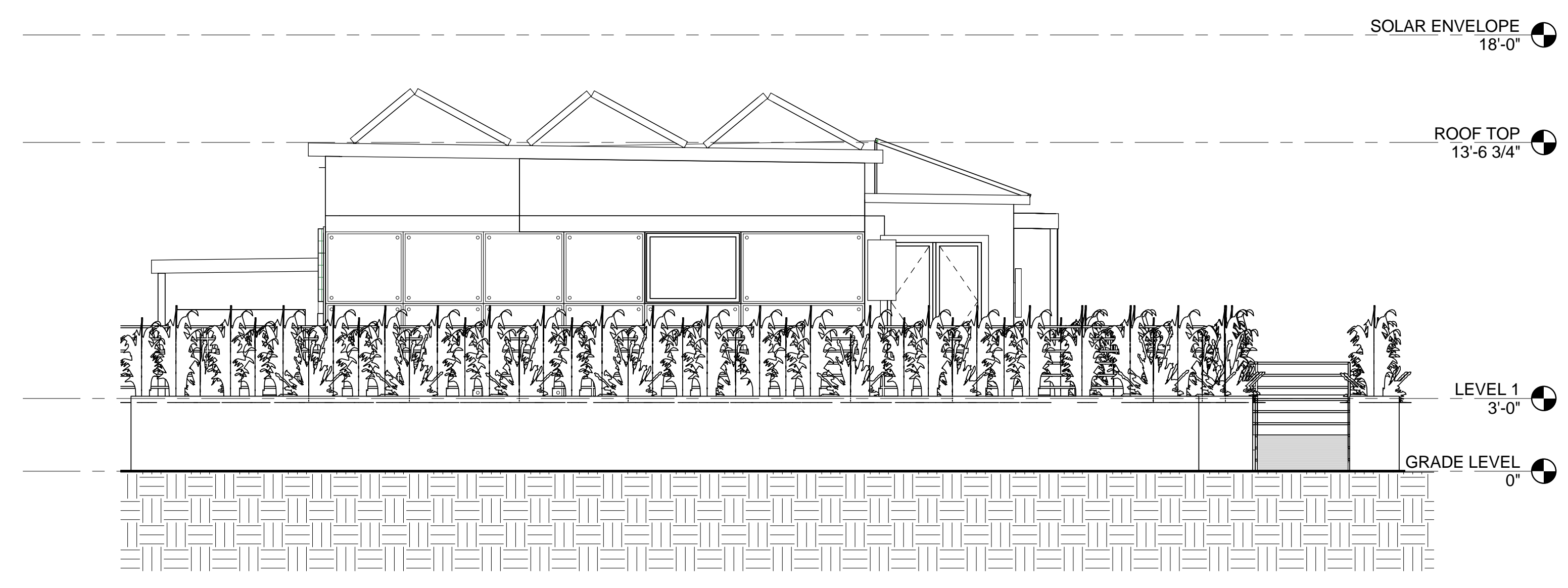
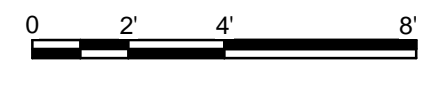
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SHEET KEYNOTES

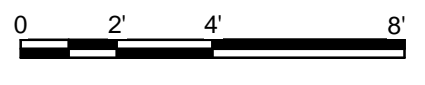
43 EXPOSED FOOTING WILL BE COVERED BY DECK SKIRT



C2 EAST SITE ELEVATION
1/4" = 1'-0"



A2 WEST SITE ELEVATION
1/4" = 1'-0"



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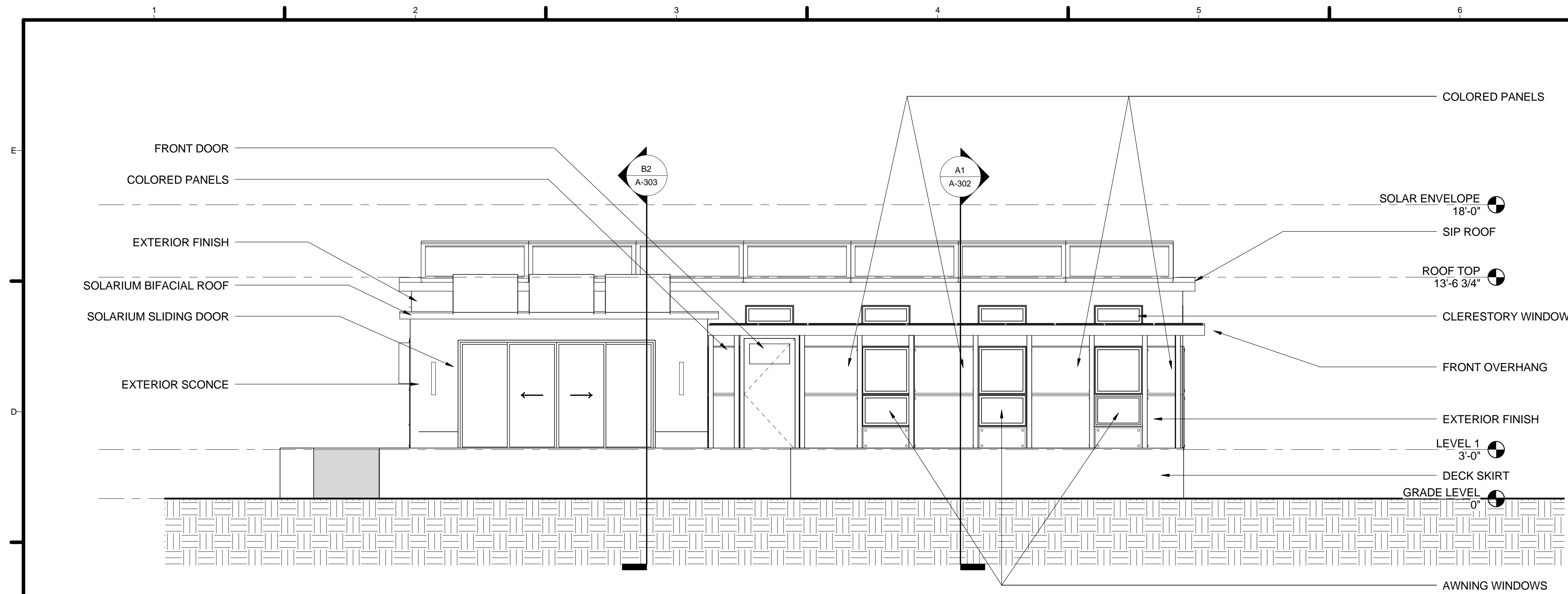


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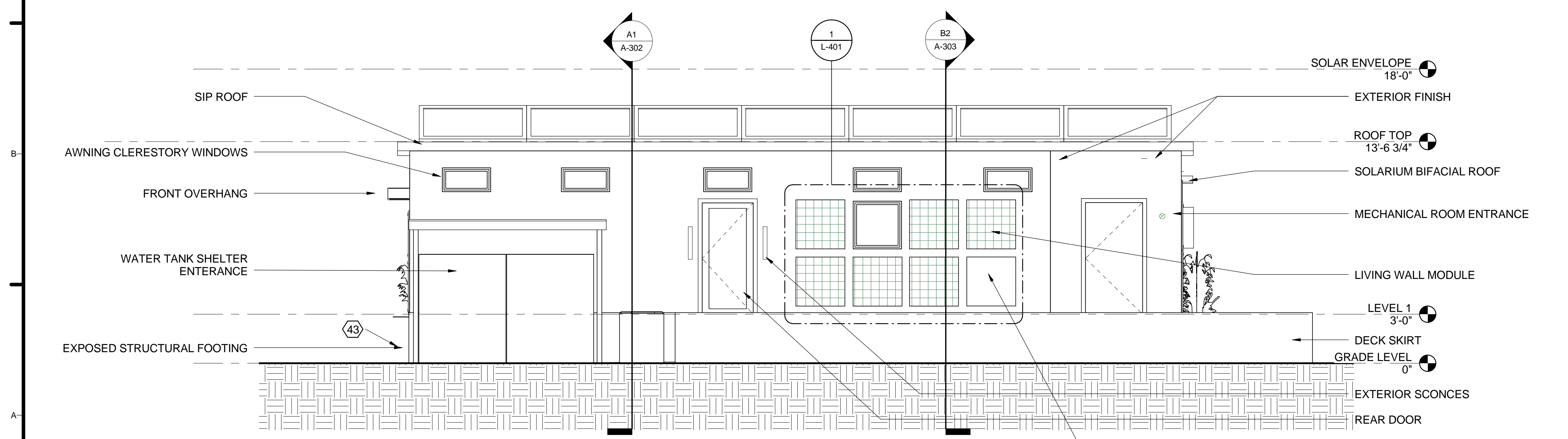
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SHEET TITLE
SITE ELEVATIONS

A-202



(C1) SOUTH ELEVATION
 1/4" = 1'-0"



(A1) NORTH ELEVATION
 1/4" = 1'-0"

GENERAL SHEET NOTES

1 HAND/GAIRD RAILS HAVE BEEN HIDDEN TO REVEAL OBSCURED ELEMENTS

SHEET KEYNOTES

43 EXPOSED FOOTING WILL BE COVERED BY DECK SKIRT



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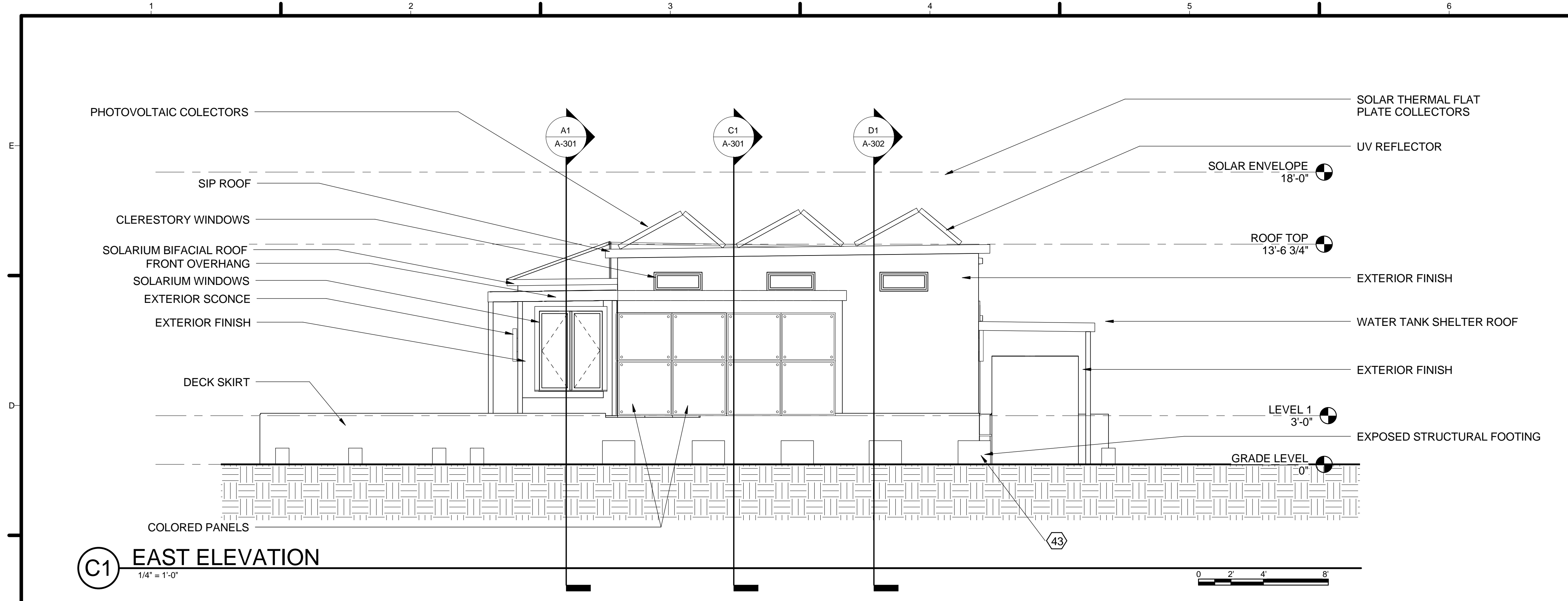


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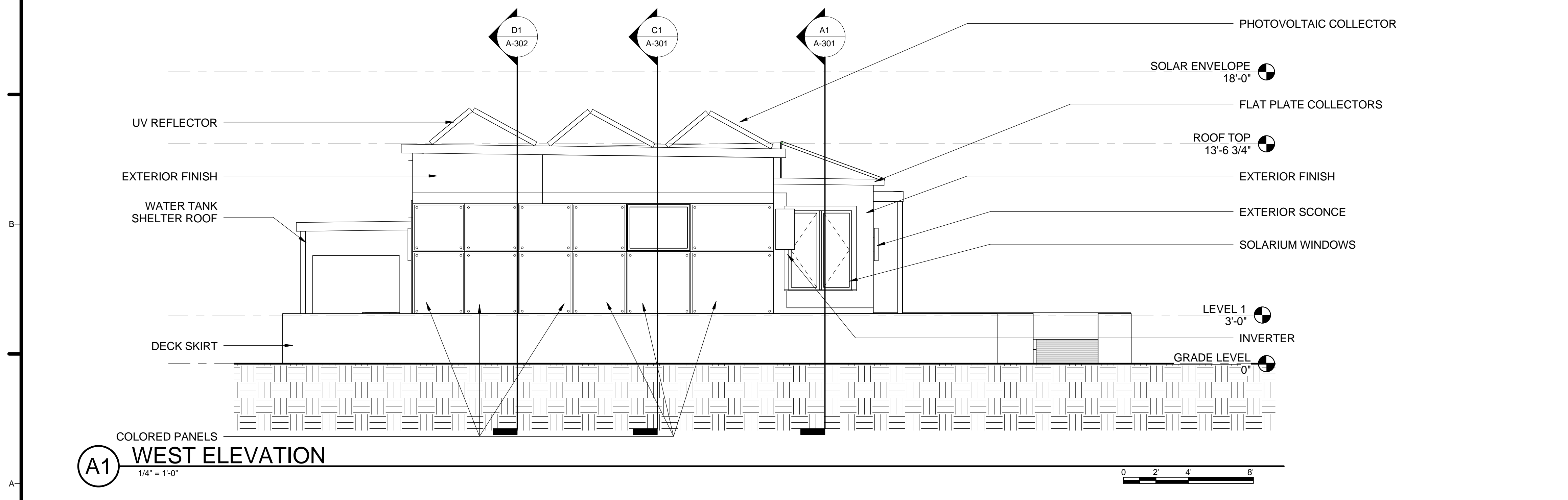
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SHEET TITLE
ELEVATIONS

A-211



C1 EAST ELEVATION
1/4" = 1'-0"



A1 WEST ELEVATION
1/4" = 1'-0"

GENERAL SHEET NOTES

1 HAND/GUARD RAILS HAVE BEEN HIDDEN TO SHOW OBSCURED ELEMENTS

SHEET KEYNOTES

43 EXPOSED FOOTING WILL BE COVERED BY DECK SKIRT



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SHEET TITLE
ELEVATIONS

A-212



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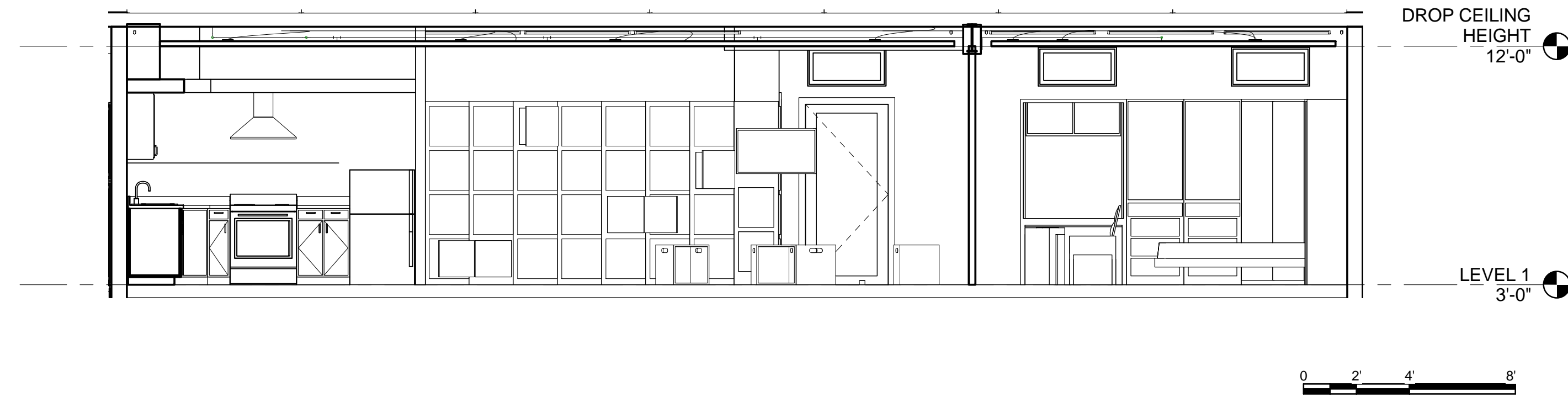
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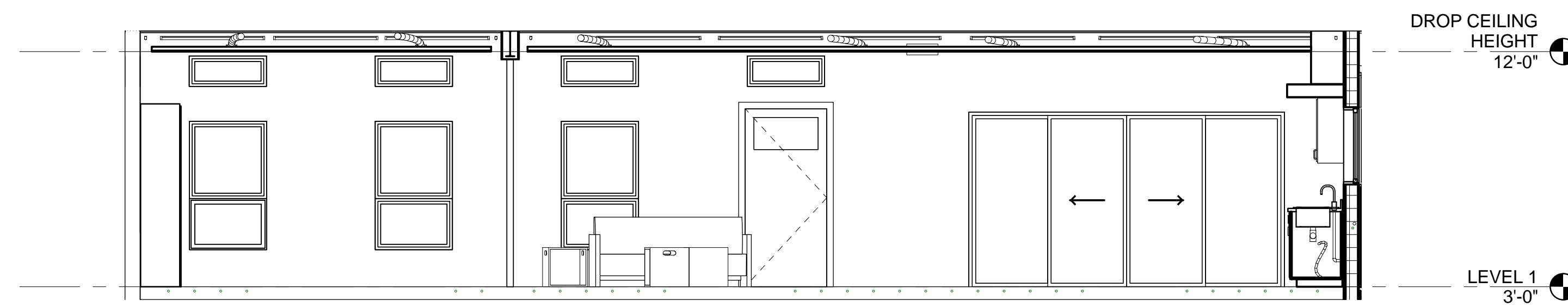
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INTERIOR ELEVATIONS

A-213



D2 INTERIOR NORTH ELEVATION
1/4" = 1'-0"



B2 INTERIOR SOUTH ELEVATION
1/4" = 1'-0"



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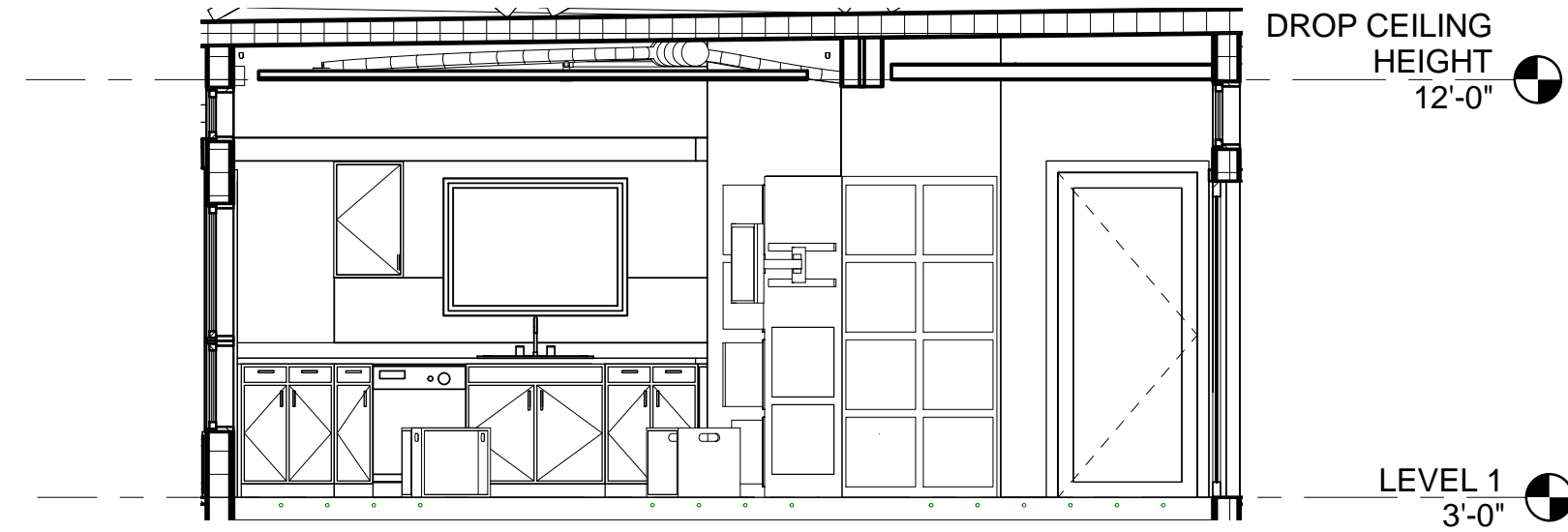


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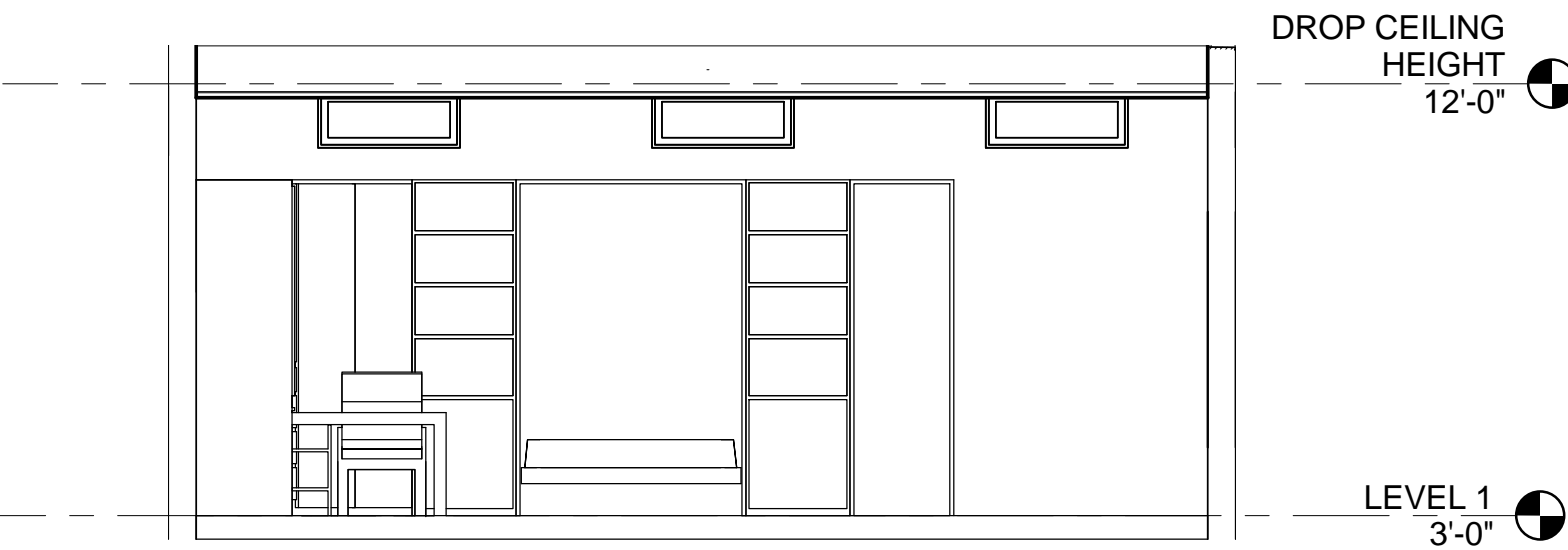
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 INTERIOR ELEVATIONS

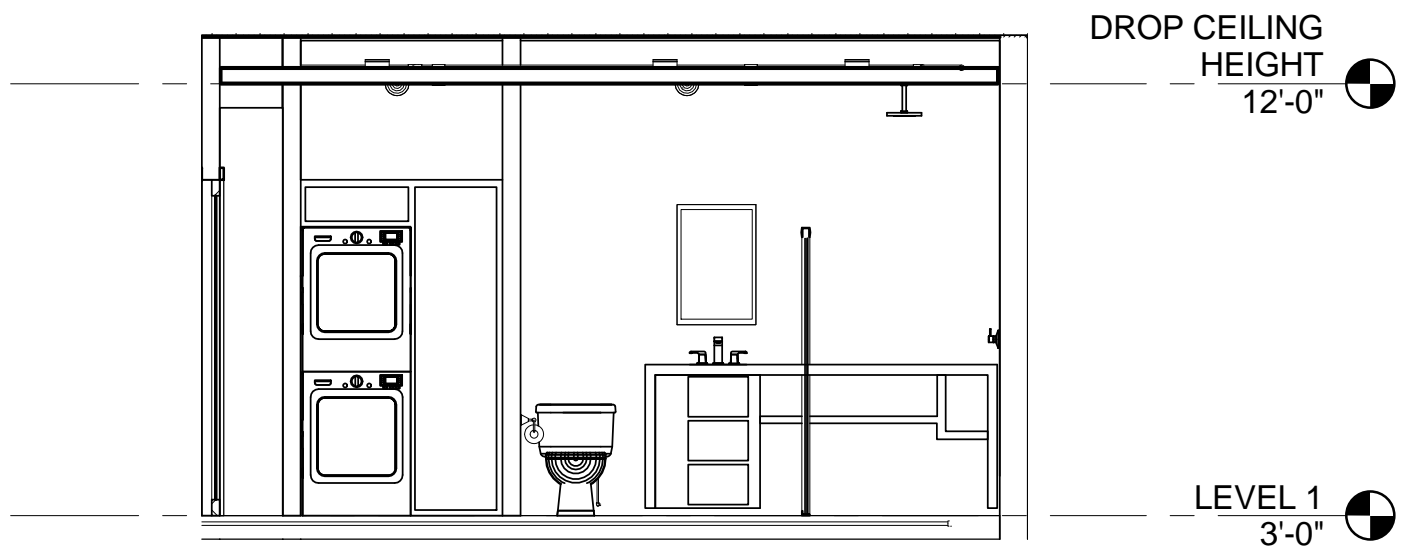
A-214



D2 INTERIOR WEST ELEVATION
 1/4" = 1'-0"



B2 INTERIOR EAST ELEVATION
 1/4" = 1'-0"



B5 INTERIOR ELEVATION BATHROOM
 1/4" = 1'-0"

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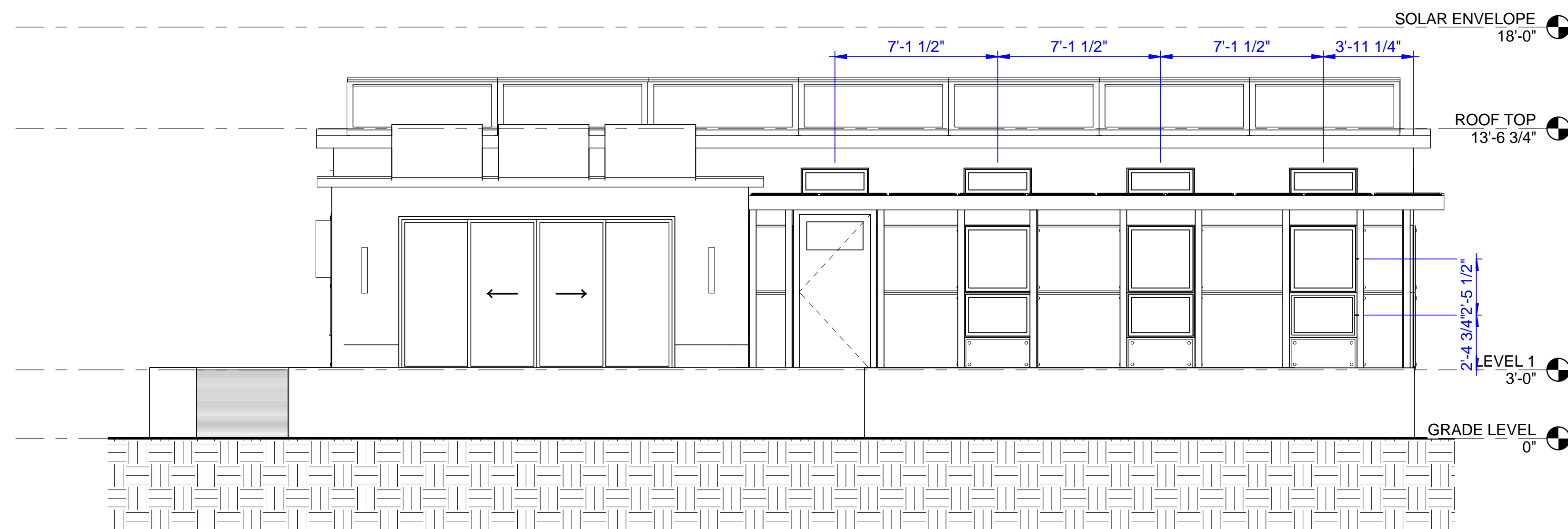


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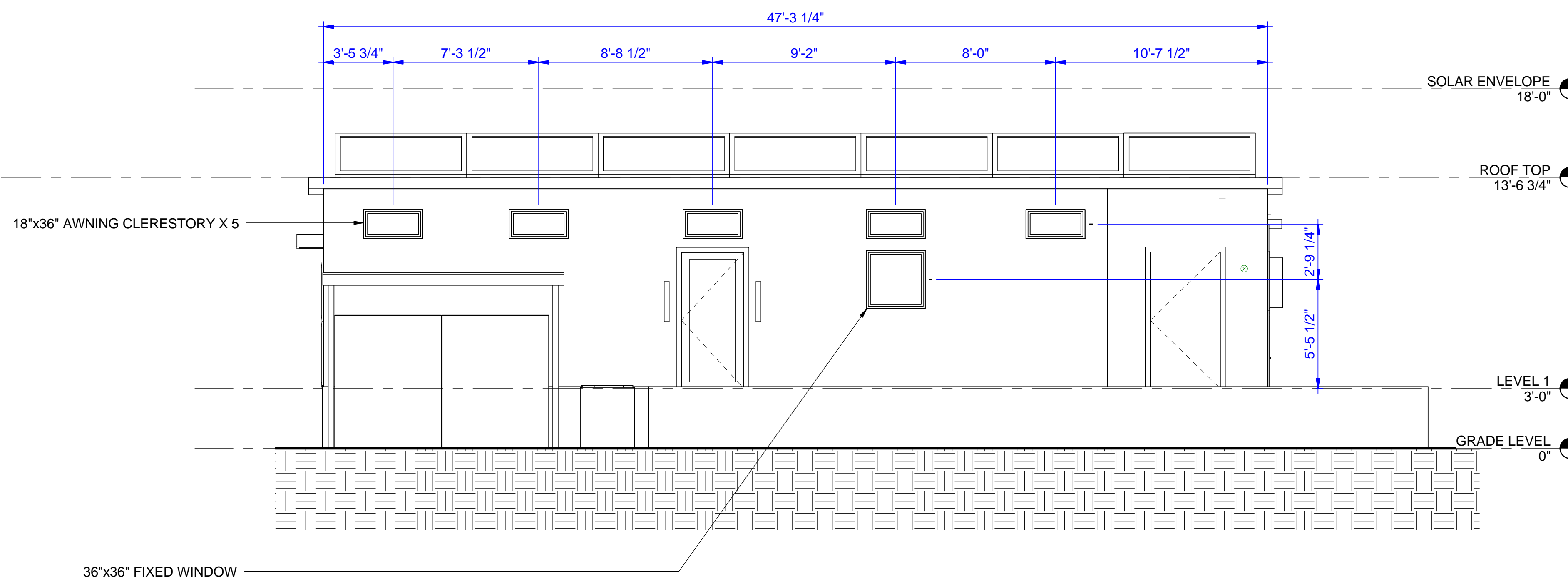
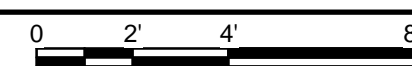
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SHEET TITLE
WINDOW PLACEMENT

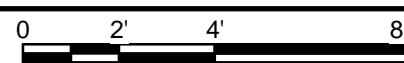
A-215



C1 SOUTH WINDOW PLACEMENT
 1/4" = 1'-0"



A1 NORTH WINDOW PLACEMENT
 1/4" = 1'-0"



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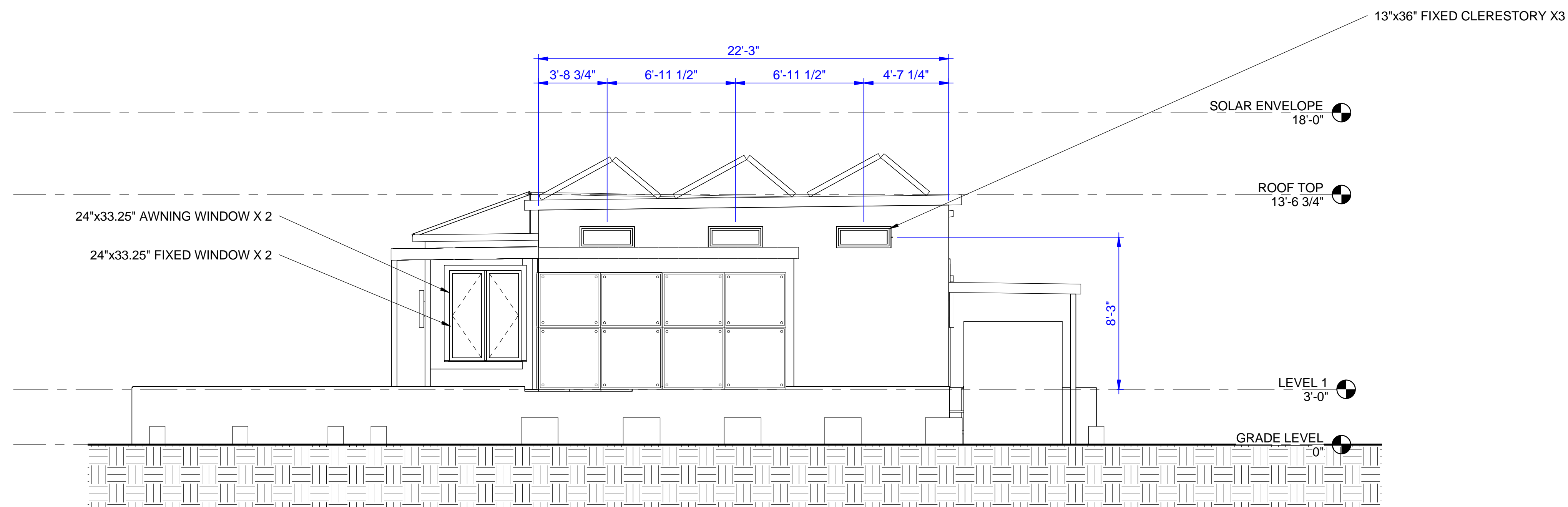
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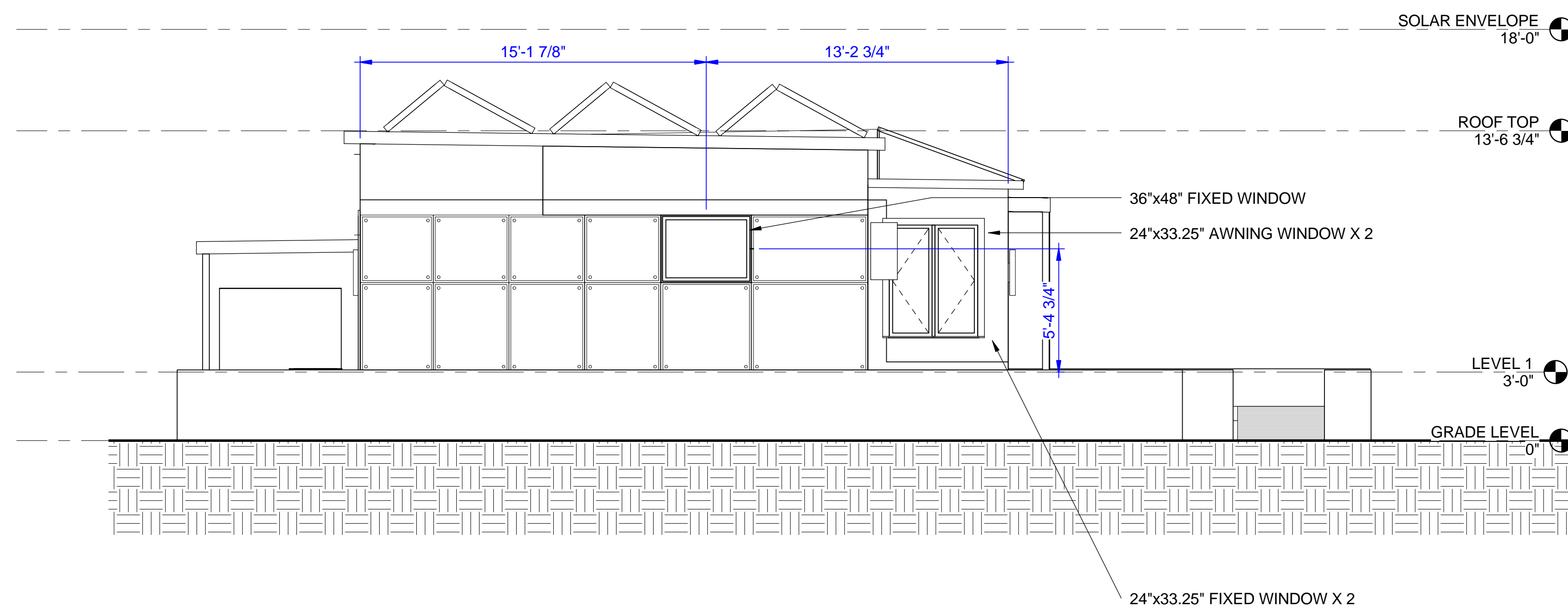
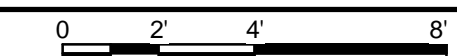
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WINDOW PLACEMENT

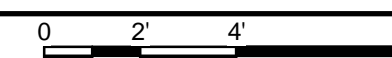
A-216



C1 EAST WINDOW PLACEMENT
1/4" = 1'-0"



A1 WEST WINDOW PLACEMENT
1/4" = 1'-0"





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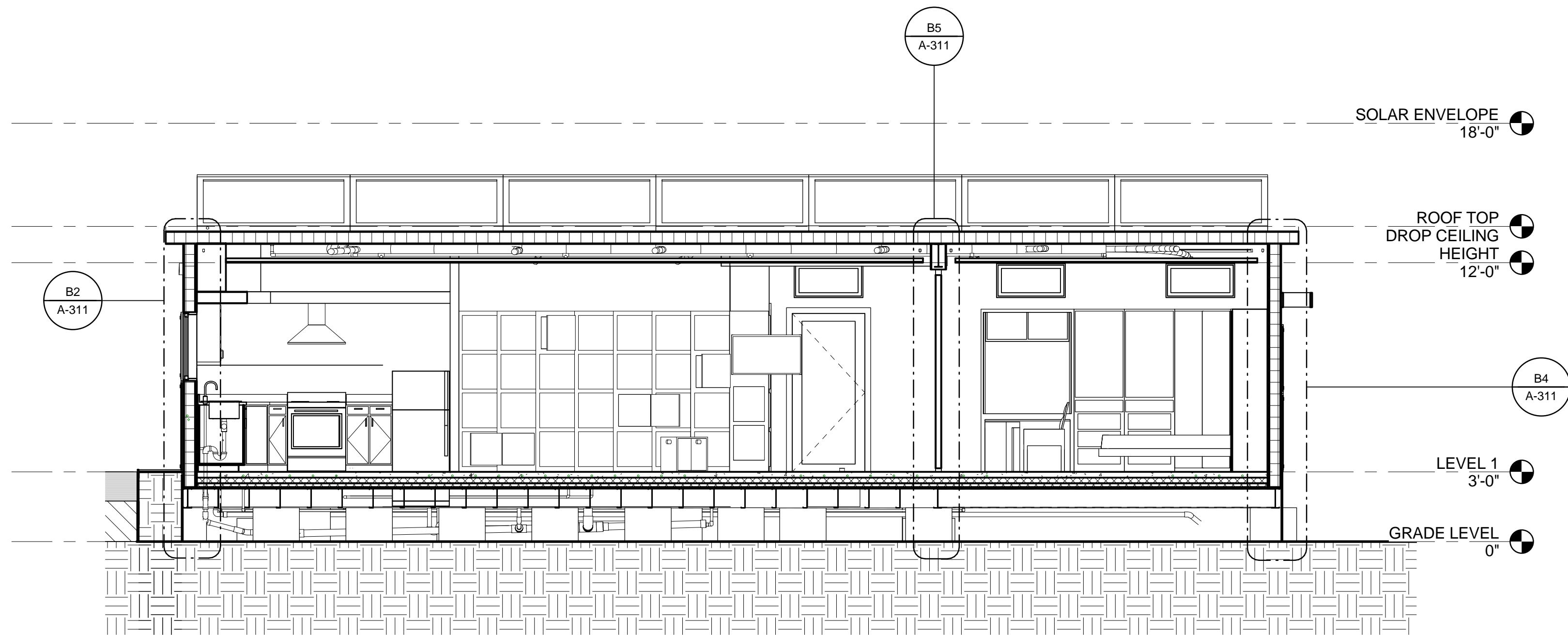
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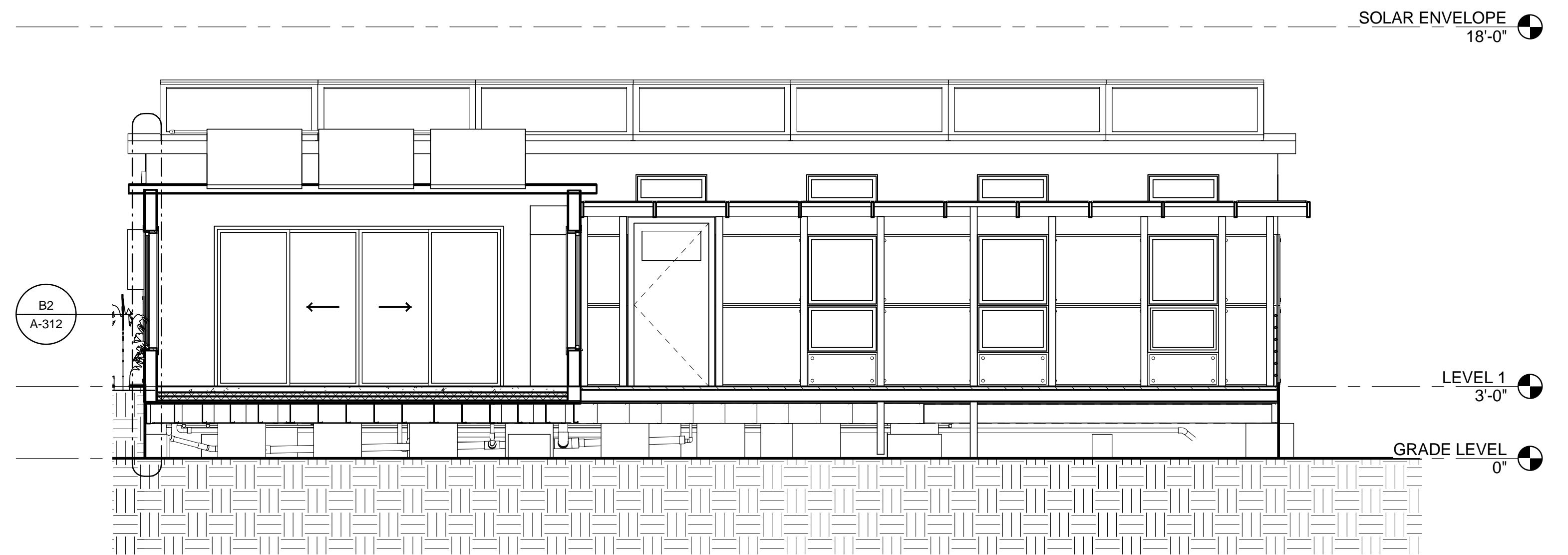
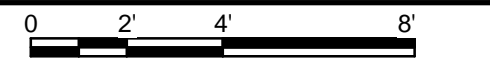
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SHEET TITLE
 BUILDING SECTIONS

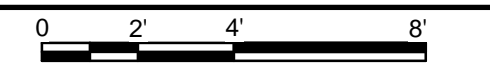
A-301



C1 BUILDING CROSS SECTION 1
 1/4" = 1'-0"



A1 SOLARIUM SECTION
 1/4" = 1'-0"





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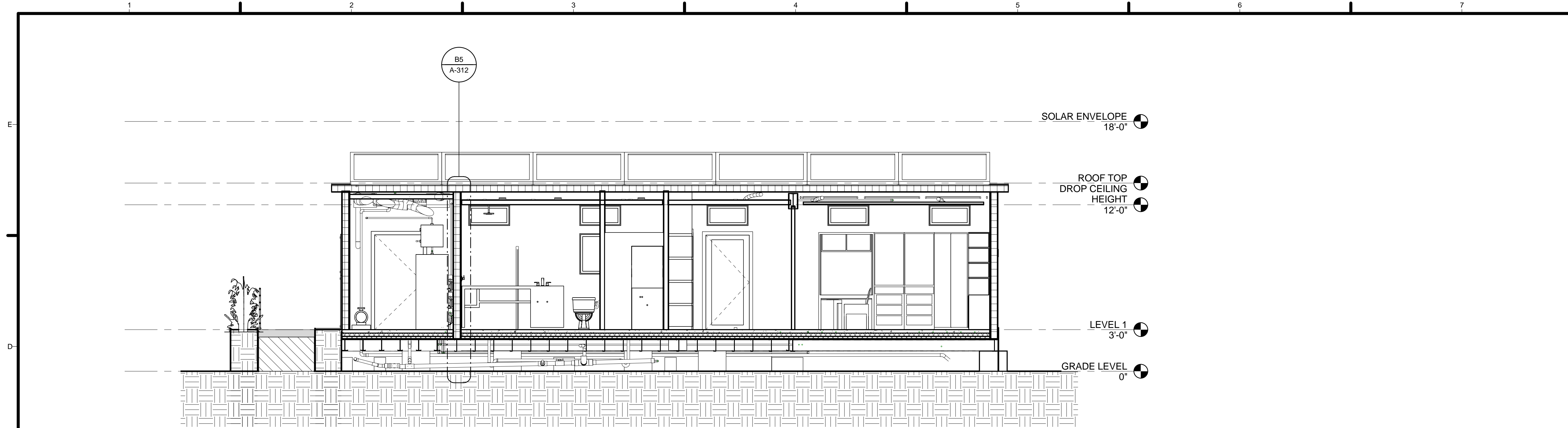
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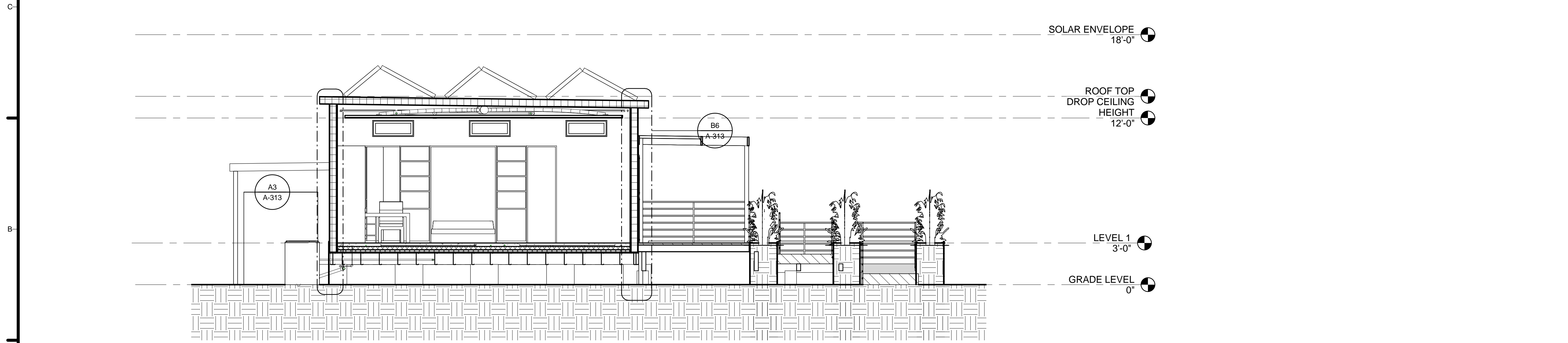
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SHEET TITLE
 BUILDING SECTIONS

A-302



D1 BUILDING CROSS SECTION 2
 1/4" = 1'-0"



A1 LONGITUDINAL SECTION 1
 1/4" = 1'-0"



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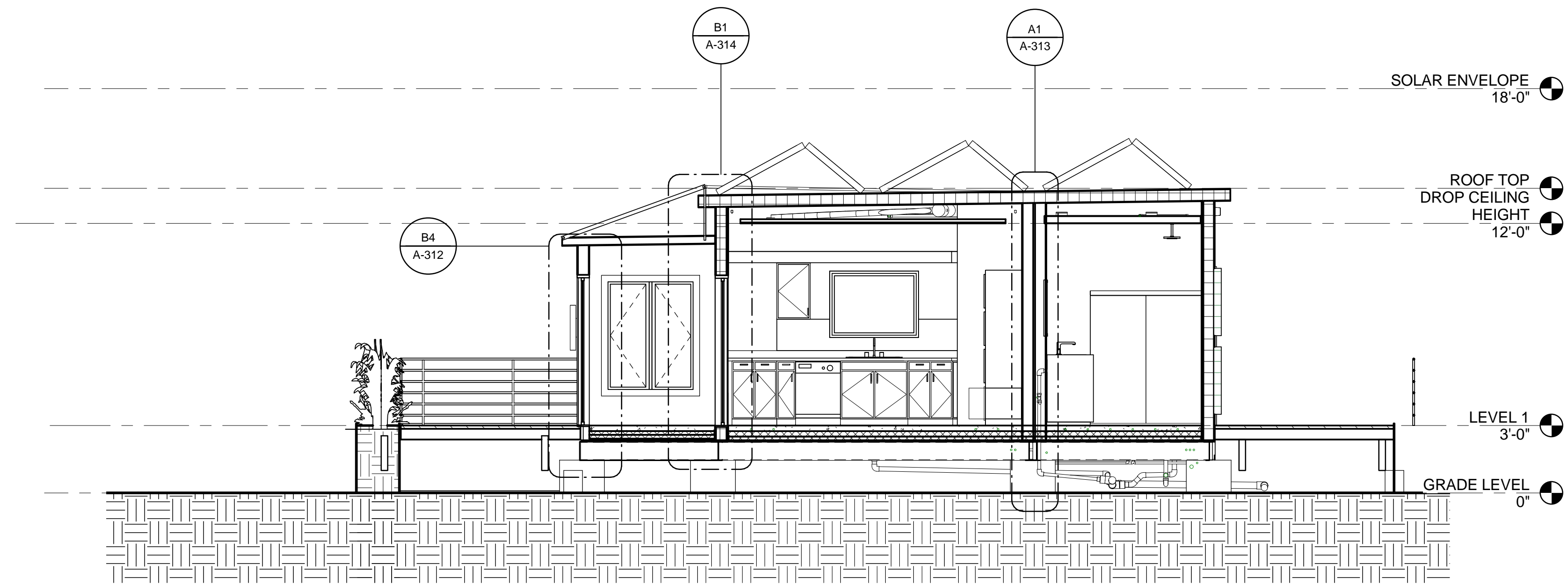
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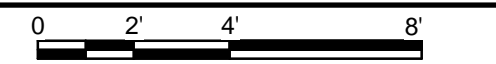
SHEET TITLE

BUILDING SECTION

A-303



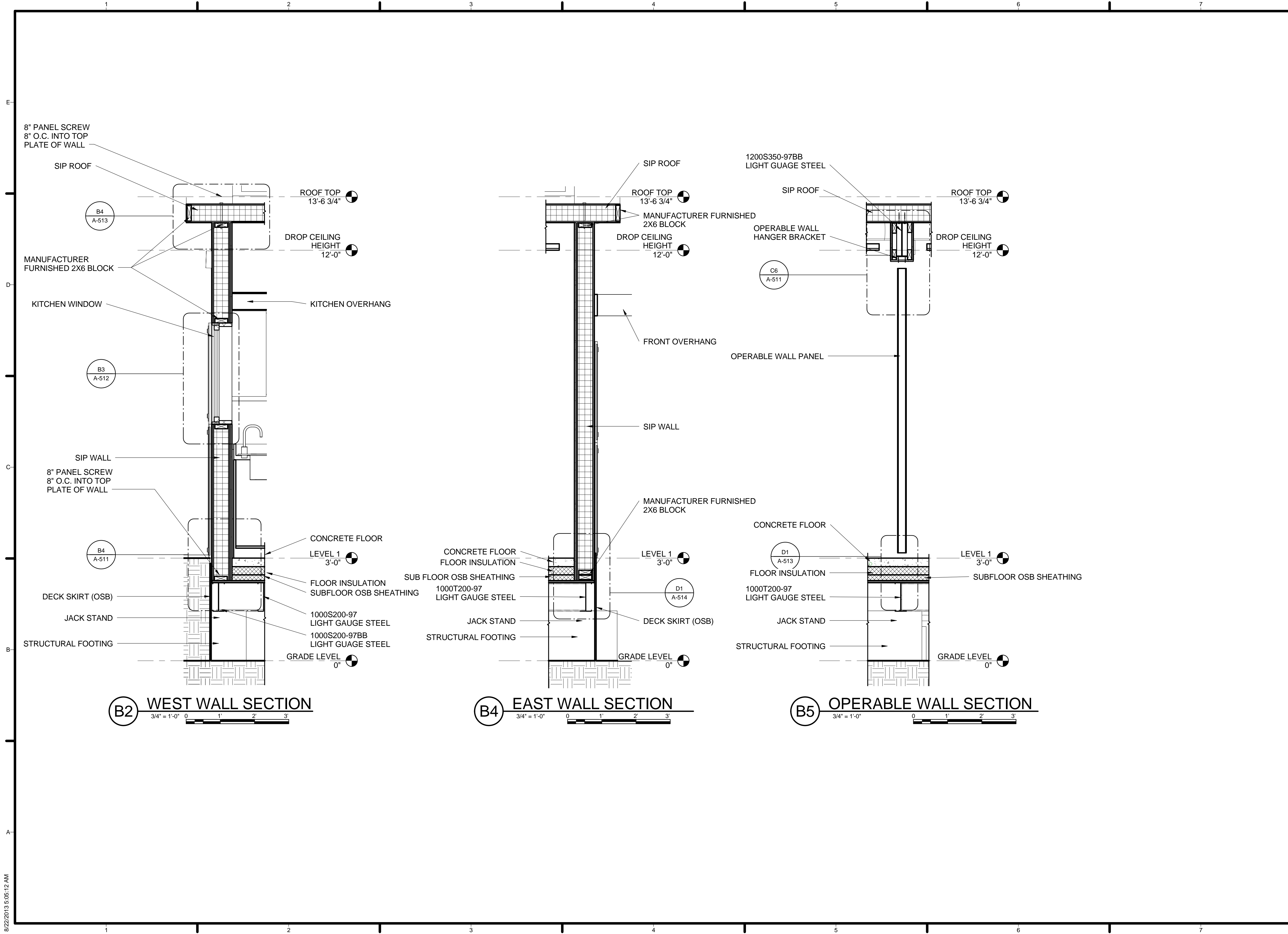
B2 LONGITUDINAL SECTION 2
1/4" = 1'-0"



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SHEET TITLE
WALL SECTIONS

A-311

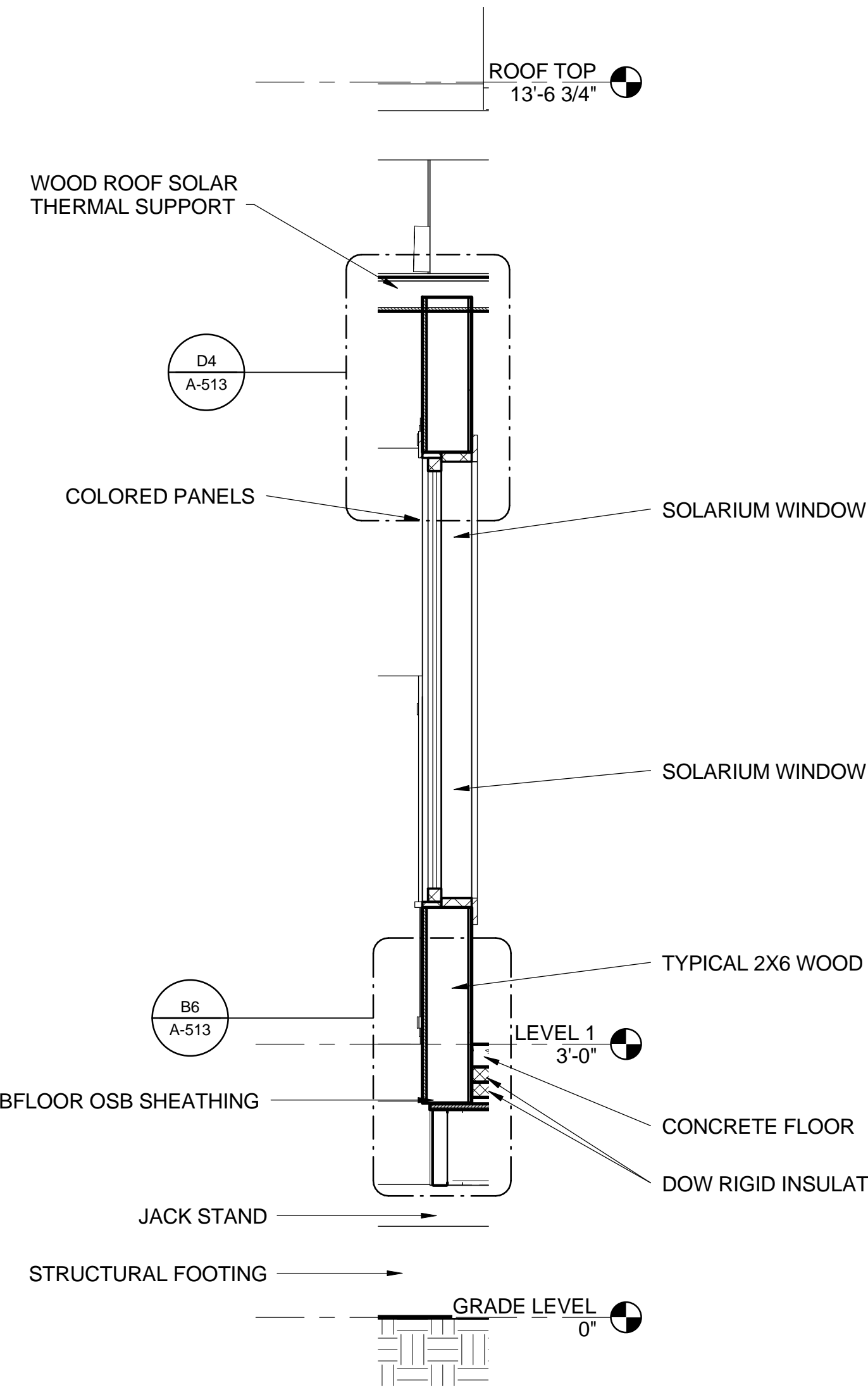


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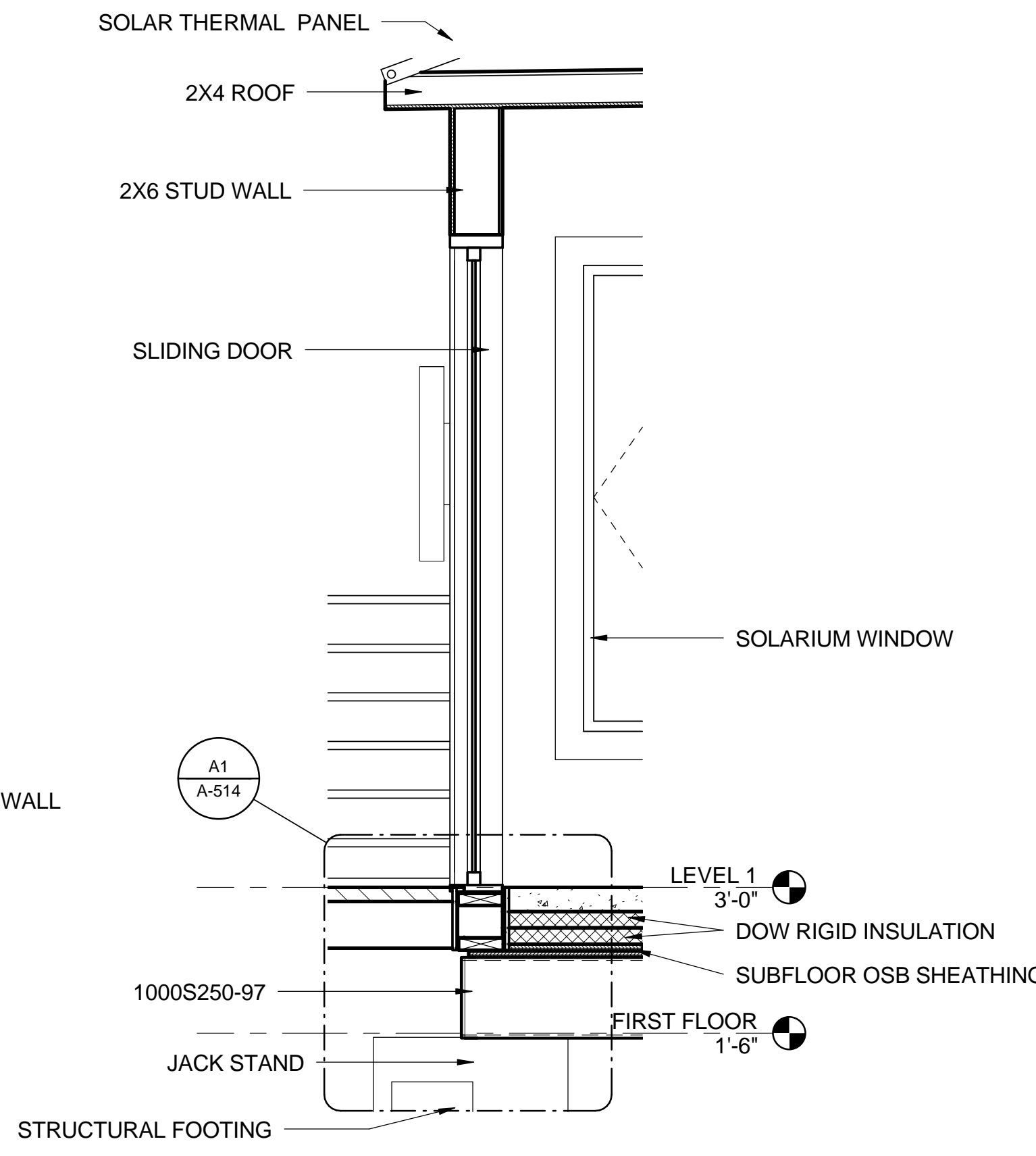
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WALL SECTIONS

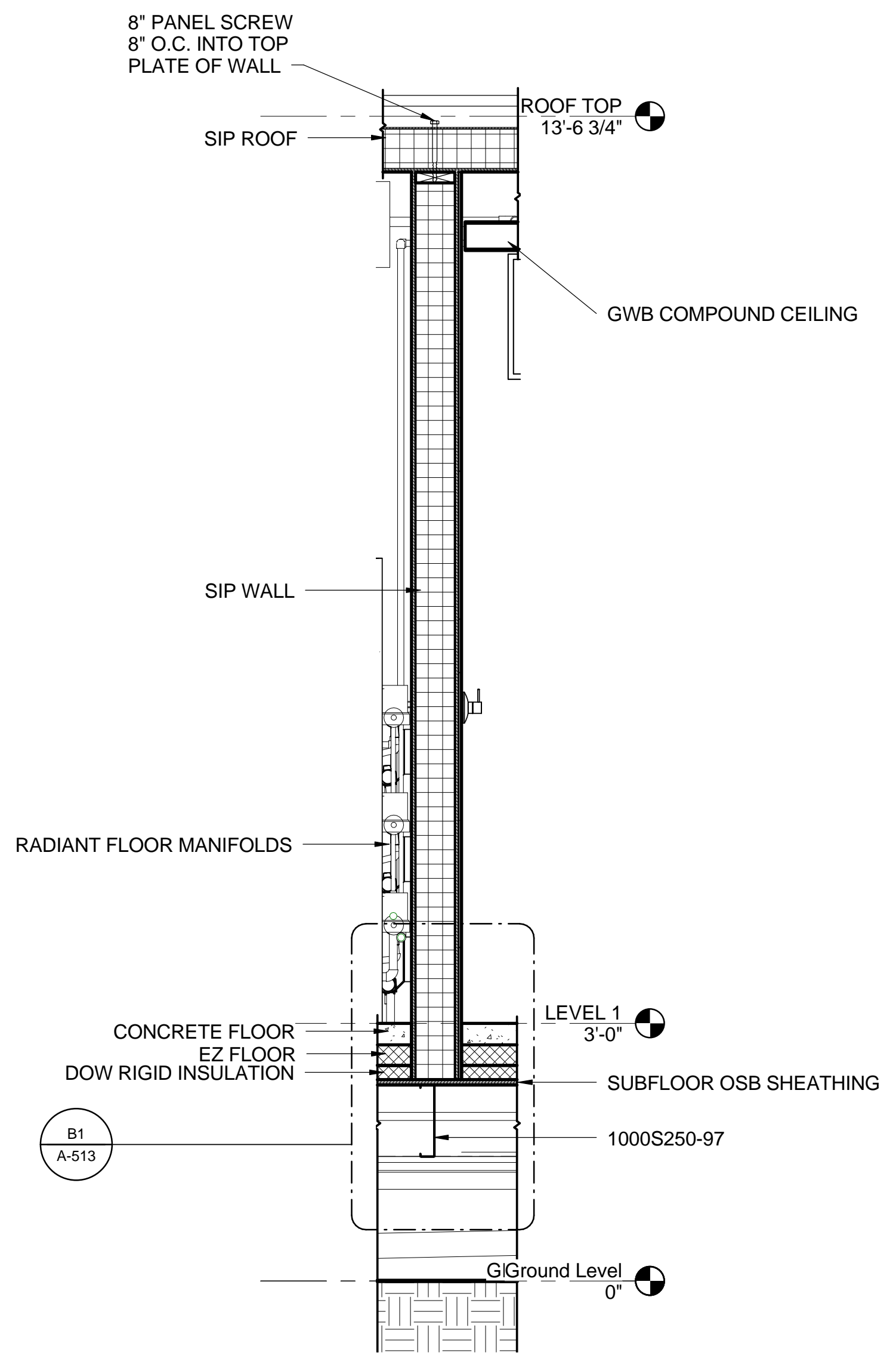
A-312



B2 SOLARIUM WEST WALL SECTION
3/4" = 1'-0"



B4 SOLARIUM SOUTH WALL SECTION
3/4" = 1'-0"



B5 MECHANICAL ROOM SIP SECTION
3/4" = 1'-0"

GENERAL SHEET NOTES

1 ALL INTERIOR SIP WALL FACES COVERED WITH 1/2" GWB AS SEEN IN DETAIL SECTION



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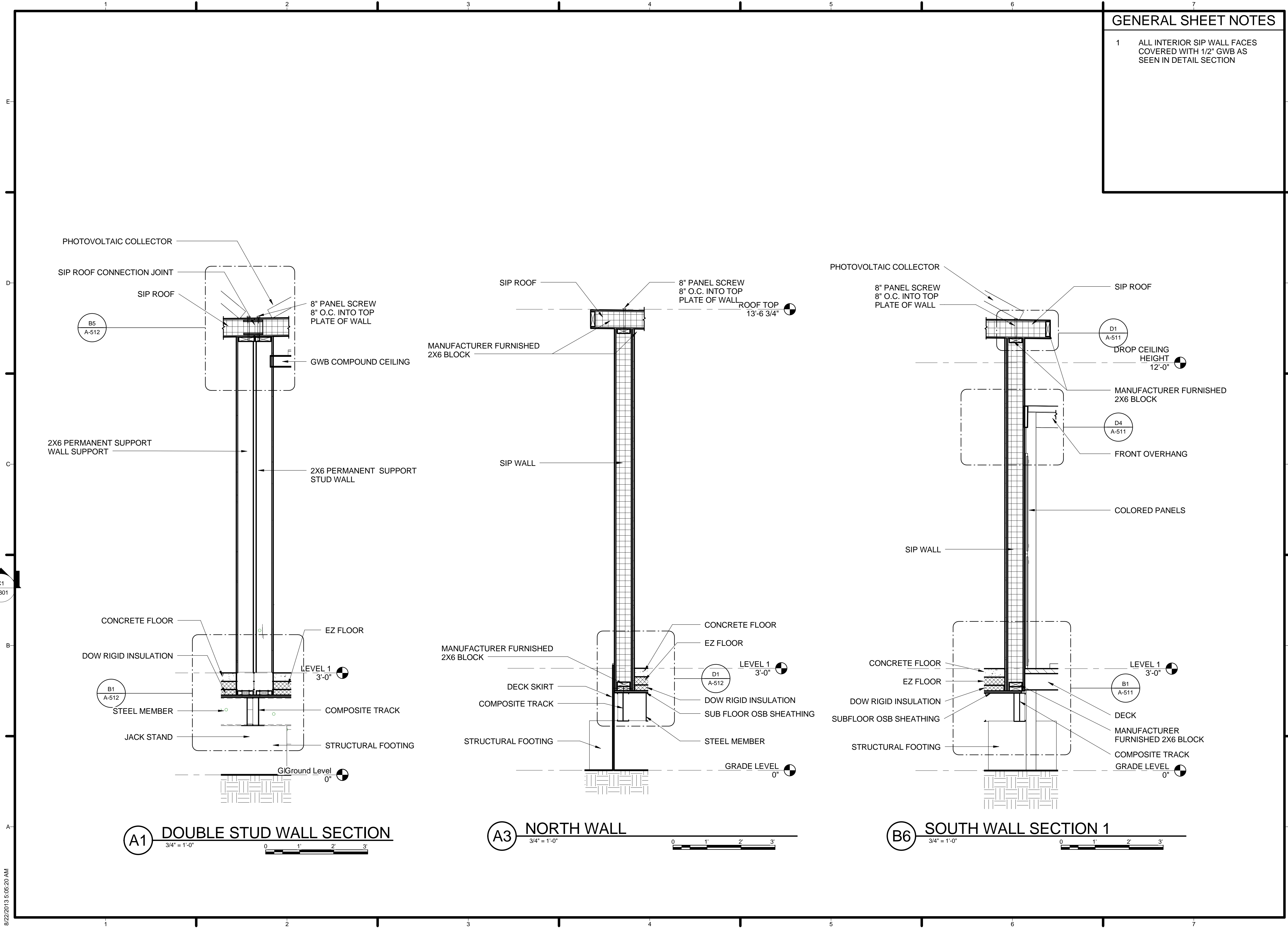
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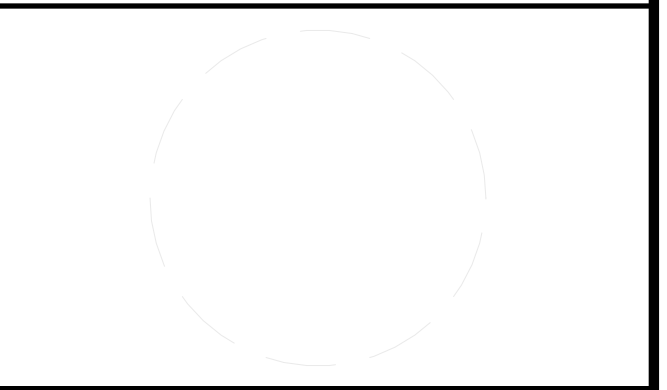
A-313



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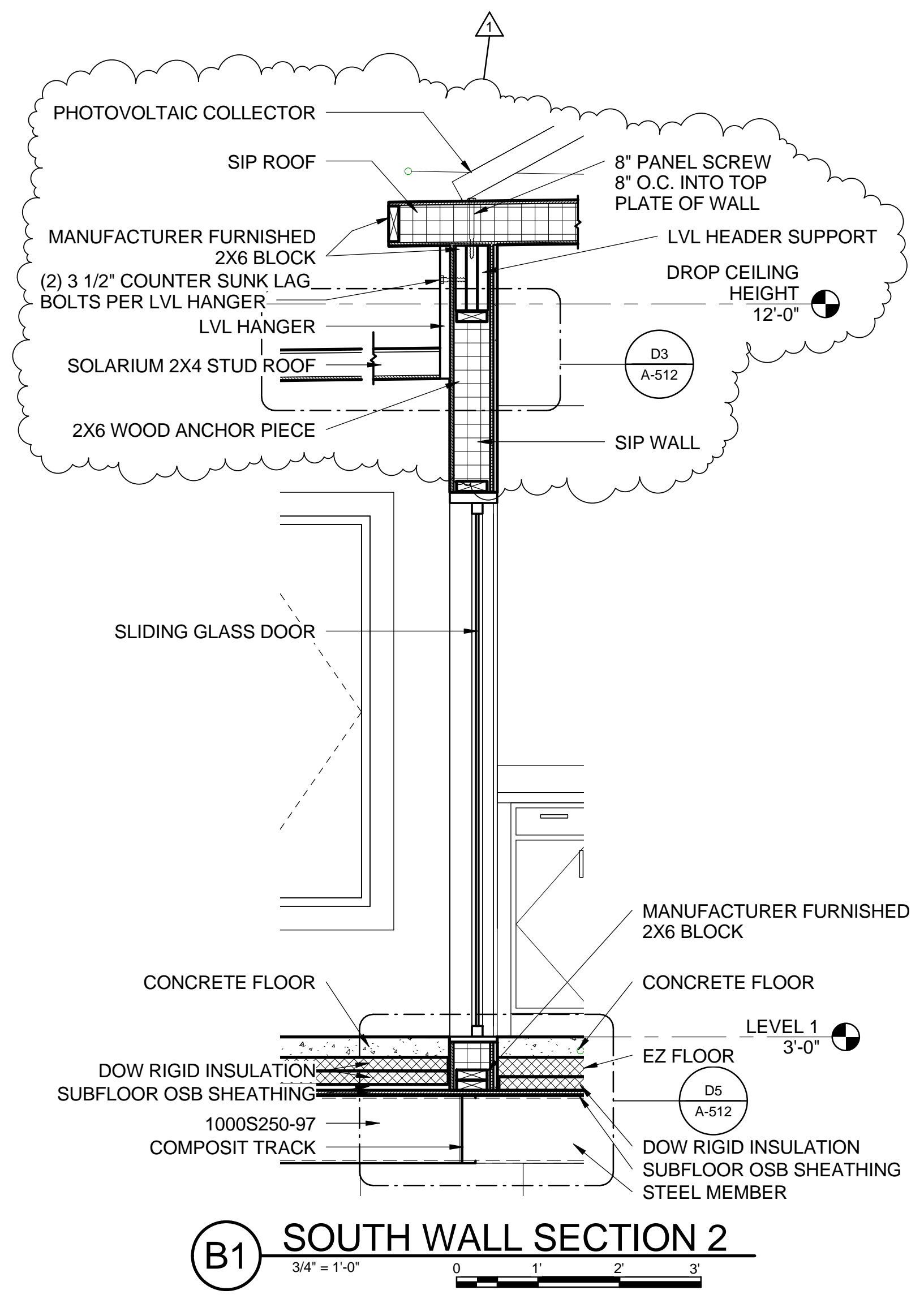


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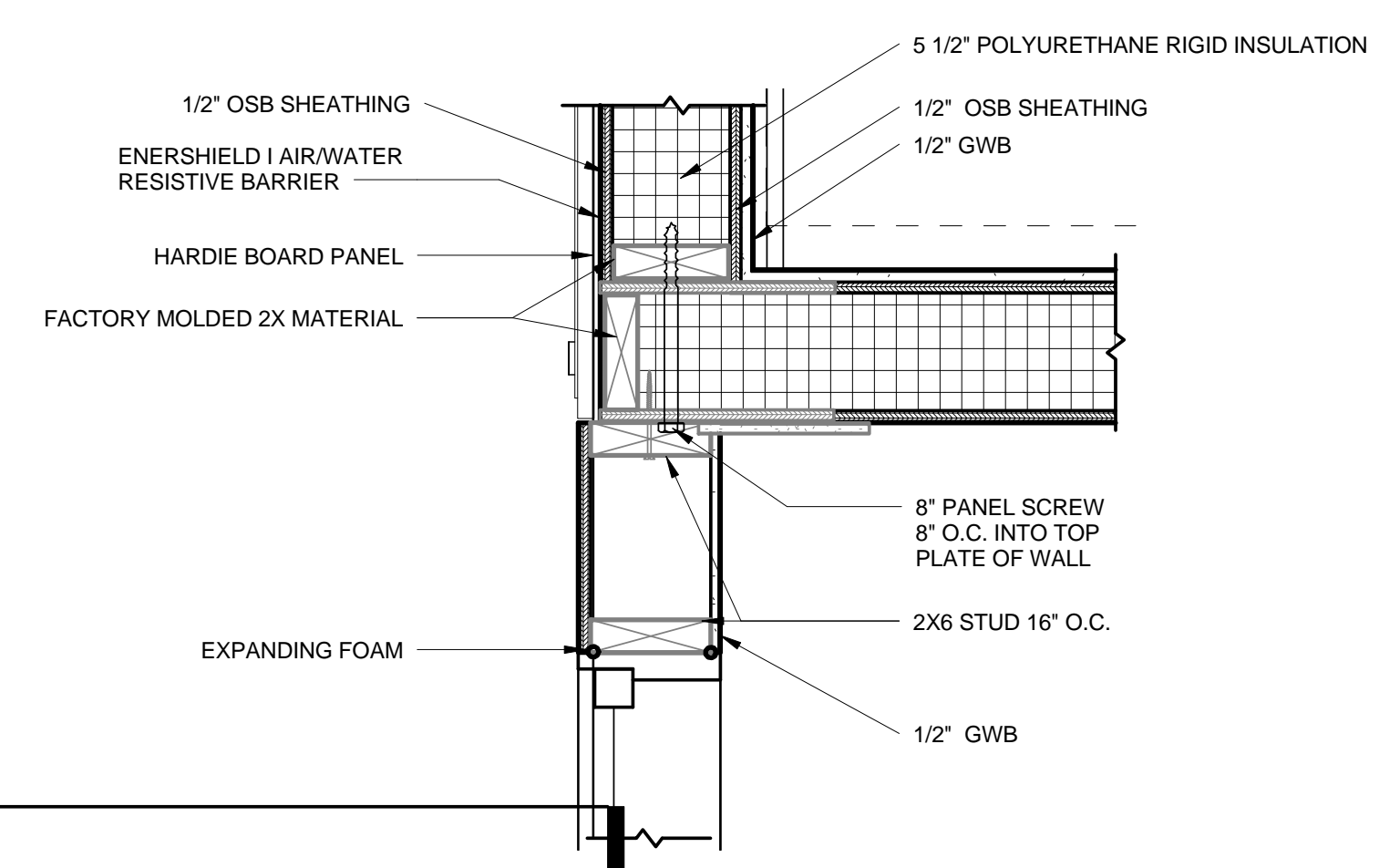
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SHEET TITLE
 WALL SECTIONS

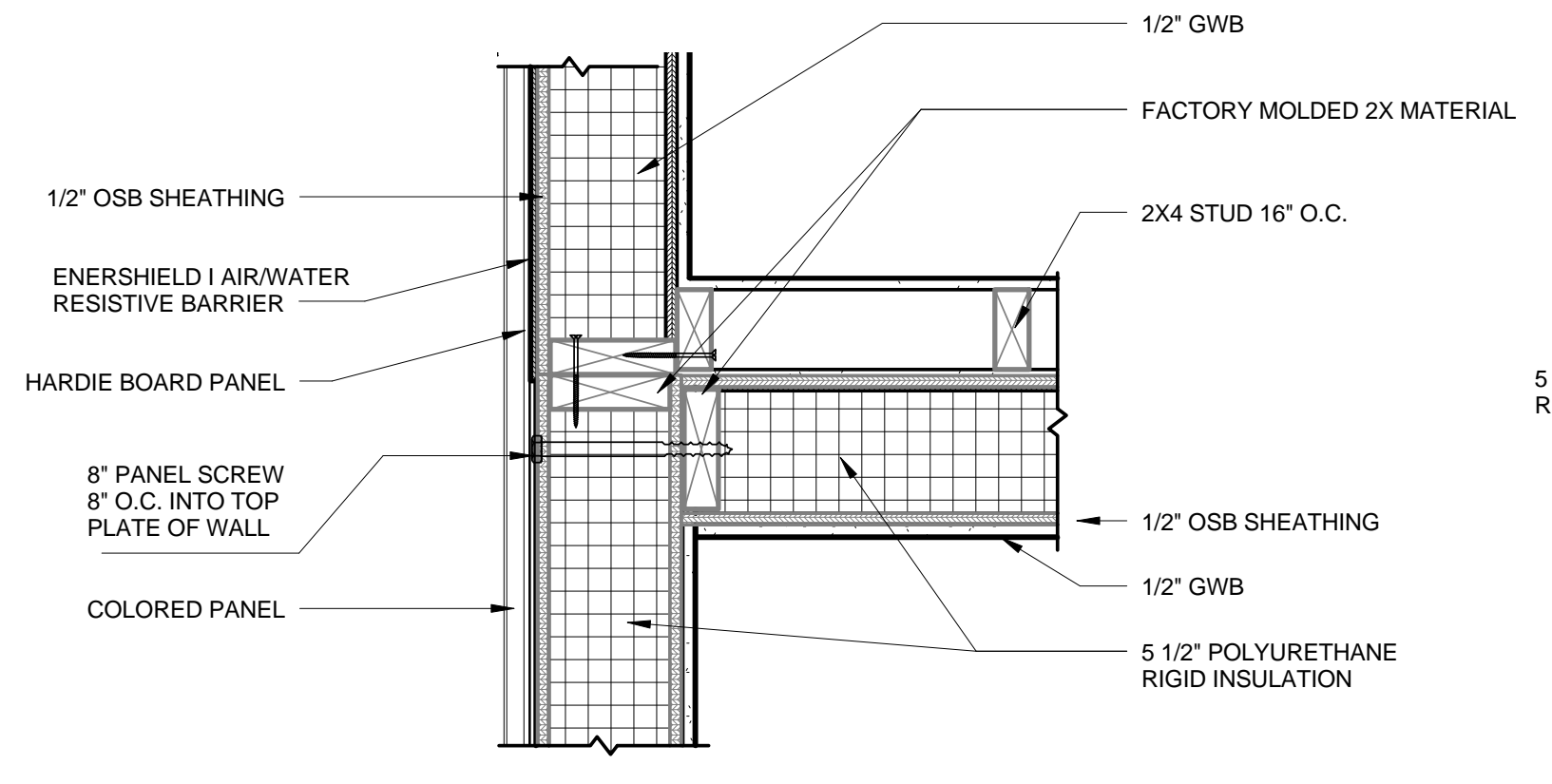
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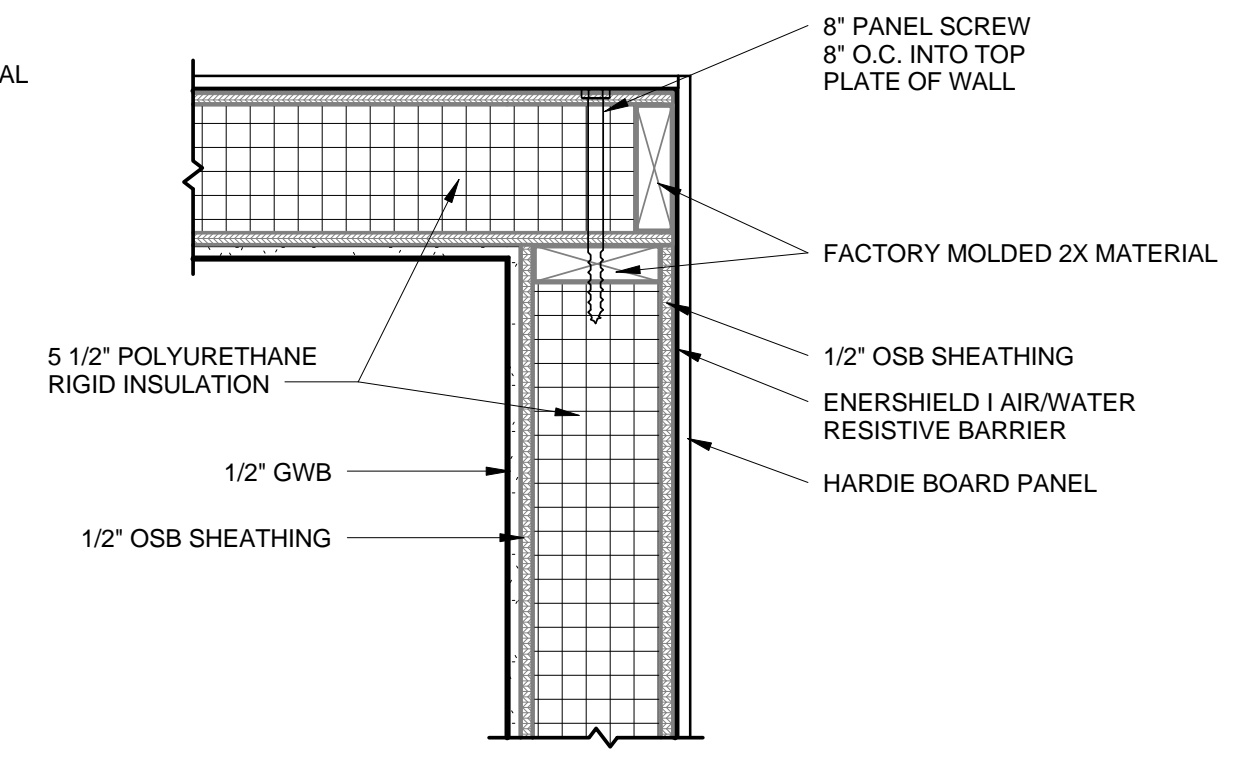
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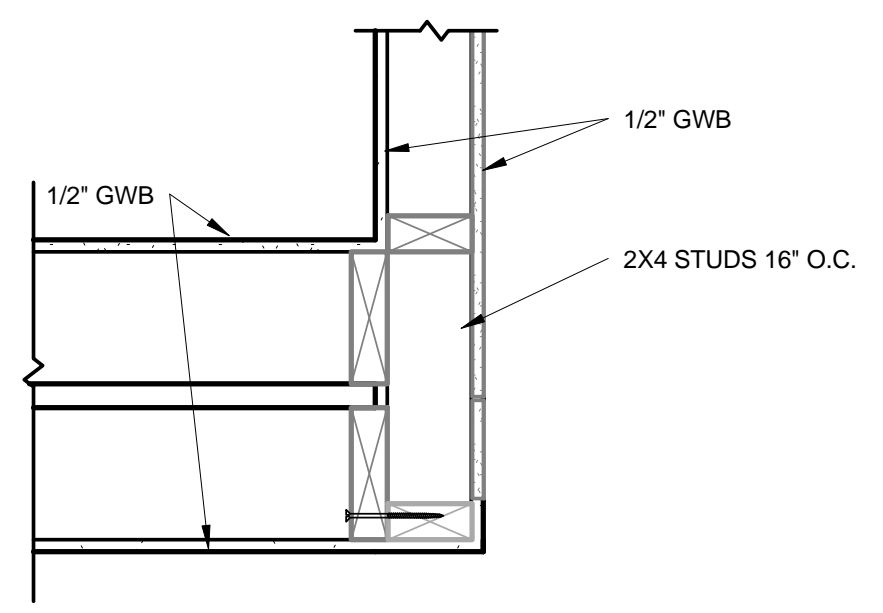
D2 SOLARIUM TO HOUSE CORNER
1 1/2" = 1'-0"



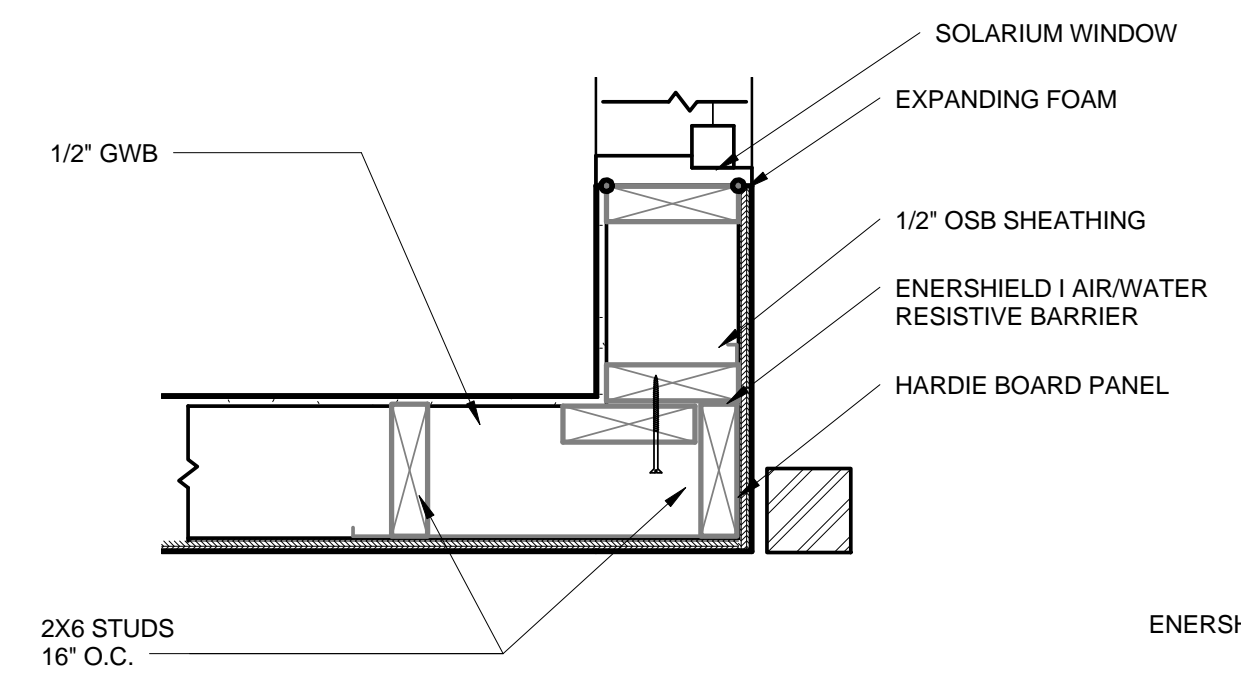
D4 MECHANICAL RM TO SIP
1 1/2" = 1'-0"



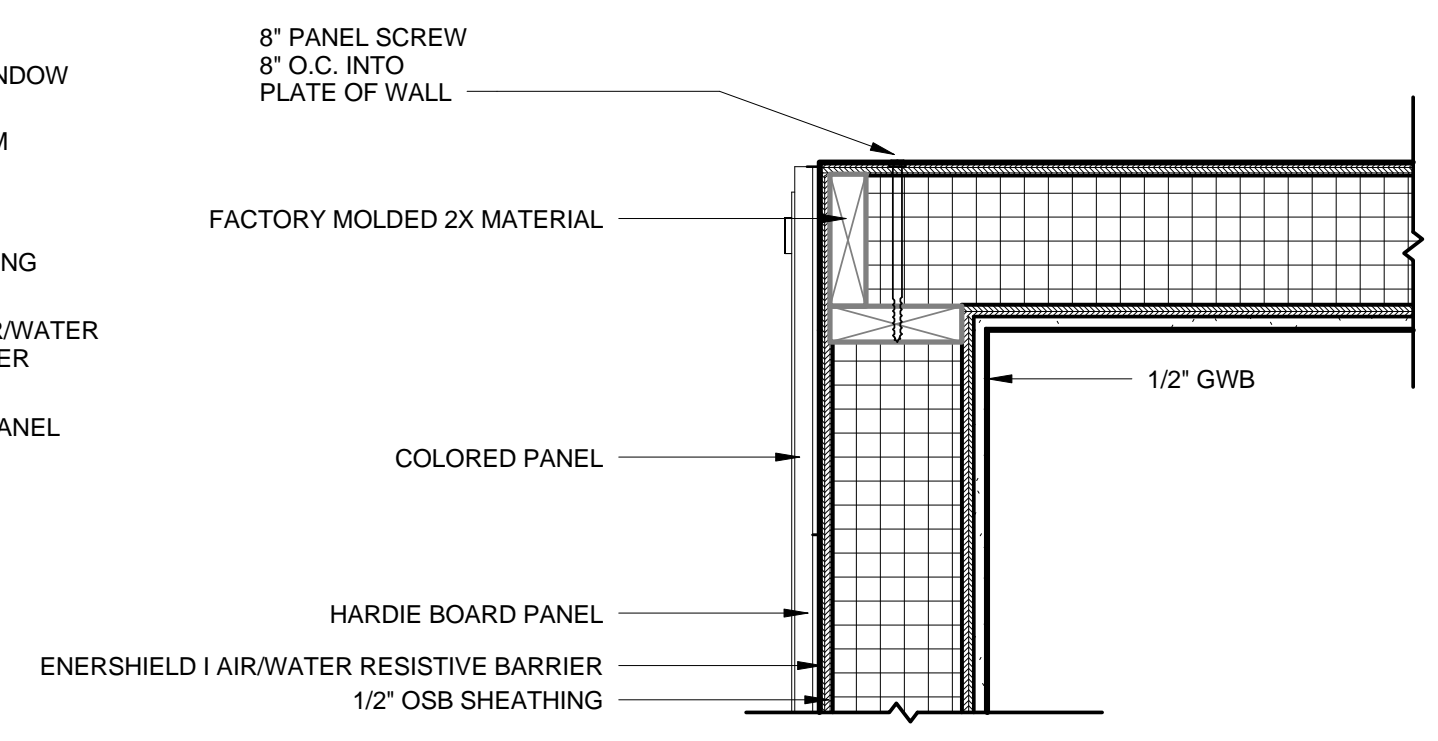
D6 NORTHEAST CORNER
1 1/2" = 1'-0"



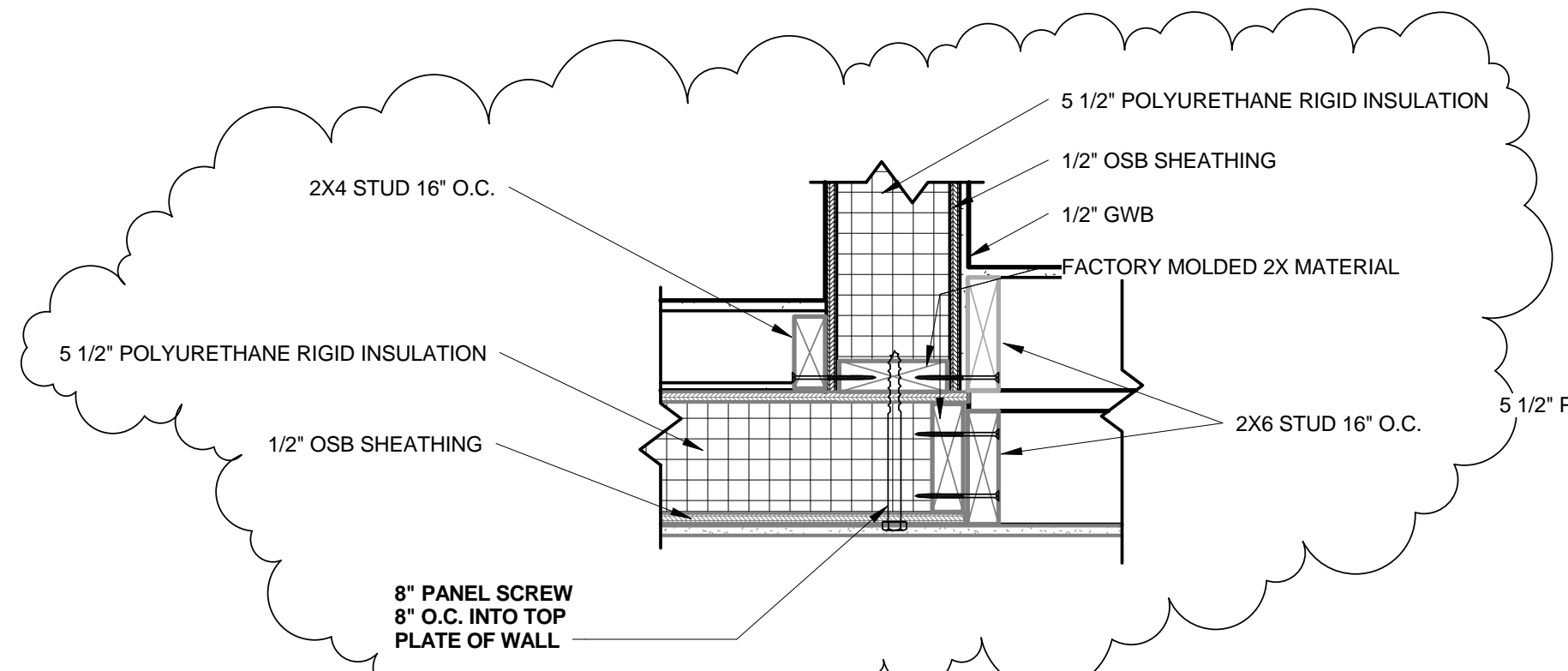
C2 INTERIOR WALL JOINT AT BATH
1 1/2" = 1'-0"



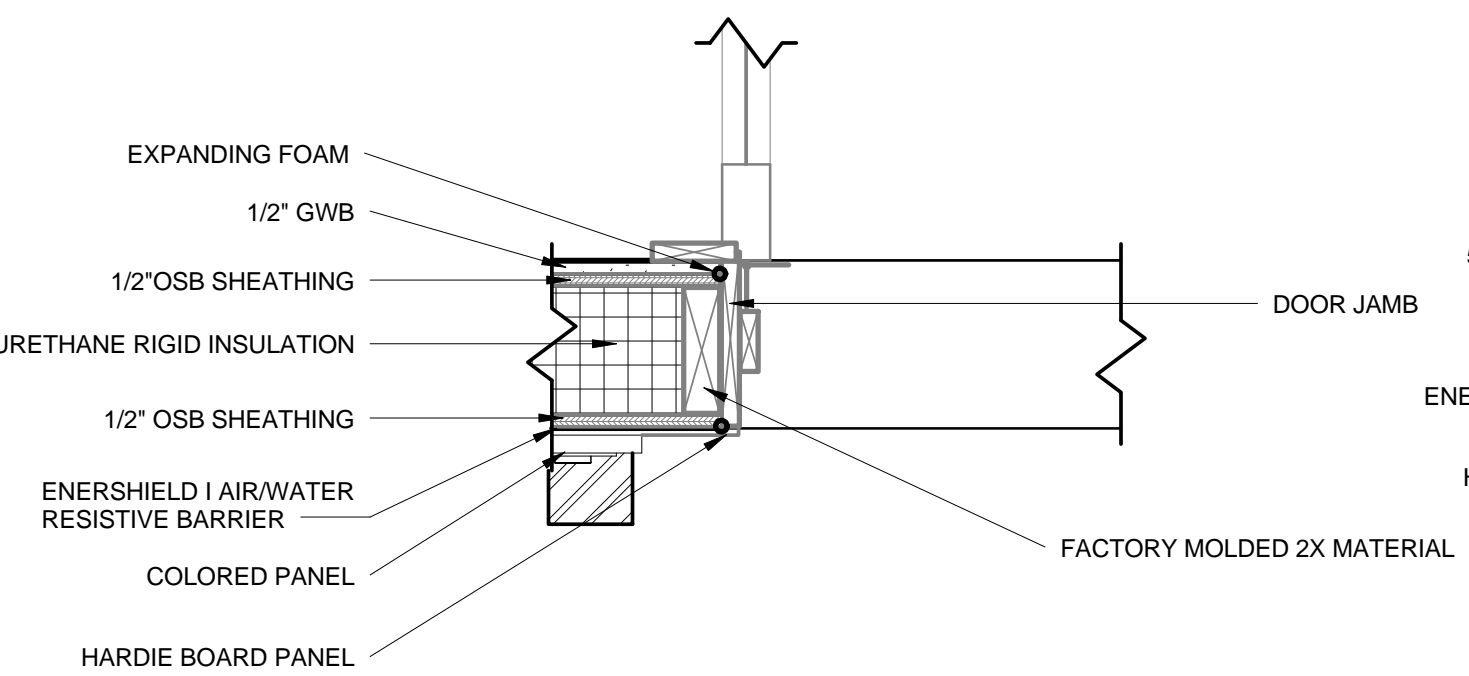
C4 SOLARIUM CORNER
1 1/2" = 1'-0"



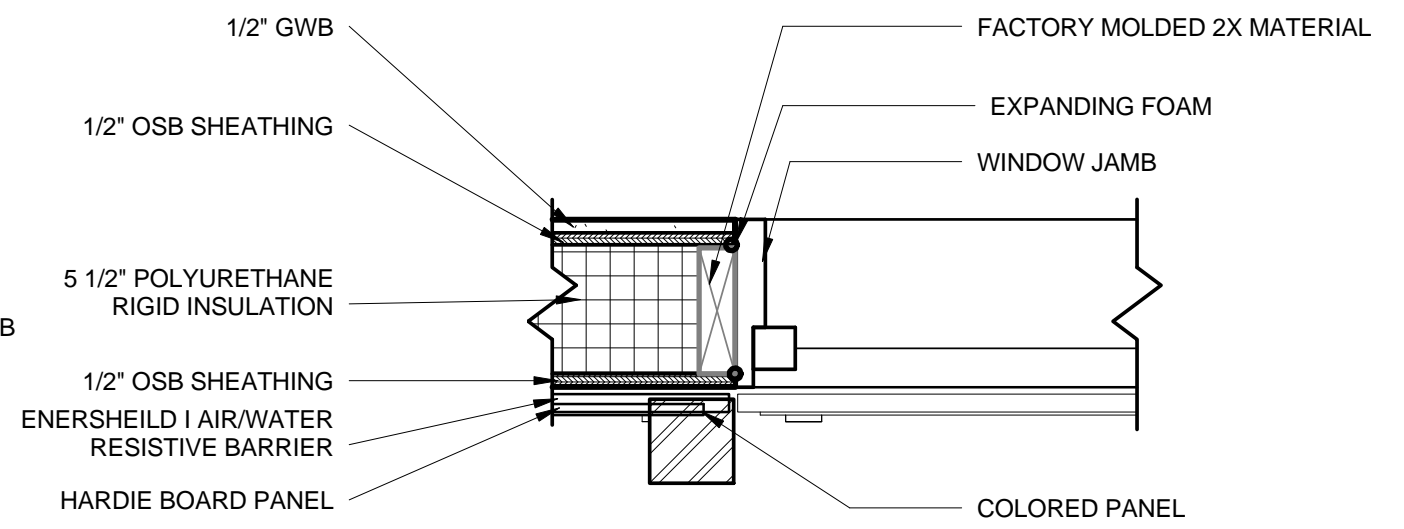
C6 MECHANICAL RM DOOR JAMB
1 1/2" = 1'-0"



A2 INTERIOR WALL JOINT AT MECHANICAL RM
1 1/2" = 1'-0"



A4 MAIN DOOR JAMBS
1 1/2" = 1'-0"



A6 SOUTH WINDOW JAMB
1 1/2" = 1'-0"

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ADDRESS: 1051 NORTH BISHOP AVENUE
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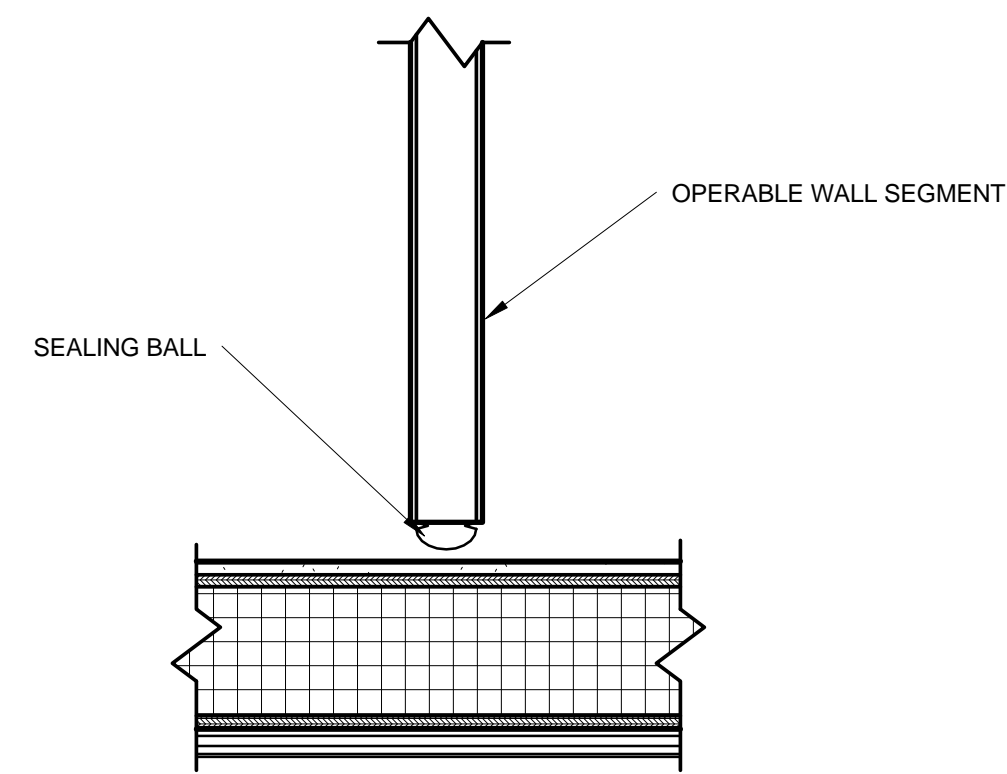
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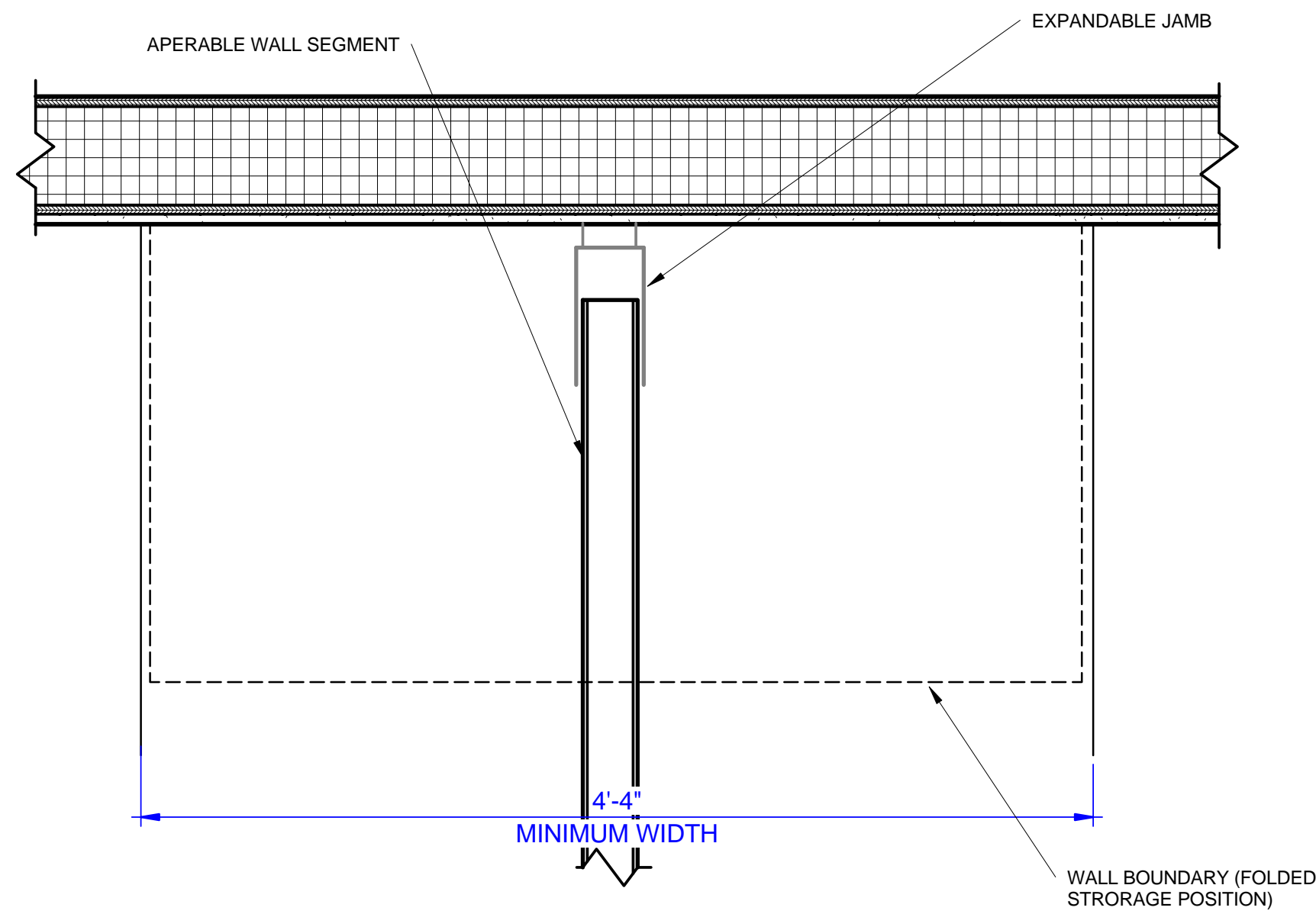
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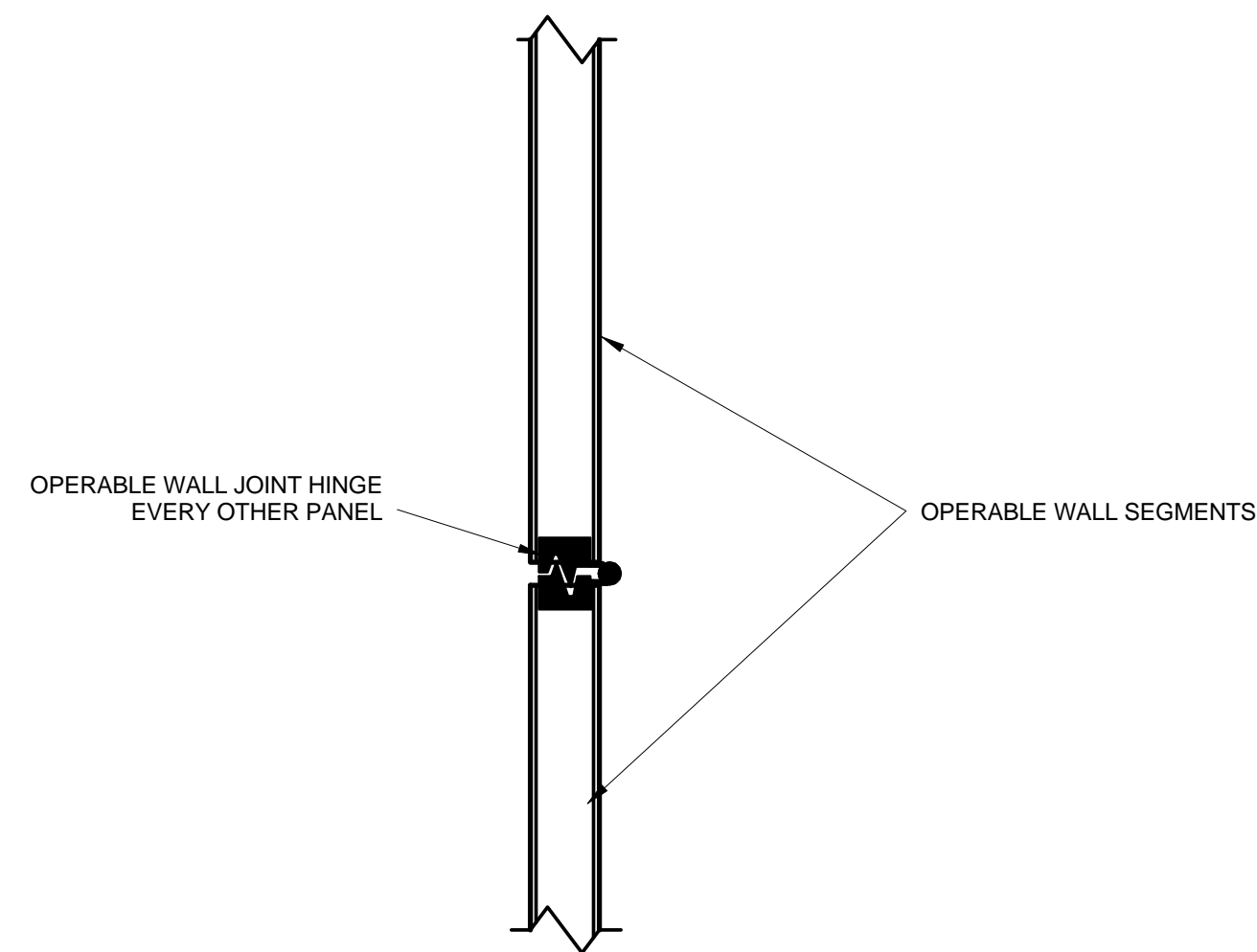
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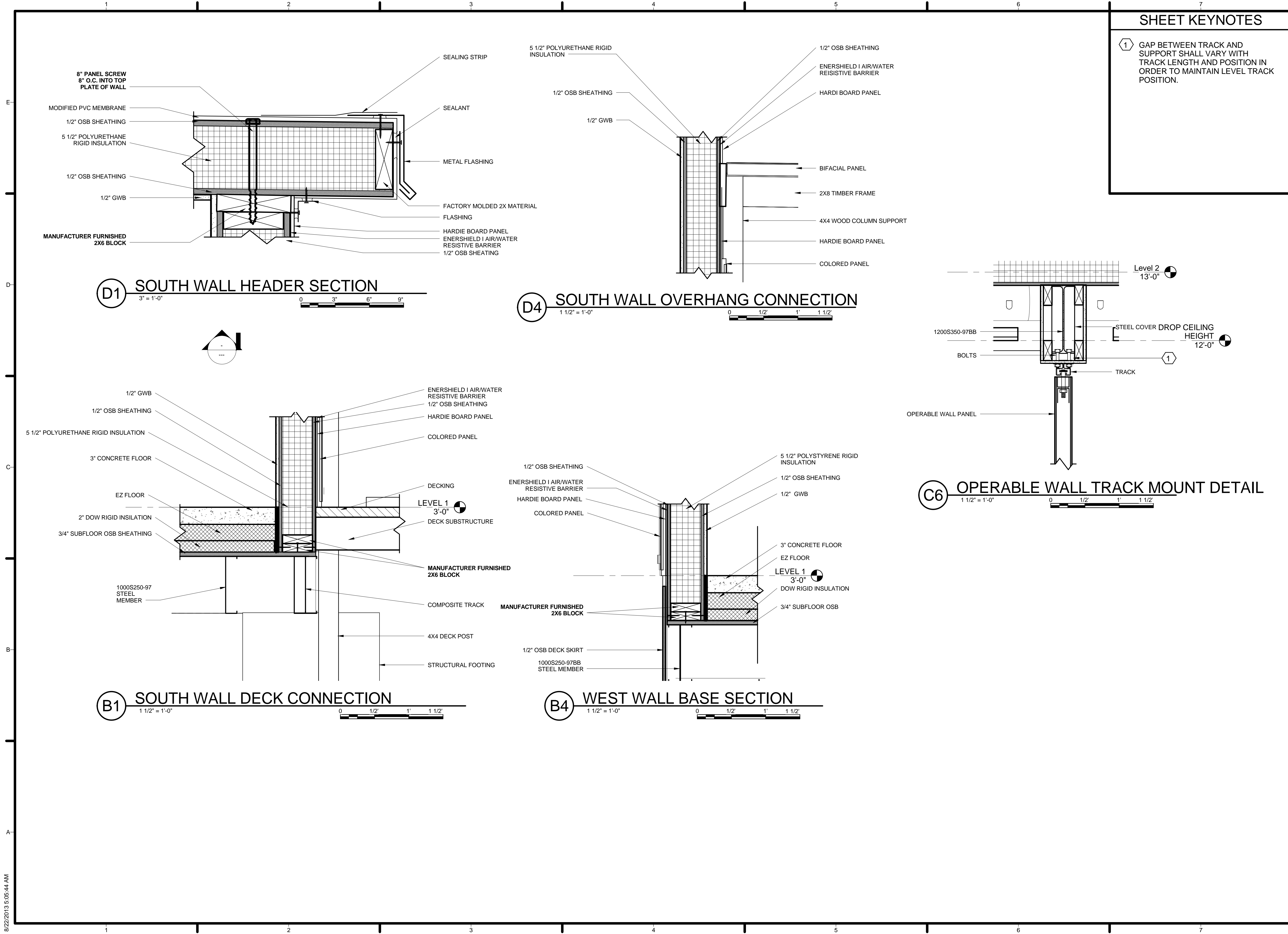
D2 OPERABLE WALL SEAL
 1 1/2" = 1'-0"
 0 1/2 1' 1 1/2"



D3 OPERABLE WALL STORAGE
 1 1/2" = 1'-0"
 0 1/2 1' 1 1/2"



A2 OPERABLE WALL JOINT
 1 1/2" = 1'-0"
 0 1/2 1' 1 1/2"

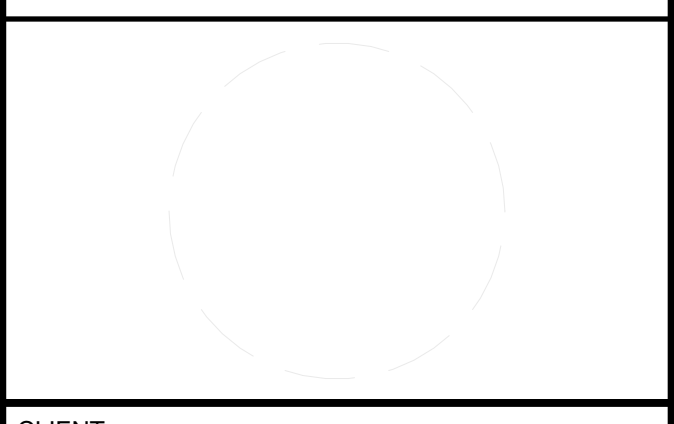


SHEET KEYNOTES

① GAP BETWEEN TRACK AND SUPPORT SHALL VARY WITH TRACK LENGTH AND POSITION IN ORDER TO MAINTAIN LEVEL TRACK POSITION.



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 ADDRESS: 1051 NORTH BISHOP AVENUE
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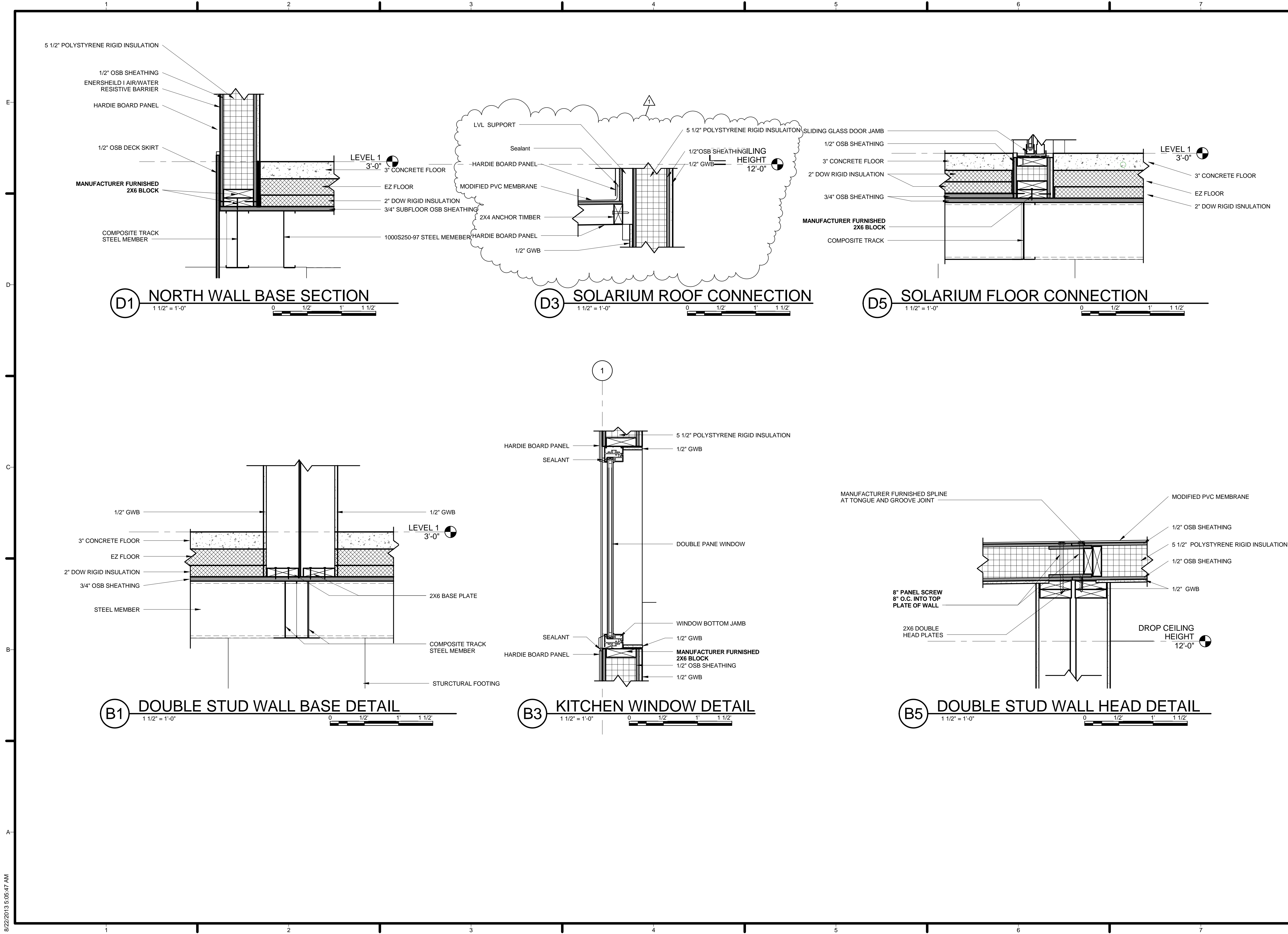


MARK	DATE	DESCRIPTION

SHEET TITLE
SECTION DETAILS

A-511

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SHEET TITLE
 SECTION DETAILS

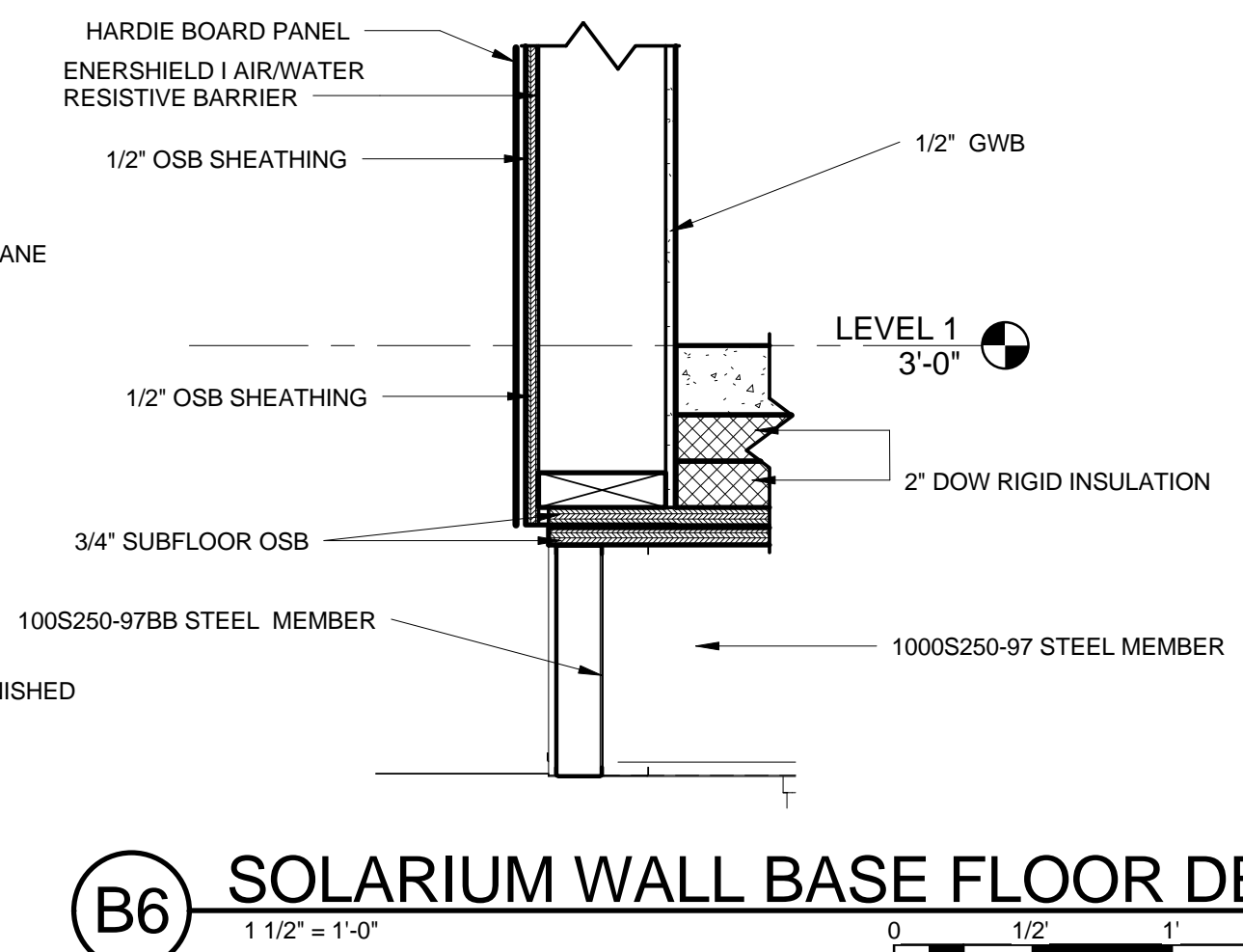
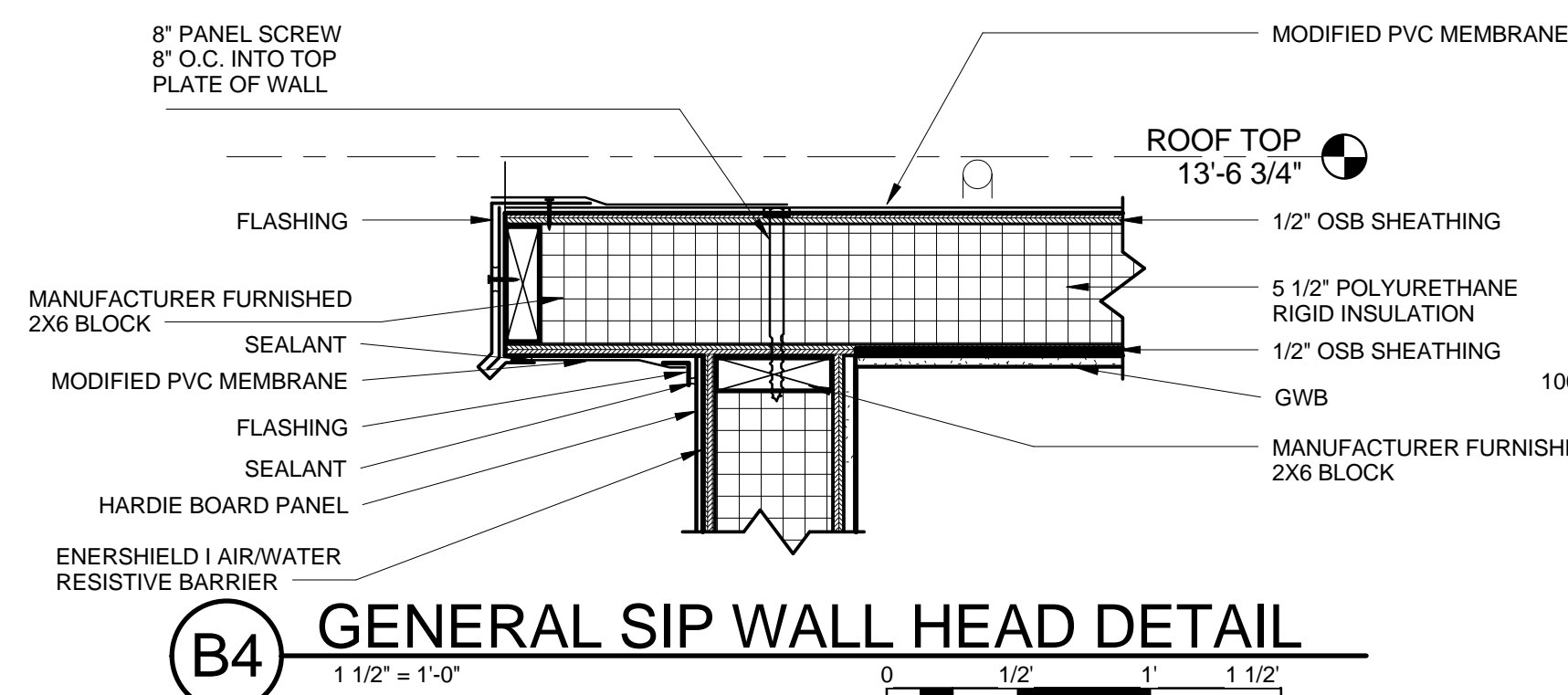
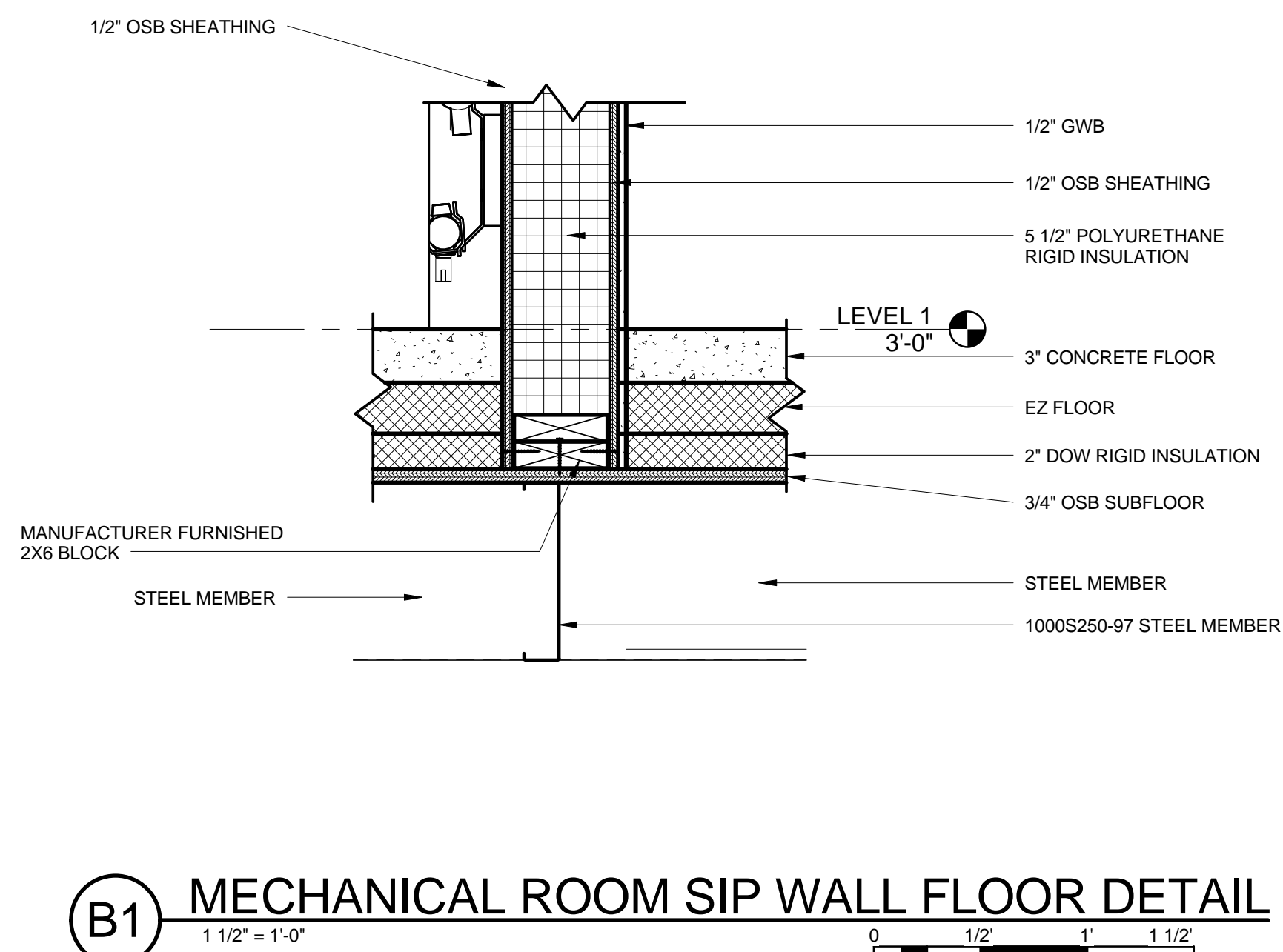
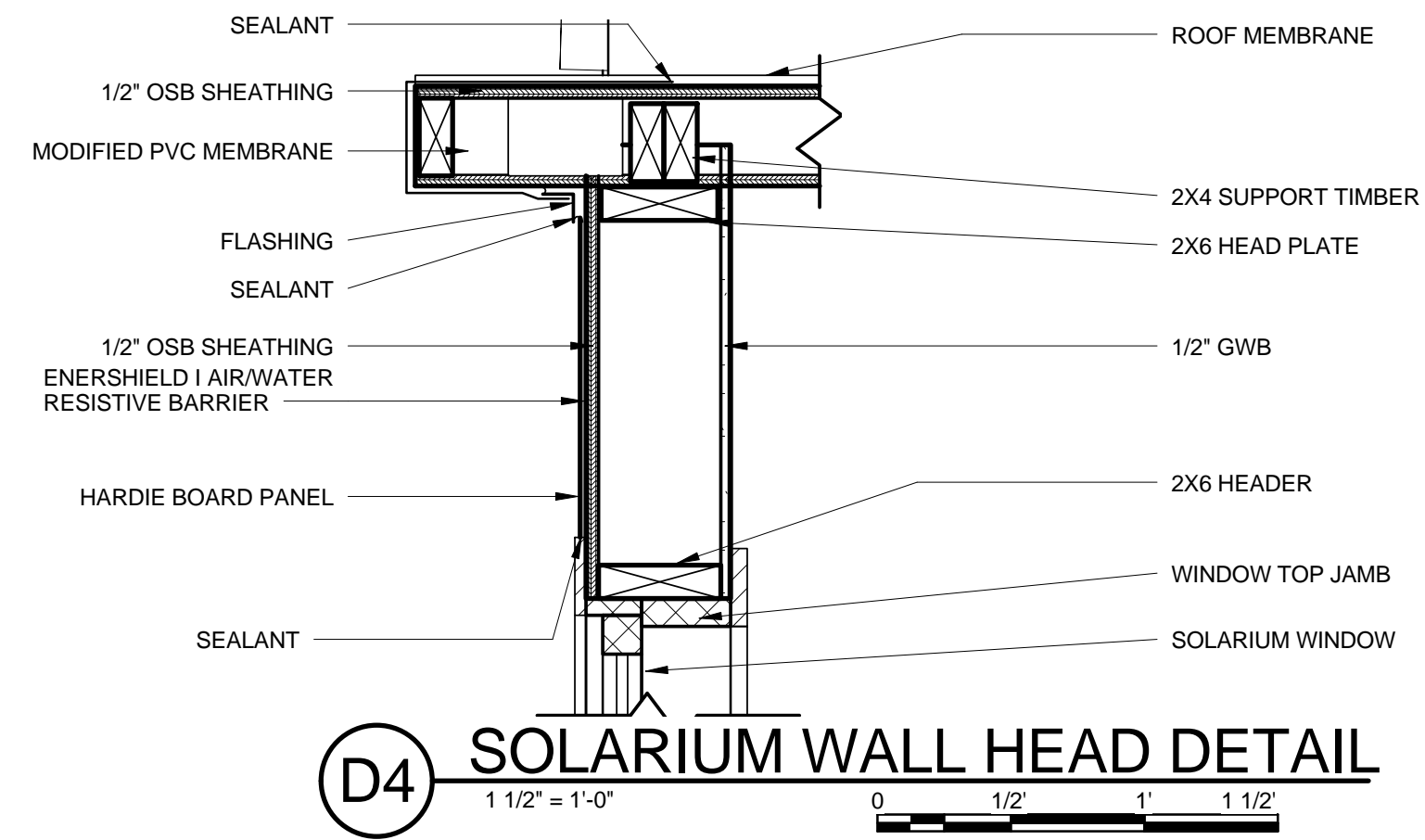
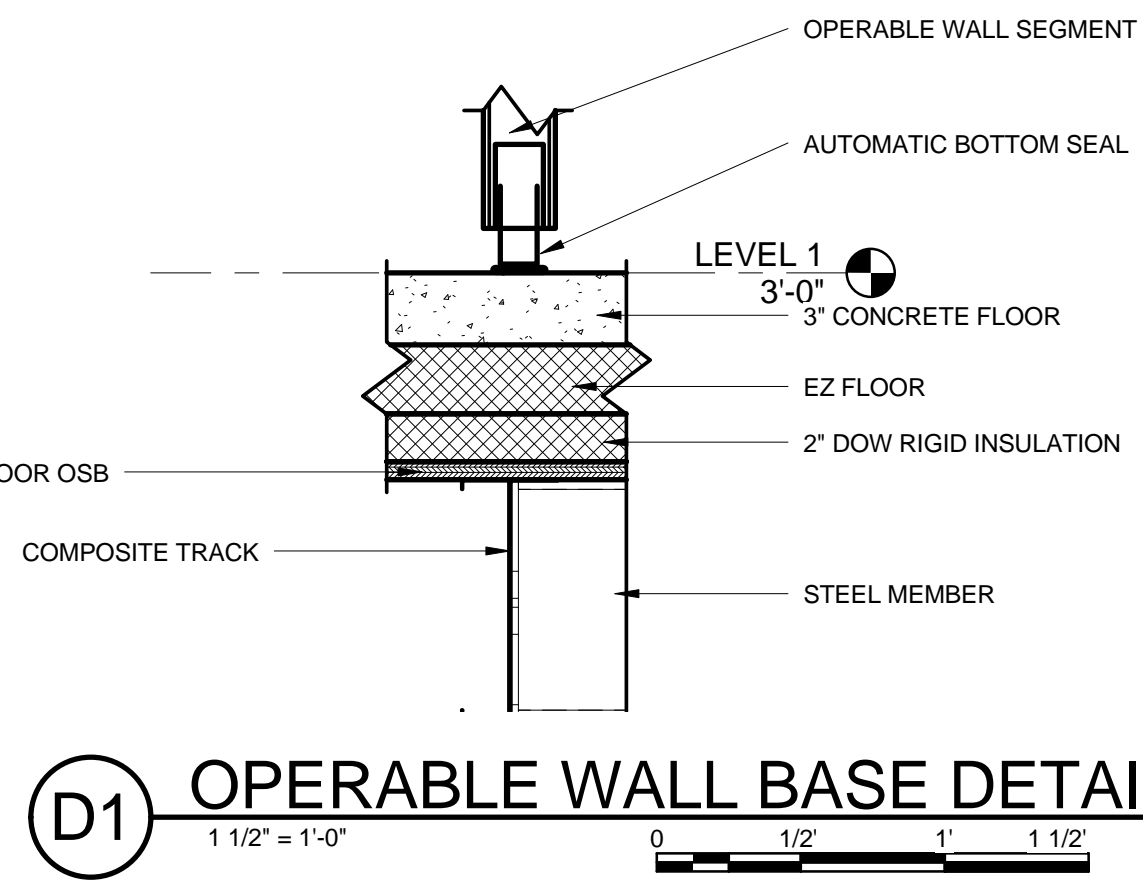
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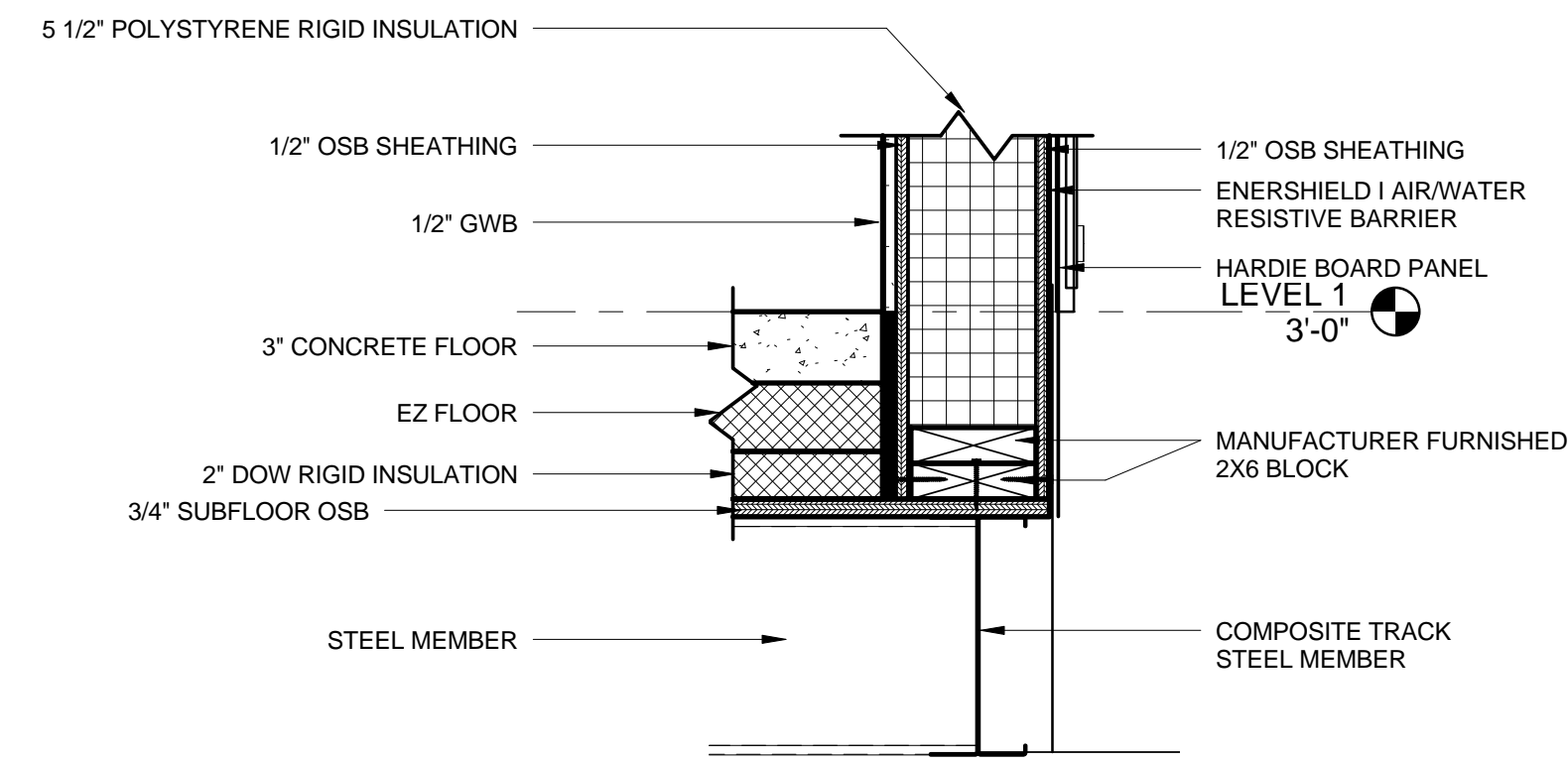
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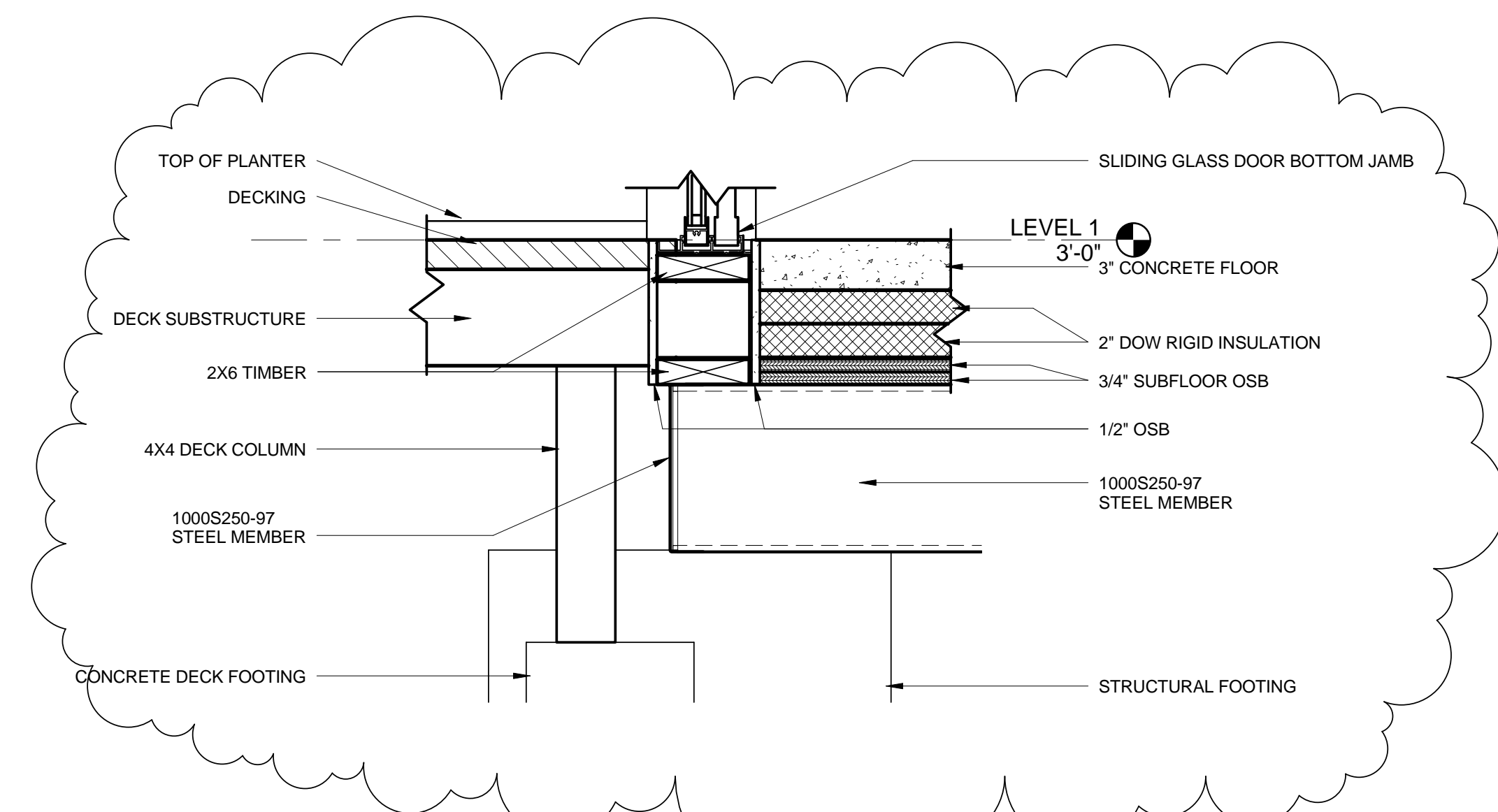
SHEET TITLE
 SECTION DETAILS

A-513





D1 EAST WALL BASE SECTION
 1 1/2" = 1'-0"
 0 1/2 1 1 1/2



A1 SOLARIUM SOUTH WALL SECTION DETAIL
 1 1/2" = 1'-0"
 0 1/2 1 1 1/2

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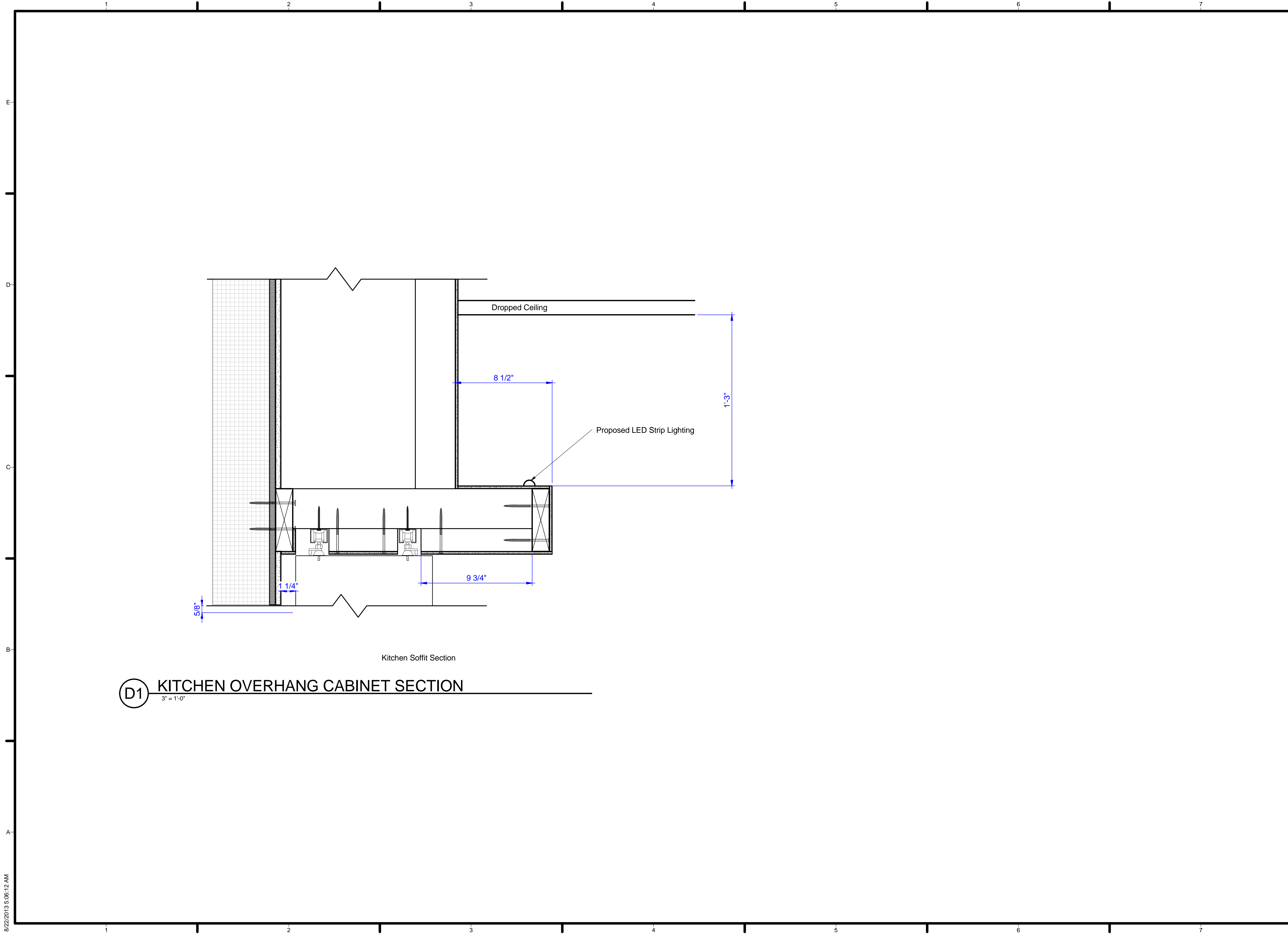


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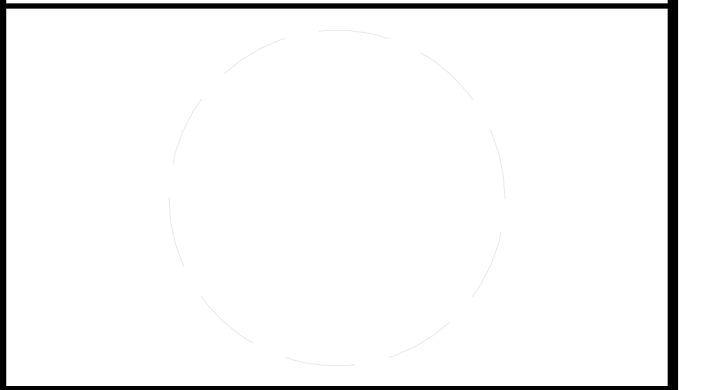
A-514



D1 KITCHEN OVERHANG CABINET SECTION
3" = 1'-0"



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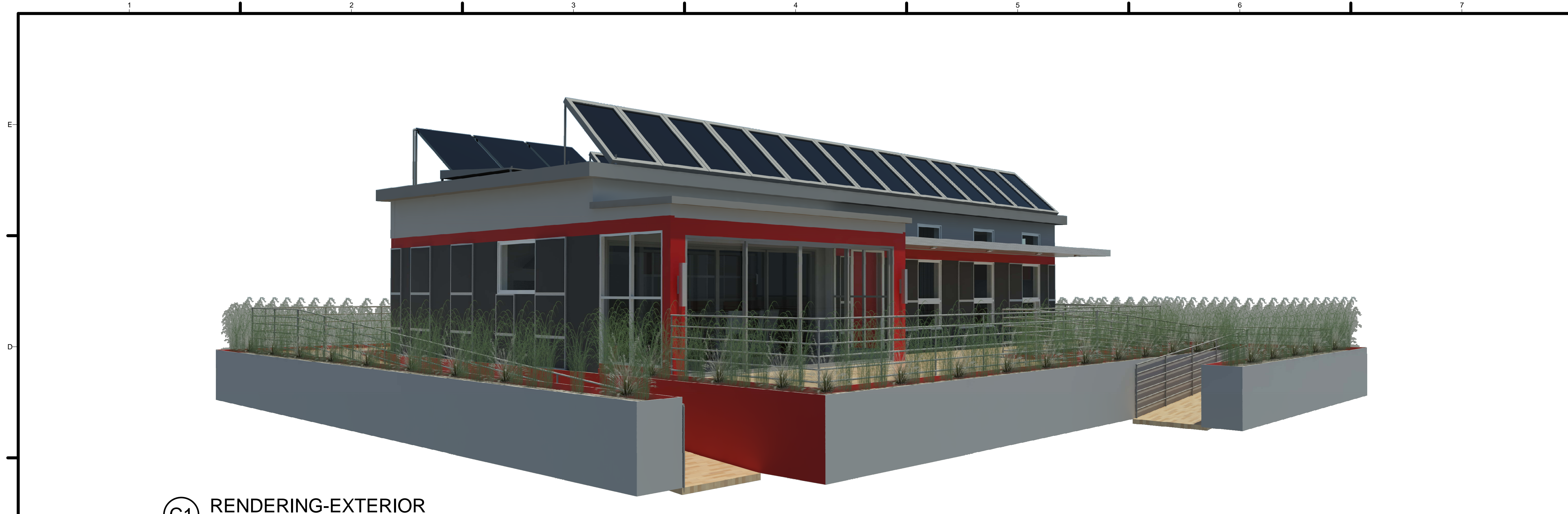
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SHEET TITLE
 CASEWORK DETAILS

A-581

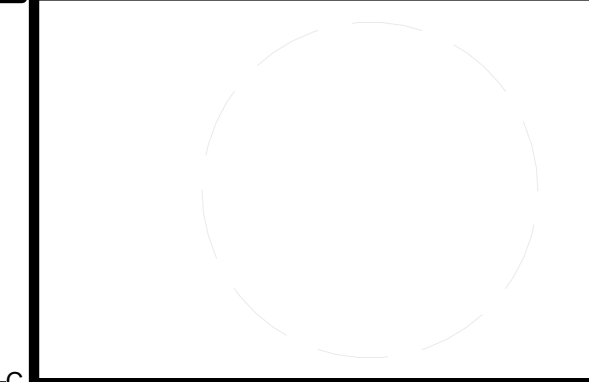
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C1 RENDERING-EXTERIOR
NOT TO SCALE



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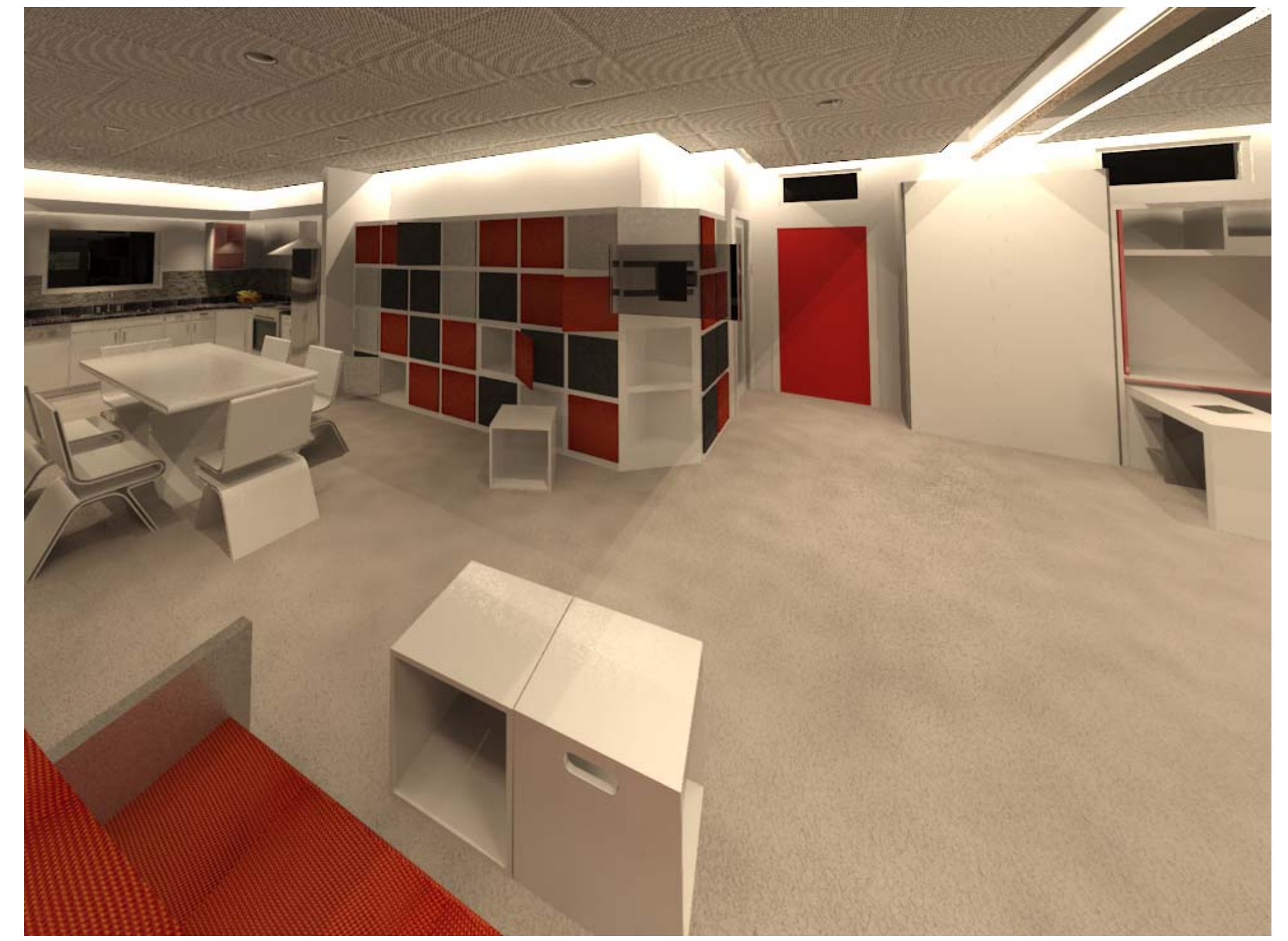


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SHEET TITLE
 ARCHITECTURAL RENDERINGS

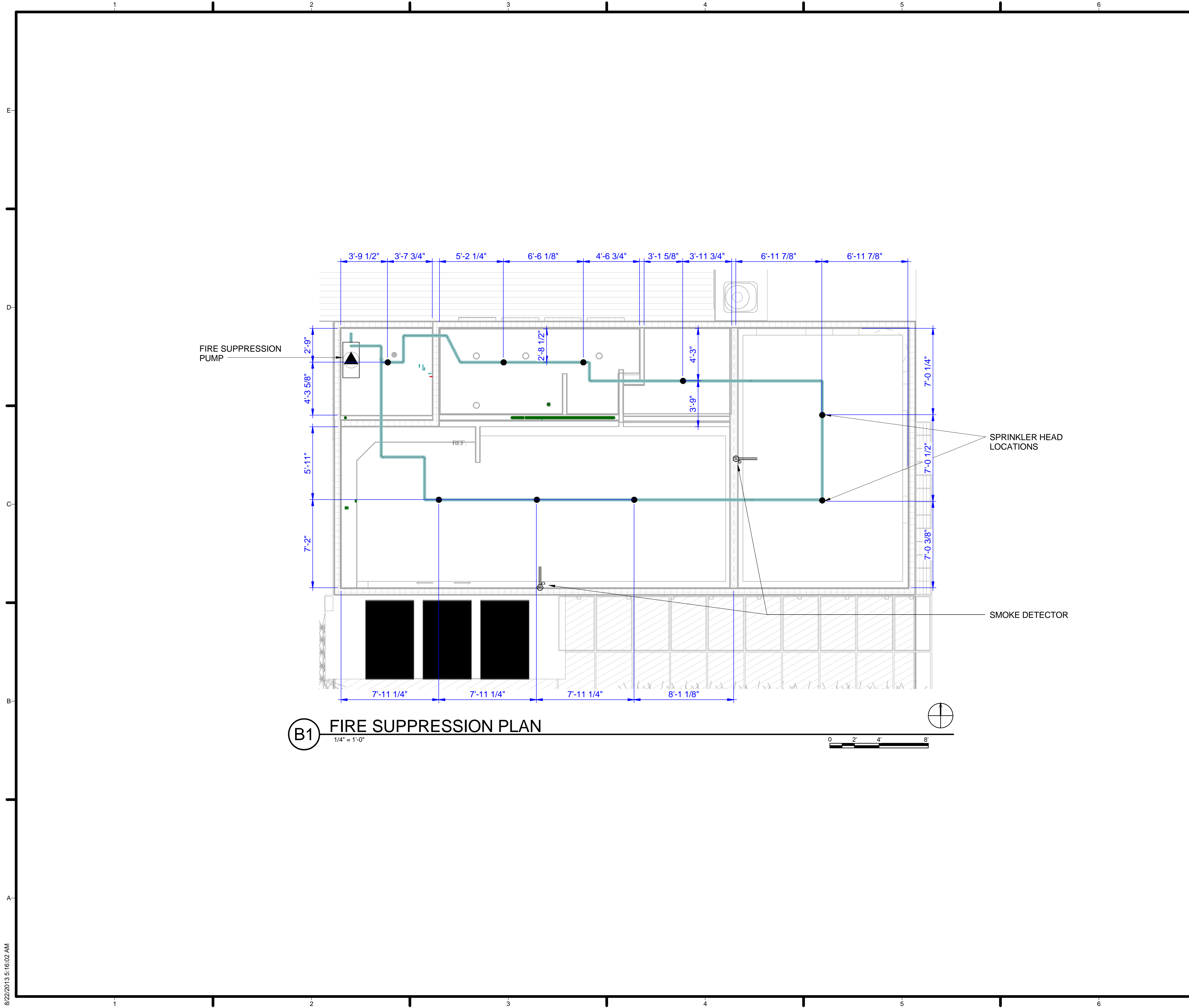
A-901



A1 RENDERING-LIVING ROOM
NOT TO SCALE



A4 RENDERING-KITCHEN
NOT TO SCALE



GENERAL SHEET NOTES

- 1 FIRE SUPPRESSION WATER SUPPLY PROVIDED BY INDEPENDENT CONNECTION TO DOMESTIC WATER TANK AND AUTOMATICALLY OPERATED PUMP PER NFPA 13D 6.2
- 2 MAXIMUM SPRINKLER COVERAGE IS 16' BY 16'
- 3 TANK STORAGE CAPACITY EXCEEDS MINIMUM REQUIREMENT PER NFPA 13D 6.1.3
- 4 TWO SPRINKLER DEMAND RATE IS 27 GMP AT 14 PSI PER NFPA 13D
- 5 AUTOMATICALLY OPERATED PUMP EXCEEDS THE TWO SPRINKLER DEMAND RATE
- 6 INTERMEDIATE TEMPERATURE SPRINKLER SPECIFIED FOR THE MECHANICAL SPACE (RECOMMENDED BUT NOT REQUIRED BY NFPA 13D)
- 7 ALL OTHER SPRINKLERS ARE STANDARD TEMPERATURE, CONCEALED, FLUSH-MOUNT TYPE
- 8 TEST FITTING WITH CONNECTION TO SUPPLY TANK TO SATISFY NFPA 13D



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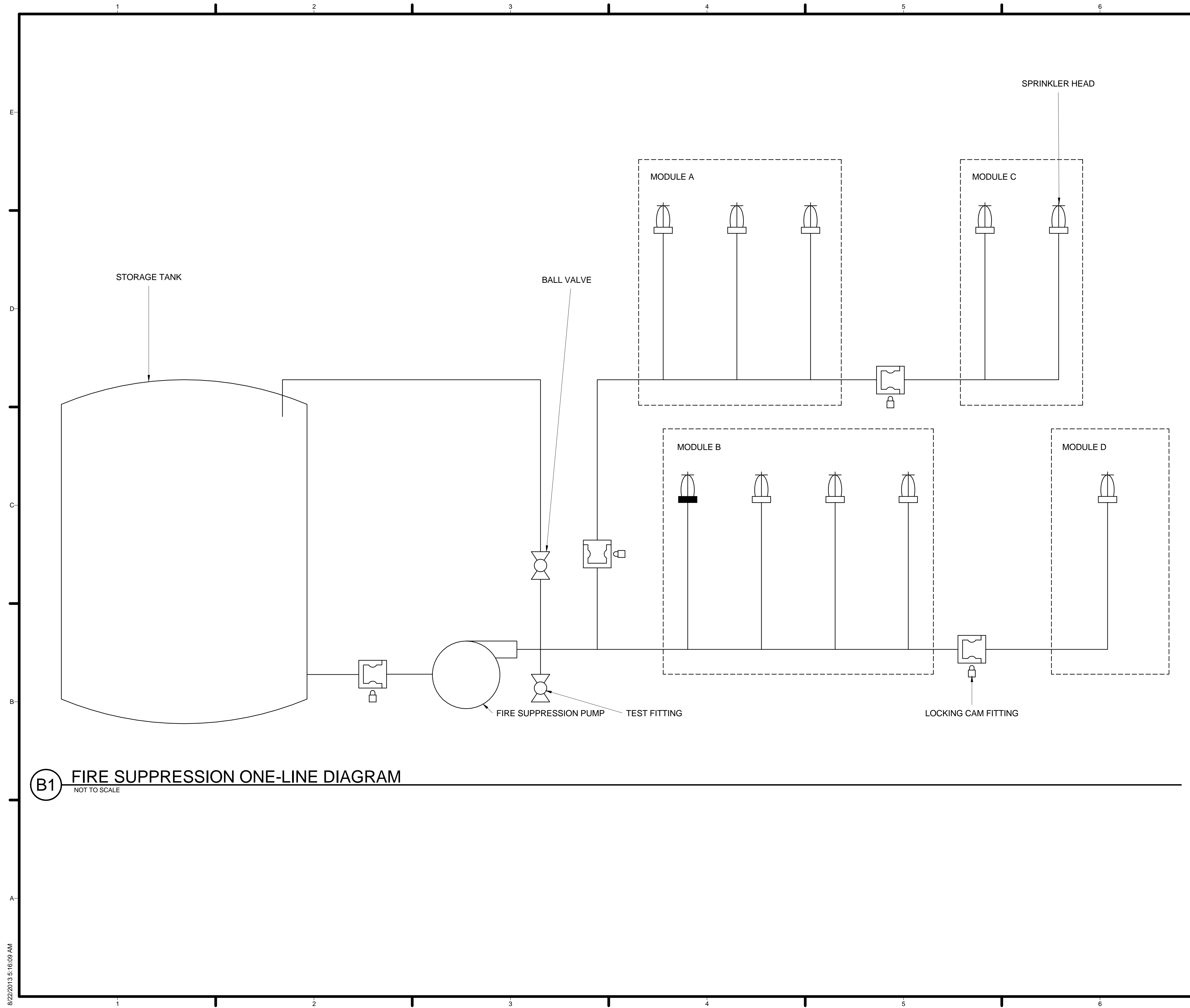
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SHEET TITLE
FIRE SUPPRESSION

F-102

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GENERAL SHEET NOTES

- 1 FIRE SUPPRESSION WATER SUPPLY PROVIDED BY INDEPENDENT CONNECTION TO DOMESTIC WATER TANK AND AUTOMATICALLY OPERATED PUMP PER NFPA 13D 6.2
- 2 MAXIMUM SPRINKLER COVERAGE IS 16' BY 16'
- 3 TANK STORAGE CAPACITY EXCEEDS MINIMUM REQUIREMENT PER NFPA 13D 6.1.3
- 4 TWO SPRINKLER DEMAND RATE IS 27 GMP AT 14 PSI PER NFPA 13D
- 5 AUTOMATICALLY OPERATED PUMP EXCEEDS THE TWO SPRINKLER DEMAND RATE
- 6 INTERMEDIATE TEMPERATURE SPRINKLER SPECIFIED FOR THE MECHANICAL SPACE (RECOMMENDED BUT NOT REQUIRED BY NFPA 13D)
- 7 ALL OTHER SPRINKLERS ARE STANDARD TEMPERATURE, CONCEALED, FLUSH-MOUNT TYPE
- 8 TEST FITTING WITH CONNECTION TO SUPPLY TANK TO SATISFY NFPA 13D
- 9 ALL FITTINGS ARE LOCKABLE CAM-TYPE COUPLINGS. THESE FITTINGS ALLOW FOR EASY ASSEMBLY AND DIS-ASSEMBLY WITHOUT THE NECESSITY TO CUT PIPE AND USE PERMANENT UNIONS. FITTINGS ARE TAMPER PROOF WHEN LOCKED SO AS NOT TO DISTURB THE READINESS OF THE SYSTEM. USE OF THESE FITTINGS IS PENDING APPROVAL FROM DECATHLON ORGANIZERS
- 10 ALL FIRE SUPPRESSION SUPPLY PIPING IS 1 INCH PEX AS ALLOWED PER NFPA 13D TABLE 8.4.10.2



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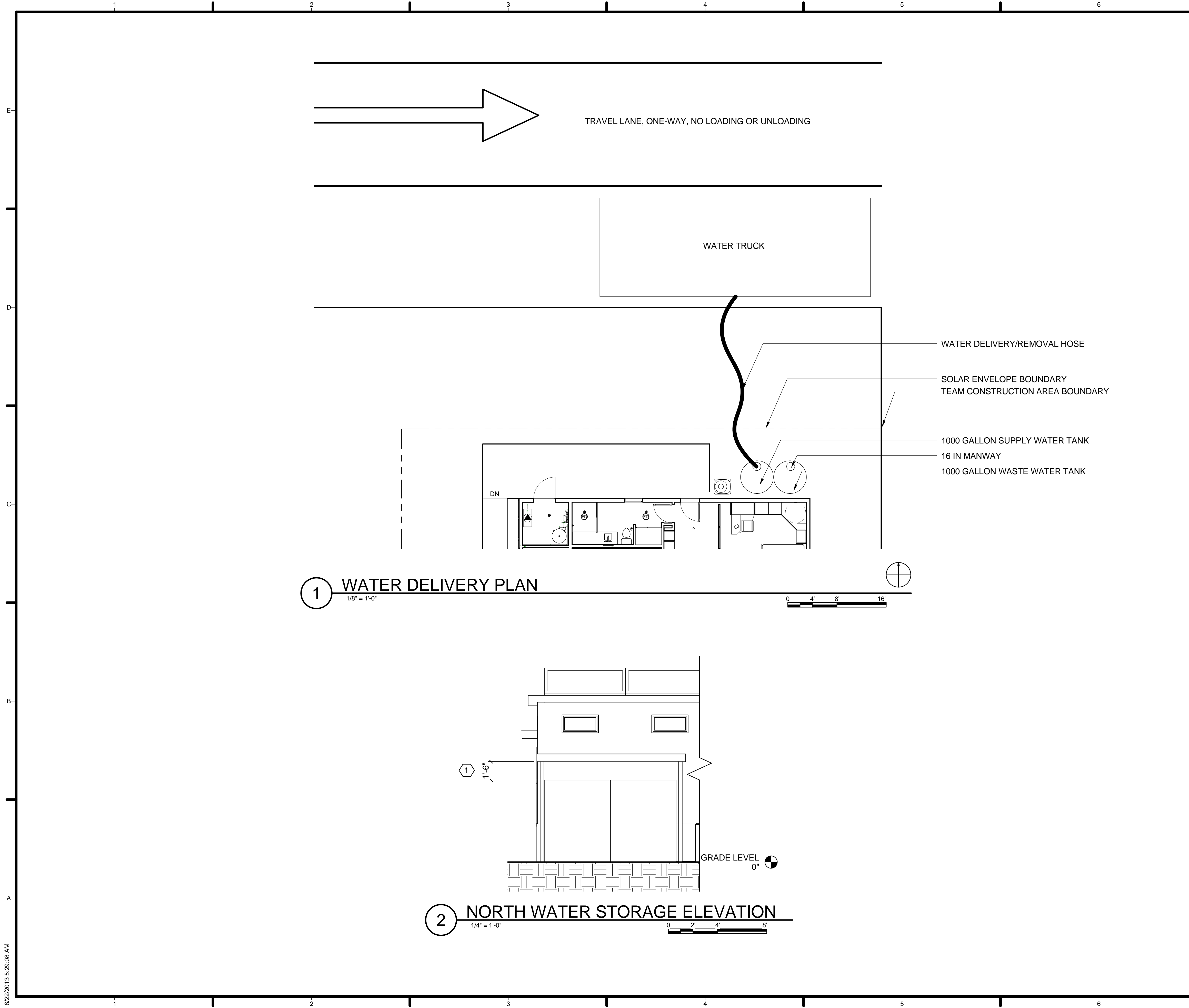
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SHEET TITLE

FIRE PROTECTION DIAGRAMS

F-602

B1 FIRE SUPPRESSION ONE-LINE DIAGRAM
 NOT TO SCALE



GENERAL SHEET NOTES

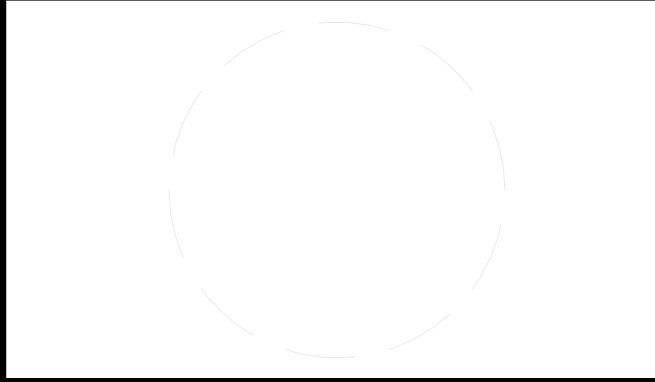
- 1 DRAWING SPECIFICALLY SHOWS WATER DELIVERY SERVICE. WATER REMOVAL SERVICE WILL FOLLOW THE SAME SEQUENCE ALTHOUGH IT WILL INCLUDE THE WASTE AS WELL AS THE SUPPLY TANK
- 2 1000 GALLON SUPPLY TANK TO BE FILLED THROUGH 16 IN MANWAY IN COMPLIANCE WITH DECATHLON RULES 9-8 SECTION E
- 3 WATER STORAGE SHELTER BUILT TO COMPLY WITH DECATHLON RULE 9-8 (SPECIFICALLY SECTION E). COMPLIANCE INDICATED WITH RELEVANT DIMENSIONS IN ELEVATION DRAWING.
- 4 PER COMPETITION RULES A MINIMUM OF 6 TEAM MEMBERS WILL BE AVAILABLE PROMPTLY TO ASSIST IN WATER DELIVERY/REMOVAL UPON THE ARRIVAL OF THE TRUCK
- 5 PER DETAILED WATER BUDGET (PROJECT MANUAL PAGE 10), 1000 GALLON SUPPLY TANK WILL BE FILLED WITH 1000 GALLON OF WATER (TO CAPACITY) DURING PRIMARY WATER DELIVERY SERVICE
- 6 THE TEAM EXPECTS TO TOP OFF THE TANK DURING THE SECOND WATER DELIVERY SERVICE AS A QUANTITY OF WATER WILL HAVE ALREADY BEEN USED TO FILL THE SOLAR AND FIRE PROTECTION SYSTEMS
- 7 IN PREPARATION FOR WATER REMOVAL SERVICE, THE TEAM WILL DRAIN ALL LIQUIDS FROM THE HOUSE INTO BOTH THE SUPPLY AND THE WASTE TANK. THE DELIVERY TRUCK WILL REMOVE WATER FROM BOTH TANKS DURING PRIMARY WATER REMOVAL. ANY REMAINING WATER WILL BE REMOVED DURING THE SECOND SERVICE AND/OR WILL BE MOVED TO THE PROPER LOCATION BY THE TEAM
- 8 MISSOURI S&T HAS A NW CORNER LOT. SOLAR ENVELOPE, TEAM CONSTRUCTION AREA, TRAVEL LANE AND OTHER DETAILS ARE SPECIFIC TO THE NW CORNER LOT.
- 9 TRUCK LOCATION AND SIZE ARE APPROXIMATE

SHEET KEYNOTES

- 1 VERTICAL CLEARANCE OF 1' 6" (18") IS IN COMPLIANCE WITH DECATHLON RULES 9-8 SECTION E. MINIMUM VERTICAL CLEARANCE OF 14" REQUIRED.



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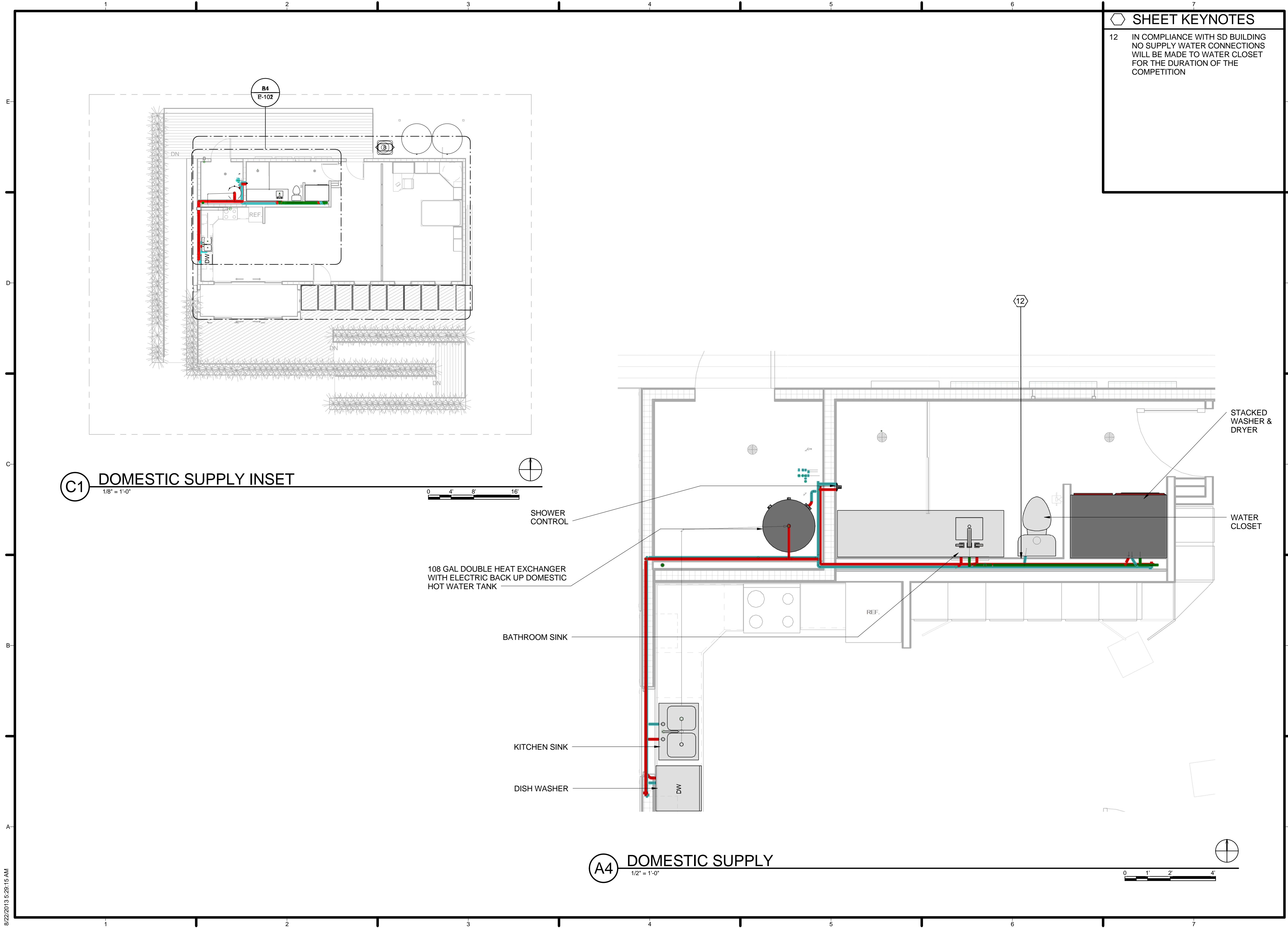


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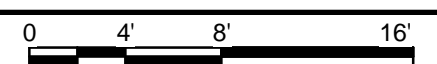
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SHEET TITLE
WATER DELIVERY PLAN

P-101



C1 DOMESTIC SUPPLY INSET
1/8" = 1'-0"



SHOWER CONTROL

108 GAL DOUBLE HEAT EXCHANGER WITH ELECTRIC BACK UP DOMESTIC HOT WATER TANK

BATHROOM SINK

KITCHEN SINK

DISH WASHER

12

STACKED WASHER & DRYER

WATER CLOSET

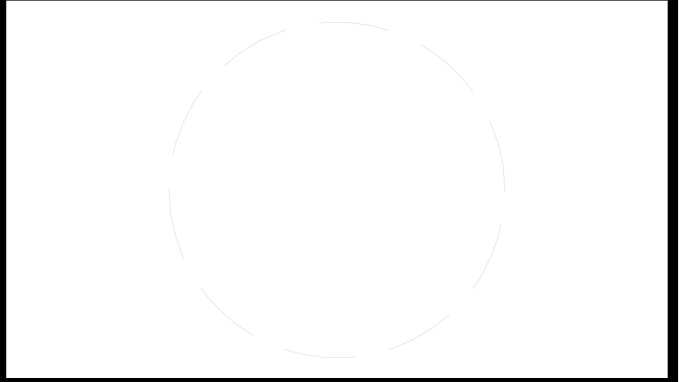
A4 DOMESTIC SUPPLY
1/2" = 1'-0"

SHEET KEYNOTES

12 IN COMPLIANCE WITH SD BUILDING NO SUPPLY WATER CONNECTIONS WILL BE MADE TO WATER CLOSET FOR THE DURATION OF THE COMPETITION



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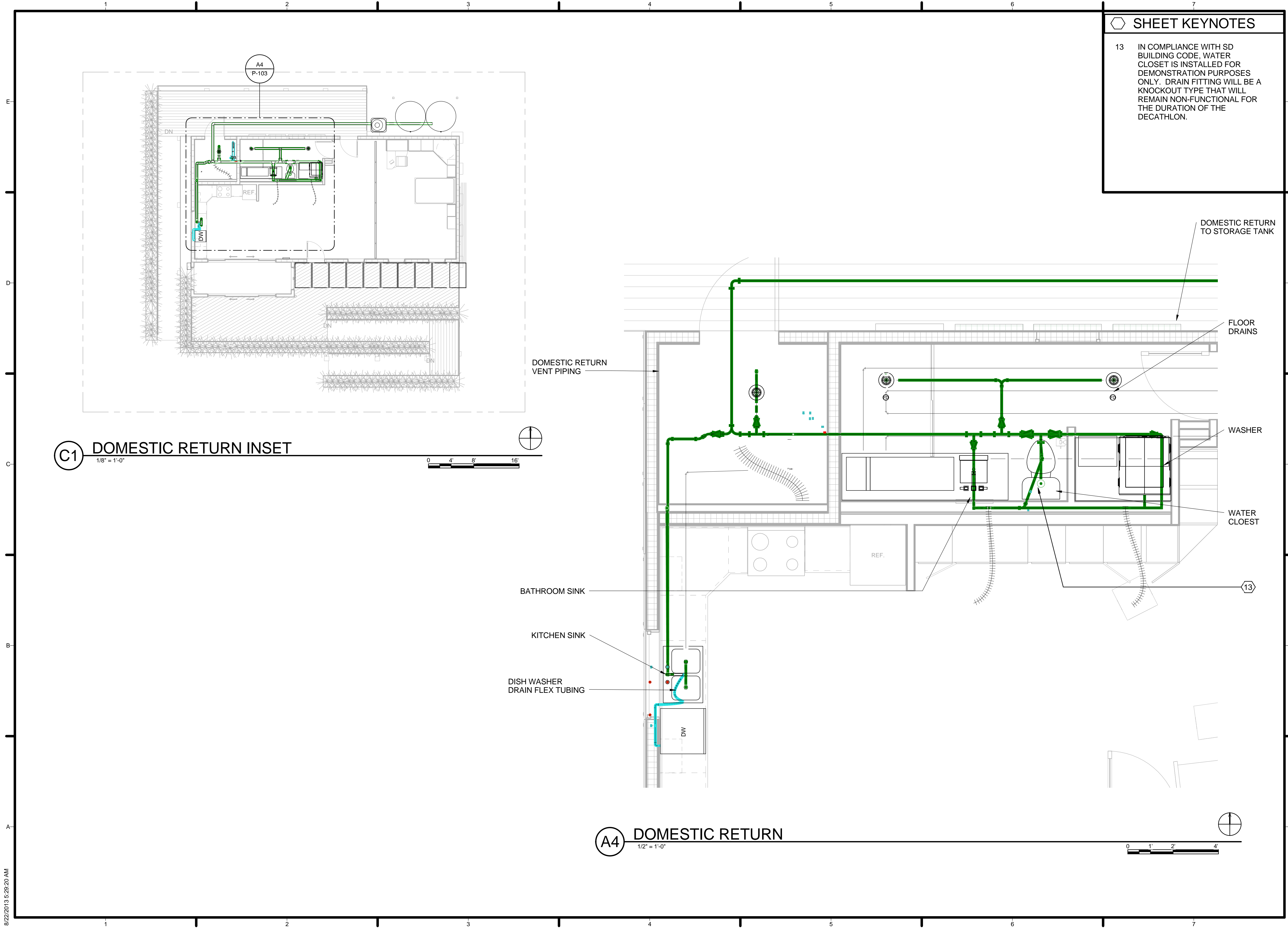
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SHEET TITLE
 DOMESTIC SUPPLY

P-102

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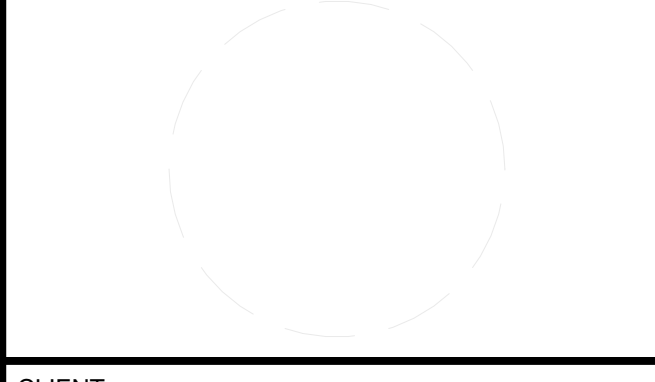


SHEET KEYNOTES

13 IN COMPLIANCE WITH SD BUILDING CODE, WATER CLOSET IS INSTALLED FOR DEMONSTRATION PURPOSES ONLY. DRAIN FITTING WILL BE A KNOCKOUT TYPE THAT WILL REMAIN NON-FUNCTIONAL FOR THE DURATION OF THE DECATHLON.



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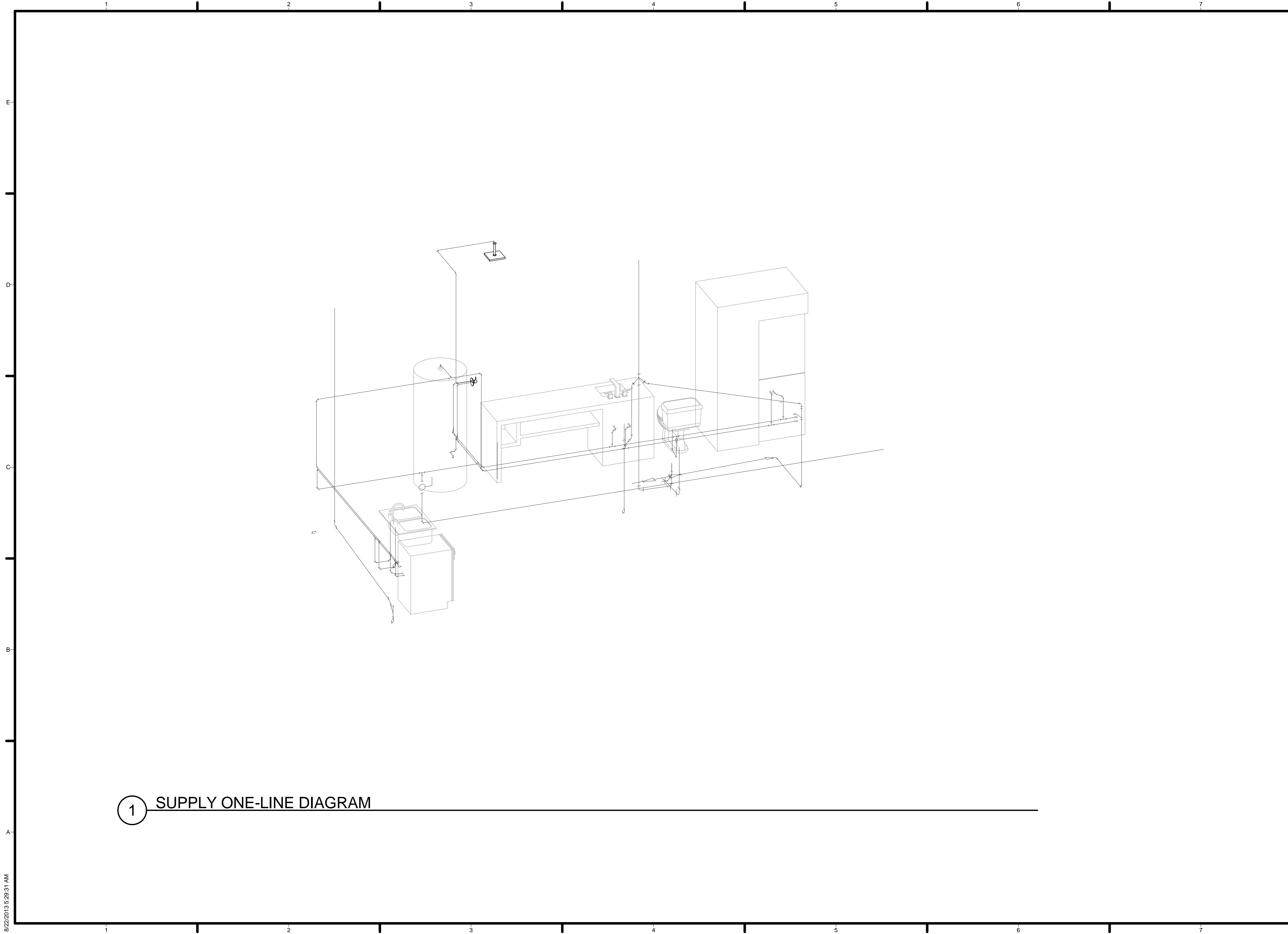


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SHEET TITLE
 DOMESTIC RETURN

P-103

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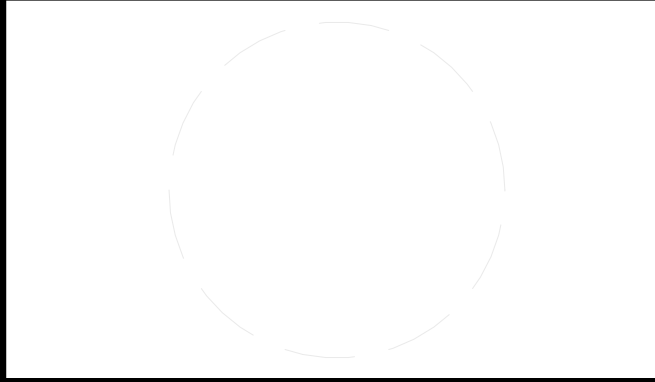


1 SUPPLY ONE-LINE DIAGRAM

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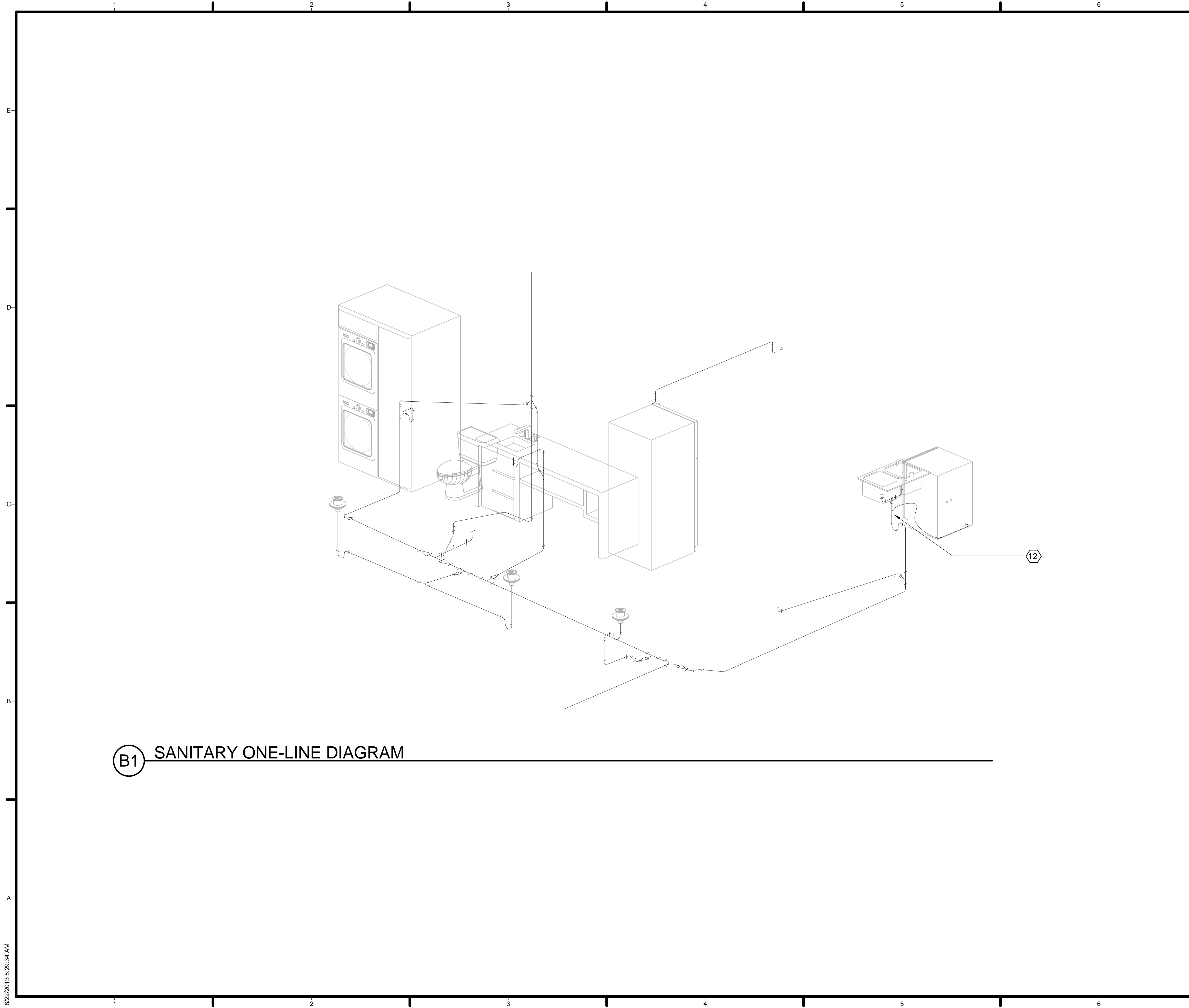


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SHEET TITLE
 SUPPLY ONE LINE
 DIAGRAM

P-613



B1 SANITARY ONE-LINE DIAGRAM

GENERAL SHEET NOTES

1 P-TRAPS REQUIRED ON FOR ALL PLUMBING FIXTURES

SHEET KEYNOTES

12 DISHWASHER DRAIN FLEX TUBE TO BE CONNECTED TO SINK DRAIN PIPE BEFORE P-TRAP



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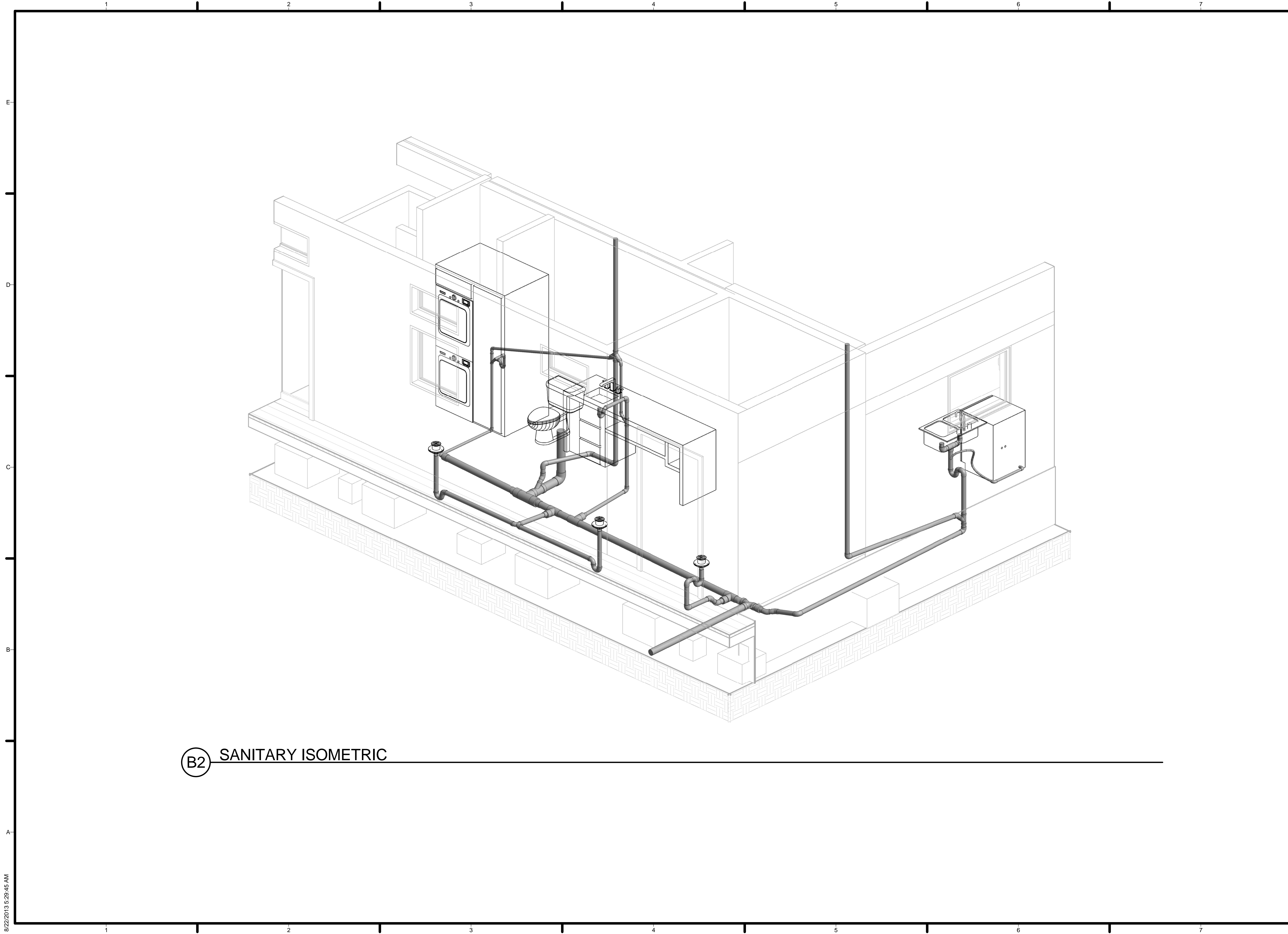


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 DIAGRAM

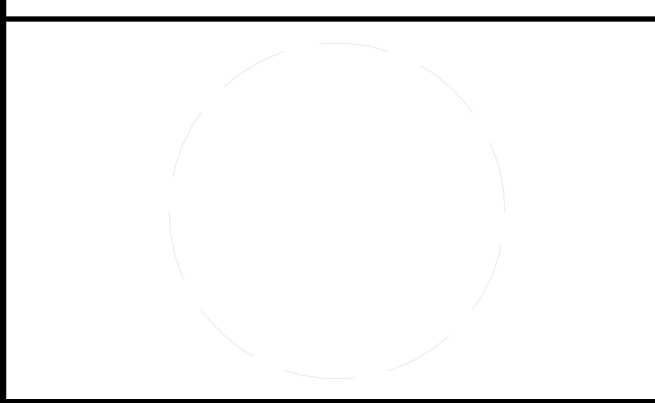
P-614



(B2) SANITARY ISOMETRIC



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SHEET TITLE
 RETURN ISOMETRICS

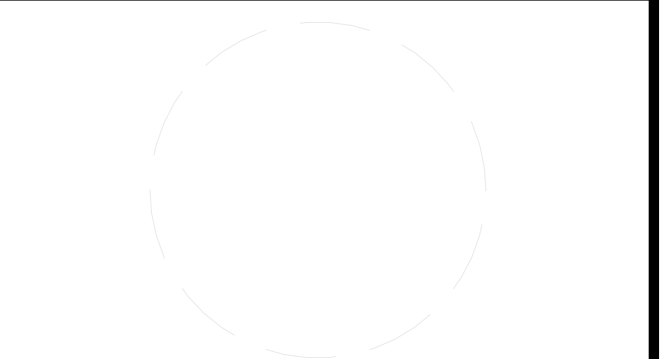
P-902



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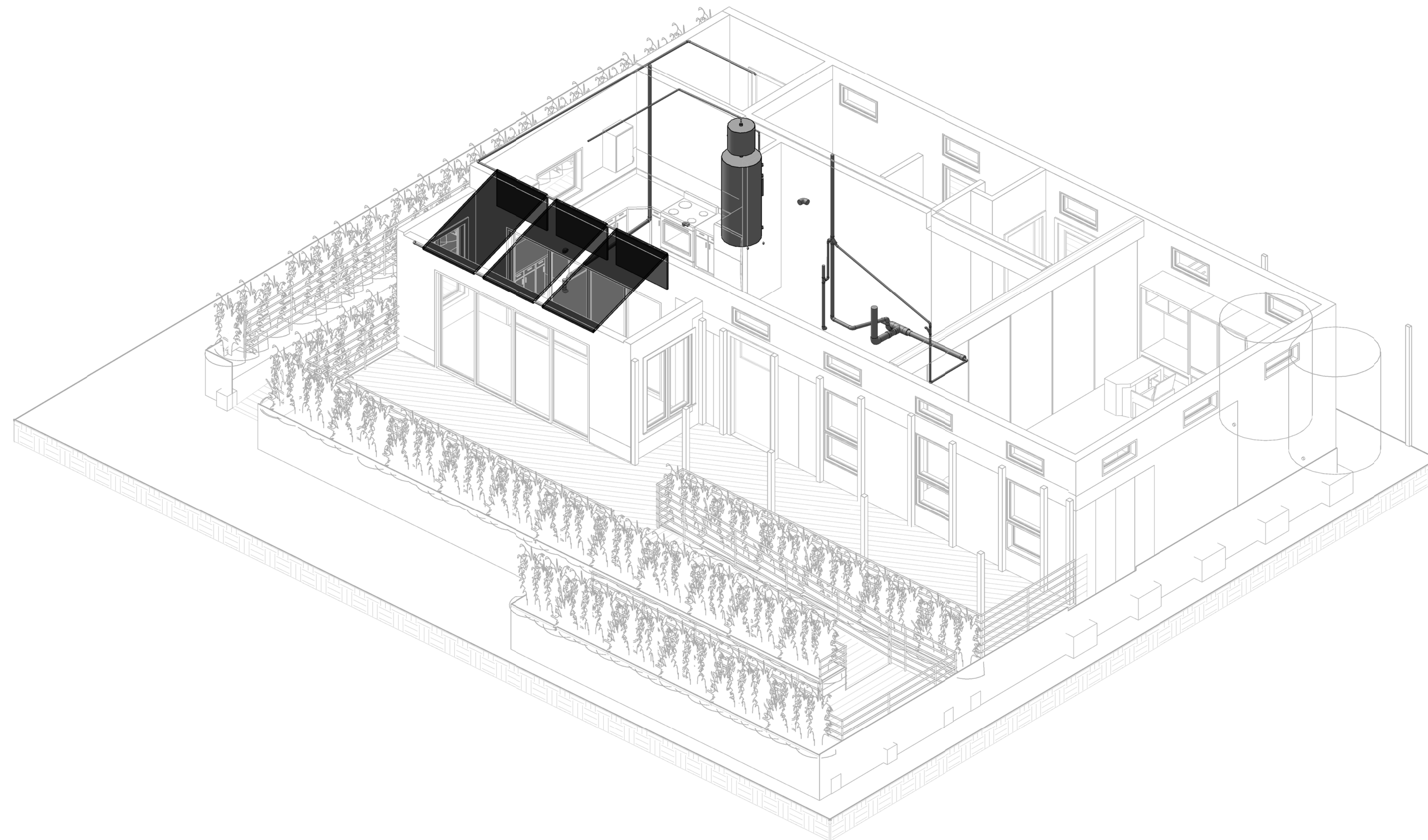


MARK	DATE	DESCRIPTION
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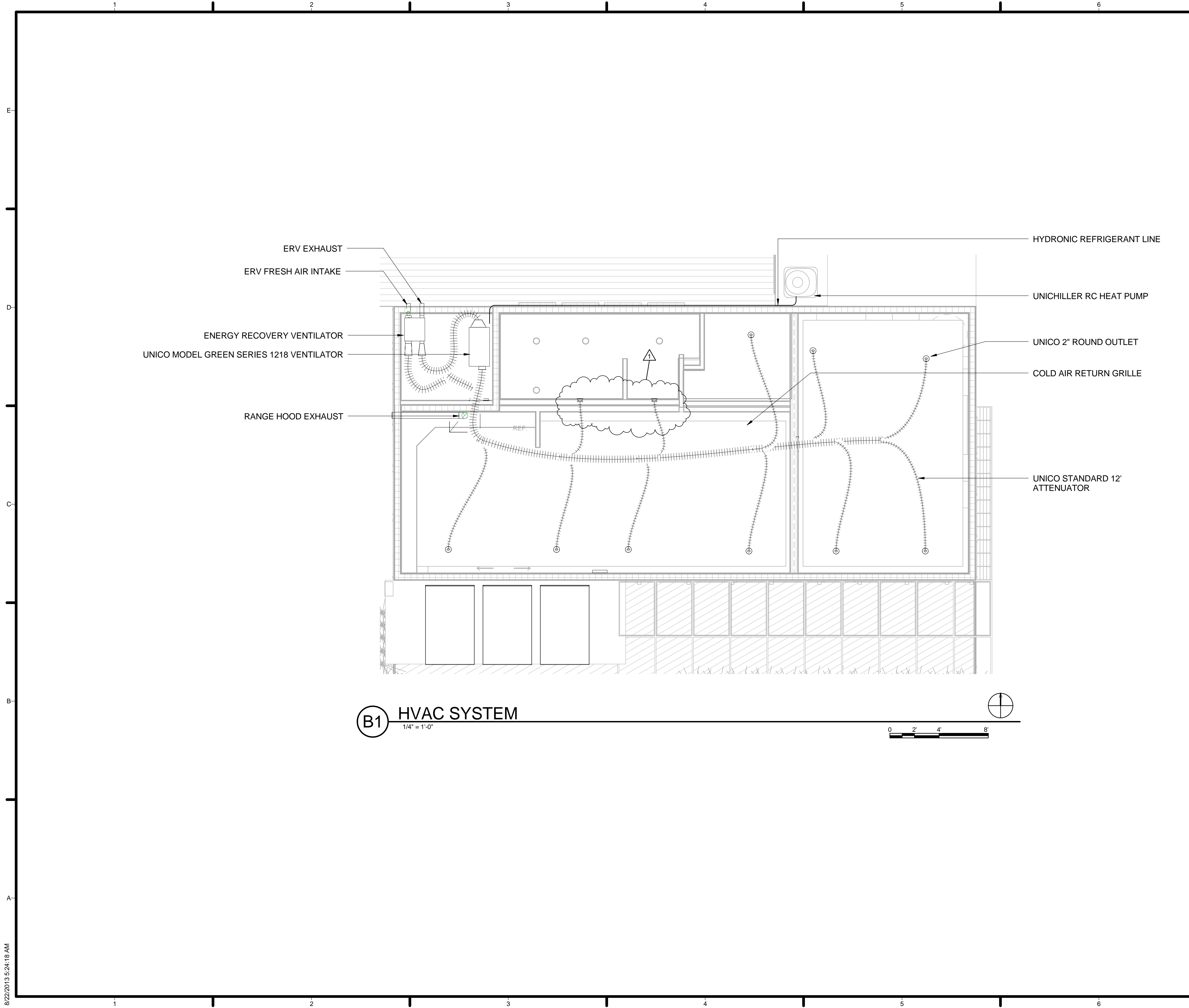
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SOLAR HOT WATER ISOMETRICS

P-903

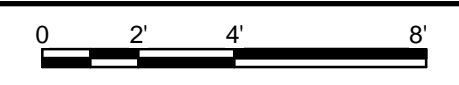


(A1) SOLAR HEATING ISOMETRIC

8/22/2013 5:29:52 AM



B1 HVAC SYSTEM
1/4" = 1'-0"



GENERAL SHEET NOTES

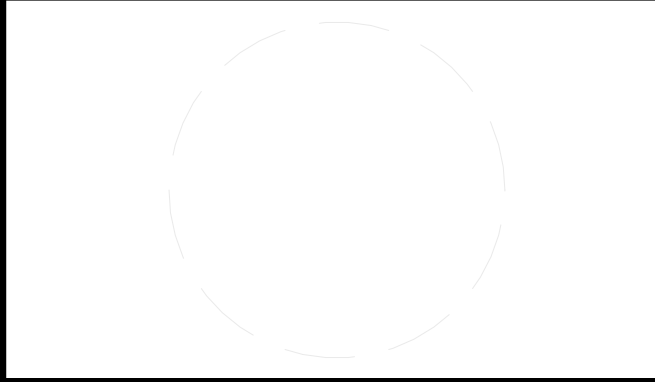
- 1 MAIN PLENUM IS 7" ROUND FLEX DUCT.
- 2 ALL ATTENUATORS ARE STANDARD 12' UNITS.
- 3 VENTILATION SYSTEM IS BALANCED BY DESIGN. NO ON-SITE BALANCING IS REQUIRED.
- 4 RETURN PLENUM IS 7" ROUND FLEX DUCT.
- 5 DUCT RUNS MUST BE ANCHORED TO THE CEILING AT REGULAR INTERVALS. SPECIFIC LOCATIONS AND TYPES OF ANCHORS ARE TO BE DETERMINED BY INSTALLER.
- 6 INSTALLED OUTLET LOCATIONS MAY VARY SLIGHTLY FROM DRAWING. CARE SHOULD BE TAKEN TO PREVENT OUTLETS FROM BLOWING DIRECTLY ONTO FREQUENTLY OCCUPIED LIVING AREAS (DESK, BED, DINING TABLE, ETC.). PRECISE PLACEMENT OF EACH OUTLET TO BE DETERMINED BY THE INSTALLER.

SHEET KEYNOTES

- 1 DUST PLUG WILL BE INSTALLED DURING TRANSPORTATION TO PREVENT DEBRIS FROM ENTERING THE RADIANT FLOOR LOOPS.



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MARK	DATE	DESCRIPTION
1	8-7-13	VENT LOCATION CHANGE

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SHEET TITLE
HVAC EQUIPMENT AND DISTRIBUTION PLAN

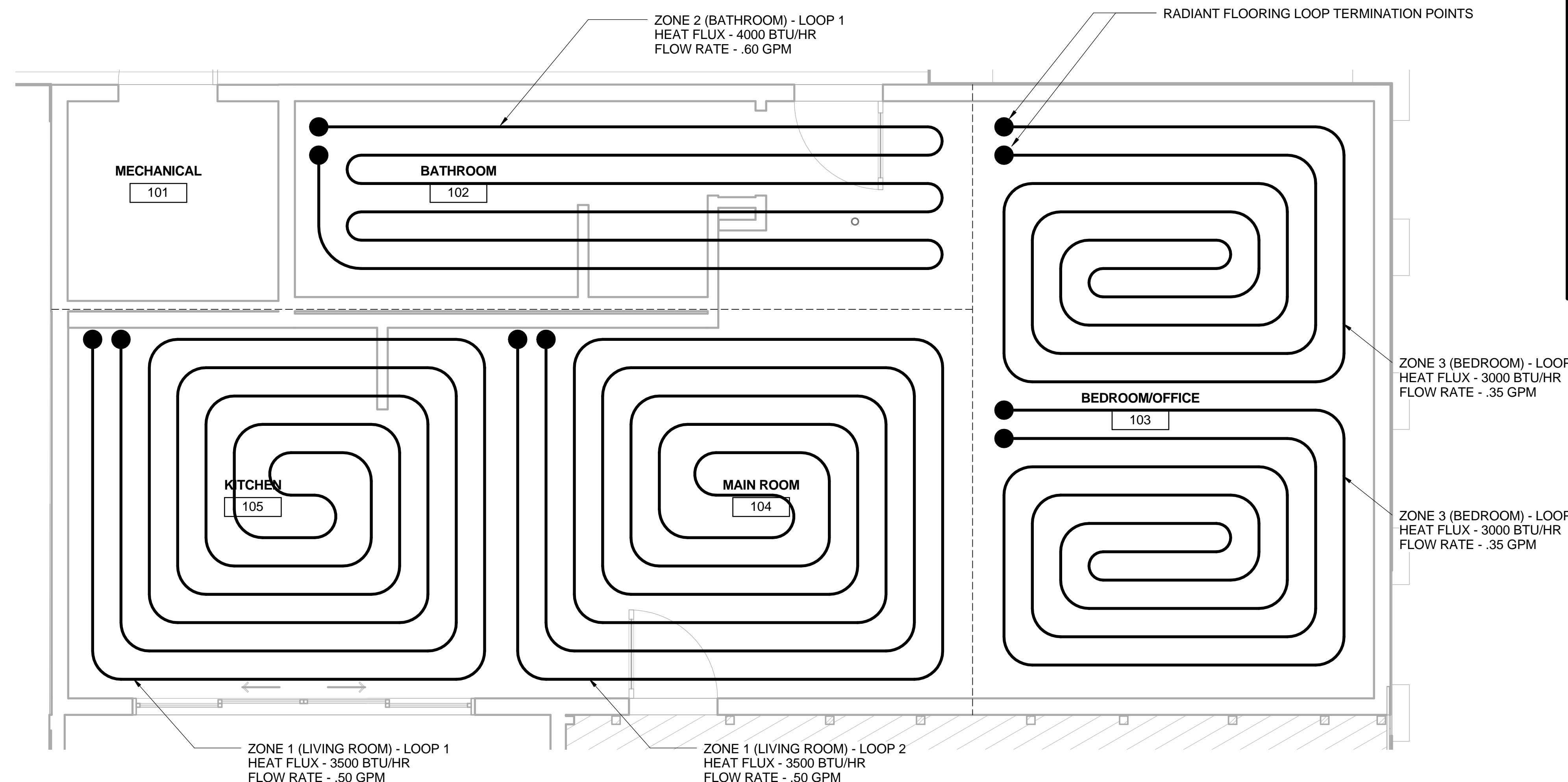
M-101

GENERAL SHEET NOTES

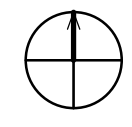
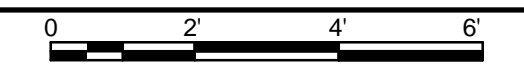
- 1 ALL PIPING IS TO BE PLACED ON 12" CENTERS.
- 2 PIPING IS TO BE HELD IN PLACE BY EZ-FLOOR RAZ PANEL. BECAUSE OF THIS, PERFECT ALIGNMENT WITH THE DRAWING MAY NOT BE POSSIBLE; ALTHOUGH, PIPING PLACEMENT SHOULD GENERALLY CORRESPOND TO THE DRAWING.
- 3 IN THE EVENT OF A LOCAL INTERRUPTION TO A PIPE RUN (FLOOR DRAIN, ETC.), PIPING MAY BE REROUTED BY INSTALLER.
- 4 MIN. BEND RADIUS OF 6" FOR ALL DIRECITON CHANGES.
- 5 ALL PIPE IS 3/4" BARRIER PEX PIPING DESIGNED FOR USE IN IN-SLAB RADIANT APPLICATIONS.
- 6 ZONE 1 (BOTH LOOPS) AND ZONE 3 (BOTH LOOPS) USE A COUNTER-FLOW SPIRAL DESIGN TO MAINTAIN UNIFORM SURFACE TEMPERATURE.
- 7 ZONE 2 USES A BASIC PARALLEL PIPING SYSTEM DUE TO THE NARROW WIDTH OF THE SPACE.



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B1 RADIANT FLOOR PLAN
3/8" = 1'-0"



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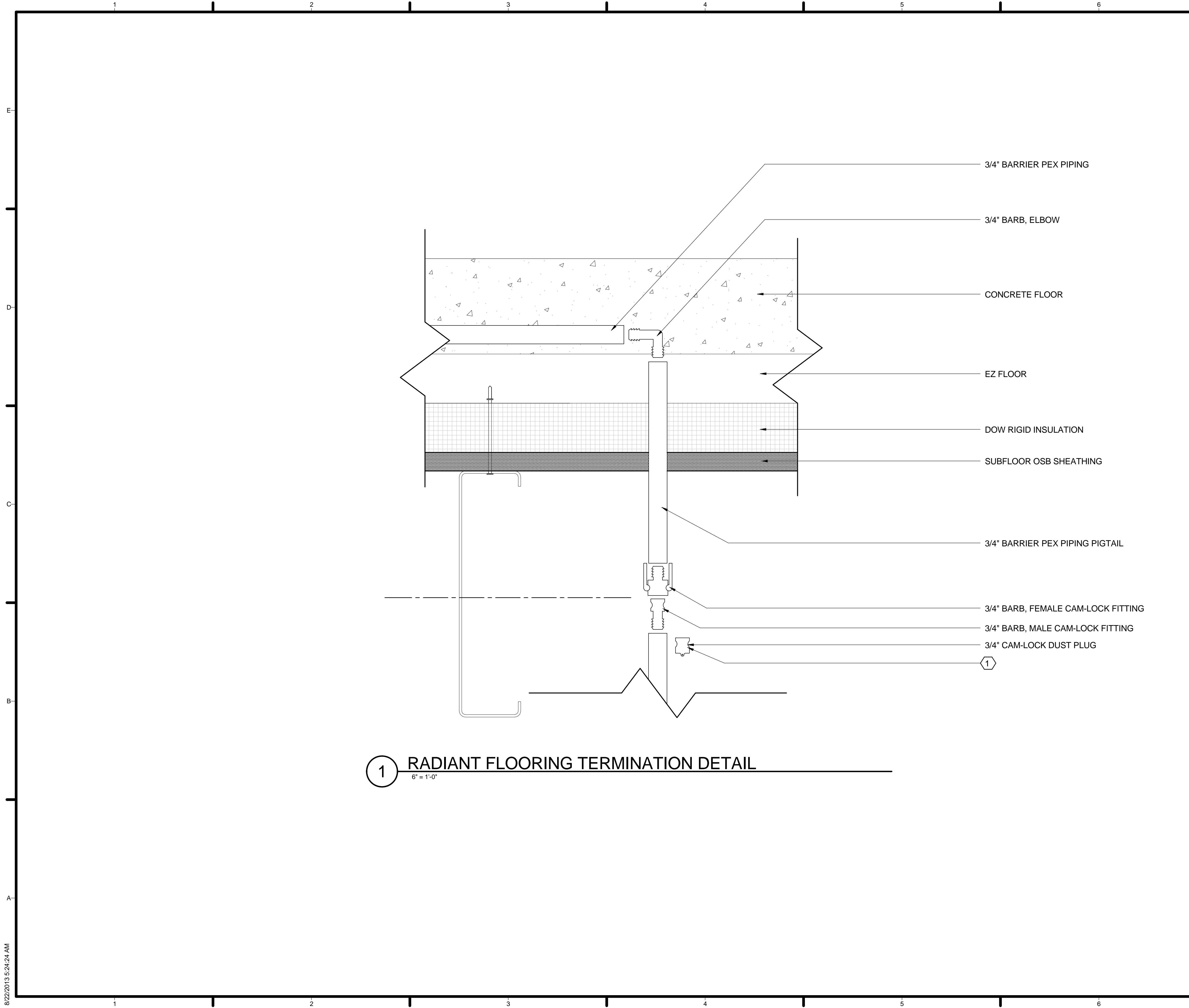
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SHEET TITLE
RADIANT FLOOR PLAN

M-103

8/22/2013 5:24:21 AM



① **RADIANT FLOORING TERMINATION DETAIL**
6" = 1'-0"

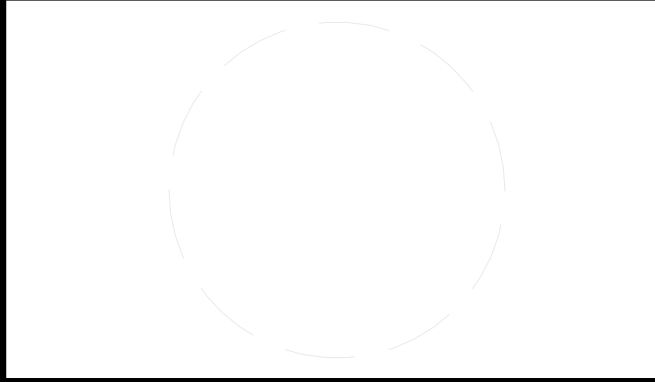
GENERAL SHEET NOTES

- 1 CAM-LOCK FITTINGS ARE BEING USED TO EXPEDITE THE ASSEMBLY PROCESS AT THE COMPETITION SITE.
- 2 EACH TERMINATION POINT SHOULD BE INSTALLED AT APPROXIMATELY THE CENTER OF THE WEB OF THE STEEL BEAM. THIS WILL ALLOW FOR SUFFICIENT CLEARANCE FOR THE ASSEMBLY AND DISSASSEMBLY OF THE CAM-LOCK FITTINGS.
- 3 PIGTAIL PIPING SHOULD BE CUT APPROXIMATELY 10" LONG.
- 4 ALL BARB FITTINGS MUST BE DESIGNED FOR USE WITH BARRIER PEX TUBING AND MUST BE SECURED USING A CRIMP-RING AND CRIMPER TOOL.
- 5 3/4" PEX TUBING NSF CERTIFIED FOR RADIANT FLOOR HEATING APPLICATIONS, WITH OPERATING PRESSURE OF 79 PSI AT 200 DEG. F.

① DUST PLUG WILL BE INSTALLED DURING TRANSPORTATION TO PREVENT DEBRIS FROM ENTERING THE RADIANT FLOOR LOOPS.



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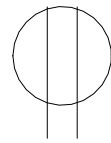
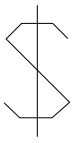

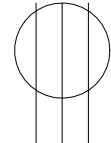

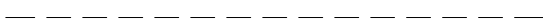
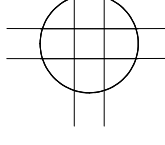
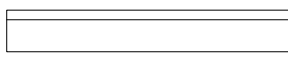


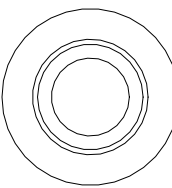

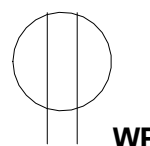


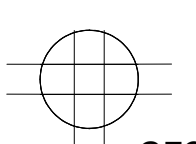
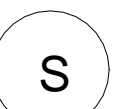
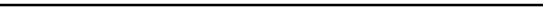
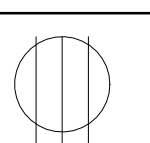
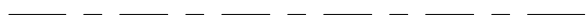

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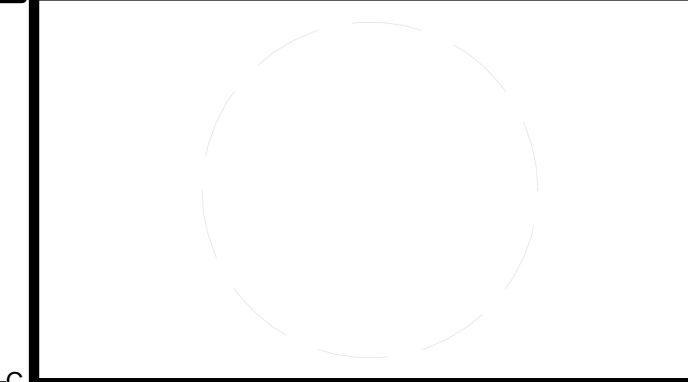
SHEET TITLE
RADIANT FLOORING TERMINATION DETAIL

M-111

	1	2	3	4	5	6	7
E	SYMBOLS		SYMBOLS		SYMBOLS		
	MARK	DESCRIPTION	MARK	DESCRIPTION	MARK	DESCRIPTION	
		TAMPER-RESISTANT DUPLEX RECEPTACLE		SWITCH		L1 HOT	
		TAMPER-RESISTANT 220V RECEPTACLE		UNDER CABINET LED LIGHT STRIP		L2 HOT	
D		TAMPER-RESISTANT QUADRAPLEX RECEPTACLE		CRESTRON DIMMER PANEL		NEUTRAL	
		TAMPER-RESISTANT DUPLEX RECEPTACLE GFCI		CEILING LIGHT		GROUND	
		TAMPER-RESISTANT WEATHER PROOF RECEPTACLE		PUMP		INTERIOR NEUTRAL	
C		TAMPER-RESISTANT QUADRAPLEX GFCI RECEPTACLE		SMOKE DETECTOR		UNUSED	
		PROVISIONS FOR ELECTRIC CAR CHARGER		CLOUD LED STRIP LIGHTS			
				KITCHEN UP LIGHTING			
B							
A							
	1	2	3	4	5	6	7



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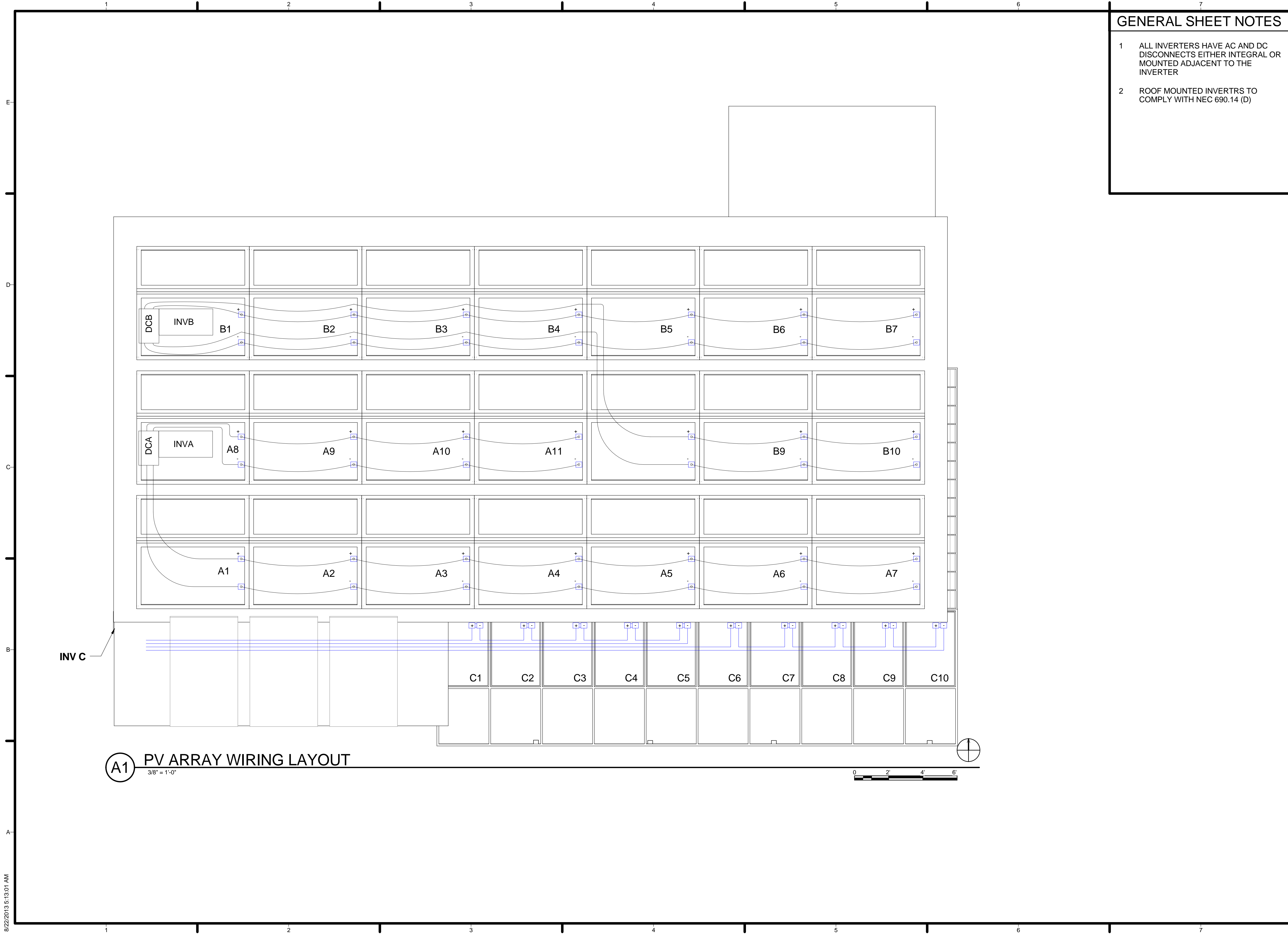


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SHEET TITLE
ELECTRICAL SYMBOLS AND NOTES

E-001



GENERAL SHEET NOTES

- 1 ALL INVERTERS HAVE AC AND DC DISCONNECTS EITHER INTEGRAL OR MOUNTED ADJACENT TO THE INVERTER
- 2 ROOF MOUNTED INVERTERS TO COMPLY WITH NEC 690.14 (D)



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MARK	DATE	DESCRIPTION

SHEET TITLE
PV WIRING PLAN

E-102

GENERAL SHEET NOTES

- 1 TRACK AND PENDANT LIGHT PLACEMENT TO BE DETERMINED BY TENANT; SUCH PLACEMENTS ARE NOT SHOWN
- 2 ALL LIGHTING AND LIGHT SWITCHES CONNECT TO LIGHTING CONTROLLER



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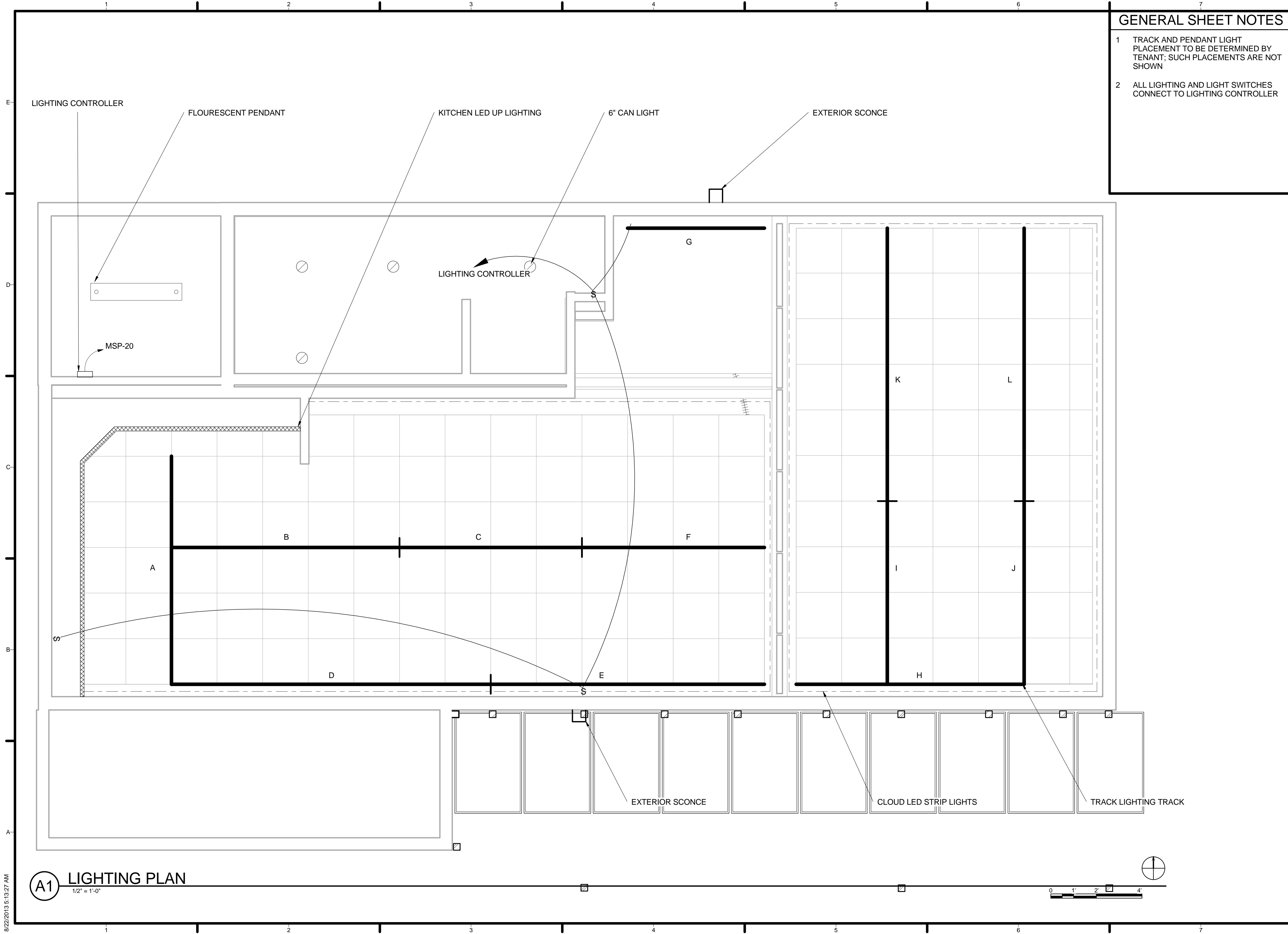
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SHEET TITLE
LIGHTING PLAN

E-103



(A1) LIGHTING PLAN
 1/2" = 1'-0"

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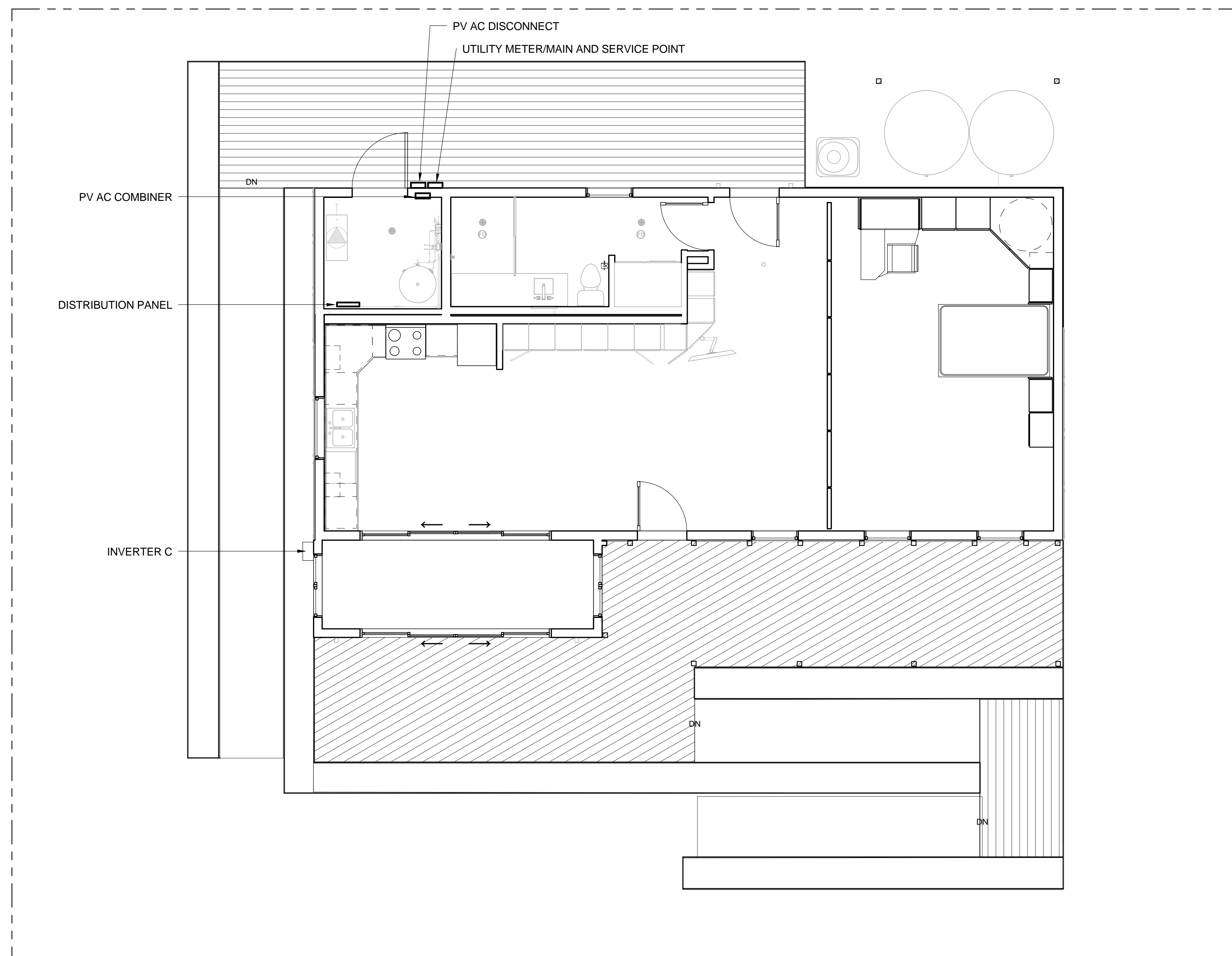
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SHEET TITLE

ELECTRICAL SERVICE LOCATIONS

E-104



A1 ELECTRICAL SERVICE LOCATIONS
1/4" = 1'-0"

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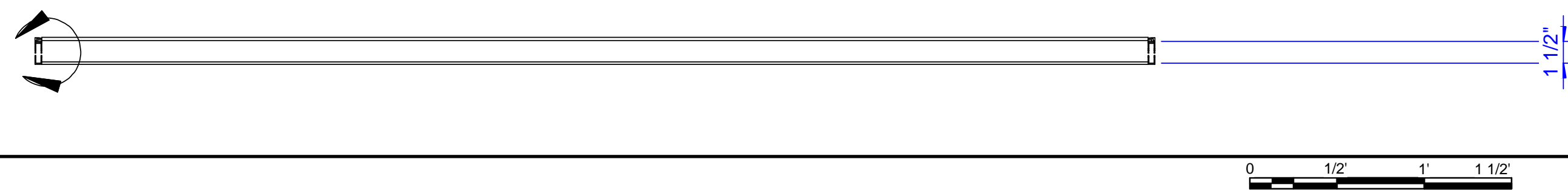
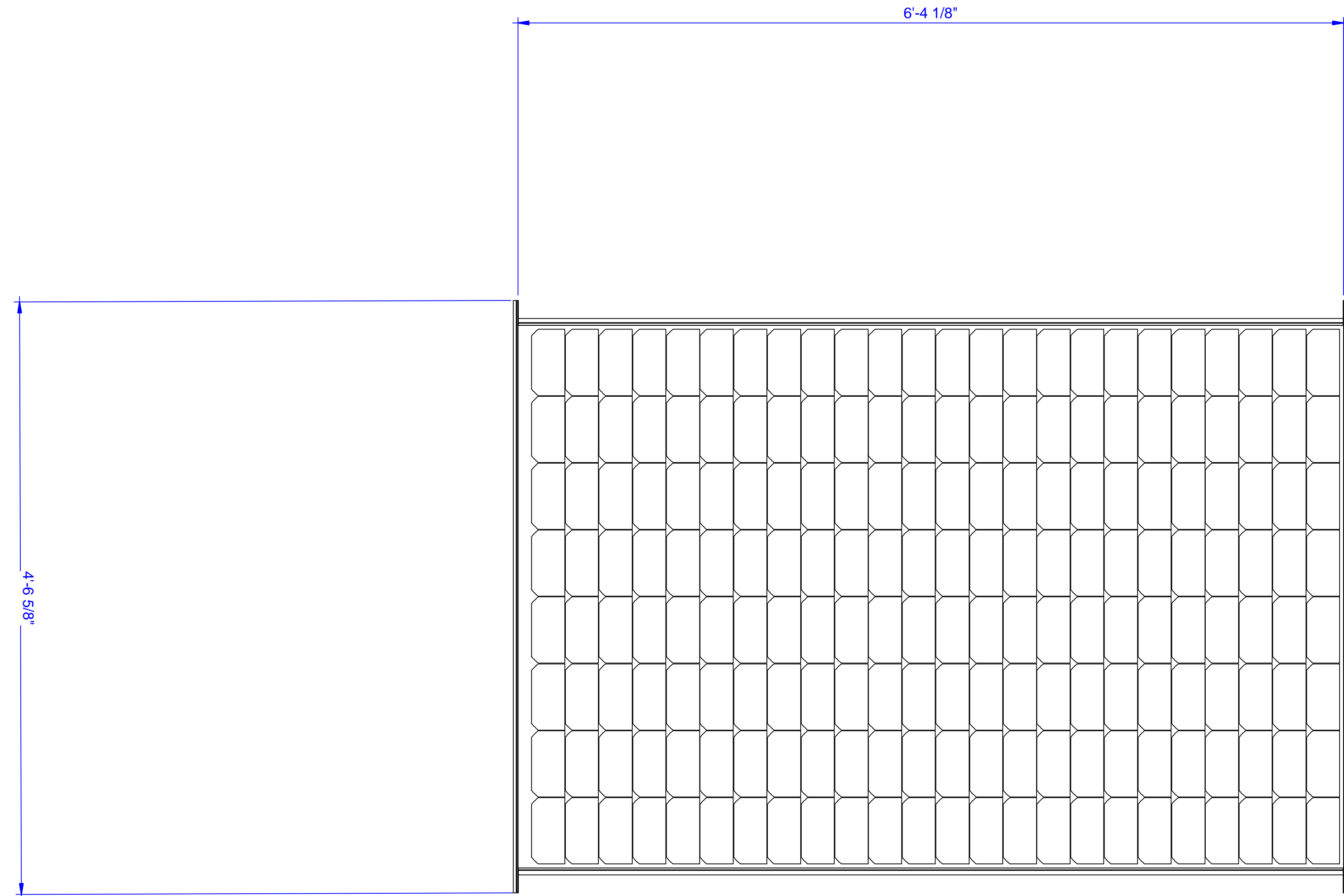


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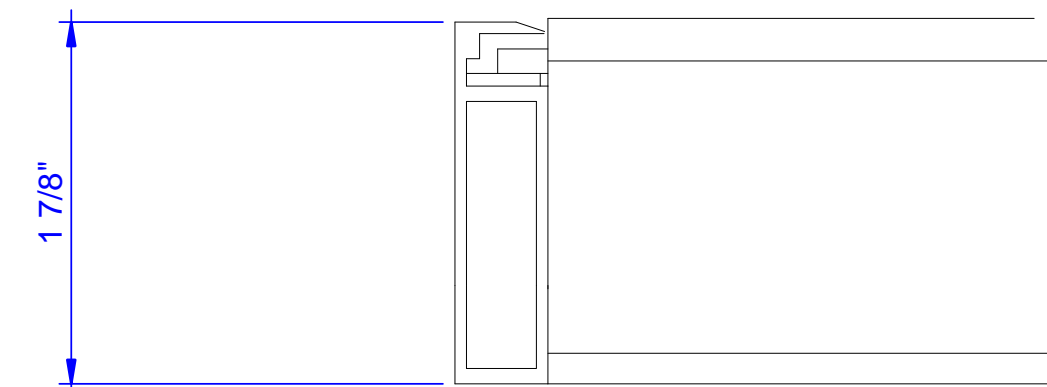
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SHEET TITLE
 DETAILS

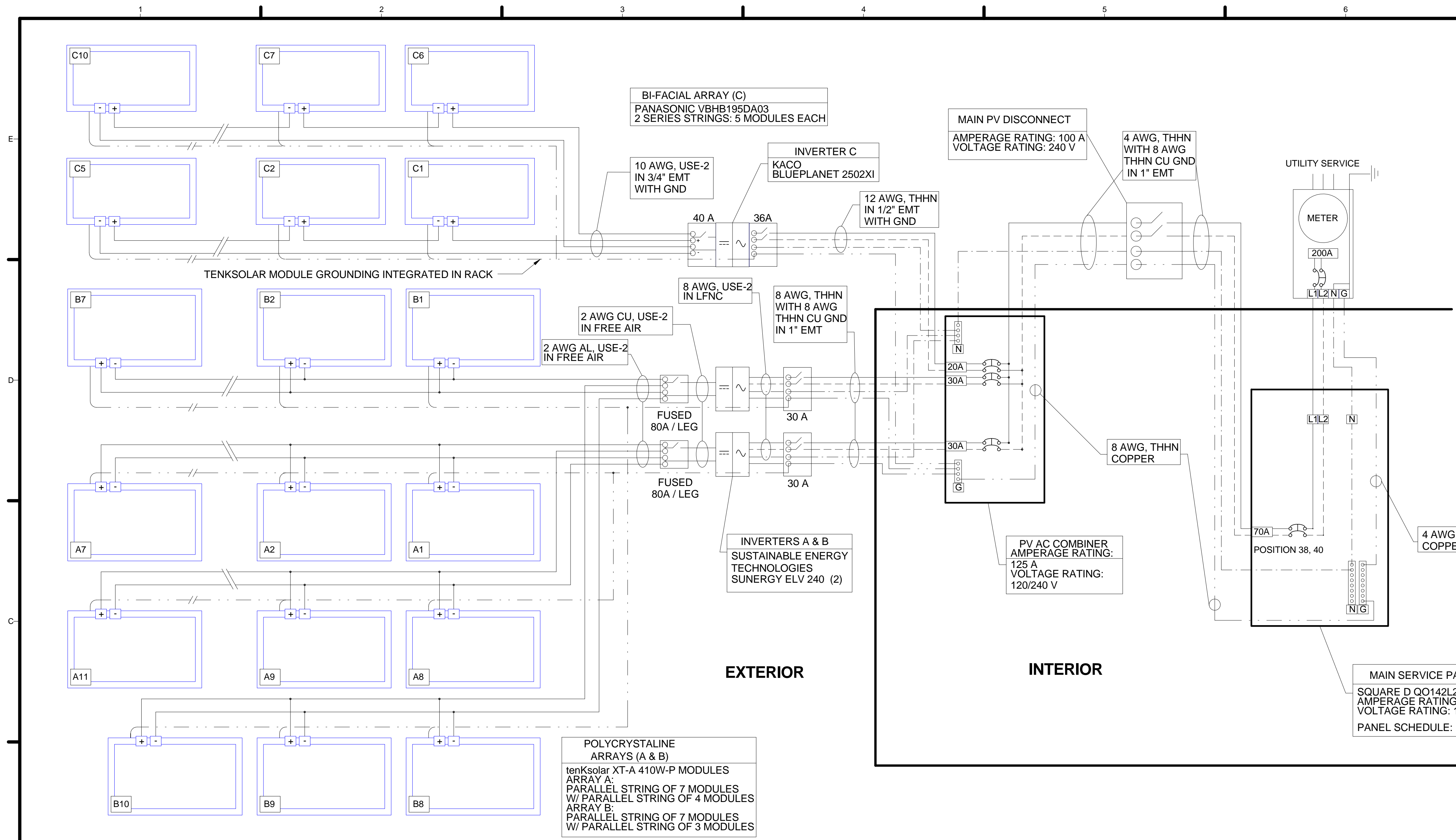
E-501



(B1) PV DETAILS PLAN
 1 1/2" = 1'-0"



(A1) PV FRAME JUNCTION
 1 7/8" = 1'-0"



GENERAL SHEET NOTES

- 1 ALL WIRES ARE COPPER UNLESS OTHERWISE STATED
- 2 REFER TO SPECIFICATIONS FOR CALCULATIONS
- 3 GROUND SIZED PER NEC TABLE 250.122
- 4 GROUND CONNECTIONS PER NEC 690.47 (C)
- 5 SE CABLES TO ORGANIZER UTILITY PANEL TO BE 2/0 CU OR 4/0 AL (3) AND A 4 BARE CU GROUND CONDUCTOR (1).
- 6 MAIN CB (200A SERVICE DISCONNECT) AND SERIES SYSTEM FAULT RATING IS 22 KAIC



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SHEET TITLE
PV THREE-LINE DIAGRAM

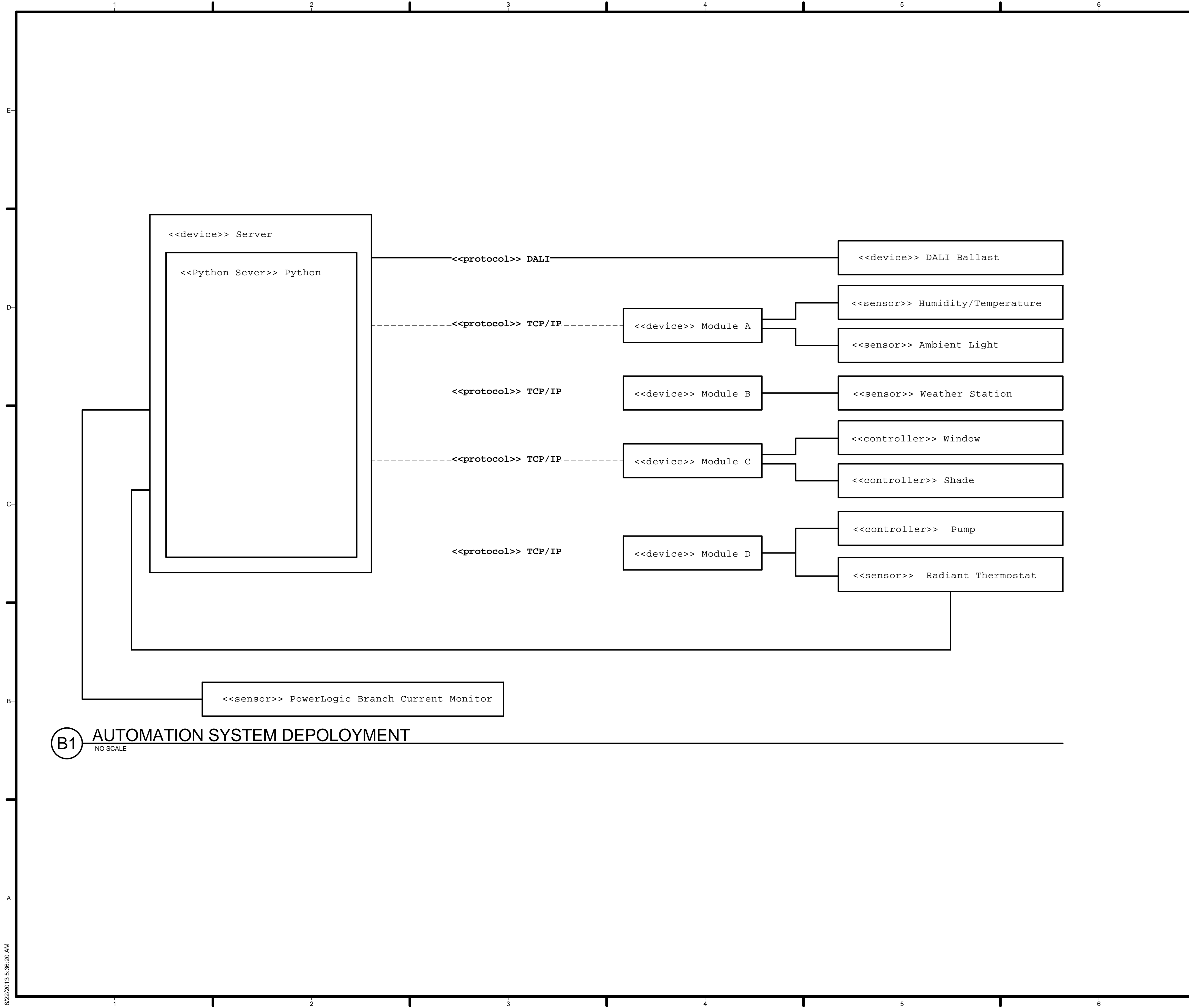
E-602

MODULE AND INVERTER SPECIFICATIONS

MODULE	STRINGS A & B	STRING C	INVERTER	INV A & B	INV C
BRAND	TENKSOLAR	SANYO	BRAND	SUSTAINABLE ENERGY TECHNOLOGIES	KACO
MODEL	XT-A 410W-P	HIP-195DA3	MODEL	SUNERGY ELV 240	BLUEPLANET 2502xi
P_MAX @ STC	410W	195W (249W POSSIBLE)	MAX DC INPUT VOLTAGE	140V	550V
V_OC	0	69.5V	OP VOLTAGE / MPPT RANGE	50 - 95V	200 - 450V
I_SC	9.1A (MAX CURRENT)	4.85A	MAX INPUT I_SC	108A	21.45A
V_MP	57V	56.1V	MAX INPUT CURRENT	100A	13.5A
I_MP	9.1A	4.45A	OUTPUT POWER	5000W	2500W
# IN SERIES	NONE	5	MAX OUTPUT CURRENT	21A	12A
# OF STRINGS	A-7,3 ; B-7,2	2	LISTING ORGANIZATIONS	UL1741, IEEE 519	UL 1741, IEEE 1547, NEC, CSA 22.2 NO.107.1-01
AMBIENT TEMP	25°C	25°C			
LOWEST TEMP	-30°C	-30°C			
HIGHEST TEMP	46°C	46°C			
V TEMP ADJ.	NONE	-0.192 V/°C			
I TEMP ADJ.	NONE	1.70 mA/°C			
LISTING ORGANIZATIONS	UL 1703/UL 1741 & IEC 61215 EN 61730	UL 1703, cUL, CEC			

A1 PV THREE-LINE DIAGRAM
 3/8" = 1'-0"

8/22/2013 5:13:45 AM



B1 AUTOMATION SYSTEM DEPOLOYMENT
NO SCALE

GENERAL SHEET NOTES

- MODULE A: HUMIDITY AND TEMPERATURE SENSOR (3 TOTAL, 1 FOR EACH HVAC ZONE IN THE HOUSE), AMBIENT LIGHT SENSOR (TO CONTROL SHADE SCHEDULE).
- MODULE B: WEATHER STATION (COMMERCIAL OUTDOOR WEATHER STATION WITH SEVERAL DIFFERENT OUTPUTS, WILL BE USED TO VERIFY AND/OR SUBSTITUTE FOR WEATHER FORECAST DATA POLLED FROM INTERNET WEATHER SERVICE).
- MODULE C: WINDOW MOTOR CONTROLLERS (12 TOTAL, 1 FOR EACH OPERABLE WINDOW), WINDOW SHADE MOTOR CONTROLLERS (3 TOTAL, 1 FOR EACH OPERABLE WINDOW SHADE).
- MODULE D: THIS MODULE WILL BE USED TO MONITOR AND CONTROL THE MECHANICAL EQUIPMENT. NOT ALL DEVICES HAVE BEEN LISTED AS NOT ALL EQUIPMENT HAS BEEN SPECIFIED AT THIS TIME. MAY INCLUDE: RADIANT THERMOSTAT, PUMP CONTROL, VALVE CONTROL, WATER HEATER ELECTRIC BACK-UP CONTROL, WATER HEATER TEMPERATURE MONITORING, ENERGY RECOVERY VENTILATOR CONTROL AND MONITORING, ETC.
- EXTERNAL WEATHER DATA (MOSTLY FORECAST INFORMATION) WILL BE POLLED REGULARLY AND USED WITHIN THE SEVER TO PREDICTIVELY MAKE HVAC DECISIONS.
- SOME MODULES MAY INCORPORATE DEVICES WITH DIFFERENT NATIVE VOLTAGES, CURRENT REQUIREMENT OR MONITORING PROTOCOL. IN THIS CASE, THE MODULE WILL SERVE AS AN INTERMEDIARY BETWEEN THE SERVER AND A TERTIARY DEVICE THAT SIMPLY TRANSLATES THE NATIVE SIGNAL SO IT CAN BE TRANSMITTED/RECEIVED.



TEAM NAME: MISSOURI S&T SOLAR HOUSE TEAM
 ADDRESS: 1051 NORTH BISHOP AVENUE
 116 KUMER STUDENT DESIGN CENTER
 ROLLA, MO 65401-11410
 CONTACT: SOLARHOUSE@MST.EDU
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SHEET TITLE
AUTOMATION SYSTEM DEPOLOYMENT

T-701



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116 KUMER STUDENT DESIGN CENTER
ROLLA, MO 65401-11410
CONTACT: SOLARHOUSE@MST.EDU
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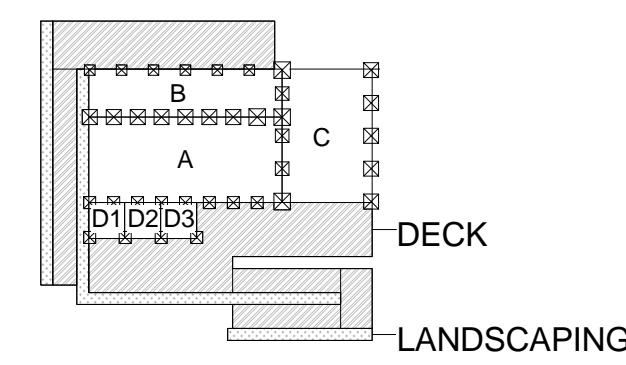


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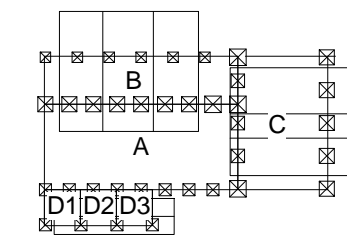
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DEPARTURE SEQUENCE PLAN

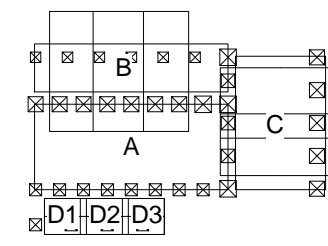
O-102



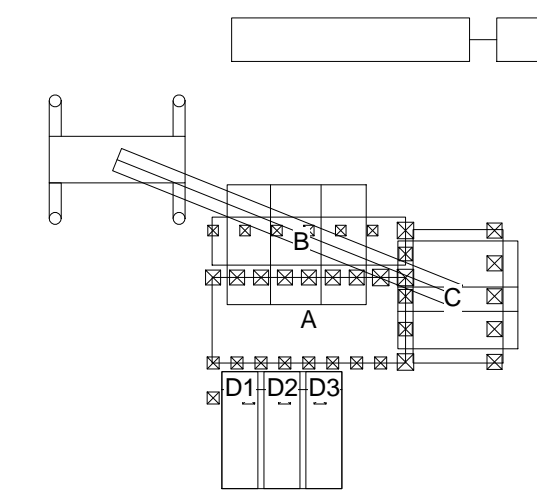
STEP 1



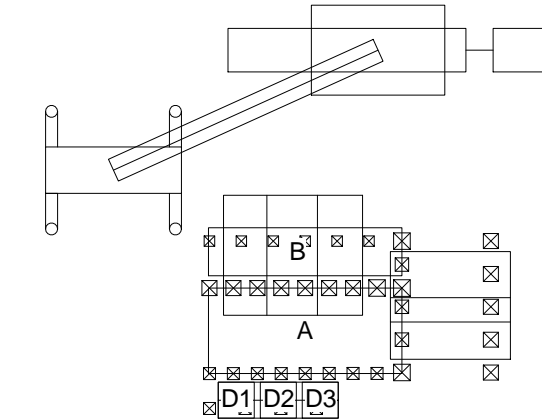
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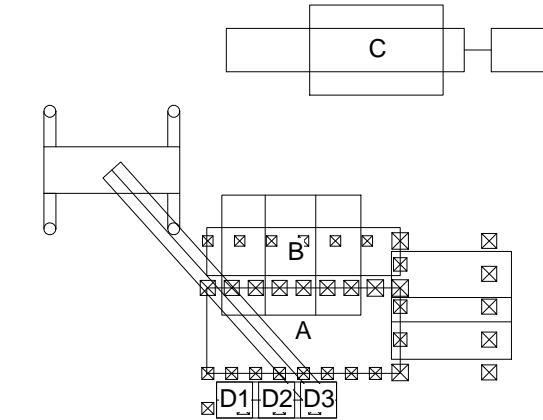
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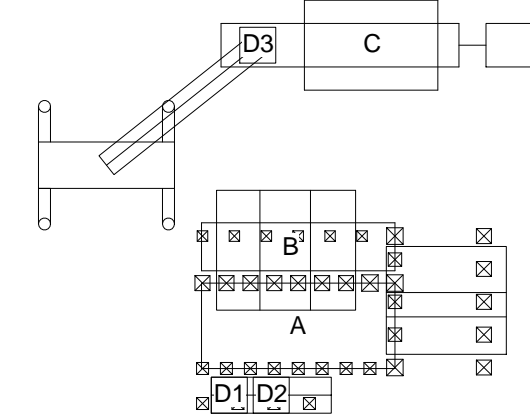
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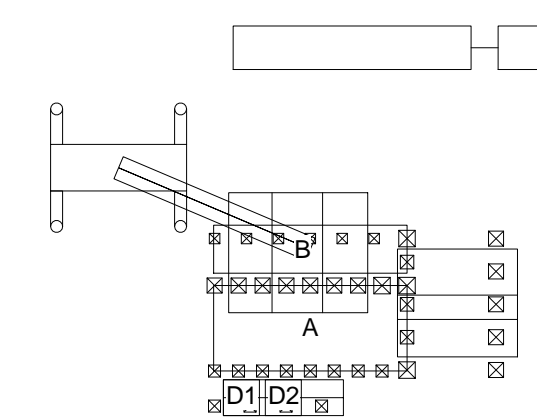
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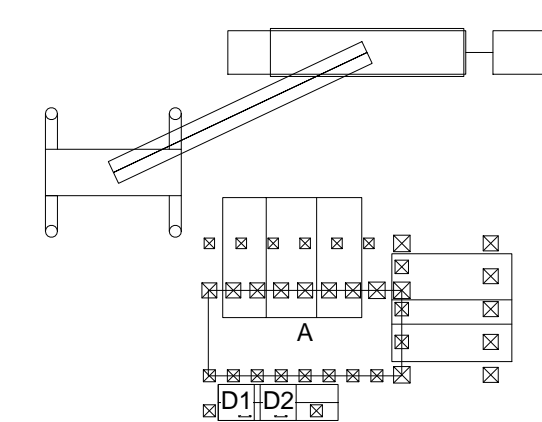
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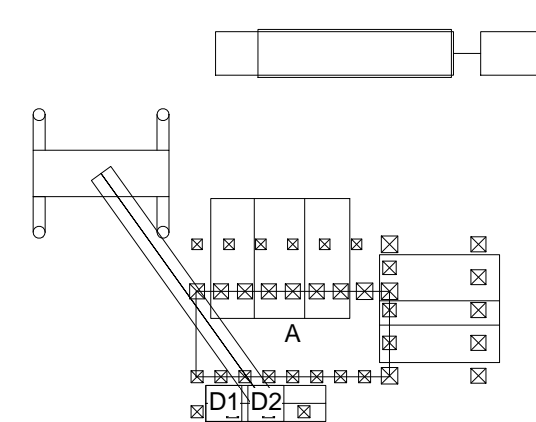
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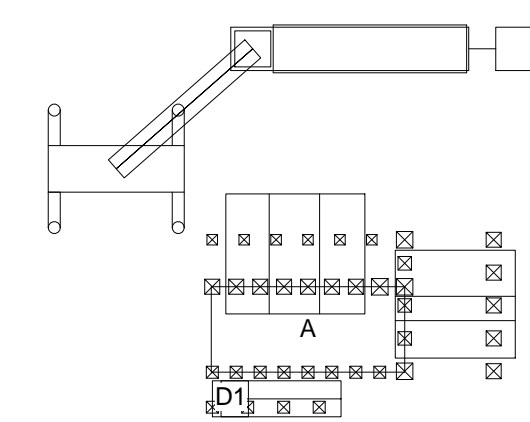
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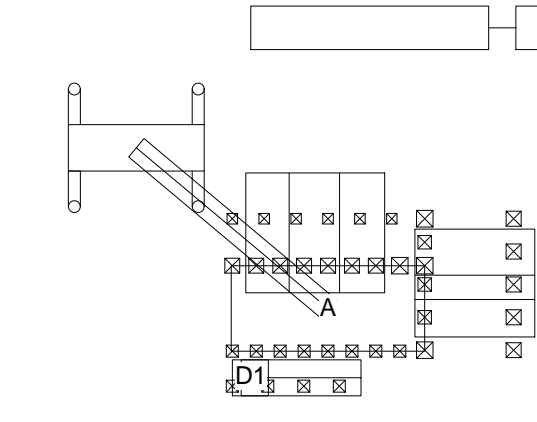
STEP 9



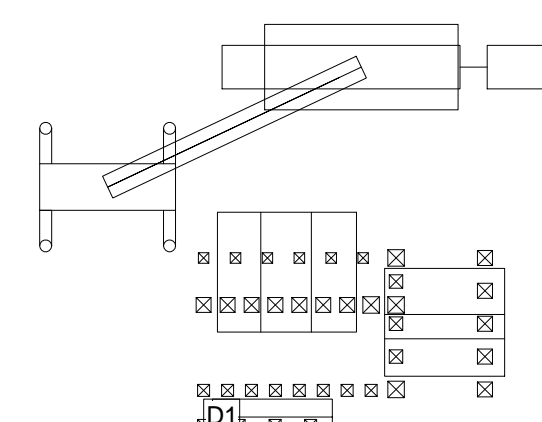
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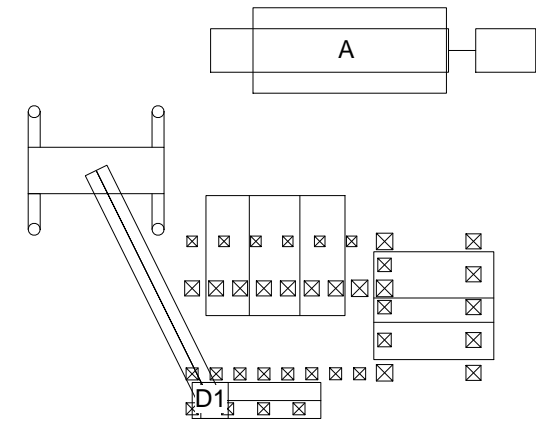
STEP 11



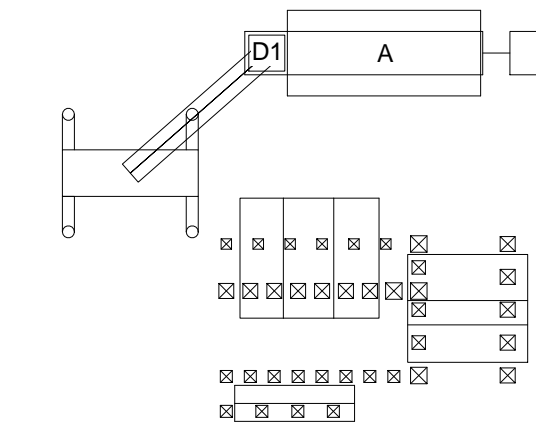
STEP 12



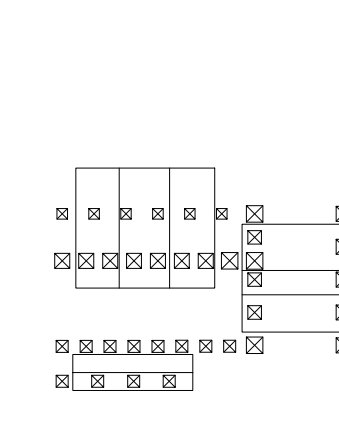
STEP 13



STEP 14

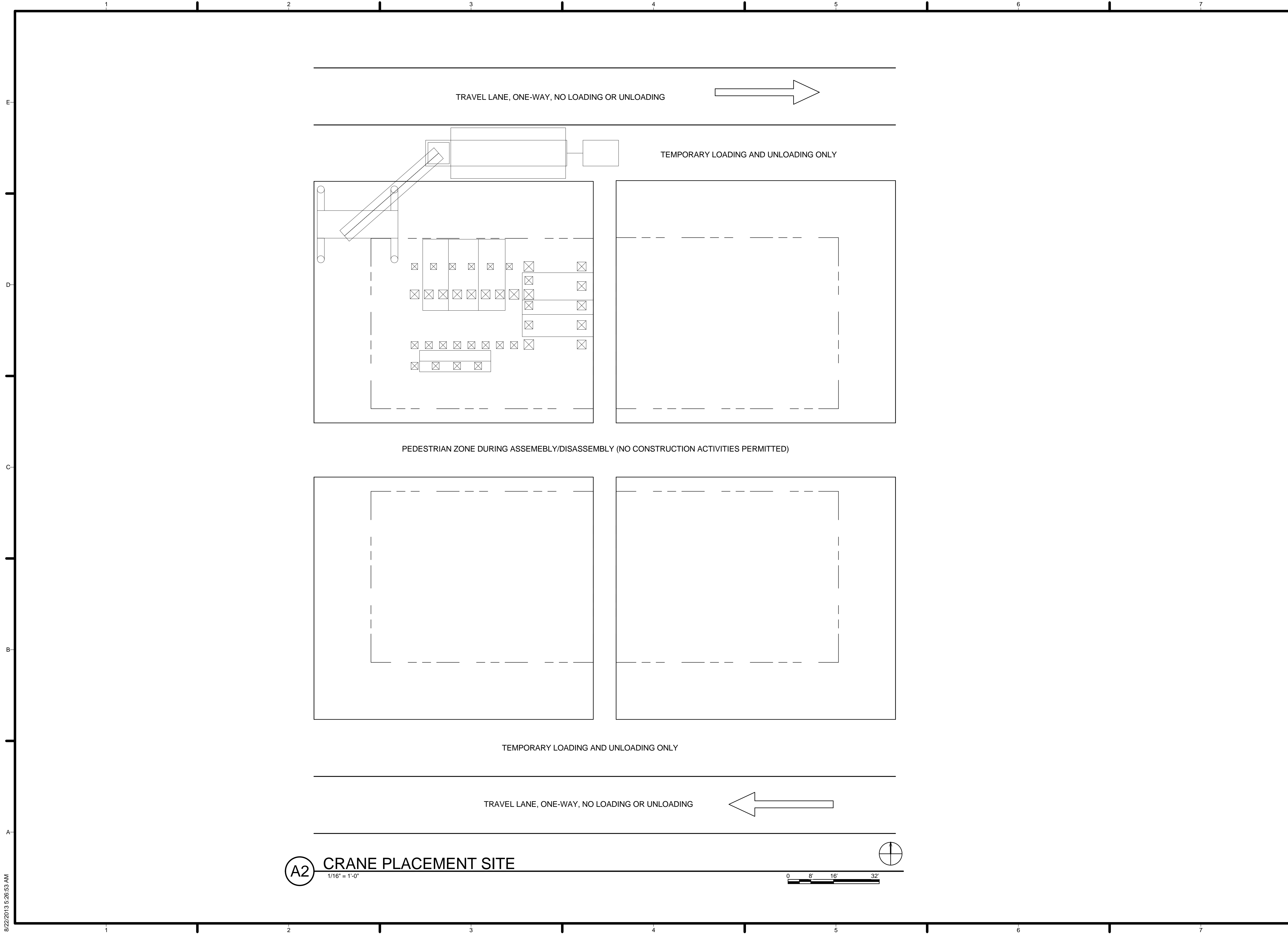


STEP 15



STEP 16

(A1) DEPARTURE SEQUENCE
NOT TO SCALE



8/22/2013 5:26:53 AM

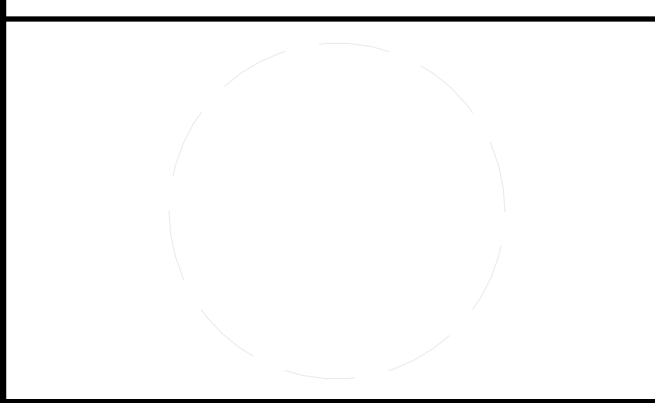
A2

CRANE PLACEMENT SITE

1/16" = 1'-0"



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 ADDRESS: 1051 NORTH BISHOP AVENUE
 116 KUMER STUDENT DESIGN CENTER
 ROLLA, MO 65401-11410
 CONTACT: SOLARHOUSE@MST.EDU
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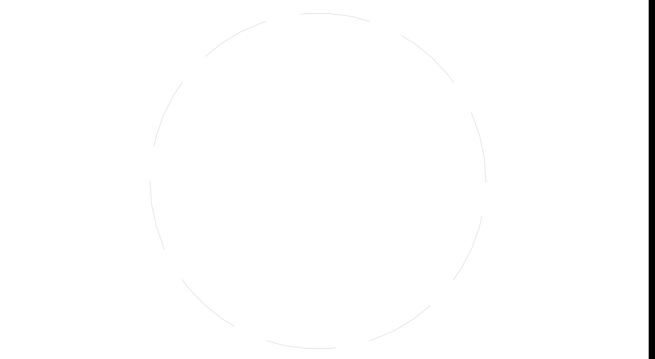
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SHEET TITLE
CRANE PLACEMENT SITE

O-103



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 ADDRESS: 1051 NORTH BISHOP AVENUE
 116 KUMER STUDENT DESIGN CENTER
 ROLLA, MO 65401-11410
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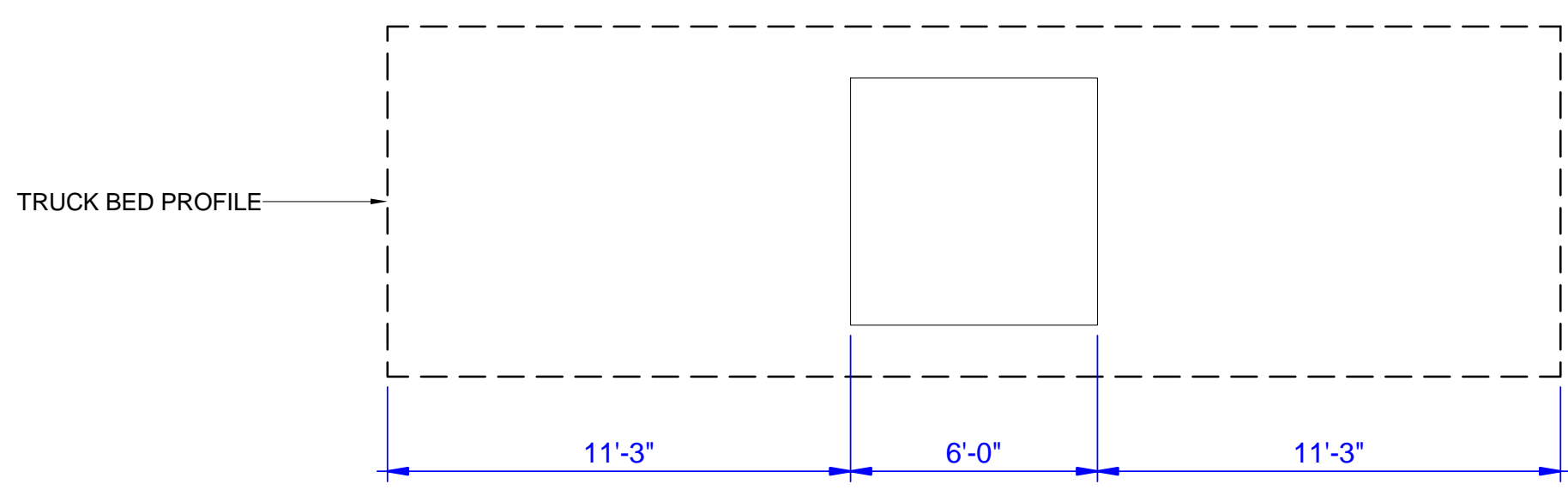
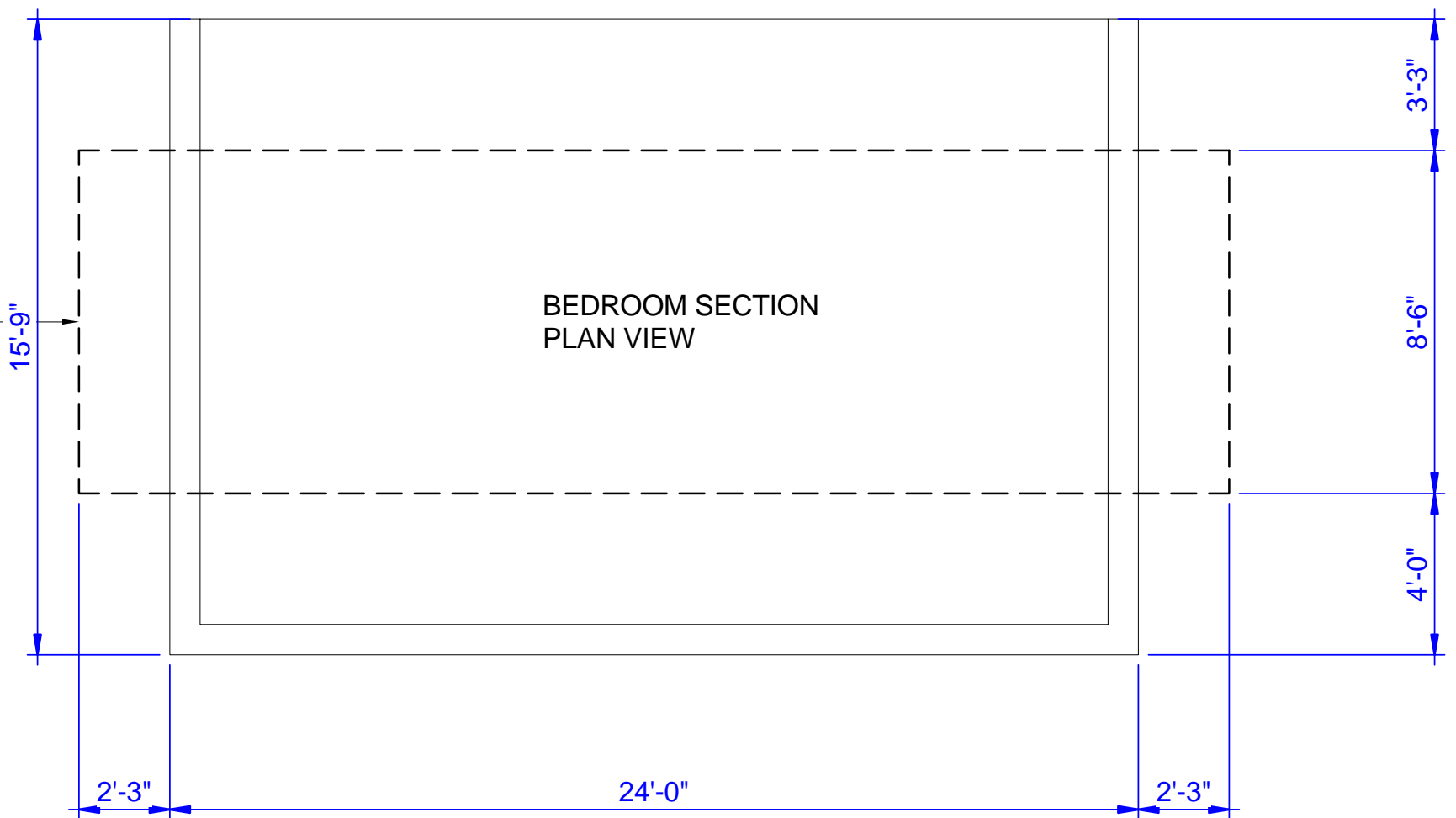
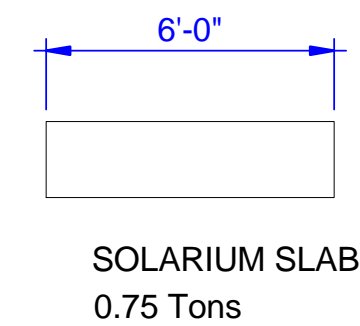
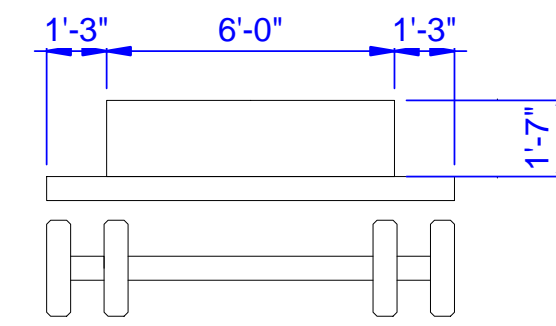
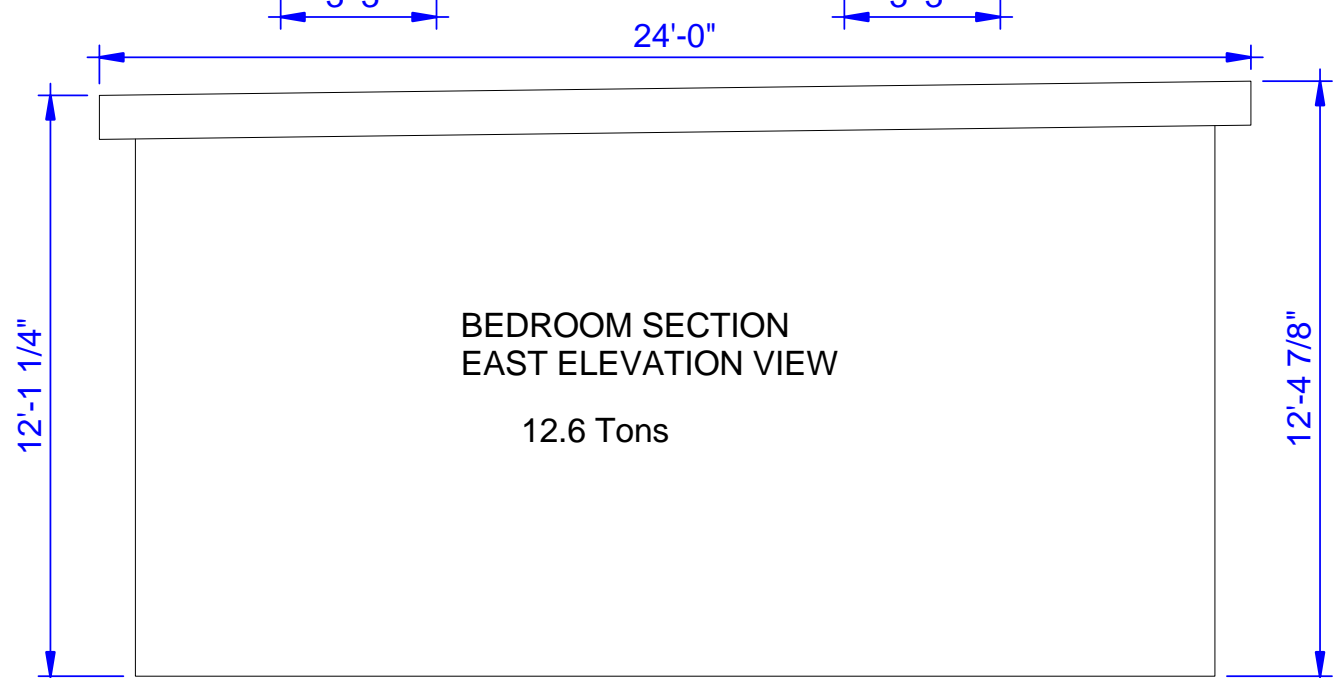
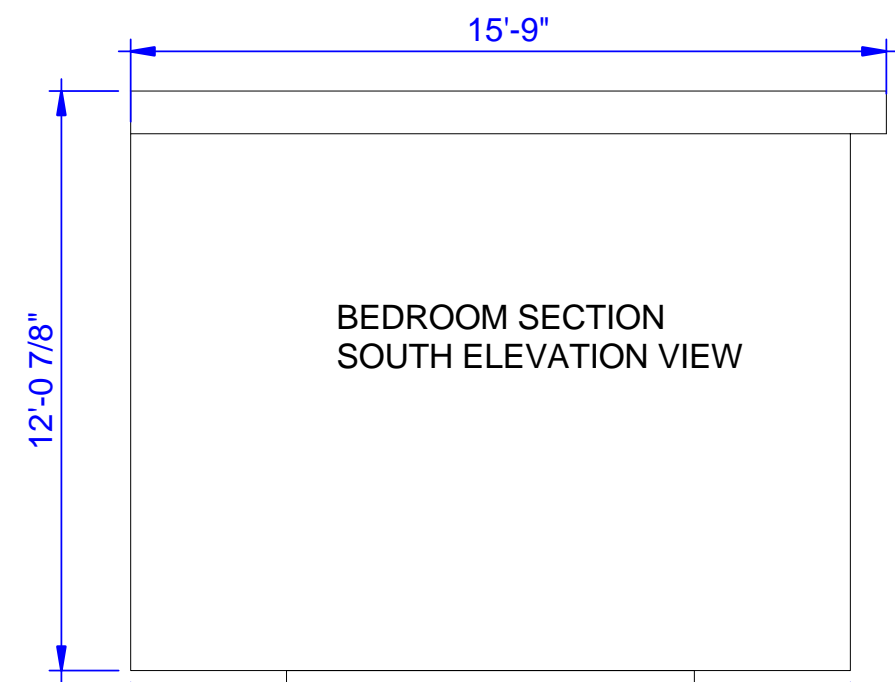


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SHEET TITLE
 TRUCK LOADING DIAGRAMS

O-602



A1 TRUCK LOADING DIAGRAMS
 1/4" = 1'-0"

