

THE  
BEACH  
HOUSE

As-Built Specifications



## Quantity Takeoff of Competition Prototype House

MASTERFORMAT SECTION	CATEGORY	BRIEF DESCRIPTION	DETAILED DESCRIPTION	MANUFACTURER	QUANTITY	UNITS
<b>DIVISION 5 - METALS</b>						
05 14 13	Architecturally-Exposed Structural Aluminum Framing	Railing	30mm X 30mm T-Slotted Profile - Four Open T-Slots	80/20 Inc.	620	ft
05 14 13	Architecturally-Exposed Structural Aluminum Framing	Slide-in Economy T-Nut	1/4-20 Slide-in Economy T-Nut - Centered Thread	80/20 Inc.	388	each
05 14 13	Architecturally-Exposed Structural Aluminum Framing	Inside Corner Bracket With Dual Support	40 Series 2 Hole- 39mm Slotted Inside Corner Bracket with Dual Support	80/20 Inc.	124	each
05 14 13	Architecturally-Exposed Structural Aluminum Framing	Socket Head Cap Screw	5/16-18 x .875" Socket Head Cap Screw (SHCS)	80/20 Inc.	248	each
05 14 13	Architecturally-Exposed Structural Aluminum Framing	Dual Rack Mid Clamp - Clear	SS6005-T5 Dual Rack PV mounting system	Dual Rack	124	each
05 14 13	Architecturally-Exposed Structural Aluminum Framing	Dual Rack End Clamp - 45mm Clear	SS6005-T5 Dual Rack PV mounting system	Dual Rack	16	each
05 14 13	Architecturally-Exposed Structural Aluminum Framing	Rigid Structural Screw	5/16 x 3 1/2"	GRK	124	each
05 14 13	Architecturally-Exposed Structural Aluminum Framing	6061-T6 Aluminum Sheet	2x4'	Metals Depot	1	each
<b>DIVISION 6 - WOOD, PLASTICS AND COMPOSITES</b>						
06 11 00	Walls	2 x 6 Stud Walls				
06 11 00	Walls	2 x 4 Stud Walls				
06 11 00	Floor Framing	2 x 10 Floor Framing				



<b>06 11 00</b>	Floor Framing	2 x 8 Floor Framing					
<b>06 00 00</b>	Wood, Plastics and Composites	1x4 Spruce Board	1x4 Spruce Board	Menards	30	8 ft	
<b>06 00 00</b>	Wood, Plastics and Composites	2x4 Spruce Board	2x4 Spruce Board	Menards	3	8 ft	
<b>06 00 00</b>	Wood, Plastics and Composites	2x6 Spruce Board	2x6 Spruce Board	Menards	2	8 ft	
<b>06 00 00</b>	Wood, Plastics and Composites	4x4 Fir Board	4x4 Fir Board	Menards	2	8 ft	
<b>06 15 33</b>	Wook Patio Decking	1"x5.31"x8' Decking		ChoiceDek	500	sq ft.	
<b>06 17 00</b>	Shop Fabricated Structural Wood	Parallam Beam		TrusJoist-Weyerhaeuser	1110	ft.	
<b>06 18 13</b>	Glued Laminated Beams	Preserved Glulam Beam		Anthony Forest Products Co.	804	ft.	

**DIVISION 7 - THERMAL AND MOISTURE PROTECTION**

<b>07 21 16</b>	Blanket Insulation	55 gal Drum Blanket	Drum Quilt Blanket for 55 Gallon Drums	Cary Company	1	each	
<b>07 27 19</b>	Plastic Sheet Air Barriers	Tyvek CommercialWrap D					
<b>07 41 13</b>	Metal Roof Panels			S-5!			
<b>07 21 13.13</b>	Foam Board Insulation	Crawl Space		DOW			
<b>07 22 16</b>	Roof Board Insulation	Roof Insulation		DOW			
<b>07 46 46</b>	Fiber Cement Siding	Hardie Plank Lap Siding		James Hardie			

**DIVISION 8 - OPENINGS**

<b>08 14 23</b>	Out-Swinging Entry Doors		3'-0" X 6'-8"	Masonite	1	each	
<b>08 14 76</b>	Bi-folding Wood Doors	D80-03	4'-4" x 6'-8"	Masonite	1	each	
<b>08 30 16</b>	Double Enry Outswing French Door	FWWO,6068,PLAR	6'-0" x 6'-8"	Anderson	2	each	
<b>08 52 16</b>	Out-Swinging Casement Window	CN 12	2'-0" x 3'4"	Anderson	5	each	
<b>08 52 16</b>	Out-Swinging Casement Window	CR 26	2'-0" x 5'-11"	Anderson	1	each	
<b>08 52 16</b>	Out-Swinging Casement Window	C 24	3'-6" x 4'-0"	Anderson	1	each	
<b>08 52 16</b>	Awing Window	C 22	2'-0" x 1'-0"	Anderson	5	each	

**DIVISION 09 - FINISHES**



09 20 00	Gypsum Board	Sheetrock Brand Ultralight Panels		United States Gypsum Comapny		
09 30 16	Tiling	Porcelain Stone		Crossville Inc		
09 64 29	Wood Flooring	Heart Pine				

**DIVISION 11 - EQUIPMENT**

11 30 13	Washer	#WM98400SX	2.3 cu.ft. washer	Blomberg		1 each
11 30 13	Dishwasher	#DWS54100SS	18" Panel Ready Dishwasher	Blomberg		1 each
11 30 13	Dryer	#DV17542	2.3 cu.ft. dryer	Blomberg		1 each
11 30 13	Refrigerator	#BRFB1312SS	11.4 cu.ft. Slim Capacity	Blomberg		1 each
11 30 13	Induction Cooktop	#CTE30400	30" Induction Cooktop 500 Series	Blomberg		1 each
11 30 13	Downdraft System	#DHD3014UC	30" Downdraft Ventilation	Bosch		1 each
11 30 13	Oven	#BWOS30100	30" Single Wall Oven 500 Series	Blomberg		1 each

**DIVISION 21 - FIRE SUPPRESSION**

21 13 13	Fire Protection	C4707HD1	1" CPVC 90 Degree Elbow	Viking		14
21 13 13	Fire Protection	C4711	1" CPVC T-Joint	Viking		8
21 13 13	Fire Protection	531194	1" CPVC Straight Piping	Viking		14 by 10 ft
21 13 13	Fire Protection	VK486	Sprinkler Head	Buckman Engineering		4
21 13 13	Fire Protection	VK457	Sprinkler Head	Buckman Engineering		2
21 13 13	Fire Protection	VK488	Sprinkler Head	Buckman Engineering		2
21 13 13	Fire Protection	1080100EG	2-Hole-Strap-for-CPVC-Pipe	Home Depot		23
21 13 13	Fire Protection	i2060	Smoke Alarm	Home Depot		3
21 13 13	Fire Protection	466142N	Fire Extinguisher	Home Depot		1

**DIVISION 22 - PLUMBING**

22 11 00	Facility Water Distribution	1/2" PEX	1/2" PEX Tubing Reb and Blue	Sharkbite		1 each 100 Feet
22 11 00	Facility Water Distribution	3/8" PEX	3/8" PEX Tubing Red and Blue	Sharkbite		1 each 100 Feet
22 11 19	Domestic Water Piping Specialties	Water Hammer Arrestor	1/2" Washing Machine Outlet Box with Water Hammer Arrestors	Sharkbite		1
22 11 23	Domestic Water Pumps	1 HP HNE Pump	Pentair Sta-Rite HNE 1 HP Pump	Sta-Rite		1
22 12 19	Facility Potable Water Storage Tanks	350 Gallon Tank	350 Gallon Quadel Titan Hauling Tank	Quadel		4
22 13 16	Sanitary Waste and Vent Piping	1" CPVC	1" CPVC Piping	FlowGuard Gold		1 100 Feet



22 33 30	Solar Water Heating Equipment	Electric Water Heater	Marine Electric Water Heater w/Heat Exchange	Torrid		1
22 06 30	Schedule for Plumbing Equipment	12 Port PEX Manifold	12-Port PEX Manifold with 1/2 in. Brass Ball Valves	Sharkbite		1
22 06 30	Schedule for Plumbing Equipment	CPVC 1" Coupling	1 in. CPVC CTS Slip x Slip Coupling	Sharkbite		10
22 06 30	Schedule for Plumbing Equipment	1" 90 Elbow	1 in. CPVC CTS 90-Degree Slip x Slip Elbow	NIBCO		17
22 06 30	Schedule for Plumbing Equipment	CPVC 1" Tee	1 in. CPVC CTS S x S x S Tee	NIBCO		5
22 06 30	Schedule for Plumbing Equipment	CPVC Ball Valves 1"	1 in. Slip x Slip CPVC Ball Valve	NIBCO		4
22 06 30	Schedule for Plumbing Equipment	1" Push-Connect	1 in. Brass Push-To-Connect Coupling	Sharkbite		3
22 06 30	Schedule for Plumbing Equipment	3/8" Push-Connect	3/8 in. (1/2 in. O.D.) Brass Push-to-Connect Coupling	Sharkbite		4
22 06 30	Schedule for Plumbing Equipment	1/2" Brass 90 Degree Elbow	1/2 in. Brass PEX Barb 90-Degree Elbow	Sharkbite		16
22 06 30	Schedule for Plumbing Equipment	1/2" Brass Tee	1/2 in. Brass PEX Barb Tee	Sharkbite		6
22 06 30	Schedule for Plumbing Equipment	1/2" Valve	1/2 in. x 1/2 in. Brass PEX Ball Valve	Sharkbite		1
22 06 30	Schedule for Plumbing Equipment	3/8" Brass 90 Degree Elbow	3/8 in. Brass PEX Barb 90-Degree Elbow	Sharkbite		30
22 06 30	Schedule for Plumbing Equipment	3/8" Brass Tee	3/8 in. Brass PEX Barb Tee	Sharkbite		5
22 06 30	Schedule for Plumbing Equipment	3/8" to 1/2" Valve	1/2 in. Chrome-Plated Brass PEX Barb x 3/8 in. Barb Straight Stop Valve	Sharkbite		1
22 06 30	Schedule for Plumbing Equipment	1/2" to 3/8" Reducers	1/2 in. x 3/8 in. Brass PEX Barb Reducer Coupling	Sharkbite		6
22 06 30	Schedule for Plumbing Equipment	PEX Installation Tool Set	Multi-Head PEX Copper Crimp Ring Tool Kit	Sharkbite		1
22 06 30	Schedule for Plumbing Equipment	PEX Pipe Cutter	PEX Pipe Cutter	Sharkbite		1



22 06 30	Schedule for Plumbing Equipment	1" Disconnect Clip	1 in. Disconnect Clip	Sharkbite	1	
22 06 30	Schedule for Plumbing Equipment	3/8" Disconnect Clip	3/8 in. Disconnect Clip	Sharkbite	1	
22 06 30	Schedule for Plumbing Equipment	1/2" Crimp Rings	1/2 in. Copper Crimp Rings (25-Pack)	Sharkbite	3	
22 06 30	Schedule for Plumbing Equipment	3/8" Crimp Rings	3/8 in. Copper Crimp Rings (100-Pack)	Sharkbite	2	
22 06 30	Schedule for Plumbing Equipment	CPVC Primer	8 oz. PVC and CPVC Purple Primer	Oatey	1	
22 06 30	Schedule for Plumbing Equipment	CPVC Cement	8 oz. CPVC Cement	Oatey	1	
22 06 30	Schedule for Plumbing Equipment	1" to 1/2" Quick Connect Reducer	1 in x 1 in x 1/2 in Quick Connect Reducer Tee	Sharkbite	1	
22 06 30	Schedule for Plumbing Equipment	1/2 in. Brass Sillcock Valve	1/2 in. Brass Sillcock Valve with Push-Fit Connections	Sharkbite	1	
22 06 30	Schedule for Plumbing Equipment	1/2 in. Washing Machine Hammer Arrestors	1/2 in. Washing Machine Outlet Box with Water Hammer Arrestors	Sharkbite	1	
22 00 00	Plumbing	PVC Fitting	Charlotte Pipe 2-in x 1-1/2-in x 2-in dia PVC Reducing Tee Fitting	Lowe's	2	each
22 00 00	Plumbing	PVC Fitting	Charlotte Pipe 1-1/2-in x 2-in Dia PVC Adapter Coupling Fitting	Lowe's	2	each
22 00 00	Plumbing	PVC 90 degree elbow	Charlotte Pipe 1-1/2-in Dia 90-Degree PVC Sch 40 Elbow	Lowe's	6	each
22 00 00	Plumbing	PVC Pipe	1-1/2 in. x 10 ft. 330-PSI Schedule 40 PVC DWV Plain End Pipe	Home Depot	10	10 ft
22 00 00	Plumbing	PVC Reducer coupling	1-1/2" x 1" Sch 40 PVC Reducer Coupling Soc 429-211	PVC Fittings Online	1	each
22 00 00	Plumbing	PVC Pipe	1 in. x 2 ft. PVC Sch. 40 Pipe	Home Depot	1	2 ft
22 00 00	Plumbing	PVC Elbows	1 in. Schedule 40 PVC 90-Degree Elbow	Home Depot	3	each
22 00 00	Plumbing	Flex Tubing	1 Inch Black Vinyl Tubing Per Foot	Growhome	10	1 ft
22 00 00	Plumbing	Grommet	Hydro Flow 1-1/2 inch Uniseal	Zen Hydro	5	each
22 33 30	Residential, Electric Domestic Water Heaters	Submersible heater	Lineba 500 Watt Ceramic Quart Glass Submersible Aquarium Heater Fish Tank Water Heater	Lineba	1	each

**DIVISION 23 - HEATING, VENTILATION AND AIR-CONDISTIONING (HVAC)**



23 81 26	Split-System Air Conditioners	Heat pump	Heat pump Z2 and Z3	Daikin	2	Each
23 81 26	Split-System Air Conditioners	Heat pump	Z2 and Z3 Condenser	Daikin	1	Each
23 81 26	Split-System Air Conditioners	Condenser	Heat pump Z1 and Condenser	Daikin	1	Each
23 81 26	Split-System Air Conditioners	Piping	OD 1/4in OD Copper piping 10 ft roll	Home Depot	5	10 ft
23 81 26	Split-System Air Conditioners	Piping	OD 3/8in OD copper Piping 20 ft roll	Home Depot	3	20 ft
23 81 26	Split-System Air Conditioners	Piping	1/2in x 10 ft pvc pipe	Home Depot	5	10 ft
23 81 26	Split-System Air Conditioners	grounding pad	1ft x 1ft paving stone	Home Depot	16	1 sq ft
23 81 26	Split-System Air Conditioners	piping	Copper Elbow 3/8"	Plumbing Supply	11	each
23 81 26	Split-System Air Conditioners	piping	Copper Elbow 1/4"	Zoro	11	each
23 81 26	Split-System Air Conditioners	piping	PVC Elbow 1/2"	Home Depot	11	each
23 81 26	Split-System Air Conditioners	piping	Brass Flare nut 3/8"	Home Depot	6	each
23 81 26	Split-System Air Conditioners	piping	Brass Flare nut 1/4"	Home Depot	6	each
23 81 26	Split-System Air Conditioners	tape	322 Multipurpose HVAC Foil Tape	Home Depot	3	each
23 81 26	Split-System Air Conditioners	insulation	DAP Fast N' Final Lightweight Spackling	Home Depot	1	each
23 81 26	Split-System Air Conditioners	insulation	16oz. Big Gap Filler Insulating Foam	Home Depot	1	each
23 81 26	Split-System Air Conditioners	Housing	Recto seal Kit	Alpine Home Air Products	3	Each
23 81 26	Split-System Air Conditioners	Screws	Everbilt #3 x 1/4 in. Flat Head Phillips Zinc Wood Screw (8-Piece/Bag)	Home Depot	6	Each
23 81 26	Split-System Air Conditioners	Screws	Screw #10 x 7/8"	Broan	4	Each
23 81 26	Split-System Air Conditioners	Fan Assembly	Housing Assembly (includes B7)	Broan	1	Each
23 81 26	Split-System Air Conditioners	Fan Assembly	Wiring Adapter Plate	Broan	1	Each
23 81 26	Split-System Air Conditioners	Screws	Ground Screw #10-32 x 1/2"	Broan	4	Each
23 81 26	Split-System Air Conditioners	Fan Assembly	Wiring Harness	Broan	1	Each
23 81 26	Split-System Air Conditioners	Nut	Whiz Nut, 1/4-20	Sears	2	Each
23 81 26	Split-System Air Conditioners	Nut	Grille Nut	Broan	2	Each
23 81 26	Split-System Air Conditioners	Fan Assembly	Outlet Box Cover	Broan	1	Each



23 81 26	Split-System Air Conditioners	Fan Assembly	Strain Relief Bushing	Appliance Parts Pros	2	Each
23 81 26	Split-System Air Conditioners	Fan Assembly	Blower Wheel (SP100)	Broan	1	Each
23 81 26	Split-System Air Conditioners	Fan Assembly	Blower Housing (SP100)	Not available for retail	1	Each
23 81 26	Split-System Air Conditioners	Fan Assembly	Motor Mounting Rubber	Broan	1	Each
23 81 26	Split-System Air Conditioners	Fan Assembly	Motor (SP 100) (includes B16)	Broan	1	Each
23 81 26	Split-System Air Conditioners	Fan Assembly	Motor Cup	Broan	1	Each
23 81 26	Split-System Air Conditioners	Screws	Screw #8B x 3/8"	Broan	10	Each
23 81 26	Split-System Air Conditioners	Fan Assembly	Capacitor (SP100)	Broan	1	Each
23 81 26	Split-System Air Conditioners	Fan Assembly	Cover	Broan	1	Each
23 81 26	Split-System Air Conditioners	Fan Assembly	Blower Assembly Complete (SP100) (includes B10 thru B16)	Broan	1	Each
23 81 26	Split-System Air Conditioners	bolt	M8 Wall-Fixing Bolts	Home Depot	4	Each
23 81 26	Split-System Air Conditioners	bolt	M8 x 30mm Bolt	Crown	4	Each
23 81 26	Split-System Air Conditioners	bolt	M8 x 20mm Bolt	Home Depot	2	Each
23 81 26	Split-System Air Conditioners	Washer	20mm Washer	Home Depot	4	Each
23 81 26	Split-System Air Conditioners	Washer	25mm Washer	Pro-Bolt	8	Each
23 81 26	Split-System Air Conditioners	Nut	M8 Nut	Home Depot	6	Each
23 81 26	Split-System Air Conditioners	Washer	Anti-Vibration Washer	MiSUMi	4	Each
23 81 26	Split-System Air Conditioners	Screws	TAPCON 1/4in x 3-1/4in (75 Pack)	Home Depot	1	Each
23 81 26	Split-System Air Conditioners	Spacer	Wall-Spacer	Northline Express	2	Each
23 84 13	Humidifiers	Sprayer nozzle	0.6mm Nozzle	Team Supplied	2	Each
23 84 13	Humidifiers	pipng	1/4" OD x 0.15" ID Nylon tube	McMaster Carr		
23 84 13	Humidifiers	Solenoid valve	Solenoid Valve	McMaster Carr	2	Each
23 84 13	Humidifiers	Water shut off value	Shutoff Valve	McMaster Carr	1	Each
23 84 13	Humidifiers	Reduction fitting	Reduction Fitting	SharkBite	1	Each
23 84 13	Humidifiers	Drip pan	Dripper	Team Supplied	2	Each
23 84 13	Humidifiers	Air compressor	Thomas Air Pump	Gulf Controls	1	Each
23 84 13	Humidifiers	Muffler	Muffler	3D Printed	1	Each
23 84 13	Humidifiers	Pipe joints	Tee Connector	McMaster Carr	2	Each





23 84 13	Humidifiers	Pipe joints	NPT to PIC connector	McMaster Carr	2	Each
23 84 13	Humidifiers	Mounting	Enclosure	3D Printed	1	Each
23 84 13	Humidifiers	Mounting	Mounting Hardware	3D Printed	2	Each
23 84 13	Humidifiers	Pressure Regulator	Pressure Regulator	McMaster Carr	1	Each
<b>DIVISION 26 - ELECTRICAL</b>						
26 00 00	Electrical	Conduit	Electrical Metallic Tubing	Allied	300	ft
26 05 26	Electrical	Cable	12 AWG RHH/RHW/USE	Southwire	250	ft
26 05 26	Electrical	Cable	8 AWG RHH/RHW/USE	Southwire	250	ft
26 05 26	Electrical	Cable	6 AWG RHH/RHW/USE	Southwire	100	ft
26 09 17	Electrical	Air Pump Timing Control	Titan Controls 734110 Apollo 6 24-Hour Timer with 15 Minute Intervals, 120-volt	Titan Controls	1	each
26 24 16	Electrical	Breaker Panel ,200 A single phase	HOM3060M200PRBVP	Square D	1	Each
26 24 16	Electrical	Sub Breaker Panel ,125 A single phase	HOM816L125PC	Square D	2	Each
26 24 16	Electrical	Homeline Breaker 15 A, 240 V	HOM215CP	Square D	4	Each
26 24 16	Electrical	Homeline Breaker 100 A, 240 V	HOM2100CP	Square D	2	Each
26 24 16	Electrical	Homeline Breaker 30 A, 240 V	HOM230CP	Square D	2	Each
26 24 16	Electrical	Homeline Breaker 40 A, 240 V GFCI	HOM240GFI	Square D	1	Each
26 24 16	Electrical	Homeline Breaker 50 A, 240 V	HOM250CP	Square D	1	Each
26 24 16	Electrical	Homeline Breaker 20 A, 120 V CAFCI, GFCI	HOM120PDFC	Square D	7	Each
26 24 16	Electrical	Homeline Breaker 20 A, 120 V	HOM120CP	Square D	7	Each
26 24 16	Electrical	Homeline Breaker 15 A, 120 V	HOM115CP	Square D	7	Each
26 27 26	Wiring Devices	30 A Double-Pole Flush-Mount Single Outlet	R50-05207-000	Leviton	2	Each
26 27 26	Wiring Devices	20 A Tamper-Resistant Single Receptacle	TR1877W	Eaton	2	Each



26 27 26	Wiring Devices	20 A Tamper-Resistant Duplex Outlet	R52-00689-00W	Leviton	14	Each
26 27 26	Wiring Devices	15 A Tamper-Resistant Duplex Outlet	M22-T5320-WMP	Leviton	2	Pack
26 27 26	Wiring Devices	15 Amp 1-Gang Recessed Duplex Power Outlet	RR52-00689-00W	Leviton	1	Each
26 27 26	Wiring Devices	Outdoor Outlet Cover	ML450G	Taymac	4	Each
26 27 26	Wiring Devices	Range and Dryer Wall Plate	R52-80726-00W	Leviton	2	Each
26 27 26	Wiring Devices	1-Gang Midway Duplex Outlet Nylon Wall Plate	M52-00PJ8-0WM	Leviton	15	Each
26 27 26	Wiring Devices	Decora 3-Gang Screwless Wall Plate	R02-80311-00W	Leviton	2	Each
26 27 26	Wiring Devices	Aspire 2-Gang Screwless Wall Plate	9522WS	Eaton	1	Each
26 27 26	Wiring Devices	1-Gang Midway Single 1.406 in. Hole Wall Plate	R52-00PJ7-00W	Leviton	2	Each
26 27 26	Wiring Devices	Decora 4-Gang Wall Plate	R62-80412-00W	Thomas and Betts Corporation	2	Each
26 27 26	Wiring Devices	1-Gang 20 cu. in. PVC Old Work Box	B120R	Thomas and Betts Corporation	29	Each
26 27 26	Wiring Devices	2-Gang 25 cu. in. Non-Metallic Old Work Switch and Outlet Box	B225R-UPC	Thomas and Betts Corporation	2	Each
26 27 26	Wiring Devices	3-Gang 55 cu. in. Old Work Box	B355R	Thomas and Betts Corporation	2	Each
26 27 26	Wiring Devices	3-1/2 in. Hard Shell Old/New Work Ceiling Box	B225R-UPC	Thomas and Betts Corporation	7	Each
26 27 26	Wiring Devices	4-Gang 68 cu. in. Old Work Box	B468R	Thomas and Betts Corporation	2	Each
26 27 26	Wiring Devices	Decora 15 Amp Single Pole AC Quiet Switch	M32-05601-2WM	Leviton	7	Each
26 27 26	Wiring Devices	Skylark 1.5 Amp Single-Pole 3-Speed Combination Fan and Light Control	S2-LFSQH-WH	Leviton	5	Each
26 27 26	Wiring Devices	Z-Wave 960-Watt CFL-LED Indoor In-Wall On/Off Rocker Switch	12722	GE	2	Each



26 27 26	Wiring Devices	Z-Wave Wireless Keypad Controller	45631	GE	2	Each
26 27 26	Wiring Devices	SmartThings Hub	F-HUB-US-2	Samsung	1	Each
26 31 00	Photovoltaic Collectors	PV Panels	Hyundai 325W mono-crystalline	Hyundai	20	Each
26 31 00	Photovoltaic Collectors	PV Panels	Jinko 305W poly-crystalline	Jinko	9	Each
26 31 00	Photovoltaic Collectors	PV Connections	MC4 Connector 12 AWG	WindyNation	100	ft
26 31 00	Photovoltaic Collectors	Inverter	Sunny Boy 7700TL-US	SMA Solar Tech	1	Each
26 31 00	Photovoltaic Collectors	PV Rapid Shutdown	2014 NEC 690.12 Rapid Shutdown	SMA Solar Tech	1	Each
26 33 00	Battery Equipment	Battery Backup	13.2kWh, Li-ion, battery	Tesla	1	Each
26 50 00	Lighting	65W Equivalent Soft White 5/6 in. Retrofit Trim LED	backup 800672	Philips	8	Each
26 50 00	Lighting	60W Equivalent Vintage Soft White A19 Dimmable LED Light Bulb	461632	Philips	19	Each
<b>DIVISION 28 - ELECTRONIC SAFETY AND SECURITY</b>						
28 46 00	Smoke Alarm					
<b>DIVISION 32 - EXTERIOR IMPROVEMENTS</b>						
32 93 00	Plants	Grow Channel	HydroCycle 4" Pro NFT Series - 8'L Channel Only	Hydrocycle	6	8 ft
32 93 00	Plants	Grow Channel Lid	HydroCycle 4" Pro NFT Series - 8'L Lid Only w/1" Holes	Hydrocycle	6	each
32 93 00	Plants	Grow Channel End Cap	HydroCycle 4" Pro NFT Series - Solid End Cap	Hydrocycle	2	each
32 93 00	Plants	Grow Channel End Cap	HydroCycle 4" Pro NFT Series - End Cap w/Outlet 1" Slip	Hydrocycle	2	each
32 93 00	Plants	Grow Channel Joiner	HydroCycle 4" Pro NFT Series - Joiner	Hydrocycle	4	each
32 93 00	Plants	Plant Medium	1.5" Block Growth Medium Qty 45	Grodan	1	45 each
32 93 00	Plants	Rain Barrel	Rain Wizard 50	Good Ideas, Inc.	1	each
32 93 00	Plants					
32 93 00	Plants	PCM 37	PureTemp-37 (PCM 37) Insulation	PureTemp	3	gal
32 93 00	Plants	Downspout Diverter	Fiskars 15962 Rain Barrel Diverterpro Kit	Fiskars	1	each
32 93 00	Plants	Air Pump	Linear Piston SL22; 115 V, 60 Hz, 48 W	Pentairaes	1	each
32 93 00	Plants	Granular Activated Carbon	Fluval Carbon, 100-gram Nylon Bags - 3-Pack	Fluval	1	3 each



32 93 00	Plants	Reservoir Drum	Titan Controls - 55 Gallon Barrel W/Lid (707168)	Titan Controls	55	gal
32 93 00	Plants	Compost Tumbler	Compost Wizard Deuling Tumbler	Good Ideas, Inc.	1	each
32 93 00	Plants	Mesh Filter	50 Micron Screen Stainless T-316 Surgical Grade Filter (3x6 ")	Kindustrial	1	each