FENIX 2.0
TEAM CHILE / USM

FINAL DRAWINGS
2021
Floor Covering: Linoleum Floor, ROSARIO® (w/built-in lattices)
Washbasin: FLORIDA®
Interior Cladding: VESTO, ROBLE
Window: CAVA®
**DOORS DETAILS**

**DETAIL DOOR 1: LOCATED IN ROTATING WALL**

- Ext. Door 1
- Door 1

**DETAIL DOOR 2: THE PRINCIPAL AND SECOND ENTRANCE**

- Ext. Door 2
- Details Door 2

**DETAIL DOOR 3: BATHROOM & BEDROOM ENTRANCE**

- Ext. Door 3
- Details Door 3-4

---

**WINDOWS - Number of windows used**

<table>
<thead>
<tr>
<th>window 1</th>
<th>window 2</th>
<th>window 3</th>
<th>window 4</th>
<th>window 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**DOORS - Number of doors used**

<table>
<thead>
<tr>
<th>door 1</th>
<th>door 2</th>
<th>door 3</th>
<th>door 4</th>
<th>door 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

---

**Universidad Técnica Federico Santa María**

**Facultad de Arquitectura**

**Final Drawings SD 2020**

**Team Chile**

**Prototipo Fenix 2.0 Chile**

**ARCHITECTURAL WINDOWS AND DOORS**

**ESC-105**
EX UMBRA

Facultad de Arquitectura

FIRST FLOOR

FIRST FLOOR
YOU MUST PRINT ONE TIME EACH PART. AND IT IS NECESSARY TO DRAW A FOLDING THROUGH THE OPPOSITE FACE THROUGH THE LINES THAT INDICATE THE SMALL WHITE TRACES. THE PIECE FOLDS IN BOTH SENSES TO OBTAIN ITS FORM.

**WALL LINING AND SPLICE PIECE**

**HORIZONTAL TABLE**

**EXTENSION PIECE**

EACH PIECE IS A HORIZONTAL TABLE.

**FACE SEAT LOW AND INTERNAL STRUCTURE**

* IF THESE THREE IRONS ARE PRINTED, TWO SEATS, ONE HIGH AND ONE LOW, ARE OBTAINED.

* OPTIONAL X2

ISOMETRIC VIEW

+ REFERENCIAL SCALE

+3,66

+0,92

Bathroom (1)

Dinner / Living Room

Bedroom (1)

Vertical Orchard

Vertical Garden

Bathroom (2)

First Architectural Floor

Paperboard Furniture designed by Diego Eusebio. From Universidad de Chile. School of Architecture.

Paperboard Furniture designed by Diego Eusebio. From Universidad de Chile. School of Architecture.

Paperboard Furniture designed by Diego Eusebio. From Universidad de Chile. School of Architecture.

Paperboard Furniture designed by Diego Eusebio. From Universidad de Chile. School of Architecture.

Paperboard Furniture designed by Diego Eusebio. From Universidad de Chile. School of Architecture.

Paperboard Furniture designed by Diego Eusebio. From Universidad de Chile. School of Architecture.

Paperboard Furniture designed by Diego Eusebio. From Universidad de Chile. School of Architecture.

Paperboard Furniture designed by Diego Eusebio. From Universidad de Chile. School of Architecture.
Over-voltage protection
IGA
IDIF
40A
20A
10A
16A
Electric Meter
2x2,5+2,5
2x2,5+2,5
2x1,5+1,5
C4 Second Floor Lighting
C3 Second Floor Socket
C5 Kitchen
C2 First Floor Lighting
C1 First Floor Socket
C6 Bathrooms
C7 Suction Pump

**CHARGE TABLE**

<table>
<thead>
<tr>
<th>CIRCUIT</th>
<th>USE</th>
<th>POWER W</th>
<th>CURRENT A</th>
<th>CABLE</th>
<th>LINE SECTION mm²</th>
<th>DUCT mm</th>
<th>PROTECTION</th>
<th>CIRCUIT BREAKER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>First Floor Socket</td>
<td>1200</td>
<td>6</td>
<td>NYA* (H07V-U)</td>
<td>2,5</td>
<td>16</td>
<td>DIFFERENTIAL</td>
<td>16</td>
</tr>
<tr>
<td>2</td>
<td>First Floor Lighting</td>
<td>800</td>
<td>4</td>
<td>NYA* (H07V-U)</td>
<td>1,5</td>
<td>12</td>
<td>SIMPLE</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Second Floor Socket</td>
<td>1100</td>
<td>5</td>
<td>NYA* (H07V-U)</td>
<td>2,5</td>
<td>16</td>
<td>SIMPLE</td>
<td>16</td>
</tr>
<tr>
<td>4</td>
<td>Second Floor Lighting</td>
<td>400</td>
<td>2</td>
<td>NYA* (H07V-U)</td>
<td>1,5</td>
<td>12</td>
<td>SIMPLE</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>Kitchen</td>
<td>2200</td>
<td>11</td>
<td>NYA* (H07V-U)</td>
<td>2,5</td>
<td>16</td>
<td>DOUBLE</td>
<td>16</td>
</tr>
<tr>
<td>6</td>
<td>Bathroom</td>
<td>1200</td>
<td>6</td>
<td>NYA* (H07V-U)</td>
<td>2,5</td>
<td>16</td>
<td>DOUBLE</td>
<td>16</td>
</tr>
<tr>
<td>7</td>
<td>Suction Pump</td>
<td>700</td>
<td>3</td>
<td>NYA* (H07V-U)</td>
<td>2,5</td>
<td>16</td>
<td>DOUBLE</td>
<td>16</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>7600</strong></td>
<td><strong>37</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SYMBOLS**
- WALL LAMP
- SOCKET + SWITCH
- LIGHT
- SIMPLE SWITCH
- DOUBLE SWITCH
- SIMPLE SOCKET
- DOUBLE SOCKET
- ELECTRIC BOARD
- SOCKET JUNCTION BOX
- LIGHTS JUNCTION BOX

**ELECTRICAL DIAGRAM**
**Agua fría**

**JUAN ANTONIO RÍOS STREET**

**Facultad de Arquitectura**

**Universidad Técnica Federico Santa María**

**Producido por un Autodesk student version**

**Washbasin**

**Bathroom**

**Dishwasher**

**Garden**

**Weight: 150kg.**

**Accumulator (150 lts.)**

**Solar panel with water washing machine**

**PPR 20mm PIPES**

**Stopcock**

**Non-return valve**

**Thermostatic valve**

**Safety valve**

**Washing Machine**

**Level 1 NFT - Water supply system**

**Level 2 NFT - Water supply system**

**Level 3 NPT - Water supply system**

**Transversal Section - Water supply system**

**Longitudinal Section - Water supply system**

**Water Diagram**

**Symbology**

**AFS Pressure Calculation**

<table>
<thead>
<tr>
<th>Section</th>
<th>Ql (l/min)</th>
<th>Dint (mm)</th>
<th>Diameter (mm)</th>
<th>Diameter (mm)</th>
<th>Velocity (m/s)</th>
<th>Section L (m)</th>
<th>Section J (m)</th>
<th>J accessory (m)</th>
<th>J total (m)</th>
<th>Level (m)</th>
<th>Level (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>44.20</td>
<td>21.2</td>
<td>33</td>
<td>23.2</td>
<td>1.89</td>
<td>0.159</td>
<td>0.063</td>
<td>0.034</td>
<td>0.095</td>
<td>0</td>
<td>11.88</td>
</tr>
<tr>
<td>2-3</td>
<td>36.33</td>
<td>20.9</td>
<td>32</td>
<td>23.2</td>
<td>1.53</td>
<td>0.137</td>
<td>0.027</td>
<td>0.115</td>
<td>0.252</td>
<td>0</td>
<td>11.21</td>
</tr>
<tr>
<td>3-4</td>
<td>30.12</td>
<td>17.9</td>
<td>31</td>
<td>21.9</td>
<td>1.36</td>
<td>0.116</td>
<td>0.019</td>
<td>0.12</td>
<td>0.245</td>
<td>0</td>
<td>11.45</td>
</tr>
<tr>
<td>4-5</td>
<td>27.28</td>
<td>13.5</td>
<td>25</td>
<td>18</td>
<td>1.13</td>
<td>0.105</td>
<td>0.012</td>
<td>0.112</td>
<td>0.218</td>
<td>0</td>
<td>10.68</td>
</tr>
<tr>
<td>5-6</td>
<td>21.8</td>
<td>9.5</td>
<td>20</td>
<td>14.4</td>
<td>0.87</td>
<td>0.091</td>
<td>0.015</td>
<td>0.106</td>
<td>0.211</td>
<td>0</td>
<td>8.52</td>
</tr>
</tbody>
</table>

**Level 2 NPT**

**Level 3 NPT**

**Level 1 NPT**

**PP COLD WATER**

**Final Drawings SD 2020**

**Prototipo Fenix 2.0 Chile**

**Team Chile**

**PP Cold Water**

**ESC 150**