This specification includes Noble Niche, Curb, and Bench used in conjunction with tile and dimension stone installations. The content of this section should be combined with the specification for the tile and stone finishes including the setting materials required to complete the sheet membrane installation.

1.1 SUMMARY

A. Section Includes:
   1. Waterproof accessories for showers:
      a. Niche and bench.
      b. Curbs, solid and overlays.

1.2 REFERENCES


1.3 ACTION SUBMITTALS

A. Product Data: For each specified product.

B. LEED Submittals:

Include the next paragraph for LEED NC, LEED CS, and LEED for Schools.

1. Certificates for Credit MR 5: For regional materials, indicating location of manufacturer and point of extraction, harvest, or recovery. Include distance to Project, cost, and fraction by weight for regional components.

Include the next paragraph for LEED CI, only.

2. Certificates for Credit MR 5: For regionally manufactured [and regionally extracted and manufactured] materials indicating location of manufacturer [and point of extraction, harvest, or recovery]. Include distance to Project, cost, [and fraction by weight] for regional components.

Include the next paragraph for LEED NC, LEED CI, and LEED CS.

3. Data for Credit IEQ 4.1: For [adhesives] [and] [sealants], statement of VOC content.

Include the next paragraph for LEED for Schools.
4. Laboratory Test Reports for Credit IEQ 4.1: For [adhesives] [and] [sealants], indicating compliance with California Department of Health Services "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources using Small-Scale Environmental Chambers."

C. Shop Drawings:

1. Include details of niche, curb, and bench installation.

PART 2 - PRODUCTS

2.1 ACCESSORIES

A. Niche and Corner Niches: High density extruded polystyrene (XPS), lightweight, waterproof, and coated with acrylic polymer finish for thin set installation of ceramic or stone tile.


3. Physical Properties: For 1” thick foam unless otherwise noted.

<table>
<thead>
<tr>
<th>Property / Unit</th>
<th>Test Method</th>
<th>Unit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density, pcf (kg/m³)</td>
<td>ASTM D1622</td>
<td>2.0 (32)</td>
</tr>
<tr>
<td>Flexural Strength, psi (kPa), Vertical</td>
<td>ASTM D1621</td>
<td>25 (172)</td>
</tr>
<tr>
<td>Tensile Strength, psi (kPa), Vertical</td>
<td>ASTM D1623</td>
<td>75 (517)</td>
</tr>
<tr>
<td>Water/Vapor Transmission, Max Perm</td>
<td>ASTM E96</td>
<td>0.15 perms</td>
</tr>
<tr>
<td>R-Value @ 3/4 : thick XPS</td>
<td>ASTM C518</td>
<td>4.0</td>
</tr>
</tbody>
</table>


B. Curb: Preformed expanded polystyrene waterproof and coated with acrylic polymer finish for thin set installation of ceramic or stone tile.


3. Physical Properties: For 1” thick foam unless otherwise noted.

<table>
<thead>
<tr>
<th>Property / Unit</th>
<th>Test Method</th>
<th>Unit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density, pcf (kg/m³)</td>
<td>ASTM C303 or D1622</td>
<td>2.7 (43)</td>
</tr>
<tr>
<td>Compressive Strength min, psi (kPa)</td>
<td>ASTM D1621</td>
<td>50 (345)</td>
</tr>
<tr>
<td>Flexural Strength min, psi (kPa)</td>
<td>ASTM C203</td>
<td>90 (620)</td>
</tr>
<tr>
<td>Water/Vapor Transmission (perm / inch)</td>
<td>ASTM E96</td>
<td>2.0</td>
</tr>
</tbody>
</table>
C. Solid Bench: Expanded polystyrene (EPS), waterproof, and coated with acrylic polymer finish for thin set installation of ceramic or stone tile.

3. Physical Properties:

<table>
<thead>
<tr>
<th>Property / Unit</th>
<th>Test Method</th>
<th>Unit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density, pcf (kg/m³)</td>
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<td>ASTM C203</td>
<td>90 (620)</td>
</tr>
<tr>
<td>Water/Vapor Transmission (perm / inch)</td>
<td>ASTM E96</td>
<td>2.0</td>
</tr>
</tbody>
</table>

D. Shelf Bench: High density expanded polystyrene (XPS), lightweight, waterproof, and coated with latex modified finish on top and front and with aluminum frame, ready to install.

3. Physical Properties: Based on 1" thick material unless otherwise noted.

<table>
<thead>
<tr>
<th>Property / Unit</th>
<th>Test Method</th>
<th>Unit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density, pcf (kg/m³)</td>
<td>ASTM D1622</td>
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<td>Flexural Strength, psi (kPa), Vertical</td>
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<td>Tensile Strength, psi (kPa), Vertical</td>
<td>ASTM D1623</td>
<td>75 (517)</td>
</tr>
<tr>
<td>Water/Vapor Transmission, Max Perm</td>
<td>ASTM E96</td>
<td>01.5 perms</td>
</tr>
<tr>
<td>R-Value @ 3/4 : thick XPS</td>
<td>ASTM C518</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**PART 3 - EXECUTION**

3.1 EXAMINATION

A. Examine substrates for unacceptable conditions affecting installation.

B. Correct unacceptable conditions before installing accessories.

C. Ensure that the walls where shelf bench is to be installed are reasonably square.

3.2 INSTALLATION

Include this article when accessories installed on solid substrates including floors and walls.

B. Install niche and bench in accordance with manufacturer’s instructions.

3.3 SCHEDULE

A. Niche:
   1. Number [Indicate number].
   2. Size: [Indicate size].
   3. Location: [Insert location].

B. Curb:
   1. Size: [Indicate size].
   2. Location: [Insert location].

C. Bench:
   1. Number [Indicate number].
   2. Shape: [Indicate shape].
   3. Location: [Insert location].

END OF SECTION 093000