3. Product Description

**BASIC USE:** Merkrete 720 Marble Pro is a premium grade polymer modified portland cement medium bed thin set mortar for installing porcelain, ceramic tile and natural stone. It is ideal for large format, ceramic, porcelain gauged and irregular thickness stone tile installations.

**Uses:** 720 Marble Pro can be used as a thin set mortar for ceramic tile and natural stone for both walls and floors in interior and exterior applications. It is recommended for use in the thin set installation method for absorptive, semi-vitreous and vitreous tile over properly prepared masonry, concrete, cement backer board, and existing ceramic tile. In interior dry areas, it is suitable for gypsum board and plywood substrates. It is used as a thin set from 3/32" (2.4 mm) to 3/4" (19.1 mm) after the tiles have been properly beat in. 720 Marble Pro is suitable for both residential and commercial construction.

**Advantages**
- Easy adjustments against lippage
- Ideal for large format tile
- Freeze thaw stable
- Interior and exterior
- Bonds to most surfaces
- Available in both gray and white colors
- Exceeds ANSI A118.4 for latex portland cement mortar and ANSI A118.11 for EPG latex portland cement mortar.

**Suitable Substrates**
- Brick masonry
- Cementitious Backer Unit (CBU)¹
- Cement mortar beds
- Cement plaster
- Ceramic terrazzo
- Ceramic tile and stone
- Concrete
- Concrete masonry
- Exterior grade plywood²
- Gypsum wallboard²
- Merkrete waterproofing/crack isolation membranes

¹ Consult backer unit manufacturer for installation recommendations and to verify acceptability for exterior use
² Interior use only

4. Technical Data

**Applicable Standards:** Merkrete 720 Marble Pro meets or exceeds industry requirements ANSI A118.4 for latex portland cement mortar and ANSI A118.11 for EPG latex portland cement mortar. Follow ANSI A108.5 for installation.

**Properties**

<table>
<thead>
<tr>
<th>ANSI 118.4</th>
<th>ANSI Requirements</th>
<th>720 Marble Pro Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Time at 70° F</td>
<td>&gt; 50 minutes</td>
<td>&gt; 60 minutes</td>
</tr>
<tr>
<td>Glazed Wall Tile, 12 week shear</td>
<td>&gt; 300 psi</td>
<td>&gt; 460 psi</td>
</tr>
<tr>
<td>Impervious Mosaic, 28 day shear</td>
<td>&gt; 200 psi</td>
<td>&gt; 320 psi</td>
</tr>
<tr>
<td>Quarry Tile, 12 week shear</td>
<td>&gt; 150 psi</td>
<td>&gt; 400 psi</td>
</tr>
<tr>
<td>LEED v3 NC VOC</td>
<td>EQ Credit 4.1</td>
<td>720 Marble Pro Results</td>
</tr>
<tr>
<td>VOC</td>
<td>&lt; 65 g/l</td>
<td>0 g/l</td>
</tr>
</tbody>
</table>
**5. Installation**

**Surface Preparation:** All surfaces must be between 40°F (4°C) to 95°F (35°C) and structurally sound (deflection per industry standard of L/360 for ceramic tile and L/720 for natural stone), dry, clean and free from oil, grease, wax, paint, old adhesives, sealers and curing compounds. Any contaminants which inhibit proper bond must be removed. Substrate preparation should be completed following ANSI A108 AN-2 “General Requirements for Sub-surfaces.” All substrates should be plumb and true, surface deviation should not exceed 1/4” in 10’. Patching, leveling or areas requiring a mortar bed should be prepared using Merkrete underlayments. Movement (expansion) joints should be provided to comply with TCNA method EJ 171.

**Note:** Vinyl asbestos tile or any substrate containing asbestos must not be sanded or scarified. Must be handled according to EPA regulations.

**Substrates**

Plywood Substrates: Maximum joist spacing should be 16” on center. Plywood should be APA Grade Exposure 1. Maintain a gap of 3/16” between plywood underlayment sheets edges and all that abut walls, columns, posts and adjacent sheets. All plywood installations should be interior areas only and protected from exposure to moisture.

1. Plywood should be underlayment grade or better, two layers 1 1/8” total thickness for joint 16” OC.
2. Internal application only.

Cement Substrates: All concrete substrates should be cured a minimum of 28 days. Smooth steel troweled floors should be roughed up using mechanical chipping, scraping or shot blasting. Dampen porous or dry concrete prior to installation of tile. Do not leave puddles or standing water.

Cementitious Backer Unit: Follow backer unit manufacturer’s instructions.

**Mixing:** In a clean container, add approximately 5 quarts (4.7 liters) of clean potable water. Then add the contents of the 50 lb. (22.7 kg.) 720 Marble Pro mortar. Mix thoroughly by hand or with a slow speed mixer to a smooth, thick, trowelable consistency. Allow mortar to slake for approximately 10 minutes, and then remix before using. Remix without adding additional water or powder. Mortar consistency shall be such that when applied with the recommended notched trowel to the substrate, the ridges formed in the mortar do not flow or slump. During use, stir mortar mix occasionally. Do not temper with additional water. Do not add any additives to 720 Marble Pro.

**Application:** Apply mortar to the substrate with the flat side of the trowel, with enough pressure to firmly work into the surface. With a notched trowel, immediately follow with a heavier coat of material using the appropriate trowel and enough mortar to provide 100% coverage to the back of the tile. For some extruded or lug back tiles, back-buttering of tiles may be required. Do not spread more mortar than can be covered in 20 minutes or before the mortar skins over. It is advised that during the installation, remove a tile to insure the mortar has not skinned over and check the tile and substrate mortar coverage. Comb the mortar using an appropriate notched trowel in one direction. Place tiles in mortar, slide back and forth perpendicular to the ridges to insure proper coverage. Do not adjust tiles set in mortar after 15 minutes.
**Limitations:** Do not use 720 Marble Pro below 40° F (4° C) or above 95° F (35° C). Use caution; do not allow mortar to freeze for the first 72 hours. Do not soak tiles previous to installation. 720 Marble Pro must not be used to apply over asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, plastic, gypsum mortar beds or other unstable substrates. Improperly cured or wet plywood, particle board or strip wood are not suitable substrates. Installations that will be continually wet like swimming pools, fountains and gang showers, the completed installation should be cured a minimum of 14 days and allowed to dry before exposure to water. For white or light colored marbles use 720 Marble Pro White mortar. Some dimensional stone tile like resin backed, black, green and red marbles may warp when installed with water based setting materials. These water sensitive stone tiles should be installed with Merkrete Pro Epoxy. For use of 720 Marble Pro over additional substrates or situations not mentioned in these instructions, contact Merkrete Technical Services.

**Cleaning:** Uncured 720 Marble Pro can be cleaned from tiles, tools, and equipment with water. Water is all that is needed to remove any uncured mortar from tiles, tools and equipment.

**Coverage:**

<table>
<thead>
<tr>
<th>RECOMMENDED NOTCH SIZE</th>
<th>APPROXIMATE COVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 mm x 6 mm</td>
<td>65 – 75 ft²</td>
</tr>
<tr>
<td>6 mm x 10 mm</td>
<td>55 – 65 ft²</td>
</tr>
<tr>
<td>12 mm x 12 mm</td>
<td>35 – 45 ft²</td>
</tr>
</tbody>
</table>

*Coverage depends on trowel notch size, substrate and job conditions.

6. **Availability**

Merkrete 720 Marble Pro is available at leading tile houses and construction distributors. Contact Merkrete or visit our web site for the name of the nearest dealer at www.merkrete.com.

7. **Warranty**

5 year, 10 year and Limited Lifetime system warranties are available. Contact Merkrete Technical Systems for specific warranty information.

8. **Maintenance**

None required, but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

9. **Technical Services**

Merkrete Systems maintains technical field representatives available throughout the country. Call Technical Services at 800-226-2424 for the nearest representative.

10. **Literature**

For the most up to date technical information (details, submittals, SDS, or data sheets), refer to our websites at www.parexusa.com or www.merkrete.com.