Merkrete’s 705 DUSTLESS Pro Set Plus, features new, innovative and patented DUSTLESS Technology (DLT) producing approximately 80% less dust than ordinary thin sets and is designed to promote cleaner working conditions and reduce mess. It uses less water and is creamier and easy to spread.

- For standard tile and stone installations
- Patented DUSTLESS Technology
- Bonds to cement and exterior-grade plywood surfaces
- Exceeds ANSI A118.4 and A118.11

1. Product Name
Merkrete 705 DUSTLESS Pro Set Plus

2. Manufacturer
Parex USA, Inc.
4125 E. La Palma Ave, Suite 250
Anaheim, CA 92807
866-516-0061
www.merkrete.com

3. Product Description
705 DUSTLESS Pro Set Plus is a standard-grade, single-component, polymer-modified thin-set mortar for most interior and exterior installations of tile. This mortar contains a blend of dry polymers, resulting in good adhesion to the substrate and tile. It can be used for both interior and exterior installations of tile in most residential and commercial floor and wall applications. 705 DUSTLESS Pro Set Plus meets or exceeds ANSI A118.4 and ANSI A118.11 requirements when mixed with water

Uses
- Most interior and exterior residential and commercial installations on floors and walls
- Installation of ceramic and porcelain tile, quarry tile, pavers, Saltillo tile, and most types of marble, granite and natural stone

Suitable Tile Types
- Brick and thin brick
- Cement-based precast terrazzo
- Impervious porcelain and glass tile
- Natural stone tile
- Vitreous, semi-vitreous or non-vitreous tile:
- Ceramic, mosaic, quarry, cement body tile

Suitable Substrates:
- Brick masonry
- Cement backer board
- Cement mortar beds
- Cement plaster
- Cement terrazzo
- Ceramic tile and stone
- Concrete
- Concrete masonry
- Exterior grade plywood
- Gypsum wallboard
- Merkrete waterproofing and crack isolation membranes
- Merkrete Fracture Guard Uncoupling Mat

1 Consult cement backer board manufacturer for installation recommendations and to verify acceptability for exterior use

2 Interior use only

Packaging
50 lb. bag (22.7 kg.) 48 bags per pallet

Colors
Gray and White

Shelf Life
Maximum 15 months from date of manufacture in unopened package.

Limitations
- Do not use 705 DUSTLESS Pro Set Plus below 40º F (4º C) or above 95º F (35º C) and do not allow mortar to freeze for the first 72 hours.
- Do not bond directly to hardwood, Luan plywood, particle board, parquet, cushioned-back vinyl flooring, metal, fiberglass, plastic, OSB panels or other unstable substrates.
5. Installation

Surface Preparation

All surfaces must be between 40°F (4°C) to 95°F (35°C) and structurally sound (deflection not to exceed 1/360 of the span), 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’s Underlayments. Movement (expansion) joints should be provided to comply with TCA method EJ 171.

Substrates:

Plywood Substrates: Maximum joist spacing should be 16” on center. Plywood should be exterior grade only. 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.

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 the installation of tile. Do not leave puddles or standing water.

Cement Backer Board: Follow cement board manufacturer’s instructions.

Mixing

In a clean container, add approximately 5.5 quarts (5.2 liters) of clean potable water. Then add the contents of the 50 lb. (22.7 kg.) 705 DUSTLESS Pro Set Plus mortar. Mix thoroughly by hand or with a slow speed mixer to a smooth, thick, trowelable consistency. Allow mortar to slake for approximately 15 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 latex liquid to 705 DUSTLESS Pro Set Plus.

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. Some extruded or lug back tiles require 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 (NTCA “Trowel and Error” method) to insure proper coverage. Do not adjust tiles set in mortar after 15 minutes.

4. Technical Data

Applicable Standards

American National Standards Institute (ANSI) — ANSI A108.5, A118.4 and A118.11 of the American National Standards for the Installation of Ceramic Tile ASTM International (ASTM)

- ASTM C627 Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester
- Resilient Floor Covering Institute - (RFCI) Recommended Work Practices for Removal of Resilient Floor Coverings
- Tile Council of North America (TCNA) - TCNA Handbook for Ceramic Tile Installation, TCNA Method EJ171
- ISO 13007-2

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Requirement</th>
<th>Typical Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pot Life</td>
<td>---</td>
<td>---</td>
<td>3 Hours</td>
</tr>
<tr>
<td>Open Time</td>
<td>A118.4 Section 5.3</td>
<td>E=30 Minutes</td>
<td>Pass</td>
</tr>
<tr>
<td>4 Week Shear Bond Strength</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glazed Wall Tile</td>
<td>A118.4 Section 5.1.5</td>
<td>&gt; 300 psi</td>
<td>300 - 350</td>
</tr>
<tr>
<td>Porcelain Tile</td>
<td>A118.6 Section 5.2.4</td>
<td>&gt; 200 psi</td>
<td>225 - 275</td>
</tr>
<tr>
<td>Quarry Tile to Plywood</td>
<td>A118.11 Section 4.1.2</td>
<td>&gt; 150 psi</td>
<td>250 - 300</td>
</tr>
</tbody>
</table>

LEED v3NC VOC (EQ Credit 4.1)

| VOC              |     | 0 g/l |

Environmental Consideration

Merkrete is committed to environmental responsibility in both products produced and in manufacturing practices. Use of this product can contribute towards LEED® v3 certification:

- Up to 2 points towards MR Credit 5, Regional Materials
- Up to 2 points towards MR Credit 4, Recycled Content
- Up to 1 point towards IEQ Credit 4.1, Low-Emitting Materials – Adhesives & Sealants

Data sheets are subject to change without notice. For latest revision, visit www.merkrete.com.
6. Availability and Cost
Merkrete 705 DUSTLESS Pro Set Plus is available at most leading tile distributors and installation shops. Contact Merkrete or visit our web site for the name of the nearest dealer at www.merkrete.com.

Cost
Contact your local Merkrete distributor or dealer in your area.

7. Warranty
5 year, 10 year and Limited Lifetime warranties are available. Contact Merkrete Technical Services or visit our web site for specific warranty information. Merkrete warrants that this product meets applicable ANSI standards in force at the time of manufacture.

8. Maintenance
Properly installed product requires no special maintenance.

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

10. Filing Systems
Merkrete architectural product information is available either in catalog form, or electronically on our website at www.merkrete.com. Additional product information is available from the manufacturer upon request.

Coverage:

<table>
<thead>
<tr>
<th>RECOMMENDED NOTCH SIZE</th>
<th>APPROPRIATE COVERAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>6mm x 6mm</td>
<td>65-75 ft²</td>
</tr>
<tr>
<td>6mm x 10mm</td>
<td>55-65 ft²</td>
</tr>
<tr>
<td>12mm x 12mm</td>
<td>35-45 ft²</td>
</tr>
</tbody>
</table>

Coverage depends on trowel notch size, substrate and job conditions. For more information visit www.merkrete.com/grout_calculator.shtml.