

MERKRETE

831 WR

Water Resistant Thin Set Adhesive for Tile and Stone

2. Manufacturer

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

3. Product Description

BASIC USE: Merkrete 831 WR thin set is a special water resistant polymer modified portland cement thin set for installing ceramic tile and natural stone. 831 WR thin set is the perfect solution for tile installations in high moisture areas such as commercial showers, laundry rooms, pool areas, or any areas where repeat and high moisture is prevalent.

Uses: 831WR Thin Set combines the attributes of a superior thin set adhesive with added water resistant protection. Unlike regular thin set mortars, the water resistant qualities add an increased defense against water infiltration to sub-floors and walls. It 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, vitreous tile and impervious ceramic tile such as porcelain tile and natural stone over properly prepared masonry, concrete, cement backer board, membranes and existing ceramic tile. 831 WR thin set is suitable for both residential and commercial construction. It is recommended for use in the thin set installation method for vitreous tiles like porcelain over low or non-absorptive subfloors, and membranes

Advantages

- Water resistant
- Increased moisture protection
- Freeze thaw stable
- Pool areas, Showers, and Steam Rooms
- Interior and exterior
- Bonds to most surfaces
- Ideal for porcelain tile
- Exceeds ANSI A118.4 for latex portland cement mortar

Suitable Substrates

- Brick masonry
- Cement backer board¹
- Cement mortar beds
- Cement plaster
- Cement terrazzo
- Ceramic tile and stone
- Concrete
- Concrete masonry
- Cutback adhesive²
- Exterior grade plywood³
- Merkrete membranes
- Post tension
- Vinyl composition flooring²

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

² Remove as much Cutback adhesive as possible, apply 626 Primer. If a Waterproof/Crack Isolation is needed use Hydro Guard 2000, Hydro Guard 1 or Hydro Guard SP-1

³ Interior use only

4. Technical Data

Applicable Standards: Merkrete Thin Set 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:

| ANSI 118.4 | ANSI Requirements | 831 WR thin set Results |
|---------------------------------|-------------------|-------------------------|
| Glazed Wall Tile, 48 hour shear | > 100 psi | > 260 psi |
| Impervious Mosaic, 28 day shear | > 200 psi | > 480 psi |
| LEED v3 NC VOC | EQ Credit 4.1 | 831 WR thin set Results |
| VOC | < 65 g/l | 0 g/l |

Packaging: 50 lb. bag (22.7 kg.) 48 bags per pallet | Color: White and Gray

Shelf Life: One year from manufacturing in sealed original container, when properly stored at room temperature, off the ground in a controlled, dry, heated area.

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 previous to 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.) 831 WR thin set 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 831 WR Thin Set.

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 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.




831 WR

Water Resistant Thin Set Adhesive for Tile and Stone

Limitations: 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 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.

Cleaning: Water is all that is needed to remove any uncured mortar from tiles, tools and equipment.

Coverage:

| RECOMMENDED NOTCH SIZE | | |
|---|---|---|
|  |  |  |
| 1/4" x 1/4" 6 mm x 6 mm | 1/4" x 3/8" 6 mm x 10 mm | 1/2" x 1/2" 12 mm x 12 mm |
| Ceramics | Quarry Tile, Rough Stone | Large Tile, Marble, Stone |
| APPROXIMATE COVERAGES | | |
| 65 – 75 Ft ² 6.0 – 6.9 m ² | 55 – 65 Ft ² 5.1 – 6.0 m ² | 35 – 45 Ft ² 3.2 – 4.2 m ² |

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

6. Availability

Merkrete 831 WR thin set is available at leading tile houses and construction distributors. Contact Merkrete for the name of the nearest dealer or visit our website at www.merkrete.com for a Distributor Directory.

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

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. Filing Systems

Merkrete architectural product information available either in catalog form, or electronically on our website at www.merkrete.com.



www.merkrete.com

Corporate Office

Parex USA, Inc.
4125 E. La Palma Ave., Suite 250
Anaheim, CA 92807
(866) 516-0061
Tech Support: (800) 226-2424

© Parex USA, Inc. • MK831WRDS 11/11



PAREXUSA
SUSTAINABILITY

PAREXUSA