720 RAPID SET

PREMIUM-GRADE, RAPID-SETTING,
POLYMER-MODIFIED PORTLAND CEMENT
MEDIUM BED MORTAR

- Easy adjustments against lippage
- Ideal for large format tile
- Freeze-thaw stable
- Interior and exterior
- Bonds to most surfaces
- Available in gray and white
- Exceeds ANSI A 118.4 for latex portland cement mortar and ANSI A118.11 for EPG latex portland cement mortar.
- Setting time: 60 – 90 minutes

Uses

720 Rapid Set can be used as a thinset mortar for ceramic tile and natural stone for interior and exterior wall and floor applications. It is recommended for use in the thinset 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 thinset from $^3/_{32}$" (2.4 mm) to $^3/_4$" (19.1 mm) after the tiles have been properly beat in. 720 Rapid Set is suitable for residential and commercial construction.

1. Product Name

720 Rapid Set

2. Manufacturer

Parex USA, Inc.
2150 Eastridge Ave, Riverside, CA 92507
866-516-0061 • www.merkrete.com

3. Product Description

Basic Use

Merkrete 720 Rapid Set is a premium-grade, rapid-setting, polymer-modified Portland cement medium bed mortar for installing porcelain, ceramic tile and natural stone. It is ideal for large format, ceramic, gauged porcelain and irregular-thickness stone tile installations.

Suitable Substrates

- Brick masonry
- Cement backer board[1]
- Cement mortar beds
- Cement plaster
- Cement terrazzo
- Ceramic tile and stone
- Concrete
- Concrete masonry
- Exterrior-grade plywood[2]
- Gypsum wallboard[2]
- Merkrete waterproofing/crack isolation membranes[2]

[1] Consult cement backer board manufacturer for installation recommendations and to verify acceptability for exterior use.
[2] Interior use only.

4. Technical Data

Applicable Standards: Merkrete 720 Rapid 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**	**720 Rapid Set Results**
Open Time at 70° F	> 20 minutes	> 35 minutes
Impervious Mosaic, 4-hour shear	> 50 psi	> 100 psi
Glazed Wall Tile, 12-week shear	> 300 psi	>528 psi
Impervious Mosaic, 28-day shear	> 200 psi	>350 psi
Quarry Tile, 12-week shear	> 150 psi	>350 psi
LEED v3 NC VOC	**EQ Credit 4.1**	**750 RS Thin Set Results**
VOC	< 65 g/l	<0 g/l

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

Shelf Life
Reference Parex USA Expiration Date of Products Technical Bulletin.

5. Installation

Surface Preparation
All surfaces must be between 40° F (4° C) and 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 that 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 underlayment. 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 before 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) 720 Rapid 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. Remix before using without adding more 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. Mix occasionally during use. Do not temper with additional water. Do not add latex liquid to 720 Rapid Set.

Application
Apply mortar to the substrate with the flat side of the trowel, keying the product in with enough pressure to firmly work into the surface. With a notched trowel, immediately follow with a heavier coat of material using enough mortar to provide 100% coverage for 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 ensure 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 ensure proper coverage. Do not move tiles set in mortar after 15 minutes.

Limitations
Do not install 720 Rapid Set below 40° F (4° C) or above 95° F (35° C). Use caution to not allow mortar to freeze for the first 72 hours. Do not soak tiles before installation. 720 Rapid Set 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. For 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 Rapid Set 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 using Merkrete Pro Epoxy. For use of 720 Rapid Set over other substrates or for situations not mentioned in these instructions, contact Merkrete Technical Services.

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

Coverage

RECOMMENDED NOTCH SIZE		
¼" x ¼" 6 mm x 6 mm	¼" x ⅜" 6 mm x 10 mm	½" x ½" 12 mm x 12 mm
Ceramics	Quarry Tile, Rough Stone	Large Tile, Marble, Stone
APPROXIMATE COVERAGES		
65 – 75 sq. ft. 6.0 – 6.9 m²	55 – 65 sq. ft. 5.1 – 6.0 m²	35 – 45 sq. ft. 3.2 – 4.2 m²

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

6. Availability

Merkrete 720 Rapid Set is available at leading tile houses and construction distributors. Contact Merkrete or visit our website for the name of the nearest dealer at www.merkrete.com.

7. Warranty

5-year, 10-year and Limited Lifetime warranties are available. Contact Merkrete Technical Services or visit our website 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. Literature

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