

## HYDROMENT® REFLEX®

### Ultra-Premium Latex-Modified Thin Set Mortar

#### PRODUCT DESCRIPTION

Hydroment® ReFlex® is a single-component, ultra-premium latex-modified mortar that has been developed in response to the need for an extremely tacky, flexible, and durable installation system. ReFlex is designed to continually exceed the challenges presented by the variety of absorption rates in today's highly specialized tiles (from impervious materials such as glass and porcelain tile, to highly absorptive materials such as white-bodied, Saltillo tiles) and difficult to bond to and deflecting/flexing substrates, such as concrete, plywood, cement backer board, cutback adhesive residue (dry only), ceramic/vinyl/VCT tile, as well as, flexing/deflecting substrates (up to L/240).

#### FEATURES & BENEFITS

- Extremely Tacky Consistency
- Extremely Flexible (deflection up to L/240)
- Extremely Durable
- Single-Component Latex-Modified (water-add only)
- Exceeds ANSI A118.4 and A118.11 Requirements
- Freeze/Thaw Stable
- For all tile absorption rates (from porcelain to saltillo)
- For Interior and Exterior Installations
- For Vertical and Horizontal Installations

#### PRODUCT USES

ReFlex Mortar is for interior or exterior installations to set all types of porcelain, saltillo, ceramic, granite, slate, marble, limestone, and dimension stone tiles. Use over properly prepared concrete; structurally-sound, exterior grade plywood (interior/dry use only); cementitious backer board; Ultra-Set® Advanced; Hydroment Gold™; Black-Top 90210™; and existing, well-bonded vinyl/VCT or ceramic tile.

#### DIRECTIONS FOR USE

Read and understand data sheet completely before beginning installation. Follow applicable ANSI and TCA installation standards.

#### TYPICAL PHYSICAL PROPERTIES

Open Time (@ 70°F)	> 70 minutes
Adjustability Time	40 minutes
Pot Life (@ 70°F)	1-2 hours
Initial Set (@ 70°F)	8-10 hours
Final Set (@ 70°F)	10-15 hours
Exceeds ANSI A118.4 and A118.11 requirements	
<b>Shear Strength, 28 Days</b>	
Porcelain Tile	576 psi (ANSI REQ 200)
Glazed Wall Tile	560 psi (ANSI REQ 300)
Quarry Tile	425 psi
Quarry to Wood*	300 psi (ANSI REQ 150)
28 Day Compressive Strength	3600 psi
All numbers represent minimum test results.	
* Wood failure (wood typically fails between 250-300 psi)	

#### SURFACE PREPARATION

All surfaces must be clean, dry and smooth; free of voids, projections, loose materials, oil, grease, sealers, curing compounds, waxes and all other surface contaminants that may inhibit proper bond.

#### MIXING

Using a slow speed mixer (< 150 rpm), mix 5 to 6 quarts of clean, potable water to 50 pounds of ReFlex. Mix to creamy consistency. Allow mixture to stand 15 minutes, and re-mix prior to application. Do not re-temper by adding more water. Mix with water only.

#### APPLICATION

Apply a thin coat of ReFlex with the flat edge of trowel to achieve a good mechanical bond to the substrate. Comb additional mortar with the appropriate size notched trowel. If any evidence of skinning or setting occurs, re-comb mortar with notched trowel. Apply mortar to an area no greater than can be tiled in 20 to 30 minutes. Apply tile using a twisting motion into a fresh bed of mortar to ensure maximum contact and bond. Periodically check back of tile to ensure proper transfer (interior applications—minimum 80% coverage; exterior, wet, or plywood applications—minimum 95% coverage). A finished mortar bed thickness of 3/32" to 1/8" is required.

**APPLICATION OVER PLYWOOD:** Maximum joist spacing shall be 16" on center. Plywood shall be Underlayment Exterior Grade or C-C Plugged Exterior Grade plywood (or better). If the existing floor is less than 1" thick, glue and nail 1 5/32" or 1/2" APA Underlayment Exterior Grade or C-C Plugged Exterior Grade plywood to the floor. Glue and nail using 5D or 6D (1 1/2" or 2") cement coated screw shank nails 6" on center along the panel edges and a maximum of 8" on center each way throughout the panel. Allow 1/8" gap between underlayment sheet edges and all areas that abut walls, drains, posts, etc., these areas shall be filled with mortar when tiles are installed. Clean and rough sand the plywood. Due to the limitations of plywood as a substrate, ReFlex is not intended for use on plywood in exterior, wet interior, or applications subject to heavy/commercial traffic.

**APPLICATION OVER EXISTING VINYL/VCT FLOORING & CUTBACK:** Vinyl must be clean and well-bonded to substrate. Do not install over cushion-backed or perimeter bonded sheet vinyl. Remove any loose pieces of vinyl, VCT flooring, or cutback adhesive residue (dry areas only). Ensure the exposed substrate is suitable for application.

**APPLICATION OVER EXISTING CERAMIC TILE:** Tile must be clean and well-bonded to substrate. Mechanical abrasion with a Carborundum disk, followed by a clear water wash is recommended. Installation must be thoroughly rinsed and dry before setting the new tile.

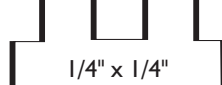
### RECOMMENDED TROWELS FOR MAXIMUM PERFORMANCE

Ceramic mosaics  
Mounted ceramics  
Coverage 85-100 ft<sup>2</sup>



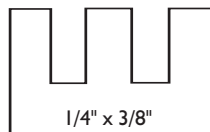
3/16" x 5/32"

4" x 4" & 4" x 8"  
Ceramic & pavers  
Coverage 70-80 ft<sup>2</sup>



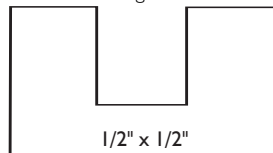
1/4" x 1/4"

6" x 6", 8" x 8" & 12" x 12"  
Ceramic Quarry tile  
Coverage 50-60 ft<sup>2</sup>



1/4" x 3/8"

8" x 8" & 12" x 12"  
Lugged back & Mexican paver tile  
Coverage 35-40 ft<sup>2</sup>



1/2" x 1/2"

Coverages shown are approximate and are given for estimating purposes only. Actual jobsite coverages will vary according to trowel size, tile size and thickness, job conditions, and setting practices.

### CURING

Keep all foot traffic off the installation until tile is firmly set (approximately 12 hours). Set times are dependent upon temperature and humidity.

### GROUTING

Depending on ambient, slab, and material temperatures, grouting can generally begin after 12 hours with any quality Hydroment grouting system. Allow 48 hours before grouting with Bostik EzPoxy™ or any 100% solids epoxy grout. Allow 24 hours before grouting with Bostik TruColor™ Pre-Mixed Grout or any urethane-based grout.

### CLEAN UP

Clean all tools and equipment with soap and water. Do not allow material to dry on surface of tile.

### PACKAGING

50 lb. (22.7 kg) Bags • 50 Bags/pallet  
Available in Gray or White formulations

### STORAGE/SHELF LIFE

Store in a clean, dry area at temperatures between 34°F and 100°F. Shelf life is one year from date of manufacturing.

### LIMITATIONS

- Do not use to install moisture sensitive stones (e.g., green marble)
- Do not use in installations where deflection exceeds L/240 (1" in 20 ft)
- Do not apply over oriented strand board, particle board, masonite, luaun, or similar unstable substrates.
- Do not use where hydrostatic pressure can occur.
- For marble and limestone, please refer to the Marble Institute of America's deflection recommendations.
- Application over cutback adhesive residue is limited to well bonded, dry areas only.



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### PLANT LOCATIONS

Temecula, CA 92590  
Conyers, GA 30207  
Paulsboro, NJ 08066



**LIMITED WARRANTY**  
Bostik, Inc. warrants that the product conforms with Bostik's written specifications and is free from manufacturing defects. A PURCHASER'S SOLE REMEDY FOR NONCOMPLIANCE WITH THIS WARRANTY SHALL BE THE REPLACEMENT OF THE PRODUCT OR REFUND OF THE PURCHASE PRICE. Purchasers may address their warranty claims to Bostik, Inc., 211 Boston St., Middleton, MA 01949, Attn: Customer Service or call Bostik at 1-800-726-7845. TO THE MAXIMUM EXTENT ALLOWED BY LAW, BOSTIK DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND LIABILITY FOR DIRECT, INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.