

# Product Information



**DURABOND**®

## D-70 ProFlex™ High Performance Extremely Flexible Mortar

### **Product Description:**

D-70 ProFlex™ Mortar is a high performance, extremely flexible, premium latex-modified, thin set used for interior or exterior installations to set glass, porcelain, 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; Durabond D-222™; existing, well-bonded vinyl/VCT or ceramic tile; cutback adhesive residue (dry only); and floors equipped with radiant heat. D-70 ProFlex Mortar has excellent sag resistance for vertical installations.

### **Product 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

### **Directions for Use:**

Read and understand the datasheet completely before beginning installation. Follow applicable ANSI, TCA and NTCA installation standards.

### **Surface Preparation:**

Surface 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 D-70 ProFlex Mortar. 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.

### **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 |                        |
| Shear Strength, 7 Days                       |                        |
| Ceramic Mosaic Tile                          | 576 psi (ANSI REQ 200) |
| Glazed Wall Tile                             | 403 psi (ANSI REQ 300) |
| Quarry to Wood*                              | 300 psi (ANSI REQ 100) |
| Shear Strength, 28 Days                      |                        |
| Ceramic Mosaic Tile                          | 623 psi (ANSI REQ 200) |
| Glazed Wall Tile                             | 557 psi (ANSI REQ 300) |
| Quarry to Wood*                              | 300 psi (ANSI REQ 150) |

All numbers represent minimum test results.

\* Wood failure (wood typically fails between 250 to 300 psi)

### **Application:**

Apply a thin coat of D-70 ProFlex Mortar 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 at least 3/32" 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 15/32" 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, D-70 ProFlex Mortar is not intended for use on plywood in exterior, wet interior, or applications subject to heavy/commercial traffic.



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**Application Over Existing vinyl/VCT Flooring:** 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 or flooring. Ensure the exposed substrate is suitable for application.

**Application Over Existing Ceramic Tile:** Tile must be clean and well bonded to the substrate. Mechanical abrasion with Carborundum disk followed by a clear water wash is recommended. Installation must be thoroughly rinsed and dry before setting.

**Application Over Cutback (Asphalt) Adhesive Residue:** Remove as much cutback residue as possible with a sharp razor scraper or similar tool. Sweep or vacuum to remove all loose adhesive and dust. Installation over cutback residue is limited to well bonded dry areas only. Note: Cutback adhesive residue should be completely removed by shot blasting in Heavy or Extra Heavy service requirements as defined by TCA guidelines for service requirements.

### **Grouting:**

Depending on ambient, slab, and material temperatures, grouting can generally begin after 12 hours with any quality Durabond grout. Allow 48 hours before grouting with any 100% solids epoxy grout. Allow 24 hours before grouting with any urethane-based grout.

### **Curing:**

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

### **Clean-Up:**

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

### **Packaging:**

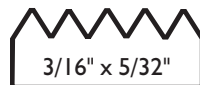
DURABOND D-70 is available in 50 lb. bags in gray and white formulas. For the name of the distributor nearest you contact Customer Service at 1-800-7BOSTIK.

### **LIMITED WARRANTY**

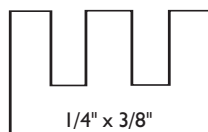
Bostik, Inc. warrants that the product conforms with Bostik's written specifications and is free from manufacturing defects. A PURCHASER'S SOLE REMEDY FOR NONCOMPLIANCE WITH THIS WARRANTY SHALL BE THE REPLACEMENT OF THE PRODUCT OR REFUND OF THE PURCHASE PRICE. Purchasers may address their warranty claims to Bostik, Inc., 211 Boston St., Middleton, MA 01949, Attn: Customer Service or call Bostik at 800/7BOSTIK. 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.

## **RECOMMENDED TROWELS FOR MAXIMUM PERFORMANCE**

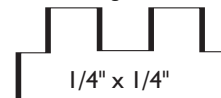
Ceramic mosaics  
Mounted ceramics  
Coverage 85-100 ft<sup>2</sup>



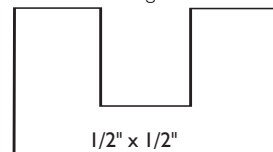
6" x 6", 8" x 8" & 12" x 12"  
Ceramic Quarry tile  
Coverage 50-60 ft<sup>2</sup>



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



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



*It is the responsibility of the user to determine the condition and suitability of all surfaces before application*

### **Limitations:**

- Do not use for installing moisture sensitive stones (i.e. green marble).
- Do not use in installations where deflection exceeds L/240 (1" in 30').
- Natural stone such as marble, limestone & travertine may not tolerate deflection in excess of L/720. Refer to the Marble Institute of America Design Manual for details on specific types of stone.
- Cutback adhesive residue should be completely removed by shot blasting in Heavy or Extra Heavy service requirements as defined by TCA guidelines for service requirements.
- Do not apply over oriented strand board (OSB), Masonite, particleboard, luaun, or similar unstable substrates.
- Do not use where hydrostatic pressure can occur.
- Due to the limitations of plywood as a substrate, D-70 ProFlex Mortar is not intended for use on plywood in exterior, wet interior, or applications subject to heavy/commercial traffic.

## **PLANT LOCATIONS**

TEMECULA, CA 92590

CONYERS, GA 30207

PAULSBORO, NJ 08066

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