



# 1900™

## EPOXY MODIFIED GROUT & MORTAR ADMIXTURE

### KEY FEATURES

- Excellent workability
- Easy clean-up
- Superior chemical resistance

### DESCRIPTION

Bostik® 1900™ Epoxy Modified Grout and Mortar Admixture, when mixed with Bostik Hydroment® Ceramic Tile Grout™ Sanded, is for interior and exterior installations to set and/or grout all ceramic, porcelain, quarry, granite, slate, marble, limestone, and dimension stone tiles. Exceeds ANSI A118.8.

### AS A SETTING SYSTEM

- Superior shear strengths (to all substrates common to ceramic tile installations)
- Exceptional bond/shear strength to plywood
- Superior flexural and tensile strengths
- Superior compressive strength
- Superior freeze/thaw resistance
- Superior chemical resistance (to dilute acids, household foods and cleaners, food waste, de-icing salts, gasoline, diesel fuel and other hydrocarbon solvents)
- Excellent workability
- Convenient/easy to use

### AS A GROUTING SYSTEM

- Superior compressive strength
- Superior flexural and tensile strengths
- Superior chemical resistance (to dilute acids, household foods and cleaners, food waste, de-icing salts, gasoline, diesel fuel and other hydrocarbon solvents)
- Excellent workability
- Easy clean-up
- Can be used with all Bostik grout colors (except white)
- Bostik Hydroment® Ceramic Tile Grout™ Sanded, when mixed with Bostik 1900, will appear darker and richer in color than when mixed with Bostik latexes or water.

### PRODUCT USES

1900™ Epoxy Modified grouting and setting systems are ideally suited for commercial or residential kitchens; counter tops and back splashes; restaurants; bathrooms; malls; concourses; service



garages; food processing or packaging plants; or anywhere stain and chemical resistance or superior shear/bond strengths are required.

### AS A MORTAR

When used with Bostik Hydroment® Ceramic Tile Grout™ Sanded, 1900™ is designed for interior and exterior installations to set all ceramic, quarry, porcelain, granite, slate, cultured marble, pre-cast terrazzo and dimension stone tile. Use over properly prepared concrete; structurally sound, exterior grade plywood (interior/dry

### TYPICAL PHYSICAL PROPERTIES

Open Time at 70°F (21.1°C)	1 hour
Adjustability at 70° F (21.1°C)	1 hour, 30 minutes
Pot Life at 70° F (21.1°C)	2 hours
Initial Set at 70° F (21.1°C)	5 hours, 30 minutes
Final Set at 70°F (21.1°C)	9 hours
7 Day Compressive Strength	3,950 psi
28 Day Compressive Strength	6,000 psi
7 Day Tensile Strength	492 psi

### SHEAR STRENGTHS (PSI):

	1 Day	7 Day	28 Day
Glazed Wall Tile	240 psi	439 psi	600 psi
Ceramic Mosaic Tile	128 psi	378 psi	387 psi
Quarry Tile	179 psi	372 psi	475 psi
Glazed to Wood	–	251 psi	300 psi
Quarry to Wood*	–	263 psi	280 psi

\* Minimum shear values due to failure of wood substrate.

use only); cementitious backer board; Bostik Ultra-Set® Advanced; and existing, well bonded vinyl/VCT or ceramic tile.

**NOTE:** Not for use with moisture sensitive stone.

## AS A GROUT

When used with Bostik Hydroment® Ceramic Tile Grout™ Sanded, 1900™ is designed for interior or exterior installations to grout all ceramic, quarry, porcelain, granite, slate, cultured marble, structurally glazed tile, pre-cast terrazzo and dimension stone tiles where joint width is 1/8" to 1/2".

## INSTALLATION

Read and understand technical and safety data sheets completely before beginning installation. Follow applicable ANSI, NTCA and TCNA installation standards. Refer to [www.bostik/us](http://www.bostik/us) for the most recent product information and safety data sheet prior to installation.

## USE AS A SETTING SYSTEM

### 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. For best results, surface, mortar, and tile should be at room temperature (70°F/21°C to 75°F/ 23.8°C). Do not apply at temperatures below 60°F (15.5°C) or above 85°F (29.4°C).

### MIXING

Using a slow speed mixer (<150 rpm), separately mix Bostik 1900™ Emulsion Resin (Part A) and then Bostik 1900™ Hardener (Part B). Mix Resin (Part A) with equal volume of Hardener (Part B) until completely and thoroughly mixed. Slowly add required amount of Bostik Hydroment® Ceramic Tile Grout™ Sanded – 25 lbs. for single unit and mix until a smooth, uniform consistency is achieved. Allow mixture to stand 15 minutes, and re-mix prior to application. Do not retemper by adding more liquid.

### APPLICATION

Apply a thin coat of properly mixed Bostik 1900™ Modified Mortar with the flat edge of trowel to achieve a good mechanical bond to the substrate. Comb additional mortar with the appropriate size notch 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 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 (1½" 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, Bostik 1900™ Modified Mortar is not intended for use on plywood in exterior, wet interior, or applications subject to heavy/commercial traffic.

**APPLICATION OVER EXISTING VINYL/VCT FLOORING:** Vinyl must be clean, wax-free 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 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.

### CLEAN-UP

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

### CURING

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

## USE AS A GROUTING SYSTEM

### SURFACE PREPARATION

Ensure tile is firmly set and mortar completely dry before grouting. Remove all spacers, debris or adhesive from tile joints. Application of a grout release agent may be necessary to prevent staining of tile.

### MIXING

Using a slow speed mixer (<150 rpm), separately mix 1900™ Emulsion Resin (Part A) and then 1900 Hardener (Part B). Mix Resin (Part A) with equal volume of Hardener (Part B) until completely and thoroughly mixed. Slowly add required amount of Bostik Hydroment® Ceramic Tile Grout™ Sanded – 25 lbs. for Regular Unit and mix until a smooth, uniform consistency is achieved. Allow mixture to stand 15 minutes, and re-mix prior to application. Do not re-temper by adding more liquid.

### APPLICATION

Lightly moisten tile with clean, damp sponge before grouting. Spread grout over the face of the tile using a rubber grout float. Work grout back and forth at a 45° angle to the face of the tile to ensure complete filling of the joints. Remove excess grout by holding the rubber float at a 90° angle working diagonally across the face of the tile.




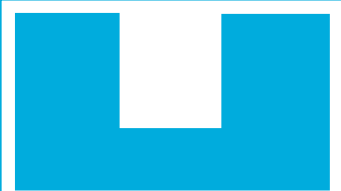
### INITIAL CLEANING

Depending on humidity and temperature, begin initial cleaning after grout becomes firm, usually 45 to 60 minutes. Using a slightly dampened sponge, clean tile by working in a diagonal motion to the grout joints. Rinse sponge frequently using two pails of water, one for rinsing out the heavy residue and the other for rinsing the sponge with clean water. Avoid cleaning with excessive water as it will cause shade variations or efflorescence.

### FINAL CLEAN UP

Depending on humidity and temperature, begin final clean up approximately 1 hour after initial cleaning. Using a damp nylon scrub pad (i.e.: 3M Doodlebug®), wipe diagonally across the face of the tile. Change water and rinse pad frequently to minimize the build up of grout haze. Never use acid cleaners as they may result in irreversible damage to the grout or tile.

## RECOMMENDED TROWELS FOR MAXIMUM PERFORMANCE

Ceramic Mosaics Mounted Ceramics Coverage 80-90 ft <sup>2</sup> /unit	4" x 4" and 4" x 8" Ceramic & Pavers Coverage 60-70 ft <sup>2</sup> /unit	6" x 6" and 8" x 8" and 12" x 12" Ceramic & Quarry Tile Coverage 45-55 ft <sup>2</sup>	8" x 8" and 12" x 12" Lugged back & Mexican Paver Tile Coverage 25-35 ft <sup>2</sup>
 <b>3/16" X 5/32" V-Notch</b>	 <b>1/4" X 1/4" Square-Notch</b>	 <b>1/4" X 3/8" Square-Notch</b>	 <b>1/2" X 1/2" Square-Notch</b>

Trowel size is suggested to maximize transfer/coverage of mortar. Periodically check coverage during installation. Uneven substrate may require the use of either a leveling/patching material, or larger notched trowel for proper coverage of mortar.

## GROUT COVERAGE CHART

Tile Size	Pounds per 100 Square Feet				
	1/8"	3/16"	1/4"	3/8"	1/2"
1" x 1" x 1/4"	58	84	110	---	---
2" x 1" x 1/4"	44	67	83	---	---
2" x 2" x 1/4"	30	44	58	---	---
3" x 3" x 1/4"	20	30	39	---	---
4" x 4" x 1/4"	15	23	30	44	58
4" x 4" x 1/2"	31	45	60	89	116
4" x 4" x 3/4"	45	68	89	133	173
4" x 8" x 3/8"	17	26	34	50	65
4" x 8" x 1/2"	23	34	45	66	88
4" x 8" x 13/8"	63	84	123	184	241
6" x 6" x 3/8"	15	23	30	45	59
6" x 6" x 1/2"	20	31	40	60	79
6" x 6" x 3/4"	31	46	60	91	118
8" x 8" x 1/4"	8	11	15	22	30
8" x 8" x 3/8"	11	17	23	34	45
8" x 8" x 1/2"	15	23	31	45	60
10" x 10" x 3/8"	9	14	18	27	36
12" x 12" x 1/4"	5	8	10	15	20
12" x 12" x 3/8"	8	11	15	23	31
12" x 12" x 1/2"	10	15	20	31	40
16" x 16" x 1/2"	8	11	15	23	31
18" x 18" x 1/2"	7	10	14	20	27
24" x 24" x 1/2"	5	8	10	15	20

Figures above are based on filling the grout joint to full depth and can vary for actual coverage by 10%.

## TEST RESULTS: ANSI A118.10

(bonded waterproof membrane below thin set, tile and dimension stone installations)

4.1 Fungus Micro Organism	Resists	Pass
4.2 Seam Strength	8 lbs per inch	> 8 lb
4.3 Break Strength	170 psi	194 psi
4.4 Dimensional Stability	—	Pass
4.5 ASTM D9068 Waterproofness	—	Pass

## LIMITATIONS

- Bostik 1900™ Epoxy Modified Grout and Mortar admixture, when mixed with Bostik Hydroment® Ceramic Tile Grout™ Sanded, will appear darker and richer in color than when mixed with Bostik latexes and water.
- Do not mix with White Bostik Hydroment® Ceramic Tile Grout™ Sanded when using as a grout.
- Do not use for installing moisture sensitive stones (i.e. green marble)
- Do not use in installations where deflection exceeds L/360 (1" in 30 feet).
- Do not apply over oriented strand board, particle board, masonite, luaun, metal, fiberglass or similar unstable substrates.
- Do not use where negative hydrostatic pressure can occur.
- Due to limitations of plywood as a substrate, Bostik 1900™ Epoxy Modified Grout and Mortar Admixture is not intended for use on plywood in exterior, wet interior, or applications subject to heavy/commercial traffic.

## PACKAGING

Regular Unit: 48 fl. oz. of each Resin (Part A) & Hardener (Part B) for mixing 25 lbs. of Bostik Hydroment® Ceramic Tile Grout™ Sanded. For the name of a distributor nearest you, contact a Bostik Customer Service Representative at 1-800-726-7845.

## STORAGE/SHELF LIFE

Store in a clean, dry area at temperatures between 34°F (1.1°C) and 100 °F (37.7°C). Shelf life is one year from date of manufacturing.

## WARNING

CAN CAUSE SEVERE SKIN, EYE AND RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. Avoid contact with skin, eyes and clothing. Avoid prolonged exposure to vapors. Do not take internally. Keep containers closed. Use only with adequate ventilation. Wear protective clothing during handling. Wash thoroughly after handling and before eating. Do not reuse containers.

## KEEP OUT OF REACH OF CHILDREN

## FIRST AID TREATMENT

In case of contact, wash skin with soap and water. Flush eyes with clear water for 10 minutes and CALL A PHYSICIAN. If inhaled, remove to fresh air. If swallowed, call a Poison Control Center or doctor immediately.

## WARNING

This product contains a chemical known to the State of California to cause cancer, or birth defects, or other reproductive harm.

## SEE SAFETY DATA SHEET

**CHEMICAL EMERGENCY:** 800-424-9300 (USA),  
703-527-3887 (International)

**MEDICAL EMERGENCY:** 866-767-5089

## LIMITED WARRANTY

Limited Warranty found at [www.bostik.com/us](http://www.bostik.com/us) or call 800.726.7845. TO THE MAXIMUM EXTENT ALLOWED BY LAW, BOSTIK DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. UNLESS OTHERWISE STATED IN THE LIMITED WARRANTY, THE SOLE REMEDY FOR BREACH OF WARRANTY IS REPLACEMENT OF THE PRODUCT OR REFUND OF THE BUYER'S PURCHASE PRICE. BOSTIK DISCLAIMS ANY LIABILITY FOR DIRECT, INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES TO THE MAXIMUM EXTENT ALLOWED BY LAW. DISCLAIMERS OF IMPLIED WARRANTIES MAY NOT BE APPLICABLE TO CERTAIN CLASSES OF BUYERS AND SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. It is the buyer's obligation to test the suitability of the product for an intended use prior to using it. The Limited Warranty extends only to the original purchaser and is not transferable or assignable. Any claim for a defective product must be filed within 30 days of discovery of a problem, and must be submitted with written proof of purchase.

## BOSTIK HOTLINE

**Smart help**  
**1-800-726-7845**

**Bostik, Inc.**  
11320 W. Watertown Plank Road  
Wauwatosa, WI 53226  
[www.bostik.com/us](http://www.bostik.com/us)

