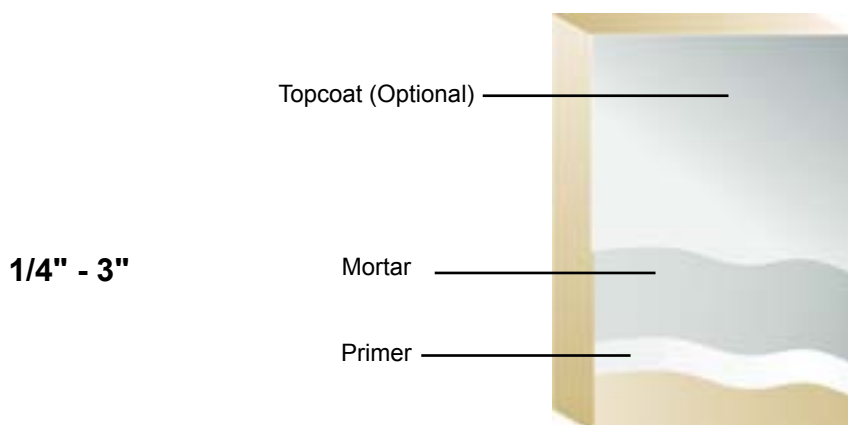




TPM® #723

Vertical Repair Mortar

General Polymers TPM #723 VERTICAL REPAIR MORTAR with a migratory corrosion inhibitor is a single component trowelable patching mortar designed for overhead and vertical use. TPM #723 VERTICAL REPAIR MORTAR is a special blend of fiber reinforced rapid setting cement with silica fume, polymeric compounds and aggregates which achieves structural properties in a short time, TPM #723 VERTICAL REPAIR MORTAR is ready to use with just the addition of clean water which activates the modified cement mortar.



Advantages

- Ideal for structural repairs
- Sets quickly, resists shrinkage
- Provides tenacious bond to rough, sound concrete
- Resists thermal shock, coefficient of expansion similar to concrete
- Fiber reinforced for high tensile strength
- High early strength gain
- Freeze/thaw resistant
- Can be applied in layers up to 3" thick
- May be used for tile setting beds

Uses

TPM #723 VERTICAL REPAIR MORTAR should be applied as a structural grade repair mortar in applications which require high compressive and flexural strength, including column and beam repair, tunnel and mine overheads and walls, cradles, and bridges. Can be used as an underlayment or repair material under other General Polymers products and systems.

Typical Physical Properties

Color	Gray	
Working Time @ 72°F (22°C) ±2	15 minutes	
Final Set Time	25 minutes	
Compressive Strength		
ASTM C 109	(psi)	(MPa)
2 hours	2000	13.79
24 hours	3000	20.68
7 days	7500	51.71
28 Days	8500	58.61
Flexural Strength		
ASTM C 293		
28 days	800	5.52
Tensile Strength		
ASTM C 190		
28 days	500	3.45
Bond Strength Slant Shear		
ASTM C 882 (Modified)		
28 days	2500	17.24
Freeze/Thaw, 10% NaCl		
50 cycles, 1 cycle per day		0% loss

Installation

General Polymers materials shall only be installed by approved contractors. The following information is to be used as a guideline for the installation of the **TPM #723 VERTICAL REPAIR MORTAR SYSTEM**. Contact the Technical Service Department for assistance prior to application.

Surface Preparation — General

General Polymers systems can be applied to a variety of substrates, if the substrate is properly prepared. Preparation of surfaces other than concrete will depend on the type of substrate, such as wood, concrete block, quarry tile, etc. Should there be any questions regarding a specific substrate or condition, please contact the Technical Service Department prior to starting the project. Refer to Surface Preparation (Form G-1).

Surface Preparation — Concrete

Concrete surfaces shall be abrasive blasted to remove all surface contaminants and laitance. The prepared concrete shall have a surface profile depending upon system selected. Refer to Form G-1. After initial preparation has occurred, inspect the concrete for bug holes, voids, fins and other imperfections. Protrusions shall be ground smooth while voids shall be filled with a system compatible filler. For recommendations, consult the Technical Service Department.

Temperature

Throughout the application process, substrate temperature should be 40°F – 90°F. Substrate temperature must be at least 5°F above the dew point. Applications on concrete substrate should occur while temperature is falling to lessen offgassing. The material should not be applied in direct sunlight, if possible. Protect material from freezing prior to installation.

Application Information — Surface Prep Profile CSP 3-5

VOC		MATERIAL	MIX RATIO	THEORETICAL COVERAGE PER COAT CONCRETE	PACKAGING
Standard Mix					
<50 g/L 0	Primer	3579 5310 Dry Silica 20-40 mesh	2:1 Full Broadcast	250-300 sq. ft. / mixed gal 100-200 lbs per 1,000 sq. ft.	3 or 15 gals 50 lbs
0	Mortar	TPM 723 plus 3.5 - 4 quarts potable water	50 lbs bag	0.45 cu. ft. or 21 sq. ft.	50 lbs bag

Primer

Mixing and Application

1. Add 2 parts 3579A (resin) to 1 part 3579B (hardener) by volume. Mix with low speed drill and Jiffy blade for three minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations.
2. 3579 may be applied via spray, roller or brush. Apply evenly, with no puddles, at a spread rate of 250-300 sq. ft. per gallon. Immediately, broadcast 5310 Dry Silica Sand (20-40 mesh) at 100-200 lbs per 1,000 sq ft.
3. Allow to cure a minimum of 4 hours.

Mortar

Mixing and Application

Mix thoroughly using a slow speed drill and a Jiffy mixer, paddle type mortar mixer or a pump/mixer combination. First add 3.5 quarts of mixing water and then the dry material. Add additional .5 quarts of water if needed for desired consistency. Overhead applications will require a stiffer consistency. Mix for 3-4 minutes. Place material immediately.

For hand trowel applications, a slurry mixture of **TPM #723** should be scrubbed into the surface to be repaired with a stiff bristled brush. Immediately apply the bulk mortar. Do not apply more bond coat than can be covered before it dries. Do not retemper the mortar. Apply material into a tacky, not dry primer. Although job conditions may vary widely, a general guide to application thickness per lift is: Overhead 1/4" - 1".

Vertical 1/4" - 3". Successive lifts will require care not to disturb the previous lift and to insure a monolithic bond between the two. If initial set has occurred on an earlier lift, roughening and pre-wetting of the surface will help secure a good bond. For additional information contact the Technical Service Department.

CAUTION:

- Do not add make-up water beyond the maximum detailed or loss of physical properties can occur.
- If this material is being used a sloping, fill or repair material under a General Polymers topcoat or floor system the surface should be abraded to remove laitance prior to coating.

Finishing

Finish to desired texture with a trowel or other suitable hand tool.

Curing

Use wet burlap, polyethylene or fog spray of water (3-4 hours) to prevent cosmetic plastic shrinkage cracking at the surface. Apply one coat of an ASTM C 309 curing compound.

Application Equipment

Trowel

Use steel finishing trowel or other suitable hand tool.

Cleanup

Clean up mixing and application equipment immediately after use. Use toluene or xylene. Observe all fire and health precautions when handling or storing solvents.

Safety

Refer to the MSDS sheet before use. federal, state, local and particular plant safety guidelines must be followed during the handling and installation and cure of these materials.

Safe and proper disposal of excess materials shall be done in accordance with applicable federal, state, and local codes.

CAUTION:

Contains Portland Cement and Silica. Avoid breathing dust. Cement powder or freshly mixed concrete, grout or mortar may cause skin injury. Avoid contact with skin; wash exposed areas promptly with water. If any cement powder or mixture gets into eyes, rinse immediately and repeatedly with water. Get prompt medical attention.

Material Storage

Store materials in a temperature controlled environment (50°F – 90°F) and out of direct sunlight.

Keep resins, hardeners, and solvents separated from each other and away from sources of ignition. One year shelf life is expected for products stored between 50°F – 90°F.

Maintenance

Occasional inspection of the installed material and spot repair can prolong system life. For specific information, contact the Technical Service Department.

Shipping

- Destinations East of the Rocky Mountains are shipped F.O.B. Cincinnati, Ohio.
- Destinations West of the Rocky Mountains are shipped F.O.B. Victorville, California.

For specific information relating to international shipments, contact your local sales representative.

Disclaimer

The information and recommendations set forth in this document are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product(s) offered at the time of publication. Published technical data and instructions are subject to change without notice.

Consult www.generalpolymers.com to obtain the most recent Product Data information and Application instructions.

Warranty

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams, NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



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