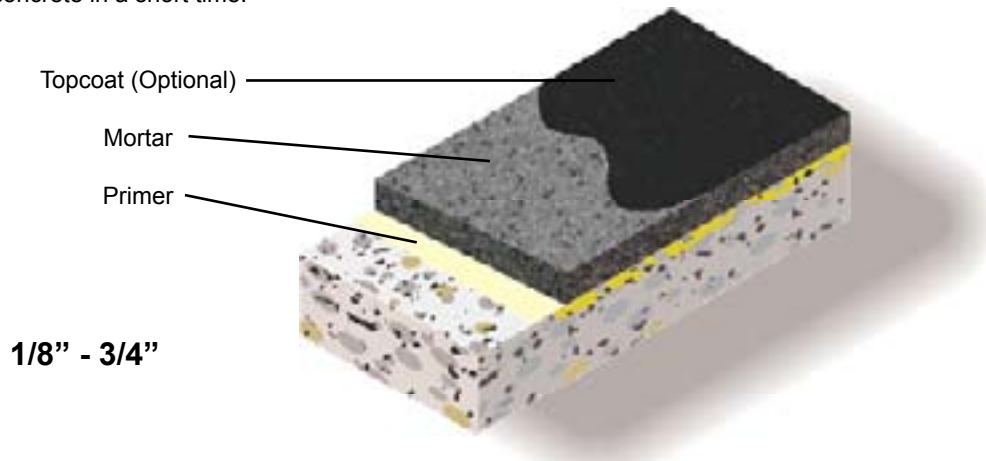




TPM[®] #721

Repair and Leveling Mortar

General Polymers TPM #721 REPAIR AND LEVELING MORTAR is a single component polymer-modified, shrinkage-compensated cement-based mortar. It is designed for horizontal concrete surfaces where high early strength gain is required. The blend of special cements, aggregates, fibers and polymers produce a highly durable mortar or concrete in a short time.



Advantages

- Sets quickly, resists shrinking
- Rapid installation capability
- Provides tenacious bond to sound concrete
- Resists thermal shock, coefficient of expansion similar to concrete
- Is ready for rubber-wheeled traffic in 2 hours
- Excellent freeze/thaw resistance
- Accepts epoxy coating after 24 hours

Uses

TPM #721 Repair and Leveling Mortar system should be applied to distressed or worn concrete surfaces/floors/steps prior to application of any coating systems. It is recommended as a repair material for numerous applications when rapid set is required and economy is desired. Can be used as an underlayment or repair material under other General Polymers products and systems.

Typical Physical Properties

Color	Gray	
Cure Time		
72°F, 50% RH	Recoat	24 hours
	Dry to Touch	30-40 minutes
	Full Cure	28 days
Working Time	10 minutes	
Initial Set Time @ 75°F (23.9°C)	15 minutes	
ASTM C 266		
Final Set Time	35 minutes	
Compressive Strength		
ASTM C 109		
	(psi)	(MPa)
2 hours	1,500	10.3
24 hours	3,500	24.1
28 Day Cure	6,000	41.4
Bond Strength		
ASTM C 882		
	(psi)	(MPa)
1 day	2,000	13.8
7 days	2,700	18.6
Freeze/Thaw, 10% NaCl		
25 cycles, 1 per day	0% loss	
Expansion/contraction	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 #721 REPAIR AND LEVELING 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 30 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 g/L 0	Mortar	TPM 721 plus 3 - 3.5 quarts potable water	50 lbs bag	50 sq. ft. @ 1/8"	50 lbs bag

VOC		MATERIAL	MIX RATIO	THEORETICAL COVERAGE PER COAT CONCRETE	PACKAGING
For Repairs Greater Than 3/4"					
<50 g/L	Primer	3579 5310 Dry Silica 30 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 g/L 0 0 0	Mortar	TPM 721 plus 3 - 3.5 quarts potable water Aggregate	50 lbs bag 25 lbs clean, well graded, coarse sand plus 3 - 3.5 quarts potable water	12 sq. ft. @ 3/4"	50 lbs

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 (30 mesh) at 100-200 lbs per 1,000 sq ft.
3. Allow to cure a minimum of 4 hours.

Mortar

Mixing and Application

Mix 1 - 50 lb. bag of TPM #721 with 3-3.5 quarts of clear water. Mix thoroughly using a mortar mixer or mortar box. Mix to a creamy mortar consistency. Add additional 0.5 quart of water if needed for desired consistency. Do not overmix; avoid whipping air into the mixture. Place material and trowel to the desired thickness. For applications over 3/4", add clean, coarse sand at the rate of 25 lbs per 50 lb bag. Protect from direct sunlight and wind. No curing compounds or curing procedures are required. For additional information contact General Polymers Technical Services Department.

Precautions

- If patches will receive considerable traffic, consider square cutting instead of feather edging to be assured of longer serviceable life of edges.
- TPM #721 is not a precision, nonshrink grout. For grouting needs, contact the Technical Service Department.
- TPM #721 should not be placed on substrates over 90°F or surfaces with temperatures less than 40°F.
- TPM #721 should not be placed in ambient temperatures under 40°F or when temperatures will be below 40°F for 24 hours after installation.
- Avoid applications where there would be exposure to standing water.
- 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.

Application Equipment

Trowel

Use steel finishing trowel

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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