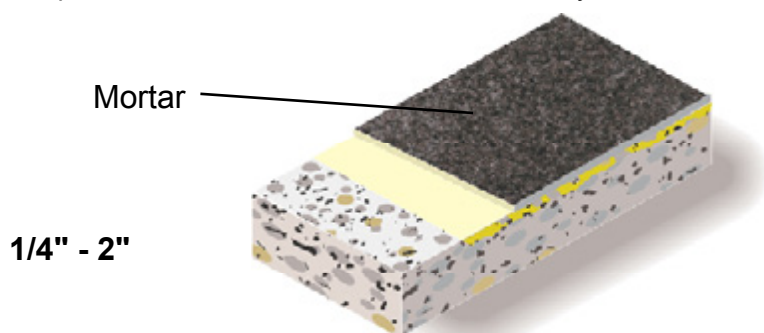




# TPM® #711

## High Early Strength Repair Mortar System

**General Polymers TPM #711 HIGH EARLY STRENGTH REPAIR MORTAR** is a non-shrink cementitious blend with exact ratios of graded aggregates and other ingredients that produce a strong, durable, rapid repair and resurfacing product. TPM #711 HIGH EARLY STRENGTH REPAIR MORTAR is easy and fast to use, simply add potable water and mix to desired consistency.



### Advantages

- Rapid, high early strength
- Reaches 2500 psi in 2 hours
- Modified with silica fume for reduced permeability
- Shrink resistant
- Resistant to deicing chemicals
- Wear resistant
- Freeze / thaw resistant
- Easy installation
- Excellent bond to concrete substrate
- Able to be extended with 30 lbs. peagravel
- Exceeds ASTM C 928 requirements

### Uses

- Manufacturing, storage and shipping areas
- Bridge decks and nosings
- Bridge high-rise railing grouting
- Distribution center and warehouse floors
- Parking garages, decks, ramps and lots
- Airport runways and runway light installations
- Highways and roadways
- Auto racetracks
- Commercial freezers
- Underlayment or repair material under other General Polymers products and systems

### Limitations

TPM #711 HIGH EARLY STRENGTH REPAIR MORTAR should not be used in temperatures below 40°F (4°C). TPM 711 should not be used in less than 1/4" thick. Areas for patching must be uncontaminated; precautions should be taken when sandblasting or when compressors are used that water and oil collection pots are used.

### Typical Physical Properties

Initial Set Time @ 72°F		15 minutes
Final Set Time @ 72°F		25 minutes
Recoat		4 hours
Compressive Strength @72°F		
ASTM C 109	2 hours	2,500 psi
	1 day	5,000 psi
	28 days	8,000 psi
Flexural Strength @72°F		
ASTM C 293	1 hour	250 psi
	24 hours	700 psi
Bond Strength		
ASTM C 882	1 day	2,000 psi
	7 days	2,500 psi
Freeze/Thaw	0.25%	50 cycles
Expansion & Contraction		0.0%
ASTM C 157		
Chloride Ion Permeability		
ASTM C 1202	28 days	Very Low (<1000 coulombs)

## 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 #711 HIGH EARLY STRENGTH 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 50°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
<b>Standard Mix 1/2" - 2" Thick Applications</b>					
<50 g/L	<b>Primer</b>	3579 5310 Dry Silica 20-40 mesh	2:1 Full Broadcast	160-200 sq. ft. / mixed gal 100-200 lbs per 1,000 sq. ft.	3 or 15 gals 50 lbs
0 g/L	<b>Mortar</b>	TPM 711 plus .85 gallons maximum potable water	50 lbs bag	12.5 sq. ft. @ 1/2" or .45 cubic feet	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 160-200 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

1. TPM 711 should be mixed in rotary drum or other suitable mechanical mixer. Coarse aggregate meeting ASTM C 33 should be used for pours greater than 2" in depth. If adding aggregate add one-half of the aggregate, then add measured amount of water to mixer, about .85 gallons per bag. Add TPM 711 to water and aggregate with mixer operating. Add remainder of aggregate. Mix one minute, then if necessary, add a small amount of water during the second minute of mixing to obtain desired consistency. Do not mix more material than can be placed in 15 minutes. Dump batch and immediately deliver TPM 711 mix to prepared pavement area. Clean mixer by adding water and allowing mixer to run. Level the TPM 711 to the surrounding pavement with an appropriate screed and before set, broom finish if necessary. If smooth finish is desired, trowel lightly before set.

### CURING:

Cure as soon as possible after the repaired area has hardened. For best results, saturate with water and cover with wet burlap and polyethylene. Curing compounds may be used when a water cure is not practical.

### Precautions

- DO NOT featheredge or use for patches less than 1/2" deep.
- In hot weather, protect TPM #711 from water evaporation by covering with polyethylene sheets, use cool mixing water, and protect applied material from direct sunlight.
- In cold weather, follow ACI suggestions and protect TPM #711 by covering with polyethylene sheets, use warm water and heat repair area surface prior to application if below 40°F.
- Do not add admixtures (accelerators or water reducers) or anti-freeze to TPM #711.
- 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.

## 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](http://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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