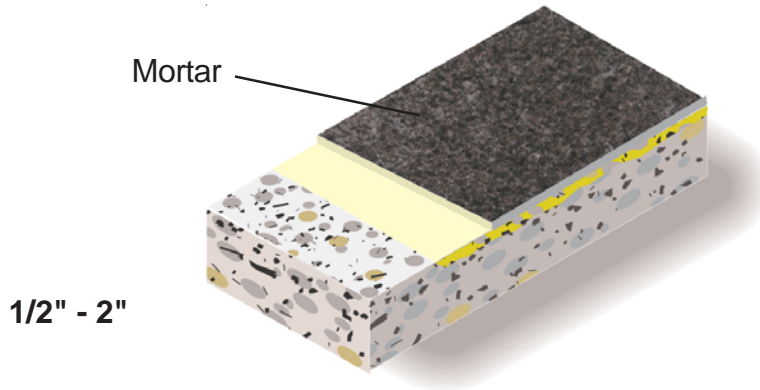




TPM® #711 High Early Strength Repair Mortar

General Polymers TPM #711 HIGH EARLY STRENGTH REPAIR MORTAR is a non-shrink cementitious blend with exact ratios of graded siliceous aggregates and other ingredients that produces 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

Typical Physical Properties

Initial Set Time @ 72°F	15 minutes
Final Set Time @ 72°F	25 minutes
Recoat	4 hours
Compressive Strength Mortar ASTM C 109	
2 hours	2500 ± 200 psi
24 hours	4500 ± 200 psi
7 day	7000 ± 200 psi
28 Day Cure	8000 ± 200 psi
Compressive Strength Concrete Mortar with coarse aggregate added ASTM C 39	
2 hours	2200 ± 200 psi
6 hours	3400 ± 200 psi
Flexural Strength ASTM C 293	
1 hour	250 ± 50 psi
24 hours	700 ± 100 psi
3 days	800 ± 100 psi
28 Day Cure	8000 ± 200 psi
Length Change ASTM C 157	0
Scaling Resistance ASTM C 672	0 rating, No scaling

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 equal to CSP3-5. 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. Applications on concrete substrate should occur while temperature is falling to lessen offgassing. The material should not be applied in direct sunlight. Proper curing should be conducted in accordance with ACI 308.

Application Information

Standard Mix - 1/2" - 2" - Thick Applications

Material	Mix Ratio	Theoretical Coverage Per Coat	Packaging
Primer 4772	1 part 4772 to 1 part clean water	300 sq. ft. per mixed gal	5 gal
TPM #711 Mortar	50 pound bag plus 3 - 3.5 quarts potable water	12.5 sq. ft @ 1/2"	50 lb polyethylene lined bags

For Repairs Greater Than 2"

Material	Mix Ratio	Theoretical Coverage Per Coat	Packaging
Primer 4772	1 part 4772 to 1 part clean water	300 sq. ft. per mixed gal	5 gal
TPM #711 Mortar	50 pound bag plus 3 - 3.5 quarts potable water	4 sq. ft @ 2"	50 lb polyethylene lined bags
Aggregate	Plus 25 pounds 3/8" clean, washed and dried pea gravel (May add up to 1 quart additional water)		

Primer

Mixing and Application

1. Pre-mix 4772 using a slow speed drill and a Jiffy mixer. Add 1 part 4772 to 1 part clean water and mix for one minute and until uniform. Apply primer by brush, roller or spray at the rate of 300 s.f. per mixed gallon immediately prior to applying mortar.

Mixing

Mix only an amount that can be placed and finished in 15 minutes. Place recommended amount of clean water into mortar mixer. Add **TPM #711**. Mix for 1-2 minutes. For applications over 1" add clean 3/8" pea gravel at the rate of 30 lbs per 50 lb bag. TPM #711 should be mixed in a rotary drum or other suitable mechanical mixer. Introduce measured amount of water to mixer, about 3 quarts per bag. If adding aggregate, add one half of the aggregate. Add 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. Dump batch and immediately deliver to prepared area. Clean mixer with water and allowing mixer to run, level with appropriate screed and broom finish before material sets, broom finish if necessary. If smooth finish if desired, trowel lightly before set. Do not retemper.

Curing - Option

Apply wet burlap, wet rags, etc. to finished repair area and cover with polyethylene, or apply a membrane curing compound approved by General Polymers. In emergency repair situations when proper curing is not possible, cover TPM #711 with polyethylene until final set and area is reopened to traffic.

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 antifreeze to TPM #711.

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. All applicable 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.

