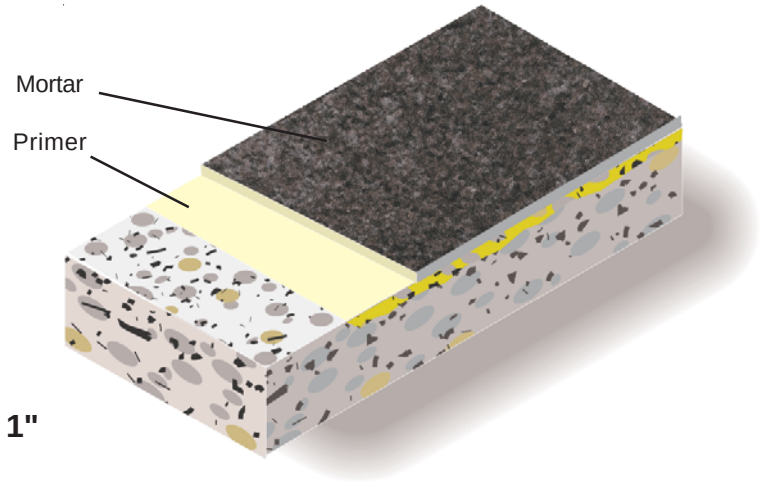
THE SHERWIN - WILLIAMS COMPANY

General Polymers®
High performance floor systems

TPM® #707
POLYFLO

General Polymers TPM #707 POLYFLO is a single component, cement based, industrial topping that requires only the addition of water to produce a self-leveling mortar.Ideally suited for leveling or resurfacing distresed, rough and unevern concrete floors.



1/4" - Greater than 1"

Advantages

- Easy mixing and placement
- Resistant to cracking
- Highly durable
- Handles heavy loads
- Pumpable or pourable for rapid installation
- Return to light foot traffic in 4 hours
- Return to service in 24 hours

Uses

- Restoring old worn concrete slabs
- Leveling new concrete slabs
- Resurfacing rain damaged slabs
- Interior and exterior environments
- Food and Beverage plants

Typical Physical Properties

Working Time			20 minutes
Initial Set Time @ 75ºF (23.9ºC)			1 hour
ASTM C 266			
Final Set Time			2 hours
Cure Time			
72ºF, 50% RH	Recoat		24 hours
	Dry to Touch		2 hours
	Full Cure		28 days
Compressive Strength			
ASTM C 109			
		(psi)	(MPa)
1 day		1,600	14.48
7 days		3,200	28.96
28 days		5,000	41.37
Flexural Strength		(psi)	(MPa)
ASTM C 293			
28 days		950	8.2
Bond Strength			
ASTM C 882			
modified 28 days		(psi)	
		1,750	
Tensile Strength			
ASTM C 190			
		(psi)	
28 days		850	

ASTM C = Mortar system

Installation

The following information is to be used as a guideline for the installation of the TPM #707 POLYFLO Flooring 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 General Polymers system filler. For recommendations, consult the Technical Service Department.

Temperature

Throughout the application process, substrate temperature should be 50ºF - 90ºF. Substrate temperature must be at least 5ºF above the dew point. Applications on concrete substrates should occur while temperature is falling to lessen offgassing. The material should not be applied in direct sunlight, if possible.

Application Information 1/4" minimum

Material	Mix Ratio	Theoretical Coverage Per Coat	Packaging
Primer 4772	1 part 4772 to 1 part clean water	250-300 sq. ft. per mixed gal	5 gal
TPM 707 Mortar	1 gal. clean water and 50 lbs of TPM #707 aggregate	24 sq. ft. @ 1/4" *	50 lb polyethylene lined bags

For Repairs Greater Than 1"

Material	Mix Ratio	Theoretical Coverage Per Coat	Packaging
Primer 4772	1 part 4772 to 1 part clean water	250-300 sq. ft. per mixed gal	5 gal
TPM 707 Mortar	1 gal. clean water and 50 lbs of TPM #707 aggregate	8 sq. ft. @ 1/4" *	50 lb polyethylene lined bags
Aggregate	25 pounds of clean washed and dried 3/8" pea gravel		

* Materials can be applied by pump and hand spread or screed rake.

Primer
Mixing and Application

1. Pre-wet concrete surface to saturated surface dry (SSD), conditions.

2. Premix 4772 using a slow speed drill and a Jiffy mixer. Add 1 part clean water and mix for one minute and until uniform. Apply primer by brush, roller or spray at the rate of 250-300 s.f. per mixed gallon immediately prior to applying mortar.

Mortar Topping
Mixing and Application

1. Mix 1 gallon of potable water to 1- 50 lb. bag of TPM 707 **POLYFLO**. **(Do not add water to material).** Mix thoroughly using a slow speed drill with Jiffy mixer, mortar mixer, or a pump/mixer combination approximately 3-5 minutes. Do not over mix; avoid whipping air into the mixture. Mix to a smooth batter consistency. Pour or pump self leveling mortar into wet primer at a minimum thickness of 1/4". For applications over 1/2" add clean 3/8" pea gravel at the rate of 25 lbs. per 50 lb bag. Allow material to self level. No curing compounds or curing procedures are required. For additional information contact General Polymers Technical Services Department.

NOTE: DO NOT mix more material than can be placed within 15 minutes of mixing at 75ºF. High temperatures will reduce working time if materials stiffens.

Precautions DO NOT apply TPM #707:
- Over fresh, plastic concrete
- Over unstructurally sound concrete substrate
- Where exposed to rain, snow or other continually or frequently wet conditions
- DO NOT use on floors that will be exposed to acids (or their salts) or other materials or liquids that may seriously and/or rapidly attack portland cement.
- DO NOT APPLY TPM #707 if base concrete slab is below 40ºF or when ambient temperature is expected to be below 40ºF during placement and/or before topping will take final set.

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 (50ºF - 90ºF) 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 50ºF - 90ºF.

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.