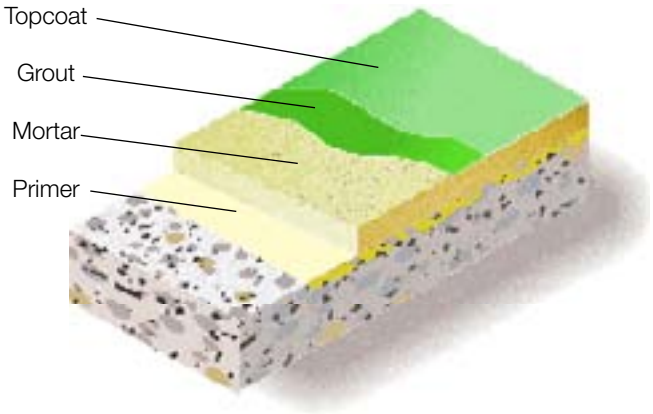
TPM® #700
POLYACRYLATE TOPPING

General Polymers TPM #700 POLYACRYLATE TOPPING SYSTEM is an acrylic polymer reinforced cementitious topping system. It is installed at a 1/4" nominal thickness and imparts greatly improved tensile, flexural and bond strengths to Portland cement compositions when compared to standard concrete. TPM #700 POLYACRYLATE TOPPING SYSTEM produces a workable, latex mortar compositions with excellent resistance to abrasion, chemical attack, salt penetration and degradation caused by thermal shock from steam cleaning and freeze / thaw conditions. TPM #700 POLYACRYLATE TOPPING SYSTEM and the concrete substrate to which it is applied exhibit very similar coefficients of expansion.



1/4"

Advantages

- Water-based, Low VOC
- Resistance to impact, wear and thermal shock
- Breatheable mortar for on or below grade installations
- High aggregate loading accommodates slope-to-drain, irregular substrates or canted surfaces
- Unaffected by most common industrial oils, mild acids and alkalies

Uses

- New construction and renovation projects of elevated or on-grade / below grade structures
- Restore spalled or damaged concrete
- Underlayment or repair material under other General Polymers products and systems

Limitations

- 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.

Typical Physical Properties

Color		Standard Colors Computerized custom color matching available upon request
Compressive Strength ASTM C 109	7 day air cure 28 day air cure	5,500 psi 6,300 psi
Tensile Strength ASTM C 190	14 day air cure 28 day air cure	500 psi 825 psi
Flexural Strength ASTM C 580	14 day air cure 28 day air cure	1,300 psi 2,000 psi
Adhesion ACI 503R		300 psi failure at concrete
Abrasion Resistance ASTM D 4060		0.1 grams lost
Resistance to Elevated Temperatures		No slip or flow at required temperature of 158ºF

ASTM C = Mortar System

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 #700 POLYACRYLATE TOPPING 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 minimum surface profile equal to 40-60 grit sandpaper.

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 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

VOC		MATERIAL	MIX RATIO	THEORETICAL COVERAGE PER COAT CONCRETE	PACKAGING
0	**Primer**	4772	Single Component	200 sq. ft. / mixed gal	5 or 6 gals
0 0 0 0 0	**Mortar**	4772 Portland Center 7410 - 1/16” aggregate 7310 - 1/8” aggregate 5310 Dry Silica Sand 80-120 mesh	Single Component 94 lbs 75 lbs 200 lbs 25 lbs	150 sq. ft. / 5 gals	5 or 6 gals 50 lbs bag
0 0 0	**Grout as slurry**	4772 Portland Cement Fine Sand	Single Component 1 part 1 part	160 sq. ft. / gal	5 or 6 gals
<50 g/L	**Topcoat**	3462	2:1	200 sq. ft. / gal	3 or 15 gals

Different optional seal coats - Consult individual Technical Data Sheet for mixing and application instructions.

3745 Self-Leveling Epoxy

Primer

Mixing and Application

1. Mix 4772 using a low speed drill and Jiffy mixer. Mix for one minute and until uniform, exercising caution not to whip air into the material.

2. Apply via brush, roller, or spray at a rate of 200 square feet per gallon (8 mils WFT). Coverage may vary depending upon porosity and surface texture of the substrate. Apply mortar over wet primer.

Mortar

Mixing and Application

1. Mix 4772 using a low speed drill and Jiffy mixer. Mix for one minute and until uniform, exercising caution not to whip air into the material.

2. Slowly add 94 pounds of Portland Cement, 200 lbs. of 7310 1/8" aggregate, 75 lbs. of 7410 1/16" aggregate, 25 lbs. of 5310 Dry Silica Sand (80-120 mesh). Mix until aggregate is thoroughly 'wet out'. Immediately dump mortar onto substrate and screed to desired thickness.

3. Compact and smooth the mortar using a hand or power trowel. DO NOT overwork the mortar system. Allow system to cure overnight.

Grout

Mixing and Application

1. Mix 4772 using a low speed drill and Jiffy mixer. Mix for one minute and until uniform, exercising caution not to whip air into the material.

2. Slowly add 1 part Portland Cement and 1 part fine sand to enough 4772 to make a slurry. Spread using a spring steel trowel to fill in all imperfections. Do not allow material to puddle.

3. Allow system to cure 3 hours and sand the floor prior to applying seal coat.

Topcoat

Mixing and Application

1. Premix 3462A (resin) and 3462B (hardener), separately using a low speed drill and Jiffy blade. Mix for one minute and until uniform, exercising caution not to whip air into the materials.

2. Add 3 parts 3462A (resin) to 1 part 3462B (hardener), mix with low speed drill and Jiffy blade for three minutes and until uniform. 3462 may be reduced with potable water up to 10%. DO NOT reduce product until after both components have been mixed together for 90 seconds. Apply material using a 3/8" nap roller at a spread rate of 110-300 sq. ft. per gallon to yield 5-15 mils WFT depending upon substrate. DO NOT EXCEED 15 MILS WFT.

3. Allow to cure for a minimum of 3-4 hours depending upon air movement, temperature and humidity before recoating.

Different optional seal coats - Consult individual Technical Data Sheet for mixing and application instructions.

Application Equipment

Brush / Roller

Use 1/4" phenolic core rollers and professional quality, medium stiff natural bristle brushes.

Trowel

Use steel finishing trowel or power trowel such as manufactured by Superior.

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 (50ºF – 90ºF) and out of direct sunlight.

Keep resins, hardeners, and solvents separated from each other and away from sources of ignition.

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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