

PRODUCT PROFILE

GENERIC DESCRIPTION Epoxy Modified Cementitious Mortar

COMMON USAGE A high-performance, aggregate reinforced material for surfacing, patching and filling voids and bugholes in concrete substrates. Generally topcoated with a variety of high-performance epoxies and polyurethanes for use in mild to aggressive exposures.

COLORS Greenish Gray

COATING SYSTEM

PRIMERS **Concrete:** Self-priming
CMU: Self-priming

TOPCOATS Series 1, 20, 22, FC22, 30, 46H-413, 61, 66, L69, N69, 84, 104, 120, L140, N140, 151-1051, 161, 201, 205, 222, 223, 224, 237, 238, 239, 262, 264, 270, 273, 280, 281, 282, 406, 434, 435, 436, 446.
Note: Refer to the applicable topcoat data sheet for color availability and additional information.

SURFACE PREPARATION

Prepare surfaces by method suitable for exposure and service. Refer to the appropriate topcoat product data sheet for specific surface preparation recommendations.

CONCRETE Allow new cast-in-place concrete to cure a minimum of 28 days at 75°F (24°C). Verify concrete dryness in accordance with ASTM F 1869 “Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride” (moisture vapor transmission should not exceed three pounds per 1,000 square feet in a 24 hour period), F 2170 “Standard Test Method for Determining Relative Humidity in Concrete using in situ Probes” (relative humidity should not exceed 80%), or D 4263 “Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method” (no moisture present). Prepare concrete surfaces in accordance with NACE No. 6/SSPC-SP13 Joint Surface Preparation Standards and ICRI Technical Guidelines. Abrasive blast, shot-blast, water jet or mechanically abrade concrete surfaces to remove laitance, curing compounds, hardeners, sealers and other contaminants and to provide a minimum ICRI-CSP 5 surface profile. Large cracks, voids and other surface imperfections should be filled with a recommended filler or surfacer.

CMU Allow mortar to cure for 28 days. Level protrusions and mortar spatter.

PAINTED SURFACES Not recommended.

ALL SURFACES Must be clean, dry and free of oil, grease and other contaminants.

TECHNICAL DATA

VOLUME SOLIDS 100% (mixed)

RECOMMENDED DFT **Parge Coat:** 1/16”-1/4” per lift; maximum 1/2” thickness
Feather-edge Capable: 1/32”

CURING TIME

Temperature	To Touch	To Recoat with Itself	To Topcoat
75°F (24°C) & 50% R.H.	3-4 hours	unlimited †	15 hours minimum

† **Note:** When the first application is equal to or greater than 1/4”, or the second application is equal to or greater than 1/4”, then the maximum recoat window with itself is 2 hours.

VOLATILE ORGANIC COMPOUNDS **Unthinned:** 0.15 lbs/gallon (19 grams/litre)

NUMBER OF COMPONENTS Three—Liquid: Part A and Part B Powder: Part C

PACKAGING KIT CONSIST OF:

	PART A (Liquid)	PART B (Liquid)	PART C (Cement-Sand)	When Mixed
Large Kit	1 gal plastic jug	1 qt can	42.75 lb bag	2.8 gallons (10.6 L)

NET WEIGHT Large Kit: 51.53 lbs (23.37 kg)

STORAGE TEMPERATURE Minimum 40°F (4°C) Maximum 110°F (43°C)
For optimum handling and application characteristics, all material components should be stored or conditioned between 70°F to 90°F (21°C to 32°C) 48 hours prior to use. Protect Parts A & B from freezing; discard if frozen. Protect Part C from moisture; store in dry environment off ground.

TEMPERATURE RESISTANCE (Dry) Continuous 170°F (77°C) Intermittent 200°F (93°C)

SHELF LIFE 12 months at recommended storage temperature.

FLASH POINT - SETA N/A

HEALTH & SAFETY This product contains chemical ingredients which are considered hazardous. Read container label warning and Material Safety Data Sheet for important health and safety information prior to the use of this product.
Keep out of the reach of children.

MORTARCLAD™ | SERIES 218

APPLICATION

COVERAGE RATES

Thickness	Large Kit
1/16" (1.6 mm)	72 sq ft (6.7 m ²) theoretical
1/8" (3.1 mm)	36 sq ft (3.3 m ²) theoretical
1/4" (6.4 mm)	18 sq ft (1.7 m ²) theoretical

Allow for application losses due to surface irregularities and substrate porosity.

MIXING

Pour liquid Part B into new empty bucket. Any remaining Part B shall be removed by adding 3-5 ounces of liquid Part A, re-sealing lid and shaking quart can for 5-10 seconds; pour contents into bucket. Add remaining liquid Part A into bucket and blend for 30 seconds. Under agitation, slowly sift Part C powder into the mixed liquids taking care not to deposit entire contents of Part C at once. Mix for two minutes or until the cement-sand is thoroughly wetted and a smooth consistency is achieved. **Important: Do not add additional Part C.**

Note: For repair of large bugholes, honeycomb and other cavities deeper than the recommended maximum thickness, 20-25 lbs of multi-purpose clean sand (conforming to ASTM C 33) or 15-18 lbs of locally purchased pea gravel (coarse aggregate) can be post added to create "dry-pack" mortar. One half inch to No. 8 size (12.5 mm to 2.36 mm) pea gravel conforming to ASTM C 33 is recommended. Contact your Tnemec representative or Tnemec Technical Services for additional information.

THINNING

Normally not required. For low-pressure spray application to transfer the Series 218, may thin up to 6 oz. for large kit. Use only potable water.

POT LIFE

1 hour at 75°F (24°C).

Caution: Thinning with high temperature water will significantly reduce the pot life. For best results, water temperature should not exceed 80°F (27°C).

SUBSTRATE CONDITIONING

The concrete substrate surface should be "pre-wet" or dampened with potable water to a Saturated Surface Dry (SSD) condition; the concrete is darkened by water but there is no pooling of water on the concrete. This can be done by using a Hudson pump-up sprayer or heavy nap roller cover dampened with potable water. **Note:** Do not over saturate the surface.

APPLICATION EQUIPMENT

Mortar Hawk, steel, stiff concrete finishing trowels, broad knives and rubber floats are recommended. For troweling inside and outside corners, the use of a radius or margin trowel is recommended.

Material can be transferred to the surface by utilizing hydraulic spray equipment (i.e. WIWA 410 9:1 or 600 12:1 pump) followed by troweling to seal the material. No special ACI 308 curing requirements - ambient cure only.

For a smoother finished appearance, trowel licks may be reduced by using a 1/4" nap roller cover lightly dampened with water over the sealed Series 218 material. **Note:** If white liquid is brought to the surface during this process, the Series 218 material is being overworked and/or oversaturated. Overworking or oversaturating the surface may have an adverse effect on the adhesion of subsequent coatings applied. Let Series 218 cure and remove surface deposit using concrete rub brick.

SURFACE TEMPERATURE

Minimum of 45°F (7°C), optimum 65°F to 80°F (18°C to 27°C), maximum of 90°F (32°C). The substrate temperature should be at least 5°F (3°C) above the dew point.

MATERIAL TEMPERATURE

For optimum application, handling and performance, the material temperature during application should be between 70°F and 90°F (21°C and 32°C). Temperature will affect the workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten pot life.

CLEANUP

Flush and clean all equipment immediately after use with warm water.

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