

# PPG RAVEN® 760 Epoxy Modified Cement

## DESCRIPTION

Three-component high performance epoxy-modified cement mortar resurfacing material.

## PRINCIPAL CHARACTERISTICS

- Proprietary epoxy-modified portland cement mortar.
- Can be spray or trowel applied
- May be polymer top-coated from 3 hours of cure time to up to 14 days without additional surface preparation
- Near zero VOCs (< 3 g/l)
- TYPICAL USES:
- Resurfacing concrete and masonry structures prior to polymer topcoat.

## COLOR AND GLOSS LEVEL

- Concrete gray
- Matte

## BASIC DATA AT 72°F (22°C)

Data for mixed product	
Number of components	Three
Mass density	2.3 kg/l (19.2 lb/US gal)
Volume solids	100%
VOC (Supplied)	EPA Method 24: 0.0 lb/US gal (0.0 g/l)
Dry to topcoat	3 hours

### Notes:

- Material should be stored in dry conditions, out of direct sunlight and at temperatures above 4°C (40°F) and below 43°C (110°F)
- The shelf life for the unmixed components (Part A, Part B and Part C) for this product is 12 months at 70°F (21°C)
- Curing time reflects ready for service time
- Refer to Application Guide for additional information

## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- Surfaces must be damp but free of excess or flowing water before application.
- A Saturated Surface Dry (SSD) condition is required.
- Surface must be clean, uniform, sound, and free from contamination (such as oil, grease, rust, scale, or deposits).
- Loose or protruding brick, mortar and concrete must be removed using a Mason's hammer, chisel or scraper

## Concrete / Masonry

- Abrade surface to achieve a surface profile equivalent to CSP 3 to CSP 5 in accordance with ICRI 310.2R-2013
- Abrasive blasting, shot blasting, high-pressure water cleaning, water jetting or a combination of methods may be used



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## **Substrate temperature and application conditions**

- Substrate temperature during application should be between 10°C (50°F) and 32°C (90°F)
- Ambient temperature during application should be between 10°C (50°F) and 32°C (90°F)

Note: For best results in limiting outgassing, apply to prepared concrete when the substrate temperature is stable or falling

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## **SYSTEM SPECIFICATION**

- Minimum application thickness is 1/16 in. (1.6 mm) per lift.
  - Maximum application thickness is 1/4 in (6.4 mm) per lift.
  - Additional thickness may be achieved by applying successive applications
  - Theoretical coverage is 83.4 ft<sup>2</sup> (7.7 m<sup>2</sup>) per 55 lb (25 kg) bag at 1/16 in (1.6 mm) thickness.
  - Theoretical coverage is 20.8 ft<sup>2</sup> (1.9 m<sup>2</sup>) per 55 lb (25 kg) bag at 1/4 in (6.4 mm) thickness.
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## **INSTRUCTIONS FOR USE**

- If time between applications of additional product is to be longer than 15 minutes, place a cover over structure to restrict air movement
  - At no time should the finished product be exposed to sunlight or air movement for longer than 15 minutes
  - In extremely hot and arid climates, surfaces shall be shaded while application is in process
  - In environments where the humidity level is below 70%, the applied product shall be kept damp for 72 hours
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## **Preparation**

- Pour the contents of the one pint jars of Part A and Part B epoxy into the 6-gallon mixing bucket and power mix for one minute.
  - Add five pints of clean water to the mixed epoxy, and mix again for one minute.
  - Slowly add the 55 lb (25 kg) bag of Dry Mortar and mix using a large drill with a large spiral mixer.
  - Mix until the material is uniform in texture with no dry lumps.
  - For spray application, you may add an additional 8 fluid ounces (1/2 pint) of water to achieve a mix that flows well through a mortar pump.
  - Follow mixing procedure on product label
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## **Pot life**

30 minutes at 22°C (72°F)

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## **Application**

- Optimal spray application is achieved with the use of a PPG approved low velocity cementitious spray system, such as the Graco M680 Mortar Pump.
- Can be applied by trowel

Note: Contact Technical Services to discuss application options.

## **Recommended thinner**

Only potable water may be added

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## Cleaning procedures

- Clean tools and equipment with water
- To clean skin, wash immediately and thoroughly with soap and water
- Cured product may be disposed of without restriction

## ADDITIONAL DATA

Physical data of cured material	
Characteristic	Value
Tensile Strength (ASTM C307)	472 psi (3.2 MPa)
Flexural Strength (ASTM C580)	1,080 psi (7.4 MPa)
Compressive Strength (ASTM C109, 28 days)	9,120 psi (62.9 MPa)
Linear Shrinkage (ASTM C531)	0.022%
Coefficient of Thermal Expansion (ASTM C531)	$5.4 \times 10^{-6}/^{\circ}\text{F}$
Modulus of Elasticity (ASTM C580)	1,640,000 psi (11,300 MPa)
Adhesion to Concrete (ASTM D7234)	>200 psi (>1.4 MPa)

Note: The value ranges stated in this Technical Data Sheet are based on system processing under laboratory conditions. Equipment configurations and/or field application conditions may produce variances in final system values.

## DISCLAIMER

- PPG Protective & Marine Coatings does not accept any responsibility or liability for any odor, taste or contamination imparted to the drinking water from the coatings or products retained in the coating

## SAFETY PRECAUTIONS

- Read all label and Safety Data Sheet (SDS) information prior to use

## WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective and Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.

## REFERENCES

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|--------------------------------------|-------------------|------|
| • EXPLANATION TO PRODUCT DATA SHEETS | INFORMATION SHEET | 1411 |
| • SAFETY INDICATIONS                 | INFORMATION SHEET | 1430 |



# PPG RAVEN® 760 Epoxy Modified Cement

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