

# 3M™ Scotchkote™ Epoxy Concrete Mortar LW 405

## Data Sheet and Application Guide

### Product Description

Scotchkote Epoxy Concrete Mortar LW 405 has been specifically developed as a three component 100% solids light weight repair mortar for use on concrete surfaces.

### Product Features

- Combines good application characteristics.
- Designed for application by trowel or float.
- Can be used to form wall/floor covings.
- Excellent hold up on vertical and overhead surfaces

**Adhesion:** Excellent to correctly prepared surfaces.

**Abrasion Resistance:** High order of resistance to abrasion and mechanical damage

### General Application Steps

1. Remove oil, grease and loosely adhering deposits.
2. Prepare the surface and apply Scotchkote Epoxy Concrete Mortar LW 405 Primer
3. Apply Scotchkote Epoxy Concrete Mortar LW 405 at the required thickness, whilst primer is still wet.
4. Allow to cure.
5. Visually inspect the system for defects.
6. Repair all defects.

### Properties

Property	Value
Colour	Light Grey
Ratio	Mix as supplied
<b>Drying &amp; Cure times at 20°C (68°F)</b>	
Useable life	30 mins (primer) 70 mins (mortar)
Hard Dry	8 hours
Full Hardness	24 hours
Maximum Overcoating	3½ hours (primer) 24 hours (mortar)
Full Cure	7 days
Volume Solids	100%
V.O.C	Nil
Volume Capacity	1080 cc (66 cu ins) per kilo
Note:	The actual thickness to be applied should be agreed between the specifier and the manufacturer dependant on operational performance criteria and may be higher or lower than the quoted typical value.
Theoretical Coverage Rate	0.18 m²/kilo at 6 mm dft (1.0 ft²/kilo at 240 mils dft)

### Performance Data

Impact Resistance	1.35 Joules (12 in lbs) (ASTM D2794)
Dry Heat Resistance	150°C (300°F) (ASTM D2485)
Direct Pull Adhesion	15Mpa (2150 psi) - Steel 3.5Mpa (500 psi) - Concrete (Concrete Failure) (ASTM D4541)
Compressive Strength	41.5 Mpa (6000psi) (ASTM D695)
Tensile Strength	16Mpa (2300 psi) (ASTM D683)
Flexural Strength	27.5Mpa (4000psi) (ASTM D790)
Shrinkage	Nil during and after cure (ASTM C157)
Heat Distortion Temperature	40°C (104°F) (ASTM 648)



# Application Procedures for 3M™ Scotchkote™ Epoxy Concrete Mortar LW 405

## Surface Preparation

Surfaces to be repaired must be clean, dry and free from contamination. All loose, spalled and eroded concrete or masonry should be removed. Any areas of exposed rebars should be primed with 3M™ Scotchkote™ Epoxy Primer GP 120. All existing coatings must be removed from the surface before any repair is carried out. Failure to do this will mean the bond is only as good as the existing coating. Thorough cleaning and roughening of any surface is absolutely essential for a successful repair.

Surfaces should then be primed with Scotchkote Epoxy Concrete Mortar LW 405 Primer.

## Priming

To obtain maximum penetration and adhesion, the repair area should always be primed with Scotchkote Epoxy Concrete Mortar LW 405 Primer. Scotchkote Epoxy Concrete Mortar LW 405 Primer consists of a Part A (Base) component and a Part B (Activator) component. The contents of the Part B (Activator) component should be added to the Part A (Base) unit. Mix thoroughly to produce a uniform material. If only small quantities are required then the Scotchkote Epoxy Concrete Mortar LW 405 Primer can be mixed in the ratio 2 parts Part A (Base) to 1 part Part B (Activator).

The mixed primer should be applied immediately using a stiff bristle brush, working the material into the prepared surface to obtain maximum penetration. Scotchkote Epoxy Concrete Mortar LW 405 Primer will generally apply at coverage rate of 0.37m<sup>2</sup> (4ft<sup>2</sup>) per 100 gms of primer.

Scotchkote Epoxy Concrete Mortar LW 405 Primer must be used as a tack coat and should not be allowed to dry - any areas of primer which have been allowed to dry should be reprimed for optimum results.

## Mixing

The mortar is a three component material comprising Part A (Base) and Part B (Activator) components and an Aggregate component which must be mixed together prior to use. The Part A (Base) and Part B (Activator) components should thoroughly mixed together in the outer container of the pack. After mixing continue stirring and add the total contents of the Aggregate bag, care must be taken to ensure thorough 'wetting' of the aggregate to prevent the formation of agglomerates. The use of a forced action mechanical mixer is recommended to ensure thorough and complete mixing. The mixed product must be used within 70 minutes of mixing at 20°C.

## Application Procedures

Application should not be carried out when surface/air temperatures fall below 5°C

The mixed product should be pressed into the primed surface with a gloved hand or a trowel whilst the primer is still wet/tacky with a steel float or trowel being used to smooth the product out, with edges feathered in.

All equipment must be cleaned IMMEDIATELY after use with 3M™ Scotchkote™ Cleaner 020.

## Packaging and Storage

Supplied in 5 kg packs

Use within 5 years of date of manufacture. Store in original sealed containers at temperatures between 5°C and 32°C.

## Handling and Safety Precautions

Read all health hazard, precautionary and first aid statements found in the Material Safety Data Sheet, and/or product label prior to handling or use.

## Ordering Information/Customer Service

For ordering, technical and product information or to request a copy of the Material Safety Data Sheet, call +44 (0)1609 780170 or fax +44 (0)1609 783762 (Sales) or 788718 (Technical).

For emergencies, please contact +44 (0)1344 858000.

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