

3M™ Scotchkote™ Epoxy Screed RS 820

Data Sheet and Application Guide

Product Description

Scotchkote Epoxy Screed RS 820 has been specifically developed as a three component 100% solids resurfacing screed for application to concrete floor surfaces.

Product Features

- Combines good application characteristics with excellent chemical resistance.
- Designed for application by trowel or float.
- Can be used to form wall/floor covings and can be laid to falls.

Adhesion: Excellent to correctly prepared surfaces.

Chemical Resistance: Unaffected by most industrial chemicals.

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 3M™ Scotchkote™ Epoxy Sealer SP 810
3. Apply Scotchkote Epoxy Screed RS 820 at the specified 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 1.35:1 By volume clear
Drying & Cure times at 20°C (68°F)	
Useable life	60 mins
Hard Dry	8 hours
Minimum Overcoating	8 hours
Maximum Overcoating	24 hours
Full Cure	7 days
Volume Solids	100%
V.O.C	Nil
Film Thickness (Typical)	Wet/Dry 6 mm.
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	1.7 m ² /25 kg pack at 6 mm (19 ft ² /25 kg pack at ¼")
Performance Data	
Abrasion Resistance	45 mgm weight loss per 1000 cycles, CS17 wheel 1kg load (ASTM D4060)
Impact Resistance	1.58 joules (14 ins/lbs) (ASTM D2794)
Compressive Strength	86Mpa (12500 psi) (ASTM D695)
Dry Heat Resistance	135°C (275°F) (ASTM D2485)
Direct Pull Adhesion	3.5Mpa (500 psi) - concrete (Concrete Failure) (ASTM D4541)
Heat Distortion Temperature	46°C (115°F) (ASTM D648)
Scrub Resistance	> 10,000 cycles (ASTM D2486)
Flexural Strength	45 Mpa (6500 psi) (ASTM D790)
Scratch Resistance	No Failure 2.5kg (5.5 lbs) load (BS 3900 Part E2)



Application Procedures for Scotchkote Epoxy Screed RS 820

Surface Preparation

All surfaces should be clean, dry and free from loose material.

Surfaces should have all surface laitance removed by mechanical means, then primed with Scotchkote Epoxy Sealer SP 810

Mixing

The product 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 be 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 60 minutes of mixing at 20°C (68°F).

Application Procedures

Application should not be carried out when humidity exceeds 85%, or when the surface to be coated is less than 3°C above the dew point.

Application is best carried out when the surface to be coated is above 10°C (50°F).

The mixed product should be poured onto the primed surface and spread with a float or trowel to the required thickness with a steel float being used to smooth the product out.

To ensure the correct application thickness is achieved, wooden laths cut to the thickness required for the screed should be used, and the mixed material levelled to this thickness. At the end of a working day the edge of the Scotchkote Epoxy Screed RS 820 should be cut at right angles to the floor using the edge of the steel float. This edge then provides a working level for the next application of screed, with the primer being applied up the vertical edge. Feather edging is not recommended for joining up bays but can be used to form ramps at door openings etc.

Coving Formation: The Scotchkote Epoxy Screed RS 820 should be applied into the primed wall/floor interface by trowel, whilst the primer is still tacky. The product should be compacted into the corner and angled off with the point of the trowel. The material can then be curved using a coving trowel or a plastic pipe of double the diameter of size of coving required.

For estimating coving quantities the following are approximate are approximate lengths which 1 unit of Scotchkote Epoxy Screed RS 820 will provide.

25 mm (1 inch)	78.3 Linear metres
38 mm (1½ inch)	34.8 Linear metres
50 mm (2 inch)	19.6 Linear metres
75 mm (3 inch)	8.7 Linear metres
100 mm (4 inch)	4.9 Linear metres
150 mm (6 inch)	2.2 Linear metres

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

Packaging and Storage

Supplied in 25 kilo packs

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.

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