

3M™ Scotchkote™ Urethane Floor Coating FB 857

Updated July 2016
Supersedes August 2014

Data Sheet and Application Guide

Product Description

Scotchkote Urethane Floor Coating FB 857 has been specifically developed as a 100% solids protection system with a degree of flexibility for application to concrete and asphalt floor surfaces.

Product Features

- Combines good application characteristics with excellent corrosion protection and chemical resistance.
- Designed for application by brush or roller.
- Designed for use on concrete surfaces in combination with 3M™ Scotchkote™ Urethane Sealer 165CS.
- Also suitable for use on asphalt floor surfaces in combination with 3M™ Scotchkote™ Urethane Primer FB856.

Adhesion: Excellent in combination with the appropriate primer.

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 surface and apply appropriate primer.
3. Apply Scotchkote Urethane Floor Coating FB 857 coating at the specified thickness.
4. Allow to cure.
5. Visually inspect the coating for defects.
6. Repair all defects.

Properties

Property	Value
Colour	Light Grey Note: Not colour stable, where a colour stable finish is required it must be overcoated with an appropriate top coat.
Ratio	3:1 By volume 3:1 By weight
Drying & Cure times at 20°C (68°F)	
Useable life	25 mins
Touch Dry	5 hours
Hard Dry	16 hours
Full Cure	7 days
Volume Solids	100%
Specific Gravity (Average Mixed)	1.3 20Mpa (2825 psi)
V.O.C	Nil
Film Thickness (Typical)	Wet/Dry 250 microns.
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	4 sq metre per litre at 250 microns dft.
Performance Data	
Abrasion Resistance	80 mgm weight loss per 1000 cycles -1 kg load - CS17 wheel (ASTM D4060)
Impact Resistance	12.43 Joules (110 in lbs) (ASTM D2794)
Elongation	55% (ASTM D412)
Tensile Strength	11Mpa (1565 psi) (ASTM D638)
Direct Pull Adhesion	6.5Mpa - Steel 3.5Mpa - Concrete (Concrete failure) 3.5Mpa - Asphalt (asphalt failure) (ASTM D4541)
Scrub Resistance	> 10,000 cycles (ASTM D2486)
Scratch Resistance	No failure 2.5kg load



Application Procedures for Scotchkote Urethane Floor Coating FB 857

Surface Preparation

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

Concrete surfaces should have all surface laitance removed by mechanical means, then primed with 3M™ Scotchkote™ Urethane Sealer 165CS.

Timber and certain asphalts should now be primed with 3M™ Scotchkote™ Urethane Primer FB 856 in accordance with the product tech sheet.

Non Porous Surfaces: including quarry tiles, power floated concrete and certain hot rolled asphalts should be primed with 3M™ Scotchkote™ Epoxy Primer GP 830.

Existing Coatings: should first be checked for adhesion to the substrate then be primed with Scotchkote Epoxy Primer GP 830.

If in doubt about the choice of primer consult the 3M Northallerton Technical Department.

Mixing

The product is a two component material comprising Part A (Base) component and Part B (Activator) component which must be mixed together prior to use.

The Part A (Base) component should be stirred and whilst continuing stirring, the Part B (Activator) component should be added with mixing continuing until a homogeneous mix results. The use of a mechanical mixer is advisable to ensure thorough and complete mixing.

The mixed product must be used within 25 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.

The product should be applied to give a smooth uniform coating by brush or roller with roller being the preferred method particularly for the application of slip resistant finishes.

Both short or medium pile rollers can be used for successful application, with medium pile being preferred on uneven surfaces.

Where a slip resistant finish is required then 3M™ Scotchkote™ Granular Aggregate LD 092 should be scattered onto the surface and rolled in.

Packaging and Storage

Supplied in 4 litre and 20 litre packs

Use within 2 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.

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