

3M™ Scotchkote™ Urethane Roof Coating SD 650

Data Sheet and Application Guide

Product Description

Scotchkote Urethane Roof Coating SD 650 is a two component elastomeric solvent based urethane specifically developed as a high performance two coat waterproofing membrane for use on most types of roof surfaces when applied over the appropriate primer. The system can be applied at low temperatures.

Product Features

- Combines good application characteristics with fast drying capabilities enabling both coats to be applied the same day.
- Outstanding weatherproofing and waterproofing properties.
- Can provide a system capable of 25 years protection.

NB: Although the system exhibits excellent UV stability, slight yellowing of the cured film may be apparent on initial weathering.

General Application Steps

1. Remove loosely adhering deposits.
2. Apply the appropriate primer and allow to dry.
3. Treat all joints and seams with 3M™ Scotchkote™ Roof Detailing Compound SDR 655.
4. Apply one coat Scotchkote Urethane Roof Coating SD650.
5. Apply a second coat in the required colour.

Properties

Property	Value
Colour	Light Grey, Mid Grey and Dark Grey
Ratio	1:1 By volume
Drying & Cure times at 20°C (68°F)	
Usable Life	1 hour
Touch Dry/Waterproof	1 hour
Hard Dry	2 hours
Minimum Overcoating	2 hours
Maximum Overcoating	Indefinite provided surface is clean
Weight Solids	91%
Volume Solids	88%
V.O.C (As Supplied)	100g/litre
Coverage Rate	2 coat system at 1.5L/sqm wet: (0.75l/sqm per coat)
Performance Data	
Abrasion Resistance	37mg weight loss per 1000 cycles - 1kg load - CS17 wheel (ASTM D4060)
Water Vapour Permeability	5.367E-4 perm.cm (ASTM D1653)
Tensile Strength	20Mpa (ASTM D638)
Elongation	230% (ASTM D412)
Tear Strength	55N/mm (ASTM D624)
Shore A Hardness	85 (ASTM D2240)
Youngs Modulus of Elasticity	35Mpa (ASTM D378-10)
Fire Performance	Spread of Flame EXT.FAA and EXT.S.AA Fire Penetration EXT.FAA and EXT.S.AA (BS476 Part 3)

Application Procedures for 3M™ Scotchkote™ Urethane Roof Coating SD 650

Surface Preparation

The Scotchkote Urethane Roof Coating SD 650 system should only be applied to structurally sound roof areas. On flat roofs which have been dressed with large or medium size chippings, these must be removed prior to application. A mechanical flail should be used to remove the chippings and then the area swept down to remove all loose dirt and dust. On asphalt roofs, blisters should be cut out and the void filled with polymer concrete screed. On felt roofs, severe blisters should be cut open and bonded flat.

Any areas of moss or lichen growth should be treated with a proprietary fungicidal wash in accordance with the manufacturer's instructions.

Any surface to be protected must be clean, dry and firm, and this is especially important with metallic, glass or plastic surfaces.

Any areas subject to movement (such as cracks, joints, overlaps, seams, poor fitting flashings or valley gutter joints etc) it is advisable to apply 3M™ 1900 Duct Tape over these areas. The tape should be laid over the joint and pressed firmly onto the surface, ensuring the edges of the tape are firmly adhered. These areas should be stripe coated with 3M™ Scotchkote™ Roof Detailing Compound SDR 655.

Application Procedures

Priming

Asphalt and Mineral Dressed Felt Surfaces: Primer not normally required.

Wood, Porous Concrete and Asbestos Surfaces: Surfaces should be primed with 3M™ Scotchkote™ Urethane Primer FB 856. Detailed application procedures are given on the data sheet.

Previously Painted Surfaces: Surfaces should be primed with 3M™ Scotchkote™ WB Epoxy Primer GP830. Detailed application procedures are given on the product data sheet.

Copper and Ferrous Metal Surfaces: Clean metal surfaces should be primed with 3M™ Scotchkote™ Epoxy Primer MC 135. Badly pitted & corroded metal should have all corrosion products removed prior to priming with 3M™ Scotchkote™ Urethane Aluminium Primer MCU 125.

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 entire contents of the Part B (Activator) should be added to the Part A (Base) container and mixed using a mechanical paddle mixer until a uniform colour is achieved. Care should be taken to ensure that no unmixed material remains around the edges and bottom of the container. A typical mixing set up would be a 5" (127mm) spiral paddle mixer on a 750 watt drill in which case the mixing should be completed after about 2-3 minutes.

The mixed product must be used within 1 hour of mixing at 20°C.

Applying the System

Scotchkote Urethane Roof Coating SD 650 should not be applied when rain is falling or when rain is imminent, surfaces must be free of visible moisture.

The Scotchkote Urethane Roof Coating SD 650 is a two coat system, it is formulated with contrasting Part A (Base) and Part B (Activator) colours to enable the user to clearly identify when the product has been mixed thoroughly. Additionally the first coat should be a different shade to the final coat to aid application and the correct coverage. The minimum overcoating interval will depend upon the roof temperature and drying conditions but is typically 2 hours @ 20°C. Provided the surface is clean there is no maximum overcoating time.

Packaging and Storage

Supplied in 1 x 5 litre Part A and 1 x 5 litre Part B as a 10 litre pack.

Use within 12 months 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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