PRODUCT DATA SHEET

Delta Roof Guard QC

COLD LIQUID APPLIED WATERPROOFING



Description

A rapid curing one-component, liquid waterproofing membrane which is laid in a 2-layer system, enabling Delta Roof Guard Glass Fibre Reinforcement to be embedded in the base layer. Offering a faster curing time, as the 2-layer system will allow for inspection of the base layer prior to application of the top coat.

Delta Roof Guard QC (Quick Cure) is a one component liquid semi-thixotropic waterproofing composition, after polymerization gives an elastomeric, cold-applied polyurethane membrane. The membrane cures in a continuous and elastic form, as a totally adhered layer. This waterproofing layer guarantees total water tightness and withstands building movements.

This is a two-layer system, where the base coat is applied and while wet, the Delta Roof Guard Fibre Reinforcement is embedded in the base coat.

When the base coat has cured, inspect base coat for pin holes. If any repairs are required they must be fixed at this stage.

Features

- Broof(t4)
- BBA Approved
- Green Roof Approved
- Quick installation times – offering cost savings
- Avoiding inherent risks associated with hot works
- Seamless applications - no joints or fixings
- Exceptionally fast curing
- Compatible with a wide range of substrates
- Easy to maintain
- Minimal on-site disruption

Storage

- Keep at a temperature between 35°C, away from ignition sources and moisture

Product Details

DMS 800

Application

- Suitable for cold or warm roof construction
- Balconies and terraces
- Podium decks
- Car parks
- Infrastructure
- Walkways
- Ideal for new construction and refurbishment projects

Specification

- BS 8102:2022 Protection of below ground structures against water ingress. Code of practice.
- J40 (Clause 290) Flexible Sheet Tanking/Damp Proofing
- J31 Liquid Applied Waterproof Coatings/130 Roof Coatings
- J31/10 Warm Deck Roof Coating
- J31/110 Cold Deck Roof Coating
- J31/120 Warm Deck Roof Coating
- J31/130 Inverted Roof Coating
- J31/5 Cold Deck Roof Coating
- J41 – Reinforced Bitumen Roof Coating

Delta Roof Guard QC

Technical Data

Delta Roof Guard QC V5.1	
Chemical Description	Single Component Aromatic Polyurethane
Physical State	Liquid
Packaging	Metal Container: 25kg
Non-Volatile Content (%)	43%
Flash Point	26°C
Available Colours	Grey - Colour is unstable under sunlight. This discolouration takes place also in the treated Delta Roof Guard CP membrane (grey turns to green). This change does not impair the membranes mechanical properties.
Density	0.99g/cm³ (20°C)
Viscosity Approximate, Brookfield	20°C, s62, 100 RPM: 5 mPa.s
VOC Content	572 g/L, 57%
Use Before	12 Months After Manufacturing Date

Information on the Final Product		
Final Appearance	Solid Elastomeric Membrane	
Colour	According to Specification	
Hardness (Shore)	65-70 A (ISO 868)	
Density	1.3g/cm³	
Tear Strength	14 N/mm (ISO 34-1, Method B)	
Water Vapour Permeability	μ>1000 (EN1931) 20g/m² day	
Abrasion	14.3mg (Taber, 1000 cycles, CS-10, UNE 48250)	
Mechanical Properties	Maximum Elongation 617% Tensile Stress: 4.1 mPa (EN-ISO 527-3)	
	Elongation (%)	**Stress (mPa)**
	100	2.0
	200	2.8
	300	3.0
	400	3.4

Support Requirements

In order to achieve a good penetration and bonding, support must be:
1. Flat and levelled (Delta Roof Guard QC is self-levelling)
2. Compact and cohesive (pull off test must show a minimum resistance of 1,4 N/mm2)
3. Even and regular surface
4. Free from cracks and fissures. If any, they must be previously repaired
5. Clean and dry, free of dust, loose particles, oils, organic residues, or laitance

Recommended Environmental Conditions

Support temperature should be between 5°C and 30°C. At higher temperatures, specific precautionary measures must be taken. Please follow manufacturer advice. Air temperature must be between 5°C and 30°C High temperature and moisture conditions can reduce the pot life and lead to bubble formation under the membrane surface, and a deficient appearance.

Tool Cleaning

Delta Roof Guard QC can be cleaned with Delta Roof Guard PU Solvent, acetone, and alcohols. Once hardened, it cannot be dissolved. It is recommended to clean equipment as soon as possible.

Mixing and Application Guidelines

Stir and homogenise the product before use. Some of the contents settle during storage and must be redispersed. Allow some minutes to release air bubbles. Stirring should be done at low speed, avoiding mechanical means to prevent bubbles. If needed, the product may be thinned with up to 5% of Delta Roof Guard PU Solvent, as a viscosity adjustment. Never use universal or unknown solvents (e.g. white spirit or alcohols) Apply by roller or brush. Once opened, contents should be used. Unused product will cure in drum.

Curing Time

Curing time is dependent on the environmental conditions. Curing rate increases with temperature and humidity rises.

Return to Service

At usual conditions (25°C, 50%) the membrane achieves up to 90% of its final properties in 3 to 4 days. Final hardness is not achieved until 10 or 15 days. It is preferable to wait this time before permanent contact with water is allowed. Reapplication is possible as soon as the curing state of the first coat allows walking and working on it, and it should be done before 48 hours.

Safety

Delta Roof Guard QC contains isocyanates and flammable solvents. Always follow the instructions provided in the material safety data sheet and take the precaution described there. As a general rule, suitable ventilation must be ensured, and all ignition sources must be avoided. This product is intended to be used only for the uses and in the way here described. This product is to be used only by industrial or professional users. It is not suitable for DIY-type uses.

Other Information

All data and information contained in these Product/Technical Data Sheets is up-to-date and correct as at the date of issue. The information given is suggested as guidance and should only be used for evaluating your specific application. Delta Membrane Systems Limited cannot control or anticipate the conditions under which this product may be used, each user should review the information in specific context of the planned use. The information contained in these Product/Technical Data Sheets should not be considered a warranty, expressed, or implied, including but not limited to a warranty of merchantability or fitness for a particular purpose. In no event shall Delta Membrane Systems Limited be liable for any incidental or consequential damages resulting from the use, misuse, or inability to use the product. This exclusion applies regardless of whether such damages are sought based on breach of warranty, breach of contract, negligence, strict liability in tort, or any other legal theory. When in doubt, contact Delta's Technical Team on 01992 523 523.