SOLIDGUARD 58 HC-NOVA

Highly Chemical Resistant Epoxy Novalac Coating



Chemical resistant, 100% solids blend of selected Novalac epoxy resins cured with a high cross-linking activator specifically formulated for coating, laminating or lining steel tanks, concrete bunds and other surfaces in heavy duty acid or highly alkaline environments.

Applied either as a roller coat or in combination with chemical resistant scrim cloth as a crack and stress reinforcing membrane or as a lining system beneath acid bricks.

UNIQUE PRODUCT BENEFITS

- High chemical resistance up to 98% sulphuric acid.
- Excellent impact and crack resistance.
- High abrasion resistance.
- Low odour.
- Solvent free.
- Thermal shock resistant.

TECHNICAL DETAILS		
Compressive Strength	> 80 MPa	
Tensile Strength	> 50 MPa	BS6319
Flexural Strength	> 40 MPa	
Concrete Adhesion	> 1.5 MPa (Concrete failure)	ASTM D7234
Hardness	80	Shore D
Water Uptake (Permeability)	Nil	Karsten Test
Service Temperature	80°C	
Solids Content	100%	
Pot Life	25 to 30 min.	
Walk On Time	12 hrs at 20°C	
Service Time	36 hrs	
Full Cure	5 days	
LAMINATION		
	33%	

LAMMINATION		
Scrim Cloth 420 LW	33% 75 m² per ro	

SYSTEM BUILD	
Primer + Scatter	0.25 mm (20 m^2 / 5 L) with 300 g / m^2 (0.7 - 1.1 mm scatter)
Basecoat	2 mm (4.35 m ² / 8.7 L)
Scrim Cloth 420 LW	0.3 mm (75 m ² / roll)
Broadcast Aggregate	2 kg / m ²
Topcoat	0.5 mm (10 m ² / 5 L)
Total DFT	3.3 mm





*Product colours may differ from the ones shown above. For a full colour chart or for samples, contact your nearest Technical Finishes branch. UV exposure yellowing is more prominent in light colours yet does not affect performance.

Leading manufacturers of specialist epoxy and polyurethane flooring systems, specialised construction and corrosion protection products.

Distribution facilities nationwide

Western Cape +27 (0)21 535 4455 **Eastern Cape** +27 (0)41 451 3944

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APPLICATIONS

- Lining system under acid bricks
- Chemical loading areas
- Petroleum storage tanks
- Pulp and paper industry
- Sugar industry
- Tank farms and process areas

Solidguard 58 HC-Nova Broadcast Aggregate Scatter Sand #1 Acid Resistant Skrim Cloth Solidguard 58 HC-Nova — Solidkote STP Primer + Scatter — Concrete Substrate

0.7 - 1.1 mm scatter sand into the wet primer at 300 g / m². Allow primer to cure for at least 8 hours prior to application of Solidguard 58 HC-Nova with a maximum over coating time of 18 hours.

SUBSTRATE REQUIREMENTS

Concrete Floors

Concrete substrates must have a minimum compressive strength of 20 to 25 MPa, a minimum tensile pull-off strength of 1.5 MPa and be free of oil, fat, grease, dust, and loose friable materials. The moisture content should be less than 5% and free from rising damp. The surface finish of the concrete should be class 2 (AS 3610).

Note: Any filling of blowholes / voids and surface levelling of substrate can be achieved using appropriate products within Technical Finishes Construction Range (please speak to one of our technical sales representatives).

PREPARATION

Concrete Floors

Remove all previous coatings, unbonded concrete and laitance mechanically through diamond grinding, abrasive blasting or scarifying to obtain a sound and porous surface (sandpaper texture). Sweep dust and loose debris followed by vacuuming, to obtain a dry and dust-free surface.

Steel

Steel surfaces require abrasive blast cleaning (Sa 2 $\frac{1}{2}$; ISO 8501-1: 1988) with a blast profile that does not exceed 50 μ m, alternatively the steel can be prepared mechanically to Grade St3. Mechanical cleaning is, however, not as effective as abrasive blasting and results in a shorter maintenance free life.

PRIMING

Ensure application conditions of 15 to 28°C and that the concrete moisture content is below 5%.

Concrete Floors:

Prime with Solidkote STP Primer at 4 m² / L and broadcast

Steel:

Prime steel (shot blasted) with Solidguard 88. Allow primer to cure for at least 8 hours prior to the application of Solidguard 58 HC-Nova, with a maximum overcoating time of 7 days. Use only in well ventilated areas.

MIXING & APPLYING

Ensure application conditions of 15 to 28°C. Ensure adequate lighting to achieve an even and level spread. Installation should not be attempted unless application team is fully trained.

Mixing

Mix Part 1 thoroughly with a paddle or mechanical mixer. Add the Part 2 into Part 1 and stir using a paddle or mechanical mixer for 2 minutes and add base coat aggregate and mix until uniform. Ensure the mixing paddle scrapes the sides of the mixing vessel. The mix should not be kept in the container as it will start to cure rapidly.

Basecoat

Evenly apply the basecoat of mixed material at approximately 2 mm (2 L / m²) using a notched trowel or rake to control the thickness.

Scrim Cloth 420 LW

Immediately place a layer of scrim cloth into the wet basecoat. Overlap seams by a minimum of 50 mm and apply a liberal amount of material between the overlapping layers and use a flat trowel to flatten and embed the cloth completely with no exposure. The use of a fluted roller will assist with embedding the cloth evenly.

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Broadcast Aggregate

While wet and the cloth covered with material, immediately broadcast Scatter Sand #1 aggregate into the wet material to rejection until a dry layer is achieved. Allow the system to cure and remove any loose excess aggregate.

Topcoat

Onto the cleaned and cured basecoats, apply a topcoat of Solidguard 58 HC-Nova at 0.5 mm to adequately cover the exposed aggregate finish. More material may be used depending on the texture required and to provide a total system dry film thickness of 3.3 mm.

WATCH POINTS

Adhere to mix ratios as supplied and do not mix partial batches. Discard any mixed material left over from the previous day. Solidkote 505 Epoxy thinners is the only thinners confirmed compatible. Ensure there is good ventilation during the application and drying. Since the system is moisture sensitive, keep equipment free of water and Part 2 containers tightly sealed when not in use.

MAINTENANCE

Regular cleaning extends the service life of the Solidguard 58 HC-Nova coating. Maintenance is to be carried out using Liquid Action which complies with SANS 1344 Medium Duty Solvent Detergent (2112/P3325/10/ID). Damaged areas of the system should be patch repaired in order to ensure longevity of the working area.

HEALTH AND SAFETY

Please read Safety Data Sheet and specific health and safety data for this product provided in compliance with the requirements of OHSA No.85 of 1993. The finished system is not hazardous to health or the environment.

WARRANTY

Technical Finishes products are manufactured under high quality standards and are warranted against defective materials and are sold subject to standard Terms and Conditions of Sale, copies of which can be obtained upon request. Technical Finishes deals with approved applicators and carry a back to back warranty with these clients. Technical Finishes cannot be held responsible for the workmanship in surface preparation and application of our products, it is understood that the approved contractor will guarantee such workmanship and application. It is vital that the application is done in accordance to our specification.

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