

### STONCLAD UF WITH STONKOTE HT4 SEALER COAT

Ref # Date

# **REQUIREMENTS:**

Proposed flooring system where a heavy-duty, 6 to 9mm thermal shock, impact and chemical resistant industrial flooring system is required at (project name and location). The system will be installed on the horizontal surfaces and will be exposed to splash and spillage of 40% caustic solution not exceeding 38°C with normal foot traffic and occasional trolley jack traffic.

### **SCOPE OF WORK (BOQ):**

Apply **Stonclad UF** at 6 to 9mm as per the engineering requirements as a heavy-duty floor screed. Apply the appropriate primer, **Stonclad UF** and **Stonkote HT4** Sealer in strict accordance with the manufacturer's product data sheet, finished off with a textured, non-slip or smooth finish as required.

### THE STONCLAD HF SYSTEM CONSISTS OF:

	Product	Kit Size	Theoretical Coverage
Primer	Stonprime 786 OPR	50 Litre kit	2.5m²/litre
Primer Aggregate	Stonhard 6225	25kg	2.0kg/m <sup>2</sup>
Flooring System	Stonclad UT Base, Stonclad UF Activator, Stonclad	14 Litre kit	2.33m <sup>2</sup> /kit at 6mm
	UF Aggregate and Stonclad UT Pigment Pack		1.55m <sup>2</sup> /kit at 9mm
Sealer Coat	Stonkote HT4		
	(2 coats required to ensure proper film build and to	2 Litre kit	3 to 4m²/litre
	avoid pinholes)		

### **TEMPERATURE:**

Do not attempt to install this material unless the application team is fully trained and understands the requirements of working with materials with short application times within the specified temperature range. Substrate and material temperature are to be within 10°C to 30°C.

### **SUBSTRATE PREPARATION:**

**Stonclad UF** can be applied over properly prepared concrete surfaces which are even and do not require renovation. The substrate must be dry and free of all wax, grease, oils, fats, loose or foreign material and laitance. Laitance and unbonded cement particles must be removed by mechanical methods, i.e. abrasive blasting or scarifying. The surface must show open pores throughout and with main aggregate in concrete exposed and have a coarse sandpaper texture. Retaining slots, 6mm x 6mm, must be cut running 75mm from and parallel to the walls, edges and both sides of joints. If weak, friable substrates exist, they should be removed and repaired with **Euco Versaspeed LS100**. Product can be laid on 1 to 2 week old concrete, provided a minimum tensile strength of 2.0 MPa has been achieved. For recommendations or additional information regarding substrate preparation, please consult StonCor Africa's "Surface Preparation Methods".

The Applicator contracts with the Client to apply the coating system strictly in accordance with the specification, and is therefore required to monitor the quality of his own workmanship. Any deviations from the specification are for agreement between the Applicator and the Client. StonCor Africa acts in an advisory capacity only, to provide technical assistance to other parties, and does not inspect nor approve the quality of application and workmanship.

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#### **PRIMING - STONPRIME 786 OPR:**

- Mark all existing joints and cracks by driving nails into the joints / cracks.
- Vacuum the substrate before priming, ensuring the surface is dry.
- To enhance the resistance against the formation of blisters, ensure that a well-bonded main aggregate in the concrete is exposed during the abrasive blasting preparation procedure.
- Apply the primer to the textured substrate at 2.5m<sup>2</sup>/litre and broadcast **Stonhard 6225** evenly at 2.0kg/m<sup>2</sup>.
- Sweep off the unbound aggregate when cured and vacuum to ensure no loose particles exist.
- Once cured, continue with the specified coating system.

### **MIXING - STONCLAD UF:**

Mixing stations must be set up to deliver a kit of material to the applicators every 3 minutes. A well displayed clock is necessary to ensure consistent supply and mixing times. Remove all lids from resin components and open pigment packs and aggregate bags. Two 25 litre clean dry mixing drums must be available. Spiral impellers fitted to a high torque, variable speed 600 rpm mixer should be used for thorough mixing.

Empty the entire contents of the part B and part A components into the 25 litre container. Mix mechanically for 30 seconds, then add the pigment pack and continue mixing for a further 30 seconds. Pour in the **Stonclad UF** aggregate and mix for another 90 seconds. Immediately send the mixed material to the application floor area and within 30 seconds start another mix in the second 25 litre container. Every 3 minutes a new batch should be made.

### **APPLICATION - STONCLAD UF:**

- The use of screeding rails is recommended during application to ensure even spread and levelling is achieved.
- Divide the floor into panels not greater than 5m wide. This will ensure that fresh product is applied onto the wet edge of the previous kit.
- Apply one kit of Stonclad UF by pouring the mixture in a line onto the floor and raking out using a 15mm notched trowel, or screeding rails with a straight edge, spreading evenly at specified thickness. This application should not take longer than 2 minutes.
- Level out the material to an even finish by floating with a flat plastic trowel.
- If a less textured finish is required, lightly roll the trowelled surface with a loop roller. This process is carried out immediately behind the applicator trowelling the material level, whilst still wet and fresh.
- Do not re-roll material after 6 minutes of application.
- Allow to cure for 12 hours at 25°C before re-cutting joints and sealing.

## **STONKOTE HT4:**

**Option 1:** Transfer mixed material into a paint tray and, using a medium nap roller, dip and roll the **Stonkote HT4**. The roller should be saturated with sealer at all times. This will smooth and level the sealer to achieve a uniform texture and appearance.

**Option 2: Stonkote HT4** is applied with a rubber squeegee and backrolled with a medium nap roller. The roller is used to remove squeegee lines and smooth out the surface, leaving a slightly textured, mild, non-slip finish. A brush may be used where necessary.

After 4 to 5 hours at 25°C, apply a second coat of **Stonkote HT4** as per the previous coat. Theoretical coverage of 3 to 4m²/litre/coat (2 coats required). Coverage will vary depending on coarseness of broadcast aggregate used and desired finish.

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• Remove the steel nails, chalk line the joint markings and use a dedicated joint cutting machine such as the Hilti to saw-cut through the cured **Stonclad UF**, to suit the engineer's design joint detail. Fill the joints with the required Pro-Struct joint sealant as determined by the specific requirements of the project (see engineer's detail).

### **CRACK TREATMENT:**

- The joint or crack to be treated must be filled with Dymonic 100 prior to the application of Stonflex CR9.
- **Dymonic 100** must be allowed to cure for a minimum of 12 hours at 21°C.
- Mix and apply Stonflex CR9 by brush over the crack at a thickness of 500 microns, 30mm either side of the crack.

## **COLOUR UNIFORMITY:**

Erratic periods of mixing and variable times of solvent rolling will lead to an uneven colour and non-uniform appearance. The use of a well displayed clock and fully trained staff is essential.

### **CURING:**

If temperatures are between 10 to 30°C, the flooring system can be exposed to light traffic after 24 hours. Excessive traffic, aqueous cleaning and exposure to aggressive chemicals should only take place after 4 to 5 days, when full cure has been achieved.

#### **NOTE:**

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### **ARCHITECT DETAIL:**

- Coving
- Joints

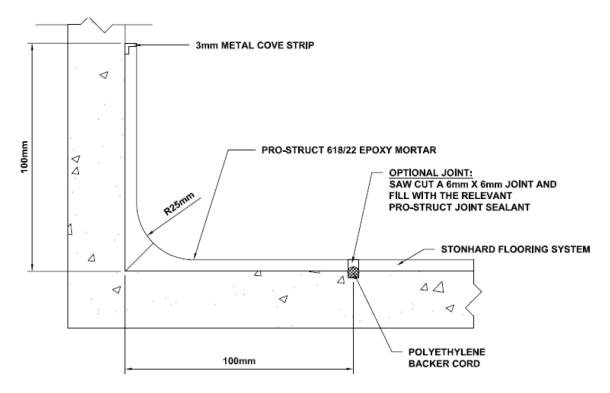
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## **COVING:**



### **APPLICATION PROCEDURE FOR EPOXY MORTAR COVED SKIRTINGS:**

- Epoxy mortar coved skirtings shall be installed prior to the installation of the flooring system.
- Install the metal cove strip to the wall to the desired height using contact adhesive, taking care to mask above the cove strip for neatness.
- Prime the prepared plastered / concrete surfaces with **Dural 618R** at a theoretical coverage of 15 linear metres x 200mm wide per 1 litre kit and broadcast **Stonhard 6222** Aggregate into the wet resin. Allow 6 to 8 hours to cure at 25°C.
- Mix the 1 litre kits of base and activator of **Dural 618/22** for 2 minutes using a JB blender. Add the 6kg bag of **Stonhard 622** aggregate and mix for a further 2 minutes. The yield of this kit is 3,64 litres. Using a steel trowel, apply the **Dural 618/22** Mortar to the primed concrete and plastered surfaces to a theoretical spreading rate of 3,6 linear metres for a 100mm x 100mm x 25mm radius.
- Form the cove to the desired radius using a suitable coving trowel, allow to cure for 18 to 24 hours at 25°C.
- Abrade the vertical surface of the cove to remove surface imperfections.
- Overcoat the coving with the proposed flooring sealer.

Technical Approval:		
Date:		

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