

TECHNICAL DATA

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Construction Products

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Waterproofing	May 2010	PM	May 2008	1 of 4

**ULTRATUFF 001 FC
LATEX DECKING MEMBRANE**

DESCRIPTION:

Ultratuff 001 FC is a reinforced waterproofing deck membrane. It is liquid applied in-situ to adapt to the design and shape of the area being waterproofed

Its unique properties are:

- Very high flexibility
- Quick drying
- High solid equals high film build
- High elongation
- Very good water resistance & early water resistance.
- Latex based
- Choice of colours if exposed.

RECOMMENDED USES:

- Decks, patio's, suspended decks (topcoated with Flexiglaze)
- For use over concrete and well fixed plywood
- Bathrooms under tiles
- Decks under tiles
- Upstand waterproofing
- Roofs (topcoated with Flexiglaze)

LIMITATIONS:

- All decks, roofs and floors should have a positive fall.
- Exterior exposed areas (not covered) must be coated over with Flexiglaze.

SURFACE PREPARATION:

Concrete

Allow full 28 days cure time after the concrete pour. Acid etch, grind or shot blast to prepare the concrete prior to priming. Ensure surfaces are clean/dry and free from surface contaminants. Check falls and reset falls if necessary using Lockfast Floor Levelling Compound (FLC).



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NUPLEX CONSTRUCTION PRODUCTS WWW.NUPLEXCONSTRUCTION.CO.NZ
 PO Box 1 2841, Penrose, Auckland Telephone: 0-9-579 2029, Fax: 0-9-525 3709, Email: bpsales@nuplex.co.nz

H A M I L T O N
 Telephone: 0-7-847 8658
 Fax: 0-7-847 3766

PALMERSTON NORTH
 Telephone: 0-6-353 3685
 Fax: 0-6-353 3632

W E L L I N G T O N
 Telephone: :0-4-477 7040
 Fax: 0-4-477 7039

CHRISTCHURCH
 Telephone: 0-3-366 6802
 Fax: 0-3-379 0279

APPLICATOR INSTRUCTIONS

Application - Preparation

Preliminary Work

Ensure that preliminary work, such as formation of falls and flashing rebates, grooves and ducts, provision of battens, rounded edges, fillets and overflows, installation of vents and countersinking edges and outlets, is complete and properly constructed to enable the Ultratuff 001 FC System to work as intended. This work and the substrate need to be smooth, clean and dry. Falls on roofs to be 1.4° and decks 1.3° and gutters 1.0° minimum.

Confirm that the substrate, including falls, surface finish, fillets, sumps, countersinking terminations and projections, will permit Ultratuff 001 FC work of the required standard.

Concrete Substrate

Ensure concrete substrate is cured for a minimum of 14 days, graded to correct falls, wood float finish, no sharp edges, clean and free from debris.

Cracks in the substrate are to be chased to allow for the application of the 15mm wide x 3mm deep Silicon Modified Paintable (SMP) bead of sealant (Simson ISR 70-50 supplied by Bostik) to act as a joint filler and bond breaker.

Plywood/ Compressed Sheet Substrate

Ensure that sheets have been butt jointed, stagger bond laid and fixed with stainless steel screws, glued across major supports to correct falls, are rigid with flush butt joints, no lumps or hollows, smooth, free of debris and dry. All upstands to be filleted, all downturns to have rounded edges rounded off and rainwater outlets countersunk as required for drainage.

Applying Ultratuff 001 FC Membrane System

Priming

Apply a suitable metal primer to all metal surfaces.

For green concrete (must be cured for at least 7 days) old membranes, old concrete, surfaces subjected to excessive heat/ solar induced vapour apply Aquaguard 101 at the rate of 6-10 litre/m². Subsequently, the Aquaguard 101 and other surfaces shall be primed with Acrylic Sealer at the rate of 7-15 litre/m².

Joint Reinforcing

All sheet joints are to be filled with 15mm wide x 3mm deep Silicon Modified Paintable (SMP) bead of sealant (Simson ISR 70-50 supplied by Bostik) to act as a joint filler and bond breaker. A coat of Ultratuff 001 FC is to be applied over the joint/crack area and a 100mm wide detail strip of 225g/m² fibreglass mat or reinforcing polyester cloth tape is to be rolled into the membrane. (Note the polyester cloth tape will dry more quickly than fibreglass.) A coat of Ultratuff 001 FC is applied over the mat to completely saturate the mat and eliminate all pin holes.

Main Reinforcing layer

Apply the **first coat body** coat of Ultratuff 001 FC at 1.1m²/lt with a long nap roller cover. Allow to dry. Average drying time is 1 hour at 20°C in low humidity. If reinforcing mat is included in application average drying time is 3 hours at 20° in low humidity.

Embedded 1mm wide Reinforcing 300gsm CSM cloth can then be laid to all exterior areas including concrete substrates. (Optional, but recommended, for interior areas to be protected by Tiles and not subject to foot traffic where only a single layer of Reinforcing over junctions & joints is required.) The reinforcing mat or cloth is to be worked into the Ultratuff 001 FC body coat. The reinforcing mat or cloth should be free of lumps and furry patches. Use a laminating roller.

Pin holes and or shrinkage cracks must be filled with sealant before the application of the second coat. Application is to commence at floor to wall joints. A strip of 225g/m² fibre glass reinforcing mat 200-300 wide is to be bedded into the Ultratuff 001 FC which is to be applied to wall and deck surfaces.

The surface of PVC rainwater outlets shall be scuff sanded. The mat is to be laid over the outlet flange plate and turned down into the waste finishing with a clean edge.

The material should look and feel completely dry (reinforced membrane should be allowed to cure overnight) before the areas can be accessed or additional coats applied. Humidity, non porous surfaces, limited ventilation and temperatures below 20°C will increase drying times. The **second body coat of Ultratuff 001 FC** is to be applied at right angles to the first body coat at 1.5-2.0m²/t. A second coat is applied to completely saturate the mat. The mat is to be worked against the wall and deck surfaces and tightly into the junction with a brush to eliminate wrinkles, bridging and furring of the mat.

When the second application of the Ultratuff 001 FC is complete and dry no pin holes, thin spots, perforations or lumps should be evident. A minimum of 1.2mm dry film thickness must be achieved.

Re-check for pinholes and/or shrinkage cracking in areas of heavy application. (eg internals and angles). If these exist, then "smear" fill them with sealant.

The optional anti - slip trafficable coating Ultratuff 001 FC is applied at the rate of 0.6 - 0.8 litre/m² with a goop loop or long nap roller cover to provide a texture.

Optional, for a very smooth finish: use another coat of Ultratuff 001 FC with surfacing tissue to create a finish that shows less of the mat visible.

If not covered in tiles, the **Ultratuff 001 FC must be over-coated**. The external trafficable UV stable top coat Flexiglaze can be applied by brush or roller to develop a minimum dry film build of 80 microns. The coating is to be applied by brush or roller at right angles to the previous coats. To ensure even consistent coverage apply in two coats at 7m² / lt / coat. Only one coat is required over the bodycoat if colour matches.

Form, mould and flash all upstands, down turns and penetrations in accordance with the Ultratuff 001 FC technical specifications.

Movements Joints

Form and flash movement control joints as designed in accordance with the Nuplex Technical Specifications.

Finishing

Finish all Ultratuff 001 FC laying, detailing, terminations and over flashings to a fully weatherproof condition, to ensure performance of the Ultratuff 001 FC installation as intended.

Foot Traffic

Foot traffic is not allowed on the Ultratuff 001 FC installation after laying until cured. Foot wear with high heels with narrow hard soles is not allowed.

Access Boards

Provide access boards and protection to Ultratuff 001 FC for later operations and remove when no longer needed.

Acceptance

Arrange for an inspection of the completed Ultratuff 001 FC work.

Subsequent Work

Make good any Ultratuff 001 FC cut or damaged by later work, by cutting out, filling in or overlaying damaged area with Ultratuff 001 FC application as required. Repairs can be neatly made in an Ultratuff 001 FC installation at any time.

Clean-up

Clean up as work proceeds. Utensils and minor spills can be cleaned with water if still wet. Cured material can be cleaned with Xylene.

Leave

Leave work to the standard required by following procedures, as described in the specification.

Remove

Remove debris, unused materials and elements from the site.

Tiling:

1. The surface must be clean and dry (can be Tiled 24hrs after final coat is completely dry, usually 48hrs)
2. The surface needs to be primed with ASA Multiprime 2 part, in accordance with the ASA instructions.
3. Suitable adhesives are ASA Accelerflex mixed with ASA Fixall **or** ASA Conflex.
4. Grouting must be done after the adhesive has fully cured.
5. Movement joints must be provided as per the tiling standards.
6. Tile within seven days or lay a protection sheet over the membrane until tiling or covering.
7. Ensure membrane that is going to be left exposed once Tiles are laid is first protected by 2x coats of Flexiglaze.

Material usage

	Material	Coverage	Quantity for 100m²	Units for 100m²
Primer	Aquaguard 101	7m ² /lt	14lts	10 lt A + 10lt B
Bodycoat #1	Ultratuff 001 FC	1.1m ² /lt	90lt	6 x 15lts
Fiberglass mesh	300gsm Chopped strand mat	1m ²	100 m ²	1 roll
Bodycoat #2	Ultratuff 001 FC	1.5m ² /lt	65 lts	4 x 15lts
UV protection; if required.	Flexiglaze low sheen	7m ² / lt / coat; 2 coats required	28 lts	3 x 10lts
				(Total 10 x 15lt Ultratuff 001 FC)

PRODUCER
STATEMENT AND
GUARANTEE:

Nuplex Ultratuff 001 FC is guaranteed for 15 years from the date of completion providing regular inspections are undertaken and reglazed as appropriate, if necessary (every 5 years depending on wear). Specifically excluded is cracking in substrates, which exceeds the movement capability of the Ultratuff 001 FC system. The user should note that wrinkling or seaming is due to substrate movement.

Nuplex Industries Ltd state that the Ultratuff 001 FC system is compliant with the Building Act E2 & E3.

Ultratuff 001 FC is approved by the Auckland City Council and is on the approved list.

This technical data sheet is to be read in conjunction with other relevant technical data sheets. If any doubt or confusion exists please contact Nuplex Industries Ltd, Construction Products Division.

