

ULTRAFLEX | Technical Data Sheet







ULTRAFLEX is a high performance liquid waterproofing system for all kind of roofs and aquatic areas. Approved for new construction or renovation.

The **ULTRAFLEX** membrane is applied by the wet-on-wet, fully reinforced, system. Due to its high adhesion to all substrates, a primer is not needed. Ultraflex is fully trafficable, and permits all kind of finishes: it can be left exposed to UV Rays with topcoat and also permits paving. Permanent water contact resistant with topcoat. It can be used for structural waterproofing.

ULTRAFLEX is BBA (British Board of Agreement) and EOTA (European Technical Approval) certified for a life in excess of 25 years (W3) and Green Roof approved. NHBC Approval.

NO Primer Wet-on-wet System Immediately rain resistant

More than 25 years **Green Roof** Approved

Excellent adhesion to different substrates / Ideal for detailing / User friendly / Ready to use / all kind of roofs: flat roof, pitched roof, inverted, green roof / All kind finishes / permits paving / suitable for aquatic areas / trafficable even for vehicles.







PROPERTIES	VALUES	METHOD
Specific Gravity (kg/m3)	1.320 ~1.420	DIN 53 217
Viscosity at 23°C	2.650 – 7.500 cps	ASTM D2196-86
Dry Extract	> 90	EN 1768
Flash Point (°C)	42°C	ASTM D93
Ashes at 450°C % Weight	42~47%	EN 1879
Temperature	2°C ~ 35°C	
Hardness Shore A at 23° C	> 75	
Tensile Strenght	10 MPa (wet-on-wet) / 7MPa (by layers)	
Dry Time	Touch dry: 2-8h / Trafficable: 24h	
Overcoat Time	±24h ~ ± 96h	
Elongation	400% (150% with matting)	
Water Vapour Resistance	μ = 2.500 EN 1931	
Concrete Adherence	> 2 MPa	
Fire Rating	Broof (t1) / Broof (t4)	

Check Application Guide for further information

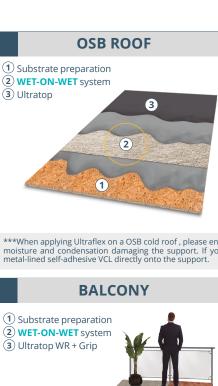






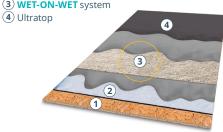






CARRIER MEMBRANE

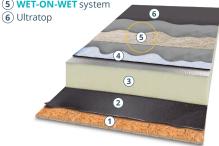
- 1 Substrate preparation
- 2 Carrier membrane
- 3 WET-ON-WET system



***When applying Ultraflex on a OSB cold roof , please ensure there is sufficient ventilation within the roof structure to avoid moisture and condensation damaging the support. If you are unsure about the ventilation we recommend installing our metal-lined self-adhesive VCL directly onto the support.

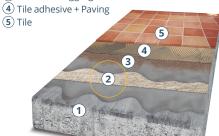
WARM ROOF

- 1 Substrate preparation
- 2 VCL
- 3 PIR insulation
- (4) Carrier membrane
- (5) WET-ON-WET system



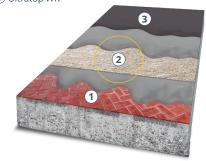
PAVING TILES

- 1 Substrate preparation
- 2 WET-ON-WET system
- (3) Ultraflex + Aggregate



CERAMIC TILES

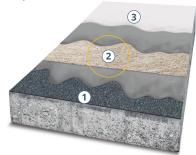
- 1 Substrate preparation
- 2 WET-ON-WET system
- 3 Ultratop WR



OVERLAY

- 1 Substrate preparation
- 2 WET-ON-WET system

3 CoolTop



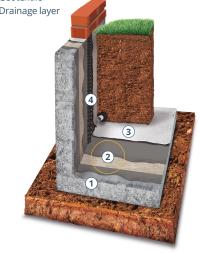
GREEN ROOF

- 1 Substrate preparation
- 2 WET-ON-WET system



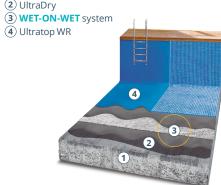
STRUCTURAL WATERPROOFING

- 1 Substrate preparation
- (2) WET-ON-WET system
- (3) Geotextile 4 Drainage layer



SWIMMING POOL

- 1 Substrate preparation
- 2 UltraDry



CARPARK SYSTEM

1 Ultraprime PRO



- WET-ON-WET: This method consists on a double layer composed of Ultraflex + Matting + Ultraflex, applied without any waiting times between layers, leaving the surface fully waterproofed immediately.
- · Substrate Preparation: Ultraflex offers excellent adhesion and does not require priming. For very porous or irregular substrates, we recommend applying a sealing layer beforehand to control consumption and facilitate the subsequent application of the wet-on-wet system. For challenging substrates (high humidity, irregularities, missing joints, etc.), please refer to our substrate preparation resins.



APPLICATION GUIDE Benefits and Product Information

- BBA and EOTA certified for life in excess of 25 years (W3). NHBC and Green Roof Approval.
- Ultraflex can be used on new or existing roofs, walkways, balconies, gutters, etc
- Ready to use straight out of the tin, application with solvent resistant roller.
- Excellent adhesion to all substrates without primer
- Use fully reinforced with Ultraflex matting ensures easy 'wet on wet' application.
- Can be used all year round moisture curing.
- Fully trafficable when cured. Resistant to stagnant water with topcoat.
- Instantly rain resistant
- Once installed, forms a seamless membrane.
- Excellent adhesion to different substrates: OSB, timber, bitumen membranes, asphalt, metals, brick, concrete, tiles and ceramics, PVC, synthetic membranes, etc.
- No waste
- The Ultraflex system is fully traficable. Can be left exposed to UV rays, or covered. Check FINISHES EXAMPES for further information.
- Fresh concrete must be cured for 28 days. Use UltraDry to speed up concrete curing.
- On EPDM and TPO it is recommended to install a patch test to check compatibility.
- Do not use silicone sealants. Always use ULTRAFLEX sealant or other compatible PU based mastics.
- Additives available. Add TIXAL to assist application on vertical areas such as box gutters and parapet walls or QUICK-CURE to speed up the process and complete the job in one day, including topcoat.

Coverage: A drum of **Ultraflex** will cover 8 to 10 sqm depending on the surface. Please note this coverage may be affected by substrate condition and contractor's experience in applying the **Ultraflex system**. On elevated porous susbtrates, we recommend to apply a thin layer of Ultraflex to seal the substrate before the wet-on-wet application to avoid overconsumption. Or use one of our Substrate Preparation Resins.

RELATED PRODUCTS:

UltraFlex Sealant, (MS Polymer) for joints. / Eagle Matting, fiberglass matting allowing the wet-on-wet system and ensuring thickness / Ultratop, one-component aliphatic polyurethane resin for light traffic. / Ultratop WR, twocomponent aliphatic polyurethane resin, for intense traffic or aquatic areas. / COOLTOP, reflective white aliphatic polyurethane resin / UltraFlex GRIP, spheres for anti-slip treatment. / UltraPrime PRO, 100% solid two-component polyurethane resin. / UltraPrime REG, 2-component epoxy self-leveling resin, 100% solids. / UltraDry, two-component, solvent-free epoxy resin that absorbs moisture from the support (98%) and blocks moisture by counterpressure (10 bar). / UltraPrime CT two-component epoxy resin compatible with sheets (EPDM, TPO...). / Tixal, thixotropic additive for vertical or steeply inclined applications. / QUICKCURE, additive to permit the curing of the Ultraflex membrane in a thick layer or cold weather. / Paddle roller, grooved metal tool to encapsulate the matting / Disc Roller, metal angle marker disc.

APPLICATION INSTRUCTION

- 1) Apply when ambient temperature is minimum of 2 degrees and rising and not exceeding 30°C.
- **2)** Ensure substrate is in good condition, dry, clean and free from dust, moss or lichen.
- **3)** All edge trims to be fixed to substrate prior to application of **Ultraflex**.
- **4)** Ultraflex is self-terminating, if brickwork is in good condition, strike a line using tape on the brickwork to coat up to (important: when the **Ultraflex** has been installed ensure the tape is pulled before the Ultraflex is dry). If the brickwork is in poor condition a termination bar or flashing is required.
- **5)** Open tin and mix thoroughly before using. Mix until the liquid is completely homogenised and no resins are left at the bottom.
- **6)** Apply **Ultraflex** straight out of the can onto the substrate using a solvent resistant roller. Dry roll **Ultraflex matting** into the product until the Ultraflex is drawn through, then immediately apply another coat of Ultraflex ensuring the matting is fully embedded avoiding any pinholes.
- **7)** It is advised to start with the perimeter, all detail work including upstands to a minimum of 150mm (if possible), ensuring the matting overlaps any trims (including fixings) / joints / change of material by 50mm.
- **8)** Infill the remaining field area using the same method as above using Ultraflex matting, at a minimum coverage rate of 1.5kg per m2. The whole area including trims must be coated to form a continuous seamless membrane. Please take time to make sure no pin holes exist. Drying time will be approx. 2-8 hours depending on weather, fully cured in 24 hours. Drying time can be shortened up to 3h with the additive Quickcure.

SOME FINISHES:

9) ULTRATOP (finish for UV protection with to light traffic): Apply a thin layer of Ultratop, one-component aliphatic polyurethane coating, as a topcoat for a glossy finish reinforcing the resistantce to weather and UV radiation. Apply ULTRATOP once the Ultraflex membrane has dried (\pm 24 ~ \pm 96h). For walkways and balconies or areas with standing water we recommend applying Ultratop WR instead. Ultratop WR is a very hard wearing topcoat designed for heavy foot traffic and fully submersible. Add Ultraflex Grip for anti-slip treatment.

10) ULTRATOP WR (finish for intense traffic or aquatic areas): apply Ultratop WR, two-component polyurethane coating as a topcoat to protect the Ultraflex membrane in situations of intense traffic or permanent contact with water. Apply in one layer (250g/m2). Add Ultraflex Grip for anti-slip treatment. In case of vehicular traffic we recommend 2 layers. Check with our Technical department for the Ultraflex Traffic system.

11) COOLTOP (white reflective finish to reduce the thermal load produced by solar radiation). Apply COOLTOP in 1 or 2 coats. Add Ultraflex Grip for anti-slip treatment.

12) PAVING: Onto the completely cured membrane, apply a thin layer of Ultraflex and spread aggregates to improve the adhesion of the pavement to be installed. Use tile adhesive to fix the pavement. In case of floating pavement, or coverage with gravel, landscaped finish, etc. we recommend using a protective geotextile over the membrane.

STORAGE

- Store unopened in original container in a cool dry place within $5^{\circ}C 25^{\circ}C$, out of direct sunlight.
- Protect from frost. Keep away from sources of ignition.
- For transportation purposes ensure that product is upright and the lid fully closed.
- Any unused material can be kept for weeks by storing the product in an air tight container.
- \bullet SHELF LIFE: Expires after 12 months, at temperatures between 5° C and 35°







