



TWO-COMPONENT, HIGH -PERFORMANCE, POLYURETHANE ADHESIVE FOR CERAMIC TILES AND STONE MATERIAL

Dubond Ultraflex is two-component solvent and water free adhesives which are flexible and waterproof. They are made up of a polyurethane base (component A) and a special hardener (component B).

Dubond Ultraflex is an improved (2) reaction resin adhesive (R) and slip resistant (T) classified as R2T.

Features & Benefits:

- Easy workability.
- Excellent durability and resistant to ageing.
- Perfect adhesion on all surfaces used in building.
- Hardens by chemical reaction without shrinkage (until it becomes highly resistant).
- High deformability.
- In the case of Ultraflex, highly thixotropic: it can be applied vertically without slump and without letting even heavy or large tiles slip.

Area of Application

- Fixing wall and floor tiles indoors and outdoors. The tiles can be made of: Ceramic, stone material and mosaic.
- Fixing on screeds, renders, concrete, asphalt, wood, metal, PVC, reinforced polyester, asbestos-cement, gypsum, gypsum board, gypsum panels etc.
- Bonding ceramic tiles, stone material and all types of mosaic in showers and on sheets used for prefabricated bathrooms.
- Bonding ceramic tiles and mosaics on wooden work surfaces or in kitchens in order to achieve a waterproof substrate.
- Bonding ceramic tiles, stone material and mosaics on balconies, external terraces domes or flat roofs subject to foot traffic.
- Bonding natural stones and reconstructed stone (marble of every type, slate etc.) also subject to movement and size variation due to the absorption of water (class C of size stability according to DUBOND standards).
- Bonding ceramic tiles and stone material on surfaces subject to vibration and deflection.





Preparation of Substrates:

- The substrate must be cured, mechanically strong, free of loose particles, grease, oil, paint, wax and be sufficiently dry.
- Cement substrate must not be subject to shrinkage after the installation of the tiles. During spring and summer renders must be cured for at least one week for every centimeter of thickness and cementitious screeds must be cured for at least 28days, unless they have been made with DUBOND special binders for screeds such as DUCEM, DU GO SL Where this not observed, the adhesion of Ultraflex to the substrate will be greatly compromised.
- Rust on iron surfaces must be removed by sandblasting. It is recommended to reinforce gypsum, gypsum board and anhydrite substrates with a coat of Primer.

Preparation of the Adhesive:

Apply to the substrate a uniform layer of Ultraflex w ith a notched trowel. Choose a trowel that will give coverage to the back of the tiles of at least 65 -70% (see "consumption"). For exterior installations, the tile backs must be completely covered with the adhesive. When both waterproofing and bonding are required, for example on wooden kitchen worktops, one of two procedures may be followed:

- Spread Ultraflex on the substrate with a flat trowel to a thickness of at least 2mm; then rework the surface with a notched trowel so as to line it all over, but without reducing the thickness to less than 1mm. Thickness must be maintained even after the tiles have been installed, especiall y when the tile backs have high lugs or ribs.
- Spread Ultraflex with a flat trowel to a uniform thickness of Imm for waterproofing and, after hardening (in any case within 24 hours), apply a second layer of Ultraflex with a notch trowel.

Application:

- Tiles must be absolutely dry.
- Apply firm pressure to the ?les to ensure good contact and covering of the back. If the layer of fresh Ultraflex is also to act as a waterproofing membrane, make sure that any ribs and lugs do not go through the layer.



- If Ultraflex is used for installing on particularly deformable substrates, all coverings larger than 5x5 cm must be installed with wide joints.
- The open time of Ultraflex under normal temperature and moisture conditions is approximately 50 minutes. Any adjustment must be carried out within 90 minutes of installation.

Precautions & Limitations

- Do not use on very damp surfaces or where there is a risk of rising damp.
- The packs are pre-measured, therefore mixing errors are impossible. Do not use partial quantities. A wrong mixing ratio could cause damage during the curing process.
- Use the products in temperature between $+10^{\circ}$ C to $+30^{\circ}$ C.
- In case of use on surfaces subject to continuous immersion in water, consult the DUBOND Technical Services Department beforehand.
- Do not use Ultraflex to bond transparent glass material.

Technical Information:

Product Identity

Colours	White
Mixing Ratio	5kg [Part A (thick paste) 4.7kg : Part B (fluid liquid) 0.3kg]
	10kg [Part A (thick paste)9.4kg: Part B (fluid liquid) 0.6kg]
Density (gm/cm³)	Part A (1.56) & Part B (0.93)
Dry Solids content (%)	Part A (97) & Part B (100)

Application Data

Pot life 30-40 minutes

Open time 50 minutes

Adjustability time 90 minutes

Application temperature range from $+10^{\circ}$ C to $+30^{\circ}$ C



Setting time:

-initial 6 hours

-final 8 hours

Set to light foot traffic 12 hours

Grouting 12 hours

Ready for use 7 days

Density of mix. (Kg/m³) 1520

Final Performances

Shear adhesion strength (N/mm²):

-Initial shear adhesion strength 2.6

_Shear adhesion strength 2.0

after immersion

Shear adhesion strength 2.4

after thermal shock

Resistance to ageing High

Resistance to solvents & oils Good

Resistance to acids & alkalis Good

Resistance to temperature from -40°C to 100°C

Deformability Highly deformable

Coverage:

Mosaic & small size tiles (3mm notch trowel): 2kg/m²

Normal size tiles (4mm notch trowel): 2.8kg/m²

■ Large size tiles, marble, stones (back buttering): 5 kg/m²

Packing:

5kg & 10kg



Shelf life & Storage:

Ultraflex are stable for at least 24 months when stored in sealed drums. Component B (hardener) must be stored in warm place to avoid crystallization during cold weather (at least at $+10^{\circ}$ C). Should crystallization occur, re-dissolve by warming before use. Stir the product before use.



Dubond Products (India) Pvt. Ltd.

C-3, 1001, Anushruti Tower, S.G. Highway, Thaltej, Ahmedabad-380054. Gujarat - INDIA Ph: 91-79-2685 6815 Fax: 91-79-2685 6816 Email: info@dubond.in Website: www.dubond.in

Customer Care: +91-93771 77771

DISCLAIMER Whilst any information contained herein is true, accurate and represents our best knowledge and experience which is given in good faith. The company will not be liable for loss or damage howsoever caused including liability for negligence, which may be suffered by the user of the data contained therein. It is the user's responsibility to conduct all necessary tests to confirm the suitability of any product or system for their intended use. No warranty / gurantee of result is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control & thus the company does not assume any liability or consequential damage for unsatisfactory results, arising from the use of our products.