



DuroFlex®670/675

Crack bridging high-performance coatings

Solvent-free and cold-hardening liquid plastics based on urethane elastomers. For seamless and jointless coatings and floor coverings, in any layer thickness, for interior and exterior use. .

Coatings made of DuroFlex®670/675 are shock-resistant, wear resistant, absolutely liquid-tight and bridge cracks. They are supplied as self-levelling systems consisting of master components and hardeners and are preferably applied by casting. Both qualities differ in the hardener component. The DuroFlex®670 hardener is an aromatic Isocyanate. Therefore coatings made of DuroFlex®670 are not UV resistant and light colours have the tendency to yellow under sunlight. We recommend the use of suitable Topcoats for outdoor applications.

An aliphatic hardener is used for DuroFlex®675. Surfaces with DuroFlex®675 are permanently light-resistant, even in direct sunlight.

Advantages

- **Seamless and jointless**
- **Pleasant and fatigue-free to walk on**
- **Flexible and tough elastic, even at low temperatures**
- **Bridges dynamic cracks, up to 1.5 mm at - 15 °C !**
- **Abrasion resistant, wear resistant**
- **Excellent self-levelling and easy to apply**
- **Surface structure can be easily adapted to the use**
- **Easy-care**

Application

Typical applications for DuroFlex® coatings and coverings are floor surfaces in multi-storey car parks, industry, consumer markets, technical function rooms, laboratories, warehouses and wherever beautiful, clean, dust-free floor surfaces are required, which are also mechanically resistant and robust and wherever cracks in the substrate need to be permanently bridged.

DuroFlex® coatings can also be laid on standard mastic asphalt, for other bituminous substrates preliminary tests are recommended.

Asphalt floor of an underground car park renovated with DuroFlex® 670



Processing

DuroFlex®670 and 675 are designed as self-leveling thick coatings for horizontal surfaces. All standard-compliant floor construction materials that can be covered with diffusion-proof coatings are suitable as substrates. Before coating with DuroFlex®670/675, any damage to the substrate must be professionally repaired and the surfaces must be primed with an adhesion bridge (primer) matched to the building material. We recommend the DuroFlex® primers or Silox®Bauhartz as primer.

If epoxy-based bonding coats/primers are used, they must always be sanded down over their entire surface. Make sure that the primer is sufficiently thick for the sand to be embedded.

The basic rules known to the specialist for coatings and coverings made of reaction resins/liquid resins:

Substrate clean, without slurry, dust and other separating substances.

Load bearing, adhesive tensile strength $\geq 1.5 \text{ kN/mm}^2$, also apply to these products.

Mineral fillers can be added to both products. They are either mixed in as an additive prior to processing or sprinkled afterwards into the still fresh coating.



Surface areas with substantial down-grades should be coated without mineral additives. The material savings through the addition of additives is minimal in comparison with the additional work and expense because of the more difficult processing.

Please note that only completely dry fillers may be used. With light colours, fillers with a pronounced inherent colour can also cause colour deviations of the hardened coating.

For processing, the base component and hardener are thoroughly mixed in the specified ratio until a completely homogeneous, streak-free product is obtained. The mixture should then be transferred to another container ("repotted") and stirred again. Always mix with stirring machines and at low speed of the stirring tools, do not stir in air! The finished mixture can be used immediately without ripening time.

Both DuroFlex® qualities are characterised by excellent flow and very good ventilation. They can be applied easily and effortlessly using the usual manual methods with toothed spatulas, squeegees etc.

For a perfect surface we recommend the additional rolling of the fresh coating with spiked rollers.

Properties

Chemical

-Components	2 („A“+„B“)
-Binding agent	Hybrid polyols and diisocyanates
-MV A : B	Depending on colour and type of material
-Density	Approx. 1,3 kg/l (20 °C) , mixed
-Viscosity	Shear thinning viscous, but thin
-Odour	Weak
-Processing time	Approx. 25 - 30 Min. /20 °C
-Hardening time	Approx. 5 h / 20 °C

Mechanical

-Adhesive tensile strength	≥ 3 N/mm ² (concrete crack), at -20 °C
-Crack bridging, dynamic	≥ from 0 till 1,6 mm without crack building , at -15 °C
-Tear resistance	≥ 200 %
-Shore-Hardness (D)	70

The available standard colours are

Sand yellow	RAL 1002
Reseda green	RAL 6011
Anthracite grey	RAL 7016
Stone grey	RAL 7030
Pebble grey	RAL 7032

All other RAL colours can be produced

The standard size containers are Hobbocks with 25 kg for main component and suitable hardeners in PE cans. Both components are available in big bags such as IBC with 1.300 kg and drums with 250 kg.

**Work Safety
Storage
Disposal**

These DuroFlex® products are not flammable, but are combustible. They must be protected from fire or radiant heat. The products should be stored in a cool and dry place and in such a way that they are inaccessible to children and unauthorised third parties as well as foodstuff.

Opened containers must be tightly resealed immediately after product removal and used up immediately. The B components (hardener) contain isocyanates and react with water, producing gaseous CO₂. The products become unusable.

Avoid contact with skin, mucous membrane and eyes when handling the products. Suitable protective clothing, goggles and respiratory protection equipment must be used when spraying. Under no circumstances should aerosols (spray mist) and product vapours produced during spraying be inhaled. The relevant health and safety regulations of the trade associations must be observed.

Hardened DuroFlex® Products are chemical inert and could be disposed as normal building rubble. Liquid left overs are special waste. Emptied containers should not be reused.

Safety data sheets are available for the products. They contain detailed information on the safe handling of the DuroFlex® components. They should be made available to all those who handle the products.

Recommended Accessories:

DuroFlex®671

Solvent containing special PU primer. 1 component system with quick drying. Universal use as primer for concrete and bitumen.

DuroFlex®TopCoat 677

Solvent containing, coloured and high elastic PU Top Coat. UV resistant. Used as light resistant TopCoat for DuroFlex®670 for outdoor use or as indication marker.

DuroFlex®-678 Pro (colourless) or 679 (pigmented, matt)

PUR sealers and TopCoat from a new generation of water-based 2 component systems. Highly abrasion-resistant, thin-bodied, solvent-free. Dries quickly to completely matt films without disturbing reflections. With excellent wear resistance and also absolutely resistant to light and weather.

These technical information describe the present-day state of knowledge these product. They should only inform about the possibilities of application and could not release the applicator of his commitment to check the possibility to use the product for the required application. Information for processing can be found in processing instructions of our product. Information about safe handling can be found in our current safety data sheet.

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passion to invent 