



Soudabond 675 HR

Product description

Soudabond 675 HR is a high quality, neutral, elastic one-component adhesive sealant based on SMX-polymer. Soudabond 675 HR is specifically developed for applications that need to withstand short term temperature spikes.

Properties

- High short term temperature resistance: maximum 30 minutes in a drying oven at 200 °C. Soudabond 675 HR must be fully cured before it can withstand the temperature spike.
- Combines high end strength with certain rigidity
- Fast build-up of end strength
- High initial tack
- Very good adhesion on many materials, even if slightly moist
- Good mechanical characteristics
- Good weather and UV resistance
- Easy to use and apply, also under difficult circumstances
- No bubble formation within sealant in high temperature and humidity applications
- Free of isocyanates, solvents, halogens and acids
- Can be painted with water based systems, industrial varnishes and coatings

Applications

- Elastic structural bonding applications where a tough and rigid bond is required.
- Elastic structural bonding in automotive applications: buses, trains, trucks, caravans or trailers, ...
- Structural bonding in vibrating constructions.
- Joints between metal plates.
- Soudabond 675 HR can be used in combination of a powder coating process. Completely cured Soudabond 675 HR is able to withstand a maximum of 30 minutes in a drying oven at 200 °C.

Technical data

Base	SMX Hybrid Polymer	
Consistency	Stable paste	
Curing system	Moisture curing	
Skin formation	ca. 5 minutes	
Curing speed	3 mm/24h → 4 mm/24h	
Density	1,52 g/ml	
Maximum allowed joint movement	ISO 11600	± 20 %
Elasticity modulus	ISO 37	2,00 N/mm ²
Elongation at break	ISO 37	> 250 %
Maximum tension	ISO 37	2,80 N/mm ²
Hardness	68 ± 5 Shore A	
Application temperature	+5°C → +35°C	

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Temperature resistance

-40°C → +90°C

Footnote: Skinning time and curing speed may vary depending on environmental factors such as temperature, moisture, and type of substrates.

Substrates

- **Substrate condition**
The surface must be rigid, clean, dry, free of dust and grease.
- **Substrate preparation**
Porous surfaces in water loaded applications should be primed with Primer 150. All smooth surfaces can be treated with Soudal Surface Activator. While producing plastics very often releasing agents, processing aids and other protective agents (like protection foil) are used. These should be removed prior to bonding or sealing.
- **Substrate types**
Soudabond 675 HR has a good adhesion to following substrates: stainless steel, AlMgSi1, electrolytic galvanized steel, hot dip galvanized steel, AlMg3, steel ST1403, polystyrene, polycarbonate, PVC, ABS, polyamide, PMMA, fiberglass reinforced epoxy, polyester. Soudabond 675 HR has no good adhesion or is not suitable for PE, PP, PTFE (Teflon®), bituminous substrates, copper or copper containing materials such as bronze and brass. We recommend a preliminary adhesion and compatibility test on every surface.

Application method

- **Application method**
Apply Soudabond 675 HR with a manual- or pneumatic caulking gun.
- **Cleaning method**
Clean with Soudal Surface Cleaner or with Soudal Swipex Wipes, immediately after use.
- **Finishing method**
Finish with a soapy solution or Finishing Solution before skinning.
- **Repair method**
Repair with Soudabond 675 HR.

Health- and Safety Recommendations

Take the usual labour hygiene into account. Consult the packaging label and safety data sheet for more information.

Packaging/Logistics

Colour: Please consult the product catalogue, the Soudal website or a Soudal representative.

Packaging: Please consult the product catalogue, the Soudal website or a Soudal representative.

Shelf life: 12 months in unopened packaging in a cool and dry storage place at temperatures between +5°C and +25°C

Joint dimensions

- The optimal bond thickness for this product is at least 2 mm for the elastic properties to come to full justice.

Remarks

- Soudabond 675 HR is paintable with most waterbased paints, however due to the large number of paints and varnishes available we strongly suggest a compatibility test before application.
- Once fully cured, Soudabond 675 HR can be coated with water-based industrial paints or powder coatings and then dried for a maximum of 30 minutes in a drying oven at temperatures up to 200 °C.
- The drying time of alkyd resin based paints may increase.
- Soudabond 675 HR can be applied to a wide variety of substrates. Due to the fact that specific substrates such as plastics, like polycarbonate, etc., may differ from manufacturer to manufacturer, we recommend a preliminary compatibility test.

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- Soudabond 675 HR can be used for bonding of natural stone, but it can not be used as a joint sealant on this surface type. Soudabond 675 HR can therefore only be used on the bottom of natural stone tiles.
- The use on plastics such as PMMA (e.g. Plexi® glass) or polycarbonate (e.g. Makrolon® or Lexan®) in stress loaded applications can give rise to stress cracking and crazing within the substrate. The use of Soudabond 675 HR is not recommended in these applications.
- Soudabond 675 HR can not be used as a glazing sealant.
- When applying, make sure that the surface of the materials is not smudged with sealant.

This technical data sheet replaces all previous versions. The directives contained in this documentation are the result of our experiments and of our experience and have been submitted in good faith. It is general in nature and does not constitute any liability. Because of the diversity of the materials and substrates and the great number of possible applications which are out of our control, we cannot accept any responsibility for the results obtained. Since the design, the quality of the substrate and processing conditions are beyond our control, no liability under this publication is accepted. It is the responsibility of the user to determine by his own tests whether the product is suitable for the application. In every case it is recommended to carry out preliminary experiments. The manufacturer reserves the right to modify products without prior notice.