

Soudaseal 650 HT

Description

Soudaseal 650 HT is a high-quality, neutral, elastic, one-component adhesive based on SMX – polymer with a very high initial tack.

Properties

- High initial tack reducing the need for initial support
- Fast curing
- Good extrudability
- High shear strength after full cure (no primer)
- Stays elastic after curing
- Very durable
- No odour
- Can be painted with water-based systems
- Good weather and UV resistance
- Does not contain isocyanates nor silicones
- Good adhesion on slightly moist substrates



Application

- Sealing and bonding in the building and construction industry.
- Elastic bonding of panels, profiles and other pieces on the most common substrates (wood, MDF, chipboard, etc).
- Elastic structural bonding in car and container industry.

Technical data

Base	SMX Hybrid Polymer	
Consistency	Stable paste	
Curing system	Moisture curing	
Specific Gravity (g/ml)	1.48	
Skin formation (minutes)	ca. 5	
Curing speed (mm/24h)	ca. 2 to 3	
Hardness (Shore A, Points)	60 ± 5	
Maximum Allowed joint movement (%)	ISO 11600	± 20
Elasticity Modulus (N/mm ²)	ISO 37	ca. 2.00
Elastic Recovery (%)	ISO 7389	> 75
Elongation at Break (%)	ISO 37 / ASTM D412	> 400
Maximum tension (N/mm ²)	ISO 37	ca. 3.50
Temperature Resistance (°C)	-40 to +90	
Application Temperature (°C)	+5 to +35	

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



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Substrates

- **Substrate condition**
The surface must be rigid, clean, dry, free of dust and grease.
- **Substrate preparation**
Prepare non-porous surfaces with a Soudal Activator or Cleaner. Porous surfaces in water-loaded applications should be primed with Primer 150. For optimum adhesion the use of Surface Activator is recommended. 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**
Soudaseal 650 HT has a good adhesion to many porous and non-porous substrates, metals, AlMg3, AlMgSi1, stainless steel, electrolytic galvanized steel, steel ST1403, hot dip galvanized steel, plastics, polystyrene, polycarbonate, PVC, polyamide, fiberglass reinforced epoxy, polyester.
Soudaseal 650 HT 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 the product with a manual, pneumatic or a battery-operated caulking gun.
- **Cleaning method**
Swiftly clean with Soudal Surface Cleaner or with White Spirit, immediately after use. Cured product can only be removed mechanically.
- **Finishing method**
Finish with a soapy solution or Soudal Finishing Solution before skinning.
- **Repair method**
Repair with the same material.

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: White, Black

Packaging: 600ml Sausage

Shelf life: 12 months from the date of production. The product must be stored in its original, undamaged, and sealed packaging under dry conditions, protected from direct sunlight, and 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.

Environmental Clauses

- **Leed regulation:** Soudaseal 650HT conforms to the requirements of LEED. Low –Emitting Materials: Adhesives and Sealants. SCAQMD rule 1168.
Complies with USGBC LEED 2009 Credit 4.1: Low-Emitting Materials – Adhesives & Sealants concerning the VOC-content.



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Remarks

- Soudaseal 650 HT may be overpainted with water-based paints, however due to the large number of paints and varnishes available. We strongly suggest a compatibility test before application.
- The drying time of alkyd resin-based paints may increase.
- Soudaseal 650 HT can not be used as a glazing sealant.
- Soudaseal 650HT 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.
- 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 Soudaseal 650HT is not recommended in these applications.
- Soudaseal 650HT can be used for bonding natural stone, but it cannot be used as a joint sealant on this surface type. Soudaseal 650HT can therefore only be used on the bottom of natural stone tiles.
- When applying, make sure that the surface of the materials is not smudged with sealant.
- A total absence of UV can cause a color change of the sealant.
- When using different reactive joint sealants, the first joint sealant must be completely hardened before the next one is applied.
- Not suitable for bonding aquariums.
- Do not use it in applications where continuous water immersion is possible.
- Discoloration of the product due to chemicals, high temperatures, UV-radiation may occur.
- A change in color does not affect the technical properties of the product.
- Contact with bitumen, tar or other plasticizer releasing materials such as EPDM, neoprene, butyl, etc. is to be avoided since it can give rise to discoloration and loss of adhesion.

This technical data sheet supersedes all earlier versions. The information provided is based on our tests and practical experience and is supplied in good faith as general guidance only, without creating any liability. Since materials, substrates, application design, and processing conditions vary widely and are outside our control, we cannot accept responsibility for the results obtained from use of this information. The user must verify suitability for the intended application through their own testing, and preliminary trials are recommended in all cases. The manufacturer reserves the right to change product specifications without prior notice.