

Soudaseal 650HT

Product description

Soudaseal 650HT 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

Applications

- 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	
Skin formation	ca. 5 minutes	
Curing speed	2 mm/24h → 3 mm/24h	
Density	1,48 g/ml	
Maximum allowed joint movement	ISO 11600	± 20 %
Elasticity modulus	ISO 37	2,00 N/mm ²
Elastic recovery	ISO 7389	> 75 %
Elongation at break	ISO 37	400 %
Maximum tension	ISO 37	3,50 N/mm ²
Hardness	60 ± 5 Shore A	
Application temperature	+5°C → +35°C	
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.

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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 (see Technical Data Sheet). 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 650HT has a good adhesion to following substrates: 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 650HT 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 Soudaseal 650HT with a manual- or pneumatic caulking gun.
- Cleaning method
Clean with White Spirit or Soudal Surface Cleaner immediately after use (before curing).
- Finishing method
Finish with a soapy solution or 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: 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

Standards and certificates

- Soudaseal 650HT meets GEV EMICODE: EC1 PLUS - very low emission.

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.

Remarks

- Soudaseal 650HT 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 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.

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- 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 not be used as a glazing sealant.
- Soudaseal 650HT can be used for bonding of natural stone, but it can not 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 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 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.