

12 December 2023

SOUDAFLEX 45FC PRO

Technical Data

Basis	Polyurethane+
Consistency	Stable paste
Curing system	Moisture curing
Skin formation* (23°C/50% R.H.)	Ca. 40 min
Curing speed* (23°C/50% R.H.)	Ca. 3 mm/24h
Hardness**	Ca. 36 ± 5 Shore A
Density	Ca. 1.24 g/mL
Elastic recovery (ISO 7389)**	> 80%
Maximum allowed distortion (ISO 11600)	± 20%
Max. tension (ISO 37)**	Ca. 1.25 N/mm ² (MPa)
Elasticity modulus 100% (ISO 37)**	Ca. 0.82 N/mm ² (MPa)
Elongation at break (ISO 37)**	> 800%
Temperature resistance**	-30 °C → 90 °C
Application temperature	5 °C → 35 °C

* These values may vary depending on environmental factors such as temperature, moisture, and type of substrates.

** This information relates to fully cured product

Product description

Soudaflex 45FC PRO is a high quality, neutral, elastic, 1-component construction joint and adhesive sealant based on Polyurethane+ technology developed by Soudal.

Properties

- Fast curing
- Very easy to apply
- High modulus
- Excellent resistance to UV radiation
- Bubble-free curing
- Permanently elastic after curing
- Very good adhesion on many materials
- Can be painted with most types of paint systems
- Excellent resistance to many chemicals

Applications

- All sealing and bonding applications in the building industry.
- Connection joints between window- and doorframes and walls.
- Interior and exterior floor joints
- Bonding of roof tiles.
- Expansion joints between many different construction materials.
- Structural bonding in vibrating constructions

Packaging

Colour: concrete grey, white, black

Packaging: 600 mL sausage

Shelf life

12 months in original, unopened packaging in a cool and dry storage place with temperature between +5°C and +25°C.

Chemical resistance

Resistant to intermittent exposure to salt water, detergents, fuels, oils, weak acids and bases (preliminary test required). Poor resistance to aromatic solvents, concentrated acids and chlorinated hydrocarbons.

Substrates

Substrates: all usual building substrates, brick, concrete, metals, polyesters, ...

Nature: rigid, clean, dry, free of dust and grease.

Surface preparation: Soudaflex 45FC PRO has a good adhesion to most substrates. However, for optimal adhesion and in critical applications, such as joints exposed to extreme weather conditions, high- or water- loaded joints, we recommend to follow a pretreatment procedure. Prepare non-porous surfaces with a Soudal **Surface Activator** or cleaner (see Technical Data Sheet). Porous surfaces should be

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primed with Soudal **Primer 100**. Always use **Primer 100** on *natural stone*. There is no adhesion on PE, PP, PTFE (Teflon®) and bituminous substrates. We recommend a preliminary adhesion test on any substrate.

Joint dimensions

	JOINT		BONDING
	Width	Depth	Width
Min	5 mm	5 mm	2 mm
Max	30 mm	½ width	10 mm
Recommendation for sealing: width = 2x depth			

Application method

Apply the product by means of a manual-, battery- or pneumatic- caulking gun. Apply Soudaflex 45FC PRO evenly without air inclusions into the joint. Smoothen the joint with a spatula with the help of finishing solution. Avoid that soapy solution comes between the joint edges and sealant (to prevent adhesion loss).

Application method: With manual- or pneumatic caulking gun.

Cleaning: Clean with Soudal Surface Cleaner or with Soudal Swipex, immediately after use. cured Soudaflex 45FC PRO can only be removed mechanically.

Finishing: With a soapy solution or Soudal Finishing Solution before skinning.

Repair: With the same material.

Health- and Safety Recommendations

Take the usual labour hygiene into account. Consult label and material safety data sheet for more information. Use only in well-ventilated areas.

Remarks

- When painted with oxidative drying paints disturbances in the drying of the paint may occur (we recommend to do a compatibility test before application).
- Soudaflex 45FC PRO has a good UV resistance but can discolour under extreme conditions or after very long UV exposure.
- Do not use in applications where continuous water immersion is possible.
- Do not use on polycarbonate.

- Soudaflex 45FC PRO cannot be used as a glazing sealant.
- Not suitable for bonding aquariums.
- 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 discolouration and loss of adhesion.
- Do not apply or allow to cure in the presence of uncured silicone sealants, alcohol - or other solvent cleaners.
- Discoloration due to chemicals, high temperatures, UV-radiation may occur. A change in colour does not affect the technical properties of the product.
- When using different reactive joint sealants, the first joint sealant must be completely hardened before the next one is applied.

Environmental clauses

Leed regulation:

Soudaflex 45FC PRO 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.

Liability

The content of this technical data sheet is the result of tests, monitoring and experience. It is general in nature and does not constitute any liability. It is the responsibility of the user to determine by his own tests whether the product is suitable for the application.

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