

SOUDAFLEX

FOR SEALANTS YOU CAN RELY ON,
RELY ON THE EXPERTS IN
SEALANTS



PU SEALANTS

SOUDAL

APPLICATION SITES & REQUIREMENTS

SEALING EXPANSION JOINTS IN FLOORS

Expansion joints in floors are continuously exposed to conditions that cause movement within the joint. These movements can be a result of heavy loads, such as industrial transport vehicles and fork-lift trucks, as well as changing weather conditions and temperature fluctuations. Typical application sites include:

- **Industrial floors**
(production sites, warehouses, etc.)
- **Public areas**
(railway stations, pedestrian areas, shopping malls, etc.)
- **Car Parks**
- **Specific projects**
(petrol stations, sewage systems, stables, etc.)

Therefore, the horizontal joints on each project must meet the specific requirements of the given application to allow for these factors.

APPLICATION REQUIREMENTS

Elastic PU Sealants used for floor joints must meet the following requirements, and depending on the application there can be additional requirements:

General Requirements

- Excellent adhesion properties to materials used in floors (e.g. concrete, aluminium and natural stone)
- High movement capability between the construction elements
- Excellent weatherability
- High mechanical strength

Application Specific Requirements

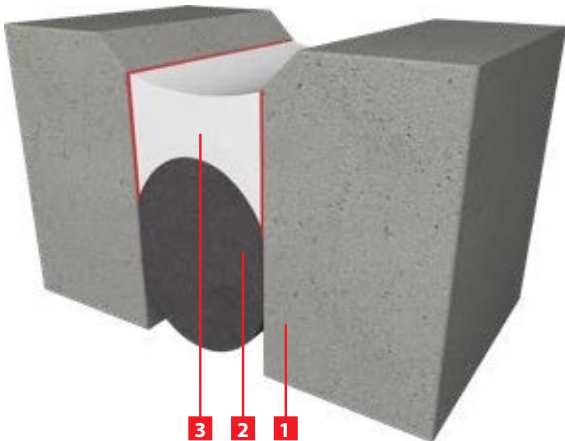
- Heavy load bearing / impact resistance:
 - Traffic loads and cleaning machines
- High chemical resistance:
 - High resistance to cleaning products
 - High chemical resistance to fuel, oil, gasoline and deicing fluids
- High resistance to abrasion
- Cleanable with high pressure
- Offer sufficient support & high hardness
- Good mechanical resistance to floor cleaning machines
- Compatibility with food, food contact



TECHNICAL

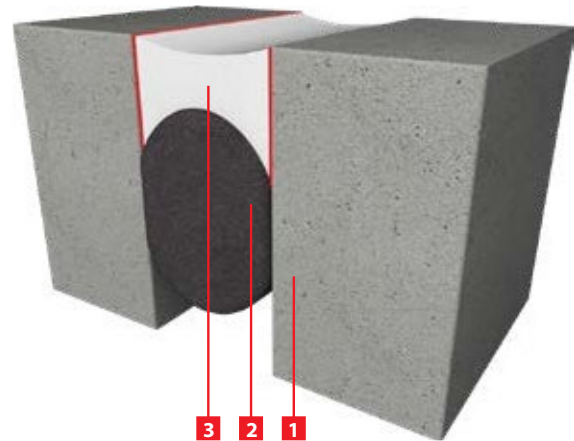
CONSTRUCTION DETAILS

Expansion joints in floors can be continuously exposed to a wide range of movement factors. The joint design will need to be determined in accordance with the application. In general, a distinction can be made between trafficable (warehouses, industrial areas, car parks...) use and pedestrian use (railway stations, shopping malls...).



TRAFFICABLE JOINT

In areas with high traffic load, a recessed joint is advised. Because of the specific design, there will be less contact between the vehicle tires and the sealant. This will reduce the chance of abrasion of the sealant and will provide a long-lasting solution. The slope design will prevent the joint edges from crumbling and affecting the sealant.



PEDESTRIAN AREA JOINT

For expansion joints in pedestrian areas, it is crucial that the joint provides sufficient support to prevent injuries. Therefore, it is important to decrease the recess of the joint to a minimum. It is also important that the sealant offers sufficient Shore A hardness to offer support when it is walked on with high heels for example.



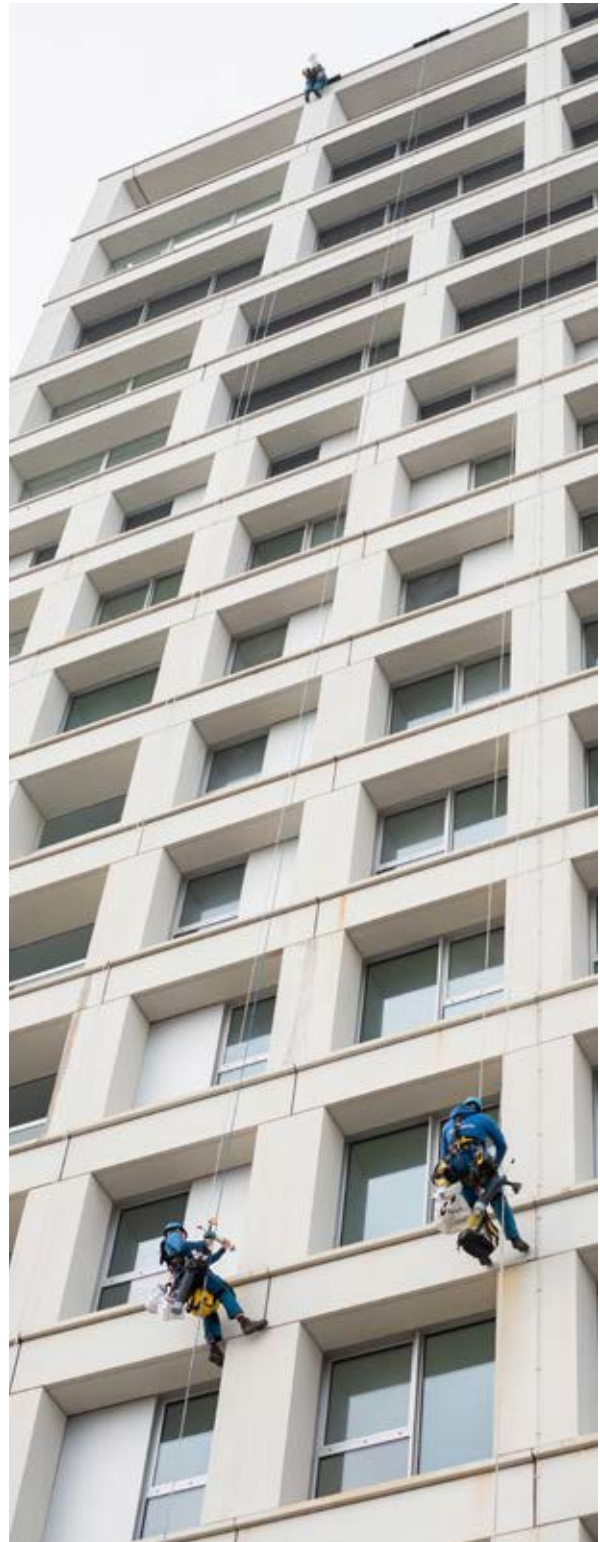
SEALING FACADE JOINTS

A facade sealant is designed to seal joints between facade elements. Expansion joints around windows and between concrete or facade panels are the most common applications.

The purpose of a sealant is to prevent humidity, air and dirt from getting inside the structure of the building, which can result in damage and additional costs. Several elements of a building can move due to thermal expansion, wind and transport. Therefore, it is crucial that a facade joint meets specific requirements of the application.

GENERAL APPLICATION REQUIREMENTS

- **Superior adhesion properties** to materials used in facades like concrete, aluminium panels and different window profiles. Depending on the type of application different materials are used.
- **High movement capability** between the construction elements.
- **Excellent weatherability:** the sealant should offer high wind, rain and UV resistance. This to prevent mechanical and esthetic failure like adhesion loss and discoloration.
- **Excellent workability:** No sagging, easy to extrude and short cut-off string. Sealants that are easy to tool will result in faster and better application.



APPLICATION SITES

CONNECTION JOINTS AND WINDOW PERIMETER SEALING

This application refers to the joint between the window frame and the facade (brickwork/concrete/etc.). For these projects special attention should be given to the adhesion on different window frames. There is a growing complexity of materials used in window assembly: wood, different types of PVC and coated aluminium. This needs to be considered when selecting the right sealing solution. Also paintability of the sealant will be in some cases an advantage. ▶



SEALING BETWEEN CONCRETE ELEMENTS, PRECAST PANELS, BRICKWORK, ...

Typically, these applications include the use of large-scale panels with exposure to high temperature fluctuations. That is why a sealant with flawless adhesion to porous substrates and a high elasticity is mandatory.

For weaker surfaces such as plaster and some external wall insulation systems, it is important to prevent stress on the sealants and surface. A softer/low E-modulus sealant will prevent high cohesive tension upon the sealants and surface in case of elongation or contraction. Good surface preparation is crucial to the success of a project. ◀

SEALING BETWEEN FACADE PANELS/CLADDING

The sealing of aluminium and composite panels is a common application in industrial construction. Due to the type of materials, extra expansion and movement will occur. Allowing for joint movement and adhesion to critical paints and coatings are therefore very important. Other points of attention are toolability, high color stability and excellent weatherability. ▶



PRODUCTS



146019	White
146020	Concrete Grey

SOUDAFLEX 45FC PRO

Premium general use and floor sealant

DESCRIPTION

Soudaflex 45FC PRO is a premium quality, elastic, 1-component construction joint and adhesive sealant based on polyurethane.

APPLICATIONS

- All sealing applications in the building industry
- Ideally suited for high movement floor joints e.g. in concrete
- Sealing between facade elements
- Suited for sealing natural stone
- Also suited for bonding applications

KEY BENEFITS

- Excellent adhesion on many materials
- Permanently elastic. Very high movement capability
- Very easy to apply, non-sag product
- Excellent weatherability
- Bubble free curing

STANDARDS & CERTIFICATES:

- Complies with ISO 11600 F 25 Hm
- EN 15651-1: F-EXT-INT-CC-25HM
- EN 15651-4: PW-EXT-INT-CC-25HM
- ISEGA - Tested for use in food stuffs-related area



130635	Concrete Grey
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SOUDAFLEX 33SL

Self-Levelling Floor Sealant

DESCRIPTION

- Soudaflex 33SL is a high quality, 1-component self-levelling PU sealant for inside and outside use.

APPLICATIONS

- All usual horizontal building, connection, expansion and dilatation joints
- Sealing of movement joints in concrete floors and natural stone
- Suited for sealing joints in environments where fuel and oil contact occurs

KEY BENEFITS

- Excellent adhesion on many materials
- Permanently elastic. Very high movement capability
- Very easy to apply, non-sag product
- Excellent weatherability
- Bubble free curing

STANDARDS & CERTIFICATES:

- EN 15651-4: PW-EXT-INT
- DIN EN 14187-4: Change in mass and volume following storage in chemical liquids
- DIN EN 14187-5: Resistance to hydrolysis
- DIN EN 14187-6: Adhesion/cohesion properties following storage in chemical liquids
- Soudal Technical Bulletin No. 2017-WD-0101 dd. April 16, 2017 regarding chemical resistance



PRODUCTS

SOUDAFLEX 36FL

Floor Sealant



DESCRIPTION

- Soudaflex 36FL is a high quality, elastic, 1-component PU sealant for floor joints.

APPLICATIONS

- All usual horizontal building, connection, expansion and dilatation joints
- Sealing of movement joints in concrete floors and natural stone
- Suited for sealing joints in environments where fuel and oil contact occurs

KEY BENEFITS

- Very good adhesion on many materials
- Permanently elastic
- Excellent weatherability
- Bubble free curing
- Excellent resistance to mechanical and chemical loads

STANDARDS & CERTIFICATES:

- EN 15651-4: PW-EXT-INT
- DIN EN 14187-4: Change in mass and volume following storage in chemical liquids
- DIN EN 14187-5: Resistance to hydrolysis
- DIN EN 14187-6: Adhesion/cohesion properties following storage in chemical liquids
- Soudal Technical Bulletin No. 2017-WD-0101 dd.

130725	Concrete Grey
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SOUDAFLEX 42FX

General Use and Floor Sealant



DESCRIPTION

- Soudaflex 42FX is a high quality, elastic, 1-component PU sealant and adhesive.

APPLICATIONS

- All sealing and bonding applications in the building industry
- Sealing joints in concrete floors
- Sealing between facade elements
- Also suited for bonding applications

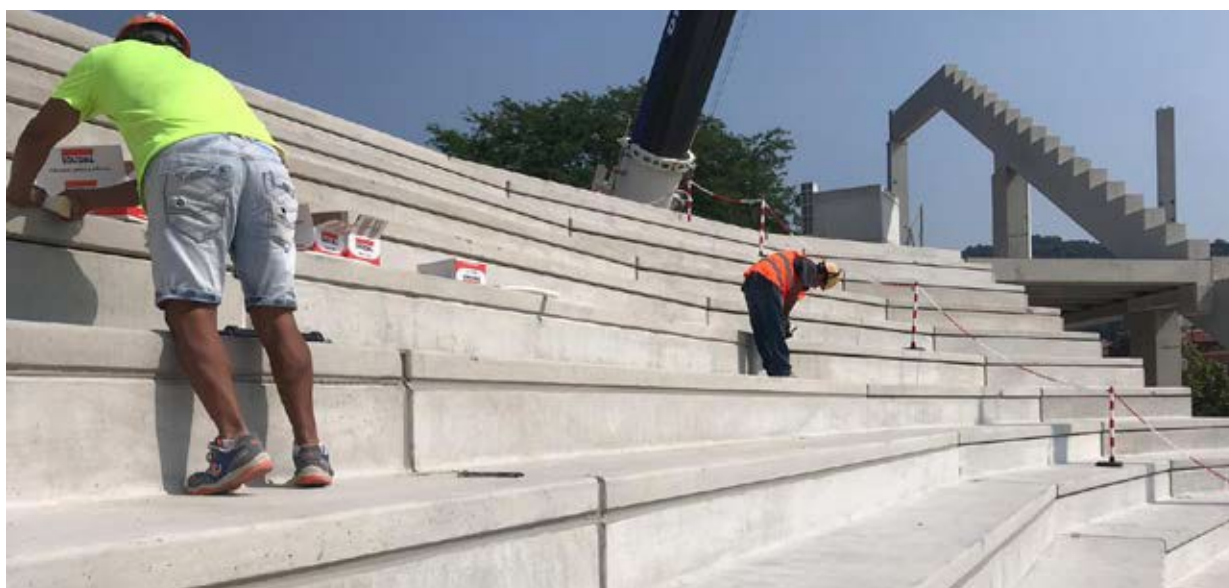
KEY BENEFITS

- Very good adhesion on many materials
- Permanently elastic
- Excellent weatherability
- Easy to apply

STANDARDS & CERTIFICATES:

- EN 15651-1: F-EXT-INT
- EN 15651-4: PW-INT

146956	White
147687	Concrete Grey
151950	Grey



PRODUCTS



CHOOSING THE RIGHT TECHNOLOGY PER APPLICATION

Depending on the application, Soudal offers a range of high-quality solutions in silicone, hybrid and PU technologies.

CONNECTION JOINTS & WINDOW PERIMETER SEALING

Neutral silicones and hybrid sealants are the most suitable for this application, as they both offer a very good weatherability. Hybrids offer the widest adhesion spectrum, are paintable and can be applied on slightly

SEALING BETWEEN CONCRETE ELEMENTS / PRECAST PANELS / BRICKWORK / ...

Polyurethane sealants or hybrid sealants are the most suitable for this application. Polyurethane sealants have an excellent adhesion to porous substrates and tend to be more forgiving in less optimal conditions. Hybrids offer better UV resistance and non-sag properties in wider joints.

SEALING BETWEEN FAÇADE PANELS / CLADDING

Both silicones and hybrids are often used for this application, due to the combination of excellent adhesion and weatherability.



SOUDAFLEX 20LM

Premium Low Modulus Facade sealant

PU

DESCRIPTION

- Soudaflex 20LM is a high quality, elastic, 1-component sealant based on polyurethane.

APPLICATIONS

- All usual building joints with high movement
- Expansion and connection joints in the building industry
- Sealing of expansion joints between concrete panels
- Suited for sealing natural stone

KEY BENEFITS

- Excellent adhesion to many materials like concrete and aluminium
- Low modulus
- Permanently elastic. Very high movement capability
- Good colour stability, weather and UV resistance
- Very easy to apply, non-sag product
- Bubble free curing



STANDARDS & CERTIFICATES:

- Meets ASTM C-920 Type S, Grade NS Class 35, Use T, NT, A and M
- Complies with ISO 11600 F 25 LM

126923	Concrete Grey
127290	White
127291	Black

MATRIX SEALING FLOOR JOINTS

KEY FUNCTION

SODAL SOLUTIONS	PREMIUM LM FACADE SEALANT	PREMIUM GENERAL USE AND FLOOR SEALANT	SELF-LEVELLING FLOOR SEALANT	ELASTIC FLOOR SEALANTS	
	SOUDAFLEX 20LM	SOUDAFLEX 45FC PRO	SOUDAFLEX 33SL	FLOOR SEALANT	GENERAL USE AND FLOOR SEALANT
					

PERFORMANCE*

TECHNOLOGY	Polyurethane +	Polyurethane +	Polyurethane +	Polyurethane +	Polyurethane
MODULUS	Low	Mid/high	Mid/High	Mid/High	High
ELONGATION AT BREAK	> 800	> 800	> 800	> 800	> 500
SKIN FORMATION (min)	35-45	35-45	55-60	55-60	35-45
SHORE A HARDNESS	29 ± 5	36 ± 5	35 ± 5	35 ± 5	40 ± 5

BUBBLING FREE CURING	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
UV RESISTANCE	★★★	★★★★★	★★★	★★★	★★★
ADHESION TO CONCRETE	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
HUMID/HOT CONDITIONS	★★★★★	★★★★★	★★★★★	★★★★★	★★★
SLUMP/SAGGING	★★★★★	★★★★★	-	★★	★★★★★

STANDARDS

ISO 11600 / CE	F EXT-INT 25LM	F-EXT-INT-25HM / PW-EXT-INT-25HM	PW-EXT-INT	PW-EXT-INT	F-EXT-INT / PW-INT
OTHERS	ASTM C920 CLASS 35	SNJF	ASTM Class 25		

- ★★ Neutral
- ★★★ Good
- ★★★★ Excellent
- ★★★★★ Superior

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Your distributor

