

PT Proofflex 1

**- joint sealing tape for construction joint, expansion joints and cracks -
(weldable, highly flexible, high elongation, waterproof)**

Product description

PT Proofflex 1 is a homogeneous high performance joint sealing tape based on special raw materials, which leads to a perfect bonding to epoxy based adhesives. The high performance tape can be welded with hot air (equipment 1500 W / 340°C). PT Proofflex 1 is UV resistant. The joint tape also has a very high chemical resistance (please ask our technical department).

Application areas

PT Proofflex 1 is used for the watertight sealing of expansion joints, joints between buildings, construction joints, concrete joints, cracks and crevices. It is used especially in areas which cannot be sealed properly with conventional sealants.

Product advantages

- **Weldable with hot air**
- **Different widths available**
- **Grey**
- **High elongation**
- **Salt water resistant**
- **High mechanical strength**
- **According DIN EN 13967**
- **Used in combination with epoxy based adhesives**
- **Part of Proofflex System**
- **Can be used on humid surfaces**
- **Absolutely watertight**
- **UV resistant**
- **Chemical resistant**
- **Takes high movements**
- **„Made in Germany“**

Specification

Material	: Thermoplastic polyolefin
Color	: light grey
Material thickness	: 1 mm
Roll width	: 150, 200, 250, 300 und 350 mm Other widths on demand
Maximum tensile strength lengthwise	: > 12,5 N/mm ² (DIN EN 12311-2 procedure B)

Maximum tensile strength crosswise	: > 12,5 N/mm ² (DIN EN 12311-2 procedure B)
Maximum tear strength lengthwise	: > 600% (DIN EN 12311-2 procedure B)
Maximum tear strength crosswise	: > 600% (DIN EN 12311-2 procedure B)
Tear propagation resistance lengthwise (nail)	: > 240 N (DIN EN 12310-1)
Tear propagation resistance crosswise (nail)	: > 240 N (DIN EN 12310-1)
Shore-A-hardness	: approx. 85
Bonding strength	: > 3 N/mm ² (DIN EN 1348)
Watertightness	: > 4 bar
UV-resistance	: > 6500 h (DIN EN ISO 4892-3)
Fire class	: E (DIN ISO 11925-2, EN 13501-1)
Weight	: 950 g/m ²

All technical datas are measured in our laboraty.

Please take notice about the safety information and advice given on the safety data sheets and packaging labels.

Delivery form

20 m per roll
Thickness: 1 mm

Width	
150 mm	Article-No. 04100150
200 mm	Article-No. 04100200
250 mm	Article-No. 04100250
300 mm	Article-No. 04100300
350 mm	Article-No. 04100350

Storage

24 months (cool and dry, protected from direct sunlight, + 5°C up to + 25°C).

Application

Surface preparation

The substrate must be mineral, wet or dry, stable, solid and clean. Loose ingredients, release agents, formwork oil, grease and other adhesion-reducing layers have to be removed first before using PT Prooflex 1. The age of the concrete should be, at least 3-4 weeks, depending on climate. Damaged areas, cracks and holes can be reprofiled with PT Prooflex Adhesive 431 CF. Probably a pretreatment of the substrate with sand or shot blasting is required. A bond strength of at least 1.5 N / mm² is necessary.

Material

Firstly the PT Proofflex Adhesive 431 CF is mixed homogeneously in the right mixing ratio. Therefore component B is fully mixed with component A. Choose a suitable mixing device, mix at least 3 minutes thoroughly, as long as in the mass are no more visible color streaks. We recommend refilling the product in a clean container and briefly mixing it again, just to ensure to get a homogenous mass. The mixing device should mix on low speed so that not too much air is introducing (max 400 U/Min).

The joint tape width and thickness depends on the expected loads. PT Proofflex 1 is intended for low-stressed seals. Maximum allowable stretching movement under constant load:

1 mm Joint Tape: 10 % unbonded zone band

For movement which are larger than predicted the PT Proofflex 1 has to be arranged in loops in the joint.

Application of PT Proofflex System

The joint tape may not be fully glued to the ground with joints > 1mm and must be free on the joint or crack. The homogeneously mixed PT Proofflex Adhesive 431 CF is applied on both sides of the crack along the joint through using a spatula or notched trowel.

Thickness of the adhesive layer: 1-2 mm.

Application width on both sides: at least 40 mm.

The PT Proofflex 1 must be embedded with the PT Proofflex Adhesive 431 CF and has to be pressed onto the surface. Avoid trapping air under the joint tape it may causes leaks.

If joint movements are anticipated the joint tape should be placed in loops into the joint. When sealing joints and cracks <1 mm in width, the PT Proofflex 1 can be covered entirely with PT Proofflex Adhesive 431 CF.

The joint tapes will be connected through thermal hot air welding (equipment 1500 W / 340°C) and compacting pressure. The welding zone of joint tape must be roughened or sanded before. Please treat only the actual welding zone.

An overlapping of 4-5 cm at connections, T-pieces, L-pieces have to be observed.

When joints are exposed to pressurized water the PT Proofflex 1 must be secured. Therefore foams and joint sealants can be used.

In case of pressurized negative water PT Proofflex 1 has to be secured from one side with a steel profile. if you have any questions you can consult us anytime.

The PT Proofflex-System includes

PT Proofflex tape + PT Proofflex Adhesive 431 CF

Recommended tools

gloves,
spatuly,
trowel,
welding equipment,
safety glasses,
roller

Application areas:**Remarks**

The information given in this technical data sheet corresponds to the current state of development and is based on our experience, our knowledge and is non-binding. An investigation has to be done with focus on the respective building project and the area of application. The technical expert advice of proof-tec employees does not exclude the planning or control by an engineer. We are liable within the scope of our general delivery and sales conditions, we are not liable for the application of our materials. The generally accepted rules of technology must be observed. If necessary, preliminary tests have to be carried out.

Version 02/2017

All previous versions of this technical data sheet are not valid anymore and should not be used anymore.