

# FLEX PU-2K

## Two-component, polyurethane joint sealant

### Description

FLEX PU-2K is a two-component joint sealant, based on polyurethane resins. When mixed, the two components are vulcanised to an elastic and cohesive mass.

The sealant has excellent UV resistance and shows thermal stability (it contains UV stabilizers and antioxidants).

Available in two types:

- **FLEX PU-2KV** for vertical surfaces.
- **FLEX PU-2KH** for horizontal surfaces.

### Fields of application

FLEX PU-2K is suitable for sealing vertical and horizontal concrete joints in buildings and civil engineering and hydraulic works (irrigation canals, water supply systems, tanks, etc.).

### Technical data

#### Uncured Sealant

Density at +23°C:	1.45 g/cm <sup>3</sup>
Application temperature:	+5°C -+35°C
Pot life:	25-60 min
Vulcanization rate:	1-2 days

#### Cured FLEX PU-2KV:

Tack-free time (+23°C):	6 h
Tension at 100% extension (DIN EN 28339):	20 N/cm <sup>2</sup>
Tensile strength at break (DIN EN 28339):	45 N/cm <sup>2</sup>
Elongation at break point (DIN EN 28339):	450%
Hardness (Shore A):	18
Movement Capability:	+/-25%
Recovery 100% extension:	90%
Resistance to flow (+23°C): (EN ISO 7390)	0mm

#### FLEX PU-2KH:

Tack-free time (+23°C):	4 h
Tension at 100% extension (DIN EN 28339):	15 N/cm <sup>2</sup>
Tensile strength at break (DIN EN 28339):	35 N/cm <sup>2</sup>
Elongation at break point (DIN EN 28339):	400%
Hardness (Shore A):	14
Movement Capability:	+/-25%
Recovery 100% extension:	90%

### Directions for use

#### 1. Substrate preparation

- The maximum anticipated joint deformity, which depends on the length of the structural elements, the expansion co-efficient of the substrate and the maximum anticipated temperature variation during the year, should not exceed 25-30% of the original width of the joint. Ideally, it is recommended that the minimum joint width should be no less than 1.0-1.5 cm and the maximum no more than 5cm. However, it can be used in applications where the joint width is up to 8cm. The sealing depth can be adjusted to 50% of the joint width, but should be at least 1.5cm.
- The joint sidewalls need to be thoroughly cleaned from loose particles, dust, etc., by blowing with compressed air.
- When necessary, the joint sidewalls are primed with PRIMER-PU 100 to reinforce the adhesion of the sealant.
- When necessary, the sealing depth is regulated with CELLUFILL (backing rod from expanded polyethylene). This way, the sealant does not adhere to the bottom of the joint and is thus free to move, following the expansion-contraction movements of the joint.

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## 2. Application

- The two components, packaged at a fixed ratio by weight, need to be thoroughly mixed with the use of a proper mixer, e.g. a helical spiral mixer attached to a drill. Mixing should continue until the mixture is completely homogenized. Since the two components are of different color (A: white - B: black), the homogenization can be visually checked (when the mixture obtains a homogeneous grey color, without darker or lighter spots or streaks, mixing is complete).
- The mixed sealant is applied into the joint by means of a special gun or spatula (for minor applications).
- The surface of the uncured sealant is smoothed with a spatula, so as to form a concave meniscus.

### Consumption

1.45 kg/l of joint volume.

### Packaging

FLEX PU-2K is supplied in packaging (A+B) of 5kg, with components A and B having a fixed ratio by weight.

### Shelf life – Storage

Shelf life is 9 months, in dry and frost-free conditions.

### Remarks

Application should be avoided in case of rain or at temperatures above +5°C or below +35°C.

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