

P635

CONSTRUCTION PU SEALANT

1 - Description

Akfix P635 is a one-component, low-modulus polyurethane sealant that cures on exposure to atmospheric humidity. It possesses excellent adhesion to all typical construction materials such as cement-based materials, brick, ceramic, glass, wood, galvanized and painted sheet iron and various plastics.

2 - Properties

- Possesses permanent elasticity
- 25 % movement capability
- No surface tackiness after full cure.
- Do not pick up dirt
- No shrinkage
- Cures bubble-free
- Enhanced storage stability
- No sagging – Thixotropic
- Can be applied with hand gun and tooled easily
- Paintable

3 – Application Areas

- Expansion joints between many different construction materials
- Movement and connection joints in floors
- Indoor and outdoor applications for pedestrian and traffic areas
- Joints between prefabricated construction materials
- Sealing and bonding of ventilation ducts, gutters and spouts etc.
- For expansion joints between pre-cast concrete panels

4 – Product Information

Packaging	310 ml , 600 ml
Shelf Life	15 months
Storage Conditions	Away from direct sunlight and moisture, between +10 °C and +25 °C
Color	White, Black, Grey

5 – Directions for Use

- Before application, be sure that joint surfaces are clean, dry and free of all contamination,
- Apply sealant evenly, If necessary, use masking tape and remove the tape while the sealant is still soft,

- Joint width/depth ratio should be 2:1 (Table 1),
- If necessary, use back up material to adjust joint depth,
- Sealants should adhere to only two surfaces of the joint: Use backer rods and bond breakers to facilitate.

Surface Preparation

Following cleaning procedure and materials are recommended:

Glass	Degrease with alcohol or MEK
Aluminium, light alloys and stainless steel	Degrease with alcohol or MEK
Other metals	Lightly abrade then degrease as above
Wood	Lightly abrade surface then remove dust
Plastics	Degrease using an agent recommended by plastics manufacturer
Concrete and other alkaline surfaces	Brush and remove dust

6 – Technical Data

Before Curing	Method /Condition	Value
Basis		: Polyurethane
Consistency		: Thixotropic
Curing System		: Moisture Curing
Density		: 1,20 ±0.03 g/ml
Tack Free Time	23°C and %50 R.H.	: 20-70 min
Curing Rate	23°C and %50 R.H.	: Min. 2.5 mm/day
Sagging	EN ISO 7390	: 0 mm
Application Temperature		: +5°C to +40°C
Temperature Resistance		: -40°C to +90°C

After Curing	Method /Condition	Value
Hardness Shore A	ASTM C661	: 35-40
Dyeability		: Yes
Elastic Recovery	ISO 7389	: ≥ 70%
Glass-Glass		
Elongation at break	ISO 8339	: ≥ 100%
E100 Modulus (23 °C)	ISO 8339	: 0.35-0.40 N/mm ²
E100 Modulus (-20 °C)	ISO 8339	: ≤ 0,60 N/mm ²
Dumble Test		
Elongation at break	ASTM D412	: ≥ 600%
Tensile Strength	ASTM D412	: 1,5-2,0 N/mm ²

Consumption (Approx.)

Joint width	15 mm	20 mm	25 mm	30 mm	35 mm
Joint Depth	8 mm	10 mm	12 mm	15 mm	15 mm
Joint length / 600 mL	5 meters	3 meters	2 meters	1,3 meters	1,1 meters

7 – Approvals and Certificates

Meets or exceeds the requirements of the following specifications:

- The requirements of VOC content specifications in LEED credit EQc4.1
- “Low-emitting products” of SCAQMD rule 1168.
- The French VOC requirements for class A+
- CE marked for EN 15651 for façade and pedestrian walkway applications.
- BS 6920 for the metallic water-soluble impurities.

8 – Remarks & Restrictions

- It must not be used in totally confined spaces where sealant cannot cure due to lack of atmospheric moisture.
- Do not use in applications where continuous water immersion is possible.
- Do not apply on frozen or wet surfaces or through standing water.
- Prolonged exposure to direct sunlight can cause discoloring,
- Avoid application below 5 °C and above 40 °C.

9 – Safety

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

10 – Disclaimer

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