

SEALANTS AND JOINTS



Vetoflex PU780

High performance, elastomeric, single-component polyurethane sealant

Uses

- Primerless sealing pre-cast panel joints and expansion joints.
- As a general elastic adhesive for materials with dissimilar properties and thermal expansion coefficients.
- Movement and static joint sealing in various construction industry requirements.

Product Description

Vetoflex PU780 is one part, moisture curing, water resistant, low modulus elastomeric joint sealant based on polyurethane. It is suitable for movement and connection joints for indoor and outdoor applications. Vetoflex PU780 is a paintable weather-resistant sealant when it fully cured with versatile usage both as a sealant and a general adhesive in the construction industry for various substrates, including concrete, steel, wood, and many others.

Advantages

- Weather-resistant, suitable for external and internal applications.
- Easy application using a caulking gun.
- Paintable with non-solvent or water-based paints after curing in static joints (i.e., around door perimeters).
- No crack or craze under UV exposure.
- Non-sag and non-staining.
- It does not require a primer and exhibits tenacious adhesion to most building materials.
- Excellent movement accommodation.

Design Criteria

Vetoflex PU780 use should follow standard concrete joints practices; sealants need either backing rod or joint breaker tapes to prohibit 3 point adhesion and allow movement freedom in the desired design. Saveto recommends the use of ACI 224.3-95 (re-approved 2013) for joint design.

Standards Compliance

- ASTM C920 as Type S, Grade NS, Class 25, Use T1, M and A
- ISO 11600 as Type F, Class 25LM
- TT-S-00230C as Type II, Class A

Technical Data

Vetoflex PU780	Typical Values @ 23°C & RH 50%
Color Availability	White, Grey, Beige as standard, others upon request.
Density (kg/liter)	1.48 (Gray)
Service Temperature (°C)	-20 to 80
Elongation at Break - ISO8339 (%)	> 173
Tear Resistance - ISO 34 (N/mm ²)	~ 11.7
Shore A Hardness - ASTM C661 @21 days	38
Elastic Modulus @100% ISO8339 (N/mm ²)	0.27
Movement Accommodation Factor (MAF) (%)	± 25
Adhesion Bond to Concrete	Higher than host concrete cohesive strength.
Extrusion Rate - ASTM C1183 @ 14 days moist cure (ml/min)	≥ 10
Curing Rate (mm/24 h)	~ 2
Tack-Free Time - ASTM C679 (Hours)	1
Peel Adhesion ASTM C794 ASTM C1442 @21 days, (N)	> 22.2
Effects of Accelerate Weathering ASTM C793	No crack

Usage Instructions

Joint Design

Standard design dimensions for concrete elements as per DIN 18 540 /table 3:

Joint Distance (m)	2	2-3.5	3.5-5	5-6.5	6.5-8
Design Joint Width (mm)	15	20	25	30	35
Minimum Joint Width (mm)	10	15	20	25	30
Joint Depth	8	10	12	15	15

Surface Preparation

Clean all joint surfaces and remove any dust, unsound material, plaster, oil, paint, grease, corrosion deposits, or algae. Roughen the surfaces, remove any laitance and expose aggregate by light scabbling or grit-blasting. Remove oil and grease deposits by steam cleaning, detergent scrubbing, or use a proprietary degreaser. Before positioning a bond breaker, check any expansion joint filler to ensure it is tightly packed with no gaps or voids at the base of the sealing slot. The use of a bond breaker is not required in expansion joints containing cellular polyethylene joint filler, backing rod (Vetoflex PBR). For construction or contraction joints, use a bond breaker tape or back-up strip.

Where a particularly neat finish is required, mask the joint's face edges before sealing and remove immediately after tooling is completed.

Priming

The use of a primer is generally not required when using Vetoflex PU780. However, where it is hard to bond substrates such as PVC or where highly porous substrates are in question, please contact Saveto local office for assistance on suitable primer choice.

Application

Cut and remove the end of the sachet and place the sachet in the Saveto bulk gun. Fit the nozzle and cut at 45 degrees to a suitable size for sealing the joint. Extrude the sealant firmly into the joint. Tool flush within 5 minutes of application to ensure good contact between the sealant and the substrate.

Cleaning

Remove Vetoflex PU780 from tools, equipment, and mixers with Vetonit Solvent XX400 immediately after use. Hardened material can only be removed mechanically.

Legal Disclaimer

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Hard copies of TDSs are printed once or twice a year. Our technical data sheets are continuously updated as per R&D improvements and new 3rd party testing; kindly refer to our website for the latest updated TDSs.

Packaging & Coverage

Product	Pack Size	
Vetoflex PU780	600 mL Sausages	
Coverage		
Joint Width (mm)	Joint Depth (mm)	Length Filled / Sausage (m)
10	8	7.5
15	8	4.5
20	10	2.5
25	12	1.6
30	15	1.3

Stated consumptions data are for general guidance. Actual consumption depends on the nature of substrate, method of application and wastage.

Shelf Life & Storage

The original sealed sausages of Vetoflex PU780 have a shelf life of 12 months, provided it is stored clear of ground in a dry, shaded place below 25°C.

Health & Safety

Vetoflex PU780 is not classified as hazardous. It contains Isocyanate.

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.

Additional Information

Saveto manufactures a wide range of construction chemicals and specialty products for various applications.

For further information on these products and systems kindly check our website or contact your local Saveto representative.