

weber PU flow 111

Polyurethane based, cold applied, non-sagging type sealant for vertical joints

Technical Data Sheet
Issued On: 02.05.2019
Revision No: 000

■ Description

Polyurethane based, dual-component, chemically curing, elastomeric, high-adhesive, non-sagging type joint sealant designed for sloped, vertical and reverse joints, suitable for heavy-traffic conditions.

■ Advantages

- Suitable for heavy service and traffic conditions
- Suitable for use on vertical areas and ceilings with non-sag feature
- High adhesion strength and abrasion resistance
- Resistant to dynamic movements
- Excellent adherence on asphalt-concrete and asphalt-asphalt joints
- Resistant to fuels, oils and many chemicals
- Resistant to UV radiation

■ Application areas

Suitable for use on sloped, vertical and reverse joints on ceilings.

Vertical joints at areas like airports, refineries, chemical facilities where materials like petrol based fuels and oils, antifreeze and battery acid are used often,

Curtain walls, expansion and control joints, sloped walls, pre-cast panels, prefabricated structures, around the holes on walls, floors and coverings where pipes are passing, connections of stairs, sloped ramps, channels and concrete pipes.

Used as joint sealant and crack repairing material, suitable for use on all vertical joints at exterior areas.



■ Application substrates

Exteriors;

- Concrete,
- Cement based renders and screeds,
- Metal,
- Asphalt,

Please consult us for all other application substrates.

■ Preparation of substrates

- Joint width should not be less than four times of the expected movement and 4 mm.

Joint width	<15 mm	15-25 mm	>25 mm
Joint depth	=Joint width	0,8 x Joint width	=25 mm

- Up to 15 mm width, joint depth should be equal to the joint width. For joints with a width between 15-25 mm, joint depth should be as 80% of the joint width. For wider joints, depth should be 25 mm.
- Joint surfaces should be clean and dry. Oil, grease, bitumen or sealant remains should be completely removed. Loose materials on the joint walls should be removed; broken joint walls should be repaired; outer corners should be beveled.
- If joint profiles will be used, then the joint edges should remain perpendicular.
- It is recommended using **weber.prim PU** primer before the application of **weber PU flow 111** on horizontal and vertical joints.
- A rod which preferably does not adhere to the sealant must be placed in the joint in order to attain the sealant depth determined according to the joint width. Closed cell polyethylene foam rods are suitable for this purpose. Diameter of the rod must be 10-25% larger than the joint width; the rod must be placed tight in the joint. Rods must not be damaged during placement.
- In wide joints, semi-rigid materials like polystyrene foam can be used instead of rod. In such cases, it is helpful to place a polyethylene tape over backing material in order to prevent adhesion to the sealant.
- It is recommended to tape both sides of the joint before starting application on joints especially where the decorative look is important.

■ Application conditions

- Ambient temperature between +5°C and +35°C.
- Avoid application under strong wind or direct sunlight.
- Should not be used on frozen or melting substrates, or substrates with the risk of frost within 24 hours.

■ Application

- Component A of **weber PU flow 111** should be mixed 2-3 minutes using low speed mixer in its own container. Then component B is added to the container and mixed for 3-5 minutes.
- The amount of sealant that can be used within the pot life must be determined by considering the application place and the capacity of the application apparatus. Mixed material must be used within its pot life.
- Prepared mixture is filled into a refillable type application apparatus with piston (sealant gun-applicator). A nozzle with a diameter enabling it to enter into the joint must be fitted to the apparatus and while the sealant is applied this tip must be moved forward by sliding over the backer rod in the joint. Thus it is ensured that no gap is left under the sealant and sufficient amount of sealant is used. Direct application using spatula is possible too.

- The joint sealer should be formed using spatula after the application.
- All tools used should be cleaned with synthetic thinner right after the application before the sealant gets cured.

■ Consumption

- Theoretical joint lengths for 1 kg of **weber PU flow III** are given in the table below;

Joint depth	Joint width				
	10 mm	20 mm	30 mm	40 mm	50 mm
5 mm	13,3 m				
10 mm		3,3 m			
15 mm			1,4 m		
20 mm				0,8 m	
25 mm					0,5 m

- Given consumptions are theoretical. Real consumption may vary depending on the smoothness of the joint and placement of the polyethylene foam rod.

■ Application tools

Hand mixer, caulking gun, spatula

■ Points of attention

- During mixing the mixer must be moved inside the container and it must be ensured that no air is trapped inside.
- Not recommended for joints narrower than 4 mm.
- Joint surfaces must be clean and dry. Oil, grease, bitumen or sealant remains must be completely removed. Loose materials on the joint walls must be removed; broken joint walls must be repaired.
- **weber PU flow III** is affected from water before curing like all other polyurethane materials. Therefore the joints must be dry and the sealant must not contact water until chemical curing occurs.

LEGAL DISCLAIMER

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The stated times apply for 20°C substrate and ambient temperature; increase at lower temperatures and decrease at higher temperatures.

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■ Technical specifications

PRODUCT	weber PU flow III
Base polymer	2 component polyurethane
Solids content	100%
Movement capability – expansion	50%
Movement capability – contraction	50%
Colour	Black
Elongation at break	>600% (ASTM D 412 Die B)
Density (A+B)	1,50±0,10 g/cm³
Durometer hardness (shore)	A20±5 (ASTM D 2240)
Resilience	>95% (TS 5962 EN 14188-2)
Penetration	0,5 mm
Pot-life	1 hour
Tack-free time	8 hours (TS 5962 EN 14188-2)
Curing time for light traffic	24 hours
Curing time for heavy traffic	48 hours
Curing time for chemical resistance	48 hours

■ Storage

Packaging	12,5 kg metal bucket (set)
Colours	Black
Shelf Life	<ul style="list-style-type: none">• 1 year from date of manufacture when stored unopened and undamaged, between +10°C and +25°C, in a dry, moisture-free environment.• Should be kept indoors.• Packages should be kept tightly closed when not in use.• Packages should be protected against frost.

■ Safety precautions

- Use appropriate safety equipment (mask, gloves, glasses).
- Protect your eyes/face.
- Avoid direct contact with eyes and skin.
- In case of contact with eyes, rinse immediately with plenty of clean water and seek medical attention.
- Please read Material Safety Data Sheet (MSDS) for further safety information.



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