



BIGUMA[®]-1401

Polymer modified bitumen based elastic joint sealant in accordance with TL Fug-StB 01 and DIN EN 14188-1, Type N1

Uses:

BIGUMA[®]-1401 is suitable for little or not trafficked joints in concrete and asphalt areas, which are subject to high movements. Particularly at joints on concrete and steel bridges along kerbs.

Properties:

BIGUMA[®]-1401 fulfils the requirements of the Technical Delivery Conditions for joint sealants in traffic areas“ (TL Fug-StB 01) and DIN EN 14188-1, Type N1.

BIGUMA[®]-1401 or the joints produced with the joint sealant distinguish itself by the following characteristics:

- elastic set, therefore high movement accommodation factor
- designed for a possible change in joint width up to 35 %
- good application characteristics at heat and at cold
- good bonding at bituminous and mineral subsoil
- high ageing resistance
- resistant against aqueous solutions, salts and thinned acids, or similar
- bituminous building material and therefore problem-free recyclable

Application instructions:

a) Melting:

BIGUMA[®]- 1401 has to be heated carefully to the application temperature of 160 - 180 °C in a boiler equipped with mechanical agitation, indirect heating and thermometer. The temperature of the sealant must be thermostatically regulated; it must be controllable at all times. Overheating of the sealant should necessarily be avoided, as this will damage the polymers, which were added for the improvement of the product, and consequently it will lead to a loss of the guaranteed properties.

b) Requirements to the subsoil:

The concrete and asphalt joints to be sealed should be thoroughly blown with high-pressure-air or cleaned with a brushing machine, whereas you have to pay attention to special separation of cleaning and application works. For artificial dry-out or pre-heating of the joints, hot compressed air lances can be used.

For BIGUMA[®]- 1401 the primer COLZUMIX[®]-Haftgrund has to be used, which is adapted to this material. The function of the primer is to bind the dust bonding at the concrete or asphalt and to form an adhesive layer, which will fuse with the sealant being filled into the joints.

The primer must cover the joint flanks completely by forming a film. It is recommendable to prime at both sides a stripe of approx. 1 cm width of the pavement. Before filling the joints the applied primer must have dried, i. e. the surface must be touch-dry. The primed joint has to dry and be free from dust to guarantee an intensive bond to the concrete or the asphalt.

c) Filling of the joints:

BIGUMA[®]-1401 can be applied by can or mechanical by the help of an application lance. The joint sealant must have reached the indicated application temperature during pouring work. If the pouring temperature is clearly below the stated temperature, the flow ability of the sealant suffers. The joint sealants may possibly not fill the to be poured joints completely. There is the danger that voids may occur which later can result in sinking of the sealant under rolling traffic.

Before the application of BIGUMA[®]-1401 a suitable bedding material is to apply. Through the bedding material the height of the joint sealant in the joint will be modulated. At the same time a leaking of the compound into possibly existing voids and the three-flank bonding will be prevented. A three-flank bonding may lead to a failure of the joint sealant caused by the tension.



The cooling of the sealant may cause shrinkage dependent on the joint dimensions; a second pouring can be necessary. This second pouring should be made immediately after the first one. The material has to be poured under flushing.

Weather conditions:

The prepared joints are only allowed to be sealed at dry weather conditions and at a surface temperature of the building part of 0°C.

Material consumption:

BIGUMA®-1401: joint length (cm) x joint width (cm) x joint depth (cm) x specific gravity of the sealant (g/cm³) = consumption (g).

Primer: The consumption of the primer (COLZUMIX®-Haftgrund) is approx. 3 % of the sealant amount needed.

Storage:

The product has to be stored cold and dry and is storable for at least 24 months

Form of supply:

The joint sealant will be filled into thin metal tins (hobbocks) and transported on non returnable pallets. A separation agent coating and the welded type of the hobbocks guarantee a fast, problem-free and safe removal of the mass out of the tin. The removed blocks can be filled into the heater together with the probably still adherent separation agent coating.

Metal tins: 27 kg

Cleaning agent:

Equipment: petrol and commercial solvents

at skin contact: hand washing paste

Authoritative regulations

At the production or the filling of the joints you have to follow among others the following regulations:

- ZTV Fug StB 01
- ZTV Beton – StB
- ZTV – BEL – B
- ZTV – BEL – ST

Technical data:

Application temperature: ca. 160 - 180 °C

Density: ca. 1,0 g/cm³

Primer: COLZUMIX®-Haftgrund

This product information is in accordance with our current information stand, the stated data are average values under normal conditions. The applicator is obliged to check the suitability and the possible applications for the intended purposes. For special technical information please do not hesitate to contact us. Our products are sold subject to our General Terms and Conditions of Sale.