



# Nafutekt Plus

## Bituminous bridge expansion joints

### Product Properties

- Bituminous hot-grouting compound
- Plasto-elastic system for bridge expansion joints according to ZTV-BEL-FÜ
- Waterproof

### Areas of Application

- Driven-on expansion joints on single- or multi-bay bridge constructions
- Segment joints in trough- and tunnel constructions
- Bridging of temperature- and load-related elongation of superstructures, waterproof junction to connected structural components and dams

### Application

#### Fusing

The polymer-modified, special bituminous binder Nafutekt Plus is carefully fused to the application temperature of 180 °C in a melting pot equipped with mixer and thermometer. Melting pots without mechanical mixer and with direct heating are not suitable and not recommended. The temperature is to be controlled thermostatically and to be checked constantly. Overheating and second fusing of Nafutekt Plus is not permitted.

#### Formation of joint troughs

Following appropriate pre-marking the joint trough is placed lengthwise and centred onto the building joint. The width is 50 cm, i.e. 25 cm each on the right and on the left side of the existing joint. The joint may either be milled and limited with subsequent sharp cuts or cut directly to pre-marked cut lines and the asphalt between the cuts may be removed using suitable equipment.

#### Preparation of substrate respectively trough edges

Prior to application of Nafutekt Plus the excavated joints are cleaned by compressed air blasting. The joints are dried and preheated using propane gas burners. The prepared joints may only be grouted in dry weather and substrate temperatures of + 5 °C. Following this the concrete substrate is to be primed, sealed or scratch coated (if required according to ZTV-BEL-B part 1).

#### Filling of joint gaps

The joint gaps are filled with heat-resistant joint filler profiles / foam rubber round cords. Afterwards the existing gap above the filler beneath is filled to the trough level with Nafutekt Plus.

#### Cover strip (Bitinox Strip)

The cover strip is pre-tailored and prepared with silicone spray; by means of a propane gas burner the cover strip is then placed centred in the joint gap.

#### Trough lining

Concrete trough edges must be primed with Nafutekt Plus Haftgrund.

The entire trough surface area is to be primed thoroughly using steel or wooden floats, especially the vertical trough edges.

#### Filling of troughs

Prior to filling of the trough the grid fabric HATELITH 30/13 is to be inserted. The grit is usually preheated in a rotary-drum mixer with perforated drum to a temperature of approx. 170 . 190 °C. Following preheating the grit is applied in layers. The single layers must not exceed 200 % of the largest grain diameter.

Nafutekt Plus is heated in a thermal oil heated mixer boiler to the required application temperature. The material may only be heated twice. If the material is not applied till then it must be dumped and disposed. Each layer of grit is compacted separately using a hand rammer or a vibrating plate and filled with Nafutekt Plus until saturated.

#### Surface finish

The final, still hot layer of Nafutekt Plus must be strewn thoroughly. The gritting material must also be heated to 150 - 170 °C. The grit is applied in excess using a shovel. After a cooling time of approx. 15 minutes the excessive grit is pressed on and swept off.



<b>Technical Data Nafutekt Plus</b>			
<b>Characteristic</b>	<b>Unit</b>	<b>Value</b>	<b>Comment</b>
Specific weight	kg/l	1.0	
Application conditions	°C	> 5	
Softening point	°C	89.0	according to Wilhelmi according to DIN 196, part 15
Softening point ring and ball	°C	84 - 97	according to DIN 250011

<b>Product Characteristics Nafutekt Plus</b>	
Delivery	Binder: 30 kg hobbocks Gritting material : 50 kg hobbocks and 25 kg bags Chipping: bulk material (loose) Cover strips: 7.5 m rolls (width 1cm)
Storage	If tightly sealed the original packs can be stored for at least one year at temperatures between + 5 °C and + 20 °C in dry conditions. The same requirements are valid for transport.
Disposal	Packs must be emptied completely.

Complete Application in accordance to installation manuel Nafutekt plus

Note: The statements in this data sheet are made on the basis of our experience and to the best of our knowledge, but are not binding. The respective objects and applications and any particular local conditions must be taken into consideration. Subject to the above reservations, we will be liable for the correctness of these statements, within the framework of our terms of sale and delivery. Any deviating recommendations made by our employees are only binding on us if they have been confirmed in writing. The generally acknowledged rules of the technology must be complied with in every case.  
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