

PRODUCT DATA SHEET

Sika Waterbar® O IN

Centrally placed PVC waterstop for watertight joint sealing

DESCRIPTION

Sika Waterbar® O IN is a flexible waterstop based on specially formulated plasticized PVC composition. It is serrated or ribbed with a central bulb to withstand expansion and contraction of joints and eliminates the risk of cracks in case of deflection and displacement arising due to change in temperature or settlement of foundation. It is produced in different profiles and sizes depending on the application and design requirements.

USES

For the effective sealing of concrete construction and expansion joints in structures such as:

- Basements
- Underground car parks
- Water reservoirs
- Dams and canals
- Sewage, effluent and water treatment plants
- Swimming pools and water bodies
- Retaining walls
- Lift shafts
- Tunnels, culverts
- Subways and sea walls
- Service pits

PRODUCT INFORMATION

Chemical base	Plasticized Polyvinyl Chloride (PVC-p)		
Packaging	Width	Thickness	Length
	230 mm	8 mm	25 m
	All rolls are packed in a PE foil. Several widths and thickness are available in various profile types. Please contact Sika representative for detailed information.		
Shelf life	12 months from date of production		
Storage conditions	The product must be stored properly in original, unopened and undam-		

CHARACTERISTICS / ADVANTAGES

- High quality PVC for long durability
- Permanent flexibility
- Provides impenetrable barrier to water migration
- Good mechanical properties
- Suitable for high water pressure
- Easy to weld on site
- Resistant to all natural mediums in soil and ground-water that are aggressive to concrete
- Good chemical resistance
- Many different sizes and types available, depending on application

APPROVALS / STANDARDS

- Confirms to IS 15058
- Confirms to IS 12200
- Confirms to CRD-C-572-74

aged sealed packaging in dry conditions at temperatures between +10 °C and +30 °C. Protect from direct sunlight.

Appearance / Colour Ribbed profile / Black or Blue

TECHNICAL INFORMATION

Shore A hardness	≥ 65	(IS 13360 : P5 : S11)
Tensile strength	≥ 13.8 MPa	(IS 8543 : P4 : S1)
Elongation	≥ 285 %	(IS 8543 : P4 : S1)
Chemical resistance	Permanent Exposure Water, sea water and sewage at temperature of +23 °C	Temporary Exposure Dilute inorganic alkalis, mineral acids and mineral oils

APPLICATION INFORMATION

Ambient air temperature +10 °C min. / +40 °C max.

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

APPLICATION METHOD / TOOLS

Formwork

Sika Waterbar® O IN is used in conjunction with split formwork. However, care should be taken to ensure that the "O" ring is not squashed flat between two forms. This method of installation increases the capacity of the Sika Waterbar® O IN to accommodate expansion.

Fixing to reinforcement

The waterstop is held in position by tying or anchoring to the reinforcement with special fixing clips or tie wires at least 5 spots per running metre. This ensures the waterbars are not displaced during concreting.

IMPORTANT

Level differences, bends, junctions, etc. should be carefully considered before placing.

Placing concrete first stage

Sika Waterbar® O IN performs its function only if both sides are well embedded in the concrete. Avoid formation of honey combs by vibrating carefully.

The consistency of the concrete itself should be neither too plastic nor too stiff, and the aggregate

must be well graded.

Placing of fresh concrete near the Sika Waterbar® O IN requires care, as otherwise it will be forced from its position by the pressure of the fresh concrete, i.e. the ends will fold up. To prevent this, the same concrete pressure must be present on both sides of the Sika Waterbar® O IN.

Placing concrete second stage

Removal of formwork in the neighbourhood of Sika Waterbar® O IN must be done with care.

The end of the Sika Waterbar® O IN should be thoroughly checked for honeycombing on the stop-end and repaired if necessary. It must also be cleaned of all hardened concrete remnants adhering from the first concrete stage. Further procedure is similar to the first stage.

Welding

On site welding can be undertaken using an electric welding knife. Both ends of the joint are heated simultaneously on the faces of the welding knife until an even, molten bead of PVC appears. The welding knife is withdrawn and the Sika Waterbar® O IN are immediately pushed together. The joint should be held rigid until the plastic cools down and solidifies.

Check for any gaps or imperfect joints. Redo the welding if necessary.

Failures can be caused by irregularities of cut edges, insufficient heat, dust etc.

IMPORTANT

Fumes and smoke are generated during the PVC welding process. Hence, welding should always be performed in open, well ventilated area.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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