

## PRODUCT DATA SHEET

# Sika Waterbar® V VN

Flexible PVC waterbar

### DESCRIPTION

Sika Waterbar® V VN is constructed from flexible thermoplastic PVC.

It is designed to stop the migration of water through construction joints in concrete structures.

### USES

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

- Water reservoirs
- Sewage treatment plants
- Swimming pools
- Basements
- Retaining walls
- Lift shafts
- Tunnels, culverts
- Service pits

### CHARACTERISTICS / ADVANTAGES

- Sealing starts as soon as the concrete has hardened
- Multi rib profile provides impenetrable barriers to water migration
- Can be easily site welded - (welding knife is available)
- Good chemical resistance
- Available various kind of profiles for all of type application

### PRODUCT INFORMATION

<b>Composition</b>	Polyvinyl Chloride
<b>Packaging</b>	Sika Waterbar® V VN 15 = 20m Sika Waterbar® V VN 20 = 20m Sika Waterbar® V VN 25 = 20m Sika Waterbar® V VN 32 = 15m
<b>Appearance / Colour</b>	Flexible strip / Yellow
<b>Shelf life</b>	5 years from date of production if stored properly
<b>Storage conditions</b>	Dry, shaded place (protected from sunlight)

### TECHNICAL INFORMATION

<b>Shore A hardness</b>	>70	ASTM D2240
<b>Tensile strength</b>	12 N/mm (± 5%)	ASTM D412-06
<b>Elongation</b>	300% (± 5%)	ASTM D412-06

<b>Chemical resistance</b>	Permanent: Seawater, sewage Temporary: Diluted inorganic alkalis, mineral acids, mineral oils and fuels.
<b>Service temperature</b>	-35°C to +55°C

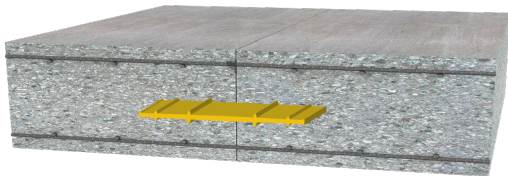
## SYSTEMS

System structure	Type	Width mm (± 5mm)	Roll Length (m)	Nominal Thickness mm (± 10%)
	V-15	150	20	3.0 - 5.0
	V-20	200	20	3.0 - 5.0
	V-25	250	20	3.0 - 5.0
	V-32	320	15	3.0 - 8.0

Sika Waterbar® V VN profile



## APPLICATION INSTRUCTIONS



### Fixing to formwork

The “V” profile Sika Waterbar® V VN is fitted into the split formwork or shuttering for casting centrally into the stopends. It is used for construction joints and movement joints where nominal movement is anticipated, such as basement or retaining walls.

### Fixing to reinforcement

Pre-punched eyelets are located in the outer flanges of the profiles. These simplify the fixing of waterbars to the steel reinforcement with tie wires to ensure the waterbars are not displaced during concreting.

### Placing concrete first stage

The Sika Waterbar® V VN 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® V VN 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 Waterbar.

### Placing concrete second stage

Removal of formwork in the neighborhood of Sika Waterbar® V VN must be done with care. The end of the Sika Waterbar® V VN 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 a Sika 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® V VN 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 CONSIDERATIONS

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

### PRODUCT DATA SHEET

Sika Waterbar® V VN  
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## BASIS OF PRODUCT DATA

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

## 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.

## ECOLOGY, HEALTH AND SAFETY

**Ecology:** Can be disposed according to local law

**Transportation:** Non-hazardous

**Toxicity:** Non-toxic

**Important note:** Care should be taken to avoid breathing fumes and smoke during the PVC welding process. Hence, welding should be performed in open, well ventilated area.

In case of doubt always follow the directions given on the pack or label.

## 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.