

## PRODUCT DATA SHEET

# Sika Waterbar® AR EG

### EXTERNAL WATERBARS FOR JOINT SEALING IN WATERTIGHT CONCRETE CONSTRUCTION

#### DESCRIPTION

Sika Waterbars Type AR made from PVC-P are used for sealing construction joints in watertight concrete structures. Sika Waterbars PVC-P Type AR are available in a range of sizes to suit different structures and applications.

#### USES

Application fields:

- Joint sealing in concrete structures
- Construction joint sealing in insitu concrete Typical structures include:
  - Residential building basements
  - Commercial building basements
  - Underground car parks

#### CHARACTERISTICS / ADVANTAGES

- High tensile strength and elongation
- Permanent flexibility Suitable for medium levels of hydrostatic pressure and stress
- Resistant to all natural mediums in soil and ground-water that are aggressive to concrete
- Weldable

#### APPROVALS / CERTIFICATES

Standards / Directives: Profile geometry and physical properties according to Sika Factory Standard

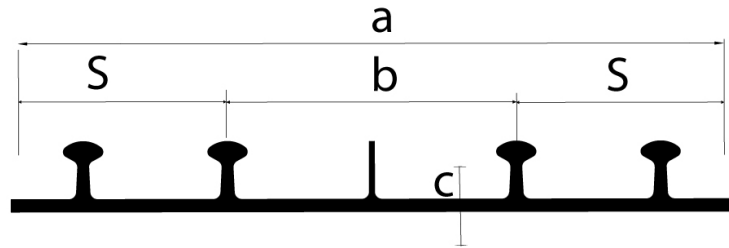
- Sika Waterbar PVC-P welding instruction and method statement
- Testing & Approvals: Manufacturer's test certificates provided, other certificates by agreement

#### PRODUCT INFORMATION

<b>Composition</b>	PVC-P (Polyvinyl Chloride Plasticized)
<b>Packaging</b>	Standard rolls 15 m.
<b>Shelf life</b>	The product does not expire if stored correctly
<b>Storage conditions</b>	▪ To be stored on the pallets as supplied on a flat base
<b>Appearance / Colour</b>	Dark grey
<b>Shore A hardness</b>	90 ± 5 DIN 53505
<b>Tensile strength</b>	≥ 10 N/mm <sup>2</sup> DIN 53455 12 - 15 N/mm <sup>2</sup> CRD-C 573 , ASTM D-412 & D-638 ≥ 11 N/mm <sup>2</sup> BS 2782 M320A
<b>Elongation</b>	> 300 % DIN 53455 300% - 350% CRD-C 573, ASTM D-412 & D-638 > 300 % BS 2782 M320A
<b>Tear strength</b>	≥ 12 N/mm <sup>2</sup> DIN 53507 A
<b>Service temperature</b>	- 35°C to + 55°C

**SYSTEMS**

**System structure**



Total width (mm) a	width of movement part (mm) b	thickness (mm) c	width of sealing parts (mm) s
AR 20 (200mm)	80 mm	3.5 mm	60 mm
AR 25 (250mm)	105 mm	3.5 mm	72.5 mm
AR 31 (310mm)	90 mm	4.0 mm	110 mm
AR 40 (400mm)	115mm	5.0 mm	142.5 mm

Type	Number of Ribs
AR 20, AR 25, AR 31	4 ribs
AR 40	6 ribs

**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**

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.. Please wear appropriate PPE applicable to the application method of this product.

**APPLICATION INSTRUCTIONS**

**APPLICATION METHOD / TOOLS**

General

Only butt joints should be formed on site with Sika Waterbars PVC-P Type AR.

Prefabricated formpieces:

Standard formpieces (flat or vertical) for Sika Waterbars PVC-P Type AR include: Cross pieces, T-pieces, L-pieces.

Prefabricated formpieces help to reduce the required butt joints on site to a minimum.

Special formpieces:

Combined formpiece systems using combinations of different standard connections and profiles. The standard maximum total length of formpiece system is 20m maximum. Longer formpiece systems on request.

Handling:

- Careful transport and handling on site
- Installation at ambient and waterbar material temperatures  $\geq 0^{\circ}\text{C}$
- Protection until the waterbar system is fully cast in

the concrete

- Special care must be taken with the waterbar system ends

- Waterbars must be cleaned before casting in

Application:

- Internal waterbars are to be installed within the concrete section and clearance from the edge of the concrete must be at least half of the total width a of the waterbar

- Detailed information on installation is given in the relevant method statement and instruction for use. If there are very high stresses or difficult concreting conditions, the waterbars can be combined with integrated injection hoses installed locally on the lateral anchoring ribs to additionally inject / grout around the cast-in parts at a later date.

Joining on site:

The Sika Waterbars PVC-P Type AR are butt jointed by welding.

Joining with adhesives is not permitted.

Requirement: Minimum ambient temperature + 5°C and dry weather conditions.

Site joints must be formed only by trained and qualified personnel.

**LOCAL RESTRICTIONS**

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

**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 cur-

rent 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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**Product Data Sheet**

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