

## PRODUCT DATA SHEET

# Sika® MetalSheet FBV

Coated metal sheet for joint waterstop with adhesion to fresh concrete for waterproofing concrete construction joints

### PRODUCT DESCRIPTION

The Sika® MetalSheet FBV joint waterstop is a galvanized metal sheet with a special coating, applied on one side to increase its adhesion to fresh concrete. This coating produces a durable watertight bond into the concrete structure.

### USES

Waterproofing of construction joints in reinforced concrete structures (White Box).

### CHARACTERISTICS / ADVANTAGES

- Approved for use against water under pressure, up to a 20 m head
- Easy, quick and safe to install due to the FBV coating
- Installation is not limited by the weather

### APPROVALS / STANDARDS

General Approval Certificate, MFPA Leipzig

### PRODUCT INFORMATION

<b>Chemical Base</b>	Hot-dip galvanized steel with polymer coating			
<b>Packaging</b>	<b>Type</b>	<b>Width</b>	<b>Length</b>	<b>Packing unit</b>
	Sika® MetalSheet FBV set*	150 mm	15 m	1 roll + accessories in cardboard
	* Set includes the following accessories: 1roll Sika® MetalSheet FBV, 30 mounting brackets; 4 jointing clamps			
<b>Shelf Life</b>	36 months			
<b>Storage Conditions</b>	Protect the coated metal sheet from exposure to contamination and direct sunlight, store in a dry place, safe from weathering and mechanical damage. Store at temperatures between +5°C and +35°C.			
<b>Appearance / Colour</b>	Grey with a transparent coating on one side and a white release-liner.			
<b>Surface</b>	Coating Density: 0.96 g/cm <sup>3</sup>			
<b>Thickness</b>	0.8 mm (0.6 mm metal-sheet + 0.2 mm coating)			
<b>Mass per unit area</b>	4800 g/m <sup>2</sup>			

## APPLICATION INFORMATION

### Ambient Air Temperature

+ 5°C up to + 40°C

Tip: For installing in cold periods, the coating can be warmed up to +5°C with a heating dryer / hot air device; so the connections can be bonded correctly.

## VALUE BASE

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

### REGULATION (EC) NO 1907/2006 - REACH

This product is an article as defined in article 3 of regulation (EC) No 1907/2006 (REACH). It contains no substances which are intended to be released from the article under normal or reasonably foreseeable conditions of use. A safety data sheet following article 31 of the same regulation is not needed to bring the product to the market, to transport or to use it. For safe use follow the instructions given in the product data sheet. Based on our current knowledge, this product does not contain SVHC (substances of very high concern) as listed in Annex XIV of the REACH regulation or on the candidate list published by the European Chemicals Agency in concentrations above 0,1 % (w/w).

## APPLICATION INSTRUCTIONS

### APPLICATION METHOD / TOOLS

#### General

- Sika® MetalSheet FBV are supplied in 15 m rolls.
- The sheets have a transparent FBV-coating on one side which is shielded by a protective film divided in at the centre. The film must be removed before the individual concrete pours.
- Installation is not limited by the temperature. Just for jointing, the coating have to be warmed up to +5°C.  
Undulations of the profile do not affect the functional performance of the Sika® MetalSheet FBV (minimum clearance from the reinforcement 3 cm).

#### Installation

- Place the Sika® MetalSheet FBV in the reinforcement. Install the coated side on the side facing the water.
- Bend to form angles and curves.
- Remove the protective film strip at the bottom before fixing the sheet (can also be done after fixing – but always before concreting the base slab).
- Position the Sika® MetalSheet FBV in the centre of the construction joint – with the coated side to the side facing the water. The minimum clearance from starter bars should be 3 cm.
- Fix the Sika® MetalSheet FBV with mounting brackets at 50 cm centres. This is done by attaching with tie

wire to the top reinforcement layer. In corner areas the clearance of the fixings from the corner should be 20 cm max. Fit the fixing clamps so that the shorter, curved leg is on the coated side.

- Lap the joints by 10 cm. Remove the protective film from the joint area, press the ends together firmly and secure with a joint clamp or mounting bracket. Connections for vertical joints (wall/wall) are not generally formed until immediately before reinforcing or striking the walls (see description under “Connections”).

#### Concreting the base slab

- Before concreting, check once again that the sheet is continuously bonded and stable and that the bottom protective strip has been removed.
- Approximately half of the metalsheet – but always at least 3 cm – should be integrated in the concrete slab.
- If the sheet slips during the concreting operation, it should be manipulated back to the correct position manually and straight after finishing pouring the concrete.

#### Concreting the walls

- Snip off the mounting brackets at the top of the sheet with bolt cutters. This removes the shortened clamp leg, which makes it easier to pull off the protective strip at the top and allows the reactive contact surface of the sheet to be effective over the full surface.
- Pull off the strip of film at the top before placing the reinforcement and closing the formwork (rain and sun cannot damage the coating in the short term).
- Fix the sheets in the wall joints (see Connections: T-joint) and remove both halves of the protective film.
- The concrete fall height should be kept to a minimum until the joint sheet is fully integrated. Avoid touching the sheet or working anywhere close to it with the vibrating concrete poker.

#### Connections

- T-joint, horizontal floor slab/vertical wall joint: First remove the film, then press firmly and secure with two joint clamps.
- Connection to expansion joint waterbar: The metal sheet is clamped to the outermost edge of the waterstop with Sika KS 15 clamping bars.

## LOCAL RESTRICTIONS

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

## 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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