

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-17/0550
of 19 December 2019

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the
European Technical Assessment:

Deutsches Institut für Bautechnik

Trade name of the construction product

"Dichtblech VB"

Product family
to which the construction product belongs

Coated metal water stop sheet for construction and
controlled crack joints

Manufacturer

MASTERTEC GmbH & Co. KG
Im Maintal 13
96173 Oberhaid
DEUTSCHLAND

Manufacturing plant

MASTERTEC GmbH & Co. KG
Im Maintal 13
96173 Oberhaid
DEUTSCHLAND

This European Technical Assessment
contains

10 pages including 5 annexes which form an integral part
of this assessment

This European Technical Assessment is
issued in accordance with Regulation (EU)
No 305/2011, on the basis of

EAD 320002-02-0605

This version replaces

ETA-17/0550 issued on 26 October 2017

European Technical Assessment

ETA-17/0550

English translation prepared by DIBt

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Specific part

1 Technical description of the product

The water stop "Dichtblech VB" consists of the following components:

- Galvanized metal sheet with the dimensions:
h = 80 mm, t = 0.6 mm
h = 120 mm, t = 0.6 mm
h = 160 mm, t = 0.6 mm / t = 0.8 mm / t = 1.0 mm
h = 240 mm, t = 0.6 mm
- coating on the basis of a thermoplastic elastomer

The metal sheet is fully coated with a thermoplastic elastomer coating. The thickness of the coating is approximately ≥ 0.14 mm.

For installation purposes the water stop is delivered with a protective foil on the coating. Furthermore there are holders for fixing the water stop during installation and clamps for fixing the overlapping joint between the ends of the water stop.

There are the following types of products:

Product	Coated side	Thickness (t)	for use
Dichtblech 80 VB	single	0.6	Working joint/ construction joints
Dichtblech 120 VB			
Dichtblech 160 VB			
Dichtblech 240 VB			
Dichtblech 80 VB	double	0.6	Working joint/ construction joints
Dichtblech 120 VB			
Dichtblech 160 VB			
Master-Dichtblech Premium			
Dichtblech 240 VB			
Abschalelement ABS, raue Fuge		1.0	Working joint
Abschalelement ABS, Verzahnte Fuge		0.8	Controlled crack joints in in-situ concrete
SRF 125			
SRF 125 Multi			

Annex A shows the principles and performances of the product and furthermore the different types of products.

2 Specification of the intended use in accordance with the applicable European assessment Document

The water stop is used to seal joints in constructions made of concrete with high resistance to water (watertight concrete) against the penetration of pressing and un-pressing water (e.g. ground water) and to soil moisture.

There are the following scenarios of intended use:

- a) Construction joints
- b) Controlled crack joints for the use in in-situ concrete

The performances given in Section 3 are only valid if the water stop is used in compliance with the specifications and conditions given in Annex B.

The verifications and assessment methods on which this European Technical Assessment is based lead the assumption of working life of the water stop of 50 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

3 Performance of the product and references to the methods used for its assessment

3.1 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire	See Annex A1

3.2 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Watertightness in end use conditions	See Annex A1
Bondstrength at state of delivery	See Annex A1
Bondstrength after heat aging	See Annex A1
Volatile compounds (Lost of weight)	See Annex A1

3.4 General aspects

The verification of durability and serviceability is part of testing the essential characteristics. Durability and serviceability are only ensured if the specifications of intended use according to Annex B and the specifications of the technical documents of the manufacturer¹ are kept.

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with EAD number 320002-02-0605 the applicable legal act is: 1999/90/EC

The system to be applied is: 3

In addition, with regard to reaction to fire for products covered by this EAD the applicable European legal act is: 2001/586/EC

The system to be applied is: 3

¹ The manufacturer's technical documents comprises all information necessary for the production and the installation of the product as well as for repair of the roof waterproofing made from that and it is deposited with DIBt.

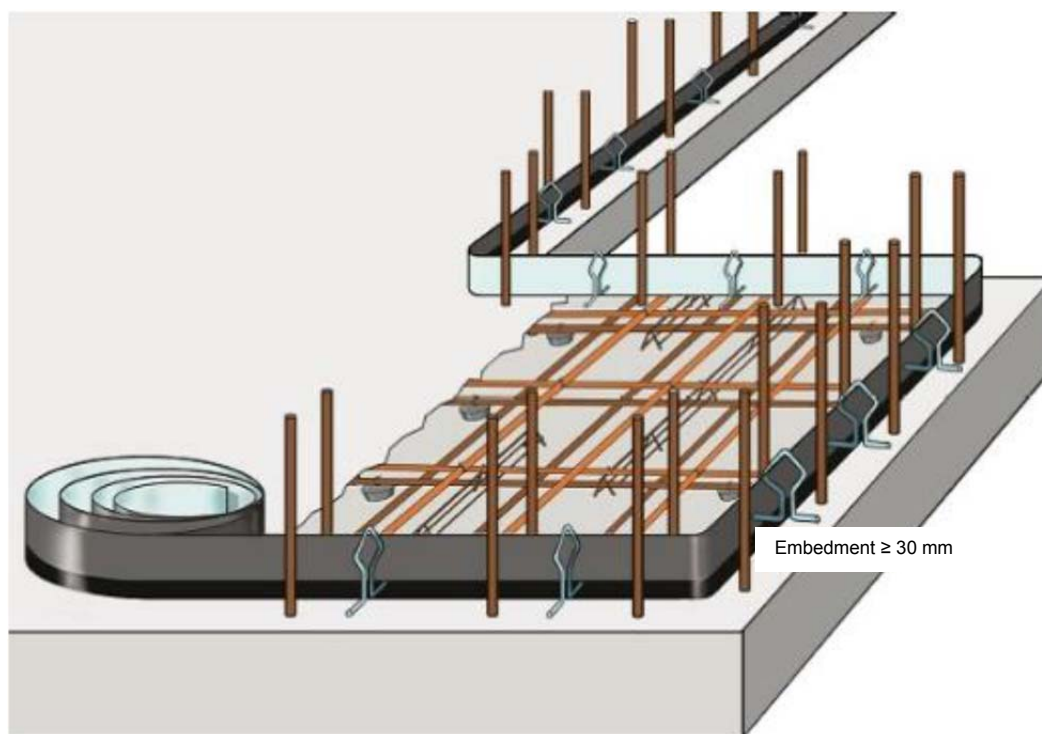
5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 19 December 2019 by Deutsches Institut für Bautechnik

BD Dipl.-Ing. Andreas Kummerow
Head of Department

beglaubigt:
Gnamou



Coated metal water stop "Dichtblech VB" - single or double coated – for construction joints

Performance of the product:

Reaction to fire acc. to EN 13501-1	Class E
Use category related to BWR 3	S/W 2
Watertightness in end use conditions	
Dichtblech 80 VB1/VB2 'Dichtblech 120 VB1/VB2	Up to 16 m
Dichtblech 160 VB1/VB2 Master-Dichtblech Premium Dichtblech 240 VB1/VB2 Stopend panels ABS, rough joint Stopend panels ABS, toothed joint SRF 125 SRF 125 Multi	Up to 20 m
Bondstrength at the state of delivery	> 0.20 N/mm ²
Bondstrength after heat aging	pass (< 20 %)
Volatile compounds	pass (< 3 %)

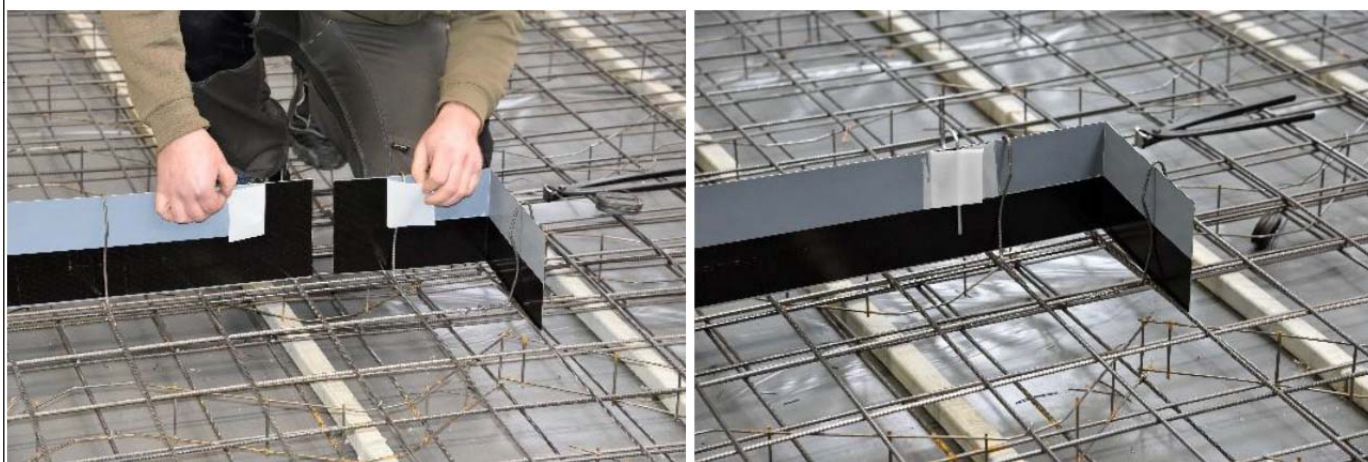
"Dichtblech VB"
Mastertec GmbH & Co. KG

System built-up, use categories and performances of the product

Annex A1

Types of Product	Coated sides	t [mm]	h [mm]	l [m]	Use scenario
Dichtblech 80 VB1	1	0.6	80	flat and coil in different lengths	construction joints
Dichtblech 120 VB1	1	0.6	120		
Dichtblech 160 VB1	1	0.6	160		
Dichtblech 240 VB1	1	0.6	240		
Dichtblech 80 VB2	2	0.6	80		construction joints
Dichtblech 120 VB2	2	0.6	120		
Dichtblech 160 VB2	2	0.6	160		
Master-Dichtblech Premium	2	0.6	160		
Dichtblech 240 VB2	2	0.6	240	1 – 5	controlled crack joints in in-situ concrete
Stopend panels ABS, rough joint	2	1.0	160		
Stopend panels ABS, toothed joint	2	1.0	160		
SRF 125	2	1.0	160		
SRF 125 Multi	2	0.8	160		

Overlap:

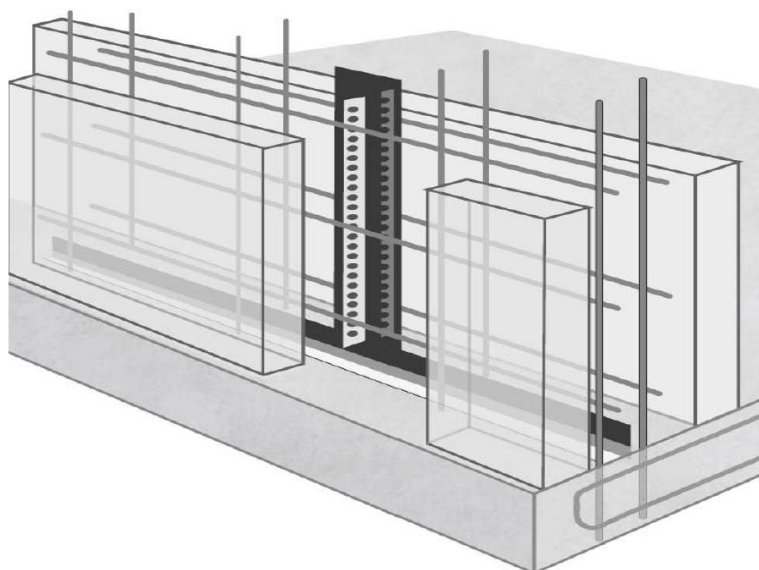


"Dichtblech VB"
Mastertec GmbH & Co. KG

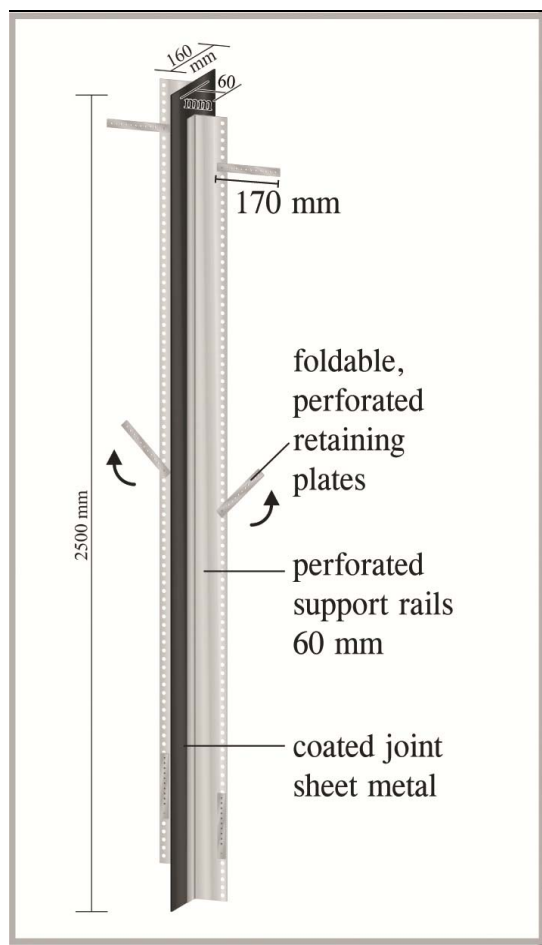
Description of equipment

Annex A2

"SRF 125" controlled crack joints and



"SRF 125 Multi" for the use in in-situ concrete



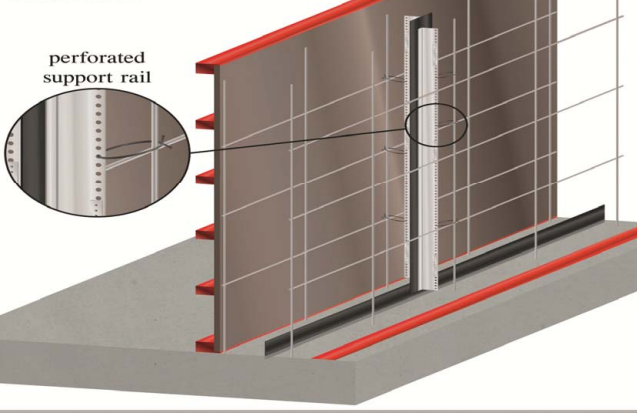
Cavity wall installation

One profile for straight joints and corner constructions.

Fastening with support rails
Wall thicknesses up to 40 cm

Connection to joint sheet metal
The offset arrangement of the retaining plates means you remain flexible at all times.

SRF 125, attached to the reinforcement

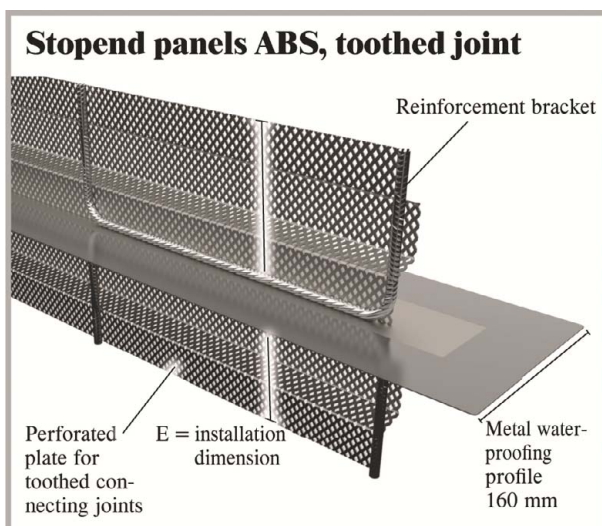


"Dichtblech VB"
Mastertec GmbH & Co. KG

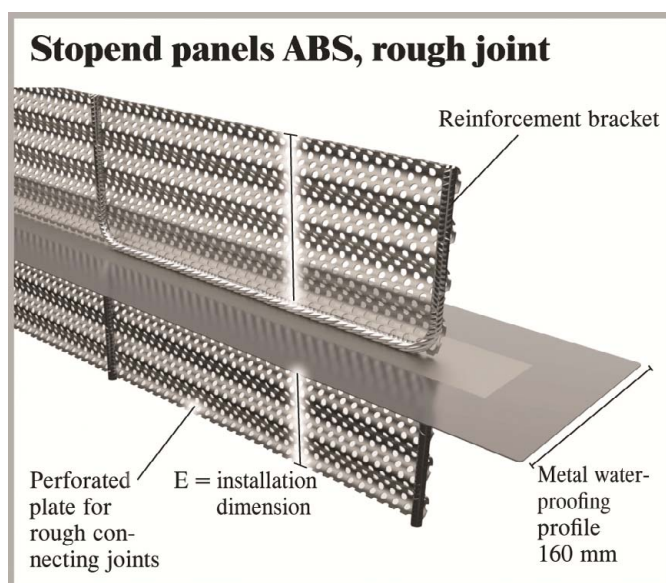
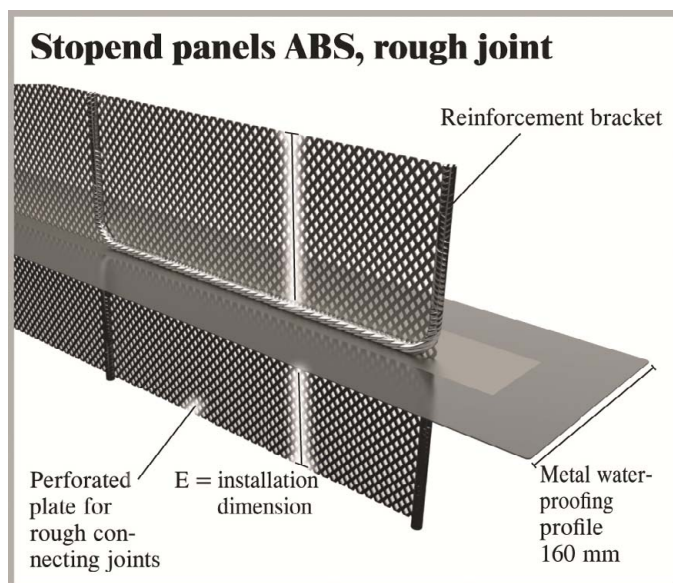
Description of equipment

Anhang A3

Stop end panel
"Stopend panels ABS, toothed joint" and



"Stopend panels ABS, rough joint"



"Dichtblech VB"
Mastertec GmbH & Co. KG
Description of equipment

Anhang A4

Installation

The performance of the waterproofing product can be assumed only, if the installation is carried out according to the installation instructions stated in the technical file of the manufacturer, in particular taking account of the following points:

- Installation by appropriately trained personnel
- Installation of only those components which are specified as components of the products
- Installation with the required tools
- Inspecting the substrate surface and the joint surface for cleanliness and correct treatment
- During storage and installation the water stop must be protected from excessive warming.
- The water stop is generally located in the center of the construction joints respectively crack control sections.
- The embedment in the concreting steps must be at least 30 mm.
- The distance between water stop and the adjacent construction components must be at least two to three times of maximum grain size.
- The water stop has to be attached with variable retaining clips on or at the reinforcement. During concreting the water stop should not move and should not float.
- The overlapping between the water stops is at least 60 mm. After removing the protective foil, the water stops are pressed tightly together. Finally, overlapping has to be secured with the joint clips.
- The protective foil should be removed just before concreting, because the coating has to be protected from pollution. The second part of the protection foil has to be removed earliest after the concreting of the first concreting step.
- Inspecting of position and fixing of the water stop during installation and of the finished installed water stop respectively after the 1. concrete step and documentation of the results.

"Dichtblech VB"
Mastertec GmbH & Co. KG

Intended use
Specifications

Annex B