

Approval body for construction products  
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and  
Laender Governments



## European Technical Assessment

**ETA-15/0792**  
**of 13 October 2017**

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

WFP sealing element and controlled crack element

Product family  
to which the construction product belongs

Coated metal water stop sheet for construction and  
controlled crack joints in waterproof concrete

Manufacturer

WFP GmbH  
Drescherstraße 49  
71277 Rutesheim  
DEUTSCHLAND

Manufacturing plant

WFP GmbH  
Drescherstraße 49  
71277 Rutesheim  
DEUTSCHLAND

This European Technical Assessment  
contains

9 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

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## Specific Part

### 1 Description of the product

The water stop "WFP" consists of the following components:

- Galvanized metal sheet with the dimensions:  
h = 80 or 150 to 170 mm, t = 0.75 mm in different shapes
- Polymer modified bituminous coating

The metal sheet is fully coated with the bituminous coating.

For transport and installation purposes the water stops are delivered with a 2-part protective foil on the bitumen coating. Furthermore there are fittings for the corners, clamps for securing the overlapping joints at the ends and crossing points of the water stop, as well as retaining clips for the BGL elements.

There are the following types of products:

- WFP sealing sheet BK – with fastening rail on both sides; for horizontal and vertical joints construction joints
- WFP sealing sheet BGL 80 / 150 - for horizontal and vertical joints construction joints
- WFP rupture element SFG – for controlled crack joints in pre-cast elements
- WFP rupture element SFG variable – for controlled crack joints in pre-cast elements in walls with a thickness between 20 cm to 45 cm
- WFP rupture element SFE - for controlled crack joints in pre-cast elements in corners
- WFP rupture element SFE variable – for controlled crack joints in pre-cast elements in corners in walls with a thickness between 20 cm to 45 cm
- WFP rupture element FE – for controlled crack joints in pre-cast elements in corners in walls
- WFP rupture element FE variable – for controlled crack joints in pre-cast elements in corners in walls with a thickness between 20 cm to 45 cm
- WFP stop-end panel ABS - with stop end panel for working joints

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 classes of intended use:

- a) Construction joints
- b) Controlled crack joints for the use in pre-cast elements made of 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.

English translation prepared by DIBt

### 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
Water tightness in end use condition	See Annex A1
Bond strength at state of delivery	See Annex A1
Bond strength after heat aging	See Annex A1
Durability	See Annex A1

#### 3.3 General aspects

The verification of durability and serviceability is only ensured if the specifications of intended use according to Annex B and the specifications of the technical file of the manufacturer are kept.

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

According to Decision of the Commission of 25 January 1999 (99/90/EC) (OJ L 29/38 of 03.02.1999) amended on 8 January 2001 (2001/586/EC) (OJ L 209/33 of 02.08.2001) the system of assessment and verification of constancy of performance (see Annex V and Article 65 Paragraph 2 to Regulation (EU) No 305/2011) given in the following table applies.

Product	Intended use(s)	Level or class	System
Coated Metal water stop sheet	For building works	-	3
	For uses subject to regulation on reaction to fire	E	3

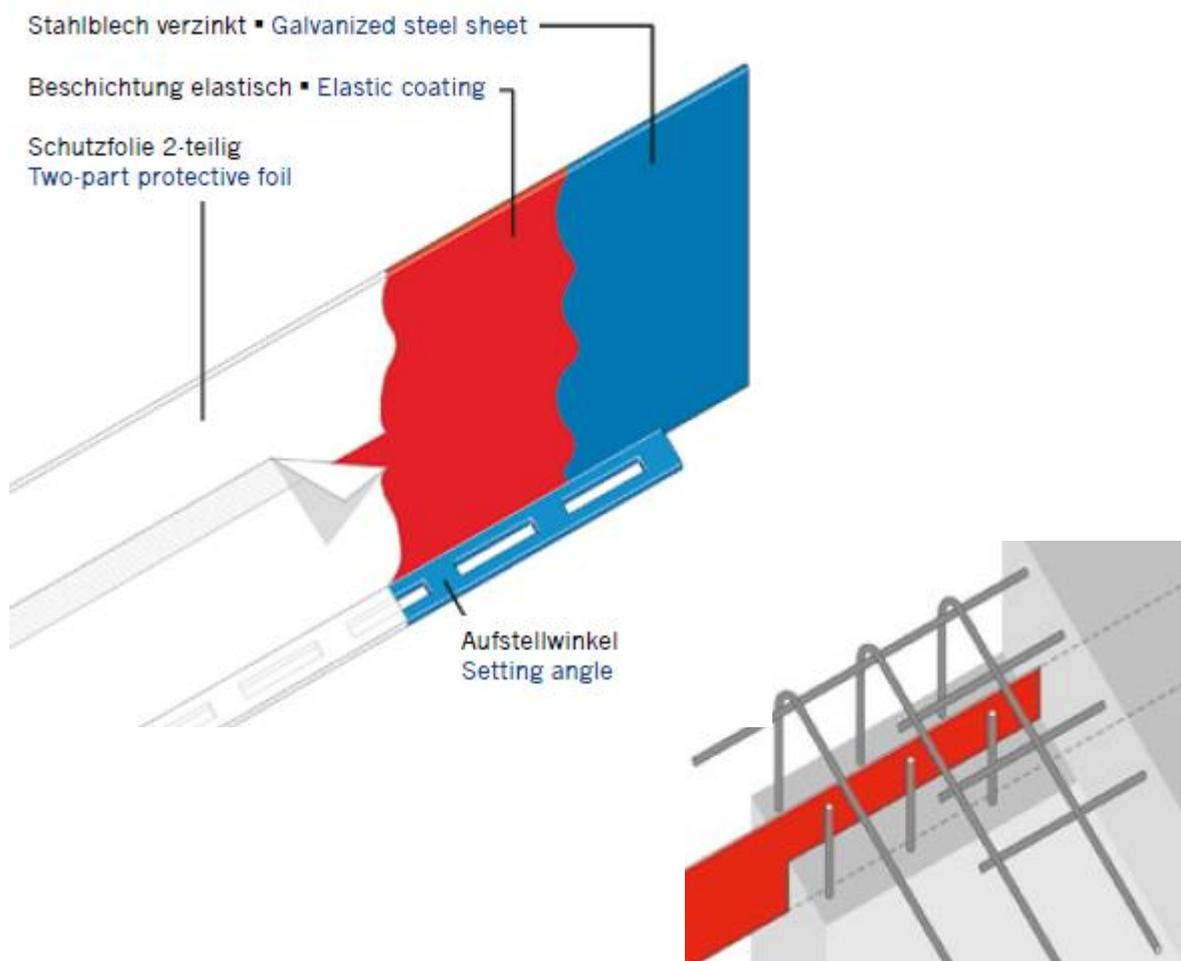
### 5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

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 13 October 2017 by Deutsches Institut für Bautechnik

BD Dipl.-Ing. Andreas Kummerow  
Head of Department

*beglaubigt:*  
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WP sealing sheet BK, h = 150 mm or 80 mm  
WFP sealing sheet BGL 150 (without setting angle), h = 150 mm

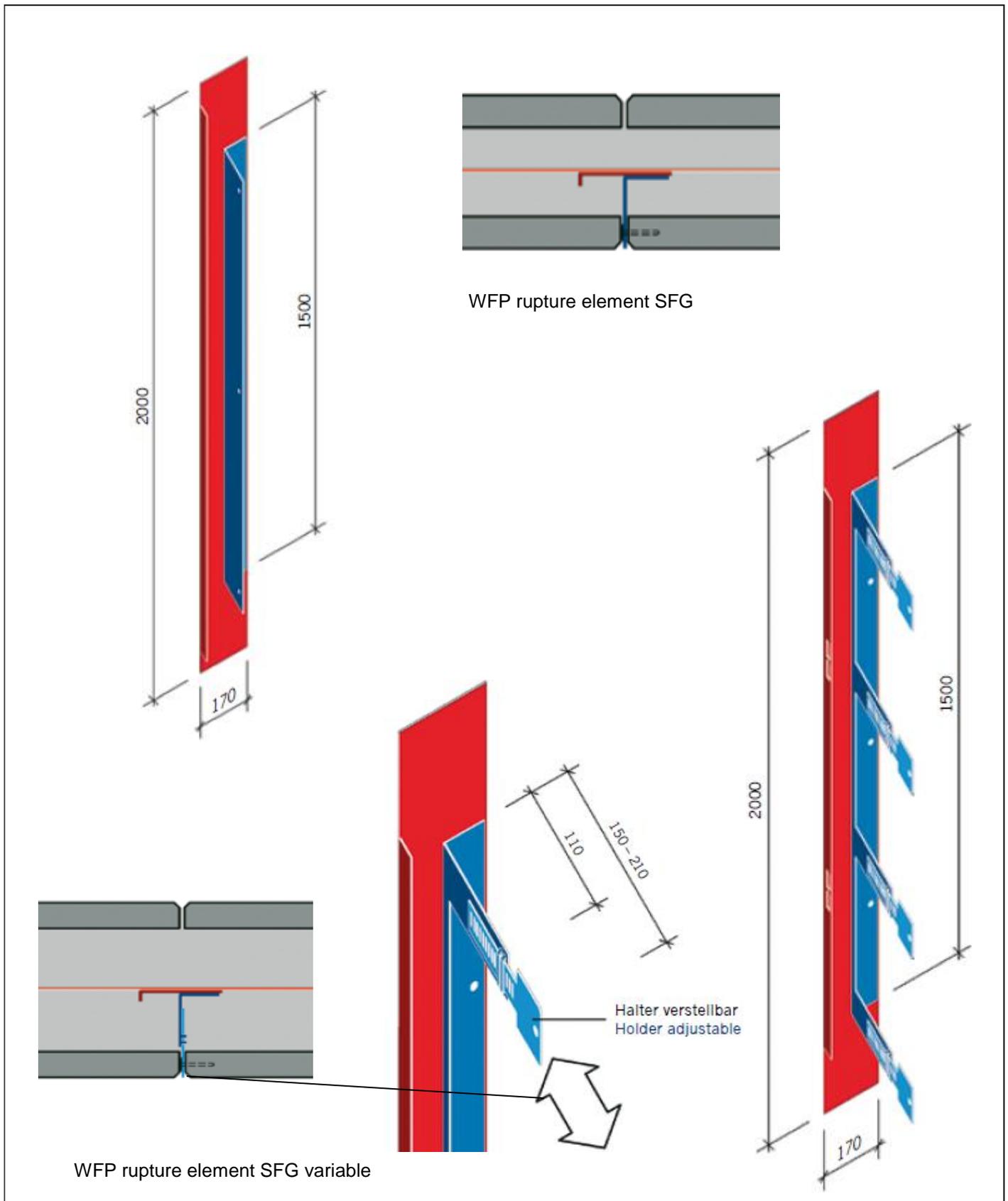
Performance of the product:

Reaction to fire acc. to EN 13501-1	Class E	
Watertightness in end use conditions  h = 80 or 150 mm, t <sub>1</sub> = 2,3 to 2,9 mm h = 170 mm, t <sub>1</sub> = 2,3 to 2,9 mm t <sub>1</sub> : Thickness incl. coating	Use scenario	
	Class a)	Class b)
	Watertight up to 12 m	Watertight up to 20 m
Bondstrength at the state of delivery	> 0,16 N/mm <sup>2</sup>	
Bondstrength after heat aging	pass (< 20 %)	
Durability (loss of weight)	Pass (< 3%)	

WFP sealing element and controlled crack element  
WFP GmbH

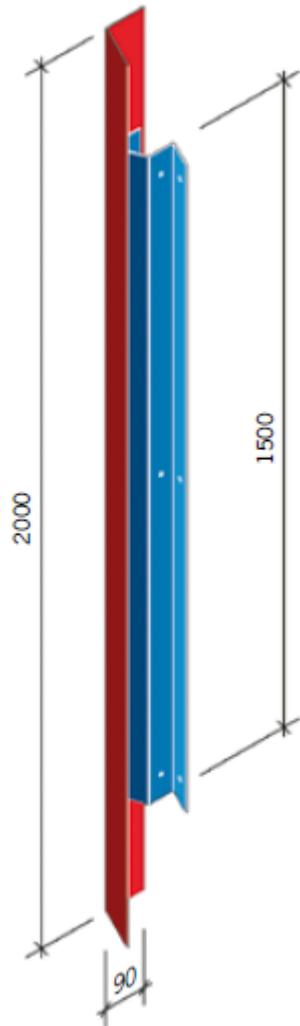
**System built-up, use categories and performances of the product**

Annex A1

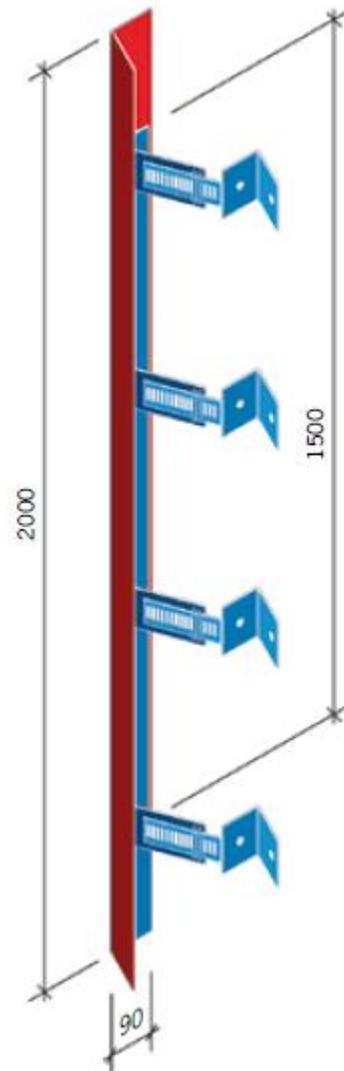
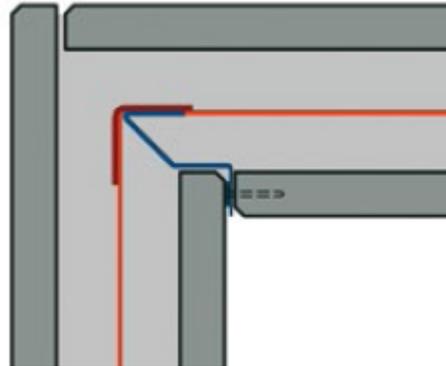


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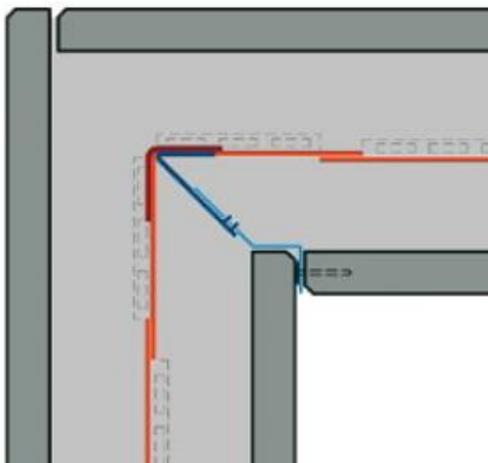
WFP sealing element and controlled crack element	Annex A2
<b>Description of equipment</b>	



WFP sealing element SFE



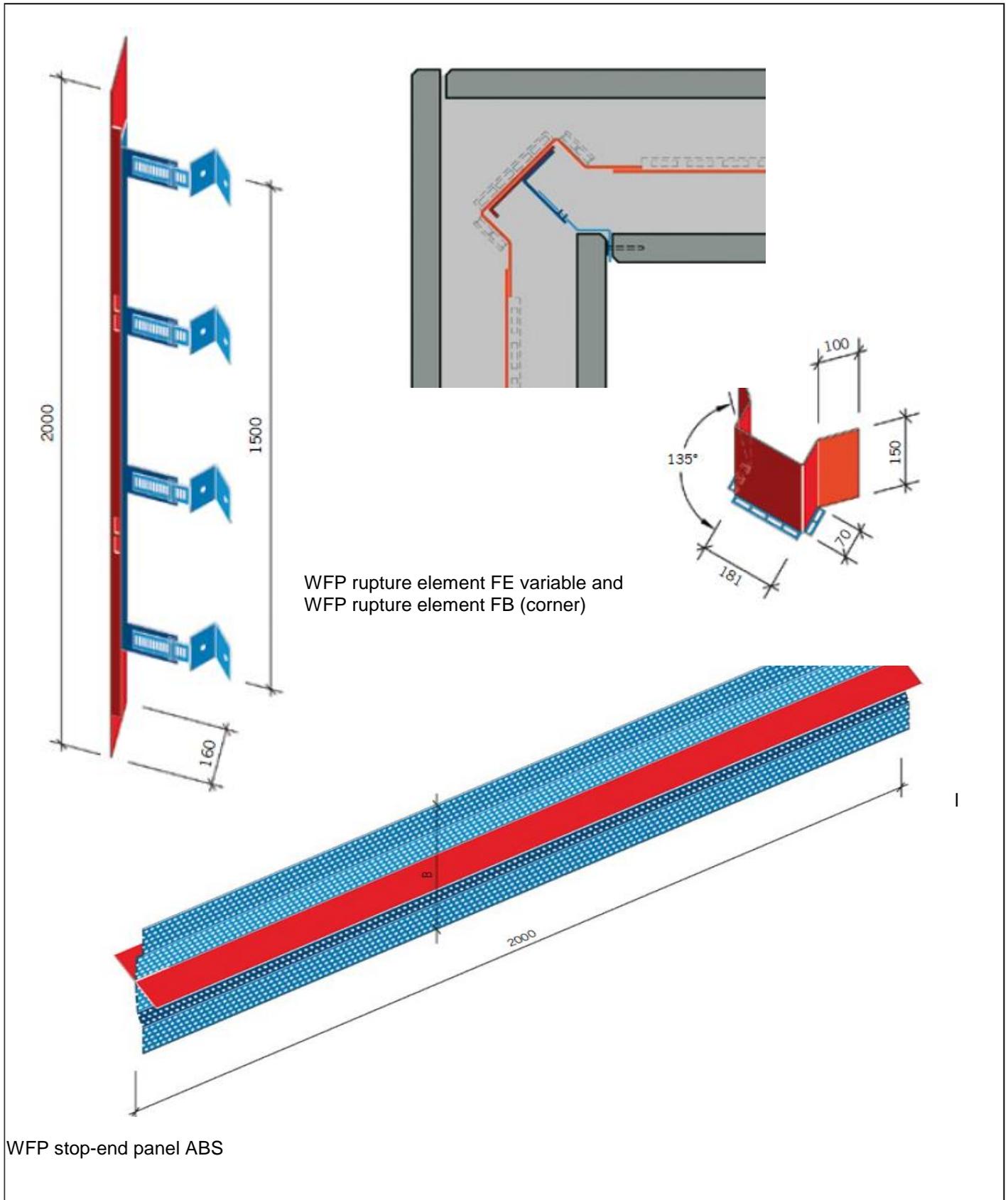
WFP sealing element SFE varabel



WFP sealing element and controlled crack element

**Description of equipment**

Annex A3



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WFP sealing element and controlled crack element 'WFP GmbH	Annex A4
<b>Description of equipment</b>	

### Installation

The levels of use categories and 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 first concreting step must be at least 30 mm.
- The distance between water stop and the edge of the construction element must be at least 50 mm respectively at least 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 50 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.

<p><b>WFP sealing element and controlled crack element</b> BPA- GmbH</p>	<p>Annex B</p>
<p><b>Intended use</b> Specifications</p>	