

# IDROSTOP PVC

PVC waterstop for sealing expansion and cold joints

## WHERE TO USE

For waterproofing expansion and cold joints in new or existing civil, industrial and hydraulic constructions.

### Some typical application examples

Waterstops are used to make water-tight expansion and cold joints in underground reinforced concrete constructions to avoid ingress from the water table and in reinforced concrete structures used to contain water, such as swimming pools, water tanks and dams.

## TECHNICAL CHARACTERISTICS

**Idrostop PVC** is a highly flexible waterstop made from high-quality thermo-plastic vinyl resins, which form a product with good resistance to mechanical stresses, the aggressive action of chemical products in alkaline environments, sea-water and acids.

**Idrostop PVC** is used within concrete structures and is highly resistant to perishing caused by sunlight, ozone and other aggressive agents present in the atmosphere and water table.

The dimensions and type of **Idrostop PVC** used for each application generally depends on the following parameters:

- type of structure;
- amount and type of movements predicted (no movement, axial movement, a combination of axial and transversal movements, etc.);
- thickness of the cast concrete.

## APPLICATION PROCEDURE

### **Idrostop PVC BI/RI - embedded in the concrete**

This type of joint is positioned at half thickness of the foundations or wall and must be stretched and held in position with wire. One end of the wire is attached to the reinforcement rods while the other end is attached to the waterstop using the specific **Idrostop PVC Clip** fastening clip.

In case of expansion joints, so when **Idrostop PVC BI** is used, insert a suitable type of compressible material between the first and second cast of concrete to form the joint and to avoid that this one is clogged by a rigid material.

For expansion joints on vertical walls only, we remind you that the joint must be embedded in the foundation pad to a depth of at least 10 cm.

### **Idrostop PVC BE/RE - to be secured to the bottom of the formwork**

This type of profile is fastened in place by nailing it directly to the formwork or the layer of lean concrete.

The fixing lugs must face towards the next layer of cast concrete so that it forms a perfect bond. In case of expansion joints, to be treated with **Idrostop PVC BE**, as with embedded joints, insert a suitable type of compressible material between the first and second cast of concrete to form the joint and to avoid that this one is clogged by a rigid material. In the area immediately around the waterstop, vibrate the concrete so that it is perfectly compacted. When vibrating the concrete, care must be taken to avoid damaging or moving the **Idrostop PVC**.

### **Idrostop PVC KK/KR**

This type of waterstop is used to waterproof structural joints between existing structures and new buildings.

For the installation of **IDROSTOP PVC KK** and **KR**, **IDROSTOP RJ-STRIP** must be applied on the existing portion of concrete, then the portion of waterstop without stalks must be positioned and mechanically fixed using **IDROSTOP KA**

ALU as a template for anchoring. The waterstop portion with **IDROSTOP PVC KK** stalks must be embedded in the casting, while the **IDROSTOP PVC KR** waterstop must be fixed on the cleaning lean.

Place a suitable compressible material between the existing structure and the new concrete casting to create the joint and to prevent it from being blocked by rigid material.

## HOT-WELDING THE ENDS OF THE JOINT ON SITE

The procedure to join the **Idrostop PVC** and create a perfect bond is by heating the adjacent pieces with a Leister electronic hot air blower. The ends of the parts to be joined must be cut straight and perfectly aligned. Set the Leister to the following temperatures to join the waterstop: +280°C in the bulb area and +320°C for the other areas.

## PACKAGING

**Idrostop PVC** is supplied in rolls.

## STORAGE

Store in a dry place at a temperature of between +5°C and +30°C.

## SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

**Idrostop PVC BI** and **Idrostop PVC BE** are articles and referring to the current European regulations (Reg. 1906/2007/CE - REACH) do not require the preparation of the material Safety Data Sheet. During use it is recommended to wear protective gloves and goggles and follow the safety requirements of the workplace.

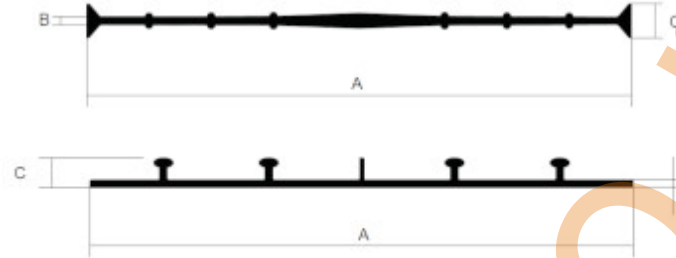
PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values) for IDROSTOP PVC BI/RI and BE/RE			
Typical physical-mechanical properties	Method	u.m.	Results
Hardness:	ISO 868	Shore A	79±74
Weight density:	ISO1183/A	g/cm <sup>3</sup>	1.32
Tensile strength:	ISO 527-2/5A/100	N/mm <sup>2</sup>	16.4
Breaking strain:	ISO 527-2/5A/100	%	360
Temperature of use:	-	°C	-20; +60
Temperature when in use:	-	°C	-30; +70

TECHNICAL DATA (typical values) for IDROSTOP PVC KK/KR			
Typical physical-mechanical properties	Method	u.m.	Results
Hardness:	ISO 868	Shore A	67 ± 5
Density:	ISO1183-1	g/cm <sup>3</sup>	1.30
Tensile strength:	DIN EN ISO 527	N/mm <sup>2</sup>	≥ 10

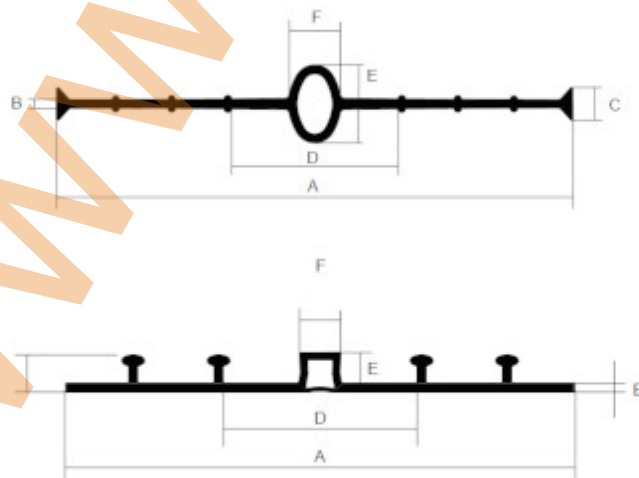
Breaking strain:	DIN EN ISO 527	%	≥ 350
Temperature of use:	-	°C	-20; +70

IDROSTOP PVC - Typical values in mm



IDROSTOP PVC	A	B	C
IDROSTOP PVC RI 15	150	2	12
IDROSTOP PVC RI 20	200	2.5	12
IDROSTOP PVC RI 25	250	3	12
IDROSTOP PVC RI 30	300	3	12
IDROSTOP PVC RE 20	200	4	16
IDROSTOP PVC RE 25	250	4	16

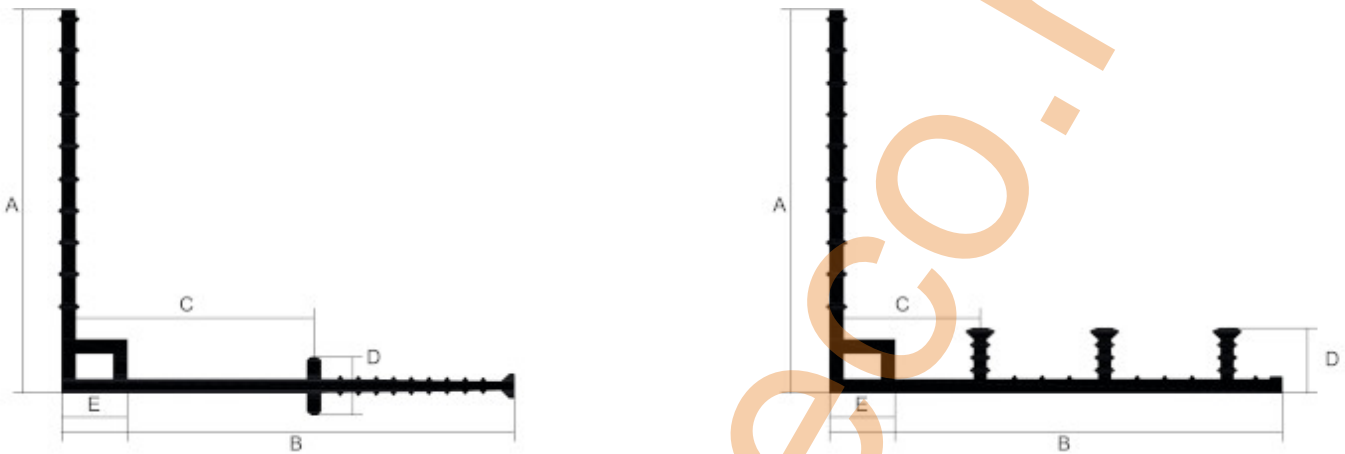
IDROSTOP PVC - Typical values in mm



IDROSTOP PVC	A	B	C	D	E	F
IDROSTOP PVC BI 20	200	2.5	12	70	25	25
IDROSTOP PVC BI 25	250	3.5	12	85	30	32

IDROSTOP PVC BI 30	300	3.5	12	75	30	35
IDROSTOP PVC BI 35	350	4	13	80	30	35
IDROSTOP PVC BE 20	200	4	16	70	16	20
IDROSTOP PVC BE 25	250	4	17.5	80	17.5	20

#### IDROSTOP PVC - Typical values in mm



IDROSTOP PVC	A	B	C	D	E
IDROSTOP PVC KK	120	170	95	26	20
IDROSTOP PVC KR	120	170	60	35	20

## WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website [www.mapei.com](http://www.mapei.com)

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