SAINT-GOBAIN

durajoint PVC waterstops

Polyinyl Chloride

RANGE OF EXTERNALLY AND CENTRALLY PLACED WATERSTOPS

RANGE

Expansion joint centrally placed
durajoint PVC centre bulb – 150 mm
durajoint PVC centre bulb – 200 mm
durajoint PVC centre bulb – 250 mm
durajoint PVC centre bulb - 300 mm

Expansion joint externally placed
durajoint PVC external E – 150 mm
durajoint PVC external E – 200 mm
durajoint PVC external E – 250 mm

Construction joint centrally placed
durajoint PVC dumbell – 150 mm
durajoint PVC dumbell – 200 mm
durajoint PVC dumbell – 250 mm

Construction joint externally placed
durajoint PVC external C – 150 mm
durajoint PVC external C – 200 mm
durajoint PVC external C – 250 mm

In addition, factory made intersections are available for the full range:

- Mitre on flat
- 3-way on flat
- 4-way on flat
- T-piece
- 90° on edge
- 270° 4-way on flat

All these sections can be made for both similar and dissimilar sections. All intersections should be factory produced by **a.b.e.**® to minimize site joints.

PHYSICAL PROPERTIES	
Form	Extruded thermoplastic PVC sections
Colour	Blue
Joint movement	Up to 10 mm
Hydrostatic head ASTM D 5385-93	> 50 metres
Tensile strength ASTM G 154-16	> 12 MPa
Elongation at break ASTM 154-16	> 266%
Shore A ASTM 2240-05	88
Relative Density g/cm^3	1.494
Water absorption is depend on rigid/flexible/filled systems but typically ranges by weight	from 0.15 – 1.00%
Alkali resistance	Good
Impact resistance will depend on rigid/flexible/filled systems.	In general the impact resistance is accepted to be good

DESCRIPTION

The **durajoint waterstop** range is extruded from specially formulated PVC material, which whilst flexible is easily welded on site to provide the primary seal in the waterproofing of water retaining and/or water excluding structures.

Hydrostatic pressure resistance in accordance with guidelines of ASTM D 5385-93.

UV resistance in accordance with ASTM G 154-16.

USES

The prevention of regress or ingress of water or liquids through construction or expansion joints in water retaining or excluding structures such as:

- Dams, reservoirs, digesters, water towers, canals
- Basements, car parks, retaining walls

ADVANTAGES

- Co-ordinated profiles
- Ensures bulb continuity throughout the network
- Making on site jointing simpler
- Allows for jointing of external to centrally placed sections
- Allows for jointing of expansion joint section to construction joint section
- Flat top to centre bulb ensures snug fit of filler board

DESIGN CRITERIA

The choice of the width and thickness of waterstop is largely governed by concrete thickness, the position of the reinforcement, aggregate size and complexity of the pour. In general the 250 mm width of waterstop is suited to wall thicknesses of 250 mm and over. For concrete less than 250 mm thick, the use of a narrower waterstop approximating to the wall thickness will be appropriate. 150 mm and 200 mm profiles are available for this purpose.

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INSTALLATION TECHNIQUES

Centrally placed waterstops

durajoint CB and **dumbell (DB)** - are to be fully tied to the re-bar to eliminate possible displacement during the concreting and vibrating process. It is imperative that care is taken to fully compact the concrete around the waterstop in order to eliminate any voids or honeycombing in that area.

Externally placed waterstops

When used on ground slabs where the waterstop is supported on blinding, **durajoint external E** and **external C** profiles usually require no fixing. Lay the waterstop centrally over the line of the joint to be formed.

Fixing to vertical shuttering is done by nailing through the outer nailing flanges leaving the head of the nail proud so that it is held in the cured concrete. This prevents the waterstop being displaced when the shuttering is struck.

SITE JOINTING

Only butt joints should be welded on site. Special function-made intersections are available from **a.b.e.**®. The ends of the butt joints must be cut square. These cut ends should then be pushed against the preheated heater blade (supplied by **a.b.e.**®) until a molten bead appears against the blade. Remove the blade and firmly press the two molten ends of the waterstop together and hold firmly until these ends are fused together. A piece of shutterboard or similar material placed under the joint prior to the operation will facilitate the jointing. This jointing must be undertaken in a well-ventilated area as the fumes given off when the PVC is being melted are an irritant to the lungs and eyes. In enclosed areas forced ventilation is a prerequisite. A wire brush is used to clean the PVC residue on the heater blade after every jointing operation.

MODEL SPECIFICATION

ASTM D 5385-93 and ASTM G 154-16 certification available on request.

Waterstop durajoint external C.

Externally placed waterstop for construction and contraction joints in walls and floors to water retaining and water excluding structures. The waterstop will be **durajoint external C**, an externally placed extruded plasticized PVC compound applied in accordance with the recommendations of **a.b.e.**®. The waterstop will comply with the requirements of CKS 389:1973 and have an elongation at break of 300%.

Waterstop durajoint dumbell.

A centrally placed waterstop for construction and contraction joints in walls and floors to water retaining and water excluding structures. The waterstop will be **durajoint dumbell**, a centrally placed extruded plasticized PVC compound applied in accordance with the recommendations of **a.b.e.**®. The waterstop will comply with the requirements of CKS 389:1973 and have an elongation at break of 300%.

Waterstop durajoint centre bulb

Centrally placed waterstop for expansion joints in walls and floors to water retaining and water excluding structures. The waterstop will be **durajoint centre bulb**, an externally placed extruded plasticized PVC compound applied in accordance with the recommendations of **a.b.e.**®.

HEALTH & SAFETY

Always carry out the jointing of **durajoint PVC** waterstops in a well ventilated area as the fumes given off are an irritant to both eyes and lungs. In confined areas forced ventilation is a prerequisite.

IMPORTANT NOTE

This data sheet is issued as a guide to the use of the product(s) concerned. Whilst **a.b.e.**® endeavours to ensure that any advice, recommendation, specification or information is accurate and correct, the company cannot accept any liability for application – because **a.b.e.**® has no direct or continuous control over where and how **a.b.e.**® products are applied.

FURTHER INFORMATION

Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted to determine total requirements.

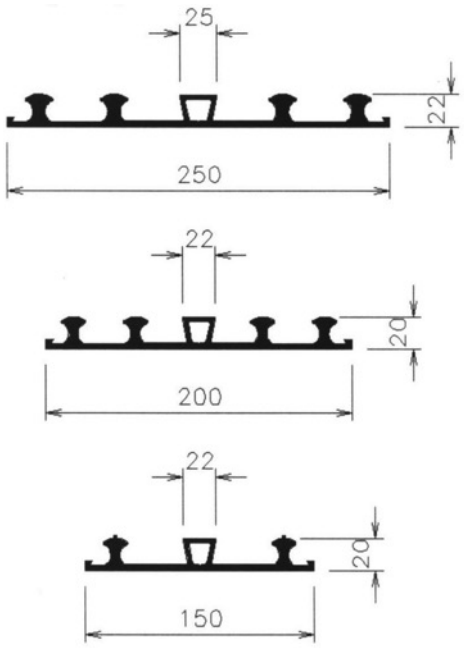
a.b.e.® has a wealth of technical and practical experience built up over the years in the company's pursuit of excellence in building and construction technology.

Please consult our website for our latest datasheets.

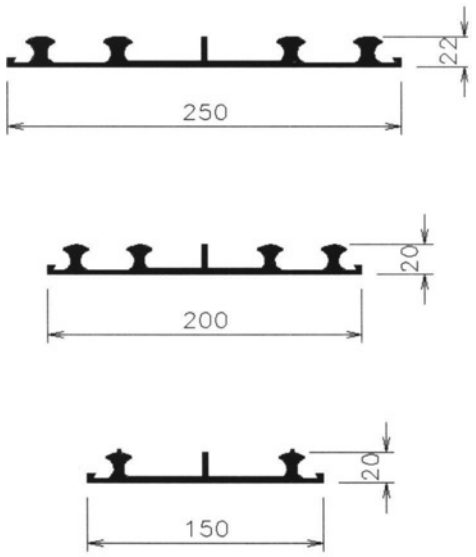
ESTIMATING	Section width	Approximate mass per roll	Minimum radii on flat	Minimum radii on edge	Roll length
durajoint	mm	kg	m	m	m
durajoint CB	300	53.6	15	0.15	15
durajoint CB	250	32.2	15	0.15	15
durajoint CB	200	25.8	14	0.15	15
durajoint CB	150	39.6	12	0.075	30
durajoint dumbell	250	30.8	15	0.15	15
durajoint dumbell	200	24.8	14	0.15	15
durajoint dumbell	150	36.8	12	0.075	30
durajoint external C	250	35.5	10	0.15	15
durajoint external C	200	27.8	9	0.15	15
durajoint external C	150	39.5	8	0.075	30
durajoint external E	250	38.7	10	5.0	15
durajoint external E	200	30.4	9	5.0	15
durajoint external E	150	43.4	8	5.0	30

STANDARD PROFILES

durajoint PVC external E

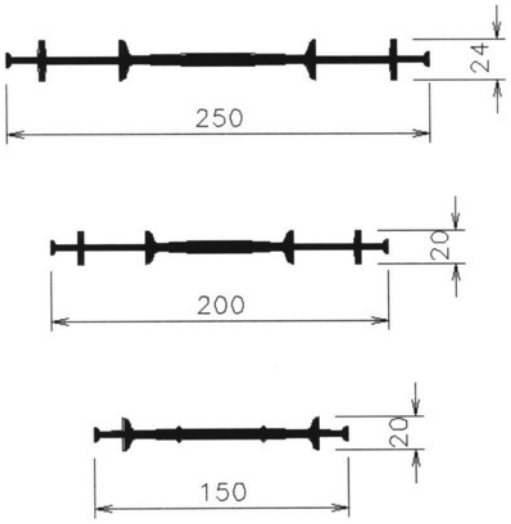


durajoint PVC external C

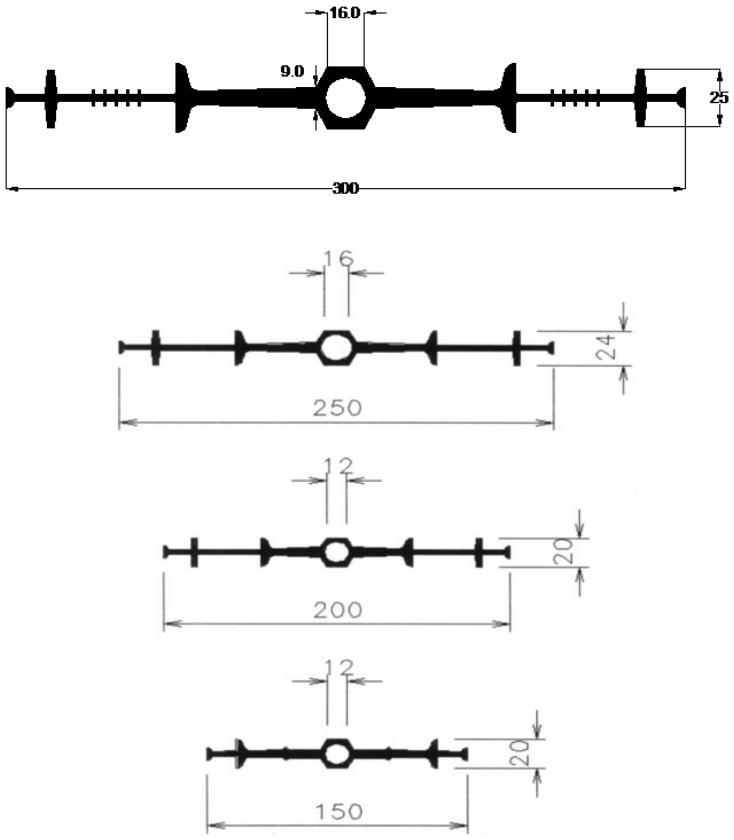


STANDARD PROFILES

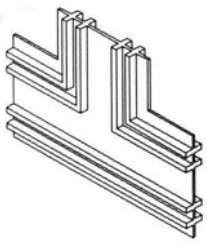
durajoint PVC dumbell



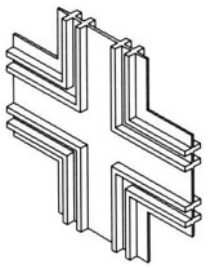
durajoint PVC centrebulb



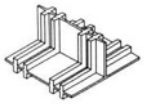
STANDARD INTERSECTIONS



3 WAY ON FLAT



4 WAY ON FLAT

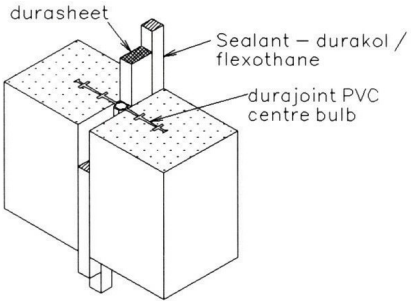


T PIECE

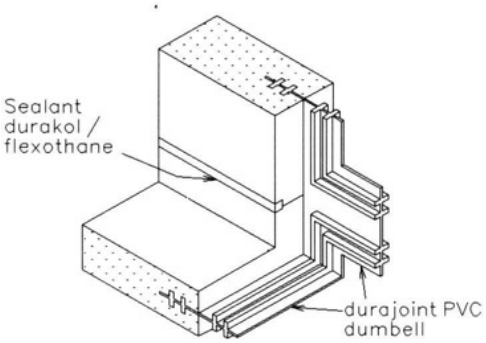
MITRE ON EDGE

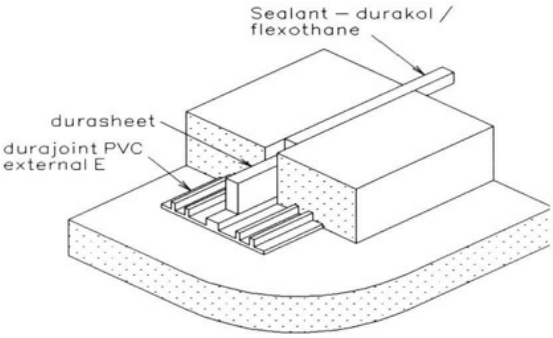
MITRE ON EDGE
(DISSIMILAR)

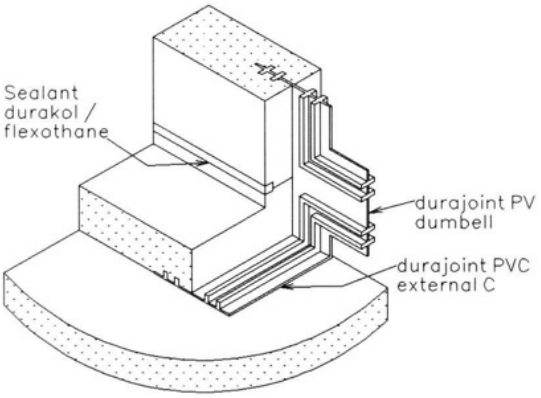
TYPICAL DETAILS



WALL EXPANSION JOINT
ISOMETRIC







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a.b.e.® is an ISO 9001:2015 registered company
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