

Estopper Dumbbell

Centrally Placed PVC Dumbbell Waterstop

Description

Estopper Dumbbell waterstops are extruded from a high quality Polyvinylchloride compound, which has been formulated to provide excellent flexibility and longevity characteristic.

They are available as straight lengths and factory produced intersections.

Estopper Dumbbell centrally placed Polyvinylchloride waterstops are suitable for use in contact with potable water.

Estopper Dumbbell has been tested by SIRIM BHD, in accordance to BS 2782, ISO 527 on Tensile Strength and Elongation at Break Test, ISO 868 on Indentation Hardness Determination and complied with the specification in this data sheet.

Uses

They are used typically in the following type of structures:-

- Basements
- Swimming pools/reservoir/water tank
- Underground sub structures
- Water excluding structures
- Water retaining structures
- Irrigation Drainage
- Culverts

Advantages

- Simple on site jointing
- 2 bulbs profile for optimum performance
- Full range profile for every needs
- Factory fabricated intersections available
- Suitable for potable water usage

Standards Compliance

- **BS 2782**
- **ISO 527**
- **ISO 868**

Selection of Waterstop Size

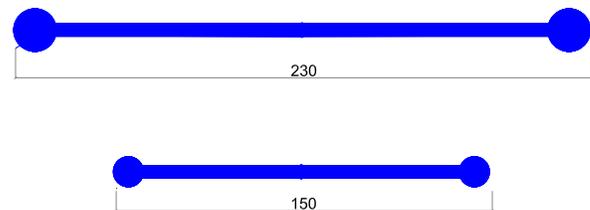
The appropriate waterstop width depends upon the concrete thickness. The width of waterstop should not be greater than the thickness of the concrete.

Estopper PVC Waterstop Sections

Centrally Placed Waterstops

Plain Web sections are used in contraction and construction joints

- **Estopper 150 dumbbell**
- **Estopper 230 dumbbell**



Above measurements are in mm unit.

Estopper PVC Dumbbell Range of waterstops are compatible to other **Estopper CJ & EJ** and **Rearguard C & E** Range of waterstops.

Physical Properties

Compound	
Standard Conform	BS 2782 at 25°C
Tensile Strength	> 10.0 N/mm ²
Elongation at Break	> 250 %
Hardness	Shore 'A' > 70
Profiles	
Form	Extruded thermoplastic sections
Colour	Black
Hydrostatic Head	Up to 50m for 230mm profile Up to 30m for 150mm profile

Heat Jointing Equipment (220 V)

Heat welding equipment is available from Estop Sdn Bhd. Ensure the heat welding equipments are earthed by the green wire.

Installation Instructions

Waterstops must be installed so that they are securely held in their position while the concrete is being placed. Concrete must be fully compacted around the waterstops to ensure that no voids or porous area remain.

Site Jointing Instructions

Jointing of **Estopper PVC** range waterstop is carried out using Estop Heat Welding Equipment. The ends to be joined are cut square and held in alignment. The ends are then pressed to both side of a special heated blade, until an even, molten bead of Polyvinylchloride appears around the section. The heated blade is then removed and the molten ends pressed fully together. The Polyvinylchloride cools to form a strong fusion welded joint.

An experienced technician would performed the jointing of the waterstops to satisfaction, subject to prior training and approval by Denka Technical Department.

Packing & Size

Estopper 150 Dumbbell	150mm x 15m roll
Estopper 230 Dumbbell	230mm x 15m roll

Technical Support

Denka offers a technical support package to specifiers, end-users and contractors, as well as on site technical assistance.

Storage

Estopper Dumbbell waterstops should be store under covered condition. The product has a shelf life of thirty six months.

Precaution

Hot weld jointing of Polyvinylchloride waterstops results in the liberation of hydrogen chloride mist and vapour. The OEL (operational exposure limit) of 5 ppm can be exceeded in still air confined space, therefore ventilation must be provided.

Additional Information

Denka Construction Solutions Malaysia Sdn Bhd and offers a wide range of complementary products which includes waterstops, waterproofing products, grouts, anchors, specialized flooring products. In addition, a wide range of products formulated for repair and refurbishment of spalled concrete are available.



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