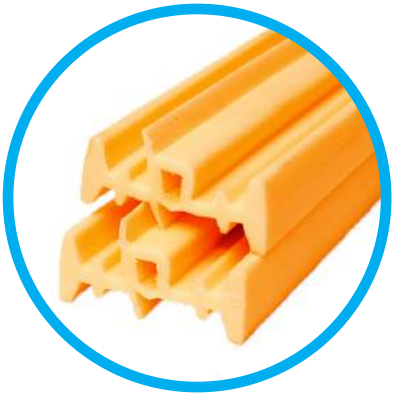
CORKJOINT

THE FORCE IN JOINTING SOLUTIONS

XB PVC WATERSTOP

STANDARD PERFORMANCE SPECIFICATION (SPS) GRADE

PRODUCT DESCRIPTION



CORKJOINT **XB PVC Waterstop** is a specially designed profile for use in expansion/isolation joints in concrete where traditional PVC waterstop profiles cannot be placed due to the interference of reinforcement bars.

ADVANTAGES

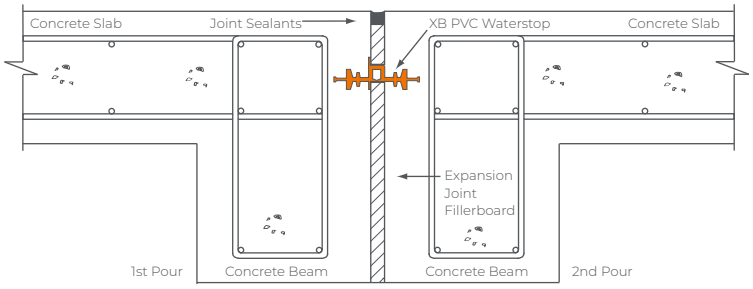
- Ability to waterstop the joint where traditional PVC waterstop profiles cannot be placed due to their inappropriate design and width.
- Able to accommodate large movements in expansion/isolation joints due to its innovative design.
- Able to accommodate longitudinal, lateral and differential movements in expansion/ isolation joints.
- A high-performance material produced from virgin PVC compound (refer to material specification) giving long-term integrity and durability over time. No scrap or recycled PVC's are used.
- Water stops the joint and allows it to expand and contract freely from movements caused by thermal fluctuations and serviceability load from within the structure.
- Easy to install (refer to our recommended installation procedures).

AREAS OF APPLICATION

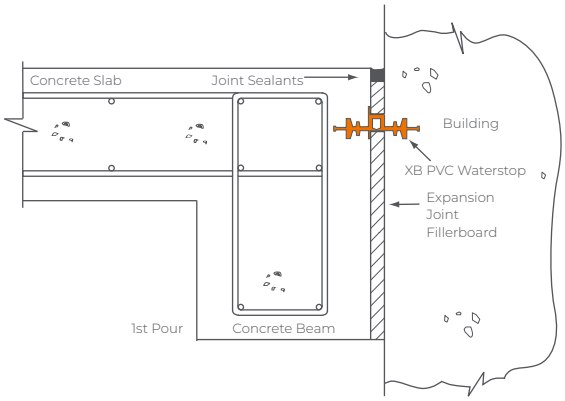
- Expansion/isolation joints in concrete where reinforcement does not allow the use of traditional, wider type, PVC waterstop profiles
- Double beam expansion joints
- Podium slab to building expansion/isolation joints
- Slab to column expansion joints
- Slabs & suspended slabs with double beams & columns

Note : The product's design and performance, its intended use, installation and final confirmation and approval for use, must be provided by the project's Design Engineer and Project Manager.

TYPICAL APPLICATIONS



DOUBLE BEAM/SLAB



PODIUM SLAB/BEAM TO BUILDING

TECHNICAL FEATURES

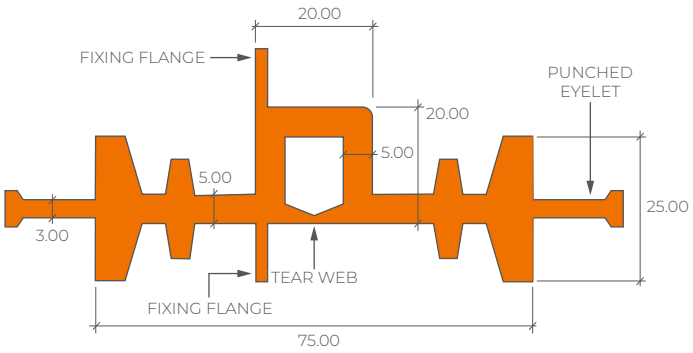
COLOUR	Orange
PACKAGING	10m per roll
ROLL WEIGHT	Dependent upon profile type
STORAGE CONDITIONS & SHELF LIFE	5 years from the date of production if stored properly in original, unopened and undamaged sealed packaging, in dry conditions out of direct sunlight at temperatures between +10°C and +40°C
MATERIAL TYPE	Polyvinyl Chloride (PVC)
WELDING TEMPERATURES	Approximately 190°C - 200°C
SERVICE TEMPERATURE RANGE	-25°C to +70°C

PHYSICAL PROPERTIES

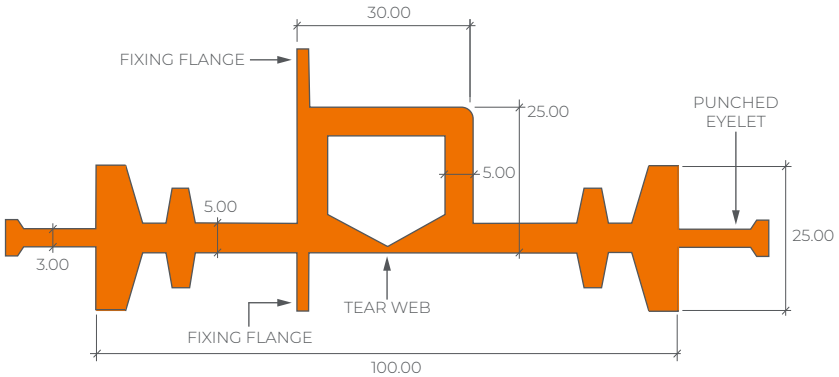
PROPERTY	TEST METHOD	REQUIREMENT	RESULT
Tensile Strength (N/mm²)	BS 2782:320A	Min. 12.00	15.20
Elongation At Break (%)	BS 2782:320A	Min. 300	320
Loss of Mass Test (mg/cm²)	BS EN 60811-3-2:1995	N/A	1.65
Water Absorption at 23°C (%)	ISO 62	Max. 0.15	0.15
Specific Gravity (g/cm³)	BS 2782:620B	1.38 ± 0.03	1.41
Thermal Stability Congo Red Test at 180°C, Min.	BS 2782:130A	N/A	50
Hardness, Shore A	BS 2782:365B	75 ± 5	75

Note : Refer to Corkjoint's in house Certificate of Analysis (COA) dated 13/12/2018 for test results pertaining to the above. A COA is conducted on every batch of raw material that is used in the production of XB PVC waterstops. Independent laboratory test results are also available upon request. Project specific material properties can be custom compounded to suit. Material properties can vary between batches.

PROFILE DRAWINGS



XB-75



XB-100

Note : XB PVC Waterstop is available in a 10 metre roll length.

INSTALLATION PROCEDURES

1. Installation of **XB PVC Waterstop** must be in accordance with our recommended installation procedures. (refer to our "installation method guideline") or refer to your designer engineer's recommendations.

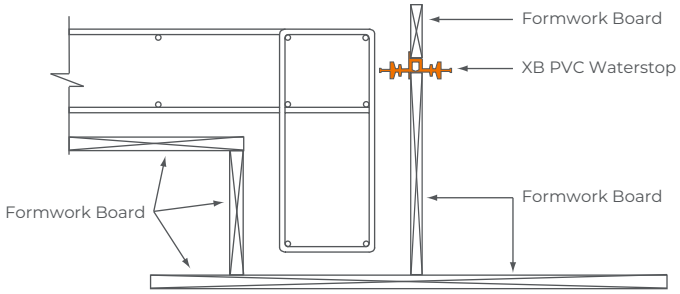
2. The concrete must be fully vibrated around the **XB PVC Waterstop** to help achieve ultimate sealing capabilities and full integration of the waterstop into the structure.

3. Joining of **XB PVC Waterstop** must be performed by heat welding with special equipment provided by the supplier. (refer to our "on site joining guidelines").

4. Factory fabricated intersections must be used to connect traditional types of PVC waterstops to **XB PVC Waterstop**.

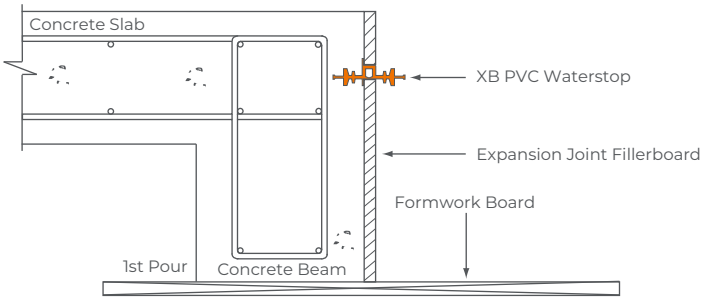
5. Special intersections will be required to join the waterstops that are being used in the construction or expansion joints that run perpendicular to the expansion/isolation joint where the **XB PVC Waterstop** is to be placed. Contact us for further details or refer to your designer engineer's recommendations.

6. All the joints of the concrete structure that run perpendicular into the expansion/isolation joint where the **XB PVC Waterstop** is being used must have waterstops in them. If they are construction joints, then traditional PVC watestops or our Superswell® 47B hydrophilic waterstop can be used (refer to our recommended installation procedures). If traditional PVC Waterstops are to be used, then refer to No. 4 above or refer to your designer engineer's recommendations.

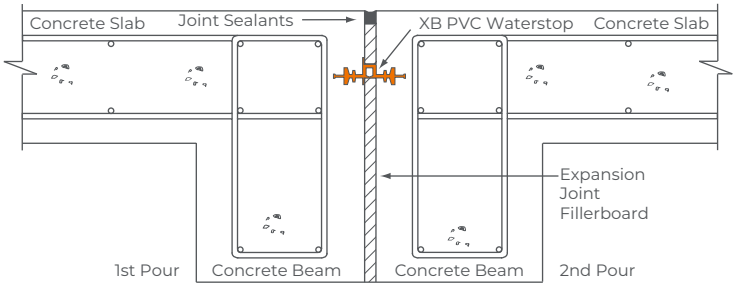


A. Place formwork into position for beam and slab. Formwork for **XB PVC Waterstop** application at expansion joint must be split and secured fully. 1st pour of concrete is now ready to be placed.

Note : XB PVC Waterstop must be secured firmly into position and 1st pour of concrete must be fully vibrated around the product.



B. Once 1st pour is completed, remove formwork from face of slab and beam and fix expansion joint fillerboard into position. 2nd pour of concrete is now ready to be placed.



C. Place 2nd pour of concrete into position and against expansion joint fillerboard. Vibrate concrete fully around the **XB PVC Waterstop**.

DESIGN PARAMETERS

1. **XB-75 PVC Waterstop** should only be installed into an expansion/isolation joint with a width of 10mm-25mm.
2. **XB-100 PVC Waterstop** should only be installed into an expansion/isolation joint with a width of 30mm-50mm.
3. Each leg length section of the **XB PVC Waterstop** that is to be embedded into the concrete, must penetrate by a minimum of 25 mm into each side of the joint. This means that the reinforcement cover must be at a minimum of 30 mm to allow for the waterstop leg to fit into the concrete, or refer to your designer engineer's recommendations.

Note : Proposal, specification, design and end use of this product must be fully endorsed and approved by the Design Engineer.

SITE JOINING

CORKJOINT recommends the use of its specialised welding equipment for on-site welding which consists of thermostatically-controlled Welding Irons and special Welding Jigs (each type of **XB PVC Waterstop** requires its own welding jig to suit the particular shape). On-site joining is a simple exercise using CORKJOINT Heat Welding Equipment comprising of an adjustable Welding Jig and Welding Iron. The ends of the waterstop are cut square and placed into the adjustable Welding Jig, then push the ends of the waterstop against the Welding Iron and bring the two ends together until the molten ends of the PVC fuse. When ordering Welding Equipment, please advise profile number of the waterstop required. Refer to our PVC Waterstop Site Joining Guidelines for further information on the above.

WRITTEN SPECIFICATION

Waterstop shall be **XB PVC Waterstop** (state profile type) as supplied by CORKJOINT with dimensions, shape and material properties as illustrated/mentioned in their brochure. All installation and joining procedures must be according to their recommendations and requirements, and also approved by the project's Design Engineer.

HEALTH AND SAFETY INFORMATION

Joining of **XB PVC Waterstop** is performed by heat welding which results in the discharge of hydrogen chloride mist and vapour. In confined spaces or in still air conditions, the use of a ventilation fan or suitable respirator should be used, and the advice and approval of the Site Safety Supervisor is essential. For further information or advice on health and safety precautions, safe handling, storage and correct disposal of products, please refer to the most recent product Safety Data Sheet (SDS), which is available upon request.

DISCLAIMER

The information and the recommendations relating to the application and end use of this product are given in good faith and are based on the information provided by the manufacturer of the product and/or the Company's current knowledge and experience in connection with the product when properly stored, handled and applied under normal conditions and no liability of final function at the job site is assumed. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability of, or fitness for, particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written and/or oral recommendations, or from any other advice offered by the Company. The Company also has no express or implied knowledge of any particular purpose for which the product is required and any such information given will not be taken into account in the supply of this product. No responsibility or liability by the Company will be accepted for misuse, misreading or derivation from recommended guidelines in respect of this product and the user shall determine the suitability of the product for his intended use and assume all risks and liability in connection therewith. The information contained in our brochure may change at any time without notice. Any use of this product, **XB PVC Waterstops**, in any application should be approved as suitable for use/application by the Design Engineer and Project Manager.

Effective Date: 05 APRIL 2022

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