

# EDEN SWELLABLE WATERBAR

Advanced Hydrophilic Swellable WaterBar



## PRODUCT DESCRIPTION

EDEN SWELLABLE WATERBAR is a next generation hydrophilic swelling water bar with excellent durability and water sealing capacity. It expands to more than three times its size upon contact with water and fills concrete joints, cracks and gaps, thereby conforming to the gap variation thus ensuring excellent sealing. It can be employed for use in Vertical and horizontal cast-in-place concrete joints where limited movement is expected. It is also an ideal option for new concrete structures and/or between new and existing concrete.

## SPECIAL FEATURES

- ✚ Welding at joint not required
- ✚ It has a rectangular profile and is available in several sizes.
- ✚ Environmentally safe and non-polluting,
- ✚ Retains flexibility throughout the life span of the structure once installed.
- ✚ Proven track record of excellence.
- ✚ Applicable to both horizontal and vertical surfaces.
- ✚ Lightweight hence easy to handle.
- ✚ Quick and Easy to install
- ✚ Does not require a depth attention of professional for installation.
- ✚ Can swell into cracks and gaps openings.
- ✚ Applicable on a wide range of substrates
- ✚ Highly economical
- ✚ Immediately Swells in contact with water
- ✚ High water repellence and resistant to various chemical substances.
- ✚ Ready for casting once installed using nail and or when adhesive is cured hence saving time.
- ✚ Adaptable to fit many different detailing tasks
- ✚ Different types and dimensions available
- ✚ Can be applied to a wide range of substrates.
- ✚ Various colours available.
- ✚ Suitable for use on below / above grade structures.
- ✚ Equipped with the most recent hydrophilic technology in its formulation.
- ✚ Does not support bacterial and Fungal growth

- ✚ Waterproofing Swimming pools and reservoirs joints.
- ✚ Basements Joints and lift pits joints etc.
- ✚ All kind of Sub-grade construction joints
- ✚ All kinds of pre-cast concrete construction joints / joining.

## APPLICATION PROCEDURE

### Stage-1: INSTALLATION PREPARATION/INVESTIGATIONS

#### A - Pre-Installation Investigation

- ✚ Check substrate for the presence of old loose coatings, dirt, fats, oils, organic substances, existing membranes and dust. The use of a bristle brush can be employed for surface cleaning where so required.
- ✚ All visible surface irregularities and indentations need to be smoothed and evened out using ED reprofiling range of mortars

#### B - Installation Preparation

- ✚ Careful surface preparation is essential for optimum finish and durability thus, surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect adhesion of the water bar. In order to achieve this, concrete surface must be mechanically profiled and prepared by using a bristle brush or and appropriate sanding method.

#### C - Post Installation Preparation Investigation

- ✚ Any uneven or visibly loose pieces needs to be chipped off and perfected using EDEN reprofiling range of mortars to achieved an excellent smooth finish.
- ✚ Thoroughly remove any evidence of grinding dust Observe.

### Stage-2: INSTALLATION

- ✚ Centrally position water bar allowing at least 3"

## WHERE TO USE

EDEN SWELLABLE WATERBAR is suitable for application in the following areas:

- ✚ Pipe penetrations
- ✚ Subway stations
- ✚ All kinds of cast-in-place concrete construction joints,
- ✚ Tunnels, pits, Sewerage & water treatment plants



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- coverage of concrete from the side exposed to water.
- ✚ Bond Water bar Strip with a suitable adhesive or nail where required.
- ✚ Apply a bead of adhesive and press the Water bar Strip into the adhesive until it oozes out from beneath.
- ✚ Do not begin the placement of concrete for at least 8 hours after bonding.
- ✚ Ensure that the water bar makes complete contact with the substrate.
- ✚ Water bar connections can be made by overlapping by the side 2" (50 mm) or by butt jointing.
- ✚ The water bar must be placed tightly together to prevent gaps. Butt jointed water-stops must be covered by a separate section of water bar with 31.75 mm overlap to both sections.
- ✚ Alternately, Water bar Strip can be fastened with masonry nails, 40 – 50mm long with 20 mm diameter washer.
- ✚ Space nails at a maximum of 200 mm centers with a minimum spacing to ensure proper substrate contact.

### RECOMMENDATION:

#### Before Use

Check product seal to ensure it is unbroken or fake. Consult customer support should any concern arise for clarity and Technical support.

#### General

- ✚ Water bar Strip can be fastened with masonry nails, 40 – 50mm long with 20 mm diameter washer.
- ✚ Do not begin the placement of concrete for at least 8 hours after bonding.
- ✚ Do not install under rain
- ✚ Do not install over wet substrate.

- ✚ Be careful to observe written instruction on all technical documents for this product such as *Safety Data Sheet, Method Statement Data Sheet, Technical Data Sheet, and Test Certificate Results.*

### BASIS OF PRODUCT DATA

- ✚ All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

### ECOLOGY HEALTH AND SAFETY

- ✚ Information on the safe handling, storage and disposal of chemical products, user is advised to refer to the most recent/updated *Safety Data Sheet, Method Statement Data Sheet, and Technical Data Sheet*, containing physical, ecological, toxicological and other safety/handling/storage related data.

### CLEAN UP

- ✚ Wash hands and tools with EDEN super cleaner or any of EDEN recommended cleaning products promptly before the material hardens. Cured material must be mechanically removed.

### TECHNICAL SUPPORT

AISE-OHIS EDEN CONSTRUCTION (CHEMICAL) Ltd provides a technical advisory service supported by a team of specialists in the field.

### STORAGE AND SHELF LIFE

- ✚ EDEN SWELLABLE WATERBAR can be stored 12 months minimum from date of production if stored properly in original, unopened and undamaged / sealed packaging.
- ✚ Storage area should be in dry conditions and product kept in original packaging at temperatures between +5 °C and +30 °C.
- ✚ Products should remain in their original, unopened containers, bearing the manufacturers name, product designation, and batch number and application precaution labels.

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## TECHNICAL PROPERTIES

<i>Packaging</i>	12.5 lm/40 lm	<i>Roll</i>
<i>Shelf life</i>	12 months minimum from date of production	<i>If stored properly in original, unopened and undamaged sealed packaging.</i>
<i>Appearance</i>	Rectangular Bar stripe	<i>Red or Black</i>
<i>Shore A Hardness</i>	75±5	<i>(TSE 3078 – ASTM D 2240)</i>
<i>Density</i>	1.25 g/cm <sup>3</sup>	<i>(TSE 3078 – ASTM D 792)</i>
<i>Tensile strength</i>	(+) 15 N/mm <sup>2</sup>	<i>(TSE 3078 – ASTM D 412)</i>
<i>Hydrostatic Head</i>	Up to 10m head	
<i>Tear Strength</i>	~19 N/mm <sup>2</sup>	<i>(ASTM D 624)</i>
<i>Water Absorption</i>	1.5% max. in weight (24 hours)	<i>(TSE 3078 – ASTM D 412)</i>
<i>Elongation</i>	300%	<i>(TSE 3078 – ASTM D 412)</i>
<i>Swelling Pressure</i>	≤ 15 bars	<i>after 3 days stored in tap water</i>
<i>Ash Content</i>	5% max. in weight	<i>(TSE 3078)</i>
<i>Service Temperature</i>	-20°C to 50°C	

## APPLICATION INFORMATION

<i>Joining</i>	Over lapping	<i>3" (inches) Minimum</i>
<i>Installation/fixing</i>	By tacking	
<i>Consumption</i>	Approximately 4.5 - 6mm bead will yield approximately 9 m of coverage.	

### HEALTH & SAFETY

- ✚ Please ensure that proper PPE are worn during installation.
- ✚ Welding should be done in ventilated areas.
- ✚ Standard safety procedures should be duly observed.
- ✚ Please consult current MSDS for product.
- ✚ *For Professional Use only.*

### ADDITIONAL INFORMATION

AISE-OHIS EDEN CONSTRUCTION (CHEMICAL) Ltd manufactures a complete range of construction chemical products which include:

- ✚ Cementitious Waterproofing membrane
- ✚ Acrylic Waterproofing membrane

- ✚ Polyurethane Waterproofing membrane
- ✚ Bituminous Waterproofing membrane
- ✚ Flooring solution
- ✚ Damp-Proofing products
- ✚ Repair and refurbishment systems
- ✚ Water-stop
- ✚ Cleaning agent
- ✚ Bonding agent
- ✚ Decorative / Repair mortars
- ✚ Tile adhesive and grouts

For more information on any of our products, please contact AISE-OHIS EDEN CONSTRUCTION (CHEMICAL) global or regional office.

### LEGAL NOTE

Details contained in this Technical Data Sheet is provided in good will based on the experience and knowledge of the products been stored, handled and applied properly under normal conditions. That client will be responsible to duly follow all instruction written herein. However, Whilst Aise-Ohis Eden Construction (Chemicals) Limited endeavors to ensure that any advice, recommendation, specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation of information given by it. Therefore, user is mandated to check/test product's suitability for the intended application and purpose. Aise-Ohis Eden Construction (Chemicals) Limited reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

