

**CONCRETE WATER EXPANDING FLEXIBLE JOINT WATERSTOP STRIP**

**DESCRIPTION**

PENEBAR® SW-55 is a waterstop developed to stop water penetration through cast-in-place concrete joints by expanding in a controlled fashion, when exposed to water and making a positive seal inside and against the concrete. Its superior ability to expand and seal concrete joints, allows it to replace the more passive tied in PVC waterstop systems and eliminate welding irons, split-forming and special shapes.

**RECOMMENDED FOR**

PENEBAR® SW-55 can be applied to non-moving, concrete construction joints for both horizontal and vertical applications. It can be used on new to existing concrete, irregular surfaces and through wall or slab penetrations, such as pipes, utility lines, piling and steel members.

- ▶ Underground structures
- ▶ Basements
- ▶ Precast panels
- ▶ Tunnels
- ▶ New to existing concrete
- ▶ Manholes
- ▶ Lift pits
- ▶ Retaining walls
- ▶ Concrete pipes
- ▶ Storage tanks

**ADVANTAGES**

- ▶ Controlled expansion. No early expansion of the product
- ▶ Allows concrete to cure normally, before expansion
- ▶ No decomposition with the passage of time
- ▶ Not affected by hydration/drying cycles
- ▶ Easy application, even on rough surfaces
- ▶ Applicable on horizontal and vertical surfaces
- ▶ No problems with the concrete application and compaction
- ▶ Not toxic. No special handling is required

**TECHNICAL CHARACTERISTICS**

Characteristics	Test Result	Test Method
<i>Color</i>	Black	
<i>Specific gravity</i>	84.28 ± 3.12 lb/ft <sup>3</sup> (1.35 ± 0.05 kg/Lt)	ASTM D-71
<i>Hydrocarbon content</i>	47% min.	ASTM D-297
<i>Volatile matter</i>	1% max.	ASTM D-6
<i>Penetration (150 g cone at 77 °F (25 °C); 5 sec)</i>	1 37/64" ± 13/64" (40 ± 5 mm)	ASTM D-217
<i>Application temperature</i>	-10 °F to 125 °F (-23 °C to 52 °C)	
<i>Service temperature</i>	-30 °F to 180 °F (-34 °C to 82 °C)	

All data are average values obtained under laboratory conditions. Impractical use, temperature, humidity and absorption of the substrate may influence the above given values.

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**DIRECTIONS FOR USE**

**Surface Preparation:** Carefully brush off all dust and debris and apply a coat of PENEBAR® PRIMER.

**Application:** Apply PENEBAR® PRIMER by using brush at a minimum of 4 mils (0.1mm thick) by 25 mm wide over the entire surface length to receive PENEBAR® SW-55. Allow it to dry for 10-15 min at a temperature of 77°F (25°C) or where the temperatures are low, allow it dry for longer time. By using the heel of the hand and moderate pressure, press a bead of PENEBAR® SW-55 firmly into position on the standing structure. Make sure the product has bonded with the primed area. Where required, splice ends to form a continuous, uninterrupted seal. For best results, cut each end at opposite 45° angles and tightly butt ends together. **DO NOT OVERLAP ENDS.** Gently knead the spliced ends creating an uninterrupted seal. Peel the protective covering from the exposed side of the installed PENEBAR® SW-55. Follow standard concrete placing procedures from here onwards.

**Application Rates:** 787 ft (240 m) PENEBAR® SW-55 to 1 gal (3.78 Lt) PENEBAR® PRIMER to the area, where PENEBAR® SW-55 is to be placed.

**SPECIAL CONSIDERATIONS**

Always use PENEBAR® PRIMER to ensure tight adhesion and to aid in preventing PENEBAR® SW-55 from moving during the concrete pour. For vertical surfaces, nails may be used to hold the product in place in conjunction with PENEBAR® PRIMER.

PENEBAR® SW-55 should be used at a minimum depth of (2") 50 mm inside the concrete.

When used on pipes and other structural penetrations, PENEBAR® SW-55 should be cut to measured length and placed around the penetration with ends butted.

In all cases, PENEBAR® SW-55 should be in direct contact with the substrate along the entire length of the installation.

PENEBAR® SW-55 is not an expansion joint sealant and only suitable for non-moving concrete joints.

PENEBAR® SW-55 should not be installed in standing water or on frozen or icy surfaces.

Contact PENETRON HELLAS S.A. for further information regarding your project.

**PACKAGING**

PENEBAR® SW-55 is available in two types:

Type A is packaged 30 meters/carton  
[6 rolls, ¾" x 63/64" x 16.4 ft (19mm x 25mm x 5m), each].

Type B is packaged 24 meters/carton  
[6 rolls, 23/64" x 63/64" x 13.2 ft (9mm x 25mm x 4m), each].

**STORAGE / SHELF LIFE**

When stored in a dry enclosed area off the ground at a minimum temperature of 45 °F (7 °C) in unopened, undamaged cartons, shelf life is unlimited.

**SAFE HANDLING INFORMATION**

Avoid skin and eye contact. If contact is made, flush areas with lots of water and seek medical advice. Protective gloves, mask and goggles should be worn. For further information please refer to Safety Data Sheet. PENETRON HELLAS S.A. has recently updated Safety Data Sheet on the safe use of PENETRON® products. Each Safety Data Sheet contains health and safety information for the protection of your employees and your customers. **KEEP OUT OF REACH OF CHILDREN.**

**WARRANTY – DISCLAIMER**

PENETRON HELLAS S.A. warrants that its products are manufactured under certified ISO Standard procedures, are of excellent quality and shall be free from material defects and contain all components in their proper proportion. Should any of the products be proven defective, the liability to PENETRON HELLAS S.A. shall be limited to replacement of the material proven to be defective, since the standard application procedures have been met and the suitability of the product for the particular application have been proven. PENETRON HELLAS S.A. makes no warranty as to merchantability of fitness for a particular purpose. User, after contacting the distributor of the product, shall determine the suitability of the product for his intended use and assume all risks and liability in connection therewith. While every care has been taken, the information provided in this product's data sheet make no part of any contract. All recommendations, technical data and test data contained in this product's data sheet are based upon the results of control laboratory tests or in actual field tests. However, PENETRON HELLAS S.A. makes no warranty of any kind, concerning this data. In any case, this data are given in good faith based in the PENETRON HELLAS S.A. experience, till the publication of this sheet. Due to variance in storage, handling and applications of the materials, PENETRON HELLAS S.A. accepts no liability for the results obtained. It is suggested that potential users try small applications to determine the suitability of each individual product for their specific requirements. The users should always refer to the most recent edition of the product's data sheet. PENETRON HELLAS S.A. may particularly differentiate its versions of the product's data sheet compared with those of PENETRON INTERNATIONAL LTD or respective PENETRON companies worldwide. These changes are due to text formatting, different application weathering and procedures or different product names and aim at the optimal consumer information.

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