

# PENEBAR™ SW-45 Rapid

## CONCRETE JOINT WATERSTOP

### DESCRIPTION

PENEBAR™ SW-45 Rapid is a unique bentonite infused butyl rubber sealing compound designed to expand rapidly when exposed to moisture, making it a self-healing joint material for construction joint applications.

### APPLICATIONS

Building foundations  
Slabs  
Retaining walls  
Storage tanks  
Other similar non-moving cold construction joints

### PHYSICAL PROPERTIES

**Color:** Black  
**Specific gravity (ASTM D71):** 1.55 ± 0.05  
**Volatile matter (ASTM D6):** 1% maximum  
**Penetration, 150 g cone @ 25°C (77°F); 5 sec (ASTM D217):** 40 ± 5 mm  
**Application temperature range:** -23°C to 38°C (-9°F to 100°F)  
**Service temperature range:** -34°C to 82°C (-29°F to 180°F)

### STANDARD

Complies and meets the requirements to EU REACH Regulation (EC) No 1907/2006 Article 33(1) Obligation to provide information of safe use (see REACH requirement in report for details).

### DIRECTIONS FOR USE

**How to apply PENEBAR™ SW-45 Rapid on poured-in-place construction joints:**

- 1) Apply PENEBAR™ PRIMER by using brush at a minimum of 0.1 mm (4 mils) thick by 50 mm (2") wide over the entire surface length to receive PENEBAR™ SW-45 Rapid. Allow it to dry for 10-15 minutes at a temperature of 25°C (77°F) or, where the temperatures are low, allow it to dry for a longer time.
- 2) By using the heel of the hand and moderate pressure, press a bead of PENEBAR™ SW-45 Rapid firmly into position on the standing structure. Make sure the product has bonded with the primed area.
- 3) 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.
- 4) Peel the protective covering from the exposed side of the installed PENEBAR™ SW-45 Rapid.
- 5) Follow standard concrete placing procedures from here onwards.

### PACKAGING

**Type A** is packaged 30 meters/carton (6 rolls, 19 mm × 25mm × 5 m each).

**Type B** is packaged 24 meters/carton (6 rolls, 9 mm × 25 mm × 4 m each).

### STORAGE / SHELF LIFE

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

### SAFE HANDLING INFORMATION

Keep out of reach of children. Refer to the Safety Data Sheet for additional information.

### RATE OF RAPID EXPANSION

#### Freshwater exposure results:

24 hours	140% expansion	Visible signs of cracking along edges of specimen
48 hours	175% expansion	Splitting along sides of specimen; both ends opening up like a flower
72 hours	190% expansion	More pronounced splitting along sides and ends
120 hours	210% expansion	Specimen's expansion became so great that further testing was impracticable

#### Saltwater exposure results:

24 hours	107% expansion	No visible sign of deterioration
48 hours	112% expansion	No visible sign of deterioration
72 hours	114% expansion	No visible sign of deterioration
120 hours	118% expansion	No visible sign of deterioration

### SPECIAL CONSIDERATIONS

- Always use PENEBAR™ PRIMER to ensure tight adhesion and to aid in preventing PENEBAR™ SW-45 Rapid from moving during the concrete pour. For vertical surfaces, nails may be used in conjunction with PENEBAR™ PRIMER to hold the product in place.
- Place PENEBAR™ SW-45 Rapid so that it is no closer than 50 mm (2") from the outer surface of poured structure. If a Keyway is utilized, place the PENEBAR™ SW-45 Rapid into the bottom of the formed Keyway area.
- When used on pipes and other structural penetrations, PENEBAR™ SW-45 Rapid should be cut to measured length and placed around the penetration with ends butted.
- In all cases, PENEBAR™ SW-45 Rapid should be in direct contact with the substrate along the entire length of the installation.
- PENEBAR™ SW-45 Rapid is not an expansion joint sealant and only suitable for non-moving concrete joints.
- PENEBAR™ SW-45 Rapid should not be installed in standing water or on frozen or icy surfaces.



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DOP NO: 10.10001D260124-05  
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PENEBAR SW-45 RAPID  
Swellable joint sealing tape  
European Technical Assessment  
ETA-22/0619 of 16.01.2024

Reaction to fire: Class E  
Dimensions: Type A 19 mm x 25 mm, Type B 9 mm x 25 mm  
Watertightness in end use conditions:  
12 m water column/watertight up to 3 bar tested  
Swelling behaviour in different liquids at state of delivery:  
Deionised water: 15 d, 175%  
Alkaline solution: 25 d, 224%  
Acidic solution: 14 d, 92%  
Reversibility of swelling process:  
- Swelling process is reversible in 12 days  
- Swelling process started without time lag  
Swelling pressure: 0.6 N/mm<sup>2</sup>

**WARRANTY:** PENETRON INTERNATIONAL, LTD. warrants that the products manufactured by it shall be free from material defects and will conform to formulation standards and contain all components in their proper proportion. Should any of the products be proven defective, the liability to PENETRON INTERNATIONAL, LTD. shall be limited to replacement of the material proven to be defective, and PENETRON INTERNATIONAL, LTD shall in no case be liable otherwise or for incidental or consequential damages. **PENETRON INTERNATIONAL, LTD. MAKES NO WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED.** User shall determine the suitability of the product for its intended use and assume all risks and liability in connection therewith.

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