

PENEBAR™ SW-45 Rapid

CONCRETE JOINT WATERSTOP

DESCRIPTION

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

APPLICATIONS

Typical applications for PENEBAR™ SW-45 Rapid include:

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

PHYSICAL PROPERTIES

Color:

Black

Specific gravity (ASTM D71):

1.50 ± 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 meet 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 25 mm (1") wide over the entire surface length to receive PENEBAR™ SW-45 Rapid. Allow it to dry for 10-15 min at a temperature of 25°C (77°F) or where the temperatures are low, allow it dry for 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.

NOTES:

- Always use PENEBAR™ PRIMER to avoid displacement of the PENEBAR™ SW-45 Rapid during concrete pouring. It may be necessary to utilize masonry nails or other mechanical means to hold the sealant in place on vertical surfaces.
- Place PENEBAR™ SW-45 Rapid so that it is no closer than 5 cm (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.

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.

PENEBAR™ SW-45 Rapid

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	90% 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 to hold the product in place in conjunction with PENEBAR™ PRIMER.
- PENEBAR™ SW-45 Rapid should be used at a minimum depth of 50 mm (2") inside the concrete.
- 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.

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 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.

PENETRON INTERNATIONAL, LTD.
45 Research Way, Suite 203, East Setauket, NY 11733
(631) 941-9700 • info@penetron.com • penetron.com