



# PENEBAR SW™

SELF HEALING CONCRETE WATERSTOPS

**PENETRON®**

INTEGRAL CAPILLARY CONCRETE WATERPROOFING SYSTEMS

T O T A L   C O N C R E T E   P R O T E C T I O N™



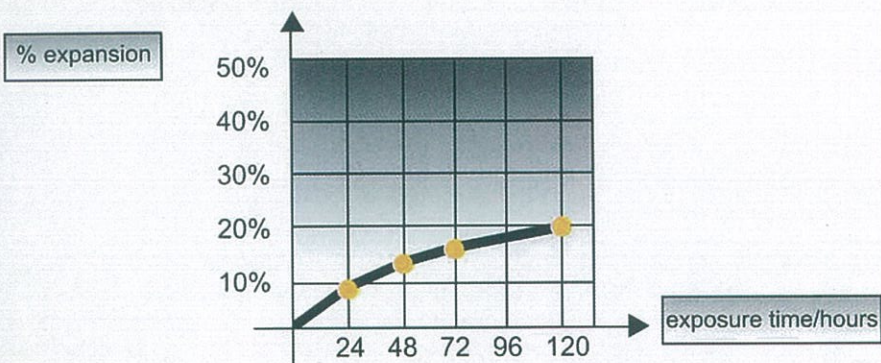
# PENEBAR SW-45<sup>TM</sup> rapid

## RAPID EXPANSION WATERSTOP

**Penebar SW-45 rapid<sup>TM</sup> is a concrete joint waterstop designed to expand rapidly when exposed to water.**



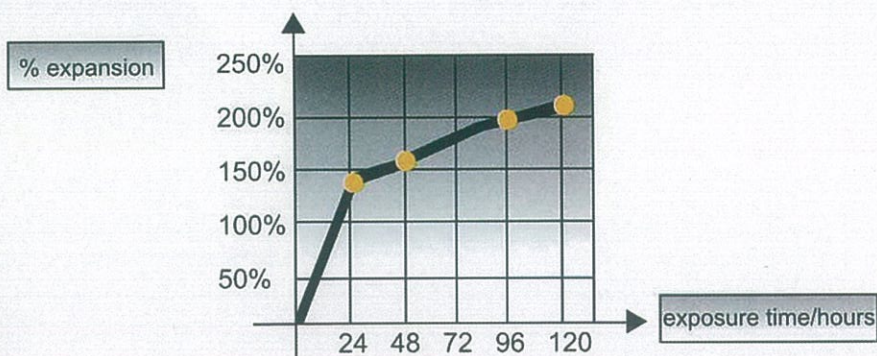
### EXPANSION RATE WHEN IMMERSSED IN SALT WATER



### SALT WATER EXPOSURE RESULTS

- after 24 hours : 8% expansion with no sign of deterioration
- after 48 hours : 11% expansion with no sign of deterioration
- after 72 hours: 15% expansion with no sign of deterioration
- after 120 hours: 20% expansion with no sign of deterioration

### EXPANSION RATE WHEN IMMERSSED IN FRESH WATER



### FRESH WATER EXPOSURE RESULTS

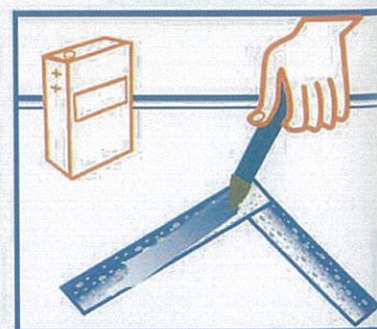
- after 24 hours : 143% expansion with signs of cracking at the edges of the sample
- after 48 hours : 170% expansion with splits starting to show on the sides of the sample
- after 72 hours: 195% expansion
- after 120 hours: 215% expansion and further expansion undesirable

### ADVANTAGES

PENEBAR SW- 45 rapid<sup>TM</sup> is suitable for use on non-moving cold construction joints. The nature of its expansion characteristics makes it a preferred solution for protection of building projects exposed to salt water or high hydrostatic pressure.

### TYPICAL PROJECTS

- Base slabs
- Foundations
- Retaining walls
- Water retaining structures
- Tunnels etc.



PENEBAR



# PENEBAR SW-55<sup>TM</sup>

## CONTROLLED EXPANSION WATERSTOP



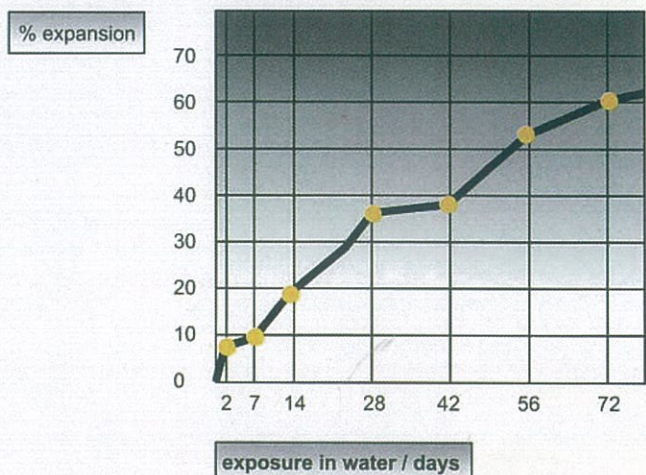
**Penebar SW-55<sup>TM</sup> is a concrete joint waterstop that will expand in a controlled fashion when exposed to water. It is a sophisticated water-sealing product that encapsulates hydrophilic materials into a rubber base to create a built-in delay system.**

### WHAT IS CONTROLLED EXPANSION?

Controlled expansion allows PENEBAR SW-55<sup>TM</sup> to avoid some of the problems that have been associated with traditional waterstops on many building sites;

- It does not expand prematurely and does not absorb any water from fresh concrete poured against it.
- It will not expand to a point where the hydration process causes it to disintegrate and hence will not be washed away when subjected to a constant water flow
- It will not cause excessive internal pressure in the concrete

### CONTROLLED EXPANSION RATE WHEN FULLY IMMERSED IN WATER



### ADVANTAGES

- Concrete is allowed to gain full strength before expansion
- Built-in delay system prevents premature expansion
- Can be bedded into wet concrete
- Does not disintegrate over time
- Not affected by repeated wet and dry cycles
- Easy to apply to rough concrete surfaces
- Can be used in horizontal and vertical joints
- No problems with compaction or displacement
- Easy to install
- Non-toxic and does not require any special handling

### TYPICAL PROJECTS

PENEBAR SW-55<sup>TM</sup> can be applied to non-moving, cold joints on all concrete building projects that need protection from moisture ingress, including;

- Underground structures
- Basements
- Precast panels
- Tunnels
- New concrete onto old concrete
- Manholes
- Lift pits
- Retaining walls
- Storage tanks
- Concrete pipe
- Car parks etc.

### PRIMER<sup>TM</sup>

PENEBAR SW PRIMER<sup>TM</sup> is suitable for use with both PENEBAR SW-45 rapid<sup>TM</sup> and SW-55<sup>TM</sup> a coat of PENEBAR SW PRIMER<sup>TM</sup> is applied first to the area where the waterstop is to be placed. See back cover for detailed application instructions.

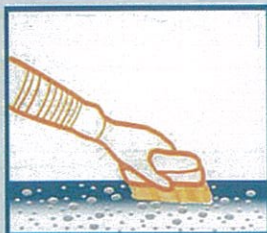




# PENEBAR SW™

SELF HEALING CONCRETE WATERSTOPS

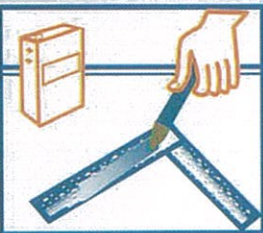
## STEP 1



### CLEAN SURFACE

Clean the surface sufficiently to receive the PENEBA SW PRIMER™.

## STEP 2



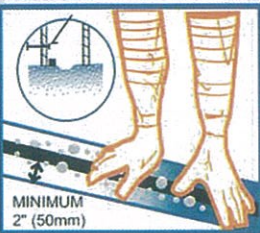
### APPLY ADHESIVE

Apply a coat of PENEBA SW PRIMER™ to the area where the PENEBA SW™ is to be placed.

#### Application Ratio:

1 gal.(3.78 L) PRIMER™ to 240 m (787 ft) PENEBA SW™

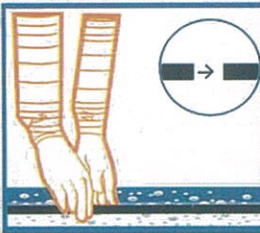
## STEP 3



### PLACE WATERSTOP

Using moderate hand pressure with the heel of the hand, press a continuous bead of PENEBA SW™ firmly into position on the standing structure. Make sure the product has bonded to the primed area.

## STEP 4

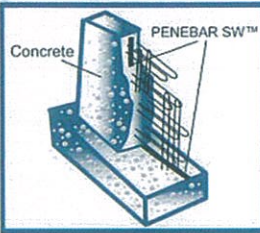


### BUTT COIL ENDS

Peel the protective backing from the exposed side of the installed PENEBA SW™ and tightly butt the coil ends to form a continuous waterstop.

Do not overlap coil ends.

## STEP 5



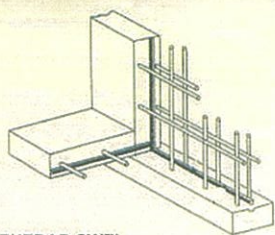
### POUR CONCRETE

Pour the mating structural member into position. Follow standard concrete placing procedures from here onwards.

## NOTES:

- Always use PENEBA SW PRIMER™ to prevent PENEBA SW™ from moving during concrete pouring. For vertical surfaces, nails may be used to hold the product in place
- PENEBA SW™ should be placed at a minimum depth of 50 mm (2") inside the concrete
- When used on pipes and other structural penetrations, PENEBA SW™ should be cut to the measured length and placed around the penetration.
- On rough and irregular surfaces, always ensure that PENEBA SW™ remains in direct contact with the substrate.

## APPLICATION DETAIL:



PENEBA SW™

## PHYSICAL PROPERTIES SVB PROVIDE:

Property	Test Standard	PENEBA SW™
Color		black
Specific gravity	ASTM D-71	1.35 - .05 <sup>+</sup>
Hydrocarbon content	ASTM D-297	47% min.
Volatile matter	ASTM D-6	1% max.
Penetration, 150gm Cone @ 77°F; 5 seconds	ASTM D-217	40 - 5 <sup>++</sup>

## CAUTION:

PENEBA SW™ IS NOT AN EXPANSION JOINT SEALANT AND ONLY SUITABLE FOR NON-MOVING CONCRETE JOINTS

## PACKAGING:

### Type A :

- 30m/box = 47lbs. = 21kg
- 40 boxes/pallet = 1200m
- 10 pallets/20' container = 12000m
- Size: 19mm x 25mm x 5m

### Type B :

- 24m/box = 21lbs. = 9.5kg
- 70 boxes/pallet = 1680m
- 10 pallets/20' container = 16800m
- Size: 9mm x 25mm x 4m

## DISTRIBUTOR:

## CONTACT DETAILS:



WATERPROOFING SYSTEM

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