TW-17

BASE-SEAL WATERSTOP

PRODUCT DESCRIPTION

TW-17 is a 17-inch wide flexible PVC base-seal profile waterstop used in concrete construction to form a watertight seal across and/or along concrete pour joints. TW-17 can be used in tunnel construction as a grid water barrier welded to the COREFLEX PVC thermoplastic membrane system. Embedded in the concrete, the TW-17 prevents the passage of water through the joint.

TW-17 roll splices, directional changes and intersections are critical components of a quality installation. CETCO strongly recommends that project specifications requiring factory made fabrications of directional changes and intersections. CETCO fabricates homogenous directional changes and intersections, leaving only the less difficult straight roll splices to be welded in the field.

INSTALLATION

Preparation

During progress of work all waterstop shall be protected from damage and should be free of oil, dirt and concrete spatter. Waterstop coils should be uncoiled several days before installation to insure ease of installation and fabrication. Be sure steel reinforcing bars do not interfere with proper positioning of waterstop.

Placement

The location and embedment of the waterstop shall be as shown on the drawings, with approximately one-half of the width of the waterstop embedded in the concrete on each side of the joint. All waterstops shall be sufficiently held in place to insure that they are correctly positioned to form a continuous watertight diaphragm in the joint unless otherwise shown. Typical methods used to secure the waterstop into position are as follows:

- extending through a slot in the keyway
- held in place by split bulkheads
- hot air welded to COREFLEX/COREFLASH membrane

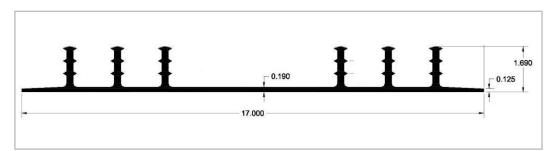
Care should be taken during concrete placement on horizontal sections to prevent excessive movement of the waterstop to insure against displacement. Always thoroughly and systematically vibrate concrete around the waterstop to avoid air entrapment and to provide a positive contact between the waterstop and the concrete. Prior to the second pour, sweep horizontal joints to insure there is no foreign matter to interfere with positive contact between the waterstop and the concrete.

Splicing

Waterstops need splicing at intersections, abrupt changes of direction, or to form longer lengths. Field splicing of straight butt joints is fairly simple. Mitered fittings such as ells, tees and crosses in both flat and vertical styles, are harder to splice correctly. We recommend that these types of fittings be factory fabricated. Please contact CETCO for more details.

PACKAGING

Roll size: 17" x 14-ft (432 mm x 4.3 m) Roll weight: 64-lbs (29 kg)



TW-17 Waterstop Dimensions

TECHNICAL DATA

TW-17 BASE-SEAL WATERSTOP

| PHYSICAL PROPERTIES | | |
|---|----------------|-----------------|
| PROPERTY | TEST METHOD | TYPICAL VALUE |
| Water Absorption | D-570 | 0.15% |
| Tear Resistance, psi (kg per cm²) | D-624 | 350 (24.5) |
| Specific Gravity, (+/-0.02) | D-792 | 1.33 |
| Hardness, Shore A (+/-3, 10 sec. delay) | D-2240 | 74 |
| Tensile, psi (kg per cm²) | D-638, Type IV | 2075 (145.25) |
| Elongation % | D-638, Type IV | 435 |
| 100% Modulus, psi (kg per cm²) | D-638, Type IV | 725 (50.75) |
| Brittle Point (Tb) (Passed) | D-746 | -37° F / -38° C |
| Stiffness in Flexure psi (kg per cm²) | D-747 | 1440 (100.8) |
| Ozone Resistance | D-1149 | No Failure |
| ACCELERATED EXTRACTION, CRD-C572 | | |
| Tensile, psi (kg per cm²) | D-638, Type IV | 2025 (141.75) |
| Elongation, % | D-638, Type IV | 420% |
| EFFECT OF ALKALI, CRD-C572 | | |
| Weight Change, % | | 0.05% |
| Change in Hardness, Shore A | D-2240 | -3 |

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