



PRIMESHIELD CENTRAL & EXTERNAL PVC WATERSTOP

IMPERIAL SYSTEM PRODUCTS

PRIMESHIELD™ PVC WATERSTOPS are extruded from high grade Polyvinylchloride virgin polymers.

They are sufficiently robust to resist high water pressures and retain the flexibility, even at low temperatures, to resist large dynamic movements.

SUITABILITY

PRIMESHIELD™ is designed for water retaining and water excluding building structures such as:

- Reservoirs,
- Water towers
- Sewage tanks
- Damps,
- Swimming pools
- Building Basements
- Underground carpark's
- Retaining walls
- Roof Decks
- Podium Decks

ADVANTAGES

- Primeshield has a full range of profiles to meet all requirements.
- Its unique ribbed design creates solid embedment in concrete
- Complex cross section maximizes resistance to water seepage.
- (Tortuous path principle)
- Factory welded junction enables simple on-site jointing for a continuous waterstop network.
- Manufactured in the United States of America where extrusions, polymer compounding conformity and standards are not compromised.
- Primeshield™ PVC waterstops are embedded into concrete structures which have designed functional life spans of more than a hundred years.
- Good inherent elasticity
- Resistant to many waterborne chemicals.
- Heat weld able
- Will not discolor concrete or produce electrolytic action
- Suitable for use above or below grade applications

SUGGESTED DESIGN CHECKLIST

- Determine country of Origin.
- Verify chemical containment requirement
- Verify hydrostatic head pressure requirement
- Verify joint type and joint movement requirement
- Verify joinery details of dissimilar or non-symmetrical waterstop profiles.
- Consider using one profile throughout the structure to simplify the use of intersections.
- Specify type, thickness and size by Product Name to bench mark quality expectation.
- Specify factory fabrication of intersections.
- Ensure that all fabrication are measured to requirement and welded and tested at the site workshop prior to placement.

PRIMESHIELD™ PVC WATERSTOP PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUE
Tensile Strength	ASTM D-638	2000 PPSI Min.
Ultimate Elongation	ASTM D-638	300% Min.
Specific Gravity	ASTM D-792	1.39
Stiffness in flexure	ASTM D-747	600 PSI Min.
Hardness Shore A15	ASTM D-2240	80±3
Low temperature		
Brittleness @ -35°F	ASTM D-746	Pass
Water absorption	ASTM D-570	15% Max
Tensile Strength After Accelerated extraction	CRD-C 872	1850 PSI MIN
Elongation After Accelerated extraction	CRD-C-572	300% Min
Alkali Resistance >weight change >hardness change	CRD-C-572	20% Max. 2 Pts Max.
Tear Resistance	D624	395 lbs/in.

IMPERIAL SYSTEM PRODUCTS

TYPES OF CONCRETE JOINTS

Contraction Joints

Contraction joints are designed planes of weakness to control the location of cracks due to shrinkage of concrete

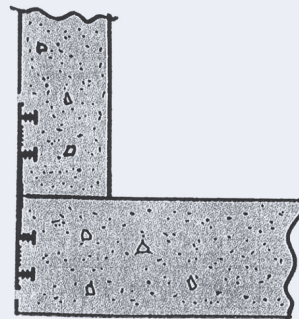
Construction Joints

Construction joints are determined by the interruption in the placement of concrete.

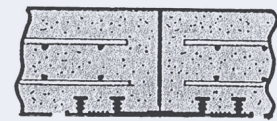
Expansion Joints

Expansion joints separate or isolate abutting concrete structures (wall, slabs footings and columns) protecting them from compressive stresses that may develop due to the thermal expansion, settlement, creep, live load deflections, during shrinkage or crush.

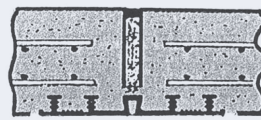
Differential movement at these joints can be both lateral and transverse



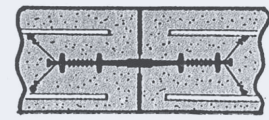
External for construction joint wall-to-slab



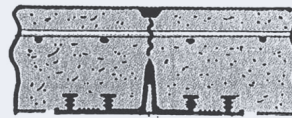
External for construction joint



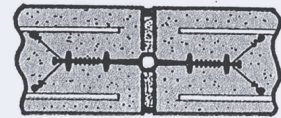
External for expansion joint



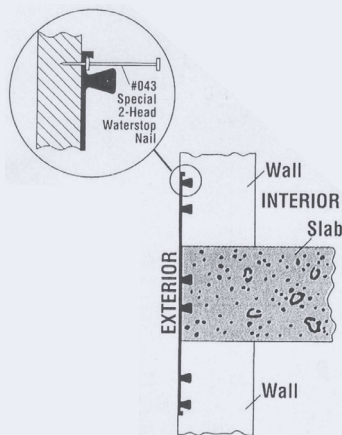
External for construction joint



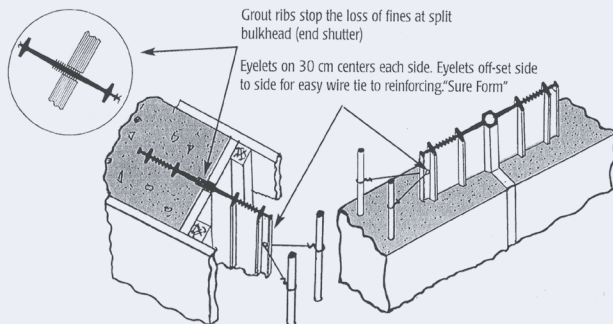
External will crack inducer for contraction joint



External for expansion joint



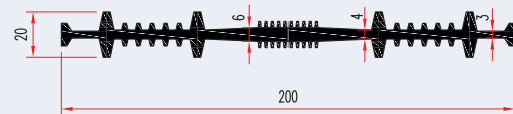
External Placement for construction joint between wall and slab



Central Placement for construction joint

PRIMESHIELD™

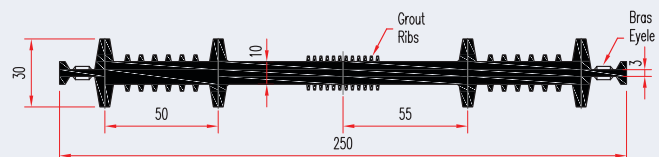
CENTRAL PLACEMENT OF PVC WATERSTOPS FOR CONSTRUCTION JOINTS



PRIMESHIELD CP/CJ 200 (HEAD PRESS 373 KPa)



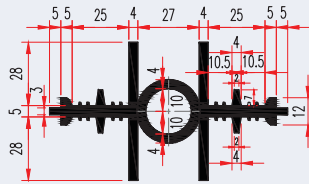
PRIMESHIELD CP/CJ 250 (HEAD PRESS 448 KPa)



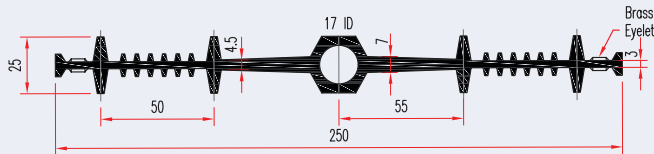
PRIMESHIELD CP/CJ 250 S (HEAD PRESS 597 KPa)

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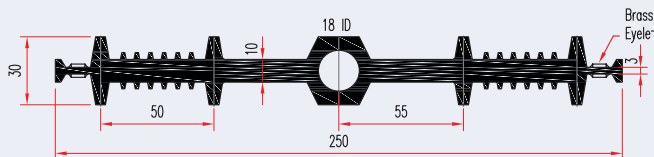
**PRIMESHIELD™
CENTRAL PLACEMENT OF PVC WATER-
STOPS FOR EXPANSION JOINTS**



PRIMESHIELD WS 2030 CP/EJ 101

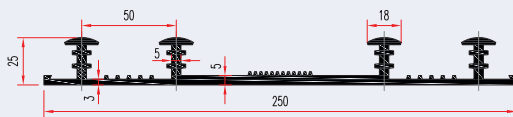


PRIMESHIELD CP/EJ 250 (HEAD PRESS 448 KPa)



PRIMESHIELD CP/EJ 250 S (HEAD PRESS 597 KPa)

**PRIMESHIELD™
EXTERNAL PLACEMENT OF PVC WATERSTOPS FOR CONSTRUCTION JOINTS**

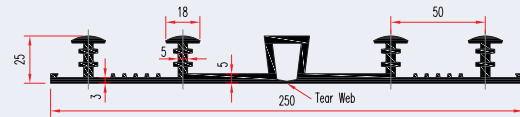


PRIMESHIELD EP/CJ 250 (HEAD PRESS 373 KPa)



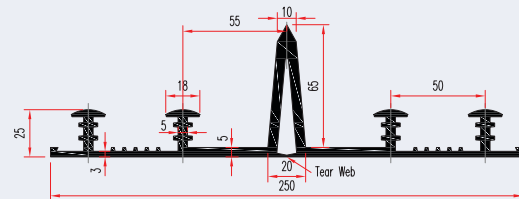
PRIMESHIELD EP/CJ 330 (HEAD PRESS 522 KPa)

**PRIMESHIELD™
EXTERNAL PLACEMENT OF PVC WATERSTOPS FOR EXPANSION JOINTS**



PRIMESHIELD EP/EJ 250 (HEAD PRESS 448 KPa)

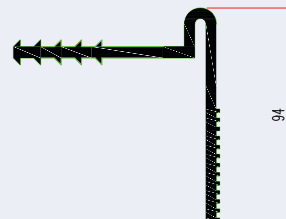
**PRIMESHIELD™
EXTERNAL PLACEMENT OF PVC WATERSTOPS FOR CONSTRUCTION JOINTS WITH CRACK INDUCER**



PRIMESHIELD EP/CJ 250 CRACK INDUCER (HEAD PRESS 448 KPa)

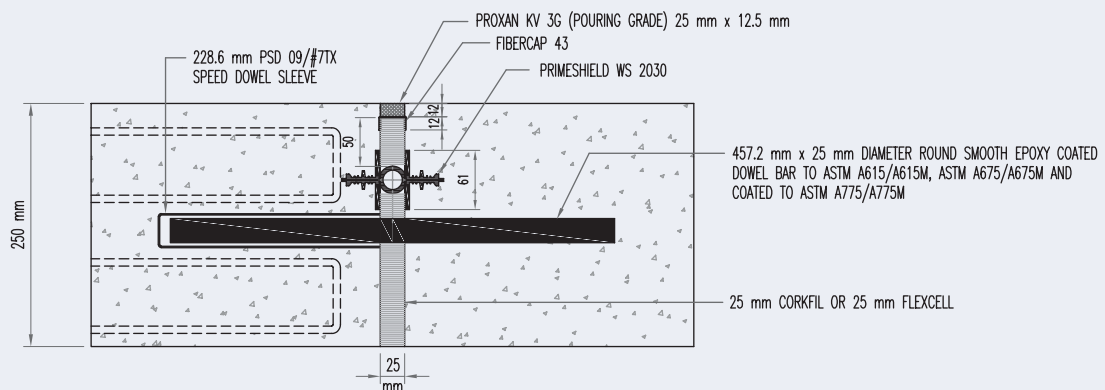
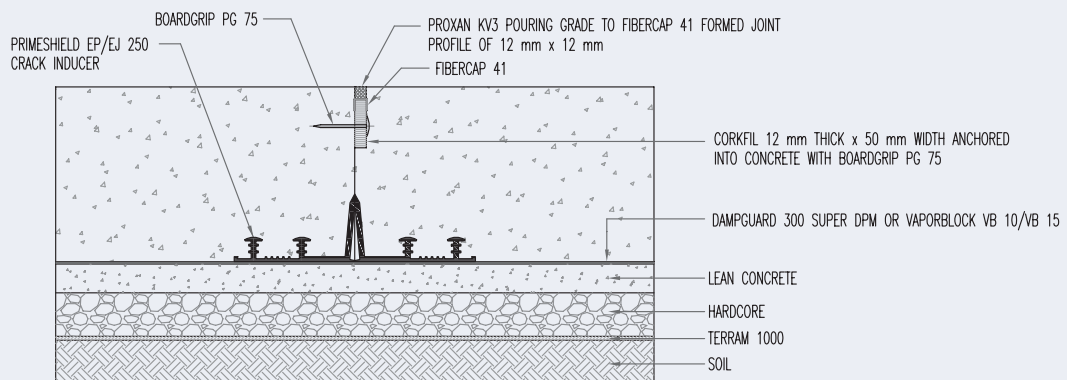
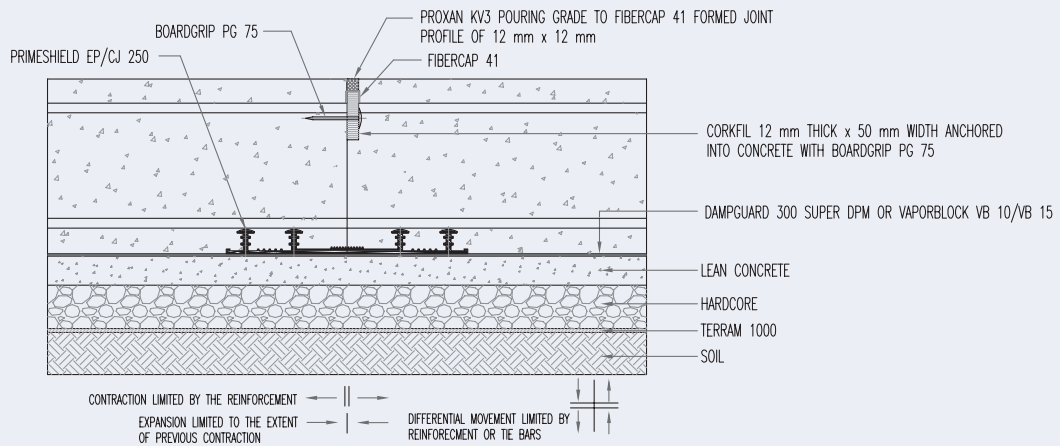
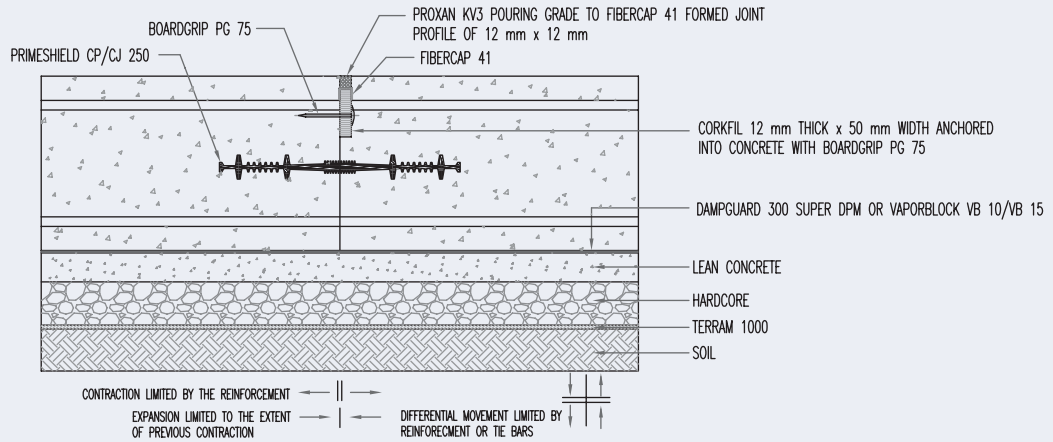
**PRIMESHIELD™
EXTERNAL PLACEMENT OF PVC WATERSTOPS FOR EXPANSION JOINTS & CONSTRUCTION JOINTS**

1. USED BETWEEN NEW AND OLD STRUCTURES
2. USED WHEN PRIMESHIELD WATERSTOPS WAS NOT INSTALLED DURING THE FIRST CAST OF CONCRETE.



PRIMESHIELD E BAR

IMPERIAL SYSTEM PRODUCTS



IMPERIAL SYSTEM PRODUCTS



IMPERIAL SYSTEM PRODUCTS



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