

# CIKOhydro Seal

## Centrally and Externally flexible PVC Waterstops

### Description

CIKOhydro Seal is extruded from an elastomeric high grade virgin polyvinyl chloride rubber (PVC). CIKOhydro Seal are designed in precision engineered profiles to stop any possible leakage from construction, contraction and expansion joints subjected to hydrostatic pressures. After being embedded in concrete, PVC water stops fill up the joint to form a continuous water tight diaphragm that prevents the passage of fluid.

### Properties

- Unique profile design with multiple ribs.
- Resistance against water, weather, ageing, tear, etc.
- Specially formulated to retain its physical properties and performance in excessively cold environment.
- Has no effect on the quality of potable water.
- Prefabricated junction pieces.
- Easy to join on site.
- Resistant to wide diluted chemicals
- Central bulbs designed to allow for large contractions and expansions.

### Application area

- Storage tanks
- Retaining walls
- Swimming pools
- Water and waste water treatment plants
- Subways, tunnels and culverts
- Dams, canals and water reservoirs
- Foundation, basements and underground chambers
- Pumping stations, underground chambers
- Drainage and sewage concrete structures (sewage treatment plants)

### Physical properties

Tensile Strength	>13.8 MPa
Elongation at break	>300%
Hardness Shore A	>80
Water Absorption	<0.6%
Service and Installation Temperature	-5 ° C to 70 ° C
Accelerated Extraction Test	
Tensile strength	>12 MPa
Elongation at break	>300%
Stability in effect of alkalis test	
a. Weight increase @7days	<0.25%
b. Weight decrease @7days	<0.1%
c. Change in hardness @7days	Shore A ± 5
d. Weight increase @28days	<0.4%
e. Weight decrease @28days	<0.3%
f. Dimension change @28days	±1%

### Dimensions

CIKOhydro Seal	Width (mm)	Web Thickness (mm)	Cross-Section
Internal expansion joints IEJ	250±10	6±2	
Internal construction joints ICJ	250±10	5±2	
External construction joints ECJ	250±10	5±2	
External expansion joints EEJ	250±10	5±2	

\*Variation of 4% may occur in the above number

\*Other profiles at different widths and thickness available upon request

## Application instructions

Most popular way of the placement of the water stop is tied to the steel frame work through small eyelet by means of steel wires; certain metal clamps could be made to grip the water stop seal to keep it in proper position.

Note: Under no circumstance in the installation, water stop should not be punctured.

Water Stop can also be held by clamps which are nailed to the wooden shuttering to maintain its exact location and straight surface. The wooden planks are erected on the void side during the first pour and before the next concrete pouring stages starts. These planks are removed to let Water Stop hang. The central bulbs in our Water Stop are designed to allow for large contractions and expansions.

## Site Welding

The key to a leak free waterstop network is correct onsite jointing. CIKOhydro Seal is made of thermoplastic PVC, and can be easily welded using suitable heating processes, such as welding knife. Cut the edges to be welded in a sharp and straight line then secure the ends in a welding jig. Use the welding knife between the ends, until an even, molten bead appears. Remove the welding knife and press the ends firmly together. Consult CIKO technical departments for further details.

## Packaging

Internal and external fixing profiles are supplied in 15, 20 meter rolls.

## Storage

CIKOhydro Seal to be stored away from direct sunlight

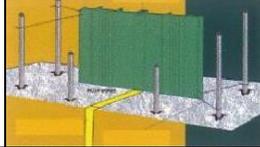
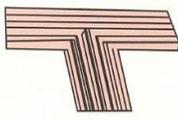
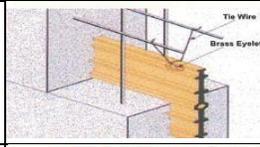
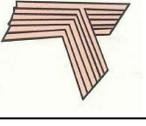
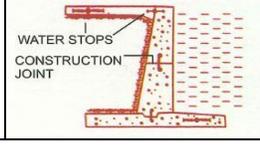
## Health & safety

Protective clothing such as gloves should be worn during installation. Wash hands with soap and water after working with this material.

Hot welding of PVC will generate fumes, jointing should take place in a well ventilated area. Avoid breathing fumes. Wear a proper mask.

## Intersection Pieces

Standard welded and moulded intersections are available as below table:

	Shop Joint Welding	Application Details
<b>Cross Piece, Flat</b> Ex: in RCC water Tank		
<b>L-Piece, Flat</b>		
<b>T-Piece, Flat</b>		
<b>Cross Piece, Vertical</b>		
<b>Corner-Piece, Vertical</b>		
<b>T-Piece, Vertical</b>		

## Technical Support

For any technical support, do not hesitate to contact CIKO team at any time as CIKO offers on and off site services to end users, specifier and contractors.

## More from CIKO Middle East

A wide range of construction chemical products are manufactured by CIKO Middle East which includes:

- Concrete admixtures and additives
- Waterproofing and damp proof coatings
- Surface treatments
- Flooring and toppings
- Grouts and anchors
- Tile adhesives and grout
- Concrete repair materials
- Adhesives and bonding agent
- Protective coating
- Joint Sealants and Moulding compounds
- Ancillaries

TDS/WP18 Rev.:4 Issue:C

Note: The information presented herein based on the best of our knowledge and expertise for which every effort is made to ensure its reliability. Although all the products are subjected to rigid quality tests and are guaranteed against defective materials and manufacture, no specific guarantee can be extended because results depend not only on quality but also on other factors beyond our control



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