

Contite® Waterstop 100



CONTROLLED EXPANSION HYDROPHILIC CONSTRUCTION JOINT WATERSTOP

DESCRIPTION

Contite Waterstop 100 is a controlled expansion waterstop that expands when exposed to water forming a compression seal in concrete joints. It is used in both horizontal and vertical construction joints in cast insitu concrete. **Contite Waterstop 100** is manufactured to provide the integrity and benefits of natural rubber together with the ability to expand & heal joints. It is made from sustainable materials that do not negatively impact the environment unlike butyl & chloroprene rubber type profiles.

USES & ADVANTAGES

Contite Waterstop 100 is used as a waterstop in construction joints in below and above grade structures such as water tanks, waste water treatment plants, tunnels, basements, lift shafts, underground stations, subway systems, manholes, culverts, reservoirs, potable water treatment plants, swimming pools, canals etc.

The advantages of the product are as follows :-

- Retains its integrity, important where the joint may have excessive shrinkage & flowing water could wash away the seal.
- Does not expand prematurely if gets wet due to rain.
- Withstands heads of water in excess of 70 metres.
- Easy to install butted. No split forming or welding.
- Can apply in wet conditions.
- Can apply to rough surfaces no levelling required.
- Unaffected by repeated wetting & drying cycles.
- Excellent bond.
- Fast installation.
- Light weight flexible coils easy to install.
- May use in potable water tanks. Non toxic.
- Permanently active system.
- Stable.

TYPICAL PROPERTIES

Hydrostatic Head Resistance	: >70 m
S.G.	: 1.7-1.8 ASTM D-71
Wet/Dry Cycling	: No effect
Service Temperatures	: -30°C to 80°C
Elongation	: >50%
Colour	: Black other colours available min. volumes apply

Adhesion to Clean : Excellent

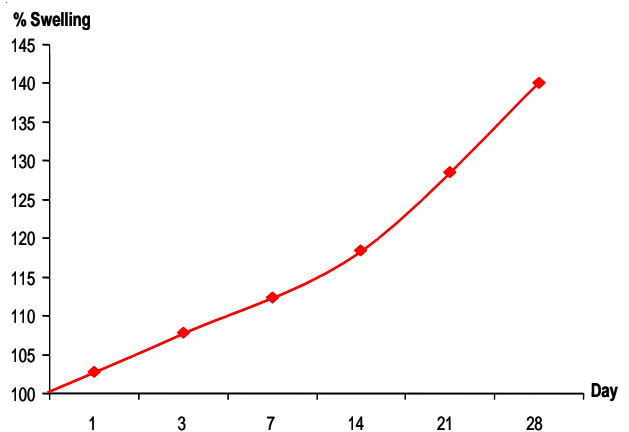
Dry Concrete

Typical Expansion : Up to 170%

***Note :**

- Swelling rates 100% indicates original size.
- Expansion is related to the quality of water, temperatures, age of material and storage conditions.
- Expansion rates vary in salt or contaminated water consult the manufacturer before use.
- Expansion rate at 23°C in potable water at 28 days. Specification shown may be changed without notice to improve the product.
- Properties are typical under laboratory conditions and do not constitute a specification. Field trials are recommended.
- Provide at least 75 mm. concrete cover. Increase cover where light weight or low strength concrete is being used.
- Do not use in expansion joints.

Typical Swell Rates in Potable Water



Typical data in laboratory conditions. Data does not constitute a specification.

INSTALLATION

Surface Preparation

The surface should be clean, free of all curing compounds, mould oils, and dry with all dirt, aggregate, dust, debris or standing water removed.

General Installation Instructions

Apply by brush **Contite Waterstop 100** adhesive along the concrete by the width of **Contite Waterstop 100**. Whilst still tacky (within 10-15 minutes) apply the **Contite Waterstop 100**. Remove the release paper and press the **Contite Waterstop 100** firmly to the surface for several seconds. At the highest coil end on vertical sections pay particular attention. If the adhesive has dried out reapply to the surface. Mechanical fasteners may be used in conjunction with adhesive. Tightly butt end together to form a continuous waterstop.

Contite Waterstop 100 is not self adhering.

Contite® Waterstop 100



CONTROLLED EXPANSION HYDROPHILIC CONSTRUCTION JOINT WATERSTOP

INSTALLATION



1. Apply by brush **Contite Waterstop Adhesive** along the concrete by the width of waterstop.



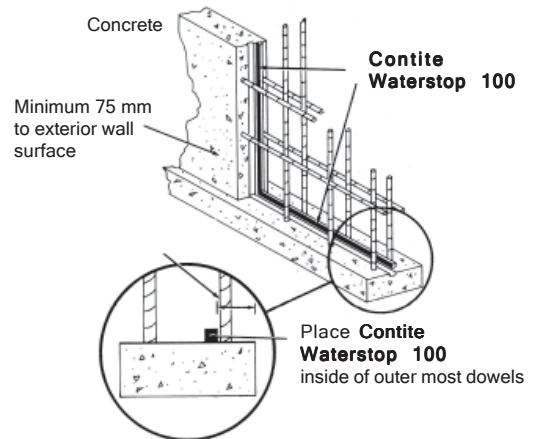
2. Remove the release paper and apply **Contite Waterstop 100** while adhesive is tacky about 10-15 minutes, press firmly to the substrate.



3. Mechanical fasteners or nails can also be used in conjunction with adhesive.

DRAWING DETAILS

Footing Joint Vertical Wall Joint



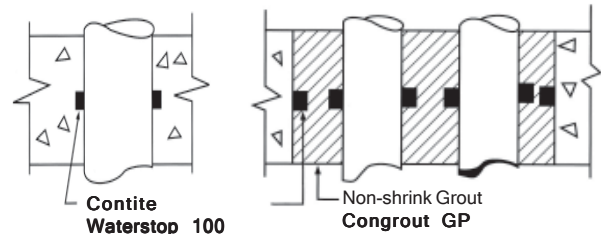
Typical placement of **Contite Waterstop 100** at concrete construction joints

PENETRATIONS

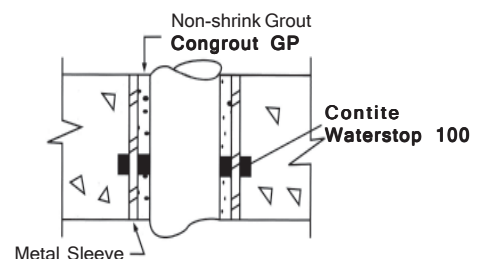
For penetration follow the general installation procedures.

Single Pipe: Install around outer diameter of the pipe.

Multiple pipe: install around each pipe as well as around block out box construction.



Sleeved Pipe: Install around the outer diameter of the sleeve. Install another strip between sleeve's inner diameter & the pipe if there is an excessive gap between inner diameter of the sleeve & the pipe 2 separate waterstops may require installing one on the inner diameter & the other on the pipe. The void should be filled with **CongROUT GP** non shrink cementitious grout.

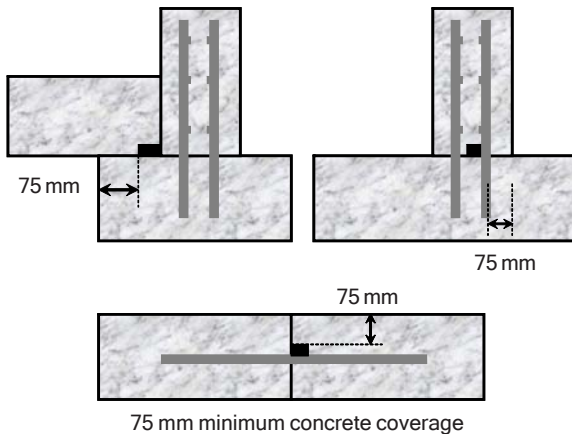


Contite® Waterstop 100

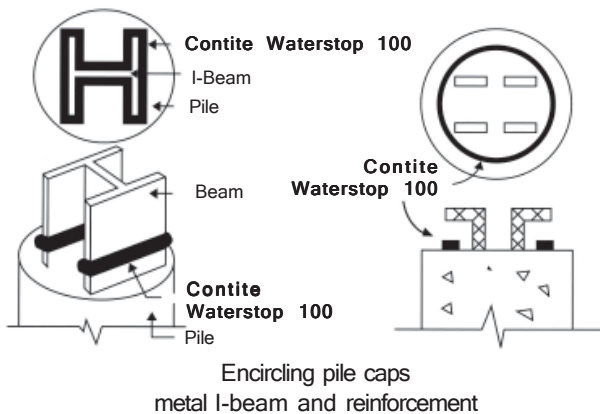


CONTROLLED EXPANSION HYDROPHILIC CONSTRUCTION JOINT WATERSTOP

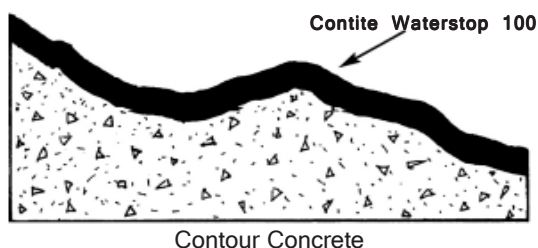
Placement of **Contite Waterstop 100** (25x20 mm.) at typical construction joints.



Pile Caps & Grade Beams: Follow the general instructions above. Install to all construction joints around or adjacent to pile caps & grade beams. Install **Contite Waterstop 100** around pile caps and grade beams above waterproofing. Wrap around all I-beams extending out of pile cap & encircle reinforcement out of pile cap.

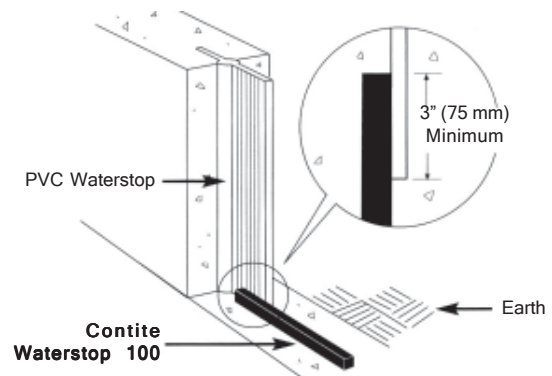


Irregular Concrete Surfaces: Follow general instructions above. Press **Contite Waterstop 100** against irregular contours filling cavities and cracks do not leave gaps between water bar and surface. It may prove necessary to install in an irregular direction to avoid major depressions or cracks.



Joining to PVC Waterstop: Follow general instructions above. Install **Contite Waterstop 100** on the interior side of the PVC water bar place in direct contact and overlap the PVC water bar by at least 7.5 cm.

For detailed drawings and for conditions not shown below contact Cormix International Limited.



SPECIFICATION

The waterstop to be used in all construction joints shall be **Contite Waterstop 100** or equal approved material. The waterstop shall consist of a natural rubber based product and expand up to 170%. It shall be capable of being butt ended, shall not be overlapped nor create a packing effect in the concrete, it shall be pliable so that it follows the contours of the concrete and may be installed to all penetrations. The material will form a positive seal, form a continuous waterstop and withstand hydrostatic pressure up to 70 m.

PACKAGING & SIZES

Approximate size :-

25 x 20 mm x 5.0 LM

20 x 10 mm x 9.0 LM

6 rolls per carton.

Other sizes available on request.

Primer / Adhesive 5 litre plastic pails
1 litre per 25-35 LM of standard profile 25x20 mm.

STORAGE & SHELF LIFE

Store dry in original boxes undercover protected from direct sunlight and rain. The shelflife is at least 12 months.

Contite[®] Waterstop 100



CONTROLLED EXPANSION HYDROPHILIC CONSTRUCTION JOINT WATERSTOP

HEALTH & SAFETY

There are no known hazards associated with **Contite Waterstop 100** during normal use. Refer to product material safety data sheet.

LIMITATIONS

Contite Waterstop 100 should only be used in applications where ground water is not contaminated. In areas where saltwater or organic contaminated water is expected contact Cormix International Limited. for recommendations. **Contite Waterstop 100** should be used in areas fully confined in concrete by a minimum of 75 mm cover. To achieve success the installation instructions must be followed. Any hydrated material allow to dry before placement of concrete.

TECHNICAL SERVICE

The Cormix International Technical Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

QUALITY ASSURANCE

ISO 9001 : 2008 verified by TUV Nord.

CONTACT DETAILS

Cormix International Limited

Regional Office,

89 Romklao Road, Sansab, Minburi, Bangkok 10510

Tel. (66 2) 917 3955-8, 543 8890

Fax. (66 2) 917 3959, 543 8891

<http://www.cormix.com> E-mail : info@cormix.com

NOTE : Every reasonable precaution is taken in the manufacture of all CORMIX-products to ensure that they comply with CORMIX's high standard of quality. The recommendations and properties of the product are based upon what is believed to be the most reliable information available, and are not intended as recommendations which infringe on other patents. Although all CORMIX-products are subject to rigid quality tests, no specific guarantee can be given, because results depend, not only on quality, but also on other factors beyond our control. We welcome therefore consultation in the event of doubt concerning application, or performance, and point out that oral recommendations, which vary from the instructions contained herein, are not binding without written confirmation by CORMIX. All transactions shall be subject to our terms and conditions of sale-delivery-and-service. This data sheet supersedes the previous one and a reprint may be issued without notice to supersede this edition, as and when deemed necessary. The information given in this leaflet is to the best of our knowledge true and reliable. Field service where provided does not constitute supervisory responsibility. Our guarantee is therefore limited to the quality of materials delivered.