

# MASTERFLEX® 613

Hydrophilic Construction Joint Waterstop

## DESCRIPTION

**Masterflex 613** is a flexible hydrophilic natural rubber and bentonite waterstop for construction joints and sealing precast elements that expands on contact with water. It is manufactured from sustainable materials bentonite and natural rubber that do not negatively impact the environment unlike butyl rubber and chloroprene rubber profile.

## RECOMMENDED FOR

**Masterflex 613** is used to stop water infiltration through both vertical and horizontal non moving construction joints, irregular surfaces and around penetrations through concrete. It is designed to replace conventional waterstops in construction joints. Uses include in construction joints in various structures including tunnels, basements, culverts, underground structures, pools, and reservoirs.

## FEATURES AND BENEFITS

Sodium bentonite in **Masterflex 613** is the key to its success. Bentonite swells when in contact with water blocking pores, capillaries, minor cracks and other paths for water forming a permanent impermeable barrier.

- **Light weight**-flexible coils easy to install.
- **Eliminates seam welding and split forming** associated with PVC/rubber waterbars.
- **Butt end joining, continuous waterstop.**
- **Withstands hydrostatic water head up to 70 metres.**
- **Forms a positive seal** - sealing cracks and small voids.
- **Non toxic**-can be used in potable water tanks.
- **No need to level**- can apply to irregular concrete surfaces
- **Good contact in precast applications**- compressible and malleable.
- **Permanently active system**-unaffected by repeated wetting and drying cycles.
- **Does not deteriorate**- lasts for the life of the structure.
- **Fast installation.**

## PERFORMANCE DATA

The waterstop to be used in all construction joints shall be **Masterflex 613** or equal approved material. The waterstop shall consist of sodium bentonite in natural rubber and expand by at least 300%. 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, from a continuous waterstop and withstand hydrostatic pressure up to 70m.

## PROPERTIES

Hydrostatic Head Resistance	:	>70m
S.G.	:	1.5-1.6 ASTM D297
Wet/Dry Cycling	:	No effect
Service Temperatures	:	-40°C to 80°C
Elongation	:	>300%
Colour	:	Black. Other colours available min. volumes apply
Adhesion to clean dry concrete	:	Excellent
Penetration Cone	:	4±5 ASTM D-217
Expansion	:	>300% within 7 days in cement water

Note: Expansion is related to the quality of water, temperatures, age of material and storage conditions. Do not use in expansion joints.

## ESTIMATING DATA

**Masterflex 613** Required depends on the profile of the substrate, the length of the joint and wastage.

On a flat and even surface, 50 – 75g (55ml to 85ml) of the adhesive will be required to bond 10m long Masterflex 610 (see the relevant data sheet).

## APPLICATION

### Surface Preparation

The surface should be clean and dry with all dirt, aggregate, rust, debris or standing water removed.

### General installation instructions:

Apply by brush **Masterflex 613** adhesive along the concrete by the width of **Masterflex 613**. One litre of adhesive will cover approximately 30 meters. Whilst still tacky (within 10-15 minutes) apply **Masterflex 613**.

Remove the release paper and press the **Masterflex 613** firmly to the surface for several seconds. At the highest coil end on vertical sections pay particular attention. If the adhesive has dried out re-apply to the surface. Mechanical fasteners may be used in conjunction with adhesive. Tightly butt end together to form a continuous waterstop.

Do not prehydrate or submerge in water. **Masterflex 613** is not self adhering.



The Chemical Company

# MASTERFLEX® 613

## PACKAGING

**Masterflex 613** is supplied in rolls. There are 6 rolls per carton with approx standard sizes:

20 x 15 mm x 6.0 LM

20 x 10 mm x 9.0 LM

20 x 5 mm x 13.0 LM

Primer/Adhesive: 5 litre plastic pails 1litre per 25-35 LM of standard profile 19 x 25 mm.

## SHELF LIFE

**Masterflex 613** can be kept for 12 months if stored in a dry place, in original boxes, undercover protected from sunlight and rain.

## PRECAUTIONS

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the BASF Construction Chemicals **Material Safety Data Sheet (MSDS)** from our office or our website.

SMFlex613/1/0609

### STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this **BASF Construction Chemicals** publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use. **BASF Construction Chemicals data sheets are updated on a regular basis and it is the user's responsibility to obtain the most recent issue.**

### NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by **BASF** either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not **BASF Construction Chemicals**, are responsible for carrying out procedures appropriate to a specific application.

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