



Watertightness of joints in concrete structures

Water penetrates through fissures caused by movements, inevitable in all concrete structures.

These fissures are caused in structural joints through retreat, settlement and expansion.

In most cases, reasons are found in inadequate waterstops without any adherence to the concrete.

**The BFL-Mastix waterstops
offer a perfect solution to those
non solved technical problems.**

What is to do ?

to obtain really waterproof joints in concrete structures.

The designer has to determine that waterstops are **really waterproof, deformable, with rough and porous surfaces.**

in order to :

- **constitute** a barrier against water infiltration.
- **absorb** permanently the movements, caused in the structures throughout their life span.
- **to make** them permanently adhere to the concrete.

If these conditions are fulfilled, it needs to respect on the job site that :

- the staff has been sufficiently **instructed**
- the placing of the waterstops has been **organized**
- the placing of the bands has been **controlled**

The MASTIX system brings an answer

The Mastix system fulfills the strictly required conditions for a permanent shaping of a waterproof joint.

The MASTIX system consists of a range of BFL-Mastix waterstops (bands), grouped in a number of different types and profiles.

The BFL-Mastix waterstops are a combination of only two materials:

- **a rubberlike**, soft and deformable core, to absorb the movements in the concrete structure.
 - **fine crushed gravel**, covering wholly or partly the core. The task of this gravel is to assure a permanent waterproof connection with the adjacent fresh concrete, to avoid any water infiltration in the joint.
- This fine crushed gravel is non alkali-reactive, grain size 4/8 mm and solidly pressed on the core.



1 Core of the BFL-Mastix waterstops

2 The gravel coated core

Thanks to this gravel coating on the core, the waterstops can tightly adhere to the fresh concrete.

BFL-Mastix waterstops

Eight different band types are proposed,
with different gravel coating on the core.

Each band type has different profile forms and dimensions.

The choice of the convenient band type and profile depends
on the particular joint structure, the importance of water and the
structural element.

Three ways of placing the BFL-Mastix waterstops are used:

- **incorporating** in fresh concrete
- **Gluing** on hard concrete, on steel, on PVC or on rock
- **fixing** in a formwork



Vertical gluing



Gluing on a rough surface

Eight types of BFL-Mastix waterstops cover the waterproofing requirements for all common joint conditions in concrete structures.

Band types	Solutions for watertightness
R4 *	Constructive joints Work joints
R *	Constructive joints Work joints
R4 1/2 D *	Retreat- and settlement joints
R4 1/2	Retreat- and settlement joints
RG	Corner joints
RGD	Corner joints with movements
RB	programmed retreat joints
N	Assembling of precast elements
* leader	

BFL-Mastix waterstops type R4

**for waterproofing construction joints
and work joints.**



Properties

Waterstops with fine gravel coating on all four core faces.

Compatibility

BFL-Mastix waterstops, type R4 have a rough and porous surface and assure a perfect watertight adherence with the concrete.

The use

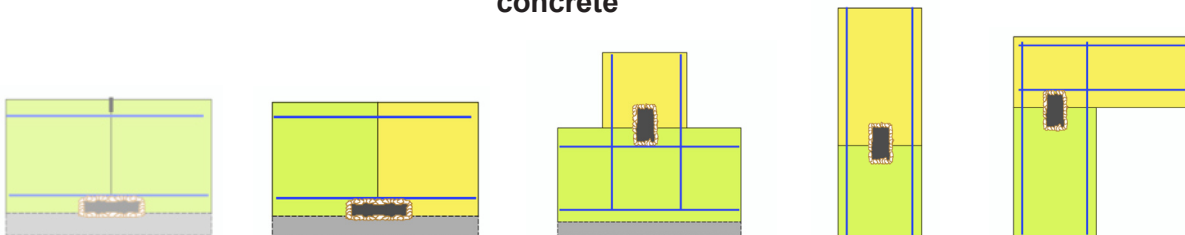
Between concreting stages of a raft, between raft and wall, between concreting stages of a wall or between wall and a slab, etc...

The profiles

seven profiles are available

The placing

BFL-Mastix waterstops type R4 are placed into fresh concrete



BFL-Mastix waterstops type R

**for waterproofing construction joints
and work joints**



Properties

Bands, with a core only on three sides gravel coated.
The free side is used for gluing the bands.

Compatibility

BFL-Mastix watertops type R have a rough and porous surface and assure a waterproof connection with the concrete.

The use

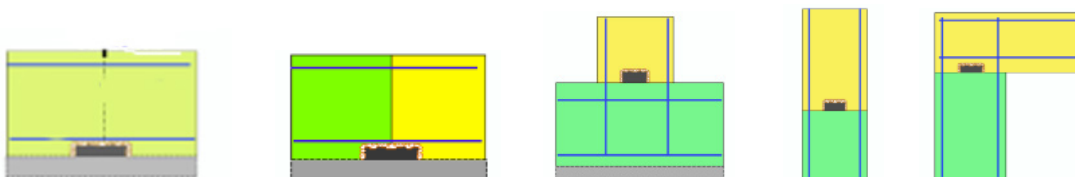
Between concreting stages of a raft, between a raft and a wall, between concreting stages of a wall, between a wall and a slab, etc. if a connection reinforcement is to be respected.

The profiles

eight profiles are available

The placing

Waterstops BFL-Mastix type R are glued on hard concrete, on steel, on PVC or on rock.



BFL-Mastix waterstops type R4 1/2 D

**for waterproofing retreat- and settlement
joints**

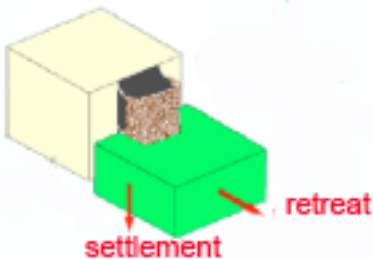


Properties

Bands with a core gravel coated only on half its perimeter. One free side is used for the gluing. An elastic reserve is used to absorb movements due to retreat and settlement.

Compatibility

BFL-Mastix waterstops type R4 1/2 D have a rough and porous surface and assure therefore a watertight connection with the concrete.



The use

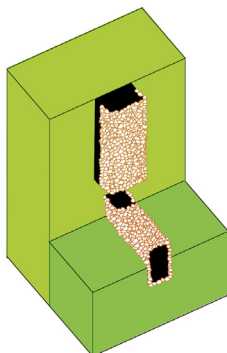
Between concreting stages without connecting reinforcement.

The profiles

Three profiles are available

The placing

BFL-Mastix waterstops type R4 1/2 D are glued on hard concrete, on steel, on PVC or on rock.



BFL-Mastix waterstops type R4 1/2

**for waterproofing retreat- and
settlement joints.**



Properties

Bands, whose core is gravel coated on only half the perimeter. One side is used for gluing.

An elastic reserve is used to absorb movements due to retreat and settlement.

Compatibility

BFL-Mastix waterstops type R4 1/2 have a rough and porous surface and assure therefore a watertight connection with the concrete.

The use

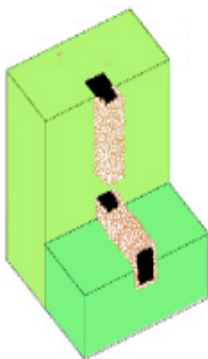
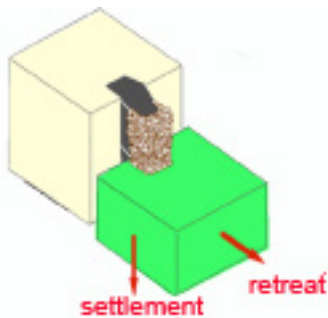
Between concreting stages without connecting reinforcement

The profiles

two profiles are available

The placing

BFL-Mastix waterstops type R4 1/2 are glued into a groove.



BFL-Mastix waterstops type RG

for waterproofing corner joints



Properties

Bands, whose core is gravel coated on only half the perimeter.

Compatibility

BFL-Mastix waterstops type RG have a rough and porous surface and assure therefore a watertight connection with the concrete.

The use

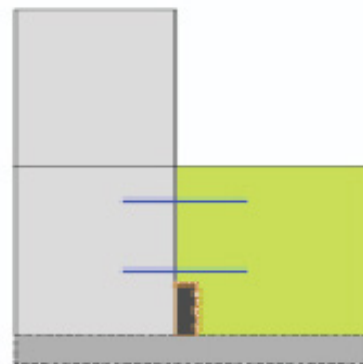
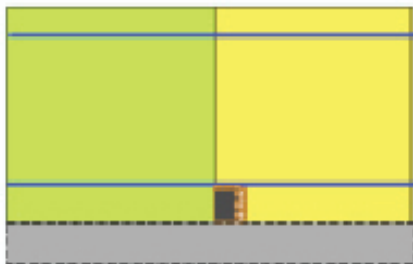
in corner joints

The profiles

two profiles are available

The placing

BFL-Mastix waterstops type RG are glued on hard concrete, on steel, on PVC or on rock.



BFL-Mastix waterstops type RGD

**For waterproofing joints in corners
in the presence of movements.**



Properties

Bands, whose core is gravel coated on only half the height of two adjacent sides.

Compatibility

BFL-Mastix waterstops type RGD have a rough and porous surface and assure therefore a watertight connection with the concrete.

The use

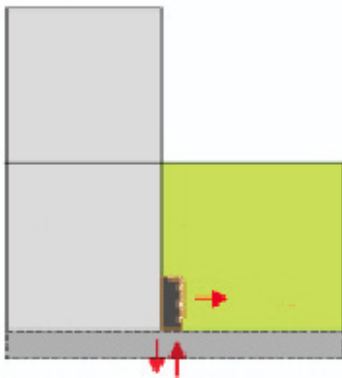
Between concreting stages, without connecting reinforcement and in the presence of retreat- and settlement movements.

The profiles

One profile is available

The placing

BFL-Mastix waterstops type RGD are glued on hard concrete, on steel, on PVC or on rock.



BFL-Mastix waterstops type RB

**for waterproofing retreat- and
settlement joints**



Properties

these bands have a core, gravel covered on all four sides. They are reinforced with a net.

Compatibility

BFL-Mastix waterstops type RB have a rough and porous surface and assure therefore a watertight connection with the concrete.

The use

between vertical concreting stages and programmed retreat joints.

The profiles

two profiles are available

The placing

BFL-Mastix waterstops type RB are attached in the formwork.



View on a wall

BFL-Mastix waterstops type N

**used for waterproofing assembled
precast elements**



Properties

these bands have no gravel coating

Deformation capacity

BFL-Mastix waterstops type N are plasto-elastic

The use

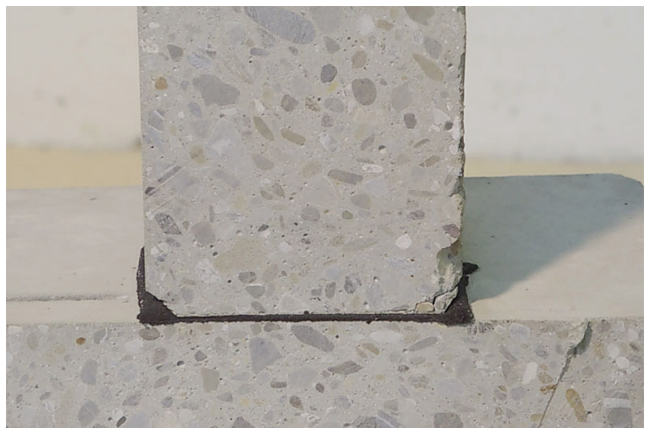
when composing precast elements

The profiles

five profiles are available

The placing

BFL-Mastix waterstops type N are glued on hard concrete, on steel, on PVC or on rock



**Please
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catalogue**

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