

Mastix system : technical file

B22

Waterproofing of retreat joints

Demolished/new horizontal wall part

Demolished/new vertical wall

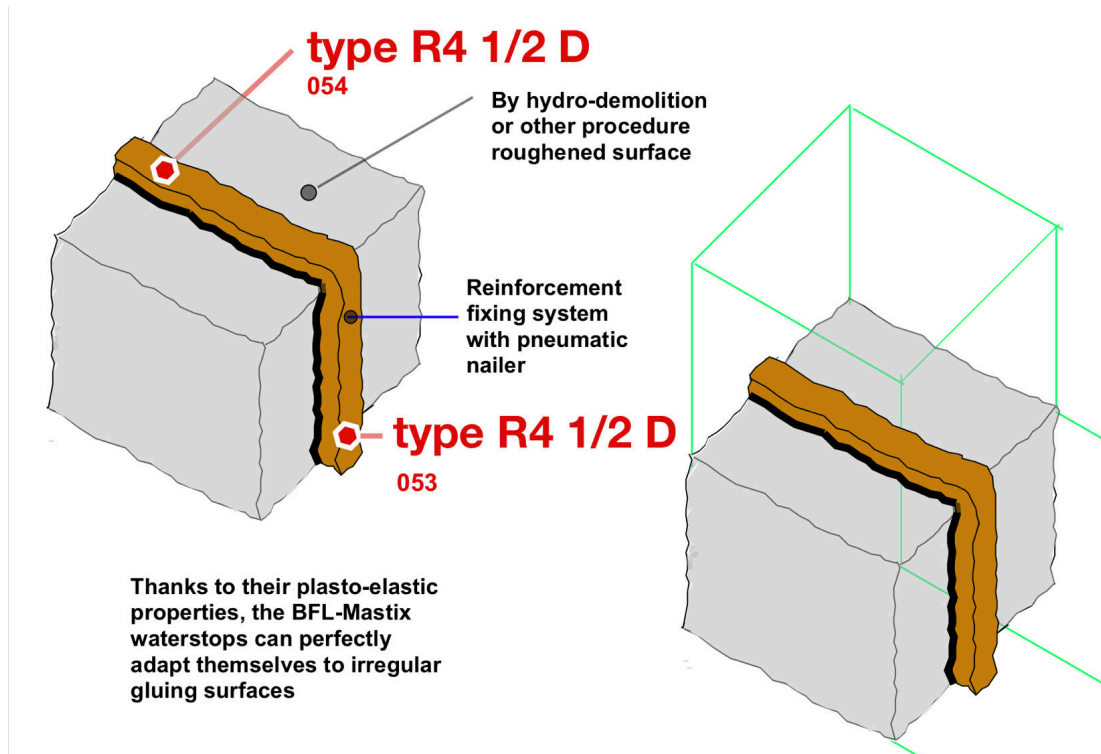
Variant with bands type R4 1/2 D

Variante with bands type R4 1/2 D

Specifications sheets 053 - 054

In this case, a connecting reinforcement does not exist.

Please consult file A22 for a case with connecting reinforcement.



The Mastix system is simple to work with and naturally compatible with concrete and concrete structures.

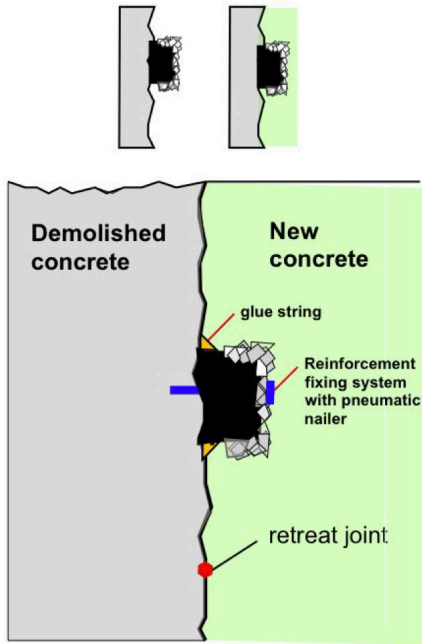
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Waterproofing of retreat joints

Demolished/new horizontal wall part

Waterstops BFL-Mastix type R4 1/2 D

to be glued on a demolished wall part



BFL-Mastix type R4 1/2 D

1. Description of waterstop type R4 1/2 D

BFL-Mastix waterstops type R4 1/2 D are composed of a partly gravel covered core.

The core consists of a soft and waterproof rubber/bitumen elastomer material.

The fine gravel coating, covering the profile R4 1/2 D, is a rough and porous non alkali-reactive material of grain size 4/8 mm.

The fine gravel is mechanically tightly anchored on the core material.

Waterstops BFL-Mastix type R4 1/2 D shall not be used for expansion joints.

Waterstops BFL-Mastix type R4 1/2 D shall not be used in the presence of water pressure

3. Reinforcement the glued waterstops

In order to reinforce the glued waterstops, a pneumatic nailer can be used during the glue hardening period.

The high elasticity of the band core avoids any liquid infiltration around the nails.

Retreat or control joint

Formed through retreat of the new concrete during its hardening period and non existing connection reinforcement.

Choosing a profile type R4 1/2 D

Consult the Mastix catalogue over www.mastix.ch pages 32 et 33

Gluing of waterstops type R4 1/2 D

- 1.- Preparation
- 2.- Gluing of waterstops with Mastix MS-Polymer on dry or humid wall concrete and reinforcement with pneumatic nailer.
- 3.- Control of the glued waterstops

Consult the Mastix catalogue over www.mastix.ch pages 74 -78 - 79 - 80

3. The fine crushed gravel on BFL-Mastix waterstops

The fine crushed gravel covers the core of the BFL-Mastix waterstops and has the following characteristics:

*granulate class 4/8 mm

*specially chosen limestone, non alkalireactive.

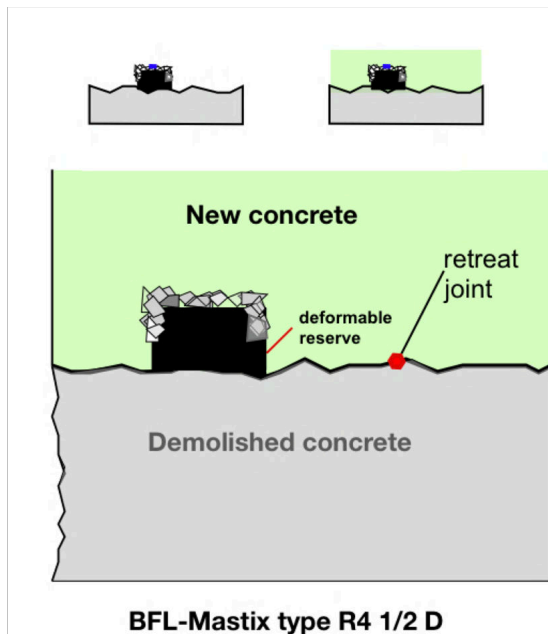


The Mastix system is simple to work with and naturally compatible with concrete and concrete structures

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Waterproofing of retreat joints**Demolished/new vertical wall part****Waterstops BFL-Mastix type R4 1/2 D**

to be glued on a demolished wall part

**Retreat or control joint**

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Choosing a profile type R4 1/2 D

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Gluing of waterstops type R4 1/2 D

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1. Behaviour of BFL Mastix waterstops in the structure

BFL-Mastix waterstops assure a permanent watertightness of construction joints. In concrete structures penetrating water does not immediately lead to damages. In most cases, water is penetrating through the joints. Here are the well known constructive weak points.

2. AGR

This is the “alkaline granulate reaction”, a long term degradation process, leading to a decay of the structure. Using an alkali-reactive granulate in the instable surrounding concrete, leads to swelling trough arising humidity.

The appearing of water infiltration in the joints will greatly accelerate this phenomenon, it must therefore be considered, that the life span of the structure will be reduced.

The kind of composition of the BFL-Mastix waterstops will highly reduce water infiltration in joints and therefore minimize the mentioned phenomenon.

**3. Deformation capacity of BFL-Mastix waterstops**

With irregular gluing surfaces, it is important that BFL-Mastix waterstops can perfectly be glued. It is therefore necessary to slightly “flame” the band core.

As well as the corresponding surface on the concrete shall be heated with the propane gas burner. Then the glue Mastix MS-Polymer assures a perfect gluing on the concrete.

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Hot connecting BFL-Mastix waterstops



1 Flaming the contact surfaces



2 Lead the bands together



3 Push band ends together



4 Press bands together

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