Mastix system : technical file Waterproofing of work joints Wall/Wall - Wall/Slab Variants with bands types R4 - R



Variant 2 with bands type R Specifications sheets 060 - 062



The Mastix system is simple to work with and naturally compatible with concrete and concrete structures. © mastix sa 2018 /JM/ A24 09.18 Certified ISO 9001/2015 A24

Mastix system : specifications sheet Waterproofing of work joints Wall/Wall

Waterstops BFL-Mastix type R4 To be placed in the concrete of the first concreting stage of the wall.



Work or construction joint

Interface between two concreting stages where water could penetrate.

Choosing a profile type R4

Consult the Mastix catalogue over <u>www.mastix.ch</u> page 15

Placing of waterstops type R4

 Préparation
 Placing of the waterstops in the fresh wall concrete and joining the bands.
 Control of placed bands
 Consult the Mastix catalogue over <u>www.mastix.ch</u> pages 76 - 77- 80

1. Description of waterstop type R4

BFL-Mastix waterstops type R4 are composed of a totally gravel covered core. The core consists of a soft and waterproof rubber/bitumen elastomer material. The fine gravel coating, covering the profile R4, 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.

2. Liaison with fresh concrete

Waterproofing a work joint cannot be done, if the fresh concrete gets in contact with a non-absorbing material, such as glass, steel or synthetics. **Fresh concrete adheres exclusivley on absorbing**

and porous materials, such as the BFL-Mastix waterstops type R4.



3. No mistake A quality control on each BFL-Mastix waterstop is already made in the factory.

The Mastix system is simple to work with and naturally compatible with concrete and concrete structures © mastix sa 2018 /JM/ 059 09.18 Certifield ISO 9001/2015

059

Mastix system : specifications sheet Waterproofing of work joints Wall/Wall

Waterstops BFL-Mastix type R to be glued on the hard concrete of the first

060

WALL 2nd stage WALL WALL 1st stage

BFL-Mastix type R

concreting stage of the wall.

Work or construction joint

Interface between two concreting stages where water could penetrate.

Choosing a profile type R

Consult the Mastix catalogue over <u>www.mastix.ch</u> page 23

Gluing of waterstops type R

 Preparation
 To be glued on dry or still moist wall concrete with Mastix MS-Polymer.
 Control of the glued waterstops
 Consult the Mastix catalogue over www.mastix.ch pages 74 - 78 - 79 - 80

1. Description of waterstop type R

BFL-Mastix waterstops type R 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 R, 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.

2. Waterproofing of concrete structures

Waterproofing is an entity of measures to avoid any penetration of humidity or water in important concrete elements.

Water infiltration through joints can sooner or later lead to structural damages, particularly in the presence of the AAR phenomenon (alkali aggregate reaction)



3. Coherence

- Thanks to the coherence between the constituting elements in the BFL-Mastix waterstops, the watertightness in the joints can be assured.
- The concrete granulate is combined with the fine crushed gravel cover of the BFL-Mastix bands and the cement paste, consequently obtaining waterproof concrete elements.

The Mastix system is simple to work with and naturally compatible with concrete and concrete structures © mastix sa 2018 /JM/ 060 09.18 Certifield ISO 9001/2015

Mastix system : specifications sheet Waterproofing of work joints Wall/Slab

Waterstops BFL-Mastix type R4 to be placed in the wall concrete

061



Work or construction joint

Interface between two concreting stages where water could penetrate.

Choosing a profile type R4

Consult the Mastix catalogue over <u>www.mastix.ch</u> page 17

Placing of waterstops type R4

 Préparation
 Placing the waterstops in the fresh wall concrete anjoining band ends.
 Control of placed bands
 Consult the Mastix catalogue over <u>www.mastix.ch</u> pages 76 - 77- 80

1. Description of waterstop type R4

BFL-Mastix waterstops type R4 are composed of a totally gravel covered core. The core consists of a soft and waterproof rubber/bitumen elastomer material. The fine gravel coating, covering the profile R4, 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.

2. The Mastix system

The Mastix system comprises the totality of the BFL-Mastix waterstops with their core of a bitumen/rubber mixture, and covering partly or totally the core, mechanically coated with fine crushed rough and porous gravel, size 4/8 mm.



3. Principle of inter-relation of the BFL-Mastix waterproofing technology

- Equivalent materials are combined in order to reach their total compatibility.
- One uses a principal component of the concrete, **the granulate** (1) and

the fine crushed gravel (2) on the BFL-Mastix waterstops to assure a performant watertightness.

The Mastix system is simple to work with and naturally compatible with concrete and concrete structures © mastix sa 2018 /JM/ 061 09.18 Certifield ISO 9001/2015

Mastix system : specifications sheet Waterproofing of work joints Wall/Slab

Waterstops BFL-Mastix type R to glued on the hard wall concrete

062



Work or construction joint

Interface between two concreting stages where water could penetrate.

Choosing a profile type R

Consult the Mastix catalogue over <u>www.mastix.ch</u> page 25

Gluing of waterstops type R 1.- Preparation

2.- To be glued on dry or still humid wall concrete with Mastix MS-Polymer
3.- Control of the glued waterstops
Consult the Mastix catalogue over www.mastix.ch
pages 74 - 78 - 79 - 80

1. Description of waterstop type R

BFL-Mastix waterstops type R 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 R, 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.

2. Water penetration

The adhesion of the bands on fresh concrete avoids any possible water penetration around the bands or alongside in the work joint.

Water penetration in work joints leads to damage or, on long term in some cases to a total structural damage.



3. Liaison The fine crushed gravel (1) on the BFL-Mastix waterstops is mechanically applied on **the band core** (2), thus assuring a tight liaison.

The Mastix system is simple to work with and naturally compatible with concrete and concrete structures © mastix sa 2018 /JM/ 062 09.18 Certifield ISO 9001/2000