

**Mastix system : technical file**

**B02**

**Waterproofing** of retreat joints

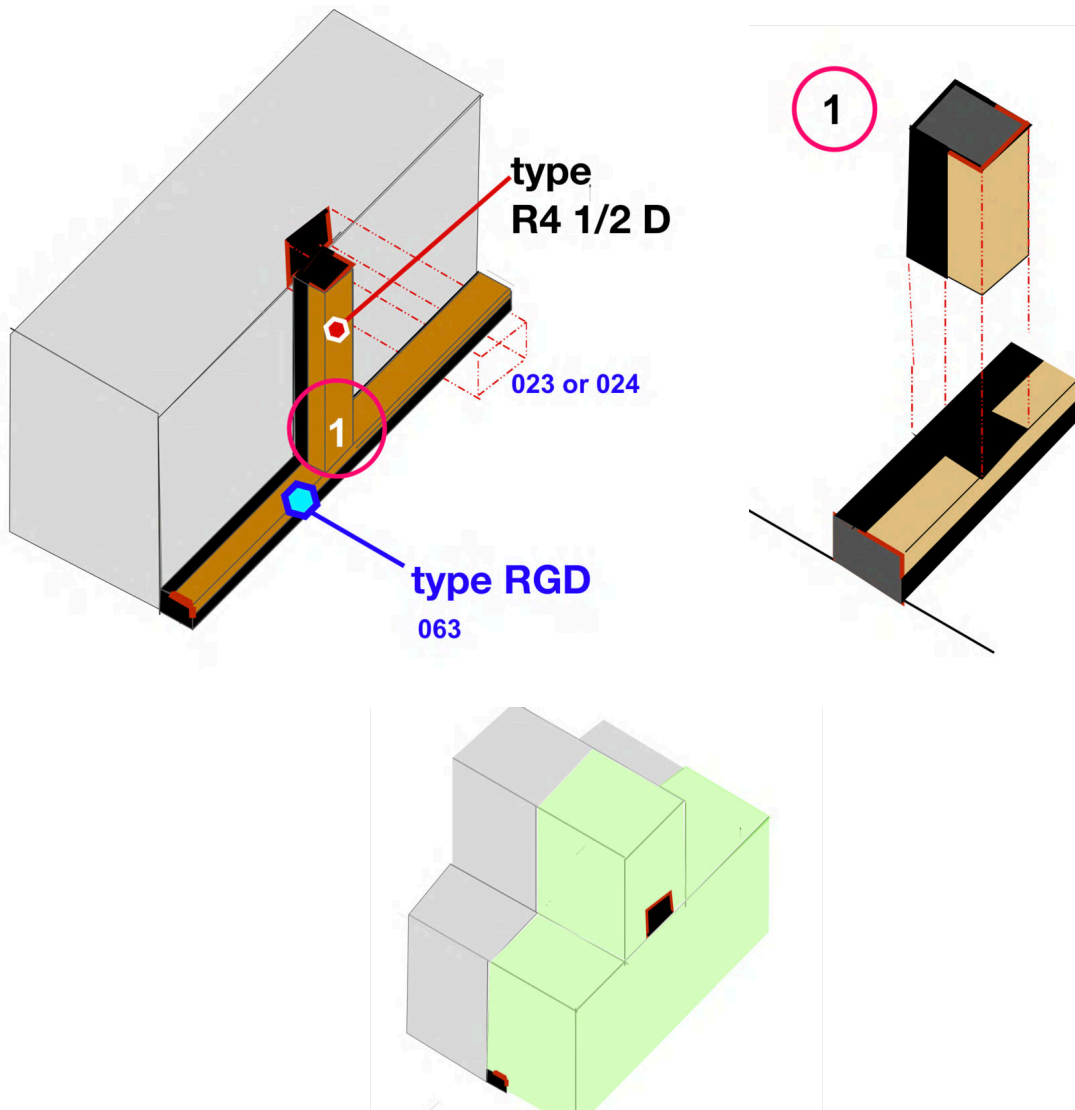
**Existing old/new raft foundation**

**Raft foundation/Walls**

**Variant with bands types RGD - R4 - R**

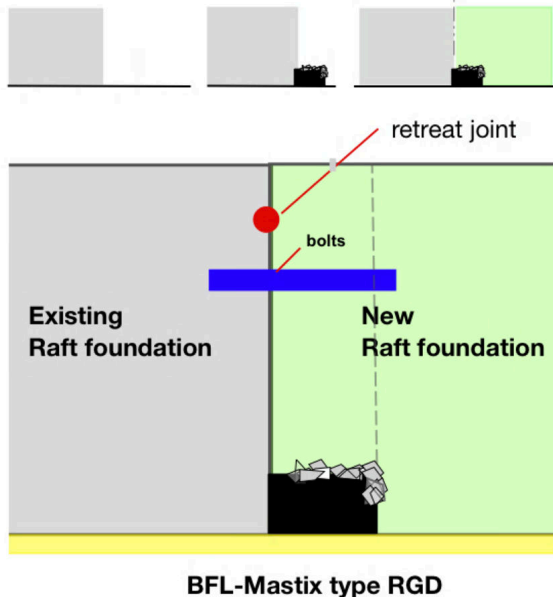
**Variant 1 with bands type RGD**

**Specifications sheet 063 - 023 - 024**



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

© mastix sa 2018 /JM/ B02 10.18 Certified ISO 9001/2015



**Retreat or control joint**

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

**Choosing a profile type RGD**

Consult the Mastix catalogue over [www.mastix.ch](http://www.mastix.ch) page 52

**Gluing of waterstops type RGD**

- 1.- Preparation
  - 2.- Waterstops to be glued on lean and existing raft concrete with Mastix MS-Polymer
  - 3.- Control of the glued waterstops
- Consult the Mastix catalogue over [www.mastix.ch](http://www.mastix.ch) pages 74 -78 - 79 - 80

**1. Description of waterstop type RGD**

BFL-Mastix waterstops type RGD are composed of a partly gravel covered core.

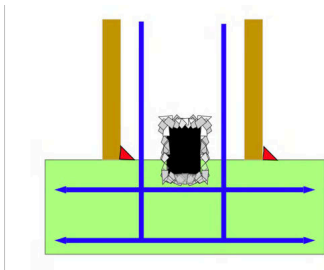
The core consists of a soft and waterproof rubber/bitumen elastomer material.

**The fine gravel coating, covering the profile RGD, 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.**

**3. Waterproofing of formwork foot**

Particular attention is required of the lowest part of the formwork, in order to avoid any leakage of cement milk. The loss of cement milk produces gravel holes (bee nests), where finally water could circulate in these spaces.



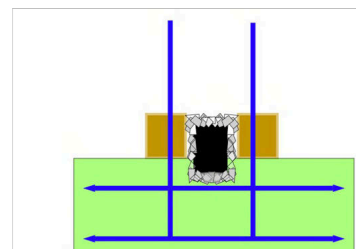
**2. Waterproofness of concrete**

Modern concrete technology allows to produce waterproof concrete.

A correctly mixed concrete is sufficiently waterproof to satisfy all construction requirements.

**4. Protection of BFL-Mastix waterstops**

To avoid any damage on already placed waterstops, it is necessary to cover them with wooden boards, when people are walking in this sector.

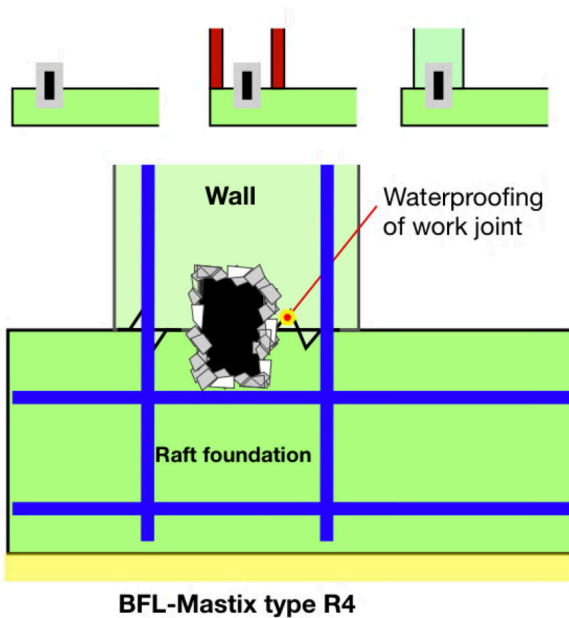


**The Mastix system is simple to work with and naturally compatible with concrete and concrete structures**

Waterproofing of work joints

Raft foundation/Walls

Waterstops BFL-Mastix type R4 to be placed into the raft concrete



**Work or construction joint**

Interface between two concreting stages where water could penetrate.

**Choosing a profile type R4**

Consult the Mastix catalogue over [www.mastix.ch](http://www.mastix.ch) page 15

**Placing of waterstops type R4**

- 1.- Preparation
- 2.- Bands incorporation in fresh raft concrete
- 3.- Control of placed bands

Consult the Mastix catalogue over [www.mastix.ch](http://www.mastix.ch) 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 exclusively on absorbing and porous materials, such as the BFL-Mastix waterstops type R4.

**3. 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.**

**4. Bad weather on the job site**

**BFL-Mastix waterstops type R4 placed in fresh concrete, do not suffer under rain, snow or frost.**

**5. Durability**

Only when the structure is demolished, then the BFL-Mastix waterstops will be detached from the concrete.

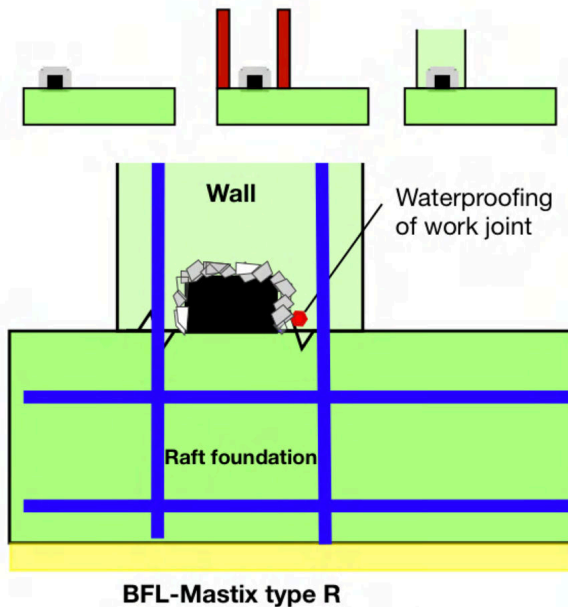
**It is possible to consider the BFL-Mastix waterstops as a constructive element of the concrete structure.**

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

Waterproofing of work joints

Raft foundation/Walls

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



**Work or construction joint**

Interface between two concreting stages where water could penetrate.

**Choosing a profile type R**

Consult the Mastix catalogue over [www.mastix.ch](http://www.mastix.ch) page 23

**Gluing of waterstops type R**

- 1.- Preparation
- 2.- Gluing with Mastix MS-Polymer on raft concrete
- 3.- Control of the glued waterstops

Consult the Mastix catalogue over [www.mastix.ch](http://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. 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 exclusively on absorbing and porous materials, such as the BFL-Mastix waterstops type R.

**3. 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.**

**4. Bad weather on the job site**

**BFL-Mastix waterstops type R placed in fresh concrete, do not suffer under rain, snow or frost.**

**5. Durability**

Only when the structure is demolished, then the BFL-Mastix waterstops will be detached from the concrete.

**It is possible to consider the BFL-Mastix waterstops as a constructive element of the concrete structure.**

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

© mastix sa 2018 /JM/ 024 0318 Certified ISO 9001/2000