RD2 The Green 1

Fast, multi-functional reactive sealant 2c

Botament

RD2 The Green 1 is a rapidly setting, bitumen-free reactive sealant for the waterproofing of structural elements that are in contact with the ground in new buildings and for the repair of existing waterproofing. RD2 The Green 1 is certificated according to the European technical approval (ETA-18/0326) as a flexible polymer thick coating. RD2 The Green 1 is tested according to EN 14891. Additionally RD2 The Green 1 is suitable for the application of tiles and slabs as well as for natural stones which are sensitive against discolouration.

PROPERTIES

- Fast waterproofing of building structures
- With ETA certification
- No priming necessary
- Highly flexible and crack-bridging
- Stockable down to -5 °C
- Impervious even under negative water pressure (during construction phase)
- Can be painted and plastered over or covered with tiles
- High UV-light and aging resistance
- High resistance against frost and de-icing salt stress
- With visible curing control
- Tested radon tightness according to ISO 11665
- Tested as a composite sealant below tile coverings
- Highly flexibel tile adhesive

AREAS OF APPLICATION

- waterproofing of basement walls, floor slabs, foundations, balconies and terraces
- protection of areas with de-icing salt stress
- sealing of plinth walls
- repair of existing waterproofing on structural elements
- partial repair of roof sealants
- intermediate sealant under screeds
- horizontal waterproofing in and underneath walls
- waterproofing of water features in landscape gardening
- sealing of water containers
- fixing of protection and insulation boards
- application of tiles, slabs and natural stones which are sensitive against discolouration

SUITABLE SUBSTRATES

- mineral substrates
- old, stable bituminous waterproofings
- many standard plastics used in construction (pipes/ penetrations)
- metal substrates
- timber substrates

SUBSTRATE PREPARATION

The substrate must be in the following condition:

- stable, clean and frost-free
- free from grease, paint, cement laitance, separating agents, sinter layers, honeycombs, protruding mortar residues and loose particles
- cut off protruding horizontal waterproofing so it sits flush

Mineral substrates must be slightly damp or pre-wetted prior to the application of the first waterproofing layer. Non-absorbent substrates (e. g. bitumen, metal, timber or plastic) and gypsum based substrates must be dry.

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SUBSTRATE PREPARATION

To ensure an optimal contact to each substrate and to close fine air voids in the surface of mineral building materials a scratch coat has to be done prior to the application of the first waterproofing layer.

Levelling of profilings, large-scaled defects and unevennesses

- mix RD2 The Green 1 with 30 % of dried quartz sand of grain size 0.5 – 1.2 mm, apply the necessary layer thickness and smooth immediately

Please also note:

- mounting parts made from PVC, steel and gunmetal must be cleaned thoroughly, removing any grease and must be roughened up (keyed)
- lightly sanding substrates must be primed with D12 pre-treat deep silification
- closing of defects and open butt joints

  < 5 mm width → with RD2 The Green 1

  ≥ 5 mm width → with M36 Speed or M35 Multi-mortar

APPLICATION

- add component B to component A and mix both together with a slowly rotating mixer for at least 2 minutes
- don't mix material again that has started to set

RD2 The Green 1 is applied using a paste brush, smoothing trowel or spray device onto the dried scratch coat. The application of RD2 The Green 1 has to be done in at least two layers.
In case of of ground moisture or non-standing seepage water the second layer can be applied fresh in fresh onto the first layer, in case of pressing water the first layer has to be cured so far that it cannot be damaged by the application of the second layer.
It is not necessary to work a glass fibre mesh into a layer of RD2 The Green 1. To cover joints and to produce connections, internal corners, transitions and penetrations, we recommend working SB78 sealing tape and accessories into the first layer of the waterproofing and then to cover these with the second layer which should be smoothed over with a paint brush.
For the quick and safe connection of the waterproofing made of RD2 The Green 1 to door and window frames as well as for the transition zone between floor slab and rising walls which are constructed of timber materials we recommend to use the PB Portal sealing tape.
RD2 The Green 1 has to be run at least 10 cm deep onto the facing side of the foundation or the floor slab (at least 15 cm in case of water-impermeable concrete).
Curing is complete when the waterproofing is no longer the colour it was when fresh (light green), but has turned dark green across the entire area. In addition to this visible control, we generally recommend carrying out a reference sample which is to be kept on the ground of the construction pit.
The mixing ratio specified by the factory must be strictly adhered to. If RD2 The Green 1 is to be applied using the spray method, we recommend contacting the experts from our technical department first.

Use of RD2 The Green 1 as Waterproofing of butt and construction joints in concrete structures with a high resistance against water penetration (water-impermeable concrete)
Here RD2 The Green 1 must be applied across the entire joint width of ≥ 30 cm (≥ 15 on either side of the joint) in at least two layers (integrate glass fibre fabric GS98 into the first layer).

Use of RD2 The Green 1 as tile adhesive
RD2 The Green 1 is also usable as a highly flexibel, waterproof tile adhesive with a comfortable working time. RD2 The Green 1 complies with the class C1 E S2 according to EN 12004.
When tiling in outside areas the risk of efflorescences and frost damages is reduced.
Moreover RD2 The Green 1 is highly resistant against de-icing salt. Due to its high elasticity the products shows a decoupling effect.
RD2 The Green 1 is especially suitable for the use in outside areas onto composite sealants according to EN 14891 (e. g. on terraces, stairs or other open spaces) for slab sizes up to 60 x 60 cm. For larger slab formats we recommend the use of our balcony an terrace adhesive BTK200.

APPLICATION

The freshly mixed RD2 The Green 1 (mixed together with up to 30 % of dried quartz sand/ grain size: 0.5- 1.2 mm) has to be applied by means of a notched trowel onto the totally cured sealant. Subsequently press the tiles using light pressure and a side-to-side movement into the adhesive bed and position.

CONSUMPTION

application area	consumption (kg/m²)	≙ wet layer thickness (mm)	≙ dry layer thickness (mm)
scratch coat	0.5- 1.2*	-	-
waterproofing of structural elements			
waterproofing in case of splash water and ground moisture at plinth walls according to ETA-18/0326	2.7	2.3	2.0
horizontal waterproofing in and under walls according to ETA-18/0326	2.7	2.3	2.0
waterproofing in case of ground damp and non-standing seepage water according to ETA-18/0326	2.7	2.3	2.0
waterproofing in case of pressing water (moderate exposure) according to ETA-18/0326	3.3	2.8	2.5
waterproofing in case of pressing water (high exposure) according to ETA-18/0326	5.4	4.6	4.0
waterproofing of joints in water-impermeable concrete structures	5.4	4.6	4.0
waterproofing in case of pressing water from the inside	3.3	2.8	2.5
setting adhesive for insulation boards	1.2	-	-
composite sealant			
composite sealant according to BS EN 14891	2.7	2.3	2.0

* depending on the roughness and the planarity of the substrate

IMPORTANT ADVISORIES

When waterproofing building structures in contact with the ground all valid technical standards and guidelines must be observed in their current versions.

To check the adhesion on smooth and metallic substrates, we recommend carrying out a site-specific trial application in advance.

RD2 The Green 1 should not be applied onto areas getting plenty of sunshine.

When work is interrupted during application, extend RD2 The Green 1 down to a feather finish. Work is continued with an overlap. Interruptions in the area of corners and edges are not permissible.

In case of punctual peeling off from the substrate the functionality of the sealing is conserved within the area due to the high inner material stability.

The filling of the building pit may not occur until RD2 The Green 1 has completely cured.

For the protection of the waterproofing we recommend Botament Protection and drainage membrane.

RD2 The Green 1 is not recommended for direct application on metals that may be attacked by cement. Metal substrates must be degreased and roughened beforehand.

RD2 The Green 1 does not serve as a vapour barrier.

RD2 The Green 1 is suitable as composite

sealant according to EN 14891 used under tiles in connection with all Botament tile adhesives.

For durable sealings against negative water pressure our sealing slurries M34 und MS30 are suitable.

Prior to the application of plasters onto the fully dried

waterproofing of RD2 The Green 1 we recommend to apply a mineral contact layer made of M35 Multi-mortar in horizontal direction by using a toothed trowel.

In case of waterproofing swimming pools please contact our technical department.

You can view or download the safety datasheet at **www.botament.com**.

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Density	kg/dm³	~ 1.18	
Sd-value	m	~ 2	at 2.0 mm dry layer thickness
		~ 2	at 2.5 mm dry layer thickness
Compressive strength	N/mm²	~ 3	
Mixing ratio	kg:kg	1:1	comp. A : comp. B
Working time	minutes	~ 45	
Layer thickness (wet)	mm		
Unextended		≤ 5	
Extended		≤ 20	
Rain resistant after	hours	~ 3	
Accessible after	hours	~ 24	in case of use as a tile adhesive
Adhesive bonding of drainage and insulation boards after		~ 4	
Resilient after	hours	~ 24	
Consistency			can be applied by trowel, painted on or sprayed on
Application conditions	°C	> 5 < 30	
	All technical values are laboratory results determined at 21°C ±2°C and 50% relative humidity.		

base	polymer dispersion, special cement, additives
colour shade	green
delivery form	8 kg unit 4 kg liquid component (A) 4 kg powder component (B) 20 kg unit 10 kg liquid component (A) 10 kg powder component (B)
Storage	Can be stored in cool and dry conditions for at least 12 months in original unopened packs.stockable down to - 5 °C
Cleaning agent	when fresh: water, when fully cured: mechanical

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