

# RAW STONES

## Laying instruction RAW STONES

### Deliver and unpack of your RAW Stones

Once the RAW Stones are delivered at your place, we advise to place these inside, or at least protect them well against dirt, rain, wind and possible frost. In extreme weather conditions, you should place both the tiles, with material, in a heated room, preferably 48 hours, but at least 24 hours before you unpack and start laying the floor, so that everything can acclimatize. Once you start laying your RAW Stones floor, you can check the tiles before processing them for any specific damages. We always supply extra tiles, since transport can cause light damages. In the event you see any damaged tiles, you can use them perfectly for cutting pieces.

Before you, or your tile layer, start laying the RAW Stones, we advise to mix the tiles and sizes with each other. By mixing the tiles from different crates you are ensured of a good spreading of the colour nuances. When you spread the RAW Stones decently, you are ensured of the best result. Be aware, always grab the tiles a little above the centre between your thumb and fingers and ensure you lift the tiles upright.

### Basic principles to lay RAW Stones

Before you start laying the RAW Stones floor, it is of great importance to clean the subfloor first. The subfloor needs to be stable, vibration free and absolutely sufficiently cured. In case of present floor heating, it is very important that it is turned off at least 48 hours before you start laying the floor. During the placing process also keep the floor heating down. Please ensure that everything is carried out in an optimal way, to avoid problems that could have been easily avoided. Please read carefully through our firing protocol before you start laying and ensure that all steps have been carried out as described.

When you, or your tile layer start laying the RAW Stones, it is of great importance to start only once you are ensured you are well prepared with the needed products / tools.

First point of attention is on what type of substrate the RAW Stones must be placed. A correct pre-treatment of the substrate is of great importance, especially because the type of primer is crucial for a correct adhesion of the tile adhesive.

For every type of substrate we use the Botament D1 primer suitable for almost every substrate and necessary for correct adhesion. Apply the primer (preferably) a day in advance, until it is completely dry. It could be that if it is still moist, this can have consequences with regard to the adhesion.

### Placing the RAW Stones in the tile adhesive

Because RAW Stones only have a thickness of 0.8 – 1.0cm, and are as much as possible produced in equal thicknesses, they are excellent for bonding. The benefit is that you relatively don't need much height, because the tile adhesive under the RAW Stones is only a couple of millimetres (total thickness with tile approx. 1.2 - 1.3mm)

To apply the RAW Stones, we work with different tile adhesive thicknesses and thus glue combs. For completeness we give you an overview to show you what type of glue comb is used for what type of RAW Stone. Depending on the substrate, the tiler must choose the hand glue-spreader to use. 15mm is most common for the ABBEY / TRIPLE / TRAPIST. Depending on the substrate, the tiler must choose the hand glue-spreader to use. 6-8mm is most common for the TERPSTRA / WAALTJES.

We also recommend that with the Abbey /Triple/ Trapist, both the substrate and tile are provided with glue, the so called 'buttering – floating' method.

# RAW STONES

With a double gluing (floating – buttering), the mortar adhesive is first spread on the surface / floor (floating) and then applied with a flat trowel or glue spreader on the backside of the tile (buttering – with a thickness of 3mm). Make sure that no film will form on the adhesive, due to rapid drying. That is, process quickly enough if applied. Finally, but just as important, press the tile firmly from the centre to the edges. This ensures that air between tile and adhesive can escape.

The tile adhesive that RAW Stones supplies with every order, is a flexible glue, Botament M29 HP Premium floor glue. However, in cold(er) weather conditions, we will automatically switch to the flexible adhesive, Botament M29 SPEED adhesive. This instant adhesive must be made smoothly. Then ripen for 5 minutes and the mix well again before applying.

## Dilatation

In case there is a dilatation in the subfloor ( separation between building components to cope with the workings), this should be continued in the tile adhesive, and certainly in the RAW Stones floor as well. In short, dilatations may not be closed by tile adhesive or tiles itself. Also with transitions from floor to wall, there should be kept a separation of 5 till 10mm. This space can easily be made by placing a foam strip of 100x5mm (height x thickness). Recommended is to divide to surface as much as possible in squares or otherwise rectangles. Do this in courses of max. 50m2 with interior floors. The ratio between length and width should never be larger than 1:2 with a maximal field length of 8 m1.

## Are you going to build new?

When you get a new construction project carried out, and you can choose for a specific type of subfloor, we advise to opt for a fibre-reinforcing cement. In addition, we recommend a double reinforcement mesh under the cement screed, as well as an intermediate layer of the cement screed. For the upper reinforcement mesh, always ensure that there is an overlap of at least 2 meshes. The height of the final RAW Stones will be 12-13mm including tile adhesive.

Take into account a minimal drying time of 1 week per 1 cm thickness of a freshly poured cements screed. In short, when your cement screed has a thickness of 6cm, it needs at least 6 weeks drying time before the RAW Stones floor can be placed. Is the thickness of the floor less than 4 cm a drying time of at least 28 days must be observed. In the case that floor heating is present, the firing protocol can be started after 4 weeks.

Read carefully through the firing protocol before you start and start well in time before the tiler comes. In the winter, carrying out a firing protocol naturally requires considerably more time than in the summer due to the low outside temperature and higher humidity. Following the firing protocol is extremely important to prevent any cracking of both the subfloor and tile floor in the future.

## Grouting the RAW Stones

RAW Stones need to be carefully joined with grout. Applying the grout, but especially removing the grout takes attention, reason why we advise to wash in the RAW Stones floor constantly per 2-3 m2. Please note that you make small portions of grout and make use of a grout float. Sponge the tiles after the grout starts to stiffen, making use of a sponge float and use clean water regularly. PAY ATTENTION, RAW Stones floors have a so called 'open structure' because it is a mineral product, and therefore absorb the joint very quickly, so that it adheres quickly to the surface. RAW Stones must be processed with Botament Multi-Joint Base 3-30 mm silver grey.

Advise: We recommend that between gluing and grouting the floor, the first layer of RAW Stones protector have to be applied by spraying or rolling. The advantage of this is that the tile absorbs significantly less.

# RAW STONES

The protector must also be applied after the jointing. For the best result this should be done with a spray (weed pressure pump). PAY ATTENTION! the RAW Stones floor needs to be maintained with our protector and we recommend repeating this on average once a year. This can be tested by dropping a drop on the floor. If this drop continues to pearl (lie on the tile for a while) then the floor is still sufficiently equipped with our protector.

## Maintenance RAW Stones floor

After the tiles have been inserted and fitted with the RAW Stones protector, you must not walk on the floor for 24 hours because of the drying of the glue and the joint. Once dried, you can mop your floor with clean, lukewarm water for the first week. This rinses the tiles and removes the last remnants of any light cement from the grout on your floor.

Once you have mopped the floor with clean, lukewarm water during the first week, you can take care of your floor (s) with our RAW Stones cleaner. This cleaner offers the great advantage that the protector is provided by and therefore offers harder protection. We recommend using 5 - 10 cleaner caps per 5 litres.

If you wish to cover the floor after laying and jointing for any stains or damage during the renovation process, we recommend that you only use breathable covering fleece for natural stone. This membrane offers ideal protection for newly laid natural stone floors. The unique membrane, which consist of several layers on the top, ensures a correct moisture – regulating effect. This means that the moisture from both glue and joint that is in your RAW Stones floor can easily ventilate, while no spilled liquids that can penetrate at the top.

**PAY ATTENTION!** *Covering with plastic or standard sheeting traps the moisture in your floor and can lead to permanent damage to your RAW Stones floor!*

## Final points

Based on knowledge and experience we advise everyone to read our instructions carefully. If you have your floor installed by your tiler or yourself, it is very important to first place a test piece before finally bonding the RAW Stones.

When there are cold(er) weather conditions, we recommend postponing the processing of the floor, as this can have its negative effect on the processing, as well as the consumption of the material and most likely also the adhesion.

Make sure the RAW Stones are sufficiently placed into the tile adhesive and take into account the grasping and laying of the tiles. In particular, the larger tiles must be grasped and relocated with some attention. When the tile is in place, carefully slide the tile back and forth in the adhesive for a good adhesion and a fully glued layer under the tile. The RAW Stones must be pressed and pushed by hand, NEVER use a hammer to check by knocking the tile if it sounds even. The main importance for a floor that is laid correctly, it must lie sufficiently in the glue, without there being any air between tile and glue. If the tile has a point that sounds hollow when you knock it (test with knuckles), this is a sign that there is not enough tile adhesive under it and the tile is insufficiently glued. The tile will crack at that point during use, so it is therefore advisable to take the tile out, and apply a thicker layer of adhesive before replacing the tile.

It often happens that there needs to be 'played' with the joint width. As a result, the joints are not equally wide in all places and this is not necessary at all. In fact, this is the charm of our handmade product. It is these small differences that give the floor much more character and a beautiful, authentic appearance.

**IMPORTANT:** it is only after applying the grout and cleaning the tiles, the floor really comes to its own and the colour nuances and authenticity will be much more visible. Rural charm at its best and a unique floor to be proud of!

**PLEASE NOTE:** *The processing advice from RAW Stones is only a guide for the correct application of our products. We cannot give any guarantee on floors when these are processed by a tiler trained by RAW Stones. Any complaints resulting from the processing of a RAW Stones floor by a third party will not be recognised by "RAW Stones".*