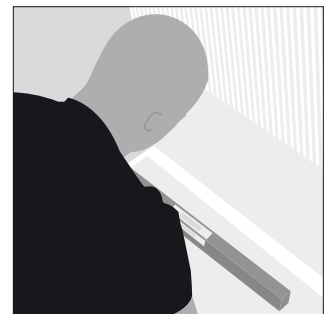


Natural Stone installation instructions

1. The proper choice of tools and implements is very important: angle grinder machine or water jet cutting table with diamond blades, notched trowel, spirit level, white rubber mallet, rubber trowel for grouting, cross-spacers for joints and mixing vessels for adhesive preparation.



2. The flatness of the substrate should not be over 5 mm span, therefore must be checked with a 2 meter rule. In case of any flatness defect, the substrate must be re-leveled in order to fix the difference. The substrate must be resistant, stable and totally dry, in order to obtain a correct adherence.



3. In order to avoid bonding problems, the substrate must be totally clean, free of dust, grease, mortar residues, etc. It is advisable to clean the surface before laying the tiles.



Natural Stone installation instructions

4. The adhesive type must be chosen in relation to the material absorption and the substrate properties. In any situation, as a precautionary measure, LEVANTINA does not recommend sand mortars use, since sand contains different salts, and when mixed with the cement and water, could be absorbed by the material porosity and may produce pathologies called efflorescence.

For high-absorption materials, like sandstone and limestone, LEVANTINA recommends C1 adhesive for indoor use, and C2 for outdoors. In case of marbles and granites, C2 adhesives can be used in both indoors and outdoors, since the main property of this product is the great adherence and elasticity. In case of natural stone materials with fiberglass or mesh backing, LEVANTINA recommends the use of Type R reactive resin adhesives.






5. Use a notched trowel to spread the product on the substrate, in order to control the thickness and assure the adhesive distribution all over the surface. For 30x30 cm or larger pieces, it is recommended to use the buttering-floating technique,

which consists of applying the adhesive on both the substrate and the back of the tile, in order to ensure a 100% contact with the bonding material.

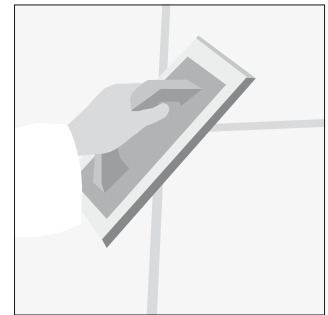


Natural Stone installation instructions

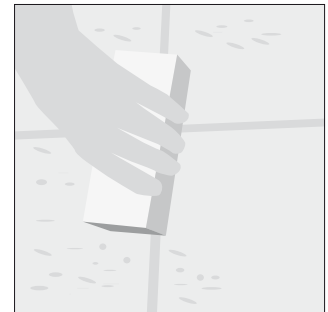
- ▲ 6. In order to ensure a total flattening of the grooves left by the notched trowel on the bonding material, lay the pieces and tap them with a rubber mallet. LEVANTINA recommends leaving at least a 1.5 mm. joint between interior pieces and 3 mm for exterior pieces. This is to compensate possible material expansion/contraction caused by temperature variations, of course considering perimeter and structural joints.
- ▲ 7. The grouting process consists of filling the space between pieces, better known as joints. The installation joints must be clean and free of bonding materials, traces of dirt and grime. This way, adherence of grout will be improved and more effective.
- ▲ 8. The grouting material should be applied 24/48 hours after the covering application, in order to help the evaporation of the water used to prepare the bonding mixture. This way is possible to avoid moisture stains that might end up causing efflorescence pathologies.

Natural Stone installation instructions

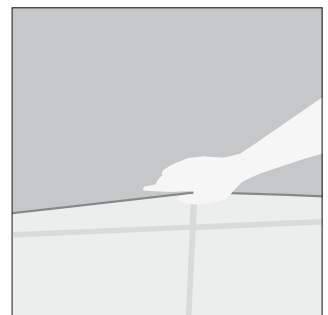
- 9. The grouting material should be applied with a rubber trowel and always in the joint gap. Never use the traditional grouting method, which consists of spreading the grouting material all over the coated surface, since the stone porosity can cause scale problems and interfere with the subsequent cleaning.



- 10. The removal of grouting material residues must be done not too long after the application. It is necessary to use a damp sponge to avoid leaving grouting material deposits.



- 11. In case of laying polished or honed floor coverings, it is advisable to protect the surface until the building work is over. This is mainly not to damage the material and make the cleaning easier.



Natural Stone installation instructions

TIPS

To carry out cutting procedures in natural stone pieces, it is advisable to mark the pieces with a pencil.

To carry out stone drilling, it is necessary to use carbide bits, always beginning with a small diameter until getting the expected result.

