

**- LAVA STONE CHARACTERISTICS**

The lava stone is a basalt stone coming from the solidified magma in contact with water and air. In our case the only source of lava stone is from Volcano Etna's (Sicily), about 60 km from our company. We distinguish two processes: smooth lava stone (PLL) and bush hammered lava stone (PLA), both available in different techniques and collections.

**- GLAZED LAVA STONE, MAJOLICA, CERAMIC OR GLAZED**

The ceramized lava stone is a fusion technique between lava basalt and ceramic pigments at high temperatures (1000 ° C and up), which can be managed with manual techniques, with decorations and colors, by skilled Ceramic Masters.

**- TERRACOTTA**

It is a mixture of various types of clays, rich in: iron (red body), kaolin (white paste), stoneware, porcelain, etc.

CI: Industrial Cotto, made by mechanical procedures

CM: manual Cotto, entirely handmade, with the addition of volcanic dusts.

**- GLAZES AND CERAMIC COLORS**

Normally they are mineral powders that brought to high temperatures (from 1000 °C and up) together with the materials (brick or lava stone) go to melting. At the end of fusion, they reach a state of perfect adhesion so as to identify themselves as single element, commonly called ceramic product.

**- CRAQUELÉ / CAVILLO**

All glazes on lava stone over time form the craquelé, in the dark glazes is not very clear (though it is), in the clear ones is more visible. This effect is due to the fact that the lava stone is a material suitable for thermal expansion and moves to the surface layers — glaze/decorations (1000° melting) — this feature too. Fundamental and decisive in order to have a product with exceptional characteristics in terms of adaptation to climatic conditions and / or thermal failures, avoiding breakages or damages of the product for its use and for its unlimited duration over time. In other words, this is not a defect of the material but a detail which makes it unique and suitable to any application.

**- GREEN SPOTS ON GLAZED, MAJOLICA AND CERAMIZED SURFACES**

On all lava stone surfaces made with white ceramic glaze or clear glazes (as Oss/16 – P/7 – P/8 etc.) some small green spots might take shape on the surface during melting (1000°) on the white glaze, caused by the reaction of small copper oxide concentrations which are in lava stone. This process, already occurred, as magma, cannot be controlled or handled by humans — so it is normal (then it cannot be disputable) within 1 cm. Over this size, Made a Mano Srl does over the product which gets this natural imperfection.

## – COPPER GREEN COLOR

You need to know that when the colours of the patterns are: verde rame SM10, SM44 and SM9, the tiles have a particular effect and you can see the “hand-made” a lot. Usually the “Made a Mano” handmade look shows that the tiles are “hand-painted”, so you can see the sign of the brush in the pattern, making some colorful shades. This effect is more clear in colours like copper, so it causes a chemical reaction in fusion with the base glaze, giving visibility to this special effect, the same thing does not occur with other colours (like black, red, brown, etc since they are more permanent). The chemical reaction occurs during the fusion ceramic procedure (1000°) which is into the ovens and it cannot be managed by us.

NOTE: Please remember that the materials are naturally extracted and then turned into finished products through ceramic procedures by craftsmen and they may have different tones, shades and finishes compared to the sample you own.ct.

## – RECOMMENDING BEFORE, DURING, AFTER THE INSTALLATION

Laying the lava stone and terracotta tiles, requires specialized and skilled labour for laying and cutting, appropriate tools and good experience. We suggest always using industrial adhesive rather than traditional mortar, (Granirapid) to a worldwide specialized suppliers as Mapei or Keracol. For cutting the tiles of lava stone you have to use a diamond cutting disk (granite disk cutter). Equal suggestion for the joint filler, white or colored, apply to all surfaces and not only on the lines of joint. Since our products are handcrafted, and may have a color shade difference, we advise you to pre-select the tiles, on the floor according to the different shade graduation before their final installation. Finally, it is recommendable not using handmade mixture (sand, water and cement), because during the drying, they might create a visible effect of white efflorescence on the tile surface, in any case removable (when all the surface is dried) by the application of chemical agent and water (see suggested procedure using Mapei – Keranet).

## – MAINTENANCE AND CLEANING

For regular cleaning and maintenance use lukewarm water and mild soap. In the kitchen (backsplash) or kitchen walls, use the same mix (soapy water) and once a month added to the mix calcium bicarbonate, use a 3M type sponge (yellow-green) on the green side, where there was presence fat (oily). Clean with wet cloth and dry with appropriate non-fibrous tissues.

THANKS TO USE MADE A MANO®™ PRODUCTS  
DO NOT HESITATE TO CALL US FOR ANY OTHER QUESTION

*Rosaria Passinella*