

# SURFACE TREATMENT

A treatment must be carried out to reduce the porosity of the surface and improve its appearance in the event of wear over time. The treatments, in addition to allowing the quality of the surface to be maintained over time, help prevent the occurrence of infections because, by making the surface less porous, dirt cannot penetrate and remain at depth, facilitating ordinary cleaning operations.

## TYPES OF SURFACES AND TREATMENTS

From the maintenance point of view, surfaces can be classified according to their nature and degree of porosity, in the following groups: natural stone, mixtures, resilient, wood and laminates, textiles and raised floors.

Based on the type of materials, we can divide the surfaces into treatable and non-treatable.

Non-treatable surfaces are: leaded natural stone, porcelain stoneware (almost all, especially glossy), klinker, single-fired ceramic, carpet/textile and all those floors that originally have already a glossy finish or closed porosity. In certain cases, some of these materials (e.g. opaque porcelain stoneware), if subjected to traffic and wear over time, can be treated subject to a sealing test.

Depending on the type of surface, a suitable treatment is recommended, preceded by thorough cleaning/dewaxing, necessary to remove old protective layers and to make all those floors that have partially or totally lost their lead sealing uniform.

Below are some types of flooring and related recommended treatments:

## NATURAL STONE

These are poly crystalline aggregates generally taken from quarries. There are various types depending on the chemical characteristics and different percentages of their constituent minerals. They can be divided into:

- Limestone: marble, travertine and agglomerates (grit, marmettone, palladiana, etc.)
- Siliceous: granite, slate, porphyry, serene, luserna, etc.

## Limestone

The treatments that can be performed are 3: sealing/waxing (water/solvent based), waterproofing (water/solvent based), crystallization.

**Sealing/waxing** with acrylic/polyurethane emulsions is a film-forming protection to obtain a glossy or satin finish.

**Waterproofing** is a film-forming protection with a natural finish.

**Crystallization** is an extraordinary maintenance technique for calcium carbonate floors. It can be defined as a form of "micro-grinding" of the ruined or opaque surface layer of the floor). It in fact consists of the removal of an imperceptible and thin layer of the surface, so as to restore the original shine, guaranteeing, among other things, greater resistance.

There are 3 actions involved in the crystallization process:

- Product, which acts chemically
- Machine, with its weight and with the rotating action of the disk
- Heat, generated by the friction of the steel wool disc with the floor.

