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.







Siliceous

Both for limestone and siliceous stones, subsequent procedures (sweeping, daily washing, low and high



These consist of crushed natural stones compacted using various binders (cement, mortar, resin). They can be divided into:

Cold products: raw cement, resinated cement, cementine

Products created in the oven: ceramic/single fired, ceramic biscuit, stoneware, porcelain stoneware, klinker, terracotta

For raw cement, both sealing/waxing (water/solvent based) as well as waterproofing, can be carried out, while for the resinated cement a waxing treatment but not waterproofing is recommended. For cementine, water-based waxing is recommended.

As for products created in the oven, the only surfaces that can receive treatment are terracotta (sealing/waxing (water/solvent based), waterproofing) and stoneware (only water-based film-forming protection).

RESILIENT MATERIALS

These are surfaces which, subjected to an applied pressure, have the property, called resilience, to flexibly deform, resuming the initial configuration once the external force has been eliminated. The materials used for this type of flooring are: PVC, linoleum, rubber.

As a treatment, waxing/sealing with water-based protective films (glossy/satin) and maintenance with low/high speed washer/waxers and sprayers is recommended.

WOOD AND LAMINATES

By wooden or parquet flooring is meant a flooring made wooden slats (planks, boards, blocks) of varying sizes. The characteristics of the timber determine the characteristics of the parquet. Wooden flooring can be made of rough or pre-treated wood, laminate or WPC (Wood Polymer Composite). In all these cases it must be remembered that these surfaces are not compatible with large quantities of water.

As far as treatments are concerned, for rough wood, sealing/waxing (water/solvent based) and the waterproofing (water/solvent based) is recommended; for pre-treated wood, laminate and WPC, it is recommended to carry out a preliminary sealing test of both treatments mentioned above.









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

maintenance with dedicated products for the various speed (UHS) spray maintenance will be important.





TEXTILES

Textile surfaces can be in natural (e.g. cotton, wool) or synthetic fibre.

A surface similar to textile is tatami, a sort of carpet created on a bamboo or woven straw support to which a rubber or woven film is applied with plastic threads.

For the maintenance of textile surfaces, deep washing systems are recommended depending on the type of fabric and the time available for the treatment: injection/extraction, shampooing, Bonnet method.

Injection/extraction consists in injecting a specific solution of water and detergent into the fabric with a special machine, proceeding with subsequent extraction of the washing solution, which takes away the dirt with it, leaving the fabric clean.

Shampooing is a dry treatment that is carried out with a shampooing machine or single brush floor machine. This is a method particularly suitable for natural fibre textile floors. It is based on the ability of the foam to crystallize the dirt which is subsequently vacuumed away once the surface is dry.

The **Bonnet method** consists of passing over the fabric with a single brush floor machine with specific pads called Bonnets which, by exploiting the mechanical action of the brush and the chemical action of a specific detergent, extract all the superficial dirt, ensuring a clean but not excessively humid surface.

RAISED FLOORS

The floor consists of square panels of various thickness coupled to the finishing surface. These are positioned on a load-bearing structure that allows the floor surface to be raised, creating a cavity for passage of the electrical connections.

Particularly suitable in environments where there are computers and electronic instruments.

Regardless of the material constituting the floor surface, raised floors cannot be washed with water and, therefore, it is necessary to perform dry wax removal as a pre-treatment.

The treatment, on the other hand, depends on the type of material constituting the floor surface and whether waxing is possible.

The Sutter Professional range includes products suitable for surface protection and maintenance, the result of Sutter's extensive experience in the "floor care" sector. Expert consultants are available to customers to provide support on the most appropriate treatments for the surface type.



