



## QUARELLA GENERAL INSTALLATION RECOMMENDATIONS

It is essential—before starting installation of the floor, that the following recommendations are observed:

- Ensure that reputable tile installers are engaged for the project with suitable experience in similar installation and application
- Ensure that floor installation does not occur until the building has been fully closed to the elements.
- Remove from the substrate coatings, including curing compounds, and other substances that contain soap, wax, oil, or silicone and are incompatible with the setting material by using a stone or concrete scabber or shotblast grinder, drum sander, or polishing machine equipped with a heavy-duty wire brush.
- Ensure substrates are firm, dry and clean and within the specific planarity tolerance prior to installation removing excessive protrusions, bumps and ridges by sanding or grinding.
- Prior to the commencement of work, construct a suitably sized full scale Trial Area (Mock-up) of the complete installation in an approved location.

During and After installation, the following recommendations should also be observed:

- Ensure that neither through erroneous mix proportions nor through external sources any excess water be trapped underneath the tiles
- Irrespective of the installation method adopted ensure at least 95% contact area between the back of tile and the setting material by using the back-buttering technique (to support layer and to back of tile in cross-ply fashion) and beating tile in place with a rubber mallet.
- Quarella products may be used for heated flooring. In this case the base must be absolutely dry and special care must be taken in realizing the expansion joints and in applying initial heating in small phased incremental values.
- Should site cutting be required this can be carried out in an open aerated area with water-cooled cutting and using machinery with adequate protections according to local regulations.
- After installation, all of the products must be protected to avoid damage from subsequent construction works/traffic, while the site is open.
- Stains from adhesive and grouting materials must be removed quickly using neutral detergents. The use of acid detergents must absolutely be avoided with marble based materials.

### INSTALLATION USING CEMENT BASE ADHESIVE

These adhesives are primarily composed of ready mixed cement/sand mixtures, and are packaged in powder form; water is added at time of use. They are composed of cement, sand, resin and other additives; their primary function is to increase adhesive qualities and water retention. Due to the additives used, these adhesives can be applied in thin layers.

From a chemical, physical and mechanical perspective, these adhesives do not differ generally from traditional cement mixtures: they are relatively compact, resist the cold, and offer a modest resistance to chemical agents, as well as ensuring adequate adhesion. Cement-based adhesives tend generally to have higher rigidity and mechanical fragility than other adhesives. For this reason, cement-based adhesives have been formulated that possess greater elasticity, necessary in cases of installation in flexible structures, or in less stable situations subjected to higher stress.

### INSTALLATION USING ORGANIC BASE ADHESIVE

There are two types of organic-based adhesives:

- ready to use mix, that is an aqueous dispersion of various types (acrylic, vinylic, etc.), with minerals and other additives;
- a two component adhesive to be mixed at the moment of use, based on synthetic resins (epoxidic, polyuretanic) and a relative hardening agent.

All organic-based adhesives possess good elasticity and are; therefore, indispensable for applications where small differentiated movements are foreseen between floor base and the covering layer, or in areas of particular hygro-thermic variations.

### INSTALLATION OF RAISED FLOORING

The installation of raised flooring must be done by firms who specialize in this field. It is essential that the laying surface be as flat as possible. The support feet are designed in a manner so as to balance out any small difference in level that might exist. Most suppliers provide underlying structures with a wide range of components and accessories that facilitate all types of installation.

### INSTALLATION OF EXTERNAL CLADDING

The installation of external cladding must be carried out by a firm that specializes in this type of work and which has the necessary equipment and experience. The technical design of the facade must be prepared by a competent professional who will take into consideration, among many other factors, the following: location, type of cladding, type of principal structure, building height, wind speed, maximum and minimum temperature, maximum daily temperature variation, etc.

### JOINT

The generic joint size recommendation is of 3mm width. However the size and position of the joints should be determined depending on the particular design and site conditions.