Marbles and granites have become increasingly popular over the past several years. Much of this is due to newer technology and techniques that lower production and installation costs. While marble and granite were once playthings of the idle rich, the cost is now increasingly affordable.

The variations in marble, travertine, dolomite, granite, sienite, gabbro, etc. are what give each stone individuality and character. A basic knowledge of these differences and the proper usage and limitations of each stone will help your customer select the one that is best suited to their needs and tastes. Let us discuss some basic facts that are common to most marble, granite and other stone.

Marbles and granites are either mined or quarried out of caves and mountains. They are taken out in large blocks. These blocks are then cut into slabs or tiles of whatever thickness is desired. The slabs or tiles are then polished, honed, or flamed depending on the desired texture and appearance of the surface. After this, they are sold as is in bundles or cut further and worked into various sizes and shapes.

Marble and granite tiles are customarily cut into 12”x12” (300 mm x 300 mm) squares and gauged to uniform thickness. Then, they are sent through a machine that hones a slight bevel into the edge of each piece. This creates a "cushioned edge" that will eliminate the sharpness if you were to run your fingers over an installed surface.

Many stone products have a mesh reinforcement adhered to the back surface of the tile. The adhesive used to attach the mesh is not standardized, however, it is commonly an epoxy or polyester-based adhesive that portland cement mortars may not reliably bond to. Such reinforced stone tile may require the use of an epoxy adhesive (e.g. LATAPOXY® 300 Adhesive).

Please note that granites and marbles are available overseas in a wide range of price. The old adage "You get what you pay for" usually applies here. Uniformity and consistency of sizing, proper gauging and good quality material are three very important factors to consider. A tile of poor quality will often take an installer a longer time to install in order to compensate for the variations. Often times you end up with an unsatisfactory installation that is more costly than originally planned.

**INSTALLATION TIPS**

Marble and granite are generally 12” x 12” (300 mm x 300 mm) in facial dimensions. It is now possible to use thin tiles (approximately 3/8” [10 mm]) due to more sophisticated installation materials.

1. Although "mud", a 2-3" (50-75mm) bed of cement mortar is often considered the ideal base for tile and stone work, thin-bed applications can also be used. Rigid floor construction is critical for providing long lasting stone installations. The floor structure must meet the minimum standard for deflection of L/480. Resin backed, mesh backed, green marble or moisture sensitive stone or agglomerate tile requires special installation materials. We recommend LATAPOXY 300 Adhesive as the adhesive for these applications. For more information on the installation of resin-backed tile or stone please refer to TDS 150.

2. Always use white mortars for installing white or light-colored marbles.