

Understanding Marble and its use in Construction

How many times have we stood amazed in front of a brilliant sculpture made of marble? Certainly, the answer would be ‘hundreds of times’. But, have we wondered how a simple limestone can be transformed to such a brilliant piece of stone? In this article we examine the wonder called marble and its role in the construction industry...

Marble basically is a metamorphic form of limestone, which is largely made of calcite. This calcite is the crystal of calcium carbonate. However, the dolomite rocks are also rich with the sedimentary calcium carbonate and they are metamorphosed to marble as well. Sometimes, the older marbles are also naturally changed in to marbles.

One interesting thing with the marble is obviously the different textures. However, they are created naturally. For, the pressure and the temperature that are necessary to form the marble ensure that there is no fossil making its impression there. The sedimentary textures are demolished as well.

One reason why marble is so widely used in home decoration and sculpture is its variety in color. This too, has a close connection with the formation of the stone beneath the surface. The white marbles are created from the pure limestone. In fact, the texture and colorful veins that make the marble such a fascinating stone, are actually impurities. This can be formed from anything starting from clay to iron oxides, silt and other minerals. Often, the marble takes up green color when silica is included in the high magnesium limestone. Such unique textures and patterns are formed due to the intense heat and pressure.

Another very interesting feature that has marble such a brilliant piece of stone in sculpture is its waxy look. It is because of this property that the models made of marble looks authentic. This is due to the low refraction index of the calcite. This allows the sunlight to penetrate few millimeters into the stone and then scatter out.

Not only human body, marble can be shaped according to the different forms like trees or city skyline. However, there are certain types of marble that are used more adeptly in the art of sculpture. Examples can be given of Royal White or the Beijing White. On the other hand, there are marbles like the Tennessee Marble that are widely used in the construction of building.

In fact, there are hundreds of different types of marble. They vary in color and textures. However, the categories are mainly made regarding the origin of the marble. Thus, we have the Beijing marble, the Vietnam marble, Luni marble, Danby marble Tennessee marble or the Connemara marble that are derived from the quarries of those areas. Again there are categories decided over the color of the marbles as well; examples of this can be found in Black Marble, Chitral Marble, Brown Marble, Green Marble, Red Marble and so on. Also there are certain other types of marble. The onyx marble for example is green in color and is translucent. Simply put, the wonder over marble never seems to be over.