PORCELAIN AND CERAMIC TILE SPECIFICATIONS

WATER ABSORPTION
Water absorption is measured using ASTM C373-88. Tiles are weighed, saturated with water and then weighed again. The percent difference between the two conditions is referred to as the water adsorption value.

Impervious: Tiles exhibiting 0.5% or less.
Vitreous: Tiles exhibiting more than 0.5% but not more than 3.0%
Semi-Vitreous: Tiles exhibiting more than 3.0% but not more than 7.0%
Non-Vitreous: Tiles exhibiting more than 7.0%

SHADE VARIATIONS
Tile range from complete consistency to a more appearance. Here’s an overview of color and shading of individual tile selections

![Image showing different shades]

VO
Very uniform appearance
V1
Uniform appearance
V2
Slight variation
V3
Moderate variation
V4
Substantial variation

SCRATCH HARDNESS (MOHS)
This test it’s based on a scale from 1 to 10. The softest mineral used is talc (1 rating) and the hardest is a diamond (10 rating). Other minerals of varying hardness providing Mohs scale of Mineral Hardness values of 5 or more are suitable for most residential floor applications. A value of 7 or greater is normally recommended for commercial applications.
BREAKING STRENGTH
Ceramic and Porcelain tiles used on floors and walls must be able to withstand the expected load bearing capacity of various installations. A force is applied to an unsupported portion of the tile breakage occurs. The breaking strength is then recorded in pounds.

CHEMICAL RESISTANCE
A tile sample is placed in a continuous contact with a variety of chemicals for 24 hours, rinsing the surface and then examining the surface for visible variation.

ABRASION RESISTANCE
The durability of a glazed tile is measured by observing the visible surface abrasion of the tile when subjected to the testing procedure. This test method includes the following classification system.
Class 0: Not recommended for use on floors
Class 1: Light Residential
Class 2: Medium to light traffic
Class 3: Medium to heavy traffic
Class 4: Commercial
Class 5: Heavy commercial

CLEANING AND MAINTENANCE OF WALL AND FLOOR TILE

PORCELAIN AND CERAMIC GLAZED TILES
Glazed porcelain and ceramic tiles required minimal maintenance. Products should be cleaned routinely with an all-purpose, non-oil-based household or commercial cleaner. The product chosen should also be grout joint cleaning compatible. The type of product may vary depending on the tile application and use. A multipurpose spray cleaner, which removes soap scum, hard water deposits, and mildew designed for everyday use, can be used on wall tile areas in residential baths and showers. The entire area should be cleaned and scrubbed with cleaner solution through the use of a cotton mop, cloth, sponge, or non-metallic brush. The entire area should be rinsed with clean water to remove any cleaning solution residue. You should sweep or vacuum floor areas prior to cleaning to remove any dust or debris. Routine cleaners should never contain acids or ammonia. Acids can damage the grout and the glazed surface of the tile, and ammonia can discolor the grout.

PORCELAIN AND CERAMIC UNGLAZED TILES
Clean routinely with concentrated tile cleaners that have a neutral pH for safe regular use. The product chosen should also be compatible with cleaning the grout joints at the same time.