

TYPES OF CERAMIC TILE

There are various types of ceramic used for tiles but the most common of these are divided into two major categories Gres, commonly called Ceramic, and porcelain.

GRES/CERAMIC TILES

Gres tiles are a type of earthenware which is porous and needs to be glazed to enable it to be used in wet zones such as bathrooms and kitchens. They are available in both red and white body depending on the origin of the clay. The glaze hardness determines a floor tile's suitability to specific environments and use, and reference should be made to its classification according to the PEI (Porcelain Enamel Institute) test to see if it will withstand the wear in the intended situation.

PORCELAIN

Porcelain is actually a type of ceramic, the primary characteristics of which are low porosity (absorption rates of less than 0.5%) and color that penetrates the entire body of the tile, rendering it very durable. Porcelain can be either glazed or unglazed depending on the desired aesthetic effect and performance qualities.

Unglazed Porcelain

Through/Full Body: unglazed porcelain is extremely durable and frost proof and can be produced using different methods to achieve diverse looks, in most cases these methods cause the colouration effect to penetrate the entire body in which case the tile is known as through or full bodied porcelain.

Polished: polishing unglazed porcelain results in a high gloss finish. Unfortunately, surface polishing opens the closed pore structure of the porcelain body and polished porcelains are more susceptible to staining because dirt gets trapped in the opened surface pores. For this reason, particular care must be taken when using a contrasting grout color with polished porcelain tile or when selecting a light or lightly patterned tile. Sealants or other pre-surface treatments can prevent this problem as long as routine re-application of the protective treatment is maintained.

Glazed Porcelain

In glazed porcelain, the glaze hardness or abrasion resistance determines a tile's suitability to specific environments and use, and some glazed porcelains should only be used in light or moderate traffic areas. Thus, glazed porcelain tile intended for floor use should be evaluated based on its PEI (Porcelain Enamel Institute) test classification.

PEI FLOOR TILE GRADES

PEI stands for the Porcelain Enamel Institute and the PEI Floor Tile grading system is the standard method for determining a given tiles resistance to abrasion

Grade 1 Light residential traffic

Tiles suited to areas of the home where soft footwear is worn, i.e. bathrooms or bedrooms.

Grade 2 Moderate residential traffic

Tiles for general residential areas, except kitchens, entrance halls and those subject to direct outdoor traffic

Grade 3 Maximum residential traffic

Tiles suitable for use in all residential areas

Grade 4 Moderate to heavy commercial use

Tiles suited to use in public areas where moderate to heavy traffic occurs such as hotel lobbies, restaurants and supermarkets

Grade 5 All domestic and commercial uses

These tiles are much more scratch resistant than standard ceramic tiles and are suited to use in all areas whether domestic or commercial