



### **Coefficient Of Friction (COF):**

COF defines the relative slip resistance of floor surfaces. The tile industry uses ASTM C1028-06 to measure the COF. The procedure involves the use of a calibrated dynamometer, a specified Neolite heel assembly, a standard reference tile surface, and a 50 pound weight. This procedure measures the maximum force required to initiate motion in the testing assembly in four perpendicular directions. The values are recorded and an averaging calculation is performed that determines the static COF.

### **Water absorption, ASTM C373-88:**

Water absorption is measured using ASTM C373-88. Individual tiles are weighed, saturated with water, then weighed again. The percent difference between the two conditions is referred to as the water absorption value. Tiles are classified according to water absorption percentages as follows:

**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%.

### **Abrasion Resistance (P.E.I.):**

The following list describes the glazing strength of each category and its application as it appears under the P.E.I.

#### **P.E.I. 1:** (Light Residential)

Light Traffic - Residential floor coverings in areas subject to soft-soled footwear or normal footwear traffic, without scratching dirt (i.e. domestic bathrooms and bedrooms without exterior access).

#### **P.E.I. 2:** (Residential)

Medium to Light Traffic - Residential floor coverings in areas subject to soft-soled footwear or normal footwear traffic with small amounts of scratching dirt (i.e. rooms in the living areas of homes except kitchens, entrances and other areas that may be subjected to high usage).

#### **P.E.I. 3:** (Heavy Residential or Light Commercial)

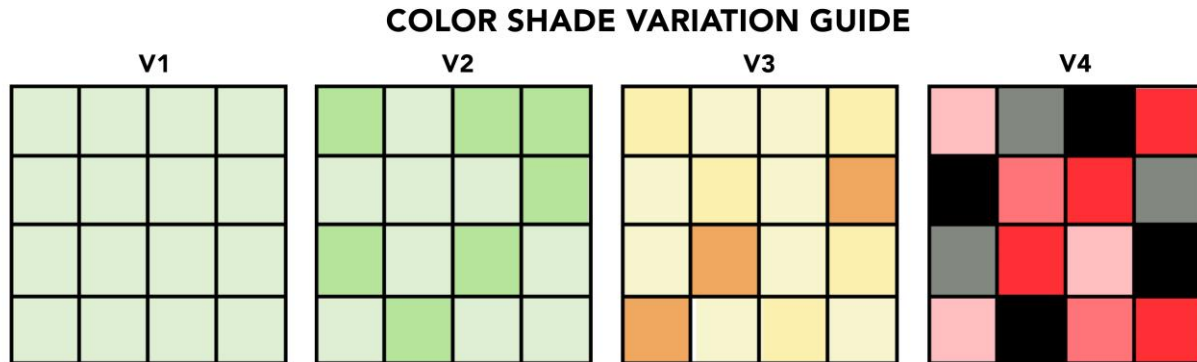
Medium to Heavy Traffic - Residential or light commercial may withstand normal footwear and regular traffic, with some dirt and/or other abrasives present in limited quantities. Tile in this class may be used in light commercial installations with limited foot traffic and with no direct access to the outside. Examples may include residential kitchens and hallways with limited traffic from the outside.

#### **P.E.I. 4:** (Commercial)

Heavy Traffic - Residential and commercial floor coverings subjected to considerable traffic and scratching dirt (i.e. entrances, workrooms, inns, exhibition halls, and sales rooms, as well as other rooms in public and private buildings). Floors should be adequately protected against scratching dirt at the entrances to buildings by either floor mats or some other footwear cleaning device.

## Chemical Resistance, ASTM C650-04

Chemical resistance is measured using ASTM C650-04. A tile sample is placed in continuous contact with a variety of chemicals for 24 hours, rinsing the surface and then examining the surface for visible variation.



### COLOR SHADE VARIATIONS

The color shade or shades of all tile varies some degree from piece to piece, from each production run to run. At least several pieces from the same production run should be reviewed whenever possible to determine acceptable color shade variations. Any questions or concerns about your tile selection should be clarified prior to installation.

V1 = UNIFORM APPEARANCE: Differences among pieces from the same production run are minimal.

V2 = SLIGHT VARIATION: Clearly distinguishable differences in texture and/or pattern within similar colors.

V3 = MODERATE VARIATION: While the colors present on a single piece of tile will be indicative of the colors to be expected on the other tiles, the amount of colors on each piece may vary significantly. For example "that little bit of color" on one piece of tile may be the primary color on the next piece.

V4 = RANDOM VARIATION: Random color differences from tile to tile, so that one tile may have totally different colors from that on other tile. Thus, the final installation will be unique.