

Slip Resistance of Glass Tiles

Test Results

Each of the tiles was tested using an English XL Variable Incidence Tribometer. The tests were conducted according to the method detailed in ASTM standard F1679-04 "Standard Test Method for using a Variable Incidence Tribometer (VIT)".

Each tile was tested under both wet and dry conditions.

The detailed results are contained in Appendix A. Under dry conditions, all the tiles were registered slip index values in excess of 1.0 in all four directions, the maximum that can be measured using the English XL.



Under wet conditions, the 50, 60, 70, and 80 percent coverage tiles also registered slip index values in excess of 1.0 in all directions. The 30 percent coverage tile registered an average slip index of 0.97 and the 40 percent coverage tile registered an average slip index of 0.995.

Under both wet and dry conditions, all of the tiles significantly exceeded the threshold value of 0.50 at which level surfaces are considered to be slip resistant.

Summary

A) The six supplied glass tiles were tested according to ASTM F1679-04

B) Under both wet and dry conditions, all six tiles were slip resistant.

		30% Coverage				
		N	E	S	W	Avg.
Dry		1.0	1.0	1.0	1.0	1.0
Wet		1.0	0.94	1.0	1.0	0.97

		60% Coverage				
		N	E	S	W	Avg.
Dry		1.0	1.0	1.0	1.0	1.0
Wet		1.0	1.0	1.0	1.0	1.0

		40% Coverage				
		N	E	S	W	Avg.
Dry		1.0	1.0	1.0	1.0	1.0
Wet		1.0	0.98	1.0	1.0	0.995

		70% Coverage				
		N	E	S	W	Avg.
Dry		1.0	1.0	1.0	1.0	1.0
Wet		1.0	1.0	1.0	1.0	1.0

		50% Coverage				
		N	E	S	W	Avg.
Dry		1.0	1.0	1.0	1.0	1.0
Wet		1.0	1.0	1.0	1.0	1.0

		80% Coverage				
		N	E	S	W	Avg.
Dry		1.0	1.0	1.0	1.0	1.0
Wet		1.0	1.0	1.0	1.0	1.0

Availability

Glass Thickness: 3mm (1/8") to 19mm (3/4") for monolithic pieces. Thickness for laminated glass to be determined by weight restrictions.

Patterns: Large selection of in-house patterns and comprehensive graphics department for creating custom patterns.

Colors: Traction Control Frit is Translucent, however, it can be tinted or applied over top of other Ceramic Frit colors for added design flexibility.

Edge work: Standard edge for screen printed glass is a seamed edge. Polishing and grinding are also available.

Fabrication: Fabrication for installation and hardware available.

Applicable Industry Standards

ASTM C1036 - Standard Specification for Flat Glass
 ASTM C1048 - Standard Specification for Heat-Treated Flat Glass-Kind HS, Kind FT Coated and Uncoated Glass
 ASTM C1172 - Standard Specification for

Product Specification for Traction Control Flooring

We have conducted tests to assess the slip resistance of the three supplied glass tiles. When the three tiles were received at our laboratory, two were identified on the bottom as "86 Mesh" while the other was identified as "156 Mesh".

For the purpose of our analysis, the two tiles identified as "86 Mesh" were arbitrarily identified as "A" and "B".

Test Results

Each of the tiles was tested using an English XL Variable Incidence Tribometer. The tests were conducted according to the method detailed in ASTM Standard F1679-04 "Standard Test Method for Using a Variable Incidence Tribometer (VIT)"

Each tile was tested under both wet and dry conditions.

Under dry conditions, the average measured values of the slip index were:

Tile Identification	Average Slip Index
86 Mesh - A	>1.0
86 Mesh - B	>1.0
156 Mesh	>1.0



The measured slip index of all the tiles exceeded the threshold value of 0.50 required to be considered slip resistant.

The slip index of all the tiles was then measured under wet conditions. The Average measured values of the slip index were as follows:

Tile Identification	Average Slip Index
86 Mesh - A	>1.0
86 Mesh - B	>1.0
156 Mesh	>0.78



Under wet conditions, both of the "86 Mesh" tiles were less slippery than the "156 Mesh" tile. However, the measured slip index of all three tiles was well in excess of the threshold value for slip resistance.

Summary

- a) Three supplied glass tiles were tested according to ASTM F1679-04
- b) Under both wet and dry conditions, all three tiles were slip resistant.

