



**H. C. NUTTING**

**A Terracon COMPANY**

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N1091338 mdw

Mr. Greg Ohlinger  
IntellaPro Technologies  
6632 E Culver Street  
Scottsdale, Arizona 85257

**RE: IntellaTread Slip Resistance Testing**

Dear Mr. Ohlinger:

Submitted herewith are the results of the slip resistance testing performed on November 6, 2009, on two ceramic tile floor surface samples delivered to the HCN laboratory. The testing was performed utilizing the English XL Variable Incidence Tribometer (VIT), and was conducted in accordance with ASTM F 1679-04, "Standard Test Method for Using a Variable Incidence Tribometer (VIT)".

The tiles were ceramic floor tiles as are available at any major home improvement center or in common use where "ceramic tiles" are in use. One tile was tested 'as is' with the normal out of the box factory surface finish. The other tile was treated with an application of IntellaTread, allowed to cure, and then tested. Testing was performed in the same manner on both samples. There was no discernable difference in the appearance of the "treated" and "untreated" tiles.

Testing was performed on the standard ceramic tile measuring 12" x 12", under both 'dry' and 'wet' floor surface conditions. The English XL VIT test foot surface utilized was fitted with a standard "Neolite (Goodyear™)" test liner/pad and is the industry standard testing material. Results are presented in the accompanying tables below.

**SLIP RESISTANCE INDEX VALUES ON 'DRY' SURFACE**

Test No.	Sample	North	East	South	West	Dry Average
1	Untreated Tile	0.75	0.97	1.0	0.95	0.92

Test No.	Sample	North	East	South	West	Dry Average
2	Intellatread Treated Tile	1.0	0.99	0.90	1.0	0.97

**SLIP RESISTANCE INDEX VALUES ON 'WET' SURFACE**

Test No.	Sample	North	East	South	West	Wet Average
3	Untreated Tile	0.31	0.31	0.30	0.30	0.31

Test No.	Sample	North	East	South	West	Wet Average
4	IntellaTread Treated Tile	0.63	0.58	0.60	0.62	0.61

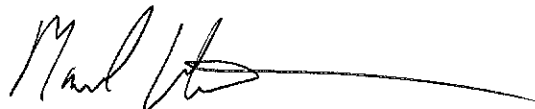
**SUMMARY SLIP COEFFICIENT INDEX VALUES**

Condition	Untreated Tile	IntellaTread Treated Tile
Dry	0.92	0.97
Wet	0.31	0.61

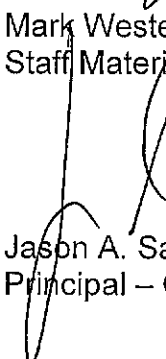
Although OSHA does not have any standards that currently mandate a particular coefficient of friction for a walking or working surface, the agency does indicate that a reasonable value of slip resistance is 0.5 or higher. This value, stated in an OSHA nonmandatory appendix, applies to a wet or dry surface. The Americans with Disabilities Act Accessibility Guidelines (ADAAG) interprets OSHA's nonmandatory appendix citing a minimum 0.5 static coefficient of friction as a recommendation on behalf of that agency. The IntellaTread treated ceramic floor tile tested with a dry slip coefficient of 0.97 and a wet value of 0.61, exceeds this referenced value.

We appreciate this opportunity to be of service to you and look forward to continuing to work with you on this project. If you have any questions please give us a call at your earliest convenience.

Sincerely,  
**H. C. NUTTING, A TERRACON COMPANY**



Mark Westermann  
 Staff Materials Engineer



Jason A. Sander, P.E.  
 Principal – CMET Manager

## MANUFACTURER'S NOTE

This test performed is a single example by the nationally recognized laboratory, H. C. Nutting, a Terracon Company (HCN). It is to be noted that the size of the tile was for testing portability and access and should have no bearing on the results as the dimensions are not relevant to the surface composition. IntellaPro Technologies is able to perform the same test and achieve satisfactory results on 99% of the floor surfaces treated with IntellaTread. With countless variations of floor types, IntellaTread performs this (VIT) test on each surface prior to actual treatment to assure compliance. IntellaPro Technologies performs these tests on site where the floor surface and environment will be unique to its own location. This testing is imperative since access of floor surface to laboratory testing is often not possible. IntellaPro Technologies endorses independent testing by HCN whenever the customer chooses to do so.

Additionally, we are able to adjust our slip resistant process to control the final coefficient of friction. As the IntellaTread treated test tile had a final 'wet test' reading of .61, we are able to dictate these numbers per the customer's requirements. As an example, .80 on ramps and around pools is what we achieve by extending our treatment time. Summarily, we control the final coefficient of friction to achieve maximum safety on all surfaces treated and will exceed safety recommendation from OSHA and ADA.

Floor types treated by IntellaTread include but are not limited to: *Ceramic, Porcelain, Quarry tile, Granite, Marble, Terrazzo, Travertine, Saltillo, Metal, Stainless Steel, Glass, Concrete, VCT, Cool Deck, Slate, and Flagstone.*

IntellaTread is not a coating that can wear off and a warranty is included. There is no discernible change in the surface appearance nor is there any change in the density, strength or durability due to the IntellaTread process.