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Epoxy & fiberglass flooring, seamless fiberglass wall systems, sealers, high performance coating systems, and industrial cleaners

INDUSTRIAL FLOORING TECHNOLOGY SERIES- #9 SLIP RESISTANCE

I hear all the time about the desire for "slip (or skid) proof flooring". DO NOT USE THIS TERM! Legally you are saying that this surface will not allow any slipping and by extension falling under ANY circumstance. So if a person falls, in this litigious society, it might come back to be your fault.. translation you pay. A competitor or ours once installed a dance floor in a bar. One late night a patron tried some amazing move and fell on his back and hurt himself. It was the fault of the floor of course .. NOT the fact that the dancer could have easily been arrested for OWI were he to try to drive. Use the term SLIP RESISTANT and have some proof that it is VS some other surface.

Better yet use the term COF coefficient of friction when comparing surfaces' walking characteristics, and let the customer make the call. Be sure to mention that this is measured (1) DRY and is the Static Coefficient of Friction(2). I use a neoprene shoe sole on the bottom of my tester to as close as possible duplicate actual walking conditions with the worst case shoe sole. The numbers are valid and reliable but should be used for comparison purposes of the various coatings against commonly known surfaces, and not as absolute numbers. So it's fair to say the slip resistance of smooth unsealed, dry, concrete is greater than that of a urethane coating. Make no assertions that the surface is somehow a "safety floor" as folks will do their utmost to prove it isn't.

WHAT TO DO IF YOU WANT SLIP RESISTANCE

1. Put in an aggregate… AVOID SAND!!
   The more and the bigger you put in the harder it will be to clean. If you use a sand sprinkle the sand, as fractured stone, will fracture more and soon come out. Use Aluminum Oxide. That works.

2. Put a coat of D'FOPYR over the surface. This is especially useful over a clear urethane glaze coat over a stained floor. The glaze coat is supposed to be clear and shiny but it will be slippery. 1-2 coats of D'FOYA will both help the walking traction and ALSO show that you have taken proactive steps to lessen the slipperiness – ie the dangerousness- of the floor.

3. Keep the surface swept and dry. Put up "slippery when wet" signs. Put mats on the floor. This is simple but SOOO often not considered.

4. There are some poly ureas that might have a softness that gives slip resistance as well as extended wear.

(1) Liquids make ANY surface more slippery ie lower the COF since they are lubricants. We do all tests dry to properly assess the surface.

(2) The COF is measured by putting a weight on a slide- 25 lb in our case- and using a spring scale putting a pull horizontally on the slide until it just moves. We do 12 of these in various places, throw out the high and the low and average the rest. This average is then divided by the weight to give COF. So if the average pull is 12.5 lb, divide this by 25 lb and you get a COF of 0.50. simple.

Tom Hennessy ChE
I hope this helps

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#1110 CLEAR EPOXY NEW	.40
#1300 CLEAR NEW	.40
#1110 RED NEW	.40
#2400 CLEAR W/SMALL TEXTURE AGENT	.39
#1300 ESD	.38
#2411 URETHANE	.37
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SQUARE 9"X9' VA TILE	.34
VINYL CHIP FLOOR NEW	.34
#2200 ALIPHATIC URETHANE -CLEAR NEW	.32
GLASS.	.32
470-300 1.25% WAX SURF-SMOOTH	.31
FORMICA	.26
1300 & 1121 TFE	.22

NOTE: COF READINGS TAKEN ON DRY SURFACES. WATER OR GREASE WILL DECREASE COF RANGES IN DIRECT PROPORTION TO THEIR AMOUNTS. JUNE 7, 2007