



CURECRETE DISTRIBUTION, INC.

Technical Services

Bulletin No. 5, Revision 2

11-22-2000

THE ASHFORD FORMULA & SLIP RESISTANCE

Prospective customers often ask if The Ashford Formula creates a slippery surface. This concern centers primarily on the perception that a shiny floor is necessarily a slippery floor. With The Ashford Formula, however, this is not true.

Under normal circumstances, the constant abrasion of traffic and use will wear away untreated concrete, creating a smooth, and potentially slippery, surface. The Ashford Formula hardens concrete to the point that it does not wear down under traffic. This hardening effect preserves the natural "roughness" or "peaks and valleys" of the concrete surface, whether they are large (as with a broom finish), or barely discernible (as with a tightly steel troweled finish). So, instead of wearing with time, a surface treated with The Ashford Formula will self-polish. The polishing effect, however, does not mean the floor becomes slippery*. The same surface profile that existed before the application of The Ashford Formula will be there afterwards, except that the surface is sealed, hardened, dust proofed, and eventually polished.

Many specifying professionals--especially engineers--are concerned with what is known as the "**co-efficient of friction**." This is a value derived from a standardized ASTM test called C-1028. In brief, this test calls for the test surface to be placed under a neolite heel assembly with a 50-lb. weight on top of it. A dynamometer is then attached to the heel-weight assembly. The tester then pulls on the assembly until it moves. The dynamometer records the force, in lbs., required to move the assembly across the test surface. That number is run through a formula that produces a coefficient of friction figure. A lower the figure indicates a more slippery floor, while a higher figure represents, a less slippery floor.

The ASTM C-1028 test references a "standard tile" with a dry coefficient of friction value of .71 and a wet value of .47. The Ashford Formula Formula-treated concrete had values of .86 and .69 respectively, significantly less slippery than the test's reference tile. The Ashford Formula samples used in the test ranged in age from three months to several years.

*** NOTE: *Any concrete surface--treated with The Ashford Formula or not --can become slippery in situations where other materials are allowed on it. Water, oil, grease, dry paper fibers, as well as other substances, can have a significant effect on how slippery a floor can become. Under such hazardous circumstances, it is advisable to exercise other precautions such as placing non-slip mats.***
