

Slip Resistance

The following is a compilation of facts regarding slip-resistance of floor finishes:

The slip resistance of floor finishes (coefficient of friction) is measured on an apparatus known as a James Machine. The results of the James Machine, when compared to actual floor condition, becomes somewhat nebulous, but it still remains the best test available. The readings measure the static coefficient of friction (slip resistance) and give a numerical rating of 0.1 to 1.0 with 0.5 being the figure set as the limit of safety. Readings higher than .5 are progressively less slippery and hence safer. Numbers progressively lower than 0.5 are more slippery and considered unsafe.

A newer generation slip resistance apparatus is the Topaka unit, which measures dynamic coefficient of friction (slip resistance).

An unfinished or unwaxed floor is very often faster (more slippery) than a finished or waxed floor. In most cases the application of finish or wax actually controls slip.

Conventional spray buffing is a major factor affecting slip-resistance. Spray buffing hardens the finish and thus speeds up the floor. There is a definite correlation between hardness and slip. Conventional spray buff (a mix of finish, water and cleaner) lowers the coefficient of slip by about 0.025 points thus speeding up the slip on the floor.

Today's modern spray buff and mop on dressing compounds such as Flashback will control the slip on a floor. After using Flashback Spray Buff or Mop on Restorer on a finished floor, the slip index will usually read 0.05 – 0.075 higher on the James scale; slowing down the floor (making less slippery). Spray buffing is a valid and economical method of floor maintenance and is here to stay, but the proper choice of chemical compounds is important in relation to safety.

Water spillage on floors creates an extremely hazardous condition. Water acts as a lubricant between the floor substrate and the bottom of the shoe. Spilled water, condensation, food and drink should be cleaned up immediately. Good quality walk off mats should be placed at entranceways to prevent rain and snow from being brought in by foot traffic.

Residual mop treatment film or residue from furniture polish, metal cleaner and lubricating sprays will greatly increase the slip on the floor surface. Avoid over-sprays onto floor. Clean up residues promptly using a good heavy-duty cleaner-degreaser.

Dust created by burnishing or dirty floors will cause a floor to become more slippery. Sweep or damp mop floors on a regular basis.

