

Epoxy grout + enzymatic no-rinse cleaners = grout disaster

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Combining epoxy grout with enzymatic cleaners in commercial kitchen settings can lead to erosion of the grout. The cleaner breaks down with sugars, fats, and proteins that collect on the grout, resulting in an acidic solution that deteriorates epoxy grout.

Warning! If you are specifying floor grouts in environments such as commercial kitchens, take note! A commonly-used floor cleaner will rapidly degrade most floor grouts, including modified-cement grouts (ANSI 118.6), high-performance cement grouts (ANSI 118.7), modified-epoxy emulsion grouts (ANSI 118.8) and even 100% solids epoxy grouts (ANSI 118.3).

Several years ago, a national chain restaurant experienced a grout-failure phenomenon in new kitchen grout installations that were grouted with a 100% solids epoxy grout. This grout failure occurred in several store locations in a very short time frame (in some instances, less than six months), with grout from various manufacturers. A study found that a new type of cleaning chemical that incorpo-

rated enzymes was used in these projects. Although harmless to the epoxy grout alone, these enzymatic cleaners accelerate the breakdown of products such as sugars, fats and proteins, which commonly appear on commercial kitchen floors.

To break down these products, the cleaner is left on the floor overnight (thus the name "no rinse"). The byproduct of the breakdown of the fats (grease) is acidic, and cumulative. After days, weeks and months of cleaner use, a highly-acid solution develops that rapidly deteriorates grouts.

I have personally been involved with several national chains and have seen firsthand the destructiveness of this product. Repairs to the floors are expensive, yet many national chains continue to require their locations to use these enzymatic cleaners.

To address this dilemma, a few grout manufacturers have developed industrial-strength epoxies that are approved for use in conjunction with these cleaners. These 100% epoxies are listed to comply with ANSI 118.5 (furan grout).

A note of caution: a new generation of accelerated enzymatic cleaners has been developed, but – to my knowledge – no grout manufacturer will warrant their epoxy grout products if used with these cleaners.

It is essential to educate the end user by consulting with maintenance- and setting-material manufacturers when selecting cleaning chemicals and grout types. This way you can be assured of a tile floor installation that will provide many years of service.

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