



CERAMIC TILE INSTITUTE OF AMERICA, INC.
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CTI FIELD REPORT 72-2-2 (R-85)

SUBJECT: UNGLAZED TILE - STAIN PREVENTION

INTRODUCTION

1. There is a growing trend to use colored grouts that contrast with tile being installed.

Examples:

Dark colored tile with white or light colored grout.

White or light colored tile with black or dark brown grout.

2. Many glazed as well as non-glazed tiles are left with noticeable grout staining in instances where contrasting grout colors are being used.
3. once stained, it is usually very difficult to remove this grout stain using conventional, industry approved methods.
4. Several manufacturers are making grout releases designed to coat and protect tiles from grout staining.
 - A. Complaints are often received that these various grout releases often prove ineffective and in some cases create even more work.
 - B. It should be noted that when using a grout release, ensure that a test area is done to determine the level of protection as well as how large of an area can be effectively grouted and cleaned with minimal effort.
5. The Ceramic Tile Institute undertook a comprehensive test program to evaluate both the manufactured grout releases as well as other marketed industry materials recommended as usable for grout releases.

DISCUSSION

Comprehensive tests were conducted through independent test laboratories. Nine different types of tile were tested. six types of grout releases were included in this test. The products marketed as a "grout release" were included in one category as one type of grout release. Other products included in this test as potential grout releases were white shellac, paraffin wax, undiluted neutral detergent liquid cleaners, acrylic finishes (synthetic liquid waxes) and penetrating sealers.

RESULTS

1. None of the manufactured grout releases worked on all of the types of tile.
2. It was obvious that some of the types of tile were easier to protect than others, and certain types of tile are most difficult to protect.
3. The product manufactured, but not sold as a grout release, also did not protect all

of the types of tile.

4. Three lb. cut pure white shellac did not protect the entire tile, and in addition, was found to be most difficult to clean off the tile.
5. The only product that protected all types of tile was paraffin wax. The wax was steamed off the surface of the tile as a method of cleanup.
6. Undiluted neutral detergent cleaners provided protection on some, but not all of the tile tested
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7. Acrylic floor finishes also provided protection to some but not all of tested tile. Floor finish may be removed by using an ammoniated type of cleaner.
8. Penetrating sealers provided protection to unglazed quarry, paver, and porcelain tiles tested.
9. It was noted during the tests that care must be used on applying all of the materials used as grout releases, including the paraffin wax. The applicator must be sure that a generous even coat of the grout release material is applied.

CONCLUSION

1. Each type of tile must be given consideration as to how the grout will affect that type of tile when grouting with contrasting colored grout.
2. If colored grout is used that is compatible, or close to the same color as the tile, it will usually not show enough to be objectionable, even though it also will penetrate the surface of the tile.
3. Paraffin wax is the best material to use as a grout release. One of the big advantages being that the removal can wait for a longer period of time.
4. None of the materials manufactured and sold as grout releases, and tried in these tests, were successful in protecting all of the types of tile.
5. Materials used as grout releases, including the paraffin wax, do not permanently protect the ceramic tile from other types of staining. It is well known that some ceramic tile, such as light colored quarry tile, will become permanently stained by dropping oils, greases and other items on them. Ceramic Tile Institute has issued Field Report CTI 72-2-2 "Quarry Tile -- Stain Prevention". This Field Report relates a treatment for stain prevention against such items as oil and grease.