CTIOA Field Report 81-1-4 (R-89)

SUBJECT: CHEESECLOTH FOR GROUTING CERAMIC TILE

A. INTRODUCTION

1. The Ceramic Tile Institute recommends the use of cheesecloth for grouting ceramic tile. The practice of grouting with a sponge is discouraged because it is felt it does an inferior job compared to cotton cheesecloth. Many of the persons who work for companies that manufacture grout also recommend the cheesecloth and no sponges.

2. Although the information has been given to use the cheesecloth instead of the sponge, little has been done to give the reasons why. There is also a lack of information on cheesecloth. This field report will supply some needed information.

B. DISCUSSION

1. CHEESECLOTH

a. Cheesecloth comes in various weights and the thread count, in two directions, known in the lengthwise direction as the warp and crossed in the other direction by the woof, is one item that determines the weight.

b. Industrial Textile Corporation has been furnishing cheesecloth to the tile trade for 30 years. They have found a thread count of 28 x 24 to be the ideal configuration for the tile trade.

c. Cheesecloth is one yard wide and is available in 100 yard bolts, 100 and 500 yard rolls and will soon be available in an 18 inch wide fold dispenser box, containing 60 square yards. The dispenser box will keep the supply clean and avoid waste.

d. Cheesecloth used for grouting must be 100% cotton and not polyester or nylon. Cotton is absorbent while the man-made fibers are not. The man-made fibers only smear the grout rather than to clean it off the tile.

e. The most important item to control when grouting is water. A minimum of water is recommended when the grout is mixed, which results in a thick trowelable consistence, not a thin, runny consistency. During grouting process, water is also kept to a minimum and this is much easier to control with cheesecloth than it is with a sponge. The water is to be cool, clean and changed frequently.
f. A pad of cheesecloth will help pack the grout into the joints, a sponge will not.
g. A pad of cheesecloth is more abrasive for removing excess grout and less water is needed. A very wet sponge is needed for removal of excess grout.
h. Ragging off the surfaces can be done with cheesecloth. TI is the practice of spreading out the damp cheesecloth and pulling it over the tile surface. Ragging off cannot be done with a sponge.
i. To obtain an excellent grout job, consistency in doing exactly the same thing throughout the entire area being grouted is needed. Cheesecloth provides the clean-up material for consistency, a sponge does not.
j. Cheesecloth allows the grout to be finished to a more uniform level with the tile edges compared to a sponge.
k. Cheesecloth leaves the grout joint cleanly finished so that when the finished installation is polished, the grout joints do not have feathery looking edges.
l. Sponges have a tendency to remove the surface portland cement and the color from the grout joints. Cheesecloth will not do this and leaves smooth joints.
m. It is a misuse of cheesecloth to moisten it with cedar oil or lemon oil prior to polishing the tile. These oils will kill the curing of the cement in the grout joints.

2. SPONGES

...Why Sponges Should Not Be Used To Grout

a. To do a "passable" job, clean up material must be firm, small celled and free of any possible contaminant. Not many sponges commonly available fulfill these three basic requirements.
b. The tendency of people to keep and re-use the sponges and use them with different colors of grout is potential cause of color contamination.
c. When poor quality sponges are purchased, they are often dyed, which is another source of contamination.
d. Overly soft sponges have a tendency to leave joints too low, and large celled sponges often leave joints uneven and not smoothly contoured.
e. Users do not thoroughly rinse soapy preservative material out of the new sponge, which is yet another source of contamination.
f. Sponges are not nearly as effective in scouring excess grout from tiles.

3. RUBBER TROWELS

a. One of our award winning finishers expresses concern on the use of the rubber trowel.
b. The concern is on the spreading and removal of excess grout; especially on non-porous or vitreous tile.
c. He uses cheesecloth to do the grouting after spreading the grout with the rubber trowel, but cautions that the rubber trowel can remove too much grout, resulting in low grout joints.
d. His further comment, "using the rubber trowel, as suggested by the manufacturer, plus finishing with a wet sponge spells disaster for most non-porous tile jobs".

4. PAPER

a. A seemingly forgotten technique in grouting is the use of dry paper prior to the final clean up with cheesecloth.
b. The paper is used on the first-time-over-the-surface, after the grout is spread. The object being, to remove excess moisture, compact grout in the joints and fill the joints up full.
c. The paper must be clean. Such paper as the inner layers of cement bags can be used. The outer layers and newspaper should not be used because of the ink. The type of paper used to wrap dishes when moving is good. Paper towels are good,
but are costly.

d. The paper will start the grout to set and this technique is especially helpful when
grouting the non-porous and vitreous tile.

e. The paper technique is also helpful in cold and wet inclement weather.

f. The final clean up is done using moist cheesecloth.

C. CONCLUSION

1. Sponges not only do an inferior grout job, but can be the source of grout contamination.

2. Overworking of grout, combined with the use of sponges and too much water in the
"tool, clean up stage" can result in the water floating out the color, which can show as a
gross distortion of the average shade of a colored grout, encompassing either the whole or
part of an application.

3. Dry paper will start the grout setting and remove moisture from the grout when
non-porous and vitreous tile are being grouted. This is also true during cold, wet,
inclement weather.

4. Cheesecloth should not be moistened with oils to control dust at the polishing stage.

5. Cotton Cheesecloth provides the ideal material for grouting.