



CERAMIC TILE INSTITUTE OF AMERICA, INC.
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CTIOA FIELD REPORT 79-3-2 (R-96)

SUBJECT: BLENDING CERAMIC TILE WITH SHADE RANGE

INTRODUCTION

- A. The cooperation and team effort of tile suppliers (manufacturers and distributors) and tile workers (tile layers and tile finishers) are needed to provide acceptable installations of ceramic tile in which shading is inherent in the tile. Outstanding installations are achieved where proper blending has been accomplished.
- B. Some specialty-type glazed tile colors have a comparatively wide variation in shades and need to be blended.
- C. The fact that this item is discussed, is, in itself, an indication that problems occur where consistent blending needed in range of shades is not done. The results are then all dark, all light, or blotches of color within a contrasting shaded field of the tiled area. On any installation, but especially on large exterior installations, this defect is very apparent and not acceptable.

DISCUSSION

- A. Tile is represented by the manufacturer to be all one shade or a blend, and the cartons in which it comes in from the factory are marked with a lot number, blend number (or shade number) and a date. Problems arise when the tile contractor purchases tile and the manufacturer has inserted a disclaimer in the packaging. The disclaimer places all responsibility for off-shade tile on the tile contractor, even though he has purchased blended tile with the cartons marked with a lot number, blend number, or (shade number) and date.
- B. Problems have developed where several orders are placed by a tile contractor without referring to previously received tile for the same project. When more than one order is placed for a single project, the lot number, date, shade, etc., should be used in order to identify the prior shipment. It is also a good practice to furnish samples of the previously received tile.
- C. When the tile contractor purchases his tile from a distributor, the cartons should be checked for lot numbers, shades, and dates. This is important because all of the tile in the particular color being purchased may not have been received from the distributor's source of supply at the same time.
- D. The tilesetter should not install tile if there is a problem with shading. Tile contractors may object to this, however, because this makes the tilesetter the inspector of the tile. Some discretion should be used by the tilesetter when installing tile with an obvious shading problem, but how far should such judgement go? In the final analysis, the tilesetter should receive approval from the owner.

the finished grouting is done and the lighting used in a new structure is in place. This type of shade variation could be seen in the manufacturer's plant, but it is very difficult to see at the jobsite.

- F. A solution to many of the blending problems which involve tile with shading characteristics is to have the tilesetter work out of many boxes at the same time, taking a few tiles from each box rather than opening a single box and using it until it is gone. This method is often used when installing natural stone tile or bricklike tile.
- G. Customers need to be shown the full range of shading in the tile to be installed on their jobs. They should not be shown just one piece of tile but a selection of samples in light and dark shades. Whenever possible the customer should be shown the tiles under the same lighting conditions that will be present when the project is completed.
- H. Even though it is not always done, the lot number, the date of manufacture, and the shade of tile in the carton all need to be stamped on the carton.
- I. Instructions would best be printed on sheets of paper and inserted on top of the tile in each carton.

CONCLUSION

Specifiers, producers, installers and end-users need to be aware of the inherent characteristics of fired ceramic products. A certain variation is to be expected, particularly in the "specialty" glazes referred to earlier.