

PRODUCT TESTING SERVICE

P.O. Box 1787 • Clemson, South Carolina 29633-1787 • Tel (864) 646-TILE • Fax (864) 646-2821 100 Clemson Research Blvd. • Anderson, SC 29625

TCA TEST REPORT NUMBER: TCA-006-98

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TEST REQUESTED BY:

The Noble Company Attn: Richard Maurer 614 Monroe Street Grand Haven, MI 49417

TEST SUBJECT MATERIAL:

NobleSeal SIS (green)

TEST DATE:

2/23/98-4/1/98

TEST PROCEDURE:

ASTM C627: "Standard Test Method for Evaluating

Ceramic Floor Tile Installation Systems Using the

Robinson-Type Floor Tester"

Materials:

A sound isolation installation over a concrete base was prepared using the following materials:

- 1) 42" x 42" x 2" concrete base with a broom finish
- 2) Noblebond 21
- 3) Mapei KER 101 Kerabond (Dry-Set Mortar)
- 4) Mapei KER 310 Keralastic (Flexible Acrylic Latex Additive)
- 5) NobleSeal SIS membrane (green)
- 6) Summitville 8 x 8 impervious porcelain pavers; Blue
- 7) Mapei KER 700 (Polymer Modified Hydraulic Tile Grout)

Base and Underlayment:

The concrete base was swept clean and wiped-down with a damp sponge. Noblebond 21 was applied to ½ of the concrete base with a 3/32 x 3/32 U-notched trowel. After allowing the Noblebond 21 to tack-up for approximately 20 minutes, Mapei KER 101 mixed with Mapei KER 310 was applied to the remaining ½ of the concrete base with a 3/16 x 5/32 V-notched trowel. A single 42" x 42" piece of NobleSeal SIS was immediately set in the adhesives, gradually smoothing by hand to remove excess air. Finally, a roller was used to further adhere the membrane to the mortar. The membrane bond coat was then allowed to cure for 24 hours before installing tile.



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Tile and Grout:

Mapei Kerabond/Keralastic was troweled over the NobleSeal SIS with a 1/4" x 3/8" U-notched trowel—first keying in the mortar with the flat side of the trowel and then combing the mortar with the notched side to form parallel ridges. Glazed porcelain paver tiles were set in the thin-set by pressing down and sliding the tile in a direction perpendicular to the combed ridges (NTCA recommended method for bonding large size tile). A beat-in block and rubber mallet were used to reduce lippage between the tile. After the tiles were set, the installation was allowed to cure for 24 hours before grouting.

Mapei KER 700, mixed with water, was forced into the tile joints with a rubber float. Excess grout was removed by holding the float at a 90° angle. The grout was allowed to set up for approximately 20 minutes before the installation was cleaned with a sponge and clean water. The grouted installation was subsequently allowed to cure for 28 days.

At the end of the cure period, the installation was subjected to cycling as defined in ASTM C627.

TEST RESULTS:

The installation completed all fourteen cycles with no evidence of damage to the tile or grout joints.

All evaluation criteria were based on 16 tile and 16 grout joints in the wheel path of the Robinson-Type Floor Tester.

CONCLUSION:

In accordance with the Performance-Level Requirement Guide of the 1999 Handbook for Ceramic Tile Installation, the installation is rated as "EXTRA HEAVY" for "Extra heavy and high impact use in food plants, dairies, breweries, and kitchens".

TEST SUBMITTED BY:

Duncan English

Technical Services Manager

5/10/99 Date