



☺: Ron Eje AMK Jr PSK  
NEW LAW

## PRODUCT TESTING SERVICE

100 Clemson Research Blvd. Anderson, SC 29625 Tel (864) 646-TILE Fax (864) 646-2821

April 18, 2008

Noble Company  
Attn: Jim Wadaga  
P.O. Box 350  
Grand Haven, MI 49417

Dear Mr. Wadaga,

Tile Council of North America has tested the samples you submitted. Test report TCNA-051-08 is enclosed. If you have any questions or concerns, please contact us.

Best Regards,

TILE COUNCIL OF NORTH AMERICA, INC.

Katelyn Simpson  
Laboratory Engineer  
Enclosures



# PRODUCT TESTING SERVICE

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TCNA TEST REPORT NUMBER: TCNA-051-08

PAGE: 1 OF 1

TEST REQUESTED BY: Noble Company  
Attn: Jim Wadaga  
P.O. Box 350  
Grand Haven, MI 49417

TEST SUBJECT MATERIAL: Identified by client as: NobleSeal CIS

TEST DATES: 4/2/08-4/4/08

**ANSI SPECIFICATION FOR CRACK ISOLATION MEMBRANES FOR THIN-SET CERAMIC TILE AND  
DIMENSION STONE INSTALLATION (A118.12)**

System Crack Resistance Test (5.4)

Specimen 1: 0.016-inches No Cracking to grout or tile  
0.032-inches No Cracking to grout or tile  
0.048-inches No Cracking to grout or tile  
0.064-inches No Cracking to grout or tile  
0.080-inches No Cracking to grout or tile  
0.096-inches No Cracking to grout or tile  
0.112-inches No Cracking to grout or tile  
0.128-inches No Cracking to grout or tile

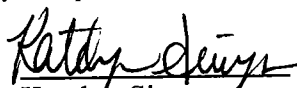
Specimen 2: 0.016-inches No Cracking to grout or tile  
0.032-inches No Cracking to grout or tile  
0.048-inches No Cracking to grout or tile  
0.064-inches No Cracking to grout or tile  
0.080-inches No Cracking to grout or tile  
0.096-inches No Cracking to grout or tile  
0.112-inches No Cracking to grout or tile  
0.128-inches No Cracking to grout or tile

Specimen 3: 0.016-inches No Cracking to grout or tile  
0.032-inches No Cracking to grout or tile  
0.048-inches No Cracking to grout or tile  
0.064-inches No Cracking to grout or tile  
0.080-inches No Cracking to grout or tile  
0.096-inches No Cracking to grout or tile  
0.112-inches No Cracking to grout or tile  
0.128-inches No Cracking to grout or tile

NOTE: Two 10 x 8 x 2-inch concrete blocks were butted together to form a 20 x 8 x 2-inch unit. The NobleSeal CIS was applied to the concrete blocks using NobleBond EXT, per manufacturer's instructions. A specific pattern of 4 x 8 x 1/2-inch quarry tiles (detailed by the method) was bonded to the NobleSeal CIS using Mapei Kerabond and Keralastic. The system was grouted using Mapei Keracolor S sanded grout. The blocks were cured for an additional 28 days.

**In accordance with ANSI A118.12 system crack resistance test, this material is classified as "high performance".**

[The ANSI A118.12 Requirement for system crack resistance states: "standard performance: tile failure occurs after 1/16" specimen gap opening, but before 1/8" gap opening. High performance: The failure does not occur by 1/8" specimen gap opening."]

  
Katelyn Simpson  
Laboratory Engineer

4/7/08  
Date