



SGS U.S. Testing Company Inc.

1341 North 108th East • Tulsa, OK 74116 • Tel. 918-437-8333 • Fax: 918-437-8487

CLIENT: The Noble Company
7300 Enterprise Drive
Spring Lake, MI 49456

Attn: Richard Maurer

Test Report No: 165865	Date: September 21, 2001
-------------------------------	---------------------------------

SUBJECT: Report of the evaluation of a Waterproof Membrane for Thin Set Ceramic Tile and Dimension Stone.

REFERENCE: Letter.

SAMPLE ID: Samples of "**Nobleseal TS Membrane**" was received from the client on 2/14/02. The samples were received in good condition.

PROCEDURE: The test sample was evaluated in accordance with ANSI A118.10-1999, "Standard Specification for Load Bearing, Bonded, Waterproof Membrane for Thin-Set Ceramic Tile and Dimension Stone Installation".

RESULTS: See test data and results on the following page.

TEST DATE: 2/20/02 – 9/2/02

CONCLUSION: The sample does comply with the requirements of ANSI A118.10-1999.

CERTIFICATION: The tests reported here were conducted under the continuous, direct supervision of SGS U. S. Testing Company Inc., Tulsa, OK.

**SIGNED FOR AND ON BEHALF OF
SGS U.S. TESTING COMPANY INC.**


Jeff Simmons
Dept. Manager/Product Evaluation

Dale E. Holloway
Tulsa Branch Director

Page 1 of 5

This report is issued by SGS U.S. Testing Company Inc. under its General Conditions for Testing Services, as printed on reverse side. SGS U.S. Testing's responsibility under this report is limited to proven negligence and will in no case be more than the amount of the testing fees. Except by special arrangement, samples are not retained by SGS U.S. Testing for more than 30 days. The results shown on this test report refer only to the sample(s) tested unless otherwise stated, under the conditions agreed upon. Anyone relying on this report should understand all of the details of the engagement. Neither the name, seals, marks nor insignia of SGS U.S. Testing may be used in any advertising or promotional materials without the prior written approval of SGS U.S. Testing. The test report cannot be reproduced, except in full, without prior written permission of SGS U.S. Testing Company Inc.

Member of the SGS Group (Société Générale de Surveillance)



SGS U.S. Testing Company Inc.

Report No.: 165865

The Noble Company

4.5 Waterproofness (ASTM D 4068-99) Pass

Test Pressure: 2 ft. water column
 Test Time: 48 hours

Neither any evidence of wetness on top of the specimens nor the formation of droplets was observed during the evaluation.

5.3 7-Day Shear Strength (ASTM C 482-1996) Pass

<u>Specimen</u>	<u>Width</u> (in)	<u>Length</u> (in)	<u>Ultimate</u> Load (lbs)	<u>Bond</u> Strength (Psi)
1	4.069	4.106	1824	109.2
2	4.153	4.043	1897	113.0
3	4.024	4.036	1766	108.7
4	4.077	4.024	1348	82.2
Average				103.3
Required				50, min.

5.4 7-Day Water Immersion Shear Strength (ASTM C 482-1996) Pass

<u>Specimen</u>	<u>Width</u> (in)	<u>Length</u> (in)	<u>Ultimate</u> Load (lbs)	<u>Bond</u> Strength (Psi)
1	3.985	4.053	1009	62.5
2	3.987	4.045	1673	103.7
3	4.009	4.026	1677	103.9
4	4.033	4.000	1109	68.7
Average	-	-	-	84.7
Required	-	-	-	50, min.



SGS U.S. Testing Company Inc.

Report No.: 165865

The Noble Company

5.5 4-Week Shear Strength (ASTM C 482-1996)

Pass

<u>Specimen</u>	<u>Width</u> (in)	<u>Length</u> (in)	<u>Ultimate</u> Load (lbs)	<u>Bond</u> Strength (Psi)
1	3.975	4.051	1209	75.1
2	3.988	4.080	1831	112.5
3	4.009	4.036	1768	109.3
4	4.008	4.015	1798	104.3
Average	-	-	-	100.3
Required	-	-	-	50, min.

5.6 12-Week Shear Strength (ASTM C 482-1996)

Pass

<u>Specimen</u>	<u>Width</u> (in)	<u>Length</u> (in)	<u>Ultimate</u> Load (lbs)	<u>Bond</u> Strength (Psi)
1	4.100	3.982	1856	113.7
2	4.085	4.049	1920	116.1
3	3.984	3.994	1435	90.2
4	4.030	4.015	1962	121.3
Average	-	-	-	110.3
Required	-	-	-	50, min.



SGS U.S. Testing Company Inc.

Report No.: 165865

The Noble Company

5.7 100 Day Water Immersion Shear Strength (ASTM C 482-1996)

Pass

<u>Specimen</u>	<u>Width</u> (in)	<u>Length</u> (in)	<u>Ultimate</u> Load (lbs)	<u>Bond</u> Strength (Psi)
1	4.017	4.014	1008	62.5
2	4.060	4.033	913	55.8
3	4.058	4.012	1251	76.8
4	3.993	4.079	1079	66.3
Average	-	-	-	65.4
Required	-	-	-	50, min.

End of Report