

NOISE REDUCTION COEFFICIENT TESTS
3100, 3120, 3141, 3144 PERFORATED PANELS
RIVERBANK ACOUSTICAL LABORATORIES (RAL)

	INSULATION	NRC	TEST DATE	RAL TEST NO.
3100 PERF.	1-1/2 in. x 1-1/2 PCF	.8	1/9/92	RAL-A92-17
3100 PERF.	1-1/2 in. x 1 PCF	.85	1/9/92	RAL-A92-18
3100 PERF.	1 in. x 1-1/2 PCF	.8	1/9/92	RAL-A92-16
3100 PERF.	1 in. x 1 PCF	.75	1/9/92	RAL-A92-15
3120 PERF.	1-1/2 in. x 1-1/2 PCF	.55	1/10/92	RAL-A92-20
3120 PERF.	1-1/2 in. x 1 PCF	.6	1/10/92	RAL-A92-19
3120 PERF.	1 in. x 1-1/2 PCF	.65	1/10/92	RAL-A92-21
3120 PERF.	1 in. x 1 PCF	.6	1/10/92	RAL-A92-22
3141 PERF.	1-1/2 in. x 1-1/2 PCF	.9	1/8/92	RAL-A92-10
3141 PERF.	1-1/2 in. x 1 PCF	.9	1/8/92	RAL-A92-9
3141 PERF.	1 in. x 1-1/2 PCF	.85	1/8/92	RAL-A92-7
3141 PERF.	1 in. x 1 PCF	.8	1/8/92	RAL-A92-8
3141 PERF*	1-1/2 in. x 1-1/2 PCF	.9	1/10/92	RAL-A92-23
3144 PERF.	1-1/2 in. x 1-1/2 PCF	.85	1/9/92	RAL-A92-11
3144 PERF.	1-1/2 in. x 1 PCF	.85	1/9/92	RAL-A92-12
3144 PERF.	1 in. x 1-1/2 PCF	.85	1/9/92	RAL-A92-13
3144 PERF.	1 in. x 1 PCF	.8	1/9/92	RAL-A92-14

NOTE: 3100, 3141, 3144 utilized a 1/16 in. dia. round hole on .216 in. staggered reverse centers. Open area = 7.5%.

3120 utilized a 9/16 in. dia. round hole on 1-5/16 straight centers with an unperforated border of 2-7/16 in. Open area = 9.9%.

* Panels only--No grid was used for comparison to RAL-A92-10..

All insulation used was encapsulated with a 2.25 mil thick plastic bag.

15/16 in. wide grid was used to frame each panel in all tests except RAL-A92-23 where no grid was used.



SGS U.S. Testing Company Inc.

US-D-075-04-03.T

Report No.:

149468

DATE: December 14, 2000

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CLIENT: Tri-City Insulation Distributors Inc.

INTRODUCTION:

This report presents test results of Flame Spread and Smoke Developed Values per ASTM E-84-98. The report also includes Material Identification, Method of Preparation, Mounting and Conditioning of the specimens.

The tests were performed in accordance with the specifications set forth in ASTM E-84-98, Standard Test Method for Surface Burning Characteristics of Building Materials, both as to equipment and test procedure. This test procedure is similar to UL-723, ANSI No. 2.5, NFPA No. 255 and UBC 42-1.

The test results cover two parameters: Flame Spread and Smoke Developed Values during a 10-minute fire exposure. Inorganic cement board and red oak flooring are used as comparative standards and their responses are assigned arbitrary values of 0 and 100, respectively.

PREPARATION AND CONDITIONING:

Sections of the material were arranged to form a 24" x 24'0" sample. The sample was laid on a 2-inch galvanized hexagonal wire mesh, supported by steel rods spanning the width of the tunnel.

The sample was conditioned at 73° ± 5° Fahrenheit and 50 ± 5% relative humidity.

TEST PROCEDURE:

The tunnel was thoroughly pre-heated by burning natural gas. When the brick temperature, sensed by a floor thermocouple, had reached the prescribed 105° Fahrenheit ± 5° Fahrenheit level, the sample was inserted in the tunnel and test conducted in accordance with the standard ASTM E-84-98 procedures.

The operation of the tunnel was checked by performing a 10-minute test with Inorganic board on the day of the test.

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