



Interior Dream Line Series Submittal Package



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Summary of Documents Submitted

- Section A: Section A provides information about the EAS Interior Dream Line Series. Included in this section are the product specifications, acoustical performance overview, quality assurance, warranty information, product data sheets, etc.
- Section B: Section B provides information on the packaging of panels, instructions on receiving and storage of panels, material handling and installation of the panels.
- Section C: Section C provides a brief overview on the durability and advantages of EAS products. .
- Appendices: 1. Acoustical Reports.
2. Mineral Rock Wool Specifications.



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Section A: Interior Dream Line Series

(Empire Interior Dream Line Series)

- The EAS Interior Dream Line Series is engineered for interior applications where sound absorption and elegance of design is crucial. The Interior Dream Line Series excellent acoustical performance makes this series of panels the ideal choice for your interior noise control needs.
- **Acoustical Performance Standards**
 - ✓ Has Noise reduction coefficient of 1.00 when measured in accordance with the requirements of ASTM C423.
 - ✓ Has SAA = .99
- **Interior Dream Line Series**
 - ✓ Standard Panel dimensions are 24" x 48" x 2 1/8" thick.
 - ✓ The panels are crafted from 3/4 plywood and 1/8 plywood.
 - ✓ The panels are covered in an interior grade decorative cloth.
 - ✓ The panels' back tray is filled with six pound density mineral rock wool.
- **Material and Finishes**
 - ✓ **Mineral Rock Wool** (see attached data sheets) conforms to Federal Specifications HH-1-558B and ASTM Standard E-136 and has the following characteristics:
 - Has a density of 6 pounds per cubic foot.
 - Is non-hygroscopic and absorbs less than 1% water.
 - Melts above 2,000 Degrees Fahrenheit, has a **flame spread of 15** or less and a **smoke development of 0** when tested in accordance with ASTM Standard E-84, is rated incombustible by ASTM Standard E-136.
 - ✓ **Finish:** Upon customers' request, a catalogue of interior cloth color finishes can be provided.
 - 100% post-consumer recycled polyester
 - ASTM E84 Class 1 or A



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- **Quality Assurance**

- EAS products will conform to the required quality and performance standards.
- EAS panels, trims, accessories shall be installed in accordance with the approved shop drawings to ensure the required quality standards.

- ✓ **Warranty**

- EAS shall warrant for a period of one year that the panels, trims and accessories furnished by the manufacturer shall be free from defects in materials and factory workmanship.

Section D: Durability

EAS wall systems are designed to minimize costs, are light weight, easy to install, aesthetically pleasing and designed to be virtually maintenance free over the expected lifetime of a typical installation.

Standard Care Label W-S. Clean with water based cleaning agents, foam or pure, water free solvents. Vacuuming or light brushing is recommended to prevent dust and soil buildup.



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Appendices

Attached herewith are the Interior Dream Line Series Mineral Rock Wool specifications and acoustical reports.



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General Product Information:

ROXUL® products are mineral wool fibre insulations made from basalt rock and slag. This combination results in a non-combustible product with a melting point of approximately 2150°F (1177°C), which gives it excellent fire resistance properties. ROXUL mineral wool is a water repellent yet vapour permeable material.

Description & Common Applications:

The RHT® 60 product is a non-combustible, semi-rigid mineral wool insulation board that is water repellent and designed for high temperature applications where durability and some flexibility are required. Common application areas for the RHT series of board insulation are storage tank insulations, drying/oven equipment, petro-chemical and power generating equipment protection where high temperature, fire resistance, and moisture resistance are concerns.

Compliance and Performance:

ASTM C 612	Mineral Fiber Block and Board Thermal Insulation	Type IVB, Complies
MEA Approval	New York City Approval	331-97-M
City Of Los Angeles Approval		RR 25444

Fire Performance:

ASTM E 136	Behaviour of Materials at 750°C (1382°F)	Non-Combustible
CAN4 S114	Test for Non-Combustibility	Non-Combustible
ASTM E 84(UL 723)	Surface Burning Characteristics	Flame Spread = 0
		Smoke Developed = 5
CAN/ULC S102	Surface Burning Characteristics	Flame Spread = 0
		Smoke Developed < 5

Maximum Service Temperature:

ASTM C 411	Hot Surface Performance	In Compliance with ASTM C612 @ 1200°F(650°C)
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Dimensional Stability:

ASTM C 356	Linear Shrinkage	<1% @ 1200°F (650°C)
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Moisture Resistance:

ASTM C 1104	Moisture Sorption	0.01%
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Thermal Resistance:

ASTM C 518 (C 177)	R-value/inch @ 75°F	4.2 hr.ft².F/Btu***
	RSI value/25.4 mm @ 24°C	0.74 m²K/W

Corrosive Resistance:

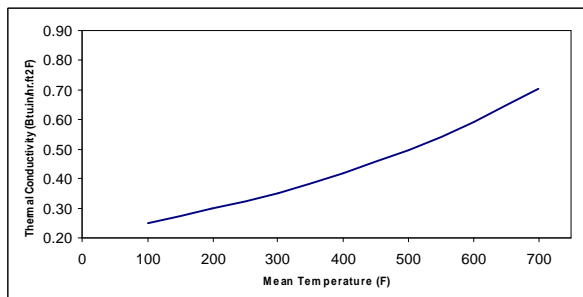
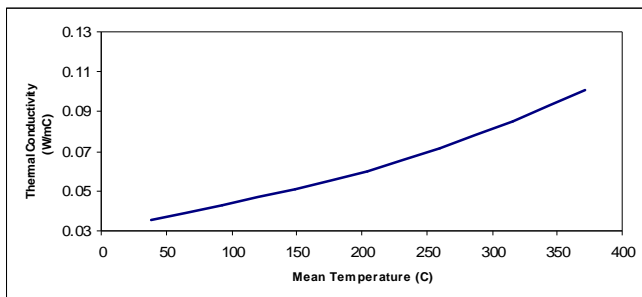
ASTM C 665	Corrosiveness to Steel	Pass
ASTM C 795 ****	Stainless Steel Stress Corrosion Specification as per Test Methods C871 and C692: U.S. Nuclear Regulatory Commission, Reg. Guide #1.36: U.S. Military Specifications MIL-I-24244 (all versions including B and C)	Conforms

Acoustical Performance

ASTM C 423 CO-EFFICIENTS AT FREQUENCIES							
Thickness	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1.5"	0.19	0.55	1.03	1.06	1.02	1.01	0.90
2.0"	0.26	0.71	1.14	1.09	1.04	1.03	1.00

*MASTER FORMAT 1995 EDITION **MASTER FORMAT 2004 EDITION
*** at the time of manufacturing

Thermal Conductivity:



Compressive Strength:

ASTM C 165 at 10%: 104 psf (5 kPa)
 at 25%: 230 psf (11 kPa)

Density:

ASTM C 612-93 - Nominal	6.0 lbs/ft ³	96 kg/m ³
ASTM C 612-09 - Actual ≥ 2" thickness	4.4 lbs/ft ³	70 kg/m ³

Dimensions:

24" (width) x 48" (length)
 610 mm (width) x 1219 mm (length)

Thickness:

Product thickness is available in 1" through 2.5" in 1/2" increments as well as 3", 4" and 5" offerings.

For additional sizes, please contact our customer service representatives.

Facing:

This product can be faced with reinforced foil. **Please note that the facing will influence the product's service temperature range.**

Key Application Qualifiers:

- Easy to install
- Service temperature 1200°F (650°C)
- Non-combustible
- Lightweight
- Can be fabricated/laminated
- Excellent thermal resistance
- Low moisture sorption
- Good compressive resistance
- Non-corrosive
- Chemically inert
- CFC and HCFC free product and process
- Made from natural & recycled materials

Other ROXUL Products:

Please consult ROXUL for all your insulation needs. We have an extensive range of products for all applications from pipe insulation to commercial products to residential batts. ROXUL invites all inquiries and will act promptly to service all of your requirements.



**** "Provisions for lot testing may be required, consult manufacturer."

Note:

As ROXUL Inc. has no control over installation design and workmanship, accessory materials or application conditions, ROXUL Inc. does not warranty the performance or results of any installation containing ROXUL Inc's. products. ROXUL Inc's. overall liability and the remedies available are limited by the general terms and conditions of sale. This warranty is in lieu of all other warranties and conditions expressed or implied, including the warranties of merchantability and fitness for a particular purpose.

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Revised: April 12, 2010
 Supersedes: March 10, 2009

Riverbank Acoustical Laboratories (RAL)TM / An Alion Science Technical Center (RAL Ver 11.0)
 Sound Absorption and Sound Absorption Coefficients
 by the Reverberation Room Method ASTM C 423-09a/E 795-08/NVLAP 08/P03

TEST NUMBER: A12-079

TEST DATE: MARCH 27, 2012

CLIENT: Empire Acoustical Systems
 DESIGNATION: Empire Interior Series Panels
 DIMENSIONS: 108" x 96" x 2"
 AREA: 72.0 ft²
 WEIGHT: 115.5 lbs AREA WEIGHT: 1.60 lbs/ft²
 MOUNTING: A EDGE SEAL: Steel
 SPECIMEN DETAILS: 8@23.75"x48"x2" - 2@12"x48"x2"

TEST ROOM DETAILS: Room 0 Volume = 10311 ft³ Area = 2864.3 ft²
 FILE NAME: A12_079_120327_A.doc

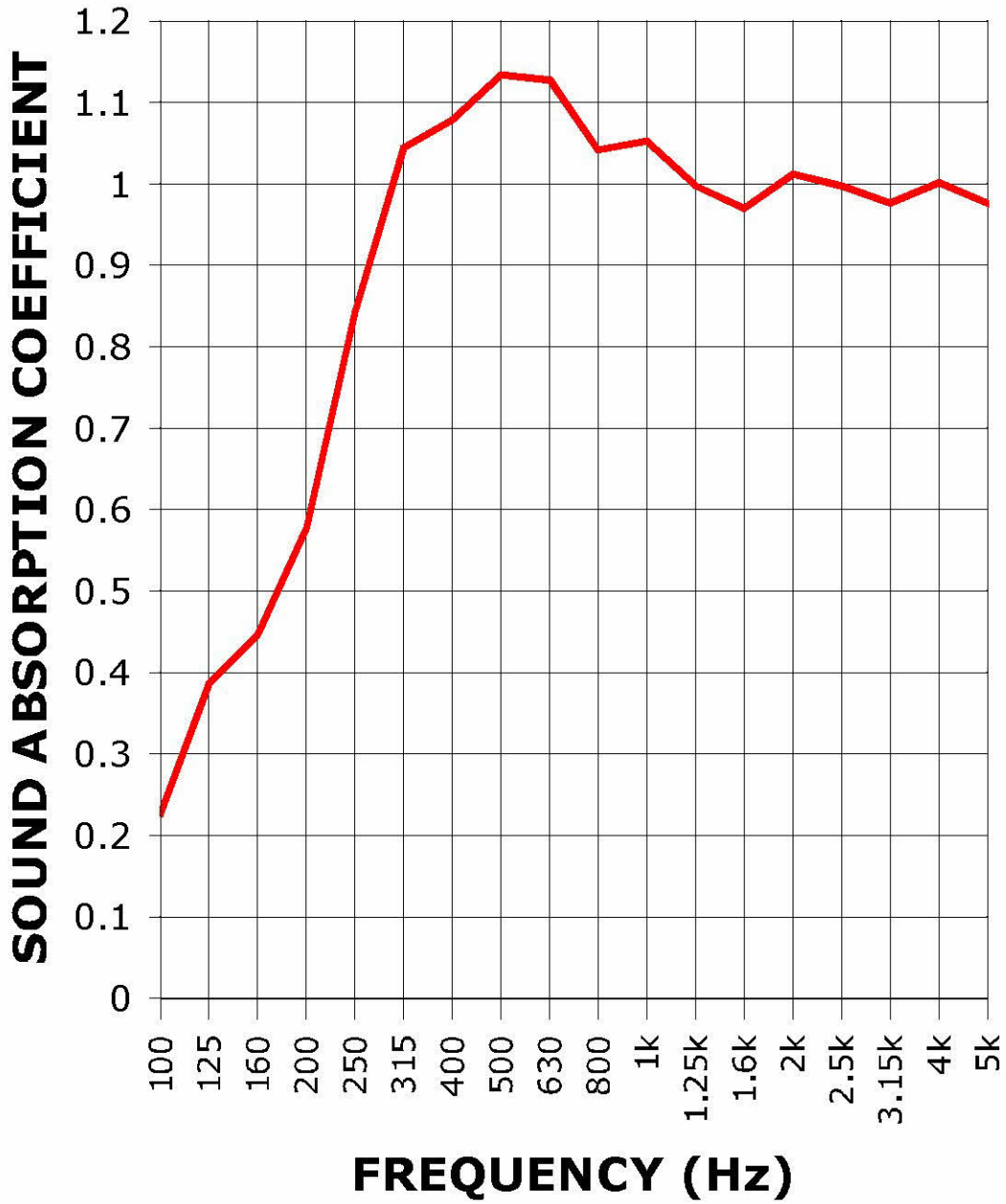
1/3 OCTAVE CENTER FREQ. (Hz)	ABSORPTION COEFFICIENT	TOTAL ABSORPTION (SABINS)
80	0.09	6.64
100	0.23	16.36
125	0.39	27.78
160	0.45	32.18
200	0.58	41.56
250	0.84	60.68
315	1.04	75.18
400	1.08	77.65
500	1.13	81.65
630	1.13	81.15
800	1.04	74.98
1000	1.05	75.78
1250	1.00	71.82
1600	0.97	69.83
2000	1.01	72.83
2500	1.00	71.82
3150	0.98	70.26
4000	1.00	72.11
5000	0.98	70.25

SOUND ABSORPTION AVERAGE [SAA] = 0.99
NOISE REDUCTION COEFFICIENT [NRC] = 1.00

Test Conducted by: Marc Sciaky

This single report page and accompanying graph contain the instantaneous raw data as provided to the client after testing of the specimen. This data, although accurate, is incomplete without the full specimen description, mounting details and signature pages. The full report referenced by the RAL test number above should be consulted for further information regarding these results.

SOUND ABSORPTION REPORT
RAL - A12-079



SAA = 0.99
NRC = 1.00