



## SUBMITTAL REVIEW

H&A JN: 1614.03  
Project: MSBA Accelerated Repair Program  
Halifax Elementary School – Windows, Doors & Siding Replacement  
464 Plymouth Street  
Halifax, MA 02338

### SUBMITTAL

08 5113-13 Mineral Wool Insulation

### ITEMS:

1. Roxul Mineral Wool Batt Insulation Product Information

### COMMENTS:

HABEEB & ASSOCIATES ARCHITECTS INC. 150 LONGWATER DRIVE NORWELL, MA 02061	
NO EXCEPTIONS TAKEN	X
NOTE MARKINGS RESUBMITTAL NOT REQ'D	
NOTE MARKINGS RESUBMITTAL REQ'D	
REJECTED	
This review is given for design concept only and does not relieve the contractor from meeting the provisions of the contract, drawings and specifications. The Contractor is responsible for verifying all dimensions, schedules, quantities and field conditions.	
DATE 03-23-18	BY SB

**To:**                      **Habeeb & Associates Architects**  
                                 **150 Longwater Drive**  
                                 **Norwell, MA 02061**

**Contractor:**            **Lambrian Construction Corporation**  
                                 **384 Washington Street**  
                                 **Westwood, MA 02090**  
                                 **Tel: (781) 461-1100      Fax: (781) 461-9885**

<b>Submittal No:</b>	<b>13</b>
<b>Date Submitted:</b>	<b>3/21/2018</b>
<b>Manufacturer:</b>	<b>ROXUL</b>
<b>Product:</b>	<b>ROXUL AFB</b>
<b>Specification Section:</b>	<b>08 5113 - Par. 2.13</b>
<b>Approved By:</b>	<i>P.L.</i>
<b>Description:</b>	<b>Mineral-Wool Fiber Insulation</b>

**COMMENTS:**

**Typical at window head & jambs only.**

**PROJECT:    Halifax Elementary School**  
**LAMBRIAN CONSTRUCTION CORP.**  
**Approved by:    *P.L.***

**WINDOWS, DOORS & SIDING REPLACEMENT**  
**HALIFAX ELEMENTARY SCHOOL**  
**464 PLYMOUTH STREET**  
**HALIFAX, MASSACHUSETTS 02338**

### ROXUL AFB®

### Acoustical Fire Batt

#### Product Description & Application

ROXUL AFB® is a mineral wool batt insulation for interior partitions in commercial constructions where superior fire resistance and acoustical performance is required.

	Performance	Test Standard																																																						
Compliance	Mineral Fiber Thermal Insulation for Buildings, Type 1 Compliant Mineral Fiber Blanket Thermal Insulation, Type 1 Compliant Mineral Fiber Blanket Thermal Insulation, Type 7 Compliant MEA Approval, New York City Approval City of Los Angeles Approval	CAN/ULC S702 ASTM C665 ASTM C553 338-97-M RR 25444																																																						
Reaction to Fire	Flame spread index = 0 ; Smoke developed index = 0 Flame spread index = 0 ; Smoke developed index = 0 Determination of Non Combustibility of Building Materials - Non Combustible Behaviour of materials at 750°C - Non Combustible Smoulder Resistance - 0.09%	ASTM E84 (UL 723) CAN/ULC S102 CAN/ULC S114 ASTM E136 CAN/ULC S129																																																						
Density	Actual Density at thicknesses ≥ 3" (76.2mm) - 2.5 lbs/ft³ (40 kgs/m³) Actual Density at thicknesses < 3" (76.2mm) - 2.8 lbs/ft³ (45 kgs/m³)	ASTM C303																																																						
Corrosion Resistance	Stress Corrosion Cracking Tendency of Austenitic Stainless Steel - Passed Corrosion of Steel - Passed	ASTM C795 ASTM C665																																																						
Air Erosion	Maximum Air Velocity 1000 fpm (5.08 m/s)	UL 181																																																						
Thickness Dimensions	1" through 4" (25.4mm - 101.6mm) in 1/2" increments as well as 5" (127mm) and 6" (152.4mm) 16" x 48" (413mm x 1219mm), 24" x 48" (610mm x 1219mm)																																																							
Acoustical Performance	<table><tr><td>Thickness</td><td>125 Hz</td><td>250 Hz</td><td>500 Hz</td><td>1000 Hz</td><td>2000Hz</td><td>4000 Hz</td><td>NRC</td><td>ASTM C423</td></tr><tr><td>1.0"</td><td>0.14</td><td>0.25</td><td>0.65</td><td>0.9</td><td>1.01</td><td>1.01</td><td>0.7</td><td></td></tr><tr><td>1.5"</td><td>0.18</td><td>0.44</td><td>0.94</td><td>1.04</td><td>1.02</td><td>1.03</td><td>0.85</td><td></td></tr><tr><td>2"</td><td>0.28</td><td>0.6</td><td>1.09</td><td>1.09</td><td>1.05</td><td>1.07</td><td>0.95</td><td></td></tr><tr><td>3"</td><td>0.52</td><td>0.96</td><td>1.18</td><td>1.07</td><td>1.05</td><td>1.05</td><td>1.05</td><td></td></tr><tr><td>4"</td><td>0.86</td><td>1.11</td><td>1.2</td><td>1.07</td><td>1.08</td><td>1.07</td><td>1.1</td><td></td></tr></table>	Thickness	125 Hz	250 Hz	500 Hz	1000 Hz	2000Hz	4000 Hz	NRC	ASTM C423	1.0"	0.14	0.25	0.65	0.9	1.01	1.01	0.7		1.5"	0.18	0.44	0.94	1.04	1.02	1.03	0.85		2"	0.28	0.6	1.09	1.09	1.05	1.07	0.95		3"	0.52	0.96	1.18	1.07	1.05	1.05	1.05		4"	0.86	1.11	1.2	1.07	1.08	1.07	1.1		
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	Please contact ROXUL for STC ratings on tested wall assemblies		ASTM E90																																																					
Fire Rated Designs	ULC Classification Code: BZJZC UL Classification Code: BZJZ																																																							



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