



# Technical Specifications Incombustible Hull Boards



## Incombustible Hull Boards

### DESCRIPTION

Incombustible Hullboards from Soundown are lightweight, semi-rigid board insulation made from felted glass fibers in a nominal density of 2.9 pcf (46.5 kg/m<sup>3</sup>). Soundown Hullboards are characterized by a low organic content, which promotes incombustibility and makes them suitable for a range of military, commercial and pleasure craft.

### Available type

Incombustible Hullboard is furnished in standard sizes of 24" x 36" (610 mm x 914 mm) and 24" x 48" (610 mm x 1219 mm) in a range of thicknesses. The insulation has a smooth surface which can be faced with a range of solid or perforated finish materials.

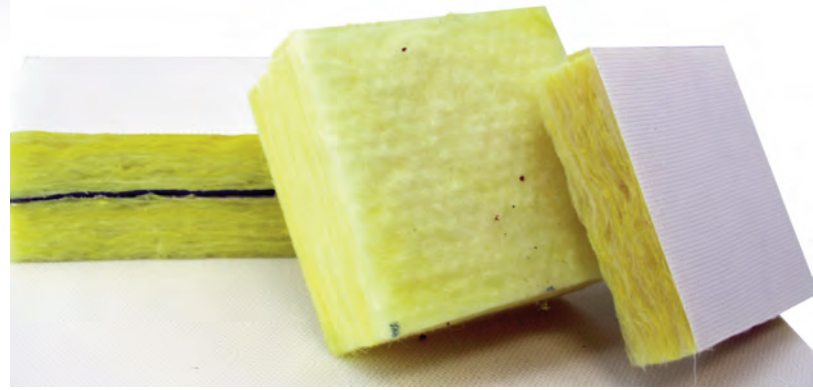
### Applications

As an incombustible material with configuration for a range of military, USCG and IMO approved applications Soundown incombustible Hullboards are suitable for any vessel or other floating application where fire rated materials are required. Soundown Hullboards are designed specifically to provide thermal and acoustical insulation on hulls, bulkhead and deckheads aboard this wide range of vessels.

### Advantages

**High Thermal Performance.** With a low "k" factor of 0.23 Btu•in/(hr•ft<sup>2</sup>•°F) at 75°F mean temperature (0.033 W/m•°C at 24°C), Incombustible Hullboard is highly effective in reducing heat transfer.

**Lower Fuel Contribution.** When compared to standard hullboard not approved as incombustible, heat potential test results show that the total number of heat units (Btu's per lb.) released by Incombustible Hullboard are 50% less. These test results indicate the potential for a substantially greater degree of safety at sea.



**Fast Installation.** The resilient, semi-rigid insulating board is easy to cut and fit, and can be fabricated with minimal time and effort. The standard sizes available help save cutting and trimming time and reduce waste. Kerfing "Vee grooves" for beam insulation can be handled cleanly on cutting tables

### Specifications \*

Incombustible Hullboard complies with current military specification requirements for a MIL-I-742F, Type II; ASTM C 1139, Type I & II, Grade 6 and has been given U.S. Coast Guard approval

Incombustible Hullboard can be fabricated with waffleboard and perforated glass cloth as acoustic absorptive Board per Section 3.2.1 of MIL-A-23054A or non perforated glass cloth face to comply with MIL-I-742F, type I.

Certificate of Approval No. 164.109/46/0. (ASTM C 1139 replaced MIL-I-22023D).

Note: At times, a formal certificate of compliance is required to verify that a product meets an outside specification. In such instances, the request for the required certificate must be made at the time the order is placed.



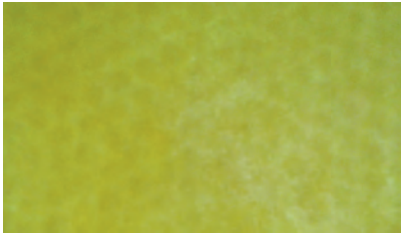
\* specification refer only to unfaced product

8" ID (203.2mm) ENGINE EXHAUST PIPE

<b>SOUNDOWN</b> SOUNDOWN CORP. <small>17000 200th Ave          Everett, WA 98203          TEL: 425-336-1100          FAX: 425-336-1101</small>		<b>SOUNDOWN CORPORATION</b> <b>ACOUSTIC INSULATION DETAIL</b>	
OWNER: K. HERTZ	DATE: 06/10/10	ENGINE NO: 1010	
SCALE: NONE	DATE: 06/10/10	DRAWN: [blank]	CHECKED: [blank]
<a href="http://www.soundown.com">http://www.soundown.com</a>		2013.2.A	

## Configuration: Unfaced

Mil Spec(s): Mil-I-742(F) Ty II  
Mil-I-22023(D) Ty I & II cl 6



### Acoustic Performance

Thickness		Frequency, Hz							
in	mm	125	250	500	1000	2000	4000	NRC	
1	25	0.06	0.29	0.75	0.99	1.04	1.02	0.75	
2	50	0.24	1	1.11	1.08	1.06	1.05	1.05	

### Thermal Performance

Thickness		Frequency, Hz	
°F	°C	Btu in/(hr * ft <sup>2</sup> * °F)	W/m <sup>2</sup> °C
75	24	0.23	0.033
100	38	0.25	0.036
200	93	0.31	0.045

## Configuration: Fiberglass Cloth Facing

Mil Spec(s): Mil-I-742(F) Ty I



### Thermal Performance

Thickness		Frequency, Hz	
°F	°C	Btu in/(hr * ft <sup>2</sup> * °F)	W/m <sup>2</sup> °C
75	24	0.23	0.033
100	38	0.25	0.036
200	93	0.31	0.045

## Configuration: Waffle Board & Perforated Glass Cloth Facing

Mil Spec(s): Mil-A-23054(A)



### Acoustic Performance

Thickness		Frequency, Hz							
in	mm	125	250	500	1000	2000	4000		
1	25	0.1	0.3	0.76	1.02	1	0.81		
2	50	0.39	0.83	1.2	1.08	0.94	0.88		

## Configuration: Other Facings

Soundown offers a range of additional fire resistant facing applied to our Incombustible Hull Board. Ask your Soundown rep for the best option for your application