



### Incombustible Hullboard

#### Fiber Glass Board Insulation

#### Description

Incombustible Hullboard from Johns Manville is a 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>). Incombustible Hullboard is characterized by a low organic content, and was the first incombustible type hullboard to be developed for use in the marine industry.

#### 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 is suitable for facing with glass cloth or can be combined with waffleboard.

#### Applications

Incombustible Hullboard is designed specifically to provide thermal and acoustical insulating control for the hull and deck-heads aboard naval and merchant vessels and drilling rig platforms.

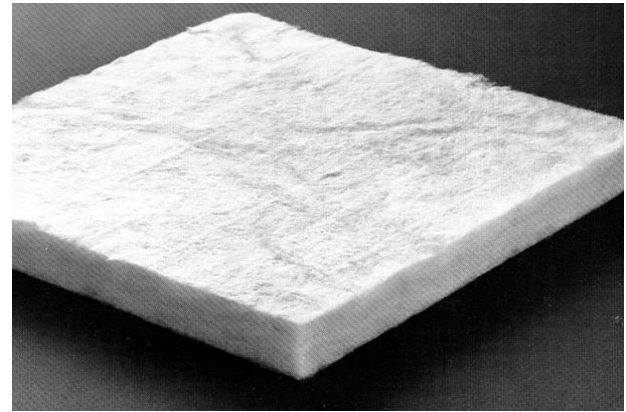
#### Advantages

**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.

**Specification Compliance.** Johns Manville Incombustible Hullboard marine insulation complies with all current, applicable standards.

**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 by using either hand tools or mechanical devices.



**Operating Temperature Limit:** 450°F (232°C)

#### Thermal Conductivity

Nominal Density 2.9 pcf (46.5 kg/m<sup>3</sup>)

Mean

Temperature		Thermal Conductivity	
°F	°C	Btu·in/(hr·ft <sup>2</sup> ·°F)	W/m·°C
75	24	0.23	.033
100	38	0.25	.036
200	93	0.31	.045

#### Sound Absorption Coefficients

Complies with MIL-I-22023D Requirements

Mounting Type A (Flat on the floor) Formerly No. 4

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	51	0.24	1.00	1.11	1.08	1.06	1.05	1.05

\*Noise Reduction Coefficient

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### Specifications

Incombustible Hullboard can be used in combination with waffleboard and perforated glass cloth for fabricating Acoustic Absorptive Board per Section 3.2.1 of MIL-A-23054A.

Incombustible Hullboard complies with current military specification requirements for a MIL-I-742G, Type II; ASTM C 1139, Type I & II, Grade 6 and has been given U.S. Coast Guard 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. Should outside testing be a condition for certification, a charge is made to cover test expenses.



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The physical and chemical properties of Incombustible Hullboard represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Regional Sales Office nearest you to assure current information. **All Johns Manville products are sold subject to Johns Manville's Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville Limited Warranty and Limitation of Remedy, call the 800 number below.** For information on other Johns Manville thermal insulations and systems, and a copy of the Spec-Line® CSI formatted specification, call **1-800-654-3103**.