

Description

Knauf Hullboard is a light-weight insulation board of 3.7 ounces per square foot per inch thickness with one surface designed to have either glass cloth facing applied in a fabricator's facility or brattice cloth applied by marine insulation applicators in the field.

Application

Knauf Hullboard has a low thermal conductivity of 0.23 BTU·in./hr·sq.ft.·°F at a mean temperature of +75°F (+24°C). It is designed for use as a thermal insulation for bulkheads, beams, decks, shell plating and ducts aboard Naval, Coast Guard and domestic ships.

Features and Benefits

Knauf Hullboard is easy to fabricate and install and can be kerfed per the requirements of Military Specification MIL-I-742F to fit irregular surfaces. The product resists the effects of vibration and slumping, providing an in-place performance that meets all required standards. The product is moisture resistant and is not damaged by temporary exposure to fresh or salt water. The product also will not provide sustenance to vermin, will not rot and has no objectionable odor.

Specification Compliance

In U.S.:

- MIL-I-742F, Type II
- MIL-I-24244C (SH)
- MIL-A-23054 (SH) – Baseboard Component
- MIL-I-22023D, Type III – Baseboard Component
- ASTM C 795
- NRC Reg. Guide 1.36
- HH-I-558B (Amendment 3)
 - Form A, Class 1 & 2
 - Form B, Class 7
- MIL-I-15475 (SH)
- ASTM C 612; Type II
- ASTM C 1139; Type I, Type II Grade 6
- USCG 164.109/16/0

Canada:

- T.C. 270.F1.324 (Canadian Coast Guard)

Technical Data

Surface Burning Characteristics (ASTM E 84)

- The product does not exceed:
 - 25 Flame Spread
 - 50 Smoke Developed

Combustibility (USCG 164.109)

- The product is rated as noncombustible.

Alkalinity (MIL-I-742F)

- Less than 0.6 percent equivalent Na₂O, the pH does not exceed 11.7.

Water Vapor Sorption (ASTM C 1104)

- Less than 3% by weight.

Application and Specification Guidelines

Knauf Hullboard is manufactured to be used by fabricators for facing with glass cloth for use on ships. The material can also be applied plain or field-finished with brattice cloth in lieu of pre-faced material for retrofit applications.

The product can be kerfed either by rotary sawblade, groove cutters or hand grooving tools to accommodate I-beams, duct work or other special requirements.

The board can be impaled over fasteners which are pre-welded in position between stiffeners, generally 12" (305 mm) on center and 3" (76 mm) from the longitudinal and horizontal joints of the insulation board. The fabricated boards can be finished with approved tapes and caps as per specification requirements.

Caution

Fiber glass may cause temporary skin irritation. Wear long-sleeved, loose-fitting clothing, head covering, gloves and eye protection when handling and applying material. Wash with soap and warm water after handling. Wash work clothes separately and rinse washer. A disposable mask designed for nuisance type dusts should be used where sensitivity to dust and airborne particles may cause irritation to the nose or throat.

During initial heat-up to operating temperatures above +350°F (+177°C), an acrid odor and some smoke may be given off as a portion of the bonding material used in the insulation begins to undergo a controlled decomposition. If natural convection is not adequate in confined areas, forced ventilation should be provided in order to protect against any harmful fumes and vapors that might be generated.

Fiber Glass and Mold

Fiber glass insulation will not sustain mold growth. However, mold can grow on almost any material when it becomes wet and contaminated with organic materials. Carefully inspect any insulation that has been exposed to water. If it shows any sign of mold it must be discarded. If the material is wet but shows no evidence of mold, it should be dried rapidly and thoroughly. If it shows signs of facing degradation from wetting, it should be replaced.

Notes

The chemical and physical properties of Knauf Hullboard represent typical average values determined in accordance with accepted test methods. The data is subject to normal manufacturing variations. The data is supplied as a technical service and is subject to change without notice. References to numerical flame spread ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions.

Check with your Knauf sales representative to assure information is current.

Hullboard

Submittal Date _____



Sizes		
Thickness	Width	Length
1" (25 mm)	24" (610 mm) and 48" (1219 mm)	36" (914 mm) and 48" (1219 mm)
1½" (38 mm)		
1¾" (44 mm)		
2" (51 mm)		
3" (89 mm)		
4" (102 mm)		
Tolerances		
± 1/8" (3.2 mm)	± 1/8" (3.2 mm)	± 3/32" (2.4 mm)

For availability of made-to-order sizes not shown above, please contact the Knauf sales representative.