



THERMAFIBER® INDUSTRIAL BOARD MINERAL WOOL INSULATION

Thermafiber® Industrial Board is an economical, rigid, mineral fiber board insulation that offers excellent thermal and acoustical performance in both hot and cold applications. It conserves energy, maintains process temperatures, designed to prevent condensation, and reduces noise emission and transmission. It is available in nominal densities from 4 to 12 lb./cu. ft. and is suitable for temperatures up to 1,200°F (649°C). On initial startup only, heat rise should not exceed 15°F per minute to allow binder to dissipate without excessive temperature rise. Thermal conductivity is not affected.

Features

- Used in continuous service up to 1,200°F (649°C)
- Easily fabricated and installed
- Noncombustible
- Excellent thermal performance and resiliency
- Dimensionally stable at elevated temperatures
- Noncorrosive
- Wide range of densities and dimensions available

Standards, Codes Compliance

- ASTM C612, Mineral Fiber Block & Board Thermal Insulation:
 - Industrial Board 40: Types IA, IB, II, III, IVA
 - Industrial Board 60: Types IA, IB, II, III, IVA, IVB
 - Industrial Board 80: Types IA, IB, II, III, IVA, IVB
 - Industrial Board 100: Types IA, IB, II, III, IVA, IVB
 - Industrial Board 120: Types IA, IB, II, III, IVA, IVB
- Doesn't contain the fire retardant decabrominated diphenyl ether (decaBDE)

Availability

For product availability, please contact your local Owens Corning Area Sales Manager.

Physical Properties

PROPERTY	TEST METHOD	VALUE
Nominal Density	ASTM C303	Industrial Board 40 4.0 pcf Industrial Board 60 6.0 pcf Industrial Board 80 8.0 pcf Industrial Board 100 10.0 pcf Industrial Board 120 12.0 pcf
Maximum Use Temperature ³	ASTM C411	up to 1,200°F (649°C)
Linear Shrinkage	ASTM C356	<2.0% at 1,200°F (649°C)
Water Vapor Sorption	ASTM C1104	<3.0% by weight at 120°F (49°C), 95% R.H.
Fungi Resistance	ASTM C1338	Pass – No Growth
CORROSION RESISTANCE	TEST METHOD	VALUE
Corrosion to Copper, Aluminum, and Steel	ASTM C665 and ASTM C1936	Pass
Corrosion to Steel	ASTM C1617	Pass
Stress Corrosion Evaluation on external stress corrosion cracking tendency of austenitic stainless steel ⁴	ASTM C795 and ASTM C692	Pass
Chemical Analysis for Cl ⁻ , F ⁻ , Na ⁺ , SiO ₃ ⁴	ASTM C795 and ASTM C871	Results fall within acceptability limits
Nonmetallic Thermal Insulation ⁴	NRC 1.36	Complies
FIRE	TEST METHOD	VALUE
Noncombustibility	ASTM E136 and CAN/ULC S114	Complies
Surface Burning Characteristics ⁵	UL 723, ASTM E84, and CAN/ULC S102	Flame Spread Index 0 Smoke Developed 0

³ Test thickness at 4" (102 mm).

⁴ Preproduction qualification testing complete and on file. Chemical analysis of each production lot required for total conformance. Certification needs to be specified at time of order.

⁵ The surface burning characteristics of these products have been determined in accordance with UL 723, ASTM E84, and CAN/ULC-S102. Values are reported to the nearest 5 rating.

Installation

Thermafiber, Inc. recommends mechanical attachment of Industrial Board products unless in an enclosed panel.

Thermafiber® Industrial Board is not recommended for use on commercial building applications, and the use should be limited to industrial and mechanical equipment applications.

Please contact your sales representative or GETTECH@owenscorning.com for further questions.

Thermal Conductivity

MEAN TEMPERATURE °F	TESTED TO ASTM C177 K-VALUE – (BTU · IN/HR · FT² · °F)							
	75°	100°	200°	300°	400°	500°	600°	700°
Industrial Board 40	0.24	0.26	0.34	0.42	0.52	0.63	0.76	0.92
Industrial Board 60	0.22	0.24	0.29	0.35	0.42	0.50	0.59	0.71
Industrial Board 80	0.23	0.24	0.29	0.35	0.42	0.50	0.59	0.71
Industrial Board 100	0.23	0.24	0.28	0.33	0.38	0.44	0.51	0.60
Industrial Board 120	0.24	0.25	0.29	0.33	0.38	0.44	0.52	0.60

Acoustical Performance

PRODUCT ⁶	TESTED TO ASTM C423 & E795 SOUND ABSORPTION COEFFICIENTS AT OCTAVE BAND CENTER FREQUENCIES (Hz)						
	125	250	500	1000	2000	4000	NRC
Industrial Board 40	0.19	0.83	1.20	1.14	1.04	1.09	1.05
Industrial Board 60	0.22	0.98	1.17	1.11	1.03	1.02	1.05
Industrial Board 80	0.20	1.00	1.16	1.11	1.03	0.99	1.10

Test conducted per ASTM C423 utilizing ASTM E795 Type A mount by an accredited laboratory

THICKNESS	PRODUCT: INDUSTRIAL BOARD 80 SOUND ABSORPTION COEFFICIENTS AT OCTAVE BAND CENTER FREQUENCIES (Hz)						
	125	250	500	1000	2000	4000	NRC
1.5"	0.47	0.64	1.07	1.10	1.04	1.00	0.95
2"	0.20	1.00	1.16	1.11	1.03	0.99	1.10
3"	0.24	0.91	1.00	1.05	1.02	0.96	1.00
4"	0.67	0.83	0.91	0.99	0.99	1.01	0.95

Environmental and Sustainability

Owens Corning is a worldwide leader in building material systems, insulation, and composite solutions, delivering a broad range of high-quality products and services. Owens Corning is committed to driving sustainability by delivering solutions, transforming markets, and enhancing lives. More information can be found at www.owenscorning.com.

Certifications and Sustainable Features

- Verified by ICC-ES to contain a minimum of 70% recycled content. See ICC-ES Evaluation Report VAR-1025 at icc-es.org.
- Environmental Product Declaration (EPD) has been certified by UL Environment. For more information, visit ul.com/epd.



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Notes

For additional information, refer to the Safe Use Instruction Sheet (SUIS) found in the SDS Database via <http://sds.owenscorning.com>.