



# THERMAFIBER® INDUSTRIAL FABRICATION BOARD MINERAL WOOL INSULATION

Thermafiber® Industrial Fabrication Board is an economical, rigid, mineral fiber board insulation used for fabrication of v-groove, fittings, and precision cut pipe. Thermafiber® Industrial Fabrication Board offers excellent thermal and acoustical performance in both hot and cold applications. It conserves energy, maintains process temperatures, provides personnel protection, prevents condensation, and reduces noise emission and transmission. It is available in an actual density of 6.5 lbs/ft<sup>3</sup> 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
- Noncombustible
- Excellent thermal performance and resiliency
- Dimensionally stable at elevated temperatures
- Noncorrosive

## Standards, Codes Compliance

- ASTM C612, Mineral Fiber Block & Board Thermal Insulation, Types IA, IB, II, III, IVA, and IVB
- Doesn't contain the fire retardant decabrominated diphenyl ether (decaBDE)

## Acoustical Performance

THICKNESS	TESTED TO ASTM C423 & E795						
	125 HZ	250 HZ	500 HZ	1000 HZ	2000 HZ	4000 HZ	NRC
1.63	0.16	0.73	1.08	1.07	1.02	1.05	1.00
2.13	0.23	0.91	1.08	1.07	1.03	1.03	1.00
2.5	0.27	0.98	1.01	1.04	1.02	0.99	1.00
2.63	0.31	0.97	0.99	1.05	1.02	1.01	1.00
3.13	0.46	0.99	1.00	1.05	1.02	1.02	1.00
3.63	0.49	0.89	1.00	1.02	1.03	1.01	1.00
4.13	0.53	0.87	0.97	1.03	1.03	1.02	1.00

## Physical Properties

PROPERTY	TEST METHOD	VALUE
Density (Actual)	ASTM C303	6.5 lbs/ft <sup>3</sup> (105 kg/m <sup>3</sup> )
Maximum Use Temperature <sup>1</sup>	ASTM C411	1,200°F (649°C)
Compressive Strength (minimum) at 10% deformation at 25% deformation	ASTM C165	2" Thickness 542 lb/ft <sup>2</sup> 840 lb/ft <sup>2</sup>
Mineral Fiber Block & Board Thermal Insulation	ASTM C612	Types IA, IB, II, III, IVA, IVB
Linear Shrinkage	ASTM C356	<0.5% at 1,200°F (649°C)
Water Vapor Sorption	ASTM C1104	<0.5% by weight at 120°F (49°C), 95% R.H.
Fungi Resistance	ASTM C1338	Pass – No Growth
CORROSION RESISTANCE	TEST METHOD	VALUE
Corrosion to Steel, Copper, and Aluminum	ASTM C665	Pass
Corrosion to Steel	ASTM C1617	Pass
Stress Corrosion Evaluation on external stress corrosion cracking tendency of austenitic stainless steel <sup>2</sup>	ASTM C795 and ASTM C692	Pass
Chemical Analysis for Cl-, F-, Na+, SiO <sub>3</sub> <sup>2</sup>	ASTM C795 and ASTM C871	Results fall within acceptability limits
Non-Metallic Thermal Insulation <sup>2</sup>	NRC 1.36	Complies
FIRE	TEST METHOD	VALUE
Non-Combustibility	ASTM E136 and CAN/ULC S114	Pass: Noncombustible as defined per NFPA 220
Surface Burning Characteristics <sup>3</sup>	UL 723, ASTM E84, and CAN/ULC S102	Flame Spread Index 0 Smoke Developed Index 0

<sup>1</sup> Test thickness at: 4" (102mm).

<sup>2</sup> 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.

<sup>3</sup> 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.

Availability

For product availability, please contact your local Owens Corning area sales manager.

PRODUCT	THICKNESS <sup>4</sup>	WIDTHS	LENGTHS	DENSITY
FAB BRD VGRV	1.5"	36"	48"	7 lbs/ft <sup>3</sup>
FAB BRD VGRV	2"-6"	36"	48"	6.5 lbs/ft <sup>3</sup>
FAB BRD CUT PIPE	10"	48"	48"	6.5 lbs/ft <sup>3</sup>

4 Thicknesses are available in ½-inch increments.

Thermal Conductivity

MEAN TEMPERATURE °F	TESTED TO ASTM C177 K-VALUE – (BTU • IN/HR • FT² • °F)							
	75	100	200	300	400	500	600	700
Fabrication Board	0.23	0.25	0.29	0.34	0.40	0.47	0.55	0.65

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](http://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](http://icc-es.org).
- Environmental Product Declaration (EPD) has been certified by UL Environment. For more information, visit [ul.com/epd](http://ul.com/epd).
- Material Health Certificate from Cradle to Cradle Products Innovation Institute. For more information, visit [c2ccertified.org](http://c2ccertified.org).



Disclaimer of Liability

Technical information contained herein is furnished without charge or obligation and is given and accepted at recipient's sole risk. Because conditions of use may vary and are beyond our control, Owens Corning makes no representation about, and is not responsible or liable for, the accuracy or reliability of data associated with particular uses of any product described herein. Owens Corning reserves the right to modify this document without prior notice.

UL and the UL logo are trademarks of UL LLC.

Notes

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

**THERMAFIBER, INC.**  
ONE OWENS CORNING PARKWAY  
TOLEDO, OH 43659 USA  
**888-TFIBER1 [834-2371]**  
**[www.owenscorning.com/thermafiber](http://www.owenscorning.com/thermafiber)**