FIBERGLAS™ SCR BOARD

FIBERGLASS INSULATION

Description

Fiberglas™ SCR Insulation Board is a lightweight insulation board composed of resilient, inorganic glass fibers bonded with a thermosetting resin. SCR Board is designed specifically for use on selective catalytic reduction units (SCR) in powerplants.

Features

- Easy to handle and install, even when large size panels are used
- There is no tendency for pin-hole elongation under vibration situations, a frequent source of heat leaks in some heavier products
- SCR Board is free of shot and lighter than mineral wools with comparable thermal performance
- Boards in sizes up to 4' x 8' (1.2m x 2.4m) help to reduce the number of joints, speeding installation and eliminating potential sources of heat leakage
- May be used on flat surfaces or easily shaped around curved surfaces
- The insulation is easily impaled over welded studs or pins, or may be held in place with wire ties, metal lath or lagging
- Available in 2' x 4' and 4' x 8' sizes in thicknesses from 11/2" to 4" in 1/2" increments
- Excellent thermal efficiency contributes to lower fuel costs due to reduced heat loss

Physical Properties

PROPERTY	TEST METHOD	VALUE
Max Operating Temperature	ASTM C411	1,000°F (538°C) Max thickness, 8" (203mm)
Nominal Density	ASTM C167	2.8 pcf (43 kg/m3)
Water Vapor Sorption	ASTM C1104	<2% by weight
Surface Burning Characteristics[1]	UL 723, ASTM E84, or CAN/ULC-S102	Flame Spread < 25 Smoke Developed < 50

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

Standards, Codes Compliance

- ASTM C612 Mineral Fiber Block and Board Thermal Insulation, (Types IA, IB, II and III, Category 1)

Applications

Fiberglas™ SCR Insulation Board is intended for use on powerplant selective catalytic reduction units. SCR Board may also be used on boilers, vessels, baghouses, scrubbers, precipitators, ducts, breechings and many other types of industrial equipment operating at temperatures up to 1,000°F (538°C) at thicknesses up to 8" (203mm).

Installation

SCR Insulation Board may be installed directly on flat and curved surfaces by attaching with welded pins or studs and finishing with sheet metal lagging. Pins with speed washers or studs and nuts should be installed on 12" (300mm) x 18" (450mm) approximate centers and the insulation impaled over them. The sheet metal lagging is secured to the same fasteners. Joints of the sheet metal are offset from joints of the insulation.

SCR Board may be used to 1,000°F with a maximum thickness of 8" (203mm). Double-layer construction with staggered joints is recommended to minimize heat loss and hot spots at insulation joints. During initial heat-up to operating temperatures above 400°F, an acrid odor and some smoke may be given off as the organic binders decompose. Caution should be exercised during heat-up to properly ventilate the area.

SCR Board may also be used in H-bar or panel systems. Panels can be erected flush to heated surfaces or away from them and secured to buckstays or breeching and ductwork angle iron stiffeners.

Thermal Conductivity

MEAN TEMPERATURE ˚F	K BTU•IN/ HR•FT²•°F	MEAN TEMPERATURE °C	λ W/M•°C
75	.23	25	0.033
100	.24	50	0.037
200	.30	100	0.045
300	.37	150	0.054
400	.46	200	0.066
500	.58	250	0.081
600	.73	300	0.098

Values are nominal, subject to normal testing and manufacturing tolerances.

Thermal Performance

THICKNESS	OPERATING TEMPERATURE, ˚F (˚C)									
	450		550		650		750		850	
IN.	HL	ST	HL	ST	HL	ST	HL	ST	HL	ST
2	58	141	84	162						
3	40	125	58	141	80	159				
4	31	116	44	129	61	144	82	160	107	179
5	25	110	36	121	50	134	66	148	86	164
6	21	106	30	116	42	126	56	139	72	153
7	18	103	26	112	36	121	48	132	62	145
8	16	101	23	108	32	117	42	127	55	138
8	17	99	38	121	69	150	114	186	114	186

The above table provides approximate heat loss values (HL) Btu/hr•ft²•°F, and Surface Temperatures (ST), °F, for flat surfaces. Values are based on horizontal heat flow, vertical flat surface, 80°F ambient temperature, still air, weathered aluminum jacket with emittance of 0.2.

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

- Certified by SCS Global Services to contain an average of 53% recycled glass content, 31% pre-consumer and 22% post-consumer
- Environmental Product Declaration (EPD) has been certified by UL Environment
- For unfaced products only: Material Health Certificate from Cradle to Cradle Products Innovation Institute
- Health Product Declaration® (HPD)

Disclaimer of Liability

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