

## Product Data Sheet



### Typical Physical Properties

| Property                        | Test Method                           | Value  |
|---------------------------------|---------------------------------------|--|
| Max Operating Temperature       | ASTM C 411                            | 1,000°F (538°C)<br>Max thickness, 8" (203mm) |
| Nominal Density                 | ASTM C 167                            | 2.8 pcf (43 kg/m <sup>3</sup> )              |
| Water Vapor Sorption            | ASTM C 1104                           | <2% by weight                                |
| Surface Burning Characteristics | UL 723, ASTM E 84,<br>or CAN/ULC-S102 |  |
| Flame Spread                    |                                       | < 25   |
| Smoke Developed                 |                                       | < 50   |

\* The surface burning characteristics of these products have been determined in accordance with UL 723, ASTM E 84, or CAN/ULC-S102. These standards should be used to measure and describe the properties of materials, products, or assemblies in response to heat and flame under controlled laboratory conditions and should not be used to describe or appraise the fire hazard or fire risk of materials, products or assemblies under actual fire conditions. However, the results of these tests may be used as elements of a fire risk assessment that takes into account all of the factors that are pertinent to an assessment of the fire hazard of a particular end use. Values are reported to the nearest 5 rating.

### 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.

### Key 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 1½" to 4" in ½" increments.
- Excellent thermal efficiency contributes to lower fuel costs due to reduced heat loss.

### Product 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.

### Standards, Codes Compliance

- ASTM C 612 Mineral Fiber Block and Board Thermal Insulation, (Types IA, IB, II and III, Category I)



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### Certifications and Sustainable Features of Fiberglas™ SCR Insulation Board

- Certified by Scientific Certification Systems to contain a minimum of 57% recycled glass content

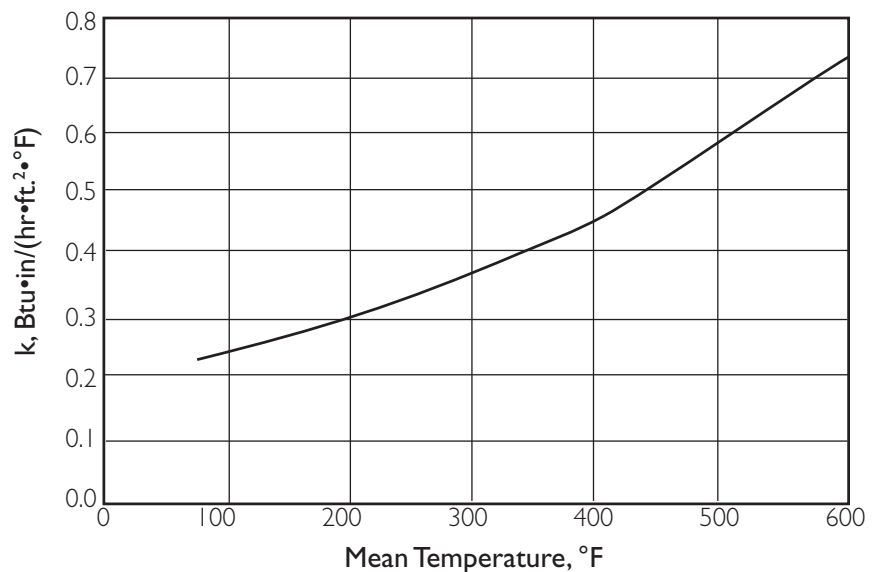
### Environmental and Sustainability

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.sustainability.owenscorning.com](http://www.sustainability.owenscorning.com).

### Thermal Conductivity

| Mean Temp, °F | k, Btu•in/(hr•ft <sup>2</sup> •°F) | Mean Temp, °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     |

Apparent thermal conductivity curve determined in accordance with ASTM Practice C 1045 with data obtained by ASTM Test Method C 177. Values are nominal, subject to normal testing and manufacturing tolerances.



### Thermal Performance

| Thickness (inches) | Operating Temperature, °F |     |     |     |     |     |     |     |     |     |
|--------------------|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                    | 450                       |     | 550 |     | 650 |     | 750 |     | 850 |     |
|                    | 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 |

The above table provides approximate heat loss values (HL) Btu/hr•ft<sup>2</sup>•°F, and Surface Temperatures (ST), °F, for flat surfaces. Values are based on horizontal heat flow, vertical flast surface, 80°F ambient temperature, still air, weathered aluminum jacket with emittance of 0.2.

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