



Datasheet English-Metric

Introduction

Next to the standard board productrange Vulcor has two very special products which are available on demand; SoliBoard X INO and SoliBoard HS. Both of these products are based on a proven RCF chemistry but engineered to provide either inorganic binding or ultimate strength.

Vulcor is offering one of the most extensive product ranges in standard high temperature board products. It is composed of 12 specially tailored boards based on Refractory Ceramic Fiber (RCF), Low Bio Persistence (LBP) fiber and Polycrystalline Wool (PCW). These 2 products complete the portfolio and let us explain what makes them special:

SoliBoard™ X INO

SoliBoard X INO is based on our SoliBoard X grade chemistry. After production we fire the product at 1200°C to create a crystalline microstructure which is minimizing the shrinkage at high temperature application, takes away the fumes and odor at first firing and most importantly improves the chemical resistance of the board.

SoliBoard™ HS

High density and high strength are easily confused. SoliBoard HS stands for High Strength and is manufactured from extra long fibers and special fillers which are improving the strength properties beyond comparison.

Like with all our other boards, the special grade boards also benefit from our continuous production process and advanced drying techniques. These enable us to produce uniform, lightweight, low shot, and stable boards with up to 100 mm thickness. These boards maintain high consistency, quality, and performance.

Whether your application requires performance at 800°C or at 1600°C, or when you have special applications we have the solution.

Type

Boards from high temperature Refractory Ceramic Fiber (RCF) insulation wool and selected fillers.

Temperature range

SoliBoard™ X INO has a classification temperature of 1315°C.

SoliBoard™ HS has a classification temperature of 1370°C.

The maximum continuous use temperature provided on the datasheet is guideline and only applicable in a clean oxidizing atmosphere.

Typical applications

- Thermal insulation for furnace linings
- High temperature back-up insulation for ladles and torpedo cars
- Tundish and launder covers in the casting of various alloys
- Insulation in tunnel kiln and holding furnaces for the ceramic industry
- Lining combustion chamber for gas fired boilers and heaters
- General technical insulation of furnaces and technical installations

Benefits

- Excellent insulation performance
- High handling strength
- Resistant to erosion from high gas velocities
- Can be used in direct flame contact
- Low shrinkage
- Excellent thermal stability





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| Dogwardia wasan wad | Constant | I India | SoliBoard™ | SoliBoard™ |
|--------------------------------|-------------|---------|-------------|------------|
| Properties measured | Standard | Unit | X INO-grade | HS-grade |
| Grade | | | RCF | RCF |
| Colour | | | white/tan | white/tan |
| Surface | | | smooth | smooth |
| Classification temperature | | °C | 1315 | 1370 |
| Continuous use temperature | | °C | 1150 | 1200 |
| Density | | kg/m3 | 360 | 450 |
| Modules of Rupture (unfired) | EN 993-6 | kPa | ≥ 550 | ≥ 800 |
| Compressive Strength (unfired) | EN ISO-8895 | | | |
| @ 10% deformation | | kPa | ≥ 250 | ≥ 300 |
| Loss on ignition | | wgt% | < 3 | < 6 |
| Permanent linear shrinkage | EN 1094-7 | % | | |
| @1100°C | | | | |
| @1200°C | | | ≤ 1 | |
| @1300°C | | | ≤ 2 | ≤ 2 |
| Thermal conductivity | ASTM C201 | W/mK | | |
| @ 200°C | | | 0,06 | 0,06 |
| @ 400°C | | | 0,09 | 0,10 |
| @ 600°C | | | 0,12 0,13 | |
| @ 800°C | | | 0,16 | 0,16 |
| @ 1000°C | | | 0,21 | 0,21 |

Contact

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Availability

SoliBoard is available in two standard formats; 1000×600 mm and 1200×1000 mm with thicknesses ranging from 6 mm all the way up to 100 mm. We offer two packaging options: durable carton boxes for manual on-site installation, and industrial packaging for automated, high-volume CNC based processing. Please find the quantities per pallet for either option:

| | Standard Packaging Boards per Pallet | | | | |
|-----------|--------------------------------------|-----------------------|-------------------|--------------|--|
| | Ş | Standard Carton Box F | Industrial Packed | | |
| Thickness | per box | 1000x600 mm | 1200x1000 mm | 1200x1000 mm | |
| 6 mm | 20 pcs | 560 | 280 | 300 | |
| 10 mm | 12 pcs | 336 | 168 | 204 | |
| 13 mm | 10 pcs | 280 | 140 | 156 | |
| 15 mm | 8 pcs | 224 | 112 | 136 | |
| 20 mm | 6 pcs | 168 | 90 | 102 | |
| 25 mm | 5 pcs | 140 | 70 | 81 | |
| 40 mm | 3 pcs | 90 | 45 | 51 | |
| 50 mm | 2 pcs | 72 | 36 | 40 | |
| 60 mm | 1 pcs | 48 | 24 | 34 | |
| 75 mm | 1 pcs | 44 | 22 | 27 | |
| 100 mm | 1 pcs | 36 | 18 | 20 | |
| | | | | | |

Product range

SoliBoard is part of an extensive product range supplied by Vulcor Insulation. Vulcor Insulation is supplying insulation solutions from ambient to high temperature applications. All products offered by Vulcor are manufactured in house or sourced from exclusive trusted $3^{\rm rd}$ party partners.

First firing

SoliBoard formulations contain a small amount of organic binder to improve cold handling strength. During the initial firing, this binder burns off, which may produce temporary fumes and odor that dissipate shortly after.

Technical support

Vulcor Insulation provides specifiers and customers with guidance on all aspects of the materials selection for their application, the installation and compliance with relevant regulations and performance standards.

For additional information about product performance or to identify the recommended product for your application, please contact the team at Vulcor Insulation.