



# H51 Cement Board

Specially developed to provide outstanding service in demanding thermal applications.

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**Product  
Description**

H51 has been specially developed to provide outstanding service in demanding thermal applications, where a quality, high strength, machineable engineering board is required. H51 is used in demanding heat and electrical insulation applications in induction furnaces, billet heater boxes, oven cladding, cathode support pads, furnaces and smelters. It is the industry standard for high temperature insulation boards and structural insulation boards.

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**Product  
Advantages**

- High Strength
  - High Machinability
  - Excellent Thermal Resistance
  - Excellent Electrical Resistance
  - High Quality Products
  - High Toughness
  - Dimensionally Stable
  - Non Combustible
  - Chemically Inert
  - Mechanical Strength at Temperature
  - Resistant to most molten metals
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**Approved Applications**

- Induction furnaces
- Billet heater boxes
- Oven cladding
- Cathode support pads
- Furnaces and smelters

Technical Data

| Property                                   | Unit               | Value |
|--|--------------------|-------|
| Density                                    | g / cm3            | 1.9   |
| Compressive strength                       | MPa @ ambient      | 70    |
|  | 24 hrs @ 350°C     | 58    |
|  | 24 hrs @ 500°C     | 56    |
| Compressive Yield                          | %                  | 5     |
| Shear Strength                             | MPa @ ambient      | 15    |
| Flexural strength                          | MPa @ ambient      | 25    |
|  | 24 hrs @ 350°C     | 23    |
|  | 24 hrs @ 500°C     | 22    |
| Impact strength                            | KJ/mm @ Ambient    | 3     |
|  | 24 hrs @ 350°C     | 2.8   |
| Linear shrinkage                           | % 24 hrs @ 350°C   | 0.3   |
|  | % 24 hrs @ 500°C   | 0.4   |
| Water absorption                           | % 24 hrs @ ambient | 12    |
| Electric strength                          | KV/mm @ 90°C       | 2     |
| Surface Breakdown                          | KV/mm @ 90°C       | 14    |
| Thermal expansion                          | 10-6 / °C          | 4.3   |
| Thermal conductivity                       | W/mK               | 0.5   |
| Maximum continuous operating temperature   | °C                 | 500   |
| Maximum intermittent operating temperature | °C                 | 600   |

Sizes

Standard sheet sizes are 1245 x 940 mm, with thickness between 6 and 75 mm. Alternatively, machined components are available on request to customer drawings.

Storage

- To be stored in a dry location
- Take care not to exceed safe working loads and heights for storage shelves and racks





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**ARCLEX**

***FEROFORM***

***FIREFLY***

**NITRASIL**

**REFEL**

**REFRACTORY  
PRODUCTS**

**REFRAVER**

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