



Ultratemp - M Board (medium density)

Ultratemp boards are inorganic, incombustible Calcium Silicate structural insulation boards. They feature a xonalite structure that results in exceptional strength and extremely low water of hydration. The materials are composed primarily of lime, silica, and reinforcing fibers. The product is white, essentially dust-free, and contains no asbestos. Ultratemp is available in thicknesses from 1/2" to 3" in 48" x 96" sheets, or cut-to-size as needed. Ultratemp materials should be specified when the following properties are required:

- Thermal shock resistance and stability
- Consistently low thermal conductivity
- High structural strength at elevated temperatures
- Incombustible
- Electrical insulating properties when dry
- Easily machinable
- Insoluble in water and non-corroding

Specifications

Composition	Monolithic Fiber Reinforced Calcium Silicate
Density	28 lb/ft ³ 449 kg/m ³
Maximum Operating Temperature	1800 °F 982 °C
Compressive Strength at 10% Deformation	900 psi 6206 kPa
Flexural Strength	550 psi 3792 kPa
Moisture Content	Normal 4 % of Dry Weight
Sheet Size	4 x 8 ft 1.22 x 2.44 m
Available Thickness	1/2 in 3/4 in 1 in 1-1/2 in 2 in 2-1/2 in 3 in

Applications

Since Ultratemp possesses both exceptional strength and insulation qualities, it can be readily machined into component parts of many sizes and shapes. Uses include fire-rated enclosures around structural steel, fire-rated walls, pipe supports, high temperature ovens, and refractory backup. The higher strength grades can be used for oven and furnace walls, structural supports, against the shell of steel ladles and torpedo cars, behind the refractory brick and ramming castable of trundages to help keep the metal at a higher temperature and protect against thermal spalling of the refractory brick. Ultratemp-S is also a cost effective material for platen press insulation.