



# Lightweight Fireproof Eco Ceramics

## Composite

Patent Pending

Lightweight Fireproof ceramics made from commercially available constituents that are nontoxic and earth friendly; component can be molded to any complex shapes.

### Performance:

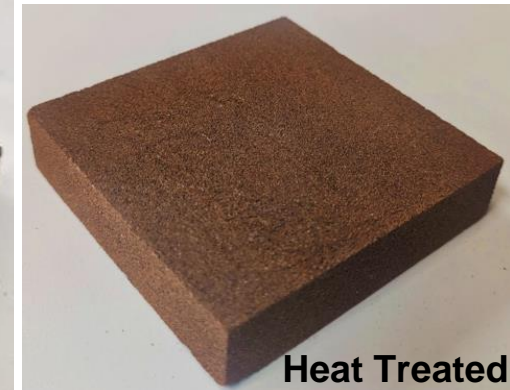
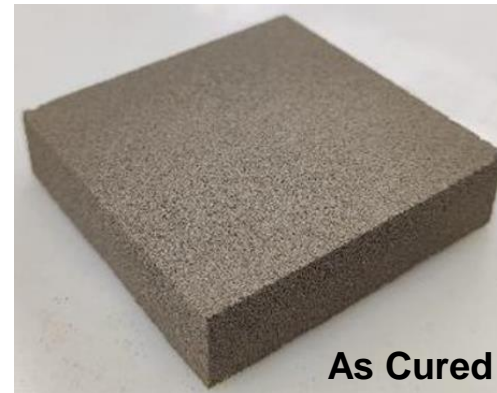
- Compression Strength: 650 to 1,000 psi
- Flexure Strength: 350 to 450 psi
- Short Beam Shear: 50 to 60 psi
- Thermal Expansion: 7 to 8 ppm/C
- Thermal Conductivity: 0.1 W/m/C
- Temperature tolerance: >1,000 C

### In Fire:

- *No ignition and no heat release*
- *Produces no smoke or toxic fumes*
- *No heat release at any heat flux*
- *No ignition and ZERO burn rate*
- Marginal strength loss in Water immersion (24-hour)
- High energy absorption in case of explosion

### Other attributes:

- Panel nailable & bondable
- Built as sandwich structure



### Targeted Applications:

- Buildings: Construction, Fire doors/Walls
- High-temperature pipe wall lining
- High-temperature/ Glass tank furnace insulation panels
- Combustion chamber insulation
- Shipping high value equipment.
- Battery Application: High heat resistant and explosion tolerant