

Product

- TPS-XTREME™ 850 is a high-temperature calcium silicate insulation board manufactured by Yantai Fanghua Insulation Engineering Co., LTD, imported exclusively by Thermal Pipe Shields and sold through a nationwide network of distribution and fabrication partners.
- Engineered to protect industrial and refractory equipment operating continuously at temperatures up to 1832°F (1000°C).
- Xonolite molecular structure provides much higher temperature and compressive resistance compared to other calcium silicate insulations.

Features

- TPS-XTREME 850 is hydraulically pressed to a bulk dry density of 53 PCF (850 Kg/m³)
- Pressing process provides a uniform and robust material matrix providing greater than 1885 psi (13.0 MPa) of compressive strength.
- Produced in board sizes ≈ 4' x 4' (1200 mm x 1200 mm) and shipped on wooden pallets.
- Offered in various board thicknesses ranging from 1/2" to 2" (13 to 51 mm).
- Used as an insulation lining in the iron and steel industries as it is able to resist the high intermediate temperatures and relatively high compressive forces within the tundish.
- Thinner layer of this product can be used to replace high alumina brick to save ladle space.

Benefits

- Provides uniform load bearing capacity throughout entire service temperature range.
- Excellent adiabatic performance
- Long-term durability with virtually no dust produced after exposure to high temperatures
- Easily fabricated with CNC equipment into OEM component parts in metal forging industry
- Available with sanded surface one or both sides
- TPS-XTREME is non-toxic and contains ZERO asbestos, mercury, sulphur, chlorine or lead.
- Used in torpedo cars, steel ladle and furnace, continuous casting tundish and foundry ladles
- Provides lower surface temperature of the shell and decreased consumption of the wear lining



Physical Properties

ASTM C302/C303 Dry Density	53 lbs. per cu. ft. (850 kg/m ³)
ASTM C165 Compressive Strength	>1885 psi @ 5% strain (>13,000 kPa)
ASTM C203 Flexural Strength	>478 psi (>5,400 kPa)
ASTM C356 Linear Shrinkage	<0.3% after soaking heat @ 1562°F (850°C)
ASTM C447 Max Service Temp	1832°F (1000°C)
ASTM E136 Non-Combustible	Passes
Loss on Ignition	10%
Moisture Content	7.5%
pH Value	7 - 9
Thermal Conductivity @ 752°F (400°C) Mean	≤0.693 BTU·in/h·ft ² ·°F (≤0.10 W/m·K)
Thermal Conductivity @ 1472°F (800°C) Mean	≤0.832 BTU·in/h·ft ² ·°F (≤0.12 W/m·K)