

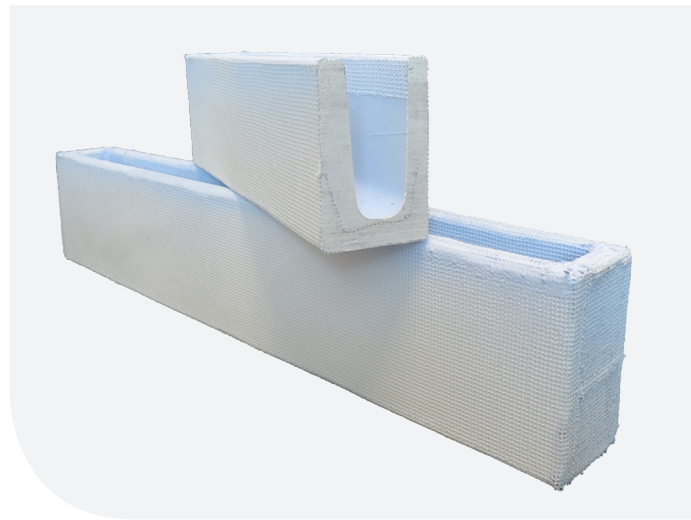
THERMOLLITE 45

INSULATING REFRACTORY SHAPES FOR MOLTEN ALUMINIUM

Thermollite 45 is a preformed, insulating refractory designed for direct contact with molten aluminium and its various alloys that does not require preheating before molten metal applications. The refractory reduces heat loss in low metal flow rate applications, and serves as an alternative to some insulating, vacuum formed and refractory ceramic fibre shapes. Thermollite 45 is available in a density range of 641–801 kg/m³ (40–50 lb/ft³) and doesn't require aluminium resistant coating for multiple casting applications.

PHYSICAL PROPERTIES

Property	Value
Density–kg/m ³ (lb/ft ³)	721 (45)
Modulus of Rupture–MPa (psi)	1.72 (249.46)
Continuous Use Temperature	850°C (1562°F)
Maximum Service Temperature	1000°C (1832°F)
Loss On Ignition–at 900°C (1652°F)	0.55%
Linear Shrinkage– at 400°C (752°F) at 730°C (1346°F)	0.11% 0.80%
Thermal Conductivity– W/m·K (BTU·in/ft ² ·hr·°F) at 540°C (1004°F) at 815°C (1500°F)	0.16 (1.11) 0.19 (1.32)



BENEFITS

- Non-wetting to molten aluminium and its alloys
- Reduced heat loss
- Thermal shock resistant
- No aluminium resistant coating required
- No alumina silicate refractory ceramic fibres
- Lightweight
- No supporting steel shell required
- Reusable for multiple casting applications

APPLICATIONS

- Continuous casting launders
- Continuous casting level feed tundishes
- Preformed molten aluminium application shapes

