FIREBLAST GLOBAL

Specification Overview

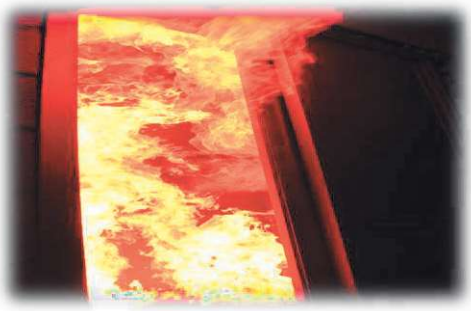
Thermablast™ Thermal Lining System

The ***Thermablast***™ Thermal Lining System is equipped with a hardboard that was developed for rugged environments. Its improved characteristics include higher strength, which equates to better durability, and greater toughness for more resistance to physical abuse. *Thermablast*™ also has significantly reduced shrinkage, so it is an extremely low shrinkage board at elevated temperatures.

Panels are available in a variety of sizes for different applications and are standardly delivered in dimensions of 2ft x 2ft. The reduced panel size reduces the expansion and contract of the material which maximizes the life span of the product.

Thermablast™ Advantages

- Reduced panel dimension/reduced expansion and contraction
- High durability
- Compatible with all steel, and concrete
- Approved for Class A and Class B fire props
- No restrictions on placement of fires within room
- Non reflective for Thermal imagining training
- Use for new construction or existing facilities
- No "drying out period" required between uses
- No environmental impact (calcium silicate product)
- Easy panel replacement
- Does not support mold growth and is water resistive
- Low Maintenance
- Cold Face temperature @1000°F is 107°F (@ 537°C is 42°C)
- Cold Face temperature @1500°F is 125°F (@ 816°C is 52°C)
- Density of 65 lbs./cuft
- Weight of system 6.4 lbs./sf
- **50 Year proven track record of performance**



Example of completely involved burn room

Thermablast™ is a complete thermal lining system comprised of a strong, machine able, non-asbestos inorganic calcium silicate board insulation mounted to an integrated framing system that provides an air gap for added thermal reduction to live fire burn rooms. The boards design allows for direct flame impingement and can be used in applications reaching 2000°F (1093°C).

Made of fibers, micro silica and a hydrothermally-produced inorganic binder, they are ideal materials for burn room protection in live fire training conditions

Manufactured for greater life and improved machining characteristics. High heat treatment removes excess water, and minimizes shrinkage that would normally occur in service.

The ***Thermablast***™ lining system provides the reliability and quality needed in your active live fire training environments. This panel has outstanding performance and continues to be synonymous with over 50 years of service.

545 Monica Circle Corona, CA 92880 T +1.951.277.8319 F +1.951.279.1705 www.fireblast.com

Installation

Thermal insulating panels and attachment materials are designed to be provided for the interior walls, ceiling, doors, and windows of the burn rooms as specified. Panels will be supported utilizing hot dipped galvanized hat channels mounted on 24" centers for ceilings and walls with door and window panels mechanically attached as required utilizing stainless steel fasteners.

Panels will be pre-cut to size and shall be 1" thick. Field modification cut will be performed as necessary to fully protect structural components. Panels include a pre-treatment to resist thermal shock and be water resistant/repellent. Panels rated for live fires in temperature ranges up to 2000 degree F. Seams and joints will include a 1" thick batten of the same material.
The insulating panels and battens will be attached to the hat channel system allowing for expansion and contraction. The fasteners of the face panels shall be adjusted to allow for movement of the panel during the heat-cool cycle.

Specifications

The ***Thermablast***™ Thermal Lining System will provide protection for burn room walls, ceiling, window and doors of concrete and steel training facilities from damage due to enclosed fires. Insulating material shall be a heat treated with a minimum of: 1" thick, 65 PCF density, 3000 psi compressive strength, possess a "K" factor of 1.92 or less at a mean temperature of 800 degrees F., and be capable of continuous service at temperature ranges to 2000 degrees F. Sub frame and wall framing system shall promote air flow behind panel to increase the thermal barrier protecting the structure.

System shall withstand repeated exposure to heat and the application of water to heated surfaces without the breakdown of insulating properties. Insulating materials shall not require "drying out' periods following the application of water nor be subject to "spalling" due to heat/moisture conditions. There shall be no restrictions placed upon use due to atmospheric conditions, ambient temperatures, Class A or B fuel source, the fire location within the room or any requirement of "special" precautions prior to ignition.

Properties Table

Density	65 lb/sf – (1041 kg/m3)
Insulating Media	Calcium Silicate
Panel Dimensions	2ft x 2ft
Panel Thickness	1 in
Sub-Framing System	Hot dipped galvanized channel
Max Operating Temperature	2000°F (1093°C).
Weight of System	6.4 lb/sf
Flexural Strength	1400 psi
Comprehensive Strength	3000 psi
Cold Face Temp @1000°F- HF	107°F - (@ 537°C is 42°C)
Cold Face Temp @1500°F- HF	125°F - (@ 816°C is 52°C)
Air Gap (Steel Building)	7 in
Air Gap (Concrete Building)	4 in
Water Resistance	Yes
Thermal Conductivity @1000°F	1.95
Thermal Image Quality	Good
Thermal Reaction	Normal
Warranty (years)	10 years

**A full set of engineered prepared installation drawings will be provided and submitted for approval, which clearly shows the panel layout, sub-framing system and attachment layout.*