



PADGENITE I™ INSULATION PERFORMANCE SPECIFICATION

PURPOSE:

The intent of this specification is to design, furnish and install an interior insulating system, enabling fire fighters to create repeated fires to 1200 degrees F. followed by extinguishment with the use of water without damage to either the structure or the system proposed.

PERFORMANCE:

Insulating panels and accessories shall be free from asbestos or other harmful ingredients, and shall not produce toxic bi-products in the course of the intended use. The panels shall be treated with a manufacturer's patented two part chemical system to protect the panels from water absorption and abrasion.

Insulating panels and accessories shall be capable of protecting the wall and ceiling surfaces of masonry, concrete or steel room, inclusive of windows, closures and doors from damage due to enclosed fires. Insulating materials shall be a minimum of: 1" thick, 46 PCF density, 800 PSI flex strength, possess a "K" factor of .81 or less at a mean temperature of 800 degrees F., and shall be capable of continuous service at temperature ranges to 1200 degrees F. Maximum temperature rating is 1800 degrees F. This maximum temperature is acceptable for a short period of time, but will decrease the panel's life if repeated regularly.

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 or ambient temperatures.

There shall be no restrictions imposed upon the nature of the Class A fuel source, the fire location within neither the room nor any requirement of "special" precautions prior to ignition.

The insulating system shall be mounted to the structure using a sub-framing system consisting of 18 gauge mounting channels securely attached to the building structure utilizing suitable fasteners. Mounting channels are mounted on 48" centers horizontally and 24" centers vertically. This sub frame will have 3 3/4" strips of insulating material attached by #6 x 1 7/8" Tek fasteners where face panels meet. Direct attachment of panels and battens to the structure will not be permitted. Door and window panels shall be mechanically attached as required utilizing standard screws and fender washers.

A full set of engineered installation drawings shall be prepared by the panel supplier, which clearly shows the panel layout, sub-framing system and attachment layout.

Materials proposed as equal to the "Padgenite" panels shall be approved seven (7) days prior to bid due date. The contractor shall provide a sample of the material, written specifications, drawing showing a typical installation with hardware clearly shown, and a MSDS.