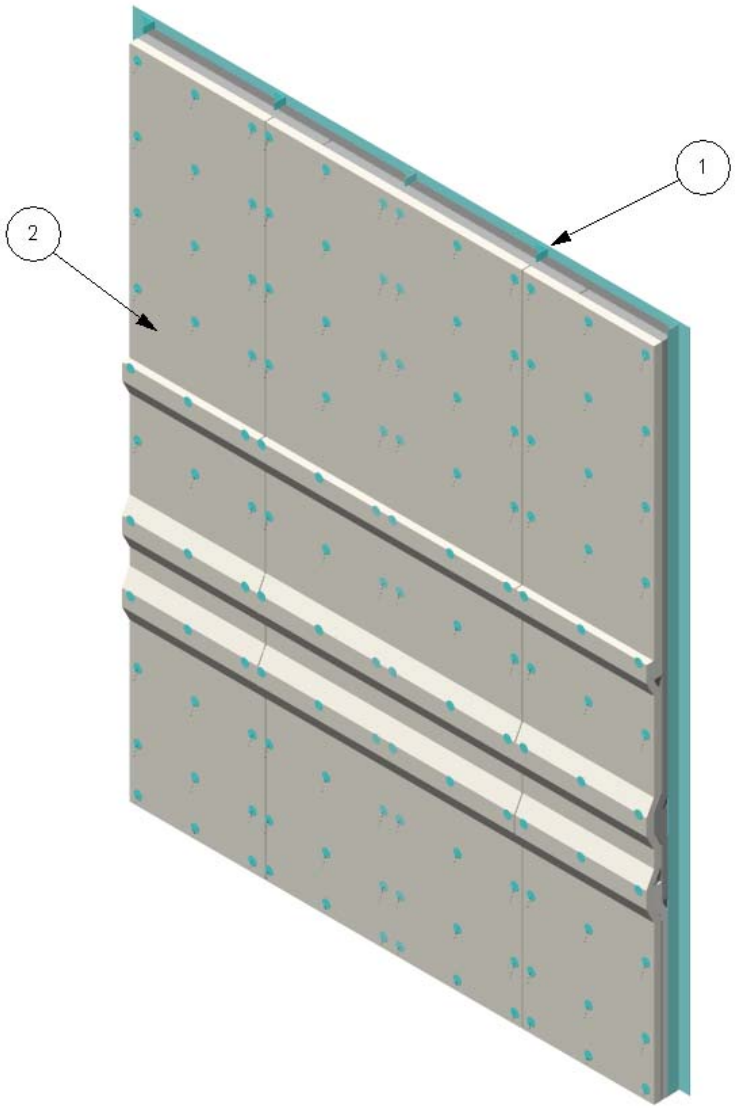
Design No. TC/BI 60-01
FIRE RATED WALL ASSEMBLY
Thermal Ceramics, Inc.
FireMaster® FastWrap XL or
Pyroscat® Duct Wrap XL
ASTM E 119-08a
Assembly Rating: 1-Hour
Non-Loadbearing Wall Assembly




1. STEEL WALL: Construct a non-loadbearing steel wall assembly consisting of 22-GA galvanized steel sheets, welded together along the vertical dimension and attached to a steel frame constructed as indicated below.

A. Construct the steel frame using 2-in. x 2-in. x 1/8-in. steel angles (stiffeners) spaced 24 in. on center oriented vertically and welded at the top and bottom to 2-in. X 1/8-in. flat stock steel. Attach the 22-GA galvanized sheet steel to the steel angles (stiffeners) with No. 10, 3/4-in.-long hex head self-tapping sheet metal screws spaced 6-in. on center along the vertical lengths of the angles.

B. Weld 6-in.-long, 12-GA mild steel copper coated pins to the 22-GA galvanized steel sheet or angle legs on the steel angle side of the assembly. Space the 12-GA mild steel copper coated pins 10-1/2 inch on center, vertically, and 1-1/2 in. horizontally from each side of the angle legs that are oriented perpendicular to the plane of the wall.

2. CERTIFIED MANUFACTURER: Thermal Ceramics, Inc.

CERTIFIED PRODUCT: Insulation Blanket

MODEL: Firemaster® FastWrap XL or
Pyroscat® Duct Wrap XL

Insulate the steel frame (item 1A) side of the steel wall (Item 1) with three layers of encapsulated insulation, having a nominal thickness of 1-1/2 in. and nominal density of 6pcf, impaled onto the 12 GA mild steel copper coated pins. When required, cut the encapsulated insulation lengthwise in order to obtain the proper width. Seal the open ends of encapsulated insulation with aluminum tape. Include a horizontal overlap joint with the bottom section of blanket overlapping the top section by a minimum of 3 in. on each encapsulated insulation layer. Offset horizontal overlap joints of encapsulated insulation between layers by a minimum of 11-1/2 in. Offset vertical butt joints of encapsulated insulation between layers by a minimum of 9-in.

Install the first layer of insulation blanket tight between steel angles (stiffeners) and impaled on the 12-GA mild steel copper coated pins.

Install the second layer of insulation blanket by impaling it onto the 12-GA mild steel copper coated pins and butt joint adjacent insulation blankets with approximately 1-2 in. of compression. Offset and install the second layer of encapsulated insulation in the same manner as the first layer. Use standard 1-1/2-in. diameter self-locking insulation clips over the 12-GA mild steel copper coated pins to hold the insulation blanket tight against the wall and underlying insulation blanket.

Offset and install the third layer of encapsulated insulation in the same manner as the second layer. Use standard 1-1/2-in. diameter self-locking speed clips over the 12-GA mild steel copper coated pins to hold the encapsulated insulation tight against the steel wall (Item 1) and the two underlying encapsulated insulation layers.