

Thermafiber- Technical Bulletin

Pre-cast Fire Containment System

Thermafiber has received a number of inquiries regarding fire containment at pre-cast spandrel panel conditions and outlines the following recommendations:

1. Install Thermafiber FIRESpan or CW90 Insulation (minimum 2" thick) over the total pre-cast area. The Thermafiber Insulation must be mechanically attached using a minimum 12 gauge steel impaling pins mechanically fastened into the back of the pre-cast. Adhesive attachments are not acceptable. The impaling pins must be located 2" in on each corner and spaced a maximum of 24 inches around the perimeter of each Thermafiber Insulation panel. Gemco clutch clips and self-locking washers, in conjunction with the impaling pins, are to be considered to properly position and hold the insulation in place as a method of moisture and condensation control.
2. Thermafiber Safing Insulation must be compression fit (minimum ½" wider than the opening) into the safe-off area (2"-8") and supported with safing "Z" clips, 24" o.c. maximum.
3. When clutch clips are used to create an air space for moisture and condensation control, the safing line must be supported with a horizontal row of impaling pins with clutch clips spaced at 12" o.c. maximum. The horizontal row of pins prevents bowing of the FIRESpan or CW90 Insulation due to the compression fit of the Safing Insulation.
4. Generally no vertical seams are allowed. If vertical seams are present, they must be protected with 6" (min.) wide strips of 1" thick Thermafiber FIRESpan or CW90 Insulation. Seam covers are to be centered over the vertical seams and impaled on the same pins used to secure the curtain wall insulation and secured in position with steel clinch shields.
5. Horizontal seams between adjacent pieces of curtain wall insulation, if present, are to be spaced a minimum of 36" o.c. If a horizontal seam is to occur near the slab edge, it shall be located 3" below the top plane of the floor at each floor level.

For further details on additional Thermafiber Fire Containment tests and Good Design Practices, see the Thermafiber SA707- Life Safety Fire Containment Systems brochure.