Installation Instructions

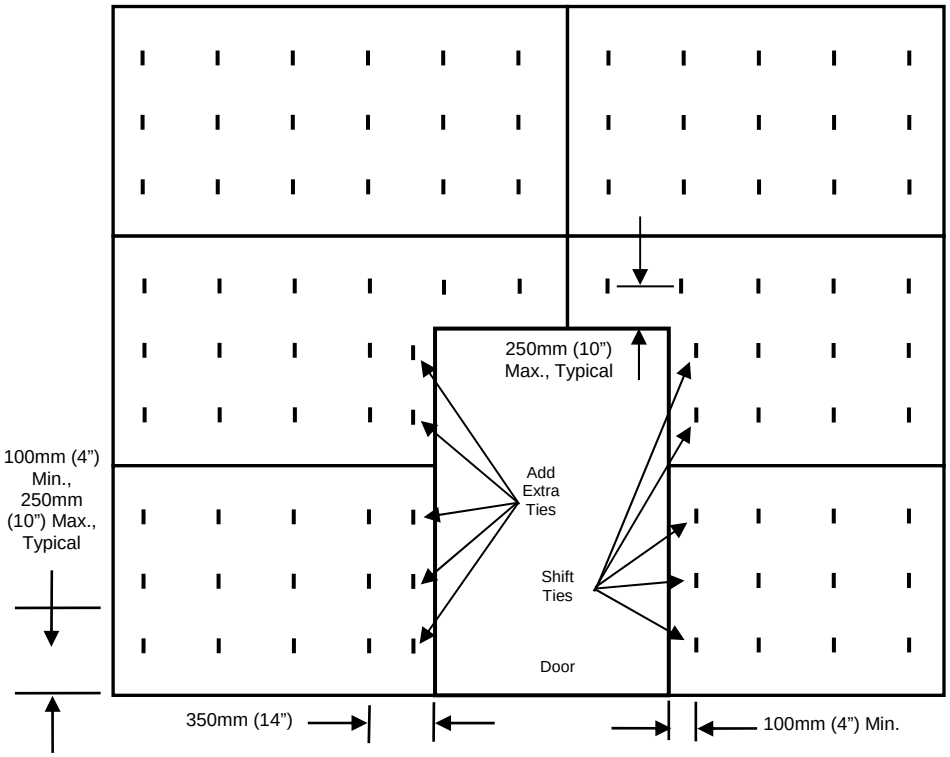
HK™ CA TIES FOR TILTUP & PRECAST INSULATED CONCRETE PANELS

Description

HK™ panel ties are specifically designed for use in tilt-up, and precast panels.

Each sheet of insulation should have 6mm by 80mm (0.25 inch by 3 inch) cutouts on 400mm to 435mm (16 to 17-inch) centers or on 300mm (12-inch) centers for increased composite action, providing slots where ties would normally be inserted into the foam. The long direction of the cutouts is to be perpendicular to the panel supports.

The HK™ ties are designed to keep a 100mm (4”) fascia layer of concrete affixed to the panel without the benefit of solid sections of concrete.



Applications

The HK™ ties may be used in most tilt-up and precast applications where:

- The fascia is 100mm (4”) thick or less
- The panels do not extend beyond 12.5m (50’) above grade
- The concrete compressive strength at the time of lifting is at least 17.2Mpa (2,500 psi)
- If the fascia is suspended, the rigid foam insulation has a density of 27.23 kg/m^3 (1.7 lb/ft^3) or greater and fascia is 100mm thick or less.

Installation

Place foam insulation board on freshly poured concrete immediately after screeding (within 15-30 minutes). The concrete should be level enough to contact the entire surface of the insulation board.

- Insert the HK ties immediately after placing the insulation board on the wet concrete. Push the pointed end of the tie through the insulation board into the fresh concrete until the embedment stop is even with the top surface of the insulation board. Optionally, ties may be pushed through insulation board before placing it on the concrete. Place ties on 600mm(24-inch), 400mm (16-inch) or 300mm (12-inch) centers, as required.

To promote concrete consolidation around the tie, apply repetitive foot pressure on the insulation board near each tie, or otherwise vibrate the tie or the area around the tie.

Do not use this system while it is raining or if rain is imminent when panels will be exposed to rainfall during installation of ties until concrete has cured sufficiently to not be adversely affected by rainfall.

Around Openings/At Panel Edges

Ties should be no closer than 100mm (4”) and no further than 250mm (10”) from the edge of the foam. In these cases, you may need to either shift ties away from the panel edges or openings or add extra ties so this spacing is maintained.

HK™ LOW CONDUCTIVITY TIES FOR INSULATED STRUCTURAL COMPOSITE-ACTION CONCRETE PANELS

More Information

For more information on HK ties please contact your local distributor to request the Product Specification.

HK Composites

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Disclaimer of Liability

It is the sole responsibility of the contractor to install the HK ties in accordance with these published instructions. The presence of an HK Composites representative at the job site does not relieve contractor from the responsibility to follow these published installation instructions. HK COMPOSITES IS NOT RESPONSIBLE FOR ANY LIABILITY RESULTING FROM A FAILURE TO FOLLOW THESE INSTRUCTIONS. Our recommendations should not be taken as inducements to infringe on any patent or violate any law, safety code or insurance regulation.