# **VP Tie Installation Instructions**



### **DESCRIPTION**

HK panel ties for vertical pour (VP) applications are specifically designed for use in cast-in-place and modular precast applications. They provide a fast, efficient method of insulating concrete structures without compromising the low-maintenance/high durability of concrete walls.

Each sheet of insulation should be marked on one side with dots on 305mm (12-inch) centers, indicating where ties would noramly be inserted into the foam.

The HK CP tie is designed to work with two clips per tie to hold the foam in place during casting. The clips fit into recessed areas on the tie.

The HK VP ties may be used in most modular precast and cast-in-place applications where the following conditions apply:

- The fascia, or outside layer, is 75mm (3") thick or less for modular precast applications.
- Fascias 10 feet or taller are unsupported, if wall section has 50mm thick foam, or use VPT ties for tall walls (fascias less than 10 feet tall may be supported or unsupported).
- The concrete compressive strength at the time of lifting is at least 17.2Mpa (2,500 psi).

#### **INSTALLATION**

- 1. Attach one cliip to the tie. The clip slides into the recessed area on the tie from the side. The two retention arms of the clip will snap into place first. Posotive retention is ensured when you hear a second "click" and the clip is properly seated on the tie.
- 2. Push the tie with one clip through the foam insulation at a location marked by a dot.
- 3. Move to the other side of the foam insulation and slide the second clip into the recessed area on the tie, just protruding from the foam. The tie is now installed.

Repeat the above steps for each tie.

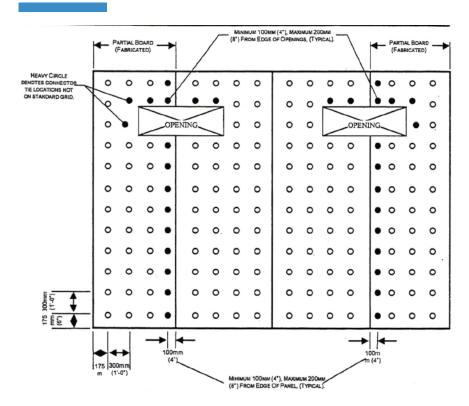
DISCLAIMER OF LIABILITY: It is the sole responsibility of the contractor to install the HK ties in accordance with these published instructions. The presence of an HK Composites representative at the job site does not relieve contractor from the responsibility to follow these published installation instructions. 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.

U.S. Patents 5,673,525 5,996,297 | Canadian Patent 2,237,793 | European Patent 0954652

© Copyright 2021 HK Composites. All rights reserved. Published May, 2021



# **VP Tie Installation Instructions**



### **Around Openings / At Panel Edges**

Ties should be no closer than 100mm (4") and no further than 200mm (8") 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.

### **Concrete Placement**

While placing the concrete inside the forms, place the concrete on either side of the foam as equally as possible. Make certain concrete level on one side does not vary from the level on the opposite side by more than 18 inches.

## **On-Site Quality Assurance**

We recommend ties be tested on-site during and after installation. Follow the On-Site Quality Assurance Instructions for proper visual and tensile testing procedures.

### Tie Re-Installation

If the tie placement has been determined to be insufficient per the On-Site Quality Assurance Instructions, use the Tie Re-Installation Instructions.

