**ThermaKlip

SECTION 07 42 13**

**THERMAL ISOLATION CLIPS FOR EXTERIOR WALL PANEL ASSEMBLIES**

PART 1 – GENERAL

1.1 SECTION INCLUDES

ThermaKlip – Stainless Steel Thermal Isolation Clip for exterior wall assemblies.

1. Clip mounting fasteners as per project engineer’s recommendations.

1.2 RELATED SECTIONS

1. Section 05 10 00 – Structural Metal Framing.
2. Section 05 40 00 – Cold-Formed Metal Framing.
3. Section 07 21 00 – Thermal Insulation.
4. Section 06 10 00 – Rough Carpentry.

1.3 REFERENCES

1. ASHRAE 90.1 – Energy Standard for Buildings Except Low-Rise Residential Buildings.
2. ASTM A240 – Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
3. ASTM C1363 – Standard Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus.
4. CAN/ULC-S134 – Standard Method of Fire Test of Exterior Wall Assemblies.
5. NFPA 285 – Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components.
6. National Energy Code for Buildings (NECB) SB-10 – Supplementary Standard.

1.4 SUBMITTALS

1. Product Data: Manufacturer’s specifications, preparation requirements, storage, handling, and installation recommendations.
2. Shop Drawings: Include product dimensions, details of materials, construction, finish, and integration with adjacent components.
3. Samples: Provide two representative units of each type and size.
4. Test Reports: Thermal and fire performance reports demonstrating compliance with the specified standards.

1.5 QUALITY ASSURANCE

1. Manufacturer Qualifications: Manufacturer must have a minimum of five years of experience in producing stainless steel thermal clips for exterior wall assemblies.
2. Installer Qualifications: Installer must have a minimum of two years of experience with similar projects.
3. Mock-Up: Construct a mock-up for evaluation of workmanship and appearance, retaining it as a reference for construction.

\*\* NOTE TO SPECIFIER \*\* Include mock-up if the project size or quality warrant the expense. The following is one example of how a mock-up on might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

1.6 DELIVERY, STORAGE, AND HANDLING

1. Store and handle ThermaKlip in accordance with manufacturer’s instructions to prevent damage.
2. Protect from weather exposure and mechanical damage.

1.7 WARRANTY

1. Manufacturer’s standard limited warranty.

PART 2 – PRODUCTS

2.1 MANUFACTURER

1. Acceptable Manufacturer: [Insert Manufacturer’s Name and Contact Information]
2. Substitutions are not permitted without prior approval.

2.2 PERFORMANCE AND DESIGN REQUIREMENTS

1. Material: 14-gauge ASTM A240 S304 Stainless Steel.
2. High Load Capacity: Fewer clips required compared to synthetic or aluminum clips, reducing thermal bridging.
3. Thermal Performance: Modeled and evaluated in accordance with ASTM C1363.
4. Fire Resistance: Complies with CAN/ULC-S134 and NFPA 285.
5. Versatile Installation: Compatible with concrete, concrete block, steel studs, and wood substrates.
6. Effective R-Value Contribution: Determined in combination with the insulation system specified.
7. Mounting Orientation: Suitable for both vertical and horizontal sub-girt applications.

2.3 AVAILABLE SIZES

ThermaKlip is available in multiple sizes to accommodate varying insulation thicknesses:

1. 2.0-inch Clip: Supports insulation thickness from 2" to 3.5" (51 to 89 mm) and allows for ±1/4-inch (6 mm) deviation.
2. 3.25-inch Clip: Supports insulation thickness from 4" to 6" (101 to 152 mm) and allows for ±1/2-inch (13 mm) deviation.
3. 4.75-inch Clip: Supports insulation thickness from 5" to 8" (127 to 203 mm) and allows for ±1/2-inch (13 mm) deviation.

PART 3 – EXECUTION

3.1 EXAMINATION

1. Verify that substrates are ready to receive ThermaKlip installation.
2. Report any discrepancies or unsatisfactory conditions before proceeding.

3.2 PREPARATION

1. Clean all surfaces before installation.
2. Ensure substrate is level and structurally sound.

3.3 INSTALLATION

1. Install ThermaKlip in accordance with manufacturer’s written instructions and approved shop drawings.
2. Ensure clips are plumb and aligned, maintaining a tolerance of ±1/8 inch over 20 feet (3.2 mm over 6.1 m).
3. Secure clips with recommended fasteners, following specified spacing for structural load requirements.
4. Install L-girt after clips are in place, ensuring proper attachment and alignment.

3.4 FIELD QUALITY CONTROL

1. Coordinate field inspections per Division 01 requirements.
2. Ensure compliance with manufacturer’s installation recommendations.

3.5 CLEANING AND PROTECTION

1. Clean installed components as per manufacturer’s instructions.
2. Replace any damaged components prior to project completion.

END OF SECTION