

# brochure.

## ET CLIP-40&75

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T H E R M A L  
C L I P S

IMP TECHNOLOGY LTD.

# ET CLIP-40&75



## ABOUT

The ET Clip-40 and Clip-75 are designed to provide robust support and secure fastening for a wide range of construction applications. These clips ensure structural integrity and stability, essential for high-performance building envelopes and efficient installation processes.

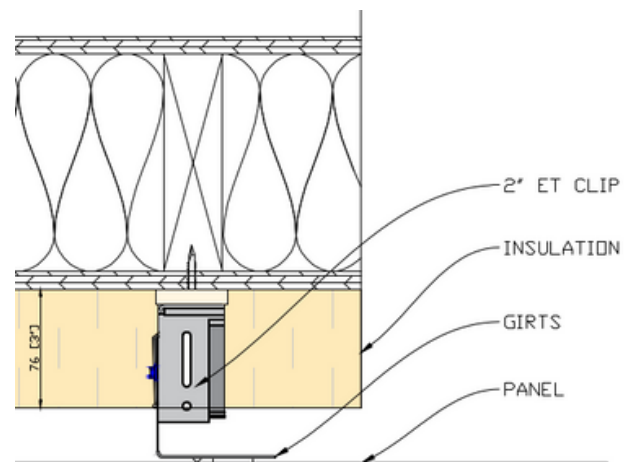
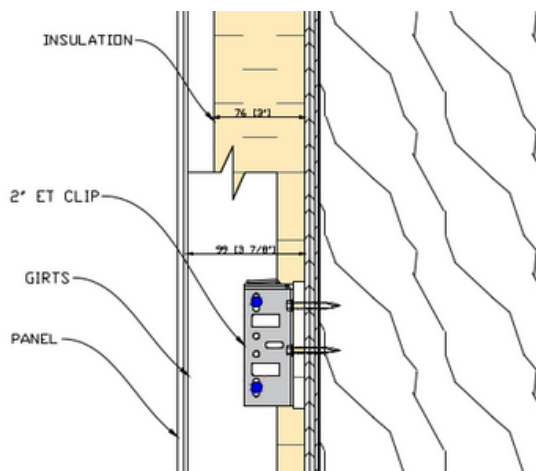
## PRODUCT DETAILS

The ET Clip creates a thermal barrier, separating the building's interior from the exterior and reducing thermal bridging. It enhances energy efficiency and supports insulation thicknesses from 2" to 6" without shims, simplifying installation. Made from durable, corrosion-resistant materials, it ensures long-lasting performance. Compatible with concrete, concrete block, steel studs, and wood, it is a versatile solution for various construction applications. The robust design improves thermal performance and adds to the building's structural integrity.

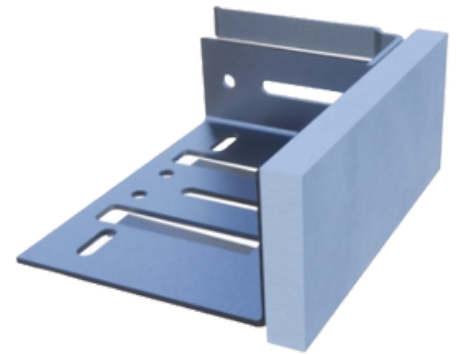
## MATERIAL COMPOSITION

- Each clip is made from steel with a minimum thickness of **1.9mm (14 gauge)**, ensuring robustness and strength.
- This material complies with **ASTM A792** standards, which guarantees its quality and performance. The yield strength of both clip models has been standardized, with the Clip-40 and Clip-75 both rated at 50 KSI, ensuring consistent structural support.
- The type of steel feature a **G90 coating**, which offers superior durability and resistance to corrosion, extending the lifespan of the clips in various environmental conditions.

## VERTICAL SUBGIRT



- Thermal Conductivity:  $\leq 0.019$  W/(m·K) at 25°C, ensuring minimal heat transfer for energy efficiency.
- Tensile Strength:  $\geq 1.9$  MPa, offering strong resistance to mechanical stress and enhancing durability.
- Fire Safety: Rated as Grade A1, ensuring high fire resistance and overall safety in construction.



### TESTS OF THERMAL BREAK PAD PROPERTIES

The insulation pads used in ET clips are designed to offer high thermal performance and safety, significantly reducing thermal bridging.

Test Item	Test Method	Test Result
Maximum Use Temperature	ASTM C1728-23 Section 7.1, 7.9, ASTM C411-19, ASTM C447-15(2022)	No warp, flame, glow, melting, or fiber degradation. Max exothermic temp rise: 17.1°C
Thickness and Density	ASTM C1728-23 Section 7.2, ASTM C303-21	Thickness: 10mm, Density: 175 kg/m <sup>3</sup>
Apparent Thermal Conductivity	ASTM C1728-23 Section 7.3, ASTM C177-19 ε1	23.9°C: 0.019 W/(m·K), 149°C: 0.024 W/(m·K), 204°C: 0.027 W/(m·K), 316°C: 0.036 W/(m·K), 371°C: 0.042 W/(m·K)
Flexibility	ASTM C1728-23 Section 7.4, ASTM C1101/C1101M-23	No visible rupture, qualifies as flexible
Water Vapor Sorption	ASTM C1728-23 Section 7.6, ASTM C1104/C1104M-19 Procedure A	0.0% by weight
Water Absorption	ASTM C1728-23 Section 7.10.2, ASTM C1763-20 Procedure B	105°C: 1.3%, 316°C: 10.5%
Stress Corrosion Performance (Austenitic Stainless Steel)	ASTM C1728-23 Section 7.11, ASTM C795-08(2023) Section 12, ASTM C692-13(2023) Procedure B Drip Test	No cracks observed
Compressive Resistance	With reference to ASTM C1728-23 Section 7.12, ASTM C165-23	35.4 kPa
Linear Shrinkage after Exposure to Maximum Use Temperature	ASTM C1728-23 Section 7.13, ASTM C356-22	Length: 1.2%, Width: 1.4%
Sag Resistance	With reference to ASTM C1728-23 Section 7.14, ASTM C411-19 Section 7.6.2	0.0%
Surface Burning Characteristics	ASTM C1728-23 Section 7.8, ASTM E84-23c	Flame Spread Index: 5, Smoke Developed Index: 5
Soluble Ion Content and pH Value of Leaching Solution	ASTM C1728-23 Section 7.11, ASTM C795-08 Section 13, ASTM C871-08	Cl <sup>-</sup> : 0.0003%, F <sup>-</sup> : Not detected, SiO <sub>3</sub> <sup>2-</sup> : 0.0048%, Na <sup>+</sup> : 0.0003%, pH: 6.4
Corrosiveness to Steel	ASTM C1728-23 Section 7.5, ASTM C1617-19	MLCR: 62 μm/y
Fungal Resistance	ASTM C1728-23 Section 7.7, ASTM C1338-2019(2022)	No mold growth observed under a 40x microscope

**PERFORMANCE**

- **Boosted Energy Efficiency:** The advanced thermal pad design minimizes thermal bridging, greatly enhancing the building's energy efficiency.
- **Superior Load Capacity:** Due to its higher load capacity, fewer ET Clips are required compared to synthetic or aluminum alternatives, leading to reduced installation effort and less thermal bridging.

**PERFORMANCE FEATURES**

- **Wall Deviation Adjustment:** Allows for adjustments up to +/- 1/2" to account for wall deviations, removing the need for shims.
- **Simple Installation:** Equipped with a built-in "helping hand" to simplify and speed up the installation process.
- **Uniform Installation Orientation:** Can be installed in the same direction, regardless of whether the girt orientation is horizontal or vertical.
- **Insulation Compatibility:** The ET Clips accommodates insulation thicknesses from 2" to 6".

**AVAILABILITY AND PRICING**

- **Cost-Efficient:** Provides a competitive and economical solution.
- **Manufactured in Canada:** Ensures high quality and dependable supply through North American manufacturing.
- **Widely Available:** Maintained in stock across an expanding network of distributors, ensuring readiness for your project needs.

**Fastener Recommendations:**

Girt Fastener: 10-16 x 5/8" Ind. Hex

Washer Head (5/16AF).

Steel Stud Assembly: 14-14 x 2" Ind. Hex

Washer Head (5/16AF).

Wood Stud Fasteners: #14 HWH cladding (metal to wood) fastener.

Concrete Wall: 2-1/4" long #14 Tapcons.



**HORIZONTAL SUBGIRT**

