# ACCESSORY PRODUCTS APPLICATIONS WALLS

# THERMAL CLIPS ACS

TECHNICAL DATA SHEET 240305SCANE

(Supersedes 230307SCANE

### DESCRIPTION

ACS THERMAL CLIPS are available in two configurations, solid and adjustable. Both types of clips are composed of stainless steel and include a high-density polyisocyanurate thermal break pad at the back. Both clips also include cut-outs that represent 15% to 20% of the clip volume in order to reduce the quantity of conductive material and further enhance its purpose of reducing the effects of thermal bridging in wall systems.

## Solid Clips

ACS-S CLIPS are shaped similarly to a Z-girt. They are available in various sizes in order to accommodate different insulation thicknesses, but they are not adjustable. The solid ACS-S CLIP is ideal when a high-performance, cost-effective solution is required and the back-up structure and cladding materials do not require on-site adjustments of the support system.

### Adjustable Clips

ACS-A CLIPS are a two-piece design. Each stainless steel piece is "L" shaped. The inner piece of the clip fits inside the outer piece, allowing the exact depth of the clip to be adjusted on-site by the installers. The adjustable ACS-A CLIP is very useful for cladding systems that require very tight tolerances on uneven substrates, such as masonry or concrete walls, and/or systems that are installed over steel stud walls that are not on the same vertical plane as the slab beams.

## **INSTALLATION**

Clip length, spacing and attachment to the substructure are determined based on the combination of thermal and structural requirements of the assembly.

The <u>Structural Design Guide</u> will provide assistance with properly specifying the attachment and spacing of the ACS THERMAL CLIP in order to support exterior cladding assemblies. The <u>BUILD BETTER Guide</u> can be referenced to comply with energy-related objectives in building codes.

- 1. Precise measurements are required for the installation of ACS THERMAL CLIPS. Use a laser level or chalk line to draw a grid on the substrate so as to ensure all lines are level and plumb.
- 2. Fasten the ACS-S CLIP or the ACS-A CLIP (male) to the substrate using the fasteners specified for the project by following the reference lines.
- 3. When the ACS-A CLIP (male) is used, insert the ACS-A CLIP (female) into it. Adjust depth to achieve the desired positioning and hold the two pieces in place using one or two long-nose locking pliers.
- 4. Use an impact driver to screw the parts together. Constant pressure and high RPM are required.

# RESTRICTIONS

Due to the number of variables inherent in the design of exterior cladding, structural review of cladding installations is required on any project. These variables include, but are not limited to, building height, building exposure, design wind pressure, cladding weight, cladding flexibility/brittleness, cladding fastening requirements, cladding assembly depth, substructure construction tolerances, and substructure material type.

As a result of the large number of variables involved in cladding design, a project structural engineer is required to review and provide the necessary design/assurance that the overall system is structurally acceptable.

FOR COMPLETE INFORMATION ON PRODUCT INSTALLATION, PLEASE CONSULT YOUR SOPREMA REPRESENTATIVE.







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# **GENERAL INFORMATION**

Specifications	ACS THERMAL CLIPS	
Available clip sizes (1)	ACS-S CLIP	ACS-A CLIP
	1.5 in 2 in 2.5 in 3 in 3.5 in 4 in 4.5 in 5 in 5 in 6 in 7 in 8 in 9 in 10 in	3-4 in 4-5 in 5-6 in 6-7 in 7-8 in 8-9 in 9-10 in 10-11 in

<sup>(1)</sup> Customized clips can also be created to accommodate various insulation thicknesses upon special order if needed.

# PROPERTIES [Thermal break pad]

Properties	Standards	ACS THERMAL CLIPS (Thermal break pad)
Color	-	Cream
Thickness	-	12.7 mm (1/2 in)
Thermal resistance (RSI (R-value) / 12,7 mm [1/2 in] @ 24 °C [75 °F])	ASTM C 518	0.44 RSI (R - 2.5)
Compressive strength	ASTM D 1621	550 to 759 kPa (80 to 110 psi)
Density	ASTM D 1622	68 kg/m³ (4.2 lb/pi³)
Linear dimensional stability	ASTM D 2126	< 0.5 % linear change
Water absorption	ASTM C 209	< 3 %
Flame spread*	ASTM E 84	40 - 60
Tensile strength	ASTM D 1623	> 35 kPa (> 730 lb/ft²)
Mold growth resistance	ASTM D 3273	Pass

(All values are nominal)





<sup>\*</sup> The results determined in accordance with the ASTM E 84 Standard are not intended to indicate the hazards generated by this material, nor any other, in real fire conditions.



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# PROPERTIES [Stainless steel]

Properties	Standards	ACS THERMAL CLIPS (Stainless Steel)
Stainless steel gauge	-	16 gauge
Grade	ASTM A240/A480	304/304L
Stainless steel finish	ASTM A240/A480	Finish 2B
Recycled content	-	approx. 70 %

(All values are nominal)

