



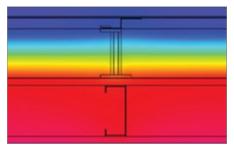
# CASCADIA CLIP® SLOPED ROOF APPLICATION

## **REDUCE ROOFING COSTS. IMPROVE THERMAL PERFORMANCE.**

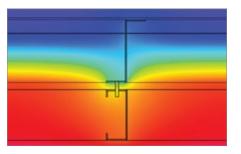
Cascadia Windows & Doors' award-winning Cascadia Clip<sup>®</sup> boasts a roughly 30-50% reduction in thermal bridging over typical sloped roofing support—while offering the same structural performance. This novel application also helps mitigates the risk of condensation on the underside of the roof deck and screws.

Improved thermal performance is only one facet of the Cascadia Clips<sup>®'</sup> benefits. When used with sloped roofs, Cascadia Clips<sup>®</sup> offer significant costs savings over traditional supports by allowing architects and specifiers to design thinner roofs. This reduces not only the amount of materials used in the roof itself, but also the overall labor associated with installation.

CREATE LIGHTER, MORE ENERGY EFFICIENT SLOPED ROOFS WITH THE EASY-TO-INSTALL CASCADIA CLIP®



CASCADIA CLIP® SYSTEM THERMAL MODELING



TYPICAL Z-GIRT SYSTEM THERMAL MODELING



### **COST SAVINGS**

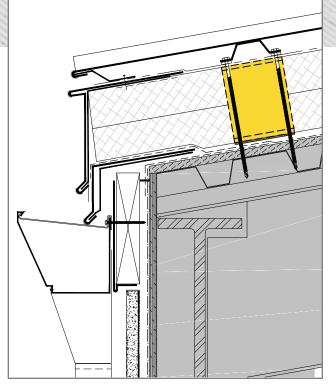
The Cascadia Clip<sup>®</sup> offers a host of costs savings to a building. Apart from improved thermal performance over the life of the building—and associated operational savings—the clip also allows architects and specifier to rethink the construction of the roof itself. By increasing performance, architects and specifiers can reduce roofing insulation and subsequent structural support, leading to lower material and installation costs.

## **EASE OF INSTALLATION**

Often times, high performance systems can be time consuming to install and require specialized tools or training. But that's not the case with the Cascadia Clip® for sloped roofs. Utilizing typical commercial roofing materials and tools, the clip's design allows for a 'production format' installation process. This process allows crews to work in smaller teams, staggering their progress to ensure efficient installation.

For an in-depth installation video, complete with stepby-step instructions, best practices and tips for efficient installation, visit cascadiawindows.com/roof-video.

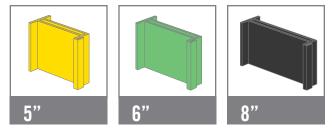




#### **CASCADIA CLIP® FOR SLOPED ROOFS**

The Cascadia Clip® can be used across all areas of a typical sloped roof—including valleys, parapets and edges. Visit our website for PDF and CAD architectural details for most typical roof installations.

#### VARIOUS CASCADIA CLIP® SIZES AVAILABLE





## **INSTALLATION RECOMMENDATIONS**

When installing the Cascadia Clip<sup>®</sup> system in a sloped roof application, a 'production format' installation approach is recommended to maximize installation efficiency and minimize labour costs. This 'production format' requires the onsite installation crew to be split into multiple smaller teams, allowing installation work to be stagger with one team directly following the next.

#### **PRIOR TO INSTALLATION:**

Demolish/remove all existing metal roof panels, if necessary, and ensure the roof structure is in good repair. Install Gypsum and Self-adhered Membrane to provide a water-tight substrate and prevent water ingress during installation.

For a full installation video, visit www.cascadiawindows.com/roof-video

#### 1. LAYOUT CASCADIA CLIPS® & PRE-FILL HOLES

Using a roughly 2ft x 8ft plywood jig, lay out the clips across the roof deck. Use sealant to pre-fill the holes on the base of the clips. This will create a tight, water-proof seal between the clips and the roof deck. Press the clips onto the roof deck using the jig as your guide, ensuring the sealant comes up through the holes in the base of the clip.



#### 2. SECURE CASCADIA CLIPS® & APPLY SEALANT

Secure the clips to the roof deck using two small screws at the base of the clips. These screws secure the clips while installing insulation and are not a structural connecting to the roofing deck.

Once secure, remove the jig and seal around the base of the clips and the screw heads. Only use sealant on the three sides facing up the roof slope so any water that does penetrate the seal can drain away. Continue this process across the roof deck.

#### **3. INSTALL FIRST LAYER OF INSULATION**

Pressure fit semi-rigid insulation boards measuring roughly 2ft x 4ft between the clips. Pre-cut insulation boards to roughly 4in x 24in and fit into the remaining gaps between clips.







#### 5. INSTALL SECOND LAYER OF INSULATION

Once the first layer of insulation is complete, fit another layer of semi-rigid insulation perpendicular to the first layer. Pre-cut insulation boards to roughly 0.75in x 24in and fit into the remaining gaps between clips.

6. INSTALL WATER-RESISTANT MEMBRANE

Cover the two layers of insulation with a waterresistant membrane, marking the location of the clips.





#### 7. INSTALL HAT-TRACK

When attaching the clip screws to a corrugated roof deck, ensure the screws are long enough to penetrate the very bottom of the deck.

Place hat-track over the row of clips and push the screws through the membrane and the holes in the clips. Place horseshoe shims behind the hat-track to ensure drainage and ventilation. Secure screws, ensuring clips are securely attached to the roof deck.

Continue this process across the roof deck.

#### 8. INSTALL ROOFING MATERIAL

Install the roof material to the hat-track using typical best practices.



