

# **1 in 1 Continuous Insulation System** GreenGirt<sup>®</sup> CMH Sub-Framing for Horizontal and Vertical Applications

The SMARTci 1 in 1 System combines the building sub-framing and continuous insulation into one cost-effective solution. Using the GreenGirt composite metal hybrid (CMH) z-girt, paired with mineral wool or spray foam (by others), the SMARTci Systems provide a thermal break and universal cladding attachment surface. Our System is designed for best practices to address the inadequacies of other continuous insulation solutions. The superior SMARTci Systems thermal efficiency leads to decreased energy costs for long-term savings.



The SMARTci 1 in 1 System installs significantly faster than traditional sub-framing and insulation systems. SMARTci Systems provide best practice continuous insulation solutions that eliminate through-insulation fasteners, designed via finite element analysis (FEA), and is fully tested and proven in the field.



## SMARTci 1 in 1 System

Eliminate Thermal Bridging with GreenGirt® CMH Z-Girt

#### **System Benefits**

- 92 98% thermally efficient, yielding the highest r-values
- (1.5" 8" depths available
- Can eliminate the need for insulation retention tools
- No through-insulation fasteners or through-metal to framing
- W Universally compatible for all cladding and substrates
- Composite metal hybrid (CMH) design
- Installs significantly faster than conventional systems
- Fastener torque & pullout strength surpases FRP products
- K Longitudinal & crosswise strength
- Meets ASCE structural design guidelines

### The Problem: Attachment Thermal Bridges

When metal is used to connect the exterior components of a building directly to the interior framing, this causes a thermal bridge. This thermal path of least resistance allows heat (or cold) to escape, creating a vulnerability for cold spots and allowing moisture problems. Using materials that eliminate the thermal bridge improves thermal efficiency to avoid unnecessary heating and cooling costs long term.



#### The Solution: GreenGirt CMH

GreenGirt CMH provides an incredibly energy-efficient envelope solution, assisting in earning LEED and other sustainability certifications. Without the conductive fasteners and materials, GreenGirt CMH can help eliminate moisture development, a leading cause of costly building envelope failure. Capable of being used with nearly any exterior wall design approach, our system benefits building projects in any location.

The *composite metal hybrid* (CMH) design maximizes beneficial properties of both steel and composite materials. This provides a high strength to weight ratio for structural integrity and easy installation. Unlike FRP products, the CMH technology improves fastener torque and pullout force while providing revolutionary longitudinal & crosswise strength.



#### Malcolm X College Chicago, Illinois

Malcolm X College, one of the City Colleges of Chicago (CCC), is a two-year college located near the west side of Chicago, Illinois. It was founded as Crane Junior College in 1911 and was the first of the City Colleges.

This project utilized the SMARTci 1 in 1 System with mineral wool on metal studs. 5" depth GreenGirt was installed vertically spaced 24" on center spacing with metal panel cladding.



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