

# CI™ SYSTEM RAINSCREEN ATTACHMENT:

Continuous Insulation Should Be Simple to Design + Easy to Install



The Knight CI™ System provides outstanding thermal performance by way of true ci (continuous insulation), while accommodating nearly any façade or cladding system — providing maximum versatility and durability, with ease of design and installation.

The CI System uses unique ¾" deep vertical box girts — called CI-Girts™— designed to properly disburse the façade loads over exterior rigid board insulation – with only unique thermally isolated fasteners penetrating the thermal barrier thus minimizing thermal bridging. For basic, cost-effective horizontal claddings, only a single layer of CI-Girts may be needed. For more complex cladding designs or types, choose from a wide variety of Knight Wall secondary rails for those panels requiring specific attachment points.

CI Systems components are produced in standard and custom lengths, in either 16 or 18 gauge Zn-Al-Mg coated steel (standard silver or black PVDF coated) and also available in stainless steel.

This easy to design and even easier to install, engineered drop-in system solution will provide any project with design versatility while still meeting or exceeding North American energy code requirements.

The CI System attachment completes the rainscreen envelope design, whether choosing metal panels, lap siding, Aluminum Composite Material (ACM) panels, terra cotta, GFRC, or many more. And choose any brand of insulation meeting minimum compressive strength and code requirements, simplifying design specifications, including Rockwool COMFORTBOARD 110.

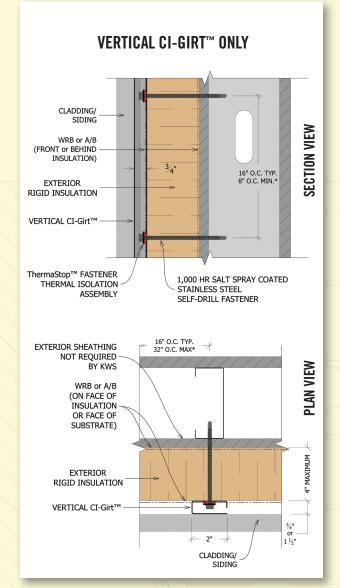
### LOST R-VALUE DUE TO THERMAL BRIDGING WITH\*:

49% - 67%

KNIGHT CI SYSTEM: 2% - 5%
FIBERGLASS BRACKETS: 23% - 31%
ALUMINUM BRACKETS: 30% - 46%
HORIZONTAL Z-GIRTS: 38% - 56%

VERTICAL Z-GIRTS:

Please see Knight Wall Systems 3D thermal modeling report for more information and assembly specific U-factors.



## ADVANTAGES TO THE KNIGHT CI™ SYSTEM RAINSCREEN

- Vertical CI-Girts can be spaced 16", 24" or 32" O.C. (every other stud)\*
- Support cladding weighing up to 20 PSF\*, unlike many other attachments
- Real labor savings no notching or cutting of exterior rigid board insulation required like with Z girts, brackets or clips
- Thermally isolated fasteners with specially designed ThermaStop™ washers come preassembled
- Highly corrosive-resistant Zn-Al-Mg ZM40 (ASTM A1046) coated steel provides a long service life vs. typical G90 Galvanized steel
- Black PVDF finish or stainless steel options available, competitively priced
- Easily installed over any type of substrate steel studs, wood studs, CMU, concrete, even brick
- Engineering calculations provide design load compliance for each specific project
- Attach nearly any type of cladding supplied by any manufacturer with easy and efficient detailing and installation
- Use any manufacturer's insulation meeting minimum strength and other code requirements (including Rockwool COMFORTBOARD 110)
- Attach cladding directly to the vertical CI-Girt or add optional KWS horizontal rails (such as PanelRails)
- Excellent ventilation with a ¾-inch minimum continuous rainscreen cavity
- Pre-engineered and 3rd party tested for proven performance, reliability and durability
- Competitive, budget conscious assembly that meets ASHRAE 90.1 standard
- Complete, drop-in rainscreen attachment system girts, thermally isolated fasteners, rails and engineering one source liability for the whole system
- Limited labor and material warranty

\*Maximum allowable spacing and dead load (weight of cladding) is based on the total load (dead + live) acting on the assembly and connections. Wall anchors must be specified and supplied by KWS for a written limited warranty. Knight will specify the exact anchor type, embedment depth and spacing for anchors in project specific engineering packages. ThermaStop thermal isolation washers must be used on all types of wall anchors with the HCl or Cl System, no matter the substrate. Contact KWS for more information.

#### VERTICAL CI-GIRT™ + HORIZONTAL PanelRail™ **EXTERIOR** RIGID INSULATION PanelRail™ SECTION VIEW (2", 3", 4" or 5") CLADDING/ 16" O.C. TYP. 8" O.C. MIN.\* WRB or A/B (FRONT or BEHIND INSULATION) VERTICAL CI-Girt™ ThermaStop™ FASTENER 1,000 HR SALT SPRAY COATED THERMAL ISOLATION **STAINLESS STEEL** ASSEMBLY SELF-DRILL FASTENER 16" O.C. TYP. 32" O.C. MAX\* EXTERIOR SHEATHING NOT REQUIRED BY KWS WRB or A/B (ON FACE OF INSULATION OR FACE OF SUBSTRATE) MAXIMUM **EXTERIOR** RIGID INSULATION 1 ½" VERTICAL CI-Girt™ 1,000 HR SALT SPRAY COATED CLADDING/ STAINLESS STEEL SELF-DRILL FASTENER PanelRail™ (2", 3", 4" or 5")



# KNIGHT WALL CAN CONTRIBUTE TO THE FOLLOWING USGBC LEED CREDITS:

- □ Energy & Atmosphere (EA) Prequisite and Credit 1
- Materials & Resources (MR) Credits 4 and 5



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