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HCI™ SYSTEM RAINSCREEN ATTACHMENT:

Horizontal Continuous Insulation Should Be Simple to Design + Easy to Install

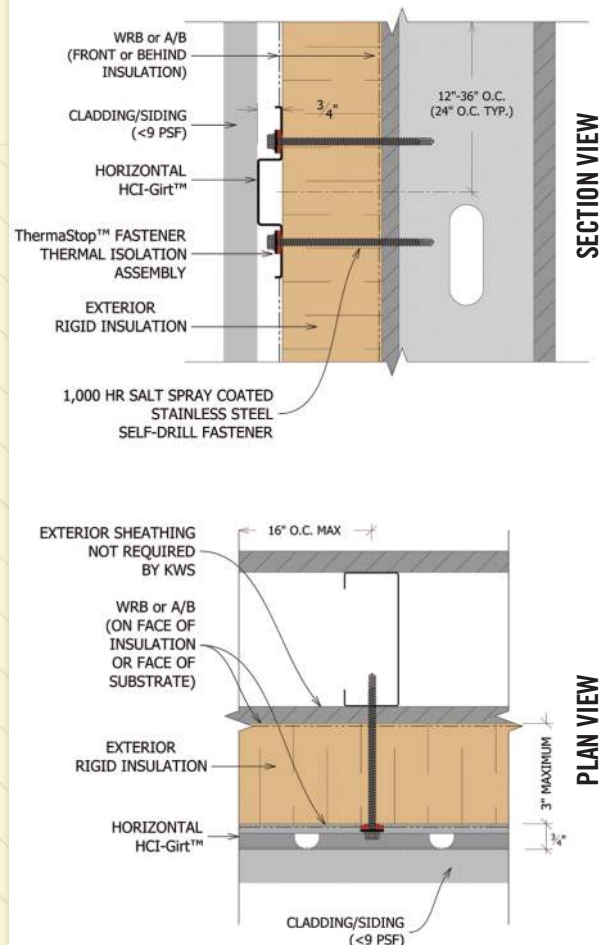
Knight's award-winning HCI™ System provides outstanding thermal performance by way of true ci (continuous insulation). As a compliment to the original CI™ System, the HCI System enables vertical cladding (and secondary rails) to be installed directly to the HCI-Girt™. This offers easy installation, broad design flexibility, and cost savings, all while still easily meeting North American energy code requirements.

The HCI System uses unique ¾" deep horizontal girts- called HCI-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 vertical claddings, only a single layer of HCI-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.

HCI 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.

The HCI System attachment completes the rainscreen envelope design, whether choosing metal panels, Aluminum Composite Material (ACM) panels, fiber cement, GFRC, or many more. And choose any brand of insulation that meets minimum compressive strength and code requirements, simplifying design specifications.

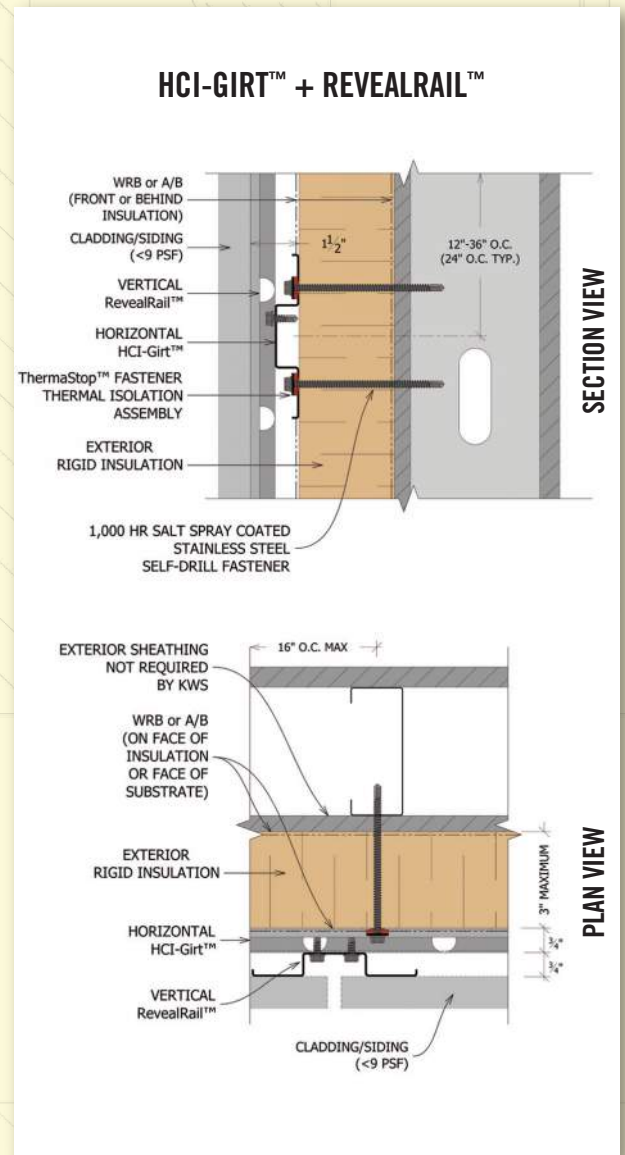
HORIZONTAL HCI-GIRT™ ONLY



ADVANTAGES TO THE KNIGHT HCI™ SYSTEM RAINSCREEN

- Horizontal HCI-Girts can be spaced from 12" up to 36" O.C.*
- Support cladding weighing up to 9 PSF*, covering many popular cladding types
- Real labor savings – no notching or cutting of exterior rigid board insulation 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 manufacturers insulation meeting minimum compressive strength and other code requirements
- Cladding can be attached directly to the horizontal HCI-Girt or used with optional vertical rails (such as PanelRails or RevealRails)
- Excellent ventilation with a ¾-inch minimum continuous rainscreen cavity
- Pre-engineered and 3rd party tested for proven performance 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 HCI or CI System, no matter the substrate. Contact KWS for more information.



KNIGHT WALL CAN CONTRIBUTE TO THE FOLLOWING USGBC LEED CREDITS:

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



ALL KNIGHT WALL SYSTEMS COMPONENTS ARE MANUFACTURED IN THE USA.

NO EXPRESS WARRANTIES ARE GIVEN EXCEPT FOR ANY APPLICABLE WRITTEN WARRANTIES SPECIFICALLY PROVIDED BY KNIGHT WALL SYSTEMS. ALL IMPLIED WARRANTIES INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. No freedom from any patent owned by Knight Wall Systems or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use.

HCI, HCI-Girt, ThermaStop, PanelRail and RevealRail are trademarks of Knight Wall Systems, Inc. Patent 8,429,866 B2 and others pending.

KNIGHT
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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.

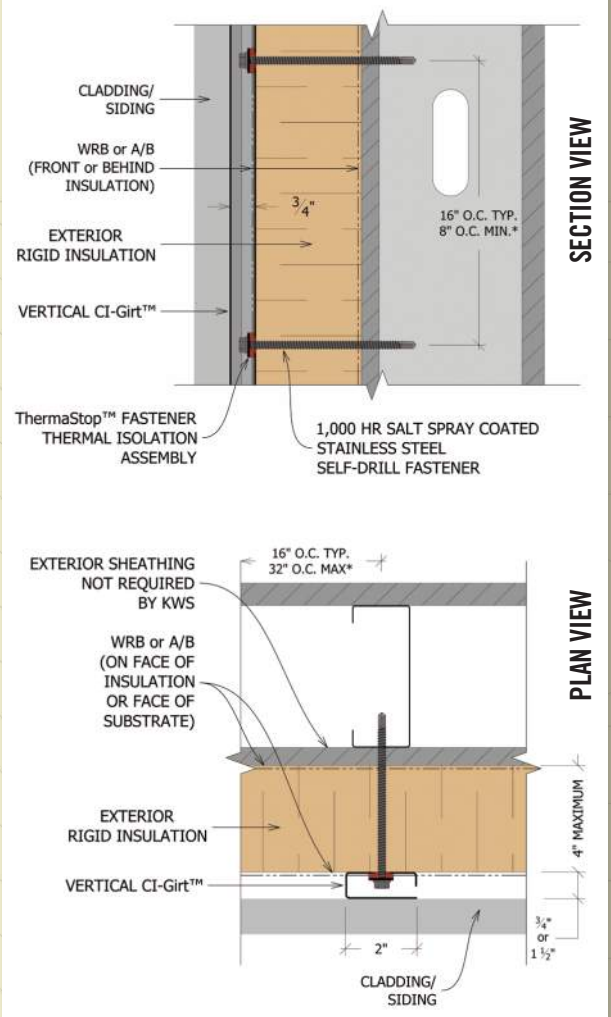
The CI System attachment completes the rainscreen envelope design, whether choosing metal panels, lap siding, Aluminum Composite Material (ACM) panels, terra cotta, GFRC, or many more. And choose any brand of insulation meeting minimum compressive strength and code requirements, simplifying design specifications.

LOST R-VALUE DUE TO THERMAL BRIDGING WITH*:

KNIGHT CI SYSTEM:	2% - 5%
FIBERGLASS BRACKETS:	23% - 31%
ALUMINUM BRACKETS:	30% - 46%
HORIZONTAL Z-GIRTS:	38% - 56%
VERTICAL Z-GIRTS:	49% - 67%

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

VERTICAL CI-GIRT™ ONLY



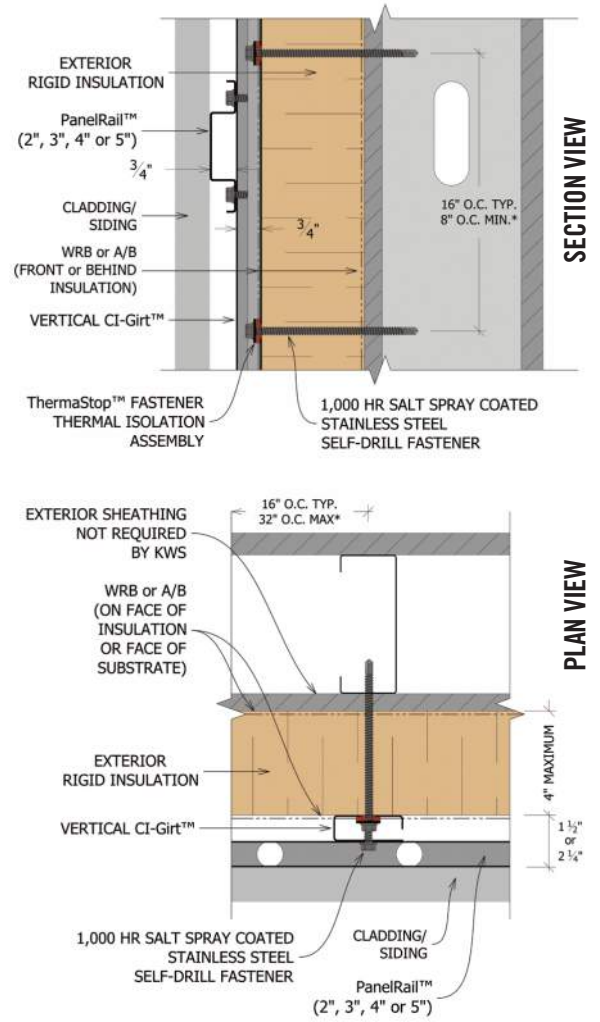
*Lost R-Value percentage will vary based upon exact wall assembly. Values shown assume a typical 16" OC steel stud wall and 24" spacing of horizontal girts and bracket assemblies with varying thicknesses of exterior insulation.

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 compressive strength and other code requirements
- 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 HCI or CI System, no matter the substrate. Contact KWS for more information.

VERTICAL CI-GIRT™ + HORIZONTAL PanelRail™



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