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### ICC-ES Listing Report ESL-1577

Issued April 2024
Revised July 2024

This listing is subject to renewal April 2025.

CSI: DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION

Section: 07 81 23—Intumescent Fireproofing

DIVISION: 09 00 00—FINISHES

Section: 09.96.43—Fire-Retardant Coatings

DIVISION: 09 00 00—FINISHES

Section: 09.96.46—Intumescent Painting

#### **Product Certification System:**

The ICC-ES product-certification system includes evaluating reports of tests of standard manufactured product, prepared by accredited testing laboratories, provided by the listee, to verify compliance with applicable codes and standards. The system also involves factory inspections, and assessment and surveillance of the listee's quality system.

Product: DC315 INTUMESCENT COATING

Listee: INTERNATIONAL FIREPROOF TECHNOLOGY INC.

**Evaluation:** 

DC315 intumescent coating was evaluated based on tested non-loadbearing wall assemblies consisting of building-material components described in each ICC Design No., tested in accordance with the following

standard:

 CAN/ULC-S101-14, Standard Methods of Fire Endurance Tests of Building Construction and Materials, ULC Standards.

Findings:

Evaluation of DC315 intumescent coating as a component of the fire-resistance rated wall assembly described in each ICC Design No. is based on testing in accordance with the applicable test standard and code exceptions for exterior walls as permitted in the applicable sections of the following code editions:

National Building Code of Canada<sup>®</sup> 2020 and 2015
 Applicable Sections: Volume 1-Division B: 3.1.7.1. and 3.1.7.2.

#### Identification:

- The ICC-ES mark of conformity, electronic labeling, or the listing report number (ICC-ES <u>ESL-1577</u>) and/or the ICC-ES evaluation report number (<u>ESR-3702</u>), and when applicable, the ICC-ES listing mark, along with the name, registered trademark, or registered logo of the report holder must be included in the product label.
- All containers of DC315 intumescent coating must be labeled with the manufacturer's name (International Fireproof Technology Inc.) and address; the product name; the date of manufacture or expiration date; and the manufacturer's instructions for application.
- 3. The report holder's contact information is the following:

INTERNATIONAL FIREPROOF TECHNOLOGY INC. 17528 VON KARMAN AVENUE IRVINE, CALIFORNIA 92614 (949) 975-8588

ptp@painttoprotect.com



Installation:

The product must be installed in accordance with International Fireproof Technology Inc.'s published installation instructions, in compliance with the associated design listing and with all applicable codes.

#### **Conditions of Listing:**

- 1. The listing report addresses only conformance with the standards and code sections noted above.
- 2. Approval of the product's use is the sole responsibility of the local code official.
- 3. The listing applies only to the materials tested and as submitted for review by ICC-ES.
- 4. The Assembly Ratings reported in each ICC Design No. are based on Sections 3.1.7.1. and 3.1.7.2. of Volume 1-Division B of the National Building Code of Canada® 2020 and 2015. The Exception for Exterior Walls is in accordance with Sentence 3.1.7.2.(1), where the limit on the rise of temperature on the unexposed surface of an assembly as required by the tests referred in Sentence 3.1.7.1.(1) shall not apply to an exterior wall that has a limiting distance of 1.2 m (3.94 ft) or more, provided correction is made for radiation from the unexposed surface in accordance with Sentence 3.2.3.1.(9) of Volume 1-Division B of the National Building Code of Canada® 2020 and 2015. Where applicable, each ICC Design No. references the respective equivalent opening factors (FEO) derived from Sentence 3.2.3.1.(9) of Volume 1-Division B of the National Building Code of Canada® 2020 and 2015 to be used in the calculation of the corrected area of unprotected openings including actual and equivalent openings (Ac) based on the Assembly Rating. Calculation of Ac is the sole responsibility of the end user and outside of the scope of this listing.
- 5. International Fireproof Technology Inc.'s DC315 intumescent coating is manufactured under a quality control program with inspections by ICC-ES.



# ICC Design No. IFRM-1577-01 ESL-1577

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Applicant: INTERNATIONAL FIREPROOF TECHNOLOGY INC.

Product: DC315 INTUMESCENT COATING

Code

Section: Sections 3.1.7.1. and 3.1.7.2. of Volume 1-Division B of the National Building Code of Canada® 2020 and

2015

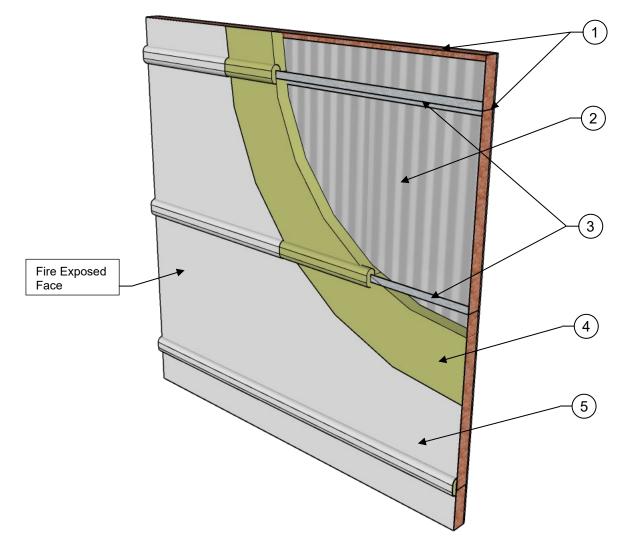
**Assembly** 

Rating: 45-minutes from the Fire Exposed Face (Asymmetrical Wall Assembly) where FEO = 0.019,

1-Hour from the Fire Exposed Face (Asymmetrical Wall Assembly) where FEO = 0.034,

Note: See Conditions of Listing Item 4 of ESL-1577

Load: Non-loadbearing





- 1. **Perimeter Framing Members** Minimum 16-gauge thick steel members with minimum 101.6 mm by 50.8 mm (4-inch by 2-inch) legs are used as perimeter framing for the wall assembly. The perimeter framing members are oriented to allow for wall sheathing attachment and secured to each other using minimum two 12.7 mm (1/2-inch) long No. 8 pan head self-drilling screws at each corner.
- 2. **Wall Sheathing (Unexposed Face) –** Minimum 26-gauge thick and 914.4 mm (36-inch) wide commercial grade steel R-panels with 31.8 mm (1<sup>1</sup>/<sub>4</sub>-inch) deep ribs must be installed vertically with panel seams overlapping in accordance with the manufacturer's published installation instructions. Panels must be secured to each other along the vertical overlapping seam using 25.4 mm (1-inch) long No. 12 external hex washer head self-drilling screws spaced at a maximum of 406.4 mm (16-inches) on center vertically. Panels are secured to the perimeter framing members using 25.4 mm (1-inch) long No. 12 external hex washer head self-drilling screws spaced at a maximum of 406.4 mm (16-inches) on center around the perimeter of the wall assembly. Panels must be secured to the intermediate support framing using 38.1 mm (1<sup>1</sup>/<sub>2</sub>-inch) long No. 12-14 external hex washer head self-drilling screws spaced at a maximum of 304.8 mm (12-inches) on center horizontally along each intermediate support framing member.
- 3. **Intermediate Support Framing** Intermediate wall framing members consist of minimum 16-gauge thick, 101.6 mm (4-inch) deep Z- or C-girts with 50.8 mm (2-inch) legs installed horizontally and spaced at a maximum of 1219.2 mm (48-inches) on center. The intermediate support framing members are secured to the perimeter framing members using minimum two 12.7 mm (1/2-inch) long No. 8 pan head self-drilling screws at each end.
- 4. Insulation GENYK Boreal Nature Elite (Closed-Cell) spray-applied polyurethane foam (SPF) insulation, with a reported density of 32.04 kg/m³ (2.0 lbs./ft³), must be applied at a nominal thickness of 101.6 mm (4-inches) between the intermediate support framing members, applied directly to the fire exposed face of the wall sheathing. SPF insulation must also be applied to the intermediate support framing members at a nominal thickness of 38.1 mm (1¹/₂-inch) matching the contour of the Z- or C-girts. Application must be in accordance with the manufacturer's published instructions.
- 5. **Intumescent Coating (Exposed Face)** International Fireproof Technology Inc. DC315 intumescent coating must be applied over the exposed surface of the spray foam insulation at a minimum 0.61 mm (24 mils) dry film thickness (DFT) on the fire exposed face of the wall assembly. Application must be in accordance with the manufacturer's published instructions.



### ICC Design No. IFRM-1577-02 ESL-1577

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Applicant: INTERNATIONAL FIREPROOF TECHNOLOGY INC.

Product: DC315 INTUMESCENT COATING

Code Section: Sections 3.1.7.1. and 3.1.7.2. of Volume 1-Division B of the National Building Code of Canada® 2020 and

2015

Assembly 45-minutes from the Fire Exposed Face (Asymmetrical Wall Assembly) in accordance with Section 3.1.7.1.

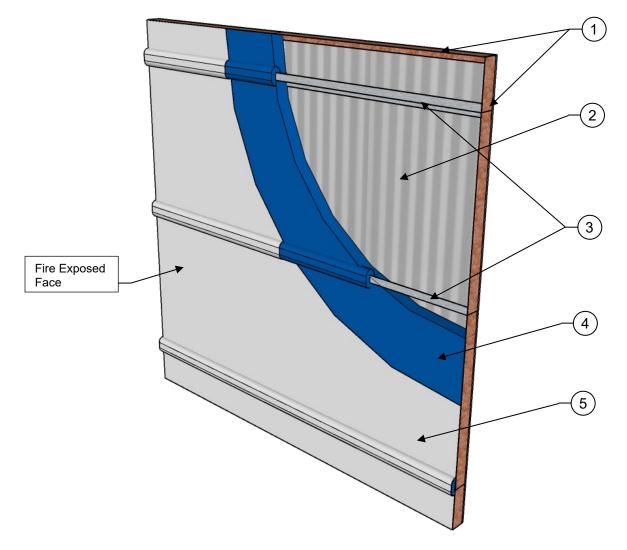
Rating: without correction required to Section 3.1.7.2. of Volume 1-Division B of the National Building Code of

Canada® 2020 and 2015,

1-Hour from the Fire Exposed Face (Asymmetrical Wall Assembly) where  $F_{EO} = 0.016$ ,

Note: See Conditions of Listing Item 4 of ESL-1577

Load: Non-loadbearing





- 1. **Perimeter Framing Members** Minimum 16-gauge thick steel members with minimum 101.6 mm by 50.8 mm (4-inch by 2-inch) legs are used as perimeter framing for the wall assembly. The perimeter framing members are oriented to allow for wall sheathing attachment and secured to each other using minimum two 12.7 mm (1/2-inch) long No. 8 pan head self-drilling screws at each corner.
- 2. **Wall Sheathing (Unexposed Face) –** Minimum 26-gauge thick and 914.4 mm (36-inch) wide commercial grade steel R-panels with 31.8 mm (1<sup>1</sup>/<sub>4</sub>-inch) deep ribs must be installed vertically with panel seams overlapping in accordance with the manufacturer's published installation instructions. Panels must be secured to each other along the vertical overlapping seam using 25.4 mm (1-inch) long No. 12 external hex washer head self-drilling screws spaced at a maximum of 406.4 mm (16-inches) on center vertically. Panels are secured to the perimeter framing members using 25.4 mm (1-inch) long No. 12 external hex washer head self-drilling screws spaced at a maximum of 406.4 mm (16-inches) on center around the perimeter of the wall assembly. Panels must be secured to the intermediate support framing using 38.1 mm (1<sup>1</sup>/<sub>2</sub>-inch) long No. 12-14 external hex washer head self-drilling screws spaced at a maximum of 304.8 mm (12-inches) on center horizontally along each intermediate support framing member.
- 3. **Intermediate Support Framing** Intermediate wall framing members consist of minimum 16-gauge thick, 101.6 mm (4-inch) deep Z- or C-girts with 50.8 mm (2-inch) legs installed horizontally and spaced at a maximum of 1219.2 mm (48-inches) on center. The intermediate support framing members are secured to the perimeter framing members using minimum two 12.7 mm (1/2-inch) long No. 8 pan head self-drilling screws at each end.
- 4. Insulation Carlisle SealTite™ PRO HFO (Closed-Cell) spray-applied polyurethane foam (SPF) insulation, with a reported density of 33.16 kg/m³ (2.07 lbs./ft³), must be applied at a nominal thickness of 101.6 mm (4-inches) between the intermediate support framing members, applied directly to the fire exposed face of the wall sheathing. SPF insulation must also be applied to the intermediate support framing members at a nominal thickness of 38.1 mm (1¹/₂-inch) matching the contour of the Z- or C-girts. Application must be in accordance with the manufacturer's published instructions.
- 5. Intumescent Coating (Exposed Face) International Fireproof Technology Inc. DC315 intumescent coating must be applied over the exposed surface of the spray foam insulation at a minimum 0.69 mm (27 mils) dry film thickness (DFT) on the fire exposed face of the wall assembly. Application must be in accordance with the manufacturer's published instructions.



### ICC Design No. IFRM-1577-03 ESL-1577

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**Applicant:** INTERNATIONAL FIREPROOF TECHNOLOGY INC.

Product: DC315 INTUMESCENT COATING

Code Section: Sections 3.1.7.1. and 3.1.7.2. of Volume 1-Division B of the National Building Code of Canada® 2020 and

2015

Assembly Rating:

45-minutes from the Fire Exposed Face (Asymmetrical Wall Assembly) in accordance with Section 3.1.7.1.

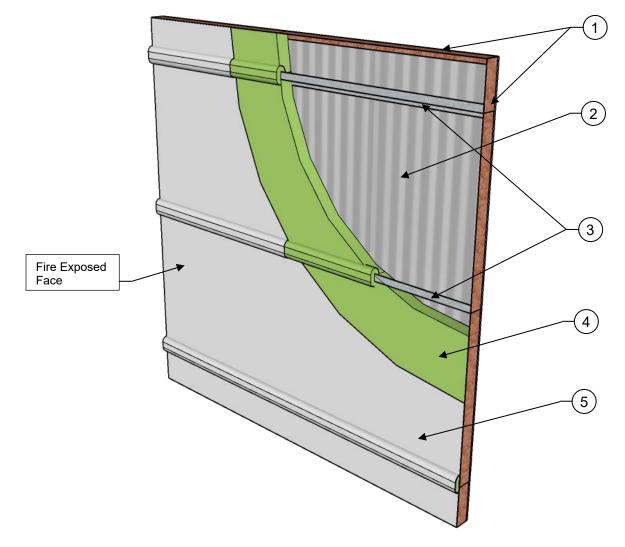
without correction required to Section 3.1.7.2. of Volume 1-Division B of the National Building Code of

Canada® 2020 and 2015,

1-Hour from the Fire Exposed Face (Asymmetrical Wall Assembly) where FEO = 0.018,

Note: See Conditions of Listing Item 4 of ESL-1577

Load: Non-loadbearing





- 1. **Perimeter Framing Members** Minimum 16-gauge thick steel members with minimum 101.6 mm by 50.8 mm (4-inch by 2-inch) legs are used as perimeter framing for the wall assembly. The perimeter framing members are oriented to allow for wall sheathing attachment and secured to each other using minimum two 12.7 mm (1/2-inch) long No. 8 pan head self-drilling screws at each corner.
- 2. **Wall Sheathing (Unexposed Face)** Minimum 26-gauge thick and 914.4 mm (36-inch) wide commercial grade steel R-panels with 31.8 mm (1<sup>1</sup>/<sub>4</sub>-inch) deep ribs must be installed vertically with panel seams overlapping in accordance with the manufacturer's published installation instructions. Panels must be secured to each other along the vertical overlapping seam using 25.4 mm (1-inch) long No. 12 external hex washer head self-drilling screws spaced at a maximum of 406.4 mm (16-inches) on center vertically. Panels are secured to the perimeter framing members using 25.4 mm (1-inch) long No. 12 external hex washer head self-drilling screws spaced at a maximum of 406.4 mm (16-inches) on center around the perimeter of the wall assembly. Panels must be secured to the intermediate support framing using 38.1 mm (1<sup>1</sup>/<sub>2</sub>-inch) long No. 12-14 external hex washer head self-drilling screws spaced at a maximum of 304.8 mm (12-inches) on center horizontally along each intermediate support framing member.
- 3. **Intermediate Support Framing** Intermediate wall framing members consist of minimum 16-gauge thick, 101.6 mm (4-inch) deep Z- or C-girts with 50.8 mm (2-inch) legs installed horizontally and spaced at a maximum of 1219.2 mm (48-inches) on center. The intermediate support framing members are secured to the perimeter framing members using minimum two 12.7 mm (1/2-inch) long No. 8 pan head self-drilling screws at each end.
- 4. Insulation Carlisle SealTite™ One (Closed-Cell) spray-applied polyurethane foam (SPF) insulation, with a reported density of 36.84 kg/m³ (2.30 lbs./ft³), must be applied at a nominal thickness of 101.6 mm (4-inches) between the intermediate support framing members, applied directly to the fire exposed face of the wall sheathing. SPF insulation must also be applied to the intermediate support framing members at a nominal thickness of 38.1 mm (1¹/₂-inch) matching the contour of the Z- or C-girts. Application must be in accordance with the manufacturer's published instructions.
- 5. Intumescent Coating (Exposed Face) International Fireproof Technology Inc. DC315 intumescent coating must be applied over the exposed surface of the spray foam insulation at a minimum 0.61 mm (24 mils) dry film thickness (DFT) on the fire exposed face of the wall assembly. Application must be in accordance with the manufacturer's published instructions.



### ICC Design No. IFRM-1577-04 ESL-1577

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Product: DC315 INTUMESCENT COATING

Code Section: Sections 3.1.7.1. and 3.1.7.2. of Volume 1-Division B of the National Building Code of Canada® 2020 and

2015

Assembly Rating:

45-minutes from the Fire Exposed Face (Asymmetrical Wall Assembly) in accordance with Section 3.1.7.1.

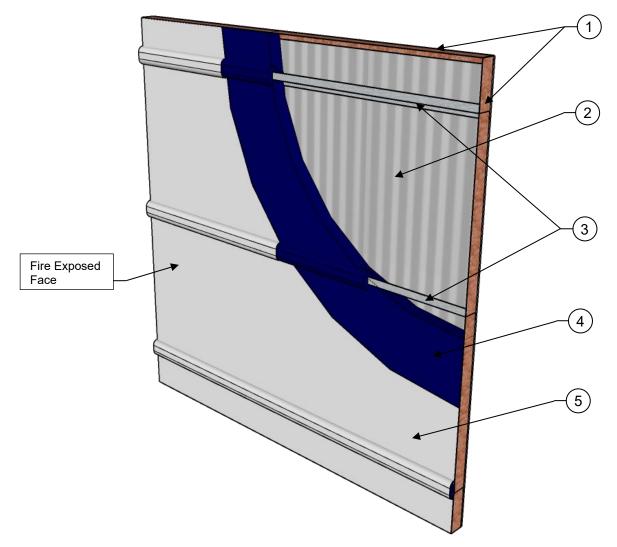
without correction required to Section 3.1.7.2. of Volume 1-Division B of the National Building Code of

Canada® 2020 and 2015,

1-Hour from the Fire Exposed Face (Asymmetrical Wall Assembly) where  $F_{EO} = 0.01$ ,

Note: See Conditions of Listing Item 4 of ESL-1577

Load: Non-loadbearing





- 1. **Perimeter Framing Members** Minimum 16-gauge thick steel members with minimum 101.6 mm by 50.8 mm (4-inch by 2-inch) legs are used as perimeter framing for the wall assembly. The perimeter framing members are oriented to allow for wall sheathing attachment and secured to each other using minimum two 12.7 mm (1/2-inch) long No. 8 pan head self-drilling screws at each corner.
- 2. **Wall Sheathing (Unexposed Face) –** Minimum 26-gauge thick and 914.4 mm (36-inch) wide commercial grade steel R-panels with 31.8 mm (1<sup>1</sup>/<sub>4</sub>-inch) deep ribs must be installed vertically with panel seams overlapping in accordance with the manufacturer's published installation instructions. Panels must be secured to each other along the vertical overlapping seam using 25.4 mm (1-inch) long No. 12 external hex washer head self-drilling screws spaced at a maximum of 406.4 mm (16-inches) on center vertically. Panels are secured to the perimeter framing members using 25.4 mm (1-inch) long No. 12 external hex washer head self-drilling screws spaced at a maximum of 406.4 mm (16-inches) on center around the perimeter of the wall assembly. Panels must be secured to the intermediate support framing using 38.1 mm (1<sup>1</sup>/<sub>2</sub>-inch) long No. 12-14 external hex washer head self-drilling screws spaced at a maximum of 304.8 mm (12-inches) on center horizontally along each intermediate support framing member.
- 3. **Intermediate Support Framing** Intermediate wall framing members consist of minimum 16-gauge thick, 101.6 mm (4-inch) deep Z- or C-girts with 50.8 mm (2-inch) legs installed horizontally and spaced at a maximum of 1219.2 mm (48-inches) on center. The intermediate support framing members are secured to the perimeter framing members using minimum two 12.7 mm (1/2-inch) long No. 8 pan head self-drilling screws at each end.
- 4. Insulation Elastochem Insulthane® Extreme (Closed-Cell) spray-applied polyurethane foam (SPF) insulation, with a reported density of 34.92 kg/m³ (2.18 lbs./ft³), must be applied at a nominal thickness of 101.6 mm (4-inches) between the intermediate support framing members, applied directly to the fire exposed face of the wall sheathing. SPF insulation must also be applied to the intermediate support framing members at a nominal thickness of 38.1 mm (1¹/₂-inch) matching the contour of the Z- or C-girts. Application must be in accordance with the manufacturer's published instructions.
- 5. Intumescent Coating (Exposed Face) International Fireproof Technology Inc. DC315 intumescent coating must be applied over the exposed surface of the spray foam insulation at a minimum 0.61 mm (24 mils) dry film thickness (DFT) on the fire exposed face of the wall assembly. Application must be in accordance with the manufacturer's published instructions.



## ICC Design No. IFRM-1577-05 ESL-1577

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**Applicant:** INTERNATIONAL FIREPROOF TECHNOLOGY INC.

Product: DC315 INTUMESCENT COATING

Code Section: Sections 3.1.7.1. and 3.1.7.2. of Volume 1-Division B of the National Building Code of Canada® 2020 and

2015

Assembly Rating:

45-minutes from the Fire Exposed Face (Asymmetrical Wall Assembly) in accordance with Section 3.1.7.1.

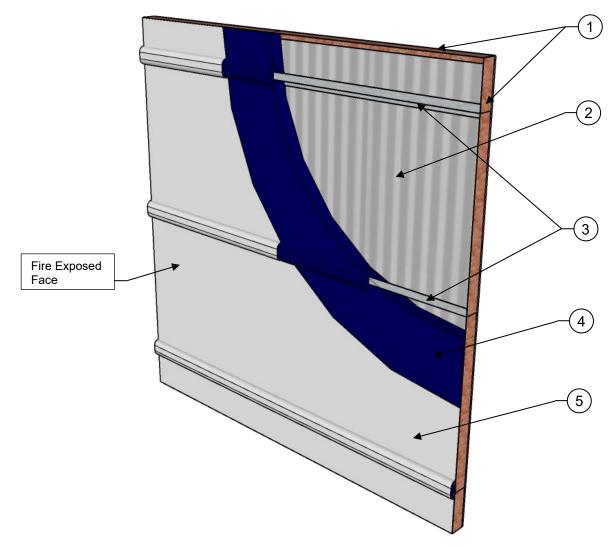
without correction required to Section 3.1.7.2. of Volume 1-Division B of the *National Building Code of* 

Canada® 2020 and 2015,

1-Hour from the Fire Exposed Face (Asymmetrical Wall Assembly) where  $F_{EO} = 0.01$ ,

Note: See Conditions of Listing Item 4 of ESL-1577

Load: Non-loadbearing





- 1. **Perimeter Framing Members** Minimum 16-gauge thick steel members with minimum 101.6 mm by 50.8 mm (4-inch by 2-inch) legs are used as perimeter framing for the wall assembly. The perimeter framing members are oriented to allow for wall sheathing attachment and secured to each other using minimum two 12.7 mm (1/2-inch) long No. 8 pan head self-drilling screws at each corner.
- 2. **Wall Sheathing (Unexposed Face) –** Minimum 26-gauge thick and 914.4 mm (36-inch) wide commercial grade steel R-panels with 31.8 mm (1<sup>1</sup>/<sub>4</sub>-inch) deep ribs must be installed vertically with panel seams overlapping in accordance with the manufacturer's published installation instructions. Panels must be secured to each other along the vertical overlapping seam using 25.4 mm (1-inch) long No. 12 external hex washer head self-drilling screws spaced at a maximum of 406.4 mm (16-inches) on center vertically. Panels are secured to the perimeter framing members using 25.4 mm (1-inch) long No. 12 external hex washer head self-drilling screws spaced at a maximum of 406.4 mm (16-inches) on center around the perimeter of the wall assembly. Panels must be secured to the intermediate support framing using 38.1 mm (1<sup>1</sup>/<sub>2</sub>-inch) long No. 12-14 external hex washer head self-drilling screws spaced at a maximum of 304.8 mm (12-inches) on center horizontally along each intermediate support framing member.
- 3. **Intermediate Support Framing** Intermediate wall framing members consist of minimum 16-gauge thick, 101.6 mm (4-inch) deep Z- or C-girts with 50.8 mm (2-inch) legs installed horizontally and spaced at a maximum of 1219.2 mm (48-inches) on center. The intermediate support framing members are secured to the perimeter framing members using minimum two 12.7 mm (1/2-inch) long No. 8 pan head self-drilling screws at each end.
- 4. Insulation Grizzly Gold 2.0 HFO spray-applied polyurethane foam (SPF) insulation, with a reported density of 34.92 kg/m³ (2.18 lbs./ft³), must be applied at a nominal thickness of 101.6 mm (4-inches) between the intermediate support framing members, applied directly to the fire exposed face of the wall sheathing. SPF insulation must also be applied to the intermediate support framing members at a nominal thickness of 38.1 mm (1¹/₂-inch) matching the contour of the Z- or C-girts. Application must be in accordance with the manufacturer's published instructions.
- 5. **Intumescent Coating (Exposed Face)** International Fireproof Technology Inc. DC315 intumescent coating must be applied over the exposed surface of the spray foam insulation at a minimum 0.61 mm (24 mils) dry film thickness (DFT) on the fire exposed face of the wall assembly. Application must be in accordance with the manufacturer's published instructions.