



## Evaluation Report CCMC 14045-R Royal Select Clapboard and Board and Batten Cladding

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|---------------------------|------------|
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### 1. Opinion

It is the opinion of the Canadian Construction Materials Centre (CCMC) that “Royal Select Clapboard and Board and Batten Cladding,” when used as a foamed cellular polyvinyl chloride (PVC) cladding system in new and retrofit constructions falling under Part 9 of the NBC 2015 in accordance with the conditions and limitations stated in Section 3 of this Report, complies with the National Building Code (NBC) of Canada 2015:

- Clause 1.2.1.1.(1)(a), Division A, using the following acceptable solutions from Division B:
  - Article 1.1.3.1., Climatic and Seismic Values
  - Sentence 4.1.7.1.(4), Specified Wind Load
  - Sentence 5.6.1.1.(1), Required Protection from Precipitation
  - Sentence 9.27.1.1.(6), General (Cladding)
  - Article 9.27.2.1., Minimizing and Preventing Ingress and Damage
  - Sentence 9.27.2.2.(1), Minimum Protection from Precipitation Ingress
  - Sentence 9.27.2.2.(4), Minimum Protection from Precipitation Ingress
  - Sentence 9.27.2.2.(5), Minimum Protection from Precipitation Ingress
  - Sentence 9.27.2.2.(6), Minimum Protection from Precipitation Ingress
  - Sentence 9.27.5.1.(1), Attachment (Attachment of Cladding)
  - Sentence 9.27.2.3.(1), First and Second Planes of Protection
  - Article 9.27.3.1., Elements of the Second Plane of Protection
- Clause 1.2.1.1.(1)(b), Division A, as an alternative solution that achieves at least the minimum level of performance required by Division B in the areas defined by the objectives and functional statements attributed to the following applicable acceptable solutions:
  - Sentence 9.27.12.1.(1), Vinyl Siding, Material Standard

This opinion is based on the CCMC evaluation of the technical evidence in Section 4 provided by the Report Holder.

### 2. Description

The “Royal Select Clapboard Cladding” product is an exterior cladding system supplied in planks measuring 216 mm (8.5 in.) and 137 mm (5.5 in.) wide with an exposure of 178 mm (7 in.) and 100 mm (4 in.), respectively; a nominal length of 3 759 mm (12 ft. 4 in.); and a nominal thickness of 8.7 mm (11/32 in.). The product is made of cellular PVC and is installed horizontally. The panels are profiled along the top and edges so that the horizontal and vertical joints are clipped together creating a shiplap joint. The exterior face of the panels is embossed to provide a wood-like pattern. The panels are available in different colours.

The “Royal Select Board and Batten Cladding” product is an exterior cladding system supplied in boards measuring 228 mm (9 in.) wide with an exposure of 190 mm (7.5 in.) and a nominal length of 3048 mm (10 ft.) and a nominal thickness of 95.25 mm (3.75 in.). The product is made of cellular PVC and is installed vertically. The exterior face of the panels is embossed to provide a wood-like pattern. The panels are available in different colours.

The cladding product must be installed in accordance with the manufacturer’s specifications and limitations listed below. The horizontal cladding product must be installed using 50 mm (2 in.) long hot-dipped galvanized roofing nails with a minimum spacing of 406 mm (16 in.) on center (o.c.). The vertical cladding product must be installed using 50 mm (2 in.) long hot-dipped galvanized roofing nails with a minimum spacing of 203 mm (8 in.) on center (o.c.).

The Royal Select Clapboard product can be installed directly over the Code acceptable sheathing and sheathing membrane in non-coastal applications with a moisture index MI of < 1. In coastal regions with a MI of > 1, the product must be installed over furring.

The Royal Select Board and Batten product must be installed over furring, Code acceptable sheathing and sheathing membrane in all regions.

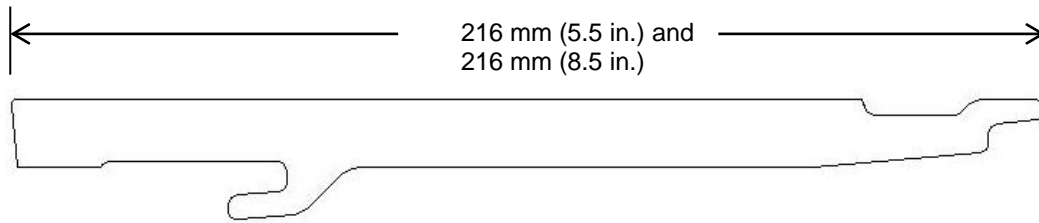


Figure 1. Profile of a “Royal Select Clapboard Cladding” plank for 100 mm (4 in.) and 178 mm (8 in.) exposures

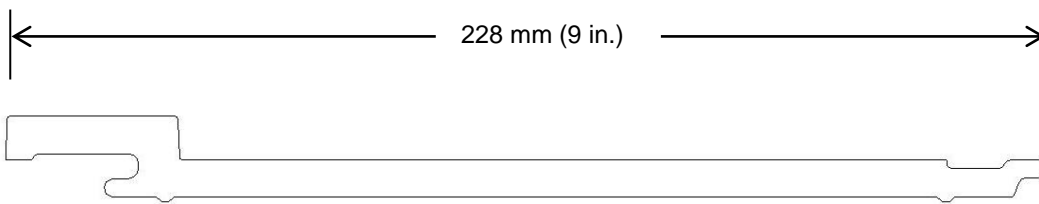


Figure 2. Profile of a “Royal Select Board and Batten Cladding” board for 190 mm (7.5 in.) exposures

### 3. Conditions and Limitations

The CCMC compliance opinion in Section 1 is bound by “Royal Select Clapboard and Board and Batten Cladding” being used in accordance with the conditions and limitations set out below:

- The cladding system is intended for use as an exterior cladding applied to vertical walls of plywood or oriented strandboard (OSB) sheathing installed over wood or steel framing in new constructions.
- The cladding system is intended for use on buildings not exceeding 12 m in height or 3 stories.
- The “Royal Select Clapboard Cladding” product can be installed directly to the sheathing in non-coastal areas ( $MI \leq 1$ ) as defined by Sentence 9.27.2.2.(5) of Division B of the NBC 2015 with conformance to Sentence 9.27.2.2.(6).
- The “Royal Select Board and Batten Cladding” product must be installed over furring in coastal and non-coastal areas ( $MI > 1$  and  $MI < 1$ ) as defined by Sentence 9.27.2.2.(5) of Division B of the NBC 2015 in conformance with Article 9.27.5.3., Furring, of Division B of the NBC 2015 and in conjunction with a minimum vented air space or capillary break of 10 mm conforming to Clause 9.27.2.2.(1)(a) and Sentence 9.27.2.2.(2) of Division B of the NBC 2015.
- Based on the test data and the computer modeling summarized in this Report, it was determined that the “Royal Select Clapboard Cladding” product must be installed over furring in coastal areas ( $MI > 1$ ) as defined by Sentence 9.27.2.2.(5) of Division B of the NBC 2015 in conformance with Article 9.27.5.3., Furring, of Division B of the NBC 2015 and in conjunction with a minimum vented air space or capillary break of 10 mm conforming to Clause 9.27.2.2.(1)(a) and Sentence 9.27.2.2.(2) of Division B of the NBC 2015.
- The cladding system must be installed in conjunction with an acceptable sheathing with a thickness of no less than 11 mm (7/16 in.) as defined in Article 9.23.17.2. of Division B of the NBC 2015.
- The cladding system must be installed in conjunction with a Code acceptable sheathing membrane as defined in Article 9.27.3.2. of Division B of the NBC 2015.
- The cladding must be installed in accordance with the following fastening pattern:
  - “Royal Select Clapboard Cladding” – 50 mm (2 in.) hot-dipped galvanized roofing nails with maximum spacing of 406 mm (16 in.).
  - “Royal Select Board and Batten Cladding” - 50 mm (2 in.) hot-dipped galvanized roofing nails with maximum spacing of 203 mm (8 in.) on center (o.c.).

- Fasteners for the cladding must be corrosion resistant, compatible with the cladding material, and positioned to permit expansion and contraction due to temperature changes.
- The attachment of the cladding system must conform to Sentence 9.27.5.1.(1), Attachment, Article 9.27.5.5., Fasteners Materials, and Sentence 9.27.5.7.(2), Penetration of Fasteners, of Division B of the NBC 2015. For any other mode of attachment to the sheathing, the structural sufficiency of the sheathing and backing wall in conjunction with the type of fasteners must be in accordance with Part 4 of Division B of the NBC 2015.
- The cladding must be installed with a suitable flashing that will drain water to the exterior and protect the exposed top edge of the cladding. Installed flashing must be in accordance with the requirements of Article 9.27.3.7. of Division B of the NBC 2015.
- At least one layer of sheathing membrane conforming to Article 9.27.3.1., Second Plane of Protection, of Division B of the NBC 2015 must be applied beneath the cladding. The sheathing membrane must be applied in accordance with Article 9.27.3.3., Required Sheathing Membrane and Installation, of Division B of the NBC 2015.
- The installation of the “Royal Plastics Clapboard Cladding” product with mechanical fasteners as indicated in Table 4.2.2.1 is limited to geographical areas where the wind value is  $Q_{50} < 1.0$  kPa.
- The installation of the “Royal Plastics Board and Batten Cladding” product with mechanical fasteners as indicated in Table 4.2.2.1 is limited to geographical areas where the wind value is  $Q_{50} < 0.75$  kPa.
- The product must be installed in accordance with the manufacturer’s current installation instructions.
- This Evaluation Report is applicable only to products identified with the phrase “CCMC 14045-R” on the packaging.

## 4. Technical Evidence

The Report Holder has submitted technical documentation for the CCMC evaluation. Testing was conducted at laboratories recognized by CCMC. The corresponding technical evidence for this product is summarized below.

### 4.1 Prescriptive Requirements

#### 4.1.1 Cladding Material Characteristics

**Table 4.1.1.1 Results of Testing the Cladding Material Characteristics of the Product**

| Property  | Unit              | Requirement  | Result       |
|---|-------------------|--------------|--------------|
| Density   | kg/m <sup>3</sup> | Report value | 477.7        |
| Tensile modulus   | MPa               | Report value | 7.9          |
| Compressive strength at 10% deformation                     | MPa               | Report value | 6.754        |
| Tensile strength at yield                                   | MPa               | Report value | 10.14        |
| Coefficient of linear expansion                             | cm/cm/°C          | < 0.000081   | 0.000005     |
| Flexural strength   | MPa               | Report value | 19.64        |
| Loss of flexural strength after ultraviolet (UV) resistance | %                 | ≤ 25         | 8.2          |
| Loss of flexural strength after freeze-thaw resistance      | %                 | ≤ 15         | 1.7          |
| Hardness of panel   | –                 | Report value | 45.5 Shore D |

## 4.1.2 Dimensional Tolerance

Table 4.1.2.1 Results of Testing the Dimensional Tolerance of the Product

| Property          | Unit | Requirement       | Result |
|-------------------|------|-------------------|--------|
| Length            | mm   | ±10               | Pass   |
| Width             | mm   | ±2                | Pass   |
| Thickness         | mm   | ±1.6              | Pass   |
| Squareness        | mm   | ±4.0              | Pass   |
| Edge straightness | mm/m | ≤ 1.8/m of length | Pass   |

## 4.2 Performance Requirements

### 4.2.1 Cladding System Impact and Weathering

Table 4.2.1.1 Results of Testing the Cladding System Impact and Weathering of the Product

| Property                          | Requirement  | Result |
|-----------------------------------|--|--------|
| Impact resistance                 | The cladding system must be capable of withstanding the applied impact loads without deterioration in the performance or safety of the system. | Pass   |
| Accelerated weathering resistance | The cladding system must show no visual surface and physical change such as cracking, flaking or any other deleterious effects.                | Pass   |

### 4.2.2 Cladding System Wind Load Resistance

Table 4.2.2.1 Results of Testing the Wind Load Resistance – “Royal Celect Clapboard Cladding”<sup>1</sup>

| Reference Wind Pressure (kPa) | Sustained                            |      | Cycling                              |      | Gust                                 |      | Deflection Test  |  |                                       |
|-------------------------------|--------------------------------------|------|--------------------------------------|------|--------------------------------------|------|--|--|---------------------------------------|
|                               | P <sub>1</sub> ,P' <sub>1</sub> (Pa) |      | P <sub>2</sub> ,P' <sub>2</sub> (Pa) |      | P <sub>3</sub> ,P' <sub>3</sub> (Pa) |      | Test Pressure (Pa)<br>2.18 P <sub>1</sub> ,P' <sub>1</sub> | Measured Maximum Net Mid-Span Deflections (mm) |                                       |
|                               |                                      | Pass |                                      | Pass |                                      | Pass |  | Stud Height<br>3 050 mm                        | Sheathing <sup>2</sup> Span<br>406 mm |
| Q <sub>50</sub> < 0.25        | ±250                                 | Pass | ±365                                 | Pass | ±540                                 | Pass | +540   | 0.0  | -0.3                                  |
|                               |                                      |      |                                      |      |                                      |      | -540   | -0.2   | 3.1                                   |
| Q <sub>50</sub> < 0.50        | ±500                                 | Pass | ±730                                 | Pass | ±1 090                               | Pass | +1 090   | 0.0  | -0.1                                  |
|                               |                                      |      |                                      |      |                                      |      | -1 090   | 0.4  | 6.3                                   |
| Q <sub>50</sub> < 0.75        | ±750                                 | Pass | ±1 090                               | Pass | ±1 630                               | Pass | +1 630   | 1.3  | -0.4                                  |
|                               |                                      |      |                                      |      |                                      |      | -1 630   | -1.3   | 1.7                                   |
| Q <sub>50</sub> < 1.00        | ±1 000                               | Pass | ±1 460                               | Pass | ±2 180                               | Pass | +2 180   | 1.5  | 1.0                                   |
|                               |                                      |      |                                      |      |                                      |      | -2 180   | -0.9   | 0.1                                   |

#### Notes to Table 4.2.2.1:

1. The horizontal siding material was fastened using 50-mm-long hot-dipped galvanized roofing nails spaced at 406 mm o.c.
2. The horizontal siding material was fastened into the 11-mm-thick sheathing.

**Table 4.2.2.2 Results of Testing the Wind Load Resistance – “Royal Celect Board and Batten Cladding”<sup>1</sup>**

| Reference Wind Pressure (kPa) | Sustained                            |      | Cycling                              |      | Gust                                 |      | Deflection Test  |  |                                       |
|-------------------------------|--------------------------------------|------|--------------------------------------|------|--------------------------------------|------|--|--|---------------------------------------|
|                               | P <sub>1</sub> ,P' <sub>1</sub> (Pa) |      | P <sub>2</sub> ,P' <sub>2</sub> (Pa) |      | P <sub>3</sub> ,P' <sub>3</sub> (Pa) |      | Test Pressure (Pa)<br>2.18 P <sub>1</sub> ,P' <sub>1</sub> | Measured Maximum Net Mid-Span Deflections (mm) |                                       |
|                               |                                      |      |                                      |      |                                      |      |  | Stud Height<br>3 050 mm                        | Sheathing <sup>2</sup> Span<br>406 mm |
| Q <sub>50</sub> < 0.18        | ±180                                 | Pass | ±180                                 | Pass | ±365                                 | Pass | +392   | -0.9   | -0.4                                  |
|                               |                                      |      |                                      |      |                                      |      | -392   | -0.4   | -3.6                                  |
| Q <sub>50</sub> < 0.375       | ±375                                 | Pass | ±365                                 | Pass | ±540                                 | Pass | +818   | -1.1   | -0.5                                  |
|                               |                                      |      |                                      |      |                                      |      | -818   | -0.1   | -1.9                                  |
| Q <sub>50</sub> < 0.562       | ±562                                 | Pass | ±730                                 | Pass | ±1 090                               | Pass | +1 225   | 1.8  | -2.9                                  |
|                               |                                      |      |                                      |      |                                      |      | -1 225   | 0.0  | -1.7                                  |
| Q <sub>50</sub> < 0.75        | ±750                                 | Pass | ±1 090                               | Pass | ±1 630                               | Pass | +1 635   | 0.5  | -1.9                                  |
|                               |                                      |      |                                      |      |                                      |      | -1 635   | -2.4   | -6.9                                  |

**Notes to Table 4.2.2.2:**

1. The horizontal siding material was fastened using 50-mm-long hot-dipped galvanized roofing nails spaced at 406 mm o.c.
2. The horizontal siding material was fastened into the 11-mm-thick sheathing.

**4.2.3 Durability under Environmental Cyclic Conditions**

**Table 4.2.3.1 Determination of Hygrothermal Properties of Cladding for the Product (with respect to Code Solution – Vinyl Siding)**

| Property                     | Unit                                  | Result   |  |
|------------------------------|---------------------------------------|--|--|
|                              |                                       | Royal Celect Clapboard and Board and Batten Cladding | Code Benchmark Vinyl Siding <sup>1</sup> |
| Thickness of siding          | mm                                    | 8.95   | 1.2                                      |
| Density                      | kg/m <sup>3</sup>                     | 477 <sup>2</sup>                                     | 1 500                                    |
| Thermal conductivity         | W/m·K                                 | 0.0555   | 0.16                                     |
| Heat capacity                | J/(kg·K)                              | 1 260 <sup>3</sup>                                   | 1 260 <sup>3</sup>                       |
| Water vapour permeance       | ng/m <sup>2</sup> ·s·Pa               | XD <sup>4</sup> 33.88                                | XD 7.11                                  |
|                              |                                       | YD <sup>5</sup> 14.4                                 | –  |
| Air permeability (at 75 Pa)  | L/m·s                                 | XD 0.06  | XD 0.00476                               |
| Water absorption coefficient | kg·m <sup>-2</sup> ·s <sup>-1/2</sup> | 0.00011  | –  |

**Notes to Table 4.2.3.1:**

1. Determined to be the benchmark cladding for alternative solution compliance of the “Royal Celect Clapboard and Board and Batten Cladding” in accordance with Sentence 9.27.2.2.(1), Minimum Protection from Precipitation Ingress, of Division B of NBC 2015. Properties provided below are based on the NRC report “Moisture Management Evaluation of Royal Building Product Celect Siding Products – Development of Hygrothermal Properties,” August 18, 2016.
2. Based on testing from the NRC report, “Moisture Management Evaluation of Royal Building Product Celect Siding Products – Development of Hygrothermal Properties,” August 18, 2016.
3. Determined to be the same value for “Royal Celect Clapboard and Board and Batten Cladding” and the Code benchmark vinyl siding based on the NRC report, “Moisture Management Evaluation of Royal Building Product Celect Siding Products – Development of Hygrothermal Properties,” August 18, 2016.
4. X direction.
5. Y direction.

**Table 4.2.3.2 Results of Test Simulation for Condensation Resistance of the Product (Code Solution – Vinyl Siding)**

| Property  | Zone                             | Code Benchmark Vinyl Siding | Royal Celect - Board and Batten Cladding <sup>1</sup>                                     | Royal Celect - Clapboard Cladding <sup>1</sup>  |
|---|----------------------------------|-----------------------------|---|---|
| <b>Diffuse air moisture transfer</b>                                      | Zone 6 – Halifax, NS<br>MI > 1   | Acceptable                  | Possible risk of formation of condensation on the interior surface of the sheathing panel | Not at risk of formation of condensation on the interior surface of the sheathing panel |
|   | Zone 7A – Winnipeg, MB<br>MI < 1 | Acceptable                  | Possible risk of formation of condensation on the interior surface of the sheathing panel | Not at risk of formation of condensation on the interior surface of the sheathing panel |
|   | Zone 8 – Iqaluit, NU<br>MI < 1   | Acceptable                  | Possible risk of formation of condensation on the interior surface of the sheathing panel | Not at risk of formation of condensation on the interior surface of the sheathing panel |
| <b>Moisture transfer by diffused air movement and an air leakage path</b> | Zone 6 – Halifax, NS<br>MI > 1   | Acceptable                  | Possible risk of formation of condensation on the interior surface of the sheathing panel | Not at risk of formation of condensation on the interior surface of the sheathing panel |
|   | Zone 7A – Winnipeg, MB<br>MI < 1 | Acceptable                  | Possible risk of formation of condensation on the interior surface of the sheathing panel | Not at risk of formation of condensation on the interior surface of the sheathing panel |
|   | Zone 8 – Iqaluit, NU<br>MI < 1   | Acceptable                  | Possible risk of formation of condensation on the interior surface of the sheathing panel | Not at risk of formation of condensation on the interior surface of the sheathing panel |

**Note to Table 4.2.3.2:**

- Simulation for the condensation resistance of the product was conducted without the Code acceptable capillary break to verify performance and installation of the product directly to the sheathing.

**Table 4.2.3.3 Results of Water Entry Testing under Pressure for the Product (with respect to Code Solution – Vinyl Siding)**

| Property                 | Unit | Requirement           | Horizontal Siding                   |                                     |
|--------------------------|------|-----------------------|-------------------------------------|-------------------------------------|
| <b>Water penetration</b> | L    | Report water quantity | Introduced                          |                                     |
|                          |      |                       | Drained                             | 8 L                                 |
|                          |      |                       | Retained                            | Less than vinyl siding <sup>1</sup> |
|                          |      |                       | More than vinyl siding <sup>2</sup> |                                     |

**Notes to Table 4.2.3.3:**

- Due to the fact that the water amounts drained and retained behind the cladding are greater than the Code benchmark solution of vinyl siding, hygrothermal simulation was undertaken to determine the effect of the moisture on the sheathing and the backup wall. The results of this analysis are found in the NRC report, “Moisture Management Evaluation of Royal Building Products Cladding – Results from Simulation to Evaluate Response for Wall Assembly to Water Entry,” September 15, 2016. Based on the findings of the hygrothermal analysis report prepared by the NRC, September 19 and 23, 2016, the “Royal Celect Clapboard Cladding” is deemed to perform in non-coastal areas (MI ≤ 1) and must be installed over strapping in coastal areas (MI > 1).
- Retained moisture requires modeling to ensure that there is no adverse effects to the components of the wall assembly. Results of the modeling are presented in Tables 4.2.4.1 and 4.2.4.2.

## 4.2.4 Modeling Results

**Table 4.2.4.1 Results of Testing the Moisture Modeling for Retained Water Entry (Code Solution – Vinyl Siding) for Zones with MI > 1**

| Zone                                | Relative Humidity (RH) Based on Temperature | Code Benchmark Vinyl Siding | Royal Celect Clapboard Cladding | Royal Celect Board and Batten Cladding | Result <sup>1</sup>                  |
|-------------------------------------|---|-----------------------------|---------------------------------|--|--------------------------------------|
| Zone 6 – Halifax, NS (MI = 1.49)    | RHT 80                                      | 8 948                       | 9 237                           | 9 923                                  | Product to be installed over furring |
|                                     | RHT 92                                      | 3 569                       | 3 679                           | 3 672                                  |                                      |
|                                     | RHT 95                                      | 2 223                       | 2 289                           | 2 285                                  |                                      |
| Zone 6 – St. John’s, NL (MI = 1.41) | RHT 80                                      | 5 364                       | 5 648                           | 5 639                                  | Product to be installed over furring |
|                                     | RHT 92                                      | 2 242                       | 2 255                           | 2 250                                  |                                      |
|                                     | RHT 95                                      | 1 336                       | 1 407                           | 1 430                                  |                                      |
| Zone 5 – Vancouver, BC (MI = 1.69)  | RHT 80                                      | 10 995                      | 11 382                          | 11 572                                 | Product to be installed over furring |
|                                     | RHT 92                                      | 4 340                       | 4 434                           | 4 618                                  |                                      |
|                                     | RHT 85                                      | 2 676                       | 2 397                           | 2 879                                  |                                      |

### Note to Table 4.2.4.1:

1. Based on the findings of the hygrothermal analysis report prepared by the NRC, “Moisture Management Evaluation of Royal Building Products Cladding – Results from Simulation to Evaluate Response for Wall Assembly to Water Entry,” September 15, 2016.

**Table 4.2.4.2 Results of Testing the Moisture Modeling for Water Entry (Code Solution – Vinyl Siding) for Zones with MI < 1 for “Royal Celect Clapboard Siding”**

| Zone                             | RH Based on Temperature | Code Benchmark Vinyl Siding | Royal Celect Clapboard Cladding | Result <sup>1</sup>                                 |
|----------------------------------|-------------------------|-----------------------------|---------------------------------|---|
| Zone 6 – Chatham, NB (MI = 0.97) | RHT 80                  | 8 719                       | 8 816                           | Product to be installed directly over the sheathing |
|                                  | RHT 92                  | 3 412                       | 3 339                           |   |
|                                  | RHT 95                  | 2 085                       | 1 907                           |   |

### Note to Table 4.2.4.2:

1. Based on the findings of the hygrothermal analysis report prepared by the NRC, “Moisture Management Evaluation of Royal Building Products Cladding – Results from Simulation to Evaluate Response for Wall Assembly to Water Entry,” September 15, 2016. The “Royal Celect Clapboard Cladding” can perform at least as well as the Vinyl-Clad Benchmark as such the product can be installed directly over the sheathing.

**Table 4.2.4.3 Results of Testing the Moisture Modeling for Water Entry (Code Solution – Vinyl Siding) for Zones with MI < 1 for “Royal Celect Board and Batten Cladding”**

| Zone                                | RH Based on Temperature | Code Benchmark Vinyl Siding | Royal Celect Board and Batten Cladding | Result <sup>1</sup>                  |
|-------------------------------------|-------------------------|-----------------------------|--|--------------------------------------|
| Zone 6 – Chatham, NB<br>(MI = 0.97) | RHT 80                  | 8 719                       | 8 666                                  | Product to be installed over furring |
|                                     | RHT 92                  | 3 412                       | 3 205                                  |                                      |
|                                     | RHT 95                  | 2 085                       | 1 839                                  |                                      |

**Note to Table 4.2.4.3:**

- Based on the findings of the hygrothermal analysis report prepared by the NRC, “Moisture Management Evaluation of Royal Building Products Cladding – Results from Simulation to Evaluate Response for Wall Assembly to Water Entry,” September 15, 2016, results shows that highest index values for decay and mold are reached more rapidly in the “Royal Celect Board and Batten Cladding” than the Code Benchmark Vinyl Siding, as such the product must be installed over furring.

**4.2.5 Fire Performance**

The product conforms to Clause 3.1.5.5.(1)(a) of the NBC 2015 by meeting the requirements of CAN/ULC-S102.2, “Standard Method of Fire Test of Exterior Wall Assemblies,” as tested by Exova, Report No. 15-002-605, October 15, 2015.

Table 4.2.5.1 Fire Performance Results

| Test              | Results |
|-------------------|---------|
| Flame Spread      | 85      |
| Smoke Development | 580     |

**Report Holder**

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