CCMC CANADIAN CODE COMPLIANCE EVALUATION

CCMC 14182-R

CCMC Canadian code compliance evaluation

CCMC number:	14182-R
Status:	Active
Issue date:	2026-04-27
Modified date:	2026-05-14
Evaluation holder:	**Associated Materials, Inc.** 3773 State Road Cuyahoga Falls OH 44223 United States Website: www.associatedmaterials.com Telephone: 800-922-6009
Product name:	ALIGN® Composite Cladding 7" Plank
Compliance:	NBC 2020
Criteria:	CCMC-TG-074643.04-20, "CCMC Technical Guide for Insulated Glass-Fibre Reinforced Polymer Siding"

In most jurisdictions this document is sufficient evidence for approval by Canadian authorities.
Learn more about CCMC recognition Look for the trusted CCMC mark on products to verify compliance.

Compliance opinion

It is the opinion of the Canadian Construction Materials Centre that the evaluated product, when used as an exterior siding for buildings of combustible construction in accordance with the conditions and limitations stated in this evaluation, complies with the following code:

National Building Code of Canada 2020

Code provision	Solution type
9.27.2. Required Protection from Precipitation	Acceptable
9.27.3. Second Plane of Protection	Acceptable
9.27.12. Vinyl Siding,Insulated Vinyl Siding and Vinyl Soffits	Alternative
9.27.12.1.(2) Insulated vinyl siding shall conform to ...	Alternative

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The above opinion(s) is/are based on the evaluation by the CCMC of technical evidence provided by the evaluation holder, and is bound by the stated conditions and limitations. For the benefit of the user, a summary of the technical information that forms the basis of this evaluation has been included.

Product information

Product name

ALIGN® Composite Cladding 7" Plank

Product description

The product is an insulated, glass-reinforced polymer exterior cladding manufactured with a graphite-infused polystyrene (GPS) thermal insulation backing (see Figure 1). The GPS is glued and contoured to the back of the siding profile. The panels are fastened to the building structure through pre-punched nailing slots located along the top edge of the panel, which are concealed after the upper panel is installed.

The product comes in two types of finishes, a polyvinyl chloride (PVC) cap stock and an acrylonitrile stryrene acrylate (ASA) cap stock, each with their own colour palette.

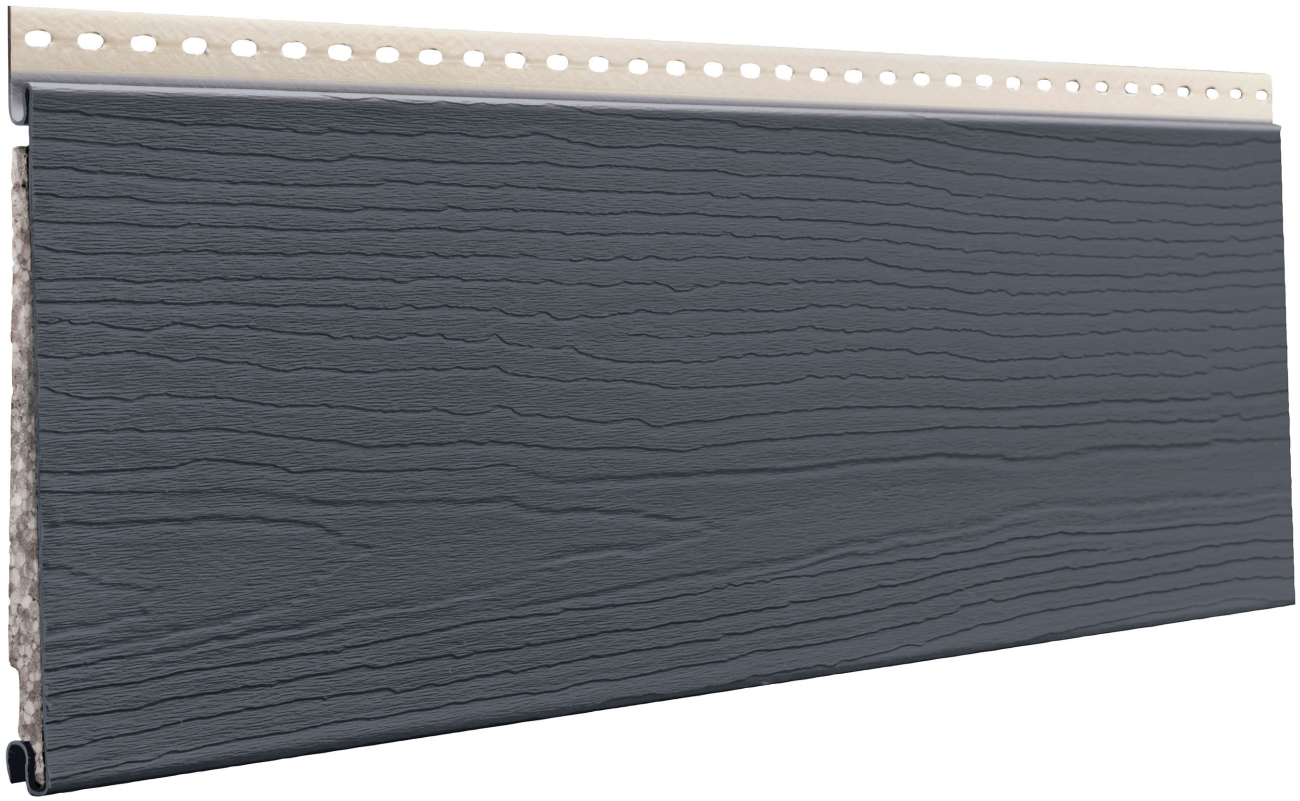

Figure 1. ALIGN® Composite Cladding 7" Plank

Manufacturing plant

This evaluation is valid only for products produced at the following plant:

Product name	Manufacturing plant
	West Salem, OH, US
ALIGN® Composite Cladding 7" Plank	✓

✓ Indicates that the product from this manufacturing facility has been evaluated by the CCMC

Conditions and limitations

The CCMC's compliance opinion is bound by this product being used in accordance with the conditions and limitations set out below.

- The products are limited to use as exterior siding for buildings falling within the scope of Part 9, Housing and Small Buildings, of Division B of the NBC 2020.
- When installed, all the building elements relevant to the product must comply with the requirements of the NBC 2020.
- The siding panels must be installed on furring to provide a second line of protection, which consists of a continuous, clear and uninterrupted air space of 19 mm outboard of the sheathing membrane.
- The furring must be installed over a sheathing membrane that meets the requirements of Article 9.27.3.2., Sheathing Membrane Material Standard, of Division B of the NBC 2020.
- In order to drain water to the outside, the system requires flashing at locations specified in Article 9.27.3.8., Flashing Installation, of Division B of the NBC 2020.
- Sealants used in conjunction with the product must meet the requirements of Subsection 9.27.4., Sealants, of Division B of the NBC 2020.
- In order to attach the cladding, the furring must be:
  - not less than 19 mm × 38 mm;
  - securely nailed to the framing; and
  - spaced not more than 600 mm on centre in accordance with Article 9.27.5.3., Furring, of Division B of the NBC 2020.
- The product or its packaging must be clearly identified with the phrase "CCMC 14182-R."
- In addition to the above requirements, the product and its accessories must be installed in accordance with the manufacturer's installation guide dated 2024 (document 500-1008E 6-24).
- This evaluation covers the installation of the products limited to geographical areas with the hourly wind pressures (HWP) shown in Table 4 . The wind load resistance test data and hourly wind pressure (Q_{50}) in this evaluation are limited to geographic areas where the site specific topographic factor, C_t = 1.0. Further calculations are required for buildings that are constructed on hills or escarpments with a slope as defined in Article 4.1.7.4., Topographic Factor, of the NBC 2020. For buildings constructed on hills and escarpments, the anticipated wind pressures may be greater than the values covered under this evaluation.

Technical information

This evaluation is based on demonstrated conformance with the following criteria:

Criteria number	Criteria name
CCMC-TG-074643.04-20	CCMC Technical Guide for Insulated Glass-Fibre Reinforced Polymer Siding

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

Material requirements

Physical properties

Table 1. Results of testing the physical properties of the product

Property	Unit	Requirement	Result	
			ASA	PVC
Coefficient of linear thermal expansion	µm/m/°C	≤ 81	MD (1): 37 CD (1): 70 (Pass)	MD: 41 CD: 68 (Pass)
Flammability	-	Compound must not exceed an average extent of burning of 25 mm, and the average time of burn must not exceed 10 s	Pass	Pass
Shrinkage	%	≤ 3.0	–0.18 (Pass)	–0.16 (Pass)
Warp	mm	≤ 3.0	1.5 (Pass)	1.6 (Pass)
Impact resistance (2)	J	≥ 6.3 at 23°C	8.1 (Pass)	8.5 (Pass)
		≥ 4.8 at 0°C	5.2 (Pass)	5.1 (Pass)
Surface distortion	-	Free from bulges, waves or ripples	Pass	Pass
Tensile strength	MPa	Report value	40.5	41.5

Loss of tensile strength	%	Soaked at 23C° for 2 h Boiled for 2 h Soaked at 25C° for 30 d < 25 of control	+0.80 –7.8 –2.4 (Pass)	–2.0 –5.7 –5.7 (Pass)
Thickness	mm	Face ≥ 0.7 mm	1.4 (Pass)	1.4 (Pass)
		Nail slots ≥ 0.9 mm	1.6 (Pass)	1.7 (Pass)

Note:

1 MD = machine direction. CD = cross direction

2 Contrary to the code minimum requirement, the test was carried out with insulation in place. Additional testing for adhesion durability was carried out, which showed there was no excessive loss of adhesion following conditioning of samples. This may not satisfy all the designer's requirements.

Dimensional tolerance

Table 2. Results of testing the dimensional tolerance requirements of the product

Property	Unit	Requirement	Result
Length	mm	± 3.0	2 (Pass)
Width	mm	± 3.0	2 (Pass)
Overall thickness	mm	± 1.6	0.11 (Pass)
Squareness	mm	± 4.0	0 (Pass)
Skew	mm/m	≤ 1.3 of length	0.0 (Pass)
Edge straightness (length)	mm/m	≤ 1.3	1.2 (Pass)
Edge straightness (width)	mm/m	≤ 1.3	0.0 (Pass)

Performance requirements

Cladding performance

Table 3. Results of testing the cladding performance of the product

Property	**Requirement**	**Result**	
		ASA	**PVC**

Acid rain resistance	The surface must not have any defects and/or occurrences of new voids.	Pass (1)	Pass (1)
	The tensile strength of the panels after acid rain exposure must not be less than 80% of the unexposed value.	Pass	Pass
Durability (2)	The cladding panel must remain fastened to the furring/sheathing with no scaling or blistering. There must be no cracking or crazing of the IPC exterior cladding. All sealants must remain adhered to the panels.	Pass	Pass
	The tensile strength of the panels after cyclic conditions must not be less than 80% of the unexposed value.	Pass	Pass
Accelerated weathering resistance	The exterior face must show no visual surface or physical changes, such as cracking, flaking or any other deleterious effects.	Pass	Pass

Note:

1 The exterior surface of the test panels exhibited some discolouration. There were no visible voids or blistering formed on the exterior surface coating of the panels.

2 The durability test was performed on a back-up wall consisting of 38 mm × 140 mm (2 in. × 6 in.) wood studs and 11.1 mm (7/16 in.) oriented strandboard (OSB) sheathing, with a self adhered, air and water resistive barrier and adhesive primer. The spacing between each stud section was 406 mm o.c., unless otherwise required to accommodate the sheathing joint locations. Along the studs, wood furring strips of dimensions 19 mm × 38 mm were installed vertically and fastened. Each siding panel was installed by using No. 8 32 mm pan head sheet metal screws on the furring strips.

Wind load resistance

Table 4. Results of testing the wind load (1) (2) (3) of the product at $Q_{1/50}$ < 0.65 kPa

Property	Requirement	Result
Deformation (sustained pressure)	No fracture or permanent deformation after sustained pressure of 650 Pa for 1 h	Pass
Repeated positive and negative pressure test (cyclic pressure), 2 000 cycles	No fracture or permanent deformation after the cyclic pressure 1360 Pa	Pass
Safety test (gust loads)	Resist wind gusts to 2 030 Pa	Pass

Note:

1 The wind load resistance test was performed on a back-up wall consisting of 38 mm × 89 mm (2 in. × 4 in.) wood studs and 11.1 mm (7/16 in.) oriented strandboard (OSB) sheathing. The spacing between each stud section was 406 mm o.c., unless otherwise required to accommodate the sheathing joint locations. Along the studs, wood furring strips of dimensions 19 mm × 38 mm were installed vertically and fastened using No. 8, 76 mm long flat head wood screws. Each siding panel was installed on the furring strips by using No. 8, 38 mm long pan head screws.

2 The performance level shown in the table is for installations to post-disaster buildings.

3 This table does not take into account where the site-specific topographic factor, Ct > 1.0, for buildings that are constructed on hills or escarpments with a slope defined in Article 4.1.7.4., Topographic Factor, of Division B of the NBC 2020. For buildings constructed on hills and escarpments, anticipated wind pressures may be greater.

Other technical evidence

Additional performance data requested by the evaluation holder

Data in this section does not form part of the CCMC's opinion in the code compliance opinion section.

Fire performance

Table 5. Results of testing of fire performance for the product (1)

Property	Requirement	Result	
		ASA	PVC
Flame-spread rating	Report value	70	55
Smoke development	Report value	470	470

Note:

1 Testing was conducted in accordance with CAN/ULC-S102.2, "Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering, and Miscellaneous Materials and Assemblies." A series of three runs was conducted for each test.

Administrative information

Use of Canadian Construction Materials Centre (CCMC) assessments

This assessment must be read in the context of the entire CCMC Registry of Product Assessments, any applicable building code or by-law requirements, and/or any other regulatory requirements (for example, the Canada Consumer Product Safety Act, the Canadian Environmental Protection Act, etc.).

It is the responsibility of the user to confirm that the assessment they are using is current and has not been withdrawn or superseded by a later version on the CCMC Registry of Product Assessments.

Disclaimer

The National Research Council of Canada (NRC) has evaluated only the characteristics of the specific product described herein. The information and opinions in this evaluation are directed to those who have the appropriate degree of experience to use and apply its contents (such as authorities having jurisdiction, design professionals and specifiers). This evaluation is valid when the product is used as part of permitted construction, respecting all conditions and limitations stated in the evaluation, and in accordance with applicable building codes and by-laws.

This evaluation is provided without representation, warranty or guarantee of any kind, expressed or implied, and the NRC provides no endorsement for any evaluated product. The NRC accepts no responsibility whatsoever arising in any way from any and all use of or reliance on the information contained herein or the use of any evaluated product. The NRC is not undertaking to render professional or other services on behalf of any person or entity nor to perform any duty owed by any person or entity to another person or entity.

Language

Une version française de ce document est disponible.
In the case of any discrepancy between the English and French version of this document, the English version shall prevail.

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CCMC recognition

The Canadian Construction Materials Centre (CCMC) assesses compliance with Canadian building, energy and safety codes. We are the only construction code compliance service supported and operated by the Government of Canada. Trusted by over 6,000 regulators across Canada.

> Most Canadian authorities having jurisdiction (AHJs) consider CCMC product assessments acceptable as evidence for product approval.

CCMC assessments are recognized by construction authorities across Canada:

Alliance of Canadian Building Official Associations (ACBOA)	(Alliance of Canadian Building Official Associations (ACBOA))
First Nations National Building Officers Association (FNNBOA)	(First Nations National Building Officers Association (FNNBOA))
Canadian Home Builders' Association (CHBA)	(Canadian Home Builders' Association (CHBA))
Alberta Building Officials Association (ABOA)	(Alberta Building Officials Associations (ABOA))
Saskatchewan Building Officials Association (SBOA)	(Saskatchewan Building Officials Association (SBOA))
Manitoba Building Officials Association (MBOA)	(Manitoba Building Officials Association (MBOA))
Ontario Building Officials Association (OBOA)	(Ontario Building Officials Association (OBOA))
New Brunswick Building Officials Association (NBBOA)	(New Brunswick Building Officials Association (NBBOA))
Nova Scotia Building Officials Association (NSBOA)	(Nova Scotia Building Officials Association (NSBOA))

> The CCMC provides code compliance assessments to Canadian code requirements, consulting nationwide with construction regulators to elicit regional variations in code requirements as well as provincial and local interpretations. Users are advised to review the technical information presented in CCMC assessments when making approval decisions. Learn more about how the CCMC provides a unique service for Canada.

For more information, contact the CCMC by phone at (613) 993-6189 or by email at ccmc@nrc-cnrc.gc.ca

Code compliance as an acceptable solution

Code Compliance via Acceptable Solutions

> If a building design (e.g. material, component, assembly or system) can be shown to meet all provisions of the applicable **acceptable solutions** in Division B (e.g. it complies with the applicable provisions of a referenced standard), it is deemed to have satisfied the objectives and functional statements linked to those provisions and thus to have complied with that part of the Code.
>
> — **National Building Code of Canada, Sentence A-1.2.1.1.(1)(a)**

The CCMC has determined that compliance with this provision of the Code has been demonstrated as an **Acceptable Solution**. The evaluation report provides a summary of the basis of CCMC's compliance opinion.

CCMC's code compliance opinions

All CCMC evaluation reports are opinions of code compliance established in accordance with the National Building Code of Canada, Subsection 1.2.1. "Compliance with this Code," which requires compliance to be achieved by:

- complying with the applicable acceptable solutions in Division B, or
- using an alternative solution that will achieve at least the minimum level of performance required by Division B in the areas defined by the objective and functional statements attributed to the applicable acceptable solutions.

The CCMC assesses compliance with Canadian building, energy and safety codes, and is trusted by over 6,000 regulators across Canada.

Code compliance as an alternative solution