

CCMC 14043-R

CCMC Canadian code compliance evaluation

CCMC number:	14043-R
Status:	Active
Issue date:	2016-09-20
Modified date:	2021-11-17
Evaluation holder:	<p>Sagiper North America 13179 156 Street NW Edmonton AB T5V 1V2 Canada Website: www.sagipernorthamerica.com Telephone: 780-238-1667 Email: info@sagipernorthamerica.com</p>
Product name:	Sagiwall
Code compliance:	NBC 2015
Evaluation requirements:	CCMC-TG-074633.07-15 "CCMC Technical Guide for Heavy Gage PVC Siding"

In most jurisdictions this document is sufficient evidence for approval by Canadian authorities.

[Learn more about CCMC recognition](#)

Code compliance opinion

It is the opinion of the Canadian Construction Materials Centre that the evaluated product, when used as an exterior cladding 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 2015

Code provision	Solution type
9.27.12. Vinyl Siding	<u>Alternative</u>
9.27.2. Required Protection from Precipitation	<u>Acceptable</u>
9.27.3. Second Plane of Protection	<u>Acceptable</u>

The above opinion is 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

Sagiwall

Product description

The products are made of heavy-gauge polyvinyl chloride (PVC) and coated with a PVC film (RENOLIT) designed for exterior applications.

The profiles are tongue and groove and fastened to the building structure through pre-punched nailing slots located along the top edge of the profiles, which are concealed after the upper profile is installed. The products are available in a 150-mm channeled groove profile and a 150-mm V-groove profile. The products are 3 660 mm or 5 790 mm in length.

All accessories are made of aluminum covered with a PVC film (RENOLIT).



Figure 1. Sagiwall Channeled Profile



Figure 2. Sagiwall V-Groove Profile

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Manufacturing plants

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

- Vagos, Portugal

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 cladding for the buildings falling within the scope of Part 9, Housing and Small Buildings, of Division B of the NBC 2015.
- The siding panels must be installed on furring providing a second plane of protection that consists of a continuous, clear, uninterrupted vented air space of 10 mm outboard of the sheathing membrane.
- The furring must be installed over the sheathing membrane.
- The system requires flashing at appropriate locations in order to drain water to the outside.
- Furring for the attachment of the cladding must not be less than 19 mm × 38 mm, securely nailed to the sheathing or framing, and spaced not more than 600 mm on centre (o.c.).
- The products shall be installed in accordance with the manufacturer's current installation instructions:
 - "Sagiwall Installation Guidelines" November 1, 2020, Version 1.1
- If there is any discrepancy between the Conditions and Limitation of this Evaluation Report and the proponent's installation instructions, the Conditions and Limitations of the Report supersede.
- The product must be clearly identified with the phrase "CCMC 14043-R" on its packaging.

Technical information

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

Criteria number	Criteria name
CCMC-TG-074633.07-15	CCMC Technical Guide for Heavy Gage PVC Siding

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:

Results of Testing the Physical Properties of the Product

Property	Unit	Requirement	Result
Thermal expansion	°C ⁻¹	$\leq 8.1 \times 10^{-5}$	4.8×10^{-5}
Flammability	–	Compound shall not exceed an average extent of burning of 25 mm, and the average time of burn shall not exceed 10 s	Pass
Shrinkage	%	≤ 3	0.2
Warp	mm	≤ 3	1
Impact resistance	J	≥ 6.3 J at 23°C	8.2
Surface distortion	–	Free from bulges, waves or ripples	Pass
Weatherability	–	No peeling, flaking, chipping or pitting	Pass
Thickness – Face	mm	≥ 0.7	17
Thickness – Nail slots	mm	≥ 0.9	1.9

Results of Testing the Wind Load Resistance of the Product at $Q_{1/50} < 0.75$ kPa ⁽¹⁾ ⁽²⁾

Property	Requirement	Result
Deformation (sustained pressure)	No fracture or permanent deformation after sustained pressure of 750 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 1 090 Pa	Pass
Safety test (gust loads)	Resist wind gusts to 1 630 Pa	Pass

Notes

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- 1 The wind load resistance test was performed on a back-up wall consisting of 38 mm × 89 mm (2 in. x 4 in.) wood studs and 6.35 mm oriented strandboard (OSB) sheathing. The spacing between each stud section was 406 mm o.c.. Along the studs, wood furring strips indimensions of 25 mm × 38 mm were installed. Each siding panel was installed by #10 × 2 in. flat socket head screws on furring strips.
 - 2 The performance level shown in the table is for installations limited to non-post-disaster buildings.
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Administrative information

Disclaimer

This evaluation is issued by the Canadian Construction Materials Centre (CCMC), a part of the Construction Research Centre at the National Research Council of Canada (NRC). The evaluation must be read in the context of the entire [CCMC Registry of Product Assessments](#) and the legislated applicable building code in effect.

The CCMC was established in 1988 on behalf of the applicable regulator (i.e., the provinces and territories) to ensure—through assessment—conformity of alternative and acceptable solutions to regional building codes as determined by the local authority having jurisdiction (AHJ) as part of the issuance of a building permit. It is the responsibility of the local AHJs, design professionals, and specifiers to confirm that the evaluation is current and has not been withdrawn or superseded by a later issue. Please refer to [the website](#) or contact:

Canadian Construction Materials Centre

Construction Research Centre
National Research Council of Canada
1200 Montreal Road
Ottawa, Ontario, K1A 0R6
Telephone: 613-993-6189
Fax: 613-952-0268

The NRC has evaluated the material, product, system or service described herein only for those characteristics stated 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 (i.e., AHJs, design professionals and specifiers). This evaluation is only valid when the product is installed in strict compliance with the stated conditions and limitations of evaluation and the applicable local building code. In circumstances where no applicable local building permit is issued and that no confirmation of compliance 'for use in the intended field application' is undertaken, this evaluation is null and void in all respects. This evaluation is provided without representation, warranty, or guarantee of any kind, expressed, or implied, and the NRC provides no endorsement for any evaluated material, product, system or service described herein. The NRC accepts no responsibility whatsoever arising in any way from any and all use and reliance on the information contained in this evaluation with respect to its compliance to the referenced code(s) and standard(s). 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

Code Compliance via Alternative Solutions

Where a design differs from the acceptable solutions in Division B, then it should be treated as an **"alternative solution."** A proponent of an alternative solution must demonstrate that the alternative solution addresses the same issues as the applicable acceptable solutions in Division B and their attributed objectives and functional statements. However, because the objectives and functional statements are entirely qualitative, demonstrating compliance with them in isolation is not possible. Therefore, Clause 1.2.1.1.(1)(b) identifies the principle that Division B establishes the quantitative performance targets that alternative solutions must meet. In many cases, these targets are not defined very precisely by the acceptable solutions [...] Nevertheless, Clause 1.2.1.1.(1)(b) makes it clear that an effort must be made to demonstrate that an alternative solution will perform as well as a design that would satisfy the applicable acceptable solutions in Division B—not “well enough” but “as well as.”

— National Building Code of Canada, Sentence A-1.2.1.1.(1)(b)

The CCMC has determined that compliance with this provision of the Code has been demonstrated as an **Alternative 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:

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