

CCMC 13420-R

CCMC Canadian code compliance evaluation

CCMC number:	13420-R
Status:	Active
Issue date:	2009-07-07
Modified date:	2023-11-08
Evaluation holder:	<p>Derby Building Products Inc. 160 rue des Grands Lacs Saint-Augustin-de-Desmaures QC G3A 2K1 Canada Website: www.derbybp.com Telephone: 418-878-6161 Email: info@novik.com</p>
Product names:	<ul style="list-style-type: none"> • Atlas Stone™ • NovikBrick • NovikShake® • NovikStone® • Portsmouth™
Compliance:	NBC 2015, OBC
Criteria:	CCMC-TG-074633.04-15, "CCMC Technical Guide for Polypropylene 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 products, when used as exterior siding for buildings of combustible construction in accordance with the conditions and limitations stated in this evaluation, comply with the following code:

National Building Code of Canada 2015

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

Ontario Building Code

Ruling No. 14-23-319 (13420-R) authorizing the use of this product in Ontario, subject to the terms and conditions contained in the Ruling, was made by the Minister of Municipal Affairs and Housing on 2014-03-07 (revised 2021-04-16) pursuant to s.29 of the Building Code Act, 1992 (see Ruling for terms and conditions). This Ruling is subject to periodic revisions and updates.

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 names

- Atlas Stone™
- NovikBrick
- NovikShake®
- NovikStone®
- Portsmouth™

Product description

The wall siding panels and corners are made of injection-molded, press-formed polypropylene and are fastened to the building structure with corrosion-resistant fasteners every 200 mm (8 in.) through pre-punched nailing slots located along the top edge of the panel, which are concealed once the upper panel is installed. The products and associated profiles evaluated under CCMC 13420-R are shown in the tables in this section. NovikStone®, NovikBrick, NovikShake®, Portsmouth™, and Atlas Stone™ have a nail hem wall thickness of between 2 mm and 2.5 mm.

Figure 1 and Figure 2 illustrate NovikStone® SK and NovikShake® RS8 as examples of NovikStone® and NovikShake® profiles, respectively.

Table 1. Names of profiles for NovikStone®, NovikBrick, NovikShake®, and NovikPlank

Product name	Profile name	Panel size, mm (length × width)	Product formulation
NovikStone®	AC	1 143 × 514	Polypropylene (Formulation #1)
NovikStone®	DS	1 054 × 333	Polypropylene (Formulation #1)
NovikStone®	FS	1 270 × 486	Polypropylene (Formulation #1)
NovikStone®	HC	1 219 × 470	Polypropylene + mineral filler (Formulation #6)
NovikStone®	PHC	1 219 × 470	Polypropylene + mineral filler (Formulation #6)
NovikStone®	RR	1 270 × 486	Polypropylene (Formulation #1)
NovikStone®	SK	1 143 × 514	Polypropylene (Formulation #1)
NovikBrick	HL	1 219 × 470	Polypropylene + mineral filler (Formulation #6)
NovikShake®	HR	813 × 254	Polypropylene (Formulation #1)
NovikShake®	HS	1 229 × 476	Polypropylene (Formulation #1)

Product name	Profile name	Panel size, mm (length × width)	Product formulation
NovikShake®	NP	1 191 × 419	Polypropylene (Formulation #1)
NovikShake®	RS	1 238 × 368	Polypropylene (Formulation #1)
NovikShake®	RS8	2 451 × 216	Polypropylene (Formulation #1)
NovikShake®	SE	1 299 × 216	Polypropylene (Formulation #1)
NovikPlank	D6	2 515 × 343	Polypropylene (Formulation #1)

Table 2. Names of profiles for Portsmouth™ and Atlas Stone™

Product name	Profile name	Panel size, mm (length × width)	Product formulation
Portsmouth™	Cedar Shingle D7	1 365 × 410	Polypropylene (Formulation #1)
Portsmouth™	Cedar Shingle 8' S7	2 356 × 222	Polypropylene (Formulation #1)
Portsmouth™	Cedar Shingle S9 Hand-Split Shake	2 362 × 275	Polypropylene (Formulation #1)
Atlas Stone™	Stacked	1 127 × 492	Polypropylene + mineral filler (Formulation #6)



Figure 1. NovikStone® SK



Figure 2. NovikShake® RS8

Manufacturing plant

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

Product names	Manufacturing plant
	Saint-Augustin-de-Desmaures, QC, CA
Atlas Stone™	☑
NovikBrick	☑
NovikShake®	☑
NovikStone®	☑
Portsmouth™	☑

☑ 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 2015.
- When installed, all the building elements relevant to the product must comply with the requirements of the NBC 2015.
- The siding panels must be installed on furring, providing a second line of defence that consists of a continuous, clear, and uninterrupted air space of 19 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 fasteners must be minimum 38 mm galvanized smooth-shank nails.
- The products must be installed in accordance with the manufacturer's current installation instructions.
- The product must be clearly identified with the phrase "CCMC 13420-R" on its packaging.

Technical information

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

Criteria number	Criteria name
CCMC-TG-074633.04-15	CCMC Technical Guide for Polypropylene 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 3. Results of testing the physical properties of NovikShake® RS

Property	Requirement	Test Method	Result
Impact resistance (N·m)	≥ 3.95	ASTM D 7254	Pass
Weathering	No structural changes or visible surface changes such as peeling, chipping, cracking, flaking, or pitting	ASTM D 7254	Pass

Performance requirements

Wind load resistance

Table 4. Results of testing the wind load resistance of NovikShake® RS at $Q_{50} < 1.00$ kPa ⁽¹⁾

Property	Requirement ^{(2) (3)}	Result
Deformation (sustained pressure)	Sustained for 1 h ≥ 1 000 Pa	Pass
Repeated positive and negative pressure test (cyclic pressure), 2 000 cycles	1 460 Pa	Pass
Safety test (gust loads)	2 180 Pa	Pass

Notes

- 1 The wind load resistance test was performed on a backup wall consisting of 38 mm × 89 mm wood studs and 11.1 mm oriented strandboard (OSB) sheathing. The spacing between each stud section was 406 mm o.c. The 19 mm × 58 mm wood furring strips were installed at 406 mm o.c. spacing and fastened using 50-mm-long nails. Each siding panel was installed using 38 mm galvanized smooth-shank nails at 406 mm o.c. on furring strips.

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- 2 This table is intended for non-post-disaster low-rise buildings that have a height from grade to the uppermost roof of 12 m or less, and that are located within a built-up area no less than 120 m away from the boundary between this area and open terrain, including bodies of water upwind of the building.
- 3 This table does not take into account the site-specific topographic factor, C_t , where $C_t = 1.0$, except 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 2015. For buildings constructed on hills and escarpments, anticipated wind pressures may be greater.
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Additional performance data

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 fire performance testing of NovikStone® DS ⁽¹⁾

Property	Test Method	Results
Flame-spread rating (FSR) ⁽²⁾	CAN/ULC-S102	105
Smoke developed classification (SDC) ⁽²⁾	CAN/ULC-S102	575

Notes

- 1 Refer to test for details of the results.
- 2 Based on Exova Test Report 17-002-246 (issued May 12, 2017).
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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.

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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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This PDF is an alternative version. This document was published on 2024-02-29 and may not be the latest version of this evaluation. Users should consult the latest [published assessment](#) on the [CCMC Registry of Product Assessments](#), which contains the most up to date information. This PDF is intended for use as a record, not the latest information available.

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

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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.

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