

# CCMC 13687-R

## CCMC Canadian code compliance evaluation

<b>CCMC number:</b>	13687-R
<b>Status:</b>	Active
<b>Issue date:</b>	2014-09-15
<b>Modified date:</b>	2023-03-28
<b>Evaluation holder:</b>	<p><b>Basement Systems, Inc.</b>          60 Silvermine Road          Seymour CT 06483          United States          Website: <a href="http://www.basementsystems.com">www.basementsystems.com</a>          Telephone: 800-640-1500          Email: <a href="mailto:info@basementsystems.com">info@basementsystems.com</a></p>
<b>Product name:</b>	WaterGuard®
<b>Compliance:</b>	NBC 2015, OBC
<b>Criteria:</b>	CCMC-TG-334613.03-15 "CCMC Technical Guide for Interior Foundation Drainage System"

**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 part of an interior foundation drainage system 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
9.13.2.2.(1) Materials installed to provide required ...	<u>Acceptable</u>

### Ontario Building Code

Ruling No. 17-12-349 (13687-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 2017-10-31 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.

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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

WaterGuard®

## Product description

The product is a drainage channel made of rigid PVC designed to mitigate incidental water leakage into the interior space of a basement structure. The product is 2 mm thick and is available in 2.3 m (7.5 ft.) lengths. WaterGuard® has a vertical flange with tabs to allow drainage along the inside of the foundation wall into slots in the pipe that receive and dissipate water to the gravel bed drainage medium under the concrete slab. (See the figure below.)

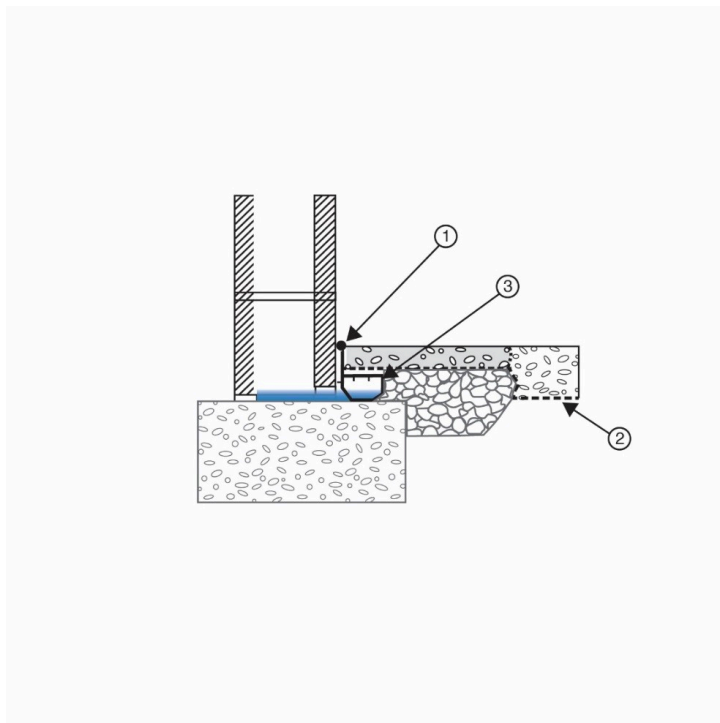


Figure 1. WaterGuard®:

1. Flexible sealant
2. Air barrier system
3. WaterGuard®

## Manufacturing plant

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

Product name	Manufacturing plant
WaterGuard®	Columbus, OH, US ☑

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

**This PDF is an alternative version.** This document was published on 2023-11-08 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.

## 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 product may be used as an interior foundation drainage system in areas where soil gas is not a hazard (consult local regulatory authorities). When installed according to the manufacturer's current instructions, the product acts as a second line of defense to keep basements dry by directing water to the aggregate bed under the concrete slab.
- As a second line of defense to keep basements dry, the product must meet all code requirements with respect to excavation, backfilling, dampproofing, drainage and foundations.
- Floors-on-ground shall be provided with a rough-in for subfloor depressurization in accordance with Article 9.13.4.3. of Division B of the NBC 2015, Providing for the Rough-in for a Subfloor Depressurization System.
- Floor assemblies separating conditioned space from the ground shall be protected by an air barrier system conforming to Subsection 9.25.3.
- The product is not suitable for use in areas subject to hydrostatic pressure.

## Technical information

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

Criteria number	Criteria name
CCMC-TG-334613.03-15	CCMC Technical Guide for Interior Foundation Drainage System

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.

**Table 1. Test results for the product**

Test	Unit	Requirement	Result
Thickness	mm	Report value	2.10
Weight	g/m <sup>2</sup>	Report value	844
Impact resistance		No visible cracking	No visible cracking
Compressive load	kN/m <sup>2</sup>	Minimum 100	101
Air space under compressive load	mm @ kPa	Minimum 3 mm @ 65 kPa	13.1 mm @ 65 kPa
Side water inflow	minutes	≤ 15	< 1

# 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](mailto:ccmc@nrc-cnrc.gc.ca)

## NOTICE

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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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