

# CCMC 13452-R

## CCMC Canadian code compliance evaluation

<b>CCMC number:</b>	13452-R
<b>Status:</b>	Active
<b>Issue date:</b>	2012-07-18
<b>Modified date:</b>	2022-12-01
<b>Evaluation holder:</b>	<p><b>SUPERSEAL Basement Systems Ltd.</b>            PO Box 61646 Brookwood RPO            Langley BC V3A 8C8            Canada            Website: <a href="http://www.superseal.ca">www.superseal.ca</a>            Telephone: 1-800-571-1877            Email: <a href="mailto:sherry@superseal.ca">sherry@superseal.ca</a></p>
<b>Product name:</b>	SUPERPRO
<b>Code compliance:</b>	NBC 2015
<b>Evaluation requirements:</b>	CCMC-TG-071416.01-15 "CCMC Technical Guide for Liquid-Applied Membrane for Waterproofing Concrete Foundation Wall"

**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.](#)

## Code compliance opinion

It is the opinion of the Canadian Construction Materials Centre that the evaluated product, when used as a cold liquid-applied polymer-enhanced asphalt for waterproofing below grade foundation walls (concrete or masonry block) 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
9.13.3.1.(1) Where hydrostatic pressure occurs, water ...	<u>Acceptable</u>
9.13.3.2.(1) Materials installed to provide required ...	<u>Acceptable</u>
9.13.3.4.(1) Unless otherwise stated in this Subsecti ...	<u>Alternative</u>
9.13.3.2.(2) +++ Waterproofing Materials	<u>Alternative</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

SUPERPRO

### Product description

The product is a liquid-applied polymer-enhanced asphalt that is applied with an airless spray to the exterior of foundation walls (concrete or masonry block) to create a 1-mm-thick waterproof membrane.

### Manufacturing plant

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

Product name	Manufacturing plant
	Surrey, BC, CA
SUPERPRO	Ⓢ

Ⓢ 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 use of the product has been evaluated for applications falling under the scope of Part 9, Housing and Small Buildings, of Division B of the NBC 2015 for foundation walls at a depth of up to 3 m. The foundation walls must meet the structural requirements of the NBC 2015.
- The poured in place concrete must be cured prior to the application of the product.
- The maximum hydrostatic pressure that the membrane can sustain is 48 kPa for five days.
- Unit masonry or poured-in-place concrete walls must meet the surface preparation requirements of Article 9.13.3.3., Preparation of Surface, of Division B of the NBC 2015.
- The chemicals (Part A and B of the waterproofing system) must be stored on-site as per the manufacturer's recommendations.
- The thickness of the membrane installed throughout the foundation wall must meet the minimum thickness of 1-mm- (40-mils-) thick (dry film) for which the product has been evaluated.
- While the waterproofing continuity of the membrane to other parts of the wall (e.g., slabs, footing) is beyond the scope of this Evaluation Report, the installer must follow engineer-approved solutions to provide the waterproofing continuity.
- Following its application, the entire membrane must be protected from exposure to ultraviolet (UV) radiation within two weeks of its application and in accordance with the manufacturer's additional recommendations.
- The membrane application must stop at ground level. The exposed above-grade portion of the membrane after soil settling must be protected from UV radiation and mechanical impact with additional backfill that would be graded away from the foundation.
- The use of the product is limited to installation over foundation walls facing normal soil conditions. When used in soils containing high levels of organic matter, chemicals and microbiological activity, the manufacturer must be consulted to determine suitability.
- Prior to backfilling, the following conditions and limitations must be followed:
  - The membrane must be first inspected to detect any defects (e.g., holes, tears, bubbles) and be repaired in accordance with the manufacturer's instructions.
  - The membrane must be covered with a protection board which may consist of a semi-rigid or rigid board with a smooth surface facing the membrane (e.g., mineral fibre boards, EPS/XPS boards or equivalent). The protection boards must not be installed using fasteners in order to avoid penetrations through the membrane. See the manufacturer's recommendations regarding the use of adhesive and tape to secure the protection boards. Clean sand backfill can be used as an alternative solution to protection boards.
- The foundation wall must be backfilled in accordance with the requirements of Subsection 9.12.3., Backfill, of Division B of the NBC 2015.
- The product must be applied by qualified installers in accordance with the manufacturer's installation instructions using their recommended tools.
- The product must be identified with the phrase "CCMC 13452-R."

## Technical information

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

Criteria number	Criteria name
CCMC-TG-071416.01-15	CCMC Technical Guide for Liquid-Applied Membrane for Waterproofing Concrete Foundation Wall

The Report 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

Table 1. Results of testing the material requirements of the product

Property	Unit	Requirement	Result
Dry film thickness	mm	± 10% of manufacturer's specified value	1.02
Hardness	–	Report value	80
Water vapour permeance	ng/Pa·s·m <sup>2</sup>	Report value	55.1
Sag flow	mm	No sagging	0 <sup>(1)</sup>
Pinholing	–	≤ 1 pinhole	No pinholing
Tensile strength	MPa	Report value	0.7
Elastic recovery	%	Report value	73

### Note

1 Material cured immediately upon contact with the substrate.

## Performance requirements

Table 2. Results of testing the performance requirements of the product

Property	Unit	Requirement	Result
Watertightness after heat aging	–	No leakage	No leakage
Watertightness after chemical aging	–	No leakage	No leakage
Watertightness after UV exposure	–	No leakage	No leakage
Crack bridging resistance after water immersion	–	No visible cracking, blistering, peeling or other visible defects	No defects
Crack bridging resistance after heat aging	–	No visible cracking, blistering, peeling or other visible defects	No defects
Crack bridging resistance after UV exposure	–	No visible cracking, blistering, peeling or other visible defects	No defects
Peel adhesion <sup>(1)</sup> – initial	N/m	≥ 175	1 401
Peel adhesion after water immersion	N/m	≥ 90% of original	1 488 (106.2%)
Peel adhesion after heat aging	N/m	≥ 90% of original	1 488 (106.2%)
Peel adhesion after UV exposure	N/m	≥ 90% of original	1 488 (106.2%)
Tensile strength after heat aging	MPa	≥ 90% of original	0.7 (100%)
Tensile strength after chemical aging	MPa	≥ 90% of original	0.7 (100%)
Tensile strength after UV exposure	MPa	≥ 90% of original	0.7 (100%)
Elastic recovery after heat aging	%	≥ 90% of original	73 (100%)
Elastic recovery after chemical aging	%	≥ 90% of original	73 (100%)
Elastic recovery after UV exposure	%	≥ 90% of original	73 (100%)
Low temperature flexibility	–	No cracking	No cracking

### Note

1 Adhesion to concrete.

## Other technical evidence

### Additional performance data requested by the report holder

### Results of testing other performance requirements of the product

Time after spraying of membrane	Peel adhesion to concrete (N/m) [lb./in.]
4 days	1 476 [8.43]
7 days	2 415 [13.79]
28 days	2 569 [14.1]

## 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

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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 2022-12-01 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))

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(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)

## 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

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