

## CCMC 13297-R

### CCMC Canadian code compliance evaluation

<b>CCMC number:</b>	13297-R
<b>Status:</b>	Active
<b>Issue date:</b>	2008-01-17
<b>Modified date:</b>	2022-02-04
<b>Evaluation holder:</b>	<p><b>Henry Company Canada</b>                      10, avenue Saint-Pierre                      Lachine QC H8R 1N7                      Canada                      Telephone: 514-364-5224</p>
<b>Product name:</b>	Blueskin® WP 200
<b>Code compliance:</b>	NBC 2005
<b>Evaluation requirements:</b>	CCMC-TG-071326.01-05 "CCMC Technical Guide for Bakor Inc. (Henry Company Canada)"

**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 a self-adhered modified bituminous membrane for waterproofing the exterior of concrete foundation walls in accordance with the conditions and limitations stated in this evaluation, complies with the following code:

### National Building Code of Canada 2005

Code provision	Solution type
9.13.3.1.(1)(b) Required Waterproofing	<u>Alternative</u>
9.13.3.2.(1) Material Standards	<u>Alternative</u>
9.13.3.3.(1) Standards for Application	<u>Alternative</u>
9.13.3.5.(1) Application of Waterproofing Membranes	<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

Blueskin  
WP 200

### Product description

The Blueskin® WP 200 is a self-adhered modified bituminous membrane that consists of a styrene butadiene styrene (SBS) rubberized asphalt compound that is integrally laminated to a blue, high density polyethylene film.

Blueskin® WP 200 is manufactured in rolls that measure 20.3 m long, 0.9 m wide and 1.5 mm thick.

### Manufacturing plant

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

Product name	Petrolia, Ontario, Canada
Blueskin® WP 200	◇

◇ 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 Blueskin® WP 200 has been evaluated for applications falling under the scope of Part 9 of Division B of the NBC 2005 for foundation walls at a depth up to 3.2 m. The foundation walls shall meet the structural requirements of the NBC 2005.
- Unit masonry or poured-in-place concrete walls shall meet the surface preparation requirements of the NBC 2005, Division B, Article 9.13.3.4.
- The poured-in-place concrete must be cured prior to the installation of Blueskin® WP 200.
- The wall and footing surface must be dried prior to the installation of Blueskin® WP 200.
- The wall shall be primed with Aquaprime™ and Aquatac™ as per the manufacturer's instructions prior to the installation of the membrane.
- Blueskin® WP 200 must be applied in accordance with the manufacturer's installation instructions by an informed and knowledgeable installer.
- The thickness of the membrane installed on site shall be of equal thickness to the evaluated membrane.
- The rolls of the membrane shall be stored on site vertically at a temperature not higher than the maximum temperature recommended by the manufacturer and shall be protected from solar radiation as per the manufacturer's instructions.
- A mastic shall be applied to seal the top and bottom edges of the membrane in accordance with the manufacturer's instructions.
- Following its installation, the membrane shall be protected to grade level from exposure to ultraviolet (UV) radiation within 48 hours of its application and in accordance with the manufacturer's additional recommendations.
- Prior to backfilling, the membrane must be covered with a protection board meeting the manufacturer's specifications. The use of mechanically attached board systems may affect the waterproofing performance of the product. The manufacturer shall provide instructions for the selection of adequate fasteners and proof that such fasteners produce a permanent waterproof seal for the foundation. If any self-seal performance is claimed by the manufacturer, then evidence must be supplied as to the extent of the capability and how tests were performed.
- The installers shall consult with the manufacturer to determine the appropriate permanent protection for the above-grade portion of the membrane from UV radiation and mechanical impact.
- The foundation wall must be backfilled in accordance with the requirements of the NBC 2005, Division B, Subsection 9.12.3.
- When used in soils containing high levels of organic matters, chemicals and microbiological activity, the manufacturer shall be consulted to determine suitability.
- Blueskin® WP 200 must be identified with the phrase "CCMC 13297-R."

## Technical information

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

Criteria number	Criteria name
CCMC-TG-071326.01-05	CCMC Technical Guide for Bakor Inc. (Henry Company Canada)

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.

See below the NBC 2005 compliance data for Blueskin® WP 200 on which the CCMC based its opinion in the [code compliance opinion](#) section.

**Table 1. Physical and mechanical properties of Blueskin® WP 200**

Property	Unit	Requirement	Result
Thickness tolerance	%	± 10 of the manufacturer's specified value	-2.5
Hardness (type 00 hardness gauge)	No unit	Report value	76
Water vapour permeance, procedure B	ng/(Pa·s·m <sup>2</sup> )	Report value	0.7
Tensile strength at maximum load	MPa	Report value	3.6
Elastic recovery	%	Report value	44

**Table 2. Watertightness performance of Blueskin® WP 200**

Property <sup>(1)</sup>	Unit	Requirement	Result
Watertightness	No unit	No leakage	Passed
Water immersion/watertightness	No unit	No leakage	Passed
Heat aging/watertightness	No unit	No leakage	Passed
Chemical aging/watertightness	No unit	No leakage	Passed
UV aging/watertightness	No unit	No leakage	Passed
Low temperature flexibility/watertightness	No unit	No leakage	Passed

**Note:**

- 1 The "/" indicates that a test sequence has been performed (i.e. a water immersion test has been performed and followed by a watertightness test).

**Table 3. Crack bridging resistance of Blueskin® WP 200**

Property <sup>(1)</sup>	Unit	Requirement	Result
Crack bridging	30 cycles at -20°C	No cracking, breakage, tearing, adhesion failure or other observable failures	Passed
	30 cycles at 30°C		
Water immersion/crack bridging	30 cycles at -20°C	No cracking, breakage, tearing, adhesion failure or other observable failures	Passed
	30 cycles at 30°C		
Heat aging/crack bridging	10 cycles at -20°C	No cracking, breakage, tearing, adhesion failure or other observable failures	Passed
	10 cycles at 30°C		
Chemical aging (NaOH)/crack bridging	10 cycles at -20°C	No cracking, breakage, tearing, adhesion failure or other observable failures	Passed
	10 cycles at 30°C		
Chemical aging (acetic acid)/crack bridging	10 cycles at -20°C	No cracking, breakage, tearing, adhesion failure or other observable failures	Passed
	10 cycles at 30°C		
UV aging/crack bridging	10 cycles at -20°C	No cracking, breakage, tearing, adhesion failure or other observable failures	Passed
	10 cycles at 30°C		

**Note:**

- 1 The "/" indicates that a test sequence has been performed (i.e. a water immersion test has been performed and followed by a crack bridging test).

**Table 4. Adhesion performance and tensile strength of Blueskin® WP 200**

Property <sup>(1)</sup>	Unit	Requirement	Result
Water immersion/adhesion	N/m	> 175	1 427 N/m
Heat aging/adhesion	N/m	> 175	1 118 N/m
Heat aging/tensile strength	%	> 90% of original value	<sup>(2)</sup>
Chemical aging (NaOH)/tensile strength	%	> 90% of original value	Passed
Chemical aging (acetic acid)/tensile strength	%	> 90% of original value	Passed
UV aging/tensile strength	%	> 90% of original value	<sup>(2)</sup>

**Notes:**

- 1 The "/" indicates that a test sequence has been performed (i.e. a water immersion test has been performed and followed by an adhesion test).
- 2 Blueskin® WP 200 failed to meet this requirement. However, based on the overall analysis of the test results in conjunction with the intended use and application of the product, Blueskin® WP 200 is deemed to meet the intent of the Technical Guide, subject to the conditions and limitations stated in the conditions and limitations section of the Report.

**Table 5. Elastic recovery of Blueskin® WP 200**

Property <sup>(1)</sup>	Unit	Requirement	Result
Heat aging/elastic recovery	%	> 90% of original value	Passed
Chemical aging (NaOH)/elastic recovery	%	> 90% of original value	Passed
Chemical aging (acetic acid)/elastic recovery	%	> 90% of original value	Passed
UV aging/elastic recovery	%	> 90% of original value	Passed

**Note:**

- 1 The "/" indicates that a test sequence has been performed (i.e. the product has been exposed to heat aging and then submitted to an elastic recovery test).

**Table 6. Performance properties of a Blueskin® WP 200 lap joint**

Property <sup>(1)</sup>	Unit	Requirement	Result
Water immersion/watertightness	No unit	No leakage	Passed
Heat aging/watertightness	No unit	No leakage	Passed
Water immersion/adhesion	N/m	> 175	1 449 N/m
Heat aging/adhesion	N/m	> 175	582 N/m
Lap joint shear test	No unit	No slippage or bounding failure	Passed
Heat aging/lap joint shear test	No unit	No slippage or bounding failure	Passed

**Note:**

- 1 The "/" indicates that a test sequence has been performed (i.e. a water immersion test has been performed and followed by a watertightness test).

# 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.

## Copyright

© 2022 Her Majesty the Queen in Right of Canada, as represented by the National Research Council of Canada.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the CCMC.



## 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)

## 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:

- 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.