CCMC CANADIAN CODE COMPLIANCE EVALUATION

CCMC 13606-R

CCMC Canadian code compliance evaluation

CCMC number:	13606-R
Status:	Active
Issue date:	2013-08-04
Modified date:	2022-04-13
Evaluation holder:	**ADS Weatherdek Canada Ltd.** 600 Adams Road Kelowna BC V1X 7S1 Canada Website: www.weatherdek.com Telephone: 1-800-667-2596; 250-765-5575 Email: info@weatherdek.com
Product name:	Weatherdek Plus
Code compliance:	NBC 2015, OBC
Evaluation requirements:	CCMC-TG-075419.01-15 "CCMC Technical Guide for “PVC Sheet-Applied Decking membranes (Exposed to light Pedestrian Traffic)”"

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 membrane covering for decks and balconies subject to light pedestrian traffic 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
9.26.1.2.(1) Roofs shall be protected with roofing, i ...	Acceptable
9.26.2. Roofing Materials	Alternative

Ontario Building Code

Ruling No. 14-209-305 (13606-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 2014-09-25 (revised 2017-03-31) 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.

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:

Weatherdek Plus

Product description

The product is a polyvinyl chloride (PVC) membrane with a non-woven polyester backing. The nominal thickness is 1.5 mm. The surface of the product is embossed to provide a textured finish. The membrane is available in rolls that are 1 372 mm or 1 829 mm wide and can be cut to a required length. The product is available in a variety of colours.

Manufacturing plant

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

Product name	Manufacturing plant
	Winchester, VA, US
Weatherdek Plus	◈

◈ 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 product can be used as a membrane that is fully adhered to a continuous solid substrate, such as a plywood or concrete deck and balconies that are subject to light pedestrian traffic.
- The product must be used only in conjunction with plywood or concrete substrates. The membrane must be fully adhered to the substrate with adhesives WD-1000 (on concrete or plywood substrates) or WD-7633 (on plywood substrates only) and applied as per the installation manual.
- The product is limited for use in areas that are subject to traffic loads generated by residential occupancies only.
- The product must not be exposed to chemical attack or spillage. In situations where extended contact with chemicals or pollutants may occur, the suitability of the product must be determined.
- Any physical or chemical damage to the membrane must be repaired in accordance with the manufacturer's instructions. The product must not be installed with butt seam joints.
- The product is limited for use where the roof or deck surface has a minimum slope of 1:48.
- Joints must be shingle-lapped in order to shed water.
- The product must be installed by approved applicators only and in strict conformance with the manufacturer's installation instructions.
- The product or its packaging must be identified with the manufacturer's name or logo and the phrase "CCMC 13606-R."

Technical information

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

Criteria number	Criteria name
CCMC-TG-075419.01-15	CCMC Technical Guide for “PVC Sheet-Applied Decking membranes (Exposed to light Pedestrian Traffic)”

Physical property requirements

Table 1. Results of physical property testing of the product

Property	Unit	Requirement	Results
Dimensional tolerance (length)	%	Tolerance shall be within 0% and + 3% of reported length	0.3
Dimensional tolerance (width)	%	Tolerance shall be within 0% and + 3% of reported width	0
Overall thickness of the PVC membrane	mm	≥ 1.2 ± 10% of thickness	1.3

Mechanical property requirements

Table 2. Results of mechanical property testing of the product

Property		Unit	Requirement	Results
Breaking strength		N	≥ 245	514
Elongation, as received	**MD** (1)	%	≥ 25	250
	CMD (2)	%	≥ 25	258
Elongation, with backing removed	**MD** (1)	%	≥ 250	272
	CMD (2)	%	≥ 250	265
Tear resistance		N	≥ 45	79
Static puncture		kg	≥ 15	15
Dynamic puncture		J	≥ 20	20
Low temperature impact		–	No cracks at –30°C	No cracks
Low temperature flexibility		–	No cracks at –40°C	No cracks
Dimensional changes	**MD** (1)	%	≤ 2.0	0.5
	CMD (2)	%	≤ 2.0	0.1
Abrasion resistance		Cycles	≥ 5 000	5 000
Slip resistance		–	DCOF (3) ≥ 0.42	0.80
Fungi resistance	**Sustained growth**	–	No growth	No growth
	Discoloration	–	No discoloration	No discoloration
Fabric adhesion to membrane		kN/m	≥ 0.525	0.557
Crack bridging		–	No cracking, splitting or pinholes	No cracking, splitting or pinholes
Adhesion to plywood	**With adhesive WD-1000**	KPa	Report value	50.5
	With adhesive WD-7633	KPa	Report value	51.9
Adhesion to concrete	**With adhesive WD-1000**	KPa	Report value	≥ 56.7 (4)
Water resistance	**Weight change**	%	≤ 3	1.62
	Retained breaking strength	%	≥ 90	96
	Retained elongation	%	≥ 90	96
Heat aging	**Visiual inspection**	–	No cracking, crazing or blistering	No cracking, crazing or blistering
	Weight change	%	≤ 5	–0.69
	Retained breaking strength	%	≥ 90	97
	Retained elongation	%	≥ 90	97

Property		Unit	Requirement	Results
	Low temperature impact	–	Report value	No cracks at –30°C
	Abrasion resistance	Cycles	≥ 1 500	4 000
	Slip resistance	–	DCOF [(3)] ≥ 0.42	0.779
	Fungi resistance	–	No growth or discoloration	No growth or discoloration
	Falling weight impact resistance	J	Report value	9.8
Accelerated weathering	**Visual inspection**	–	No cracking, crazing or blistering	No cracking, crazing or blistering
	Retained breaking strength	%	≥ 80	88
	Retained elongation	%	≥ 80	81
	Low temperature flexibility	–	Report value	No cracks at –25°C
	Abrasion resistance	Cycles	≥ 1 500	4 000
	Slip resistance	–	DCOF [(3)] ≥ 0.42	0.814
Seam strength	**Reference (no seam)**	N	Report value	451
	Unconditioned	%	≥ 75	91
	After heat aging	%	≥ 70	92
	After 7 days in boiling water	%	≥ 70	80

Notes

1 MD: Machine direction.

2 CMD: Cross-machine direction.

3 DCOF: Dynamic coefficient of friction

4 The failure occurred between the concrete and test platform, while the adhesion of membrane to concrete was still in tact.

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
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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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