

# **Evaluation Report** CCMC 13452-R

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## **SUPERPRO**

# 1. Opinion

It is the opinion of the Canadian Construction Materials Centre (CCMC) that "SUPERPRO", when used as a cold, liquid-applied polymer-enhanced asphalt for waterproofing below grade foundation walls (concrete or block) in accordance with the conditions and limitations stated in Section 3 of this Report, complies with the National Building Code 2010:

- Clause 1.2.1.1.(1)(a), Division A, using the following acceptable solutions from Division B:
  - Article 5.8.2.2. Protective Material and Component Properties
  - Subsection 9.13.2. Dampproofing
  - Subsection 9.13.3. Waterproofing

This opinion is based on CCMC's evaluation of the technical evidence in Section 4.1 provided by the Report Holder.

## 2. 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 block) to create a 1-mm-thick waterproof membrane.

### 3. Conditions and Limitations

CCMC's compliance opinion in Section 1 is bound by the "SUPERPRO" being used in accordance with the conditions and limitations set out below.

- Use of the product has been evaluated for application depths not more than 3 m in accordance with Part 9 of Division B of the NBC 2010.
- The foundation wall must be backfilled in accordance with the NBC 2010.
- Backfill must be placed in a manner that does not damage the foundation wall or the waterproof membrane.
- The product must be applied by installers qualified and approved by the manufacturer in accordance with the manufacturer's conditions, procedures, and directions.

- The membrane must be protected with a drainage board when the backfill contains angular stones or sharp objects.
- The applied membrane must not be exposed to weathering for more than 15 days.
- When used over concrete block foundation walls, the wall must be covered with the product from the top
  of the footing to the final grade. Please note that other wall substrates are considered beyond the scope of
  this evaluation.
- The wall and footings must be dry during application.
- Any water must be removed and the concrete must be dry prior to application of the product.
- The product must be clearly identified with the phrase "CCMC XXXXX-R"

## 4. Technical Evidence

The Report Holder has submitted technical documentation for CCMC's evaluation. Testing was conducted at laboratories recognized by CCMC. The corresponding technical evidence for this product is summarized below.

### 4.1 Material Requirements

Table 4.1.1 Test results for physical properties of the material

Property	Unit	Requirement	Result
Dry film thickness	mm	± 10% of manufacturer's specified value	1.02
Hardness	1	Report value	80
Water vapour permeance	ng/Pa·s·m <sup>2</sup>	Report value	644
Sag flow	mm	No sagging	0 (1)
Pinholing	-	≤ 1 pinhole	No pinholing
Tensile strength	MPa	Report value	0.7
Elastic recovery	%	Report value	73

#### Note to Table 4.1.1:

#### 4.2 Performance Requirements

Table 4.2.1 Test results of performance properties

Property	Unit	Requirement	Result
Watertightness after exposure: <ul><li>heat aging</li><li>chemical aging</li><li>UV exposure</li></ul>	_	No leakage	No leakage
Crack bridging resistance after exposure:  • water immersion  • heat aging  • UV exposure	_	No visible cracking, blistering, peeling or other visible defects	No defects
Peel adhesion <sup>(1)</sup> – initial	N/m	≥ 175	1401

<sup>(1)</sup> Material cured immediately upon contact with the substrate.

Table 4.2.1 Test results of performance properties (cont.)

Property	Unit	Requirement	Result
Peel adhesion after exposure (1):  • water immersion  • heat aging  • UV exposure	N/m	≥ 90% of original	1488 (106.2%)
Tensile strength after exposure:	MPa	≥ 90% of original	0.7 (100%)
Elastic recovery after exposure:	%	≥ 90% of original	73 (100%)
Low temperature flexibility	_	No cracking	No cracking

#### Note to Table 4.2.1:

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<sup>(1)</sup> Adhesion to concrete.