

# CCMC 14509-L

## CCMC Standard compliance evaluation

<b>CCMC number:</b>	14509-L
<b>Status:</b>	Active
<b>Issue date:</b>	2022-09-27
<b>Modified date:</b>	2022-09-28
<b>Evaluation holder:</b>	<p><b>SHUNDA Polyurethane Ltd.</b>            190 Silver Star Blvd. Unit 9 &amp; 10            Scarborough ON M1V 0E5            Canada            Telephone: 905-754-0568            Email: <a href="mailto:info@sdpu.ca">info@sdpu.ca</a></p>
<b>Product name:</b>	COMFORT LOCK HFO
<b>Evaluation requirements:</b>	<u>CAN/ULC-S705.1-15</u>

**In most jurisdictions this document is sufficient evidence for approval by Canadian authorities.**

[Learn more about CCMC recognition](#)

# Product information

## Product name

COMFORT LOCK HFO

## Product description

The product is a closed-cell, spray-applied, rigid polyurethane foam of medium density. The foam system consists of two components (isocyanate and resin) that must be labelled as follows with "CCMC 14509-L:"

- Isocyanate (Component A): "PM-200", and
- Resin (Component B): "Comfort Lock" resin.

The two components are mixed on-site by a Shunda Polyurethane Ltd.-qualified installer with fixed-ratio positive displacement equipment. The colour of the installed final cured product is sky blue.

The evaluation holder attests that this/these product(s) contains a foaming agent that is compliant with the Ozone-Depleting Substances and Halocarbons Alternatives Regulations (ODSHAR), which is administrated by Environment and Climate Change Canada (ECCC)

## Manufacturing plant

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

Product name	Manufacturing plant
	Yantai City, Shandong Province, China
COMFORT LOCK HFO	◇

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

## Technical information

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

Criteria number	Criteria name
<a href="#">CAN/ULC-S705.1-15</a>	Standard for Thermal Insulation - Spray Applied Rigid Polyurethane Foam, Medium Density - Material Specification

### Design values

The product's minimum site density, design long-term thermal resistance (LTTR), water vapour permeance (WVP) and time-to-occupancy values are provided in the table below.

**Table 1. Site density, design LTTR, WVP and time-to-occupancy specifications for the product**

Product	Minimum site density <sup>(1)</sup> (kg/m <sup>3</sup> ) [lb/ft. <sup>3</sup> ]	50 mm design LTTR (m <sup>2</sup> ·°C/W)	50 mm WVP <sup>(2)</sup> (ng/(Pa·s·m <sup>2</sup> ))	Time-to-occupancy <sup>(3)</sup> (hours)
Comfort Lock HFO	35.0 [2.18]	1.87	47	25

#### Notes:

- <sup>1</sup> Based on the qualification testing to CAN/ULC-S705.1, the specified minimum site density must comply with CAN/ULC-S705.1, as measured on-site in accordance with CAN/ULC-S705.2-05, "Thermal Insulation – Spray Applied Rigid Polyurethane Foam, Medium Density – Application."
- <sup>2</sup> The WVP is determined from a core sample with the skins removed. Due to the effect of the skins, the WVP at this thickness would be lower in the site-installed product.
- <sup>3</sup> For retrofit construction, the time to occupancy is twenty-five (25) hours when the segregated retrofit area is ventilated as required by CAN/ULC-S705.2 during installation of the product and after spraying. See the Evaluation Requirements for more information.

### Qualified installers

This is a site-manufactured product whereby SHUNDA Polyurethane Ltd. requires that only specific, qualified installers be authorized to install its proprietary spray-polyurethane insulation in buildings. In accordance with the SHUNDA Polyurethane Ltd. site quality assurance program (SQAP), the certification organization (CO) Caliber Quality Solutions Inc. (Caliber) has been commissioned to license the specified installers and issue them the requisite Caliber identification card. All specified installers must have a Caliber identification card.

### Third-party field auditing of qualified installers

As part of its SQAP, SHUNDA Polyurethane Ltd. also stipulated that site-audit inspections be conducted by site inspectors licensed by Caliber. Upon completion of the site audit, Caliber will report the product's conformity results and any corrective action required, if necessary, to SHUNDA Polyurethane Ltd. Building Officials who would like site-audit inspections to be conducted on specific building sites can contact Caliber at:

Caliber Quality Solutions Inc.  
2323 Yonge Street, Unit 605  
Toronto, ON M4P 2C9  
Tel: 888-572-7435

## Administrative information

### Disclaimer

This evaluation is issued by the Canadian Construction Materials Centre (CCMC), 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

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### Language

Une version française de ce document est disponible.

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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)



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Canadian Home Builders' Association (CHBA)



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(Manitoba Building Officials Association (MBOA))

Ontario Building Officials Association (OBOA)



(Ontario Building Officials Association (OBOA))

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(Nova Scotia Building Officials Association (NSBOA))

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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)