



## **BUILDING PRODUCT LISTING PROGRAM**

Customer: Norbec Architectural Inc.  
Class: Insulated Metal Panels  
Location: Boucherville, Quebec, Canada  
Website: [www.norbecarchitectural.com](http://www.norbecarchitectural.com)

Listing No. B1096-1  
Project No. B1096-1 Edition 4

Effective Date: December 14, 2016  
Last Revised Date: July 8, 2021  
Expires: N/A

Standards: CAN/ULC S102 *Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.*  
CAN/ULC S126 *Standard Method of Test for Fire Spread Under Roof-Deck Assemblies.*  
CAN/ULC S138 *Standard Method of Test for Fire Growth of Insulated Building Panels in a Full-Scale Room Configuration.*  
CAN/ULC S101 *Standard Methods of Fire Endurance Tests of Building Construction and Materials.*  
CAN/ULC S134 *Standard Method of Fire Test of Exterior Wall Assemblies.*  
ASTM E84 *Standard Test Method for Surface Burning Characteristics of Building Materials*  
ASTM D1929 *Standard Test Method for Determining Ignition Temperatures of Plastic.*  
NFPA 285 *Standard Fire Test Method for Evaluation for Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components.*  
NFPA 259 *Standard Test Method for Potential Heat of Building Materials.*  
NFPA 286 *Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth.*

Product: NOREX-L, NOREX-H, NOREX-S Insulated Metal Panels (IMP) with Polyisocyanurate Core

Markings: Each panel is marked with a permanent label containing the following information:

- Manufacturers name or recognized trademark
- Product name
- Date of manufacture
- QAI file number: B1096
- CAN/ULC S102 / ASTM E84 Flame Spread Index and Smoke Developed Indices as noted in this listing.
- QAI logo shown here:



Models / Ratings: NOREX IMP have the following ignition properties determined in accordance with ASTM D1929:

Ignition Properties	
Flash Ignition Temperature:	≥ 600°F (316°C)
Spontaneous Ignition Temperature:	≥ 800°F (427°C)

NOREX IMP surface burning characteristics determined in accordance with CAN/ULC-S102:

Model(s)	Flame Spread Index	Smoke Developed Index	Thickness Max. (mm)	Density Max. lbs/ft <sup>3</sup> (kg/m <sup>3</sup> )
NOREX-L, NOREX-H, NOREX-S (w/o Steel Skin)	≤ 500 <sup>1</sup>	≤ 175	152	2.6 (41.6)
NOREX-L, NOREX-H, NOREX-S (Evaluated With Steel Skin Including Panel Joint)	≤ 25	≤ 100	152	2.6 (41.6)

Note 1: *Flame spread index determined in accordance with CAN/ULC S127.*

NOREX IMP surface burning characteristics complying with CAN/ULC S126:

Model(s)	Results	Thickness Max. (mm)	Density Max. lbs/ft <sup>3</sup> (kg/m <sup>3</sup> )
NOREX-L, NOREX-H, NOREX-S	Complies	152	2.6 (41.6)

NOREX IMP surface burning characteristics determined in accordance with ASTM E84:

Model(s)	Flame Spread Index	Smoke Developed Index	Maximum Thickness (inches)	Density Max. lbs/ft <sup>3</sup> (kg/m <sup>3</sup> )
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NOREX-L, NOREX-H, NOREX-S (w/o Steel Skin)	≤ 25	≤ 450	6	2.6 (41.6)
NOREX-L, NOREX-H, NOREX-S (Evaluated With Steel Skin Including Panel Joint)	≤ 25	≤ 100	152	2.6 (41.6)

NOREX IMP products ratings determined in accordance with CAN/ULC-S138:

QAI Design #	Model(s)	CAN/ULC-S138 Compliant Assembly
<b>B1096-1a<sup>2</sup></b>	NOREX-L, NOREX-H, NOREX-S to maximum 152 mm (6 inches) thickness	Sprinklered Room Compliant when equipped with 68°C (155°F) activation temperature, pendant style listed sprinklers.  Fastener at top and bottom panels for panel connection are required. Corners treated with flashing, mechanically secured. Silicone sealant applied at panel and ceiling joint intersections.

Note 2: The above assembly has been evaluated and found compliant for Protection of Foam Plastic in Combustible Construction as outlined in Section 3.1.4.2 of the 2015 National Building Code of Canada (NBC).

The above assembly has been evaluated and found compliant for Factory Assembled Panels for use in Non-Combustible Construction for buildings that are sprinklered, < 18 meters high, have no Group A Group B or Group C major occupancies, with the panel having no air spaces, as outlined in Section 3.1.5.7 of the 2015 NBC and where panels are used in application where flame spread ratings required are ≤ 10.

NOREX IMP products ratings determined in accordance with NFPA 286:

Model(s)	NFPA 286 Compliant Assembly
NOREX-L, NOREX-H, NOREX-S to maximum 152 mm (6 inches) thickness	Fastener at top and bottom panels for panel connection are required. Corners treated with flashing, mechanically secured.  Silicone sealant applied at panel and ceiling joint intersections is optional.

NOREX IMP products evaluated to CAN/ULC S134:

NOREX Panels CAN/ULC S134				
QAI Design #	Flame Spread	Heat Flux at 3.5 m	Maximum Thickness	Maximum Density lbs/ft <sup>3</sup> (kg/m <sup>3</sup> )
<b>B1096-1b<sup>3</sup></b>	< 5.0 m	< 35 kW/m <sup>2</sup>	152 mm (6 inches)	2.6 (41.6)

Note 3: *The above assembly has been evaluated and found compliant for use as combustible cladding in non-combustible construction as required by Section 3.1.5.5 of the 2015 National Building Code of Canada.*

NOREX IMP evaluated to CAN/ULC-S101 10-minute stay in place when used as wall panels:

NOREX Panels CAN/ULC S101 10 Minute Stay in Place <sup>4</sup>				
QAI Design #	Model(s)	Maximum Thickness	Maximum Duration	Openings
<b>B1096-1c</b>	NOREX-H NOREX-S NOREX-L	152 mm (6 inches)	10 minutes	No Openings Developed

Note 4: *The above assembly has been evaluated and found compliant to Section 3.1.5.12 of 2015 National Building Code of Canada, for exterior wall assemblies containing combustible insulation with flame spread of > 25 and < 500, for use in non-combustible construction of > 18 m height non sprinklered where the conditions of this section of the National Building Code of Canada are met.*

NOREX IMP products evaluated to NFPA 285:

NOREX Panels NFPA 285				
QAI Design #	Model(s)	Maximum Thickness	Potential Heat of Combustion <sup>5</sup>	Maximum Density lbs/ft <sup>3</sup> (kg/m <sup>3</sup> )
<b>B1096-1d</b>	NOREX-H NOREX-L	4 inches (102 mm) 6 inches (152 mm)	11,350 Btu/lbs	2.6 (41.6)

Note 5: *Potential Heat of Combustion determined in accordance with NFPA 259.*

Notes:

Products must be installed with the manufacturer's installation instructions and in accordance with the building codes recognized by the authority having jurisdiction.

Listed manufacturers are subject to on-going inspections by QAI to ensure that the products outlined above remains as it is listed.

The materials, products or systems listed herein have been qualified to bear the QAI Listing Mark under the conditions stated with each Listing. Only those products bearing the QAI Listing Mark are considered to be listed by QAI. No warranty is expressed or implied, and no guarantee is provided that any jurisdictional authority will accept the Listing found herein. The appropriate authorities should be contacted regarding the acceptability of any given Listing. Visit the QAI Online Listing Directory located at [www.qai.org](http://www.qai.org) for the most up to date version of this Listing and to validate that this QAI Listing is active. Questions regarding this listing may be directed to [info@qai.org](mailto:info@qai.org). Please include the listing number in the request.

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