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## **BUILDING PRODUCT LISTING PROGRAM**

Customer: Falk Panel LLC

Class: Insulated Metal Panels

Location: Walker, MI

Website: www.falkpanel.com

Listing No. B1142-1

Project No. B1142-1 Edition 1

Effective Date: November 1, 2023 Last Revised Date: November 1, 2023

Expires: N/A

Standards: ASTM E84 Standard Test Method for Surface Burning Characteristics of

**Building Materials** 

NFPA 286 Standard Methods of Fire Tests for Evaluating Contribution of

Wall and Ceiling Interior Finish to Room Fire Growth.

ASTM D1929 Standard Test Method for Determining Ignition Temperatures of

Plastic.

UL 1256 Standard for Fire Test of Roof Deck Constructions.

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.
CAN/ULC S102 Standard Method of Test for Surface Burning Characteristics of

Building Materials and Assemblies.

CAN/ULC S127 Standard Corner Wall Method of Test for Flammability

Characteristics of Non-Melting Foam Plastic Building Materials.

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.

Product: Falk Panel LLC insulated metal panels (IMP) of the following types:

HFW-40

CSW-44

SSR-42

• RRP-40

MRP-44

RDEK-40



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

- a) Manufacturer's name or recognized trademark
- b) Product name
- c) Date of manufacture
- d) QAI file number: B1142
- e) ASTM E84 / CAN/ULC S102 Flame Spread Index and Smoke Developed Indices as noted in this listing.
- f) QAI logo shown here:



## Models / Ratings:

Falk Panels 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)		

Falk Panels IMP surface burning characteristics determined in accordance with ASTM E84:

Model(s)	Flame Spread Index	Smoke Developed Index	Maximum Thickness inches (mm)	Density Max. lbs/ft³ (kg/m³)
Falk Panel IMP (w/o Steel Skin)	≤ 25	≤ 450	6 (152)	2.7 (43.2)
HFW-40, CSW-44, SSR-42, RRP-40, MRP-44, RDEK-40 (Evaluated With Steel Skin and representative joint)	≤ 25	≤ 450	6 (152)	2.7 (43.2)

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

Model(s)	Flame Spread Index	Smoke Developed Index	Thickness Maximum mm (inches)	Density Max. kg/m³ (lbs/ft³)
Falk Panel IMP (w/o Steel Skin)	≤ 500¹	≤ 175	152 (6)	43.2 (2.7)
HFW-40, CSW-44, SSR-42, RRP-40, MRP-44, RDEK-40 (Evaluated With Steel Skin and representative joint)	≤ 25 <sup>2</sup>	≤ 100	152 (6)	43.2 (2.7)

Note 1: Flame spread index determined in accordance with CAN/ULC S127 for the foam core without steel skins.



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Falk Panels IMP underdeck spread of flame per UL 1256:

Model(s)	Results	Thickness Maximum mm (inches)	Density Max. kg/m³ (lbs/ft³)
HFW-40, CSW-44, SSR-42, RRP-40, MRP-44, RDEK-40 (Evaluated With Steel Skin and representative joint)	Complies	204 (8)	43.2 (2.7)

Falk Panels IMP underdeck spread of flame per CAN/ULC S126:

Model(s)	Results	Thickness Maximum mm (inches)	Density Max. kg/m <sup>3</sup> (lbs/ft <sup>3</sup> )
HFW-40, CSW-44, SSR-42, RRP-40, MRP-44, RDEK-40 (Evaluated With Steel Skin and representative joint)	Complies	204 (8)	43.2 (2.7)

Falk Panels IMP when installed in accordance with details listed below, have been found to meet requirements of NFPA 286:

QAI Design #	Model(s)	NFPA 286 Compliant Assembly
B1142-1a <sup>3</sup>	HFW-40, CSW-44, SSR-42, RRP-40, MRP-44, RDEK-40	Fastener at top and bottom panels for panel connection are required. Corners treated with flashing, mechanically secured.
	Maximum 6 inches (152 mm) thickness.	Optional sealant can be applied at panel joints.

Note 3: Falk Panels described above have been found to comply with Section 2609.3 *Special Approval* of the 2021 International Building Code (IBC) for installation without a code prescribed thermal barrier.

Falk Panels IMP when installed in accordance with details listed below, have been found to meet requirements of CAN/ULC S138:

QAI Design #	Model(s)	CAN/ULC-S138 Compliant Assembly
	HFW-40, CSW-44, SSR- 42, RRP-40, MRP-44, RDEK-40	Sprinklered Room compliant when equipped with 68°C (155°F) activation temperature, standard response pendant style listed sprinklers listed by an approved agency.
B1142-1a <sup>4</sup>	Maximum 6 inches (152 mm) thickness	Fastener at top and bottom panels for panel connection are required. Corners treated with flashing, mechanically secured.
		Optional sealant can be applied at panel joints.

Note 4: The above assembly has been evaluated and found compliant per 2020 NBC Section 3.1.5.7 Factory-Assembled Panels Clause 1) 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, and where panels are used in application where flame spread ratings 10 − 150 are required. Flame spread rating of ≤ 25 is noted as Falk Panels IMP with joint, with surface burning ratings determined per CAN/ULC S102.



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

Falk Panels CAN/ULC S101 10 Minute Stay in Place⁵					
QAI Design #	Model(s)				
B1142-1b	HFW-40, CSW-44	152 mm (6 inches)	10 minutes	No Openings Developed	

Note 5: The above assembly has been evaluated and found compliant per 2015 NBC Section 3.1.5.7 Factory-Assembled Panels Clause 2) for use in Non-Combustible Construction for buildings that are < 18 meters high, have no Group B or Group C major occupancies, with the panel having no air spaces, and where panels are used in application where flame spread ratings 10 – 150 are required.

Flame spread rating ≤ 25 is noted as Falk IMP with joint ratings determined per CAN/ULC S102.

Falk IMP products evaluated to NFPA 285:

	Falk Panels NFPA 285				
QAI Design #	Model(s)	Maximum Thickness	Potential Heat of Combustion <sup>6</sup>	Maximum Density Ibs/ft³ (kg/m³)	
B1142-1c	HFW-40	6 inches (152 mm)	11,350 Btu/ft <sup>2</sup>	2.7 (43.2)	

Note 6: 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 <a href="www.qai.org">www.qai.org</a> 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 <a href="mailto:info@qai.org">info@qai.org</a>. Please include the listing number in the request.

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