VANCOUVER, BC: 877.461.8378 ph. | 604.527.8368 fx.
LOS ANGELES, CA: 909.483.0250 ph. | 909.483.0336 fx.
WASHINGTON, DC: 540.636.9445 ph. | 540.636.9414 fx.
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TORONTO, ON 905.605.5444
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WEBSITE: WWW.QAI.ORG

BUILDING PRODUCT LISTING PROGRAM

Customer: VAGA Refrigeration, Inc.
Class: Insulated Metal Panels
Location: Trenton, Ontario Canada

Listing No. B1154
Project No. B1154-1 Edition 1

Effective Date: July 17, 2024
Last Revised Date: July 17, 2024

Standards:

CAN/ULC-S102-18	"Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies."
CAN/ULC-S127-14	"Standard Corner Wall Method of Test for Flammability Characteristics of Non-Metling Foam Plastic Building Materials".
CAN/ULC-S138-06	"Standard Method of Test for Fire Growth of Insulated Building Panels in a Full-Scale Room Configuration"
ASTM C518-17	"Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus".

Product: VAGA Insulated Metal Panels (IMP) for walk-in coolers and freezers of the following types:

- V-TAG (Tongue and Groove) Panels
- V-CAM (Camlock) Panels

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

a) Manufacturers name or recognized trademark
b) Product name
c) Traceability code.
d) QAI file number: B1154
e) CAN/ULC-S102 Flame Spread Index and Smoke Developed Index
f) CAN/ULC-S138 compliant.
g) Panel thickness requirements.
h) QAI logo shown here:

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Models / Ratings: VAGA V-TAG and V-CAM IMP have the following performance properties when evaluated per CAN/ULC S102:

Model(s)	Flame Spread Index	Smoke Developed Index	Thickness Max. (mm)	Density Max. (kg/m^3)
V-TAG and V-CAM foam core (w/o Steel Skin)	≤ 500[1]	> 500	152	40
V-TAG and V-CAM Panels (with Steel Skin including panel joint gasketing[2])	≤ 25	≤ 500	152	40

1: Flame spread determined in accordance with CAN/ULC-S127 as required by CAN/ULC-S102 for thermosetting charring foam.
2: Joint treatment can include gasketing or butyl sealant. Finished panel joint requires Nuco Self-Seal Non-Sag GG-200 sealant continuous applied to seal over joint and underlying gaskets and sealant and shall include panel fastening with screws at top and bottom of joint.

VAGA V-Tag and Camlock IMP have the following ratings determined in accordance with CAN/ULC-S138:

Design Listing: Model(s)	CAN/ULC-S138[1]
B1154-1a V-TAG and V-CAM IMP	Sprinklered Room Compliant when equipped with standard response 68°C (155°F) activation temperature, pendant style listed sprinklers. Joints can include optional gasketing or butyl sealant. After installation, joint is to be sealed with Nuco Self-Seal Non-Sag GG-200 silicone sealant applied to continuously cover joint, and panels are fastened at joint top and bottom. Installation requires 51 mm x 51 mm (2-inch x 2-inch) steel angle trim at wall to ceiling, wall to floor, and wall corner intersections.

Note 1: VAGA IMP found to comply with 2020 National Building Code of Canada, Section 3.1.5.7 *Factory-Assembled Panels* for use as walk-in cooler or freezer panels in sprinklered buildings, based on compliance with CAN/ULC-S138 where the interior finish rating meets flame spread ratings noted in CAN/ULC S102 above for V-Tag Panels where joints are treated as noted.

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VAGA V-TAG and V-CAM IMP have the following thermal resistivity and minimum thickness required for compliance with National Resources Canada (NRCan) Energy Efficiency Regulation requirements when evaluated per ASTM C518 for applications noted[1]:

APPLICATION		**THERMAL RESISTIVITY m*K/W (hr*ft²*°F / Btu*in)**	**REQUIRED MINIMUM THICKNESS, mm (inches)**
Walk-In Cooler Mean 12.8°C (55°F)	Structural (Wall)	49.0 (7.1)	89 (3.5) @ RSI 4.40 m²*K/W
	Floor		101 (4) @ RSI 4.93 m²*K/W
Walk-In Freezer Mean -6.7°C (20°F)	Structural (Wall)	55.5 (8.0)	102 (4) @ RSI 5.64 m²*K/W
	Floor		89 (3.5) @ RSI 4.93 m²*K/W

Note 1: Evaluation was conducted in accordance with 10 CFR-2017, Part 431, Subpart R, Appendix B.

Notes: Products must be installed with the manufacturer's published 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.

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