



LISTING INFORMATION OF Alucoil - larson® by Alucoil® FR 4 mm and 6 mm ACM Panels

SPEC ID: 29074

Alucoil North America LLC  
1976 Joe Rogers Jr Blvd

Manning, SC 29102

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larson® by Alucoil® FR 4 mm and 6 mm ACM Panels consist of 0.5 mm aluminum skins on both sides with a proprietary, fire resistant (FR) core with a total panel thickness of 4 mm or 6 mm.

## RATINGS

ASTM E84	FLAME SPREAD INDEX	SMOKE DEVELOPED INDEX
larson® by Alucoil® FR 4 mm ACM Panels	5	5

CAN/ULC S102	FLAME SPREAD INDEX	SMOKE DEVELOPED INDEX
larson® by Alucoil® FR 6 mm ACM Panels	0	0

ASTM E119 / CAN/ULC S101	FIRE RESISTANCE	DESIGN NUMBER
larson® by Alucoil® FR 4 mm ACM Panels*	1 hour	ANA/MCMWP 60-01
*The 1-hour fire resistance rating is applicable to only the interior side of the wall system. See Design Listing for further details.		

CAN/ULC S134	HEAT FLUX INDEX @ 3.5 m	FLAME SPREAD
larson® by Alucoil® FR 6 mm ACM Panels	24.93 kW/m <sup>2</sup>	2.5 m

See Design Listing ANA/MCMWP 25-01.

The NFPA 285 (Design Listing ANA/MCMWP 30-01), UL 1715 and ICC-ES AC25 requirements were met using the larson® by Alucoil® FR 4 mm ACM Panels.

larson® by Alucoil® FR 3 mm, 4 mm, and 6 mm ACM panels have met the requirements of ASTM E331-09 (300 Pa pressure differential, 2 hour duration) using the following assembly details:

- 19 mm deep aluminum Z-bar fastened into the bottom of the wall using 45 mm long tapcon screws, and a panel starter extrusion fastened into the Z-bar to support the bottom of the larson® by Alucoil® ACM Panels using 19 mm pan head fasteners.
- 19 mm deep aluminum hat-bar fastened into the wall using 45 mm long tapcon, spaced to line up with the top of the larson® by Alucoil® ACM Panels.
- Support panel clips fastened into the top side of the larson® by Alucoil® FR 3mm ACM Panels using 19 mm pan head fasteners. This enables the larson® by Alucoil® ACM Panels to be fastened into the hat-

bar.

4. The Larson® by Alucoil® ACM Panels are friction fitted into the panel starter extrusion and then the top of the panels fastened through the support panel clips into the hat-bar using two 19 mm pan head fasteners per support panel clip.
5. A spline (same material as core) friction fitted into the sides of the Larson® by Alucoil® ACM Panels through built-in metal channels, so that it fills both the horizontal and vertical joints.
6. This process is followed to complete one row of panels. The second row above is friction fitted into the support panel clips and another hat-bar installed in line with the top of the Larson® by Alucoil® ACM Panels.
7. Window openings are covered on the sides with aluminum flashing using 127 mm tapcon screws.
8. The gap between flashing and window frames are filled with 5/8 in. backer rod, topped with Dow 795 sealant, and then tooled.

<u>Attribute</u>	<u>Value</u>
CSI Code	07 42 13 Metal Wall Panels
Fire Resistance	1 Hour Fire Rating
Listed or Inspected	LISTED
Report Number	G100624209
Criteria	CAN / ULC S134 (1992)
Criteria	CAN / ULC S101 (2007)
Criteria	UL 1715 (2008)
Criteria	ASTM E331 (2009)
Criteria	NFPA 285 (2006)
Criteria	ASTM E119 (2010)
Criteria	ASTM E84 (2010b)
Criteria	CAN / ULC S102 (2010)
Criteria	ASTM E84 (2012)
Criteria	ASTM E119 (2012)
Criteria	NFPA 285 (2012)
Criteria	ICC-ES AC25 (2010)
Intertek Services	Certification
Listing Section	WALL ASSEMBLIES
Test Original Issue Date	December 9, 2010
Verification Testing	YES
Verification Test Type	FTIR

## DRAWING INDEX

ANA/MCMWP 25-01

ANA/MCMWP 30-01

ANA/MCMWP 60-01

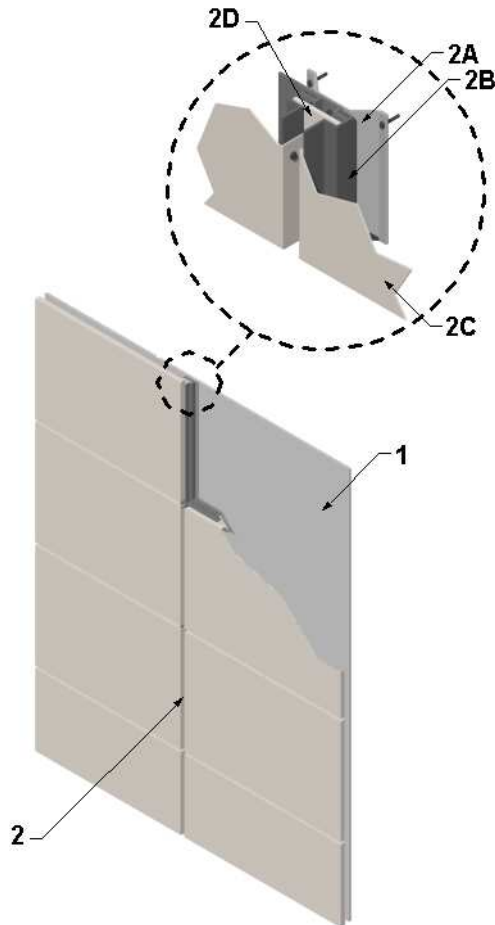
# ANA/MCMWP 25-01

Division 7 – Thermal and Moisture Protection  
07 42 00 Wall Panels  
07 42 13.23 Metal Composite Material Wall Panels

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Design Number: ANA / MCMWP 25-01  
EXTERIOR WALL SYSTEMS  
Alucoil® North America, LLC  
Iarson® by Alucoil® FR 6 mm ACM Panels  
CAN/ULC S 134 (1992)

Meets the Requirements of Section 3.1.5.5 of the National Building Code of Canada, 2010



1. EXTERIOR WALL ASSEMBLY:  
Incorporate construction features in the exterior wall assembly as described in Item 2. Secure exterior veneer to existing wall assembly as follows:

2. CERTIFIED COMPANY: Alucoil® North America, LLC

CERTIFIED PRODUCT: Aluminum Composite Panels

Date Created: August 28, 2012  
Project No: 100596374SAT-018C



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**Division 7 – Thermal and Moisture Protection**  
**07 42 00 Wall Panels**  
**07 42 13.23 Metal Composite Material Wall Panels**

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MODEL: larson® by Alucoil® FR 6 mm  
ACM Panels

EXTERIOR VENEER: Install an ACM  
(Aluminum Composite Metal Panel)  
system consisting of the following  
elements:

- A. HAT BAR: Secure hat bars oriented vertically to the base wall assembly (Item 1) using appropriately sized fasteners specified by the manufacturer. Hat bars coincide with the vertical joints of the aluminum composite panel (Item 2C) vertical joints.
- B. SUPPORT PANEL CLIPS: Install support panel clips to the top side of the larson® by Alucoil® FR 6 mm ACM Panels (Item 2C) spaced approximately 12 in. on center (oc) then secure assembly to the exterior side of hat bar (Item 2A).
- C. ALUMINUM COMPOSITE METAL PANEL: Install larson® by Alucoil® FR 6 mm ACM Panels by friction fitting the bottom of the panel into the starter extrusion (not show), and secure the top of the panel using two 3/4 in. (19 mm) pan head fasteners inserted through the support panel clips (Item 2B) into the hat bar (Item 2A).
- D. SPLINE: Insert and friction fit a nominal 2 in. wide pre-cut strip of larson® by Alucoil® FR 6 mm ACM Panel in the support panel clips (Item 2B) in all vertical and horizontal panel joints.

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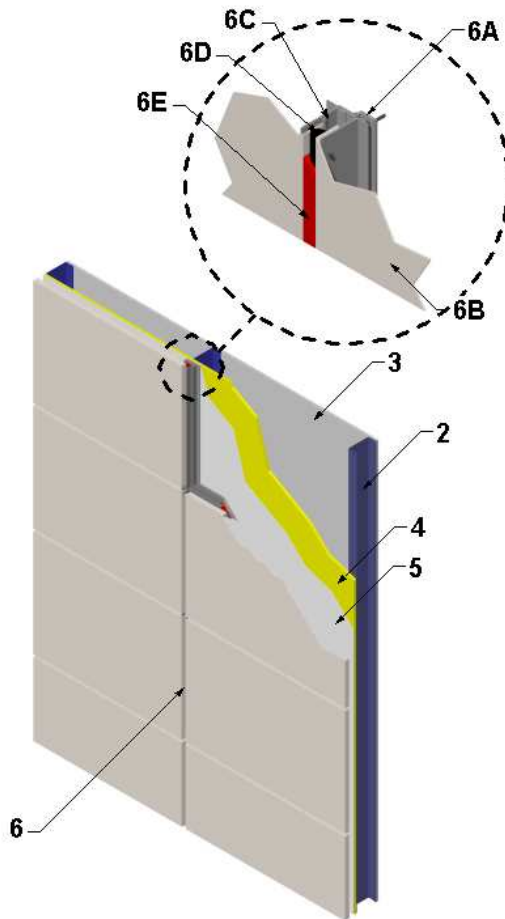
Division 7 – Thermal and Moisture Protection  
07 42 00 Wall Panels  
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Design Number: ANA / MCMWP 30-01  
EXTERIOR WALL SYSTEMS  
Alucoil® North America, LLC  
Iarson® by Alucoil® FR 4 mm ACM Panels  
NFPA 285 – Meets Conditions of Acceptance

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**Item 1: Exterior Wall Assembly**

1. EXTERIOR WALL ASSEMBLY: Incorporate construction features in the exterior wall assembly as described in Items 2 through 6.
2. STEEL FRAMING (ITEM 2): Install nominal 3-5/8 in., 20 GA steel studs

spaced nominally 24 in. on center (oc). Attach steel studs to 20 GA top and bottom steel tracks using nominal 7/16 in. long pan head framing screws attached to the front and back of each steel stud.

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3. **INTERIOR GYPSUM:** Apply one (1) layer of 5/8 in. thick, Type X gypsum board to the interior side of the steel framing (Item 2) with the long dimension parallel to the steel studs. Secure using #6 1-1/4 in. long, Type S, screws spaced nominally 8 in. oc around the perimeter and 12 in. oc in the field.
- A. **JOINT TAPE AND COMPOUND – (Not Shown)** Apply a level 2 finish of vinyl or casein, dry or premixed joint compound applied in two coats to all exposed fastener heads and gypsum board joints. Embed minimum 2 in. wide paper, plastic, or fiberglass tape in first layer of compound over joints in gypsum board (Item 3).
4. **EXTERIOR SHEATHING:** Install 5/8 in. thick DensGlass® Gold exterior sheathing to the exterior side of the steel framing (Item 2) with the long dimension perpendicular to the steel studs. Secure using #6 1-1/4 in. long, Type S, screws spaced nominally 8 in. oc around the perimeter and 12 in. oc in the field.
5. **WEATHER BARRIER:** Install a single layer of vapor permeable barrier to the exterior side of the exterior sheathing (Item 4) with minimum 2 in. overlaps at the seams.
6. **CERTIFIED COMPANY:** Alucoil® North America, LLC
- CERTIFIED PRODUCT:** Aluminum Composite Panels
- MODEL:** larson® by Alucoil® FR 4 mm ACM Panels
- EXTERIOR VENEER:** Install an ACM (Aluminum Composite Metal Panel) system consisting of the following elements:
- A. **“L” CHANNELS:** Install vertical aluminum “L” shaped channels secured through the exterior sheathing (Item 4) into the steel framing (Item 2) around the perimeter of the assembly. Secure clip extrusion channel into steel framing (Item 2) using #12-11 X 2 in. long self-drilling screws spaced maximum 24 in. oc.
- B. **ALUMINUM COMPOSITE METAL PANEL:** Install Alucoil® FR 6 mm ACM Panels to “L” channels (Item 7A) flush to the exterior sheathing (Item 4). Secure panels to “L” channels using #12-11 X 3/4 in. long stainless steel fasteners spaced nominal 18 in. oc.
- C. **ALUMINUM EXTRUSIONS:** Secure aluminum composite metal panels (Item 6B) in the field of the assembly using aluminum extrusions attached directly to the panels using #10 X 3/4 in. self-drilling hex head plated steel fasteners.
- D. **BACKER ROD:** Install nominal 1/2 in. diameter Tundra Foam, open cell backer rod in all horizontal and vertical seams between aluminum composite panels.
- E. **SEALANT:** Install DOW 795 over the backer rod (Item 6D) to bring the surface flush with the adjacent aluminum composite panels (Item 6B).

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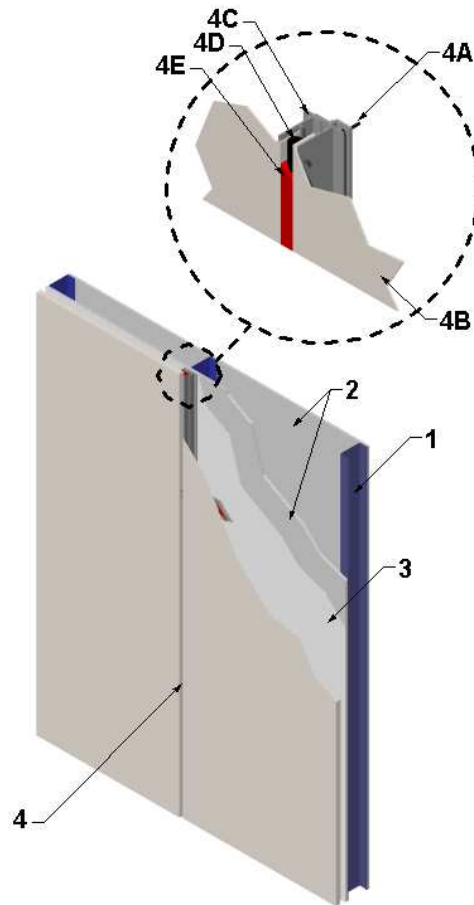


# ANA/MCMWP 60-01

Division 7 – Thermal and Moisture Protection  
07 42 00 Wall Panels  
07 42 13.23 Metal Composite Material Wall Panels

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Design Number ANA/MCMWP 60-01  
Non-Load Bearing Wall System  
Alucoil® North America, LLC  
Parson® by Alucoil® FR 4 mm ACM Panels  
ASTM E 119 (2012)  
CAN/ULC S 101 (2007)  
Rating: 1 Hour  
Interior Exposure Only



Construct 1-hour rated gypsum wall assembly using the following elements:

1. STEEL STUDS: Install nominal 3-5/8 in. deep, 18 gauge (GA) galvanized steel

studs spaced maximum 16 in. on center (oc). Friction-fit steel studs into 20 GA galvanized steel floor and ceiling track (Not Shown). Install lateral bracing (not shown) nominal 5 ft. oc vertically.

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#### 07 42 00 Wall Panels

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2. GYPSUM BOARD: Install nominal 5/8 in. thick Type X gypsum board to the interior and exterior sides of wall assembly. Install gypsum board with long edge perpendicular to steel studs and secure using #6 X 1-1/4 in. long self drilling zinc plated drywall screws spaced 8 in. oc around the perimeter and 12 in. oc in the field. Offset horizontal joints minimum 24 in. oc. After gypsum board is attached, apply a level 2 finish consisting of the following elements: Vinyl or casein, dry or premixed joint compound applied to the gypsum board in two coats to cover all exposed screw heads and gypsum board butt joints. Embed a minimum 2 in. wide paper, plastic, or fiberglass tape in first layer of compound over butt joints of the gypsum board.
3. WEATHER BARRIER: Install a single layer of vapor permeable barrier to the exterior side of the exterior gypsum board (Item 2) with minimum 2 in. overlaps at the seams.
4. CERTIFIED COMPANY: Alucoil® North America, LLC  
  
CERTIFIED PRODUCT: Aluminum Composite Panels  
  
MODEL: larson® by Alucoil® FR 4 mm ACM Panels  
  
EXTERIOR VENEER: Install an ACM (Aluminum Composite Metal Panel) system consisting of the following elements:
  - A. "L" CHANNELS: Install vertical aluminum "L" shaped channels secured through the exterior sheathing (Item 4) into the steel framing (Item 2) around the perimeter of the assembly. Secure clip extrusion channel into steel framing (Item 2) using #12-11 X 2 in. long self-drilling screws spaced maximum 24 in. oc.
  - B. ALUMINUM COMPOSITE METAL PANEL: Install Alucoil® FR 6 mm ACM Panels to "L" channels (Item 7A) flush to the exterior sheathing (Item 4). Secure panels to "L" channels using #12-11 X 3/4 in. long stainless steel fasteners spaced nominal 18 in. oc.
  - C. ALUMINUM EXTRUSIONS: Secure aluminum composite metal panels (Item 6B) in the field of the assembly using aluminum extrusions attached directly to the panels using #10 X 3/4 in. self-drilling hex head plated steel fasteners.
  - D. BACKER ROD: Install nominal 1/2 in. diameter Tundra Foam, open cell backer rod in all horizontal and vertical seams between aluminum composite panels.
  - E. SEALANT: Install DOW 795 over the backer rod (Item 6D) to bring the surface flush with the adjacent aluminum composite panels (Item 6B).

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