



EVALUATION REPORT

FLORIDA BUILDING CODE 7TH EDITION (2020)

Manufacturer: ALUMINUM COILS, INC.
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Tampa, FL 33634
(813) 249-9743
www.aluminumcoilsinc.com

Issued August 9, 2020

Manufacturing: Tampa, FL

Quality Assurance: PRI Construction Materials Technologies (QUA9110)

SCOPE

Category: Panel Walls
Subcategory: Soffits
Code Sections: 1404.5.1, 1709.10
Properties: Wind Resistance

REFERENCES

| <u>Entity</u> | <u>Report No.</u> | <u>Standard</u> | <u>Year</u> |
|---|-------------------|-----------------|-------------|
| Certified Testing Laboratories (TST1577) | CTLA 1847W | AAMA 1402 | 2009 |
| Certified Testing Laboratories (TST1577) | CTLA 2076W | AAMA 1402 | 2009 |
| PRI Construction Materials Technologies (TST5878) | ACIX-003-02-01 | AAMA 1402 | 2009 |
| PRI Construction Materials Technologies (TST5878) | ACIX-003-02-02 | AAMA 1402 | 2009 |
| PRI Construction Materials Technologies (TST5878) | ACIX-008-02-01 | AAMA 1402 | 2009 |
| PRI Construction Materials Technologies (TST5878) | 1303T0001 | ASTM E 330 | 2002(2010) |
| PRI Construction Materials Technologies (TST5878) | 1303T0002 | ASTM E 330 | 2002(2010) |
| PRI Construction Materials Technologies (TST5878) | 1303T0003 | AAMA 1402 | 2009 |
| PRI Construction Materials Technologies (TST5878) | 1303T0004 | AAMA 1402 | 2009 |
| PRI Construction Materials Technologies (TST5878) | 1303T0004A | AAMA 1402 | 2009 |
| PRI Construction Materials Technologies (TST5878) | 1303T0005 | ICC-ES AC132 | 2010 |

LIMITATIONS

1. This report is not for use in the HVHZ.
2. Design wind loads shall be determined in accordance with FBC Section 1609.
3. Soffits shall be labeled in accordance with FBC Section 1709.10.
4. Installation of the evaluated products shall comply with this report, the FBC and the manufacturer's published application instructions. Where discrepancies exist between these sources, the more restrictive and FBC compliant installation detail shall prevail.
5. Installations shall meet the minimum ventilation requirements of FBC section 1203.2.
6. Field fastener withdrawal may be required by the AHJ for confirmation of existing substrates. All data shall be reviewed by a qualified design professional to ensure the fastener withdrawal meets or exceeds the minimum load resistance for the project requirements.
7. All products listed in this report shall be manufactured under a quality assurance program in compliance with Rule 61G20-3.

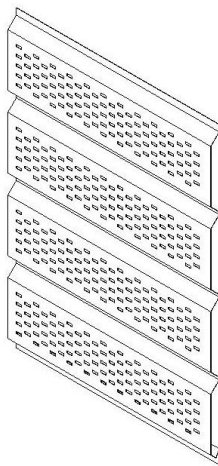
PRODUCT DESCRIPTIONS

3/8" F-Channel Preformed nominal 0.016-inch thick, 3105 H-14 aluminum F-channel. See Appendix C for dimension drawings.

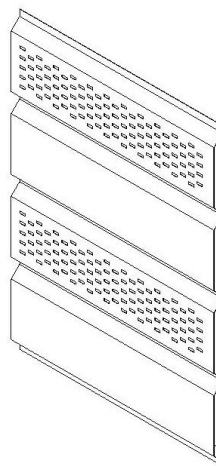
3/8" J-Channel Preformed nominal 0.016-inch thick, 3105 H-14 aluminum J-channel. See Appendix C for dimension drawings.

Fascia Preformed nominal 0.019-inch thick, 3105 H-14 aluminum fascia. See Appendix C for dimension drawings.

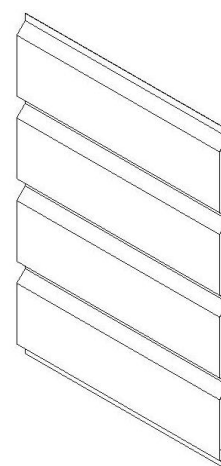
16" Q4 Soffit Preformed nominal 0.0135-inch thick, 3105 H-14 aluminum soffit panels provided in 16-inch sections. The reported net free ventilation areas are 25.6 in²/lin.ft (19.2 in²/ft²) for the 'full vent' configuration and 12.8 in²/lin.ft. (9.6 in²/ft²) for the 'center vent' configuration. See Appendix C for dimension drawings.



16" FULL VENT

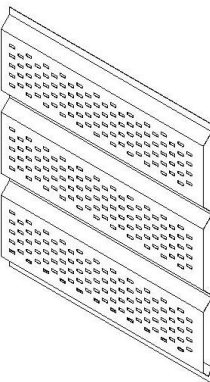


16" CENTER VENT

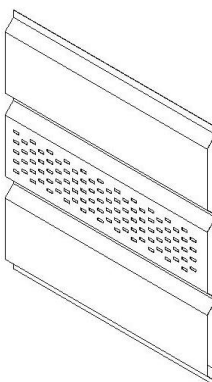


16" SOLID PANEL

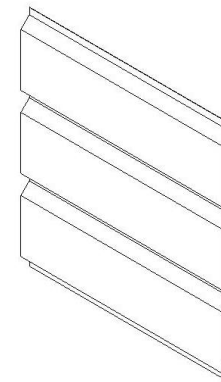
12" T4 Soffit Preformed nominal 0.0135-inch thick, 3105 H-14 aluminum soffit panels provided in 12-inch sections. The reported net free ventilation areas are 19.7 in²/lin.ft (19.7 in²/ft²) for the 'full vent' configuration and 6.6 in²/lin.ft. (6.6 in²/ft²) for the 'center vent' configuration. See Appendix C for dimension drawings.



12" FULL VENT



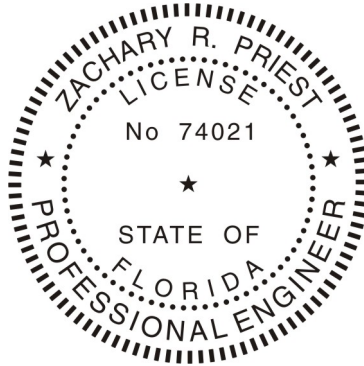
12" CENTER VENT



12" SOLID PANEL

COMPLIANCE STATEMENT

The products evaluated herein by Zachary R. Priest, P.E. have demonstrated compliance with the Florida Building Code, 7th Edition (2020) as evidenced in the referenced documents submitted by the named manufacturer.



Zachary R. Priest, P.E.
Florida Registration No. 74021
Organization No. ANE9641

CERTIFICATION OF INDEPENDENCE

CREEK Technical Services, LLC does not have, nor will it acquire, a financial interest in any company manufacturing or distributing products under this evaluation.

CREEK Technical Services, LLC is not owned, operated, or controlled by any company manufacturing or distributing products under this evaluation.

Zachary R. Priest, P.E. does not have, nor will acquire, a financial interest in any company manufacturing or distributing products under this evaluation.

Zachary R. Priest, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.

APPENDICES

- 1) [APPENDIX A](#) – Approved Systems (1 page)
- 2) [APPENDIX B](#) – Installation Drawings (5 pages)
- 3) [APPENDIX C](#) – Dimensional Drawings (4 pages)

APPROVED SYSTEMS

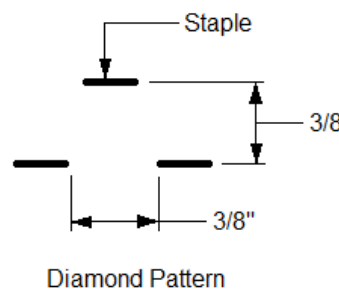
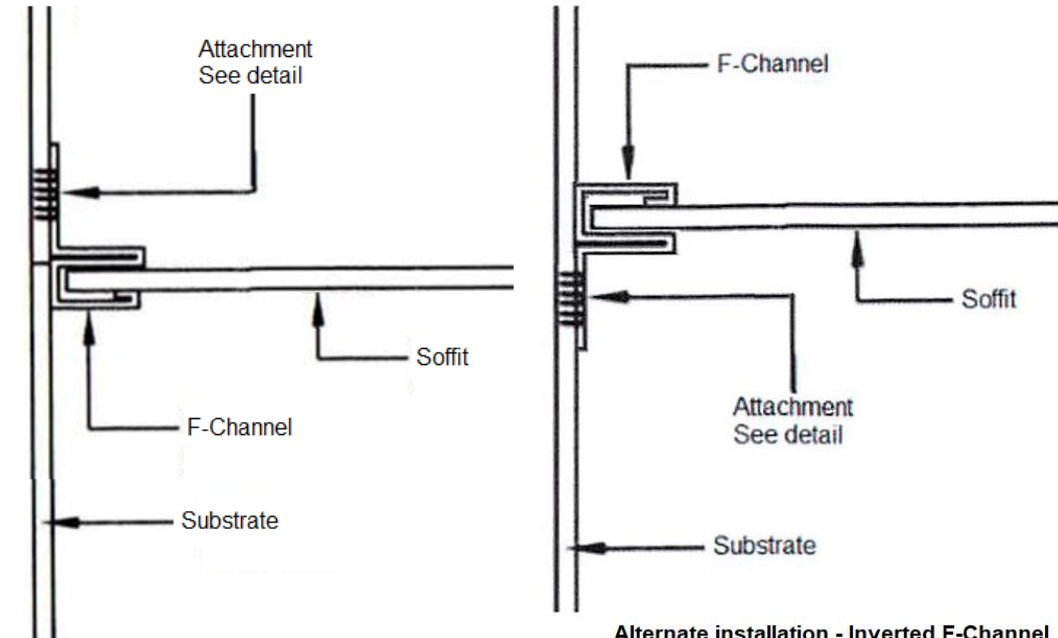
The following notes shall be observed when using the assembly tables below.

1. Maximum Design Pressures (*MDP*) were calculated using a 1.5:1 margin of safety per FBC Section 1404.5.1.
2. Refer to [LIMITATIONS](#) and sections of this evaluation when using the table(s) below.
3. Refer to [INSTALLATION](#) section of this report for installation detail when the information is not explicitly stated for the selected assembly.
4. The on-center (o.c.) spacing given is the maximum allowable attachment spacing for the rated system.
5. Allowable span tolerance shall be +0.5-inches.
6. Unless otherwise specified, the Wood substrate shall be minimum No. 2 SPF (S.G. = 0.42) 2x lumber. Substrate attachment shall be designed by others in accordance with FBC requirements to meet the minimum design requirements for the project.
7. Trusses/Rafters shall be spaced a maximum 24-inch o.c. at the overhang.
8. Unless otherwise specified, the Masonry substrate shall conform to ASTM C 90. Substrate attachment shall be designed by others in accordance with FBC requirements to meet the minimum design requirements for the project.

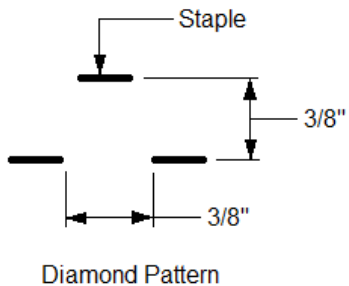
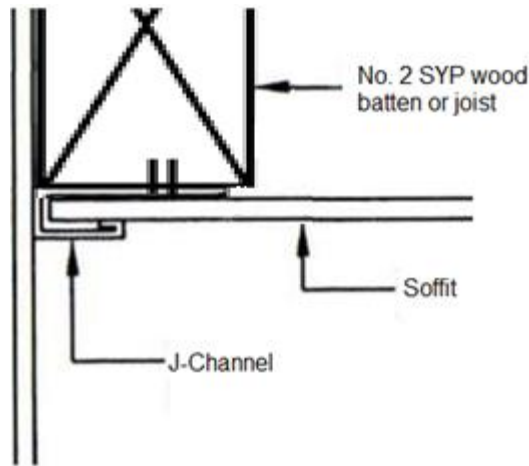
| Approved Maximum Design Pressure (<i>MDP</i>) for J-Channel and F-Channel Systems with Fascia Cap | | | | | | | | |
|--|---------------------|----------|---------------------|----------|---------------------|----------|----------------------------------|----------|
| Soffit Panel | 12-inch Soffit Span | | 16-inch Soffit Span | | 24-inch Soffit Span | | Greater than 24-inch Soffit Span | |
| | <i>MDP</i> (psf) | | <i>MDP</i> (psf) | | <i>MDP</i> (psf) | | <i>MDP</i> (psf) | |
| | Positive | Negative | Positive | Negative | Positive | Negative | Positive | Negative |
| 12" T4 Soffit with F-Channel | +48 | -64.2 | +53.3 | -53.3 | +80 | -60 | +60 | -60 |
| 12" T4 Soffit with J-Channel | +70 | -73.3 | +53.3 | -53.3 | +60 | -60 | +60 | -60 |
| 16" Q4 Soffit with F-channel | +48 | -64.2 | +53.3 | -46.7 | +80 | -60 | +60 | -60 |
| 16" Q4 Soffit with J-channel | +70 | -73.3 | +53.3 | -53.3 | +53.3 | -53.3 | +60 | -60 |

Appendix B
INSTALLATION

Note - Refer to the [APPROVED SYSTEMS](#) section of this report for additional installation details of a selected system and maximum design pressures limitations.

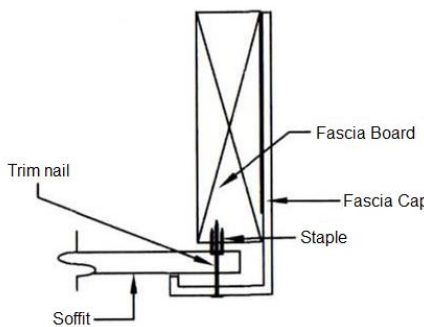
| Soffit Panel | Soffit Span | Substrate | F-Channel Wall Connection Detail |
|--|--------------------|-----------|--|
| 12" T4 Soffit or 16" Q4 Soffit | 12-inch | Wood | Three (3) 18 ga., 1/4-inch crown x 3/4-inch leg staples in diamond pattern spaced 24-inch o.c. |
| | | Masonry | One (1) 14 ga., 5/8-inch long T nail or 9 ga., min. 5/8-inch long Stub Nail with 3/8-inch diameter head spaced 8-inch o.c. |
| 12" T4 Soffit | 16-inch | Wood | Three (3) 18 ga., 1/4-inch crown x 1-inch leg staples in diamond pattern spaced 16-inch o.c. |
| | | Masonry | One (1) 14 ga., 5/8-inch long T nail or 9 ga., min. 5/8-inch long Stub Nail with 3/8-inch diameter head spaced 8-inch o.c. |
| 16" Q4 Soffit | 16-inch | Wood | Three (3) 18 ga., 1/4-inch crown x 3/4-inch leg staples in diamond pattern spaced 16-inch o.c. |
| | | Masonry | One (1) 14 ga., 5/8-inch long T nail or 9 ga., min. 5/8-inch long Stub Nail with 3/8-inch diameter head spaced 8-inch o.c. |
| 12" T4 Soffit or 16" Q4 Soffit | 24-inch & >24-inch | Wood | Three (3) 18 ga., 1/4-inch crown x 1-inch leg staples in diamond pattern spaced 16-inch o.c. |
| | | | One (1) min. 1.5-inch x 11ga. smooth shank roofing nail spaced 16-inch o.c. |
| | | Masonry | One (1) 14 ga., 5/8-inch long T nail or 9 ga., min. 5/8-inch long Stub Nail with 3/8-inch diameter head spaced 8-inch o.c. |
|  | | |  |

Appendix B

| Soffit Panel | Soffit Span | Substrate | J-Channel Wall Connection Detail |
|---|--------------------|-------------------------------|--|
| 12" T4 Soffit or 16" Q4 Soffit | 12-inch & 16-inch | Min. 2x No. 2 SYP Wood Batten | Three (3) 18 ga., 1/4-inch crown x 3/4-inch leg staples in diamond pattern spaced 12-inch o.c. |
| 12" T4 Soffit or 16" Q4 Soffit | 24-inch & >24-inch | Min. 2x No. 2 SYP Wood Batten | Three (3) 18 ga., 1/4-inch crown x 1-inch leg staples in diamond pattern spaced 16-inch o.c. |
|  | | |  |

Appendix B

| Wall Connection | Soffit Panel | Soffit Span | Soffit Panel(A) and Fascia Cap(B) Attachment at the Eave |
|------------------------|--------------------------------|-------------|--|
| F-channel | 12" T4 Soffit or 16" Q4 Soffit | 12-inches | A. One (1) min 18 ga., 1/4-inch crown x 3/4-inch leg staple spaced 8-inch o.c. and securing each panel lap B. One (1) min. 1 3/4-inch long x 0.072-inch dia. x min. 3/16-inch head dia. trim nail spaced 48-inch o.c. in fascia cap |
| F-channel | 12" T4 Soffit | 16-inches | A. One (1) min 18 ga., 1/4-inch crown x 1-inch leg staple spaced 4-inch o.c. and securing each panel lap B. One (1) min. 1 3/4-inch long x 0.072-inch dia. x min. 3/16-inch head dia. trim nail spaced 12-inch o.c. in fascia cap |
| F-channel | 16" Q4 Soffit | 16-inches | A. One (1) 18 ga., 1/4-inch crown x 3/4-inch leg staple shall be installed at each of the following locations: the female leg of the lap, the male leg of the lap, and 4" o.c. in the flutes between laps. B. One (1) min. 1 3/4-inch long x 0.072-inch dia. x min. 3/16-inch head dia. trim nail spaced 16-inch o.c. in fascia cap |
| F-channel | 12" T4 Soffit or 16" Q4 Soffit | 24-inches | A. One (1) min 18 ga., 1/4-inch crown x 1-inch leg staple spaced 8-inch o.c. in soffit flute and securing each panel lap B. One (1) min. 1 3/4-inch long x 0.072-inch dia. x min. 3/16-inch head dia. trim nail spaced 16-inch o.c. in fascia cap |
| J-channel | 12" T4 Soffit or 16" Q4 Soffit | 12-inches | A. One (1) 18 ga., 1/4-inch crown x 3/4-inch leg staple shall be installed at each of the following locations: the female leg of the lap, the male leg of the lap, and the center flute. Alternately, one (1) min. 1 3/4-inch long x 0.072-inch dia. x min. 3/16-inch head dia. trim nail may be placed at the center flute instead of a staple. B. One (1) min. 1 3/4-inch long x 0.072-inch dia. x min. 3/16-inch head dia. trim nail spaced 8-inch o.c. in panel flutes opposite staples in fascia cap |
| J-channel | 12" T4 Soffit or 16" Q4 Soffit | 16-inches | A. One (1) 18 ga., 1/4-inch crown x 3/4-inch leg staple shall be installed at each of the following locations: the female leg of the lap, the male leg of the lap, and the center flute. Alternately, one (1) min. 1 3/4-inch long x 0.072-inch dia. x min. 3/16-inch head dia. trim nail may be placed at the center flute instead of a staple. B. One (1) min. 1 3/4-inch long x 0.072-inch dia. x min. 3/16-inch head dia. trim nail spaced 8-inch o.c. in panel flutes opposite staples in fascia cap |
| J-channel | 12" T4 Soffit | 24-inches | A. One (1) min 18 ga., 1/4-inch crown x 1-inch leg staple spaced 8-inch o.c. in soffit flute B. One (1) min. 1 3/4-inch long x 0.072-inch dia. x min. 3/16-inch head dia. trim nail spaced 12-inch o.c. in fascia cap |
| J-channel | 16" Q4 Soffit | 24-inches | A. One (1) min 18 ga., 1/4-inch crown x 1-inch leg staple spaced 8-inch o.c. and securing each panel lap B. One (1) min. 1 3/4-inch long x 0.072-inch dia. x min. 3/16-inch head dia. trim nail spaced 16-inch o.c. in fascia cap |
| F-channel J-channel | 12" T4 Soffit or 16" Q4 Soffit | >24-inches | A. One (1) 18 ga., 1/4-inch crown x 3/4-inch leg staple shall be installed at each of the following locations: the female leg of the lap, the male leg of the lap, and the center flute. B. One (1) min. 1 3/4-inch long x 0.072-inch dia. x min. 3/16-inch head dia. trim nail spaced 12-inch o.c. in fascia cap |



Appendix B

| Wall Connection | Soffit Panel | Soffit Span | Center Connection (evenly spaced between wall and eave) for Soffit Spans 24-inches or Greater | |
|-----------------|--------------------------------|-------------|--|--|
| | | | Batten | Panel Attachment |
| F-channel | 12" T4 Soffit or 16" Q4 Soffit | 24-inches | Nominal 1x2 No.2 SYP wood batten. Connection to structure to be designed by others. | One (1) 18 ga.1/4-inch crown x 1-inch leg staple securing the nailer of each female lock or spaced 16-inch o.c. securing each panel lap One (1) min. 1 3/4-inch x 0.072-inch diameter finishing nail with min. 3/16-inch head spaced 4-inch o.c. |
| J-channel | 12" T4 Soffit or 16" Q4 Soffit | 24-inches | Nominal 1x2 No.2 SYP wood batten. Connection to structure to be designed by others. | One (1) 18 ga.1/4-inch crown x 1-inch leg staple spaced 12-inch o.c. securing each panel lap One (1) min. 1 3/4-inch x 0.072-inch diameter finishing nail with min. 3/16-inch head spaced 4-inch o.c. |
| J-channel | 12" T4 Soffit or 16" Q4 Soffit | >24-inches | Min. 1x2 No. 2 SYP wood battens installed 12-inch o.c. Connection to structure to be designed by others. | One (1) 18 ga., 1/4-inch crown x 3/4-inch leg staple or min. 1 3/4-inch long x 0.072-inch dia. x min. 3/16-inch head dia. trim nail shall be installed at each batten intersection at each of the following locations: the female leg of the lap, the male leg of the lap, and the center flute. |

Typical panel fastening details for all assemblies are as follows:

- a. 12" T4 Soffit – 12-inch o.c.



- b. 12" T4 Soffit – 8-inch o.c.

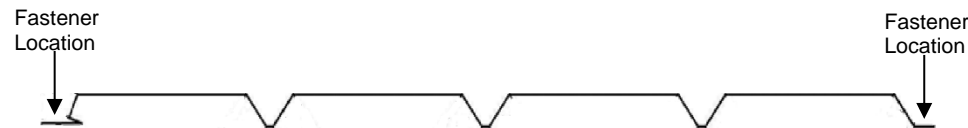


Appendix B

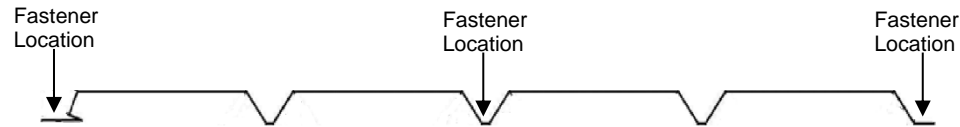
- c. 12" T4 Soffit – 4-inch o.c.



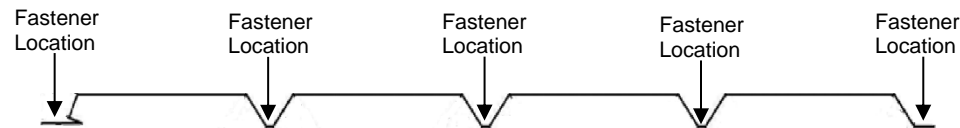
- d. 16" Q4 Soffit – 16-inch o.c.



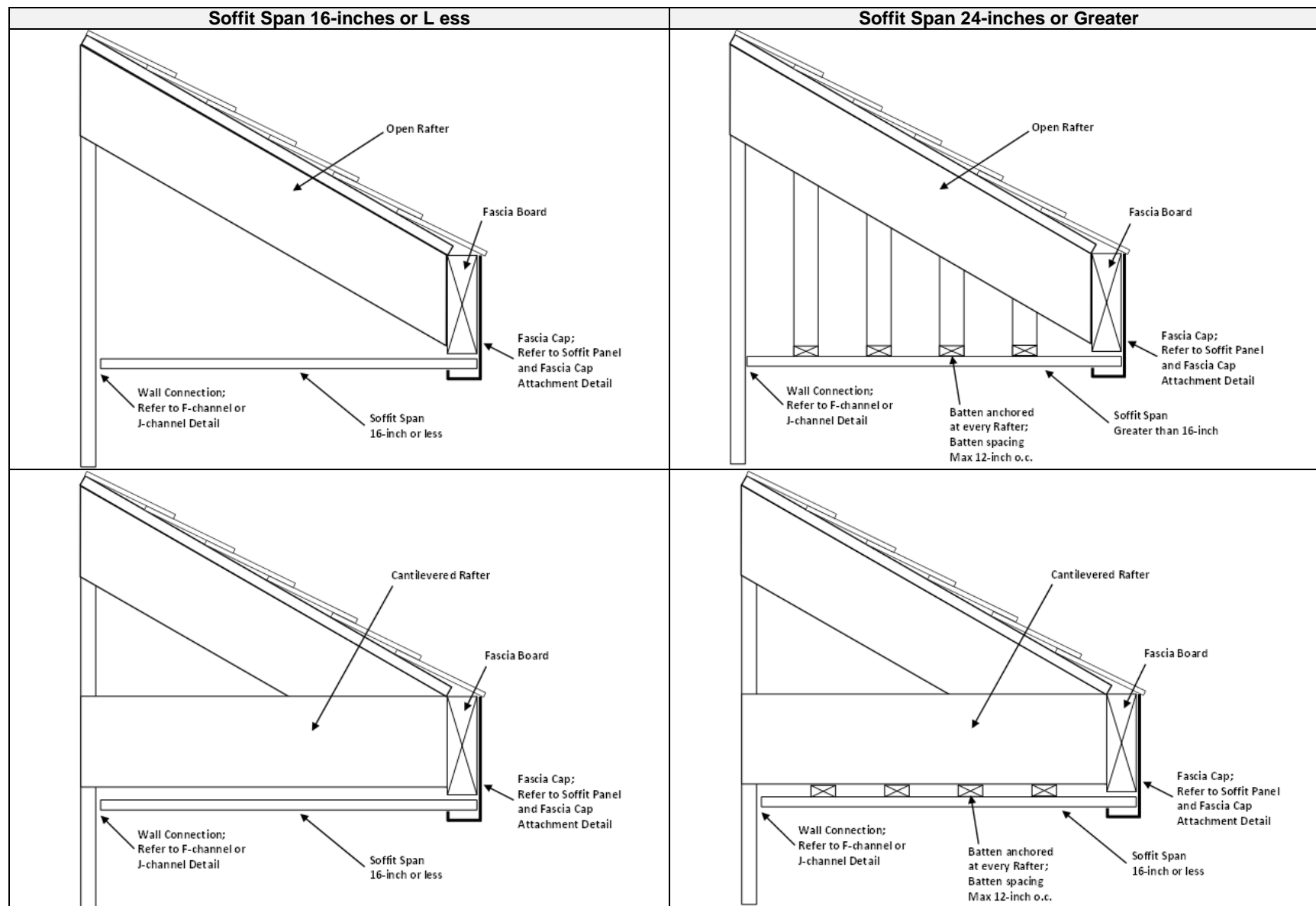
- e. 16" Q4 Soffit – 8-inch o.c.



- f. 16" Q4 Soffit – 4-inch o.c.

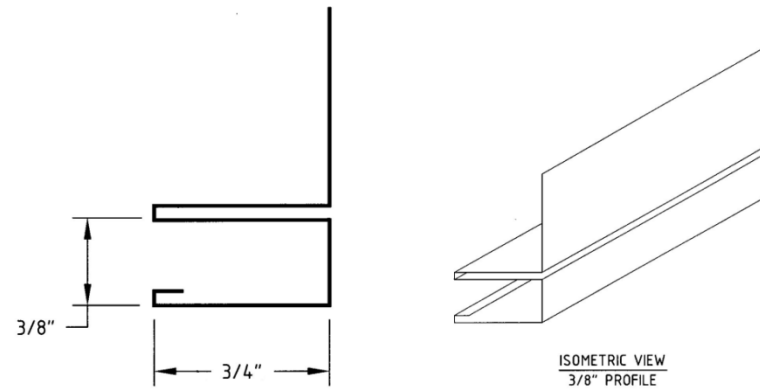


Appendix B

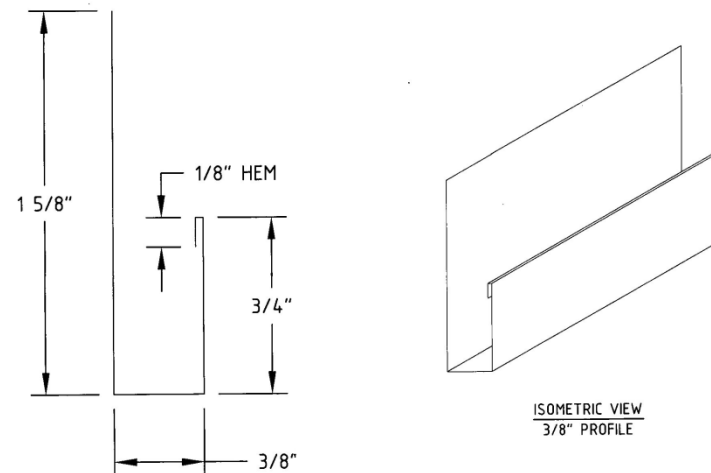


DIMENSIONAL DRAWINGS

3/8" F-Channel

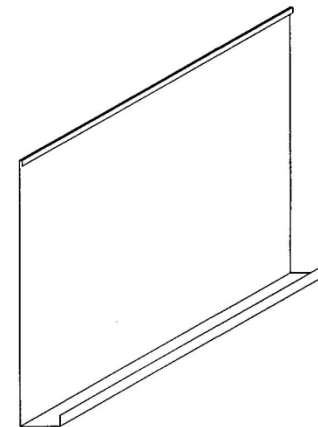
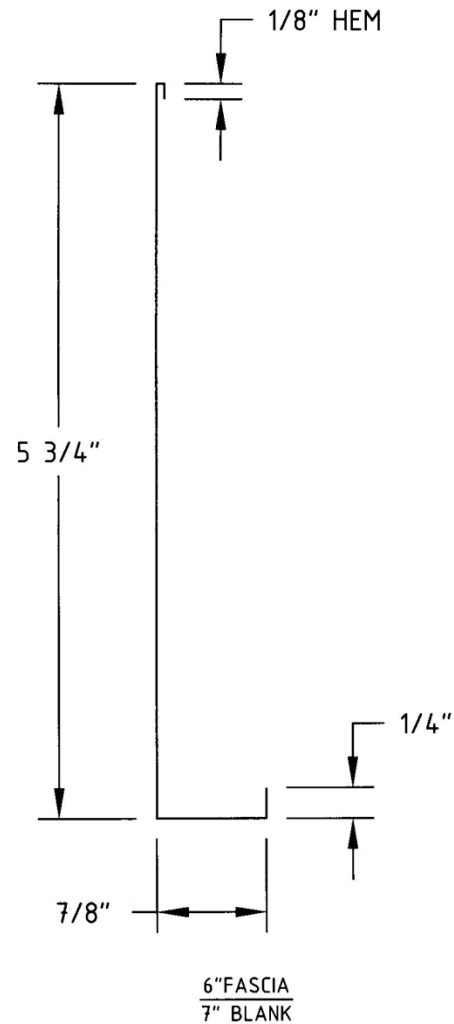


3/8" J-Channel



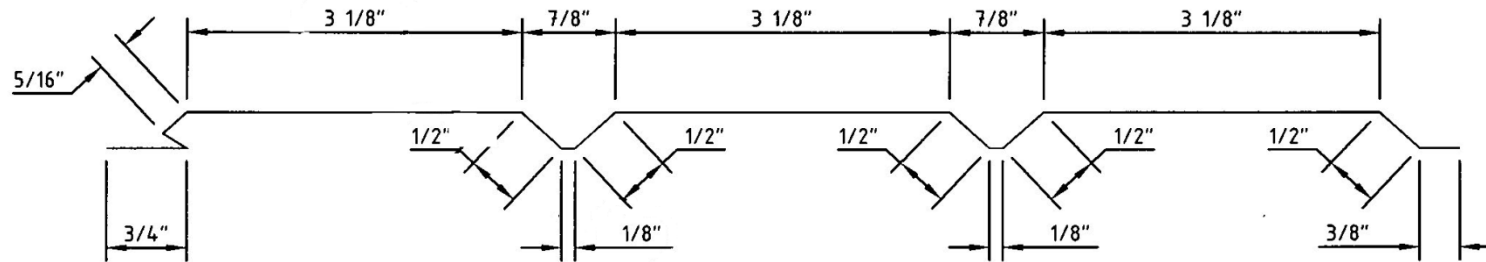
Appendix C

Fascia

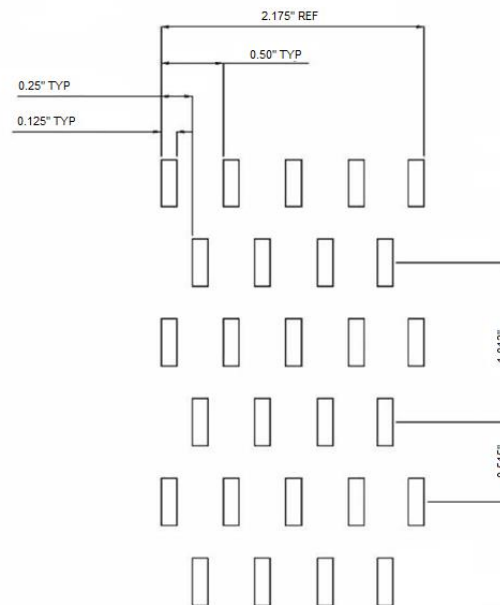


ISOMETRIC VIEW

12" T4 Soffit

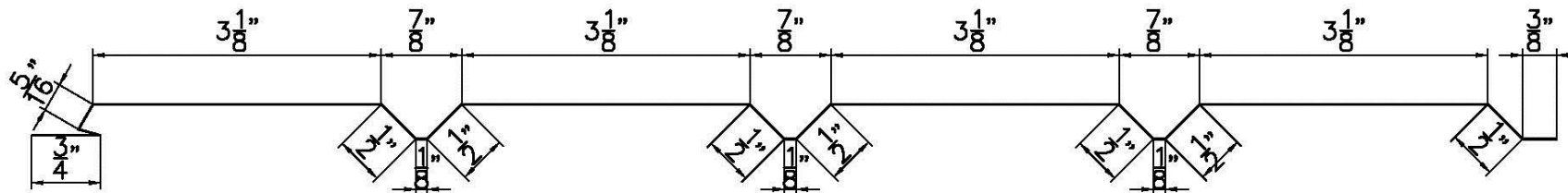


13.75" BLANK
3/8" PROFILE

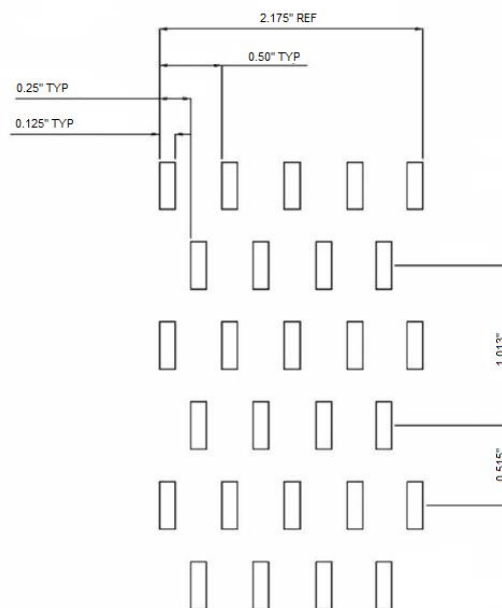




16" Q4 Soffit



18" BLANK
3 / 8 PROFILE



END OF REPORT