

AlSCO® Aluminum Soffit Panel Installation Instructions

1 Installation Instructions:

- 1.1 Installation shall comply with the approved construction documents, the manufacturer installation instructions, this report, and the applicable building code.
- 1.2 In the event of a conflict between the manufacturer installation instructions and this report, contact the manufacturer for counsel on the proper installation method.
- 1.3 AlSCO Aluminum Soffit Panels shall be installed over minimum single nominal 2 x 4 stud grade dimensional lumber with a minimum published specific gravity of 0.42 and nominal 1 x 4 fascia member of a lumber species with a minimum published specific gravity of 0.42.
 - 1.3.1 Flashing in accordance with Florida Build Code requirements shall be installed at all openings, penetrations, abutments with dissimilar materials, and at terminations of soffit panels.
 - 1.3.2 The strength of the supporting framing, structural sheathing, and the withdrawal strength of the fasteners shall be designed in accordance the referenced codes for the required loads.
 - 1.3.3 Fasteners for attaching the F-Channels shall be minimum 1/4" crown, 1 1/4" leg staples in a fastening group pattern shown in **Figure 3**. Fasteners for attaching the fascia trim shall be minimum 15-gauge trim nails.

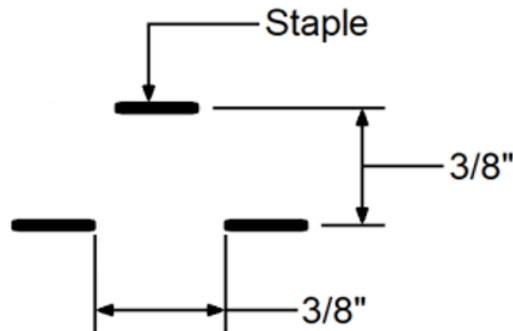


Figure 1. Staple Pattern for Wood Walls

- 1.3.3.1 Spacing of fastener groups for the F-Channels and spacing of the nails for the fascia trim shall be in accordance with **Table 1** for wood walls. Spacing of fastener groups for the F-Channels and spacing of the nails for the fascia trim shall be in accordance with **Table 2** for masonry walls.

Table 1. Aluminum Soffit Panels Wind Resistance – Wood Wall^{2,3}

Product ⁵	Soffit Unsupported Span (in)	Fasteners for F-Channel Attachment to Wall ⁴	Fasteners o.c. Spacing into F-Channel (in)	Allowable Wind Pressure (psf)
Double 6	12 ¹	(3) 1/4" Crown x 1" Leg, 18-gauge, Galvanized Staples	24	+83 / -69
			16	+94 / -78
			12	+104 / -86
	16		24	+52 / -58
			16	+52 / -58
			12	+58 / -64
	24		24	+23 / -26
			16	+23 / -26
			12	+26 / -28

Table 1. Aluminum Soffit Panels Wind Resistance – Wood Wall^{2,3}

Product ⁵	Soffit Unsupported Span (in)	Fasteners for F-Channel Attachment to Wall ⁴	Fasteners o.c. Spacing into F-Channel (in)	Allowable Wind Pressure (psf)
Triple 4	12 ¹	(3) 1/4" Crown x 1" Leg, 18-gauge, Galvanized Staples	24	+86 / -78
			16	+86 / -78
			12	+95 / -86
	16		24	+48 / -55
			16	+48 / -55
			12	+54 / -61
	24		24	+21 / -24
			16	+21 / -24
			12	+24 / -27
Quad 4	12 ¹	(3) 1/4" Crown x 1" Leg, 18-gauge, Galvanized Staples	24	+89 / -80
			16	+89 / -80
			12	+99 / -88
	16		24	+50 / -54
			16	+50 / -54
			12	+56 / -60
	24		24	+20 / -20
			16	+20 / -20
			12	+22 / -22

SI: 1 in = 25.4 mm, 1-psf = 0.0479 kPa

1. The 12" span values are applicable to a 24" overhang distance with a center support.
2. The soffit is attached to the wood fascia board with (1) 1/4" Crown x 1" Leg, 18-gauge, Galvanized Staple at each groove. BASL Fascia cover attached to wood with (1) 0.100" x 1 1/4" Trim Nail spaced 12" o.c. into the wide face, and (1) 0.100" x 1 1/4" Trim Nail spaced 12" o.c. into the narrow edge of the fascia board.
3. Wood framing members shall be of a species with a published minimum specific gravity of 0.42.
4. Staple groups (of 3) shall be arranged as shown in **Figure 3**.
5. Allowable wind pressure values are applicable for products listed in Section 1 of TER 2509-108.

Table 2. Aluminum Soffit Panels Wind Resistance – Masonry Wall^{2,3}

Product ⁴	Soffit Unsupported Span (in)	Fasteners for F-Channel Attachment to Wall	Fasteners o.c. Spacing into F-Channel (in)	Allowable Wind Pressure (psf)
Double 6	12 ¹	(1) Minimum 14-gauge x 5/8" T-Nail or (1) Minimum 9-gauge x 5/8" Stub Nail with 3/8" Diameter Head	8	+83 / -69
			6	+94 / -78
			4	+104 / -86
	16		8	+52 / -58
			6	+52 / -58
			4	+58 / -64
	24		8	+23 / -26
			6	+23 / -26
			4	+26 / -28
Triple 4	12 ¹	(1) Minimum 14-gauge x 5/8" T-Nail or (1) Minimum 9-gauge x 5/8" Stub Nail with 3/8" Diameter Head	8	+86 / -78
			6	+86 / -78
			4	+95 / -86
Triple 4 Continued	16	(1) Minimum 14-gauge x 5/8" T-Nail or (1) Minimum 9-gauge x 5/8" Stub Nail with 3/8" Diameter Head	8	+48 / -55
			6	+48 / -55
			4	+54 / -61
	24		8	+21 / -24
			6	+21 / -24
			4	+24 / -27
Quad 4	12 ¹	(1) Minimum 14-gauge x 5/8" T-Nail or (1) Minimum 9-gauge x 5/8" Stub Nail with 3/8" Diameter Head	8	+89 / -80
			6	+89 / -80
			4	+99 / -88
	16		8	+50 / -54
			6	+50 / -54
			4	+56 / -60
	24		8	+20 / -20
			6	+20 / -20
			4	+22 / -22

SI: 1 in = 25.4 mm, 1-psf = 0.0479 kPa

- The 12" span values are applicable to a 24" overhang distance with a center support.
- Masonry units shall have a minimum compressive strength of 2,500-psi.
- The soffit is attached to the wood fascia board with (1) 1/4" Crown x 1" Leg, 18-gauge, Galvanized Staple at each groove. BASL Fascia cover attached to wood with (1) 0.100" x 1 1/4" Trim Nail spaced 12" o.c. into the wide face, and (1) 0.100" x 1 1/4" Trim Nail spaced 12" o.c. into the narrow edge of the fascia board.
- Allowable wind pressure values are applicable for products listed in Section 1 of TER 2509-108.

1.4 Installation Procedure

1.4.1 Pre-Installation – Planning Stage:

- 1.4.1.1 **Step 1:** First, define the project geometry so quantities and component selections are correct.
 - 1.4.1.1.1 Determine the total wall perimeter length where soffit panels will terminate at the wall-side starter (e.g., F-Channel).
- 1.4.1.2 **Step 2:** Measure the horizontal overhang width from the exterior wall plane to the outside face of the fascia board.
- 1.4.1.3 **Step 3:** Measure the total fascia run length and fascia height. Select the appropriate BASL fascia cover size by fascia height. See below:
 - 1.4.1.3.1 BASL4 to cover 4" fascia board
 - 1.4.1.3.2 BASL6 to cover 6" fascia board
 - 1.4.1.3.3 BASL8 to cover 8" fascia board
 - 1.4.1.3.4 BASL10 to cover 10" fascia board
- 1.4.1.4 **Step 4:** For each corner condition, measure from the outside corner of the building wall to the inside corner of the fascia to determine the Double Channel Runner needs.
 - 1.4.1.4.1 If using vented panels, local code requirements shall be adhered to.
- 1.4.1.5 See **Figure 1** for more details regarding these measurements. The numbers in the illustration correspond to the step numbers above.

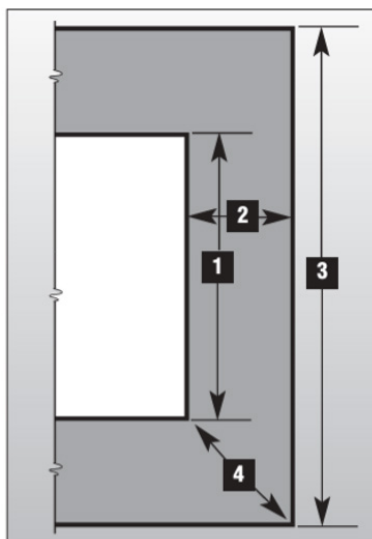


Figure 1. Measurement Diagram

1.4.2 Soffit Installation:

- 1.4.2.1 **F-Channel Step 1:** Snap a chalk line on the wall so that it is level with the bottom edge of the fascia board. Install the F-Channel as detailed in **Table 1** or **Table 2**, so that the bottom is $\frac{3}{8}$ " below the chalk line.
- 1.4.2.2 **J-Channel Step 1:** Where required, install 2 x 4 blocking in between rafters to create a continuous nailing strip. Install the J-Channel as detailed in **Table 3**.

Table 3. Aluminum Soffit Panels Wind Resistance – J-Channel

Product ⁵	Soffit Unsupported Span (in)	Fasteners for J-Channel Attachment ^{3,4}	Fasteners o.c. Spacing into J-Channel (in)	Allowable Wind Pressure (psf)
Double 6	12 ¹	(3) 1/4" Crown x 1" Leg, 18-gauge, Galvanized Staples	12	+83 / -66
	16			+52 / -60
	24			+23 / -27
Triple 4	12 ¹	(3) 1/4" Crown x 1" Leg, 18-gauge, Galvanized Staples	12	+86 / -66
	16			+48 / -59
	24			+21 / -26
Quad 4	12 ¹	(3) 1/4" Crown x 1" Leg, 18-gauge, Galvanized Staples	12	+89 / -66
	16			+50 / -55
	24			+20 / -20

SI: 1 in = 25.4 mm, 1-psf = 0.0479 kPa

- The 12" span values are applicable to a 24" overhang distance with a center support.
- The soffit is attached to the wood fascia board with (1) 1/4" Crown x 1" Leg, 18-gauge, Galvanized Staple at each groove. BASL Fascia cover attached to wood with (1) 0.100" x 1 1/4" Trim Nail spaced 12" o.c. into the wide face, and (1) 0.100" x 1 1/4" Trim Nail spaced 12" o.c. into the narrow edge of the fascia board.
- Nominal 2" thick blocking shall be fastened onto walls or onto roof framing members. Blocking shall be of a species with a published minimum specific gravity of 0.42 and shall be designed to handle all superimposed loads.
- Staple groups (of 3) shall be arranged as shown in **Figure 1**.
- Allowable wind pressure values are applicable for products listed in Section 1 of TER 2509-108.

1.4.2.3 **Step 2:** If needed, provide intermediate support where soffit is deep.

1.4.2.3.1 For larger soffit spans (e.g., ≥ 24") or where a higher resistance is required, supplemental midspan support is recommended.

1.4.2.3.1.1 Provide an intermediate support nailer (wood block). Wood blocking shall be fastened with two 0.131" x 3" to the rafter every 8', maximum, along the run.

1.4.2.3.1.2 A continuous 1 x 2 and 1 x 4 stringer shall be fastened to the wood blocking with two 0.131" x 3".

1.4.2.3.1.3 The depth wood blocking and stringer shall be sized to maintain the support elevation where the bottom face of the stringer is level with the starter's top flange plane.

1.4.2.3.2 Product shall be fastened with two 1/4" x 1" leg, 18-gauge galvanized staples at each groove, 1/2" apart at the center support (when center support is being used).

1.4.2.4 **Step 3:** Cut soffit panels to length using an appropriate tool (e.g., circular saw, hacksaw). Seat the panel into the F-Channel and align the opposite edge to the bottom of the fascia board for fastening.

1.4.2.4.1 Staple the soffit panel at each groove to the bottom of the fascia board as detailed in **Table 1** or **Table 2**.

1.4.2.5 **Step 4:** For subsequent panels, engage the interlock by inserting the tongue of the next panel into the flange of the installed panel, then repeat fastening and continue along the run.

1.4.2.6 **Step 5:** For corners, trim the Double Channel Runner so that one end is flush with the corner of the building (i.e., a "V" configuration) and the other end will be flush with the corner of the overhang (i.e., a "point" configuration). Orient and install so that the point end bears to the fascia boards and the "V" end bears to the building corner, then fasten into place in accordance with manufacturer installation instructions.

1.4.2.7 **Step 6:** Drill nailing holes in BASL Fascia Cover slightly larger than the nail being used. Nail through the drilled holes.