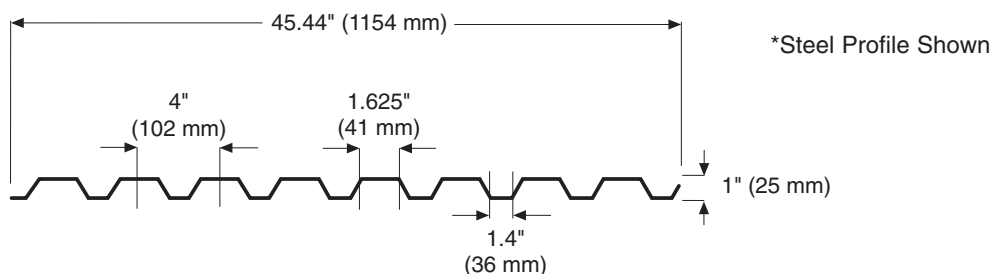


TECHNICAL DATA SHEET



4" Rib Roofing and Siding



Profile Dimensions

	Overall Width	Coverage Width	Rib Pitch	Profile Depth
Aluminum	45.4"	44"	4"	1"
Steel	33.5"	32"	4"	1"

Load Span Table

4" RIB	NO. SPANS	LOAD (PSF)								
		20	25	30	35	40	45	50	55	60
Siding Allowable Span										
.024" Aluminum	1	6'-8"	6'-2"	5'-10"	5'-4"	5'-0"	4'-8"	4'-6"	4'-4"	4'-1"
	2	7'-1"	6'-4"	5'-10"	5'-4"	5'-0"	4'-8"	4'-6"	4'-4"	4'-1"
.032" Aluminum	1	7'-4"	6'-10"	6'-5"	6'-1"	5'-10"	5'-7"	5'-5"	5'-2"	5'-1"
	2	9'-1"	8'-2"	7'-6"	6'-10"	6'-6"	6'-1"	5'-10"	5'-6"	5'-4"
.040" Aluminum	1	7'-11"	7'-4"	6'-10"	6'-6"	6'-2"	6'-0"	5'-10"	5'-7"	5'-6"
	2	10'-6"	9'-7"	8'-10"	8'-1"	7'-7"	7'-2"	6'-10"	6'-6"	6'-2"
.050" Aluminum	1	8'-6"	7'-11"	7'-6"	7'-1"	6'-10"	6'-6"	6'-4"	6'-1"	5'-11"
	2	11'-5"	10'-7"	10'-0"	9'-6"	9'-1"	8'-8"	8'-2"	7'-11"	7'-6"
24 GA. Steel	1	6'-6"	6'-0"	5'-8"	5'-5"	5'-2"	4'-11"	4'-10"	4'-8"	4'-6"
	2	8'-9"	8'-1"	7'-7"	7'-1"	6'-8"	6'-3"	6'-0"	5'-7"	5'-5"
22 GA. Steel	1	7'-2"	6'-7"	6'-3"	5'-11"	5'-7"	5'-5"	5'-4"	5'-2"	4'-11"
	2	9'-6"	8'-10"	8'-4"	8'-0"	7'-7"	7'-4"	7'-1"	6'-9"	6'-5"
20 GA. Steel	1	7'-9"	7'-1"	6'-8"	6'-5"	6'-1"	5'-10"	5'-8"	5'-6"	5'-4"
	2	10'-3"	9'-6"	9'-0"	8'-6"	8'-2"	7'-10"	7'-7"	7'-4"	7'-1"

NOTES:

1. Allowable deflection for aluminum is L/60.
2. Allowable deflection for steel is L/180.

Material Specifications

Aluminum

Alloy 3004 in compliance with the Aluminum Association Composition Specifications and conforming to ASTM B209-96 is standard. Alloy 3004 Alclad (Alloy 7072 cladding is used) is also available. Available smooth or stucco embossed.

Steel

Grade 33 structural quality conforming to ASTM A653, galvanized to ASTM A924, G90 Class is standard. Available smooth or stucco embossed.

TECHNICAL DATA SHEET

4" Rib Roofing and Siding



Engineering Properties

Aluminum	I + (in ⁴ /ft)	S + (in ³ /ft)	I - (in ⁴ /ft)	S - (in ³ /ft)	Lbs/Sq Painted
.032"	0.0879	0.1844	0.0879	0.1705	57.2
.040"	0.1086	0.2259	0.1086	0.2091	71.8
.050"	0.1383	0.2846	0.1383	0.2636	89.2

Steel	I ± (in ⁴ /ft)	S ± (in ³ /ft)	I ± (in ⁴ /ft)	S ± (in ³ /ft)	Lbs/Sq Painted
24 ga	0.0636	0.1038	0.0630	0.1003	131.2
22 ga	0.0850	0.1457	0.0841	0.1406	162.2
20 ga	0.1049	0.1909	0.1036	0.1843	192.9
18 ga	0.1347	0.2728	0.1352	0.2547	252.0

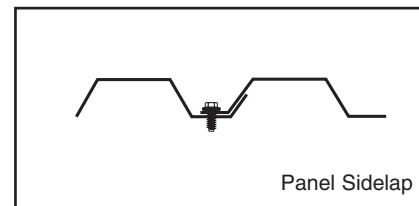
Tolerances

- Standard Lengths: 5'0" to 40'0"
Length Tolerance: +1/2" - 0
- Overall Width: ± 1/4"
- Coverage Width: ± 5/32"
- Squareness:

<u>Length</u>	<u>Squareness Tolerance</u>
0" - 20'0"	3/16"
20'1" - 26'8"	5/16"
26'9" - 40'0"	3/8"

Installation & Fastening Guidelines

- Minimum recommended roof slope: 3:12
- Minimum end laps:
 - Siding: 4"
 - Roofing 3:12 or greater slope: 6"
 - Roofing 2:12 to 3:12 slope: 9"
(requires sealant at side and end laps)
- Fastening Patterns for 20psf loading*:
 - Panel field: 8" o. c.
 - Panel end laps: 8" o. c.
 - Panel sidelaps: 16" o. c.



It is recommended that when 4" Rib is used in a roofing application, attachment screw fasteners should be applied in the rib crowns.

* Consult Alcoa for attachment guidelines for greater load conditions.

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