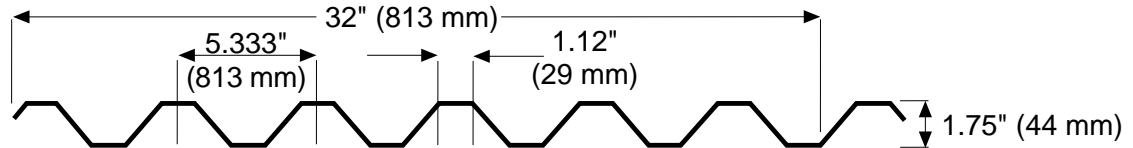


# TECHNICAL DATA SHEET



## V-Beam Roofing and Siding



\*Steel Profile Shown

### Profile Dimensions

	Overall Width	Coverage Width	Rib Pitch	Profile Depth
Aluminum	44.98"	42.67"	5.33"	1.75"
Steel	34.31"	32"	5.33"	1.75"

### Load Span Table

V-BEAM	NO. SPANS	LOAD (PSF)								
		20	25	30	35	40	45	50	55	60
<b>Siding Allowable Span</b>										
.024" Aluminum	1	8'-10"	8'-2"	7'-6"	6'-10"	6'-6"	6'-1"	5'-10"	5'-6"	5'-4"
	2	9'-1"	8'-2"	7'-6"	6'-10"	6'-6"	6'-1"	5'-10"	5'-6"	5'-4"
.032" Aluminum	1	9'-8"	9'-0"	8'-6"	8'-1"	7'-8"	7'-5"	7'-2"	6'-10"	6'-8"
	2	12'-0"	10'-8"	9'-10"	9'-1"	8'-6"	8'-0"	7'-7"	7'-2"	6'-10"
.040" Aluminum	1	10'-5"	9'-8"	9'-1"	8'-8"	8'-4"	8'-0"	7'-8"	7'-5"	7'-2"
	2	14'-0"	12'-8"	11'-7"	10'-8"	10'-0"	9'-6"	9'-0"	8'-7"	8'-2"
.050" Aluminum	1	11'-4"	10'-6"	9'-11"	9'-5"	9'-0"	8'-7"	8'-4"	8'-1"	7'-10"
	2	15'-2"	14'-1"	13'-2"	12'-6"	11'-8"	11'-0"	10'-6"	10'-0"	9'-6"
24 GA. Steel	1	8'-9"	8'-2"	7'-7"	7'-3"	6'-10"	6'-8"	6'-5"	6'-3"	6'-1"
	2	11'-6"	10'-3"	9'-6"	8'-9"	8'-1"	7'-8"	7'-3"	6'-10"	6'-7"
22 GA. Steel	1	9'-6"	8'-9"	8'-3"	7'-10"	7'-6"	7'-3"	7'-0"	6'-9"	6'-7"
	2	12'-9"	11'-9"	10'-9"	10'-0"	9'-5"	8'-10"	8'-5"	8'-0"	7'-8"
20 GA. Steel	1	10'-0"	9'-3"	8'-9"	8'-4"	8'-0"	7'-8"	7'-4"	7'-2"	7'-0"
	2	13'-6"	12'-6"	11'-9"	11'-0"	10'-3"	9'-9"	9'-3"	8'-9"	8'-5"
18 GA. Steel	1	11'-2"	10'-4"	9'-9"	9'-3"	8'-10"	8'-6"	8'-3"	8'-0"	7'-9"
	2	14'-1"	13'-11"	13'-0"	12'-5"	11'-10"	11'-5"	11'-0"	10'-8"	10'-2"
<b>Roofing Allowable Span</b>										
.032" Aluminum	2	10'-5"	9'-4"	8'-6"	7'-11"	7'-5"	6'-10"	6'-7"	6'-4"	6'-0"
.040" Aluminum	2	12'-4"	11'-0"	10'-0"	9'-4"	8'-8"	8'-2"	7'-10"	7'-5"	7'-1"
.050" Aluminum	2	14'-4"	12'-10"	11'-8"	10'-10"	10'-1"	9'-6"	9'-1"	8'-7"	8'-4"
24 GA. Steel	2	10'-0"	9'-0"	8'-2"	7'-6"	7'-0"	6'-8"	6'-4"	6'-0"	5'-9"
22 GA. Steel	2	11'-6"	10'-3"	9'-3"	8'-8"	8'-1"	7'-8"	7'-3"	6'-10"	6'-7"
20 GA. Steel	2	12'-6"	11'-3"	10'-3"	9'-6"	8'-11"	8'-5"	8'-0"	7'-7"	7'-3"

#### NOTES:

1. Allowable deflection for aluminum is L/60.
2. Allowable deflection for steel is L/180.
3. Allowable spans for roofing are based on live load.

# TECHNICAL DATA SHEET

## V-Beam Roofing and Siding



### 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.

### Engineering Properties

Aluminum	I ± (in <sup>3</sup> /ft)	S ± (in <sup>3</sup> /ft)	Lbs/Sq Painted	Steel	I ± (in <sup>3</sup> /ft)	S ± (in <sup>3</sup> /ft)	Lbs/Sq Painted
.032"	0.2046	0.2348	56.5	24 ga	0.1542	0.1495	128.8
.040"	0.2526	0.2886	71.0	22 ga	0.1941	0.1988	159.3
.050"	0.3216	0.3654	88.2	20 ga	0.2347	0.2390	189.0
				18 ga	0.3171	0.3587	250.3

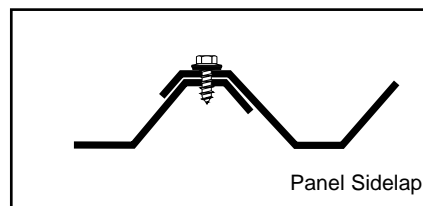
### Tolerances

- 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: 2:12
- 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: 10-2/3" o. c.
  - Panel end laps: 10-2/3" o. c.
  - Panel sidelaps: 16" o. c.



It is recommended that when V-beam 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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