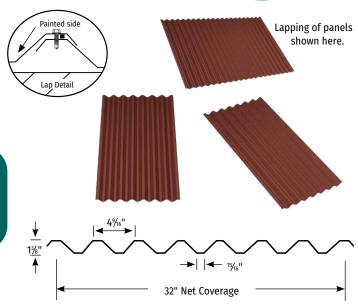
Mini-V-Beam™ Roofing and Siding



Mini-V-Beam is an exposed-fastened metal panel with 32" net coverage.

Mini-V-Beam is ideal for roof, vertical or horizontal siding applications, open framed canopy or carport designs.



| Properties | | | | | | | | | Standard Finishes | | |
|------------|------------------------------|----------------|------------------|------------------|-----------------------------|----------------|-----------------------------|----------------|---------------------|----------------------------|--|
| Gauge | Base Steel Thickness (in) | Yield (ksi) | Tensile (ksi) | Wt. (lbs/ft²) | l+ (in ⁴ /ft) | S+ (in³/ft) | I- (in ⁴ /ft) | S- (in³/ft) | Metallic Coating | Paint System | |
| 26 | 0.0173 | 80 | 82 | 0.92 | 0.0708 | 0.0921 | 0.0705 | 0.0876 | AZ50 | Cool Dura Tech™ <i>nt</i> | |
| 24 | 0.0232 | 50 | 65 | 1.23 | 0.0956 | 0.1307 | 0.0956 | 0.1286 | AZ50 | Cool Dura Tech™ 5000 | |
| 22 | 0.0294 | 50 | 65 | 1.56 | 0.1200 | 0.1665 | 0.1200 | 0.1668 | AZ50 | (polyvinylidene fluoride) | |
| 20 | 0.0354 | 40 | 55 | 1.88 | 0.1463 | 0.2000 | 0.1463 | 0.2000 | G90 | or Dura Tech™ <i>mx</i> | |
| 18 | 0.0459 | 40 | 55 | 2.43 | 0.1913 | 0.2573 | 0.1913 | 0.2573 | G90 | (metallic polyvinylidene) | |

NOTES: The moments of inertia, I⁺ and I⁻, presented for determining deflection are: (2I_{Effortive} + I_{Gross})/3

standard features

- Minimum recommended slope 1:12.
- Gauges: 22ga, 24ga, and 26ga in standard finishes ZINCALUME® Plus.
- Refer to AEP Span Color Charts for full range of color options and paint systems.
- Custom manufactured panel lengths: 5"-0" to 45"-0".
- Matching fiberglass panels available.
- Testing: ASTM E1680 (air infiltration) and ASTM E1646 (water infiltration). All testing performed by accredited third-party.
- Roof assemblies Class A Fire Rated when installed on non-combustible deck or framing per IBC or IRC or when installed in accordance to UL listings (UL790). Wall assemblies rated for fire resistance (UL263) when installed in accordance with UL listings.
- Building Code Approval Report: IAPMO-UES #ER-0550.
- UES
- Manufactured in Sacramento, WA.

optional features

- Short cut sheets from 5'-0" to 1'-0". Additional fees and lead times apply.
- 20ga and 18ga available in galvanized G90 with standard and custom colors subject to a minimum order size of 4,500 square feet and longer lead times.
- 18ga available in bare galvanized G90 subject to a minimum order size of 18,000 square feet and longer lead times.
- Custom colors, thick film primer and/or clear coat paint finishes available. Subject to 4,500 square feet minimum order.
- Perforation options available for an additional charge. Minimum order size 1,335 square feet (Inquire for smaller orders). Select from standard perforation patterns with open areas of 7.8%, 13.8%, 23.4% or 30.6%.
- Stucco embossed available in 26ga, 24ga and 22ga. Subject to minimum order size of 1,335 square feet.

Mini-V-Beam Roofing and Siding



| | | | Allowable Inward Loads (lbs/ft²) per Span (ftin.) | | | | | | | | | | |
|-------|-------------|----------|---|-------|-------|-------|-------|-------|-------|-------|--------|--|--|
| Gauge | Span | Cond. | 2'-0" | 2'-6" | 3'-0" | 4'-0" | 5'-0" | 6'-0" | 7'-0" | 8'-0" | 10'-0" | | |
| 26 | Single Span | ASD, W/Ω | 551 | 353 | 245 | 138 | 88 | 61 | 45 | 34 | 22 | | |
| | | L/180 | - | - | 229 | 97 | 49 | 29 | 18 | 12 | 6 | | |
| | Double Span | ASD, W/Ω | 441 | 297 | 214 | 124 | 81 | 56 | 42 | 32 | 20 | | |
| | | L/180 | - | - | - | - | - | - | - | 29 | 15 | | |
| | Triple Span | ASD, W/Ω | 517 | 357 | 258 | 153 | 100 | 70 | 51 | 40 | 26 | | |
| | | L/180 | - | - | - | - | 93 | 54 | 34 | 23 | 12 | | |
| 24 | Single Span | ASD, W/Ω | 652 | 417 | 290 | 163 | 104 | 72 | 53 | 41 | 26 | | |
| | | L/180 | - | - | - | 131 | 67 | 39 | 24 | 16 | 8 | | |
| | Daubla Cara | ASD, W/Ω | 603 | 394 | 277 | 157 | 101 | 71 | 52 | 39 | 25 | | |
| | Double Span | L/180 | - | - | - | - | - | - | - | - | 20 | | |
| | Triple Span | ASD, W/Ω | 734 | 484 | 342 | 195 | 126 | 88 | 65 | 49 | 31 | | |
| | | L/180 | - | - | - | - | 126 | 73 | 46 | 31 | 16 | | |
| 22 | Single Span | ASD, W/Ω | 831 | 532 | 369 | 208 | 133 | 92 | 68 | 52 | 33 | | |
| | | L/180 | - | - | - | 164 | 84 | 49 | 31 | 20 | 10 | | |
| | Double Span | ASD, W/Ω | 798 | 517 | 362 | 206 | 131 | 92 | 68 | 51 | 33 | | |
| | | L/180 | - | - | - | - | - | - | - | 49 | 25 | | |
| | Triple Span | ASD, W/Ω | 979 | 640 | 449 | 256 | 164 | 114 | 84 | 64 | 41 | | |
| | | L/180 | - | - | - | - | 158 | 92 | 58 | 39 | 20 | | |
| | Single Span | ASD, W/Ω | 798 | 511 | 355 | 200 | 128 | 89 | 65 | 50 | 32 | | |
| | | L/180 | - | - | - | - | 102 | 59 | 37 | 25 | 13 | | |
| 20 | Double Span | ASD, W/Ω | 770 | 499 | 348 | 197 | 126 | 88 | 64 | 49 | 32 | | |
| | | L/180 | - | - | - | - | - | - | - | - | 31 | | |
| | Triple Span | ASD, W/Ω | 948 | 617 | 433 | 246 | 158 | 109 | 81 | 61 | 39 | | |
| | | L/180 | - | - | - | - | - | - | 70 | 47 | 24 | | |
| | Single Span | ASD, W/Ω | 1027 | 657 | 456 | 257 | 164 | 114 | 84 | 64 | 41 | | |
| | | L/180 | - | - | - | - | 134 | 77 | 49 | 33 | 17 | | |
| 10 | Double Span | ASD, W/Ω | 991 | 642 | 449 | 254 | 163 | 113 | 83 | 64 | 41 | | |
| 18 | | L/180 | - | - | - | - | - | - | - | - | 40 | | |
| | Triple Span | ASD, W/Ω | 1221 | 795 | 557 | 316 | 203 | 142 | 104 | 79 | 51 | | |
| | | L/180 | - | - | - | - | - | - | 92 | 62 | 32 | | |

| Inward Loads | Single Span | w, distributed load $ \downarrow $ $ \downarrow \leftarrow \qquad \qquad L, span \qquad \qquad \downarrow $ | | | | | |
|--------------|-------------|---|--|--|--|--|--|
| | Double Span | ₩]←— L ————] | | | | | |
| | Triple Span | w w w w w w w w w w | | | | | |

Top values based on allowable stress (ASD). Bottom values based on a deflection limit of L/180.

"-" denotes that the allowable load is limited by the panel stress vs. deflection limit.

Steel conforms to ASTM A653 (Galvanized) or ASTM A792 (ZINCALUME) structural steel.

Tabulated values are for positive (inward) uniform loading only.

Values are based on the American Iron and Steel Institute "Cold Formed Steel Design Manual" (AISI

Refer to aepspan.com for more complete Mini-V-Beam performance data.

Oil Canning: All flat metal surfaces can display waviness commonly referred to as "oil canning". "Oil canning" is an inherent characteristic of steel products, not a defect, and therefore is not a cause for panel rejection.







