# METAL ROOF & WALL PANEL PRODUCT SELECTION GUI









Fire Station 34 | San Jose, CA



Olympic College Poulsbo | Poulsbo, WA



Parks and Recreation Center | Glendale, AZ



Blue Sky Homes | Yucca Valley, CA

### **Contents**

#### **AEP SPAN - Architectural Engineered Products**



**Design freedom. Structural integrity.** AEP Span is a leading manufacturer of architectural metal products, offering performance rated structural roofing and siding. AEP Span affords the architectural community uncompromising design flexibility and freedom of expression by allowing architects to design and specify roofing and siding systems for new construction and retrofit applications. AEP Span blends traditional design with contemporary technology and tested values. The innovative thought that goes into the product design, customer service and consideration for the installer is what makes AEP Span's roofs and walls protect not only buildings, but reputations.



www.aepspan.com

## **Product Index and Application Guide**

CONCEALED FASTENER PANELS			STANDARD PERFORMANCE TESTS*			TESTS*
Product	Application <sub>1</sub>	Min. Roof Slope <sub>2</sub>	Minimum Curved Radius <sub>3</sub>	Wind Uplift <sub>4</sub>	Air and Water	Fire <sub>5</sub>
Design Span® <i>hp</i> & Design Span® <i>hp</i> Wide Batten	Watershed, Structural, Aesthetic Roof, Vertical Wall, Fascia	3:12	N/A	UL580-Class 90 ASTM E1592	ASTM E1680 ASTM E1646	UL 263 Non-Combustible
Klip Rib <sup>®</sup>	Watershed, Structural, Aesthetic Roof, Vertical Wall, Fascia	1:12	Factory Crimped: 24in. Field Sprung: 300ft.	UL580-Class 90 <sub>6</sub> ASTM E1592	ASTM E1680 ASTM E1646	UL 263 Non-Combustible
MultiLok-24®	Watertight, Structural, Non-Aesthetic Roof	1/4:12	N/A	UL580-Class 90 ASTM E1592 FM Class 1-90 <sub>8</sub>	ASTM E1680 ASTM E1646	UL263 Non-Combustible
Prestige Series®	Aesthetic, Wall, Soffit, Fascia, Ceiling	N/A Wall Panel	N/A	ASTM E1592	ASTM E283 ASTM E331	Non-Combustible
Select Seam® Narrow Batten	Watershed, Non- Structural, Aesthetic Roof, Vertical Wall, Fascia	3:12	Sprung: 25ft. Pans only Field Machine: 4ft.	UL580-Class 90 ASTM E1592	ASTM E283 ASTM E331	Non-Combustible
Select Seam® Wide Batten	Watershed, Non- Structural, Aesthetic Roof, Vertical Wall, Fascia	3:12	N/A	UL580-Class 90 ASTM E1592	N/A	Non-Combustible
Curved Span-Lok <sup>™</sup> & SpanSeam™	Watertight, Structural, Aesthetic Roof, Fascia	1/4:12	Machine Curved: 35ft. minimum (Curved Span- Lok only)	UL580-Class 90 ASTM E1592	ASTM E1680 ASTM E1646	UL 263 Non-Combustible
Span-Lok™ <i>hp</i>	Watertight, Structural, Aesthetic Roof, Vertical Wall, Fascia	V4:12	N/A	UL580-Class 90 ASTM E1592 FM Class 1-120 <sub>7</sub>	ASTM E1680 ASTM E1646 ASTM E2140	UL 263 Non-Combustible
EXPOSED FASTENER PANELS			STANDARD PERFORMANCE			T E S T S *
Product	Application <sub>1</sub>	Min. Roof Slope <sub>2</sub>	Minimum Curved Radius <sub>3</sub>	Wind Uplift <sub>4</sub>	Air and Water	Fire <sub>5</sub>
Nu-Wave® Corrugated	Watershed, Structural, Aesthetic Roof, Horizontal and Vertical Wall	3:12	Machine Curved: 36in. Field Sprung: 60ft.	N/A	ASTM E1680 ASTM E1646	Non-Combustible
Mini-V-Beam®	Watershed, Structural, Aesthetic Roof, Horizontal and Vertical Wall	1:12	N/A	N/A	ASTM E283 ASTM E331	Non-Combustible
Box Rib® & Reversed Box Rib	Watershed, Structural, Aesthetic Roof, Horizontal and Vertical Wall	1:12	Factory Crimped: 24in. 24-22ga 48in. 20-18ga	N/A	ASTM E283 ASTM E331	Non-Combustible
HR-36 <sup>®</sup> & Reversed HR-36	Watershed, Structural, Aesthetic Roof, Horizontal and Vertical Wall	1:12	Factory Crimped: 12in. 24ga 24in. 22-20ga 48in. 18ga	N/A	ASTM E283 ASTM E331	UL263 Non-Combustible

#### Visit www.aepspan.com for complete company and product information.

- 1. Applications: Watertight: seam designed and tested to resist standing water. Watershed: system designed to resist water penetration in sloping applications. Structural: capable of spanning between supports. See panel load table (in product literature) for panel capacity and section properties. Non-Structural: must be installed over solid substrate, such as plywood decking. Aesthetic: viewed as visually enhancing a building.
- Recommended minimum slope applicable only to roof installations utilizing standard details. Severe conditions (heavy snow, ice, winds) may increase recommended minimum slope. For lower slopes, contact your AEP SPAN representative.
- **3.** Sprung curving panels, are installed (forced) to the curvature of the roof's radius. Crimp curving is a process by Curveline Inc., which curves panels in a stamping process and limits maximum panel length to 30'.
- **4.** UL580-Class 90 Underwriters Laboratories tests provides a comparative index. AEP SPAN can provide a list of UL580 tested assemblies and recommended attachments for specific project conditions.
- **5.** See UL Fire Directory for P numbers and hourly ratings.
- **6.** Testing applies to 22-26ga product.
- **7.** Class 1-120 at 2'-6" spacing and FM approved construction method. Class 1-75 at 5'-0" spacing.
- **8.** Class 1-90 at 4'-0" spacing and FM approved construction method. Class 1-60 at 5'-0" spacing.
- Tests shown apply to both 22 & 24 gauge steel unless otherwise noted.

AEP Span 3

#### FIELD SEAMED PANELS



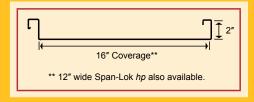


**Span-lok hp, Curved Span-lok, and SpanSeam** are performance-rated architectural standing seam metal roof systems. The mechanically seamed 2" high rib, provides aesthetic appeal and weathertightness that can be used in a wide variety of new construction or retrofit applications.

- Architectural standing seam panel.
- Span-Lok hp has been designed and tested to withstand high wind loads exceeding 240psf.
- Can be installed on pitches as low as 1/4:12
- Gauges: 24ga and 22ga standard.
- Widths: 16" and 12" coverage.
- Factory applied sealant is standard (except curved panels).
- 16" wide Span-Lok available machine curved (factory or field) for radiused applications.
- Can be installed over spaced supports or solid substrates.
- Long length panels (over 70′-0″) can be manufactured on-site.
- Factory notching available for turn under at the eave. Notch provides a clean detail and reduction in labor.
- For end laps, factory swaged panels are available.\*
- Choose from subtle striations, two pencil ribs\* or a clean flat-pan depending on aesthetic requirements.
- Manufactured in Tacoma, WA. and Fontana, CA.

Please refer to Product Index and Applications Guide on page 3 for more information. Contact AEP Span representative for details about specific product offering.

\* - applies to 16" panel only.







90° Field Seam Spanlok hp, Curved Span-lok



180° Field Seam SpanSeam

## Select Seam®

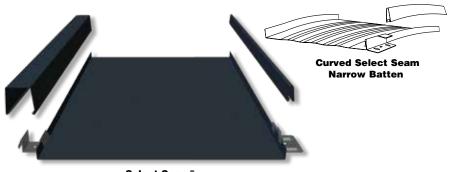
#### **CONCEALED FASTENER PANEL**



**Select Seam** is a performance-rated, non-structural, batten seam metal roof systems. The clean wide pan appearance makes Select Seam Narrow or Wide Batten ideal for classic architectural designs and Narrow Batten Select Seam can be curved for radius applications.

- Architectural standing seam panel.
- Narrow Batten coverage 12", 16" or 211/4"
- Wide Batten coverage 131/4", 171/4" or 221/2"
- Recommended minimum slope of 3:12.
- Gauges: 24ga and 22ga standard.
- Narrow Batten available field or factory curved.
- Can be installed over a variety of solid substrates.
- Subtle longitudinal striations between the ribs on 16" and wider panels reduce the appearance of oil canning.
- Optional factory applied sealant on Narrow Batten Select Seam.
- Available tapered for special architectural applications.
- Ideal for both new and roof-over-roof retrofit applications.
- Manufactured in Tacoma, WA and Fontana, CA.

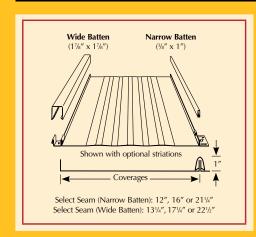
Please refer to Product Index and Applications Guide on page 3 for more information.



Select Seam®



New Testament Church | Graham, WA



#### CONCEALED FASTENER PANEL





Pier 69 | Seattle, WA

Klip-Rib® is a performance-rated structural and architectural standing seam panel system that snaps positively over concealed anchor clips for quick installation and exceptional strength. Klip-Rib is the preferred panel for commercial, educational and institutional roofs in all climates.

- Architectural/Structural standing seam panel.
- 16" panel coverage.
- Recommended minimum slope of 1:12.
- Gauges: 24ga and 22ga standard.
- Klip-Rib® has been designed and tested to withstand wind loads exceeding 180psf.
- Can be installed over solid substrates or spaced support members.
- Its patented 21ga clip engages two ribs and allows panels to be disengaged if needed.
- Klip-Rib® can be crimp curved for radiused applications (spring curved over 300' radius).
- Integral ribs have the bold appearance of a batten, but without separate snap-on battens.
- Manufactured in Tacoma, WA.

Please refer to Product Index and Applications Guide on page 3 for more information.





## Design Span®hp

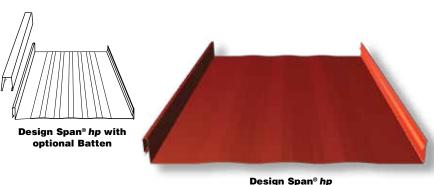
**CONCEALED FASTENER PANEL** 



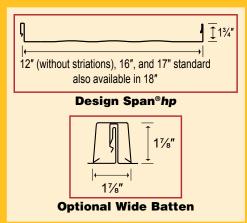
**Design Span®** *hp* is a performance-rated structural standing seam metal roof system with net coverage of 12", 16", 17", 18". Design Span *hp* is excellent as a roof over metal or wood decking, and as a fascia or mansard over plywood or supports.

- Architectural/Structural standing seam panel.
- 12", 16", and 17" panel coverages are standard, 18" panel coverage is also available.
- Recommended minimum slope of 3:12.
- Gauges: 24ga and 22ga standard.
- Subtle striations between ribs on 16" and wider panels reduce the appearance of oil-canning.
- Factory applied butyl sealant is standard.
- Available notched at panel ends for the ease of turning under at eave, reducing installation labor and costs.
- Wide batten cap available for a bold appearance.
- Manufactured in Fontana, CA and Tacoma, WA.

Please refer to Product Index and Applications Guide on page 3 for more information.

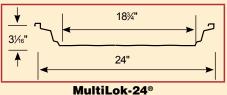








Audubon Elementary School | Spokane, WA



MultiLok-24® is a structural standing seam roof system preferred for weathertight low slope applications. Multilok-24 uniquely offers three field-seaming options to suit the varying wind uplift requirements.

- Structural standing seam panel.
- An 18" wide modular panel is also available for a clean finish at the rake.
- Recommended minimum slope of 1/4":12.
- Gauges: 24ga Standard. Also available in 22ga.
- Subtle longitudinal striations between the ribs reduce the appearance of oil canning.
- Weathertight 3 inch high standing seam with concealed clips and fasteners
- Floating roof clips allow for thermal expansion on very long runs. Clips available to accommodate multiple thicknesses of insulation, up to 6" thick.
- Factory-applied seam and clip sealant.
- MultiLok-24 system includes trim and accessories.
- Ideal for both new and retrofit construction.
- Manufactured in Tacoma, WA.

Please refer to Product Index and Applications Guide on page 3 for more information.





Hand crimped at clips and no electric seaming tool is used.





Seamed with two varying sets of rolls, using the electric seaming tool.



\*Used for high wind conditions.

## **Prestige Series**®

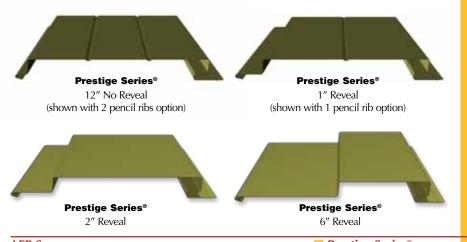
CONCEALED FASTENER PANEL

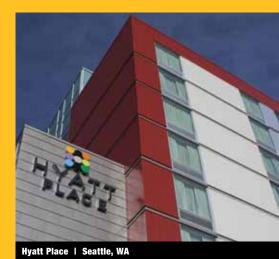


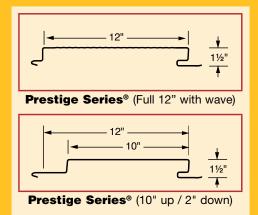
**Prestige Series®** is a crisp, distinctive solution for vertical exterior and interior wall applications. Mix and match this 12" module panel with four available reveal options: 6", 2" 1" and no reveal. Prestige Series can also be used as a fascia, soffit, ceiling panel or as an equipment screen.

- Architectural wall, fascia and soffit panel.
- Available surface options include flat, wave, pencil ribs and stucco embossed.
- Gauges: 24ga and 22ga standard. Also available in 18ga and 20ga.
- Available perforated for acoustically sensitive applications or where ventilation is required. Perforated steel panels recommended for exterior soffit and interior applications only.
- Compatible trim and accessories are readily available.
- Panels clips provide higher wind load resistance and longer spans. Clips are required for most wall panel applications.
- The Prestige Series offers a design-flexible modular design with the panel option of a full 12" wide panel, or with a 1", 2" or 6" panel reveal.
- Sealant provided as standard.
- Designed for use both horizontally and vertically. Recommend using 22ga or heavier for wall applications.
- Manufactured in Fontana, CA, and Tacoma, WA.

Please refer to Product Index and Applications Guide on page 3 for more information. Contact AEP Span representative for details about specific product offering.







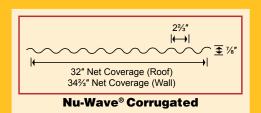
## **Nu-Wave®** Corrugated

**EXPOSED FASTENER PANEL** 



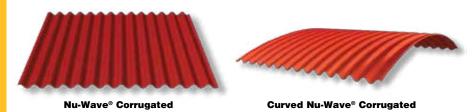


Waste Management and Recycling Facilities | Sacramento, CA

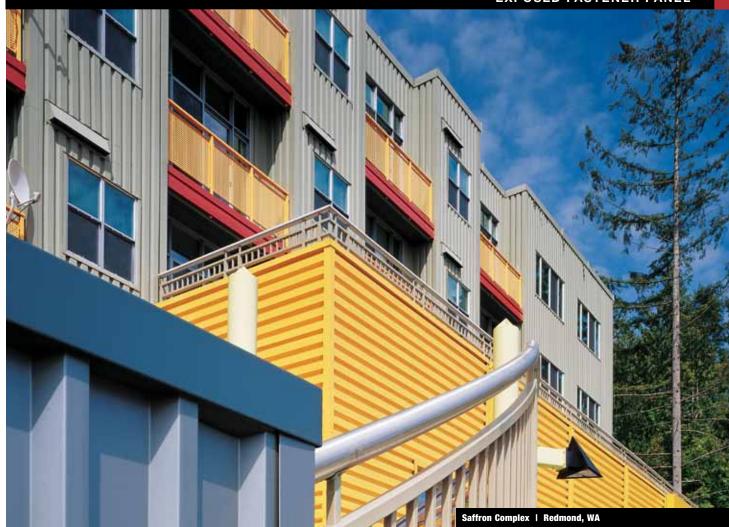


**Nu-Wave® Corrugated** is an exposed fastened metal panel with %" deep corrugations. The panel has a 32" net coverage for roof applications and a 34%" net coverage for horizontal or vertical wall applications.

- Excellent spanning capabilities.
- Recommended minimum slope of 3:12
- Gauges: 24ga and 22ga standard. Also available in 20ga.
- Nu-Wave is offered factory-curved in 24ga, 22ga and 20ga in lengths up to 30'-0".
- Fiberglass skylight panels are available to match the profile of the panels.
- Quick, economical trim packages available as standard trim pieces that can be ordered by number.
- Manufactured in Fontana, CA.



#### **EXPOSED FASTENER PANEL**



Box Rib® is an economical structural, exposed-fastener wall panel with 36" net coverage that is suitable for general usage. Box Rib is ideal for vertical and horizontal wall applications, ceilings and soffits.

- Architectural/Structural panel.
- Superior load and span capacities.
- Recommended minimum slope of 1:12.
- Gauges: 24ga and 22ga standard. Also available in 20ga and 18ga.
- Reversed Box Rib available for roof and wall applications.
- Standard economical trim packages available.
- Crimp curving available for a unique appearance.
- Fiberglass panels are available in matching profile.
- Manufactured in Fontana, CA.

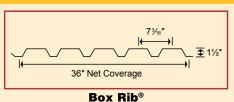






Reverse Box Rib (Roof and Wall)







EMERALDA

Emerald Downs Race Track | Auburn, WA

7<sup>3</sup>/<sub>6</sub>" |← 36" Net Coverage HR-36® **HR-36**° is an exposed fastener metal panel with 36" net coverage. HR-36 Roof & Wall is predominantly used in industrial and commercial applications. As a wall application HR-36 can be used both vertically or horizontally to create design interest.

- Architectural/Structural panel.
- Superior load and span capacities.
- Recommended minimum slope of 1:12.
- Gauges: 24ga and 22ga standard. Also available in 20ga and 18ga.
- Reversed HR-36 available for wall applications.
- Standard economical trim packages available.
- Crimp curving available for a unique appearance.
- Fiberglass panels are available in matching profile.
- Manufactured in Fontana, CA and Tacoma, WA.



HR-36 (Roof and Wall)

Reverse HR-36 (Wall)

## Mini-V-Beam®

**EXPOSED FASTENER PANEL** 



**Mini-V-Beam**® is an exposed fastener metal panel with 32" net coverage. This panel is predominantly used in industrial roof and wall applications.

- Excellent spanning capabilities.
- Recommended minimum slope of 1:12.
- Mini-V-Beam gauges: 24ga and 22ga standard. Also available in 20ga and 18ga.
- Reversed Mini-V-Beam available for wall applications.
- Fiberglass skylight panels are available to match the profile of the panels.
- Quick, economical trim packages available as standard trim pieces that can be ordered by number.
- Manufactured in Tacoma, WA.



Mini-V-Beam (Roof and Wall)

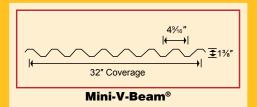


Reverse Mini-V-Beam (Wall)

Mini-V-Beam®



Holgate Square | Seattle, WA



13

#### STRUCTURAL MEMBERS OF A ROOF OR WALL



Self Storage | Garnerville, NV

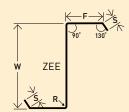


Fred T. Korematsu Elementary School, Solar Carport | Davis, CA



**AEP Span** is your source for steel components in the solar mounting, residential framing and pre-engineered metal building markets. We offer a broad range of light gauge steel components, welding and fabrication capabilities from a manufacturer that understands the benefits steel provides to the construction industry.

- Broad range of manufacturing capabilities that encompass several variations in part sizes and punching locations.
- Optimum versatility in custom requested punch patterns and penetration placements on web and flange areas.
- Large selection of standard penetration shapes and sizes.
- Capabilities to manufacture welded columns per customer specifications.
- Proven Quality & Performance approved fabricator certification and listings with LA City, Clark County, NV and Phoenix, AZ for welded fabrication, 3rd party-quality system-certified and DSA Approved.

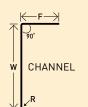


#### ZEE SECTION CAPABILITIES

Web Height (W): 4" min - 20" max Flange Size (F): 15/8" min - 41/2" max Inside Bend Radius (R): 0.188" typ. \*Stiffener Lip Length (S): 3/4" max lip with 15/8" flange, 1¼" max lip with 2" or greater flange.

Steel Thickness: 0.047" (18ga) min to 0.135" (10ga)

\*Maximum stiffener lip length determined by flange width.



#### **CHANNEL CAPABILITIES**

Web Height (W): 4" min - 20" max Inside Bend Radius (R): 0.188" typ. Flange Size (F): 1%" min - 41/2" max

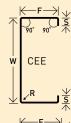
Steel Thickness: 0.047" (18ga) min to 0.135" (10ga)



#### **BASE ANGLE CAPABILITIES**

Web Size (A): 2" min - 5" max Leg Size (B): 2" min - 5" max Inside Bend Radius (R): 0.188" typ.

Steel Thickness: 0.047" (18ga) min to 0.135" (10ga)

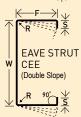


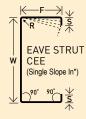
#### **CEE SECTION CAPABILITIES**

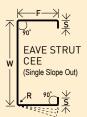
Web Height (W): 4" min - 20" max Flange Size (F): 1%" min - 5" max Inside Bend Radius (R): 0.188" typ.

\*Stiffener Lip Length (S): %" max lip with 1%" flange, 11/4" max lip with 3" or greater flange Steel Thickness: 0.047" (18ga) min to 0.135" (10ga)

Maximum stiffener lip length determined by flange width.







#### **EAVE STRUT CEE CAPABILITIES**

Slope: 1:12 - 4:12

Web Height (W): 8" min - 14" max Flange Size (F): 21/2" min to 5" max Inside Bend Radius (R): 0.188" Stiffener Lip Length (S): 1/8"

Steel Thickness: 0.047" (18ga) min to 0.135" (10ga)

\*Note: On Single Slope In Eave Strut 8" web not available in 3:12 or 4:12 slope.

# **Sustainability Information**

#### AEP SPAN LEEDS THE WAY WITH GREEN BUILDING INITIATIVES



The Aldo Leopold Legacy Center | Baraboo, WI | LEED Platinum Building

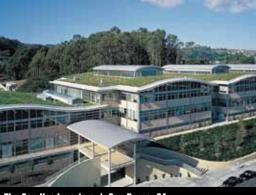
**AEP Span** supports the efforts of the building industry's movement towards sustainable construction and design. All AEP Span colors contain pigments that reflect UV rays from the sun, keeping surface temperatures cooler and reducing the effects of Urban Heat Island. All our standard colors have a minimum SRI of 29 and are listed with the Cool Roof Rating Council and the Department of Energy, Energy Star Program. AEP Span can provide products containing over 60% recycled steel. Metal roofing is ideal for solar panel applications, both the mounted modular as well as thin film PV systems. Contact our AEP Span representative on how we can support your effort to design and build green.



The Aldo Leopold Legacy Center | Baraboo, WI

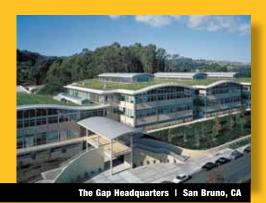


Mercer Slough Environmental Education Center | Bellevue, WA



The Gap Headquarters | San Bruno, CA

## Design Freedom. Structural Integrity

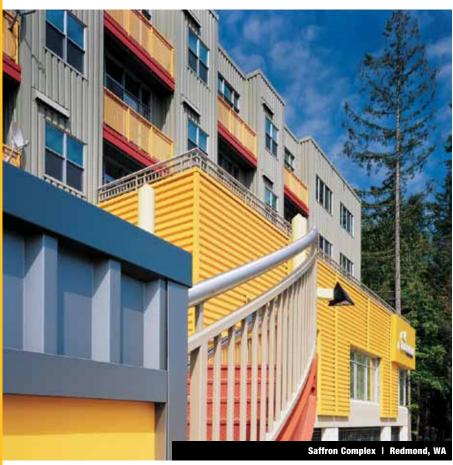












Call Toll Free at **800-733-4955** or email us at info@aepspan.com





Visit our website at www.aepspan.com





