1. Product Name
- TITE-LOC, TITE-LOC HS and TITE-LOC Plus
- Mechanically Seamed Panels
- SNAP-CLAD Standing Seam Panels
- Snap-On and High Snap-On Standing Seam Panels
- Redi-Roof and Redi-Roof Batten Standing Seam Panels
- Integral Standing Seam and Integral Batten Panels
- Flush Panels
- PAC-750 and PAC-850 Soffit Panels
- Exposed Fastener Panels
- Precision Series Horizontal Wall Panel

2. Manufacturer
Petersen Aluminum Corp.
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3. Product Description

BASIC USE
Petersen Aluminum produces a wide variety of wall and soffit panels in addition to a complete line of metal roofing panels. All standing seam panels are corrective leveled. Standing seam, flush, exposed fastener panels and wall and soffit panels are all factory formed in continuous lengths up to 50’. Check specific profile for maximum panel length and consult with local factory for longer lengths. Matching flashing and trim can be factory or field formed from PAC-CLAD material.

MATERIALS & FINISHES
PAC-CLAD is a versatile prefinished sheet metal coating (Kynar 500® or Hylar 5000®) that is applied to G90 galvanized steel, galvalume steel, or prime quality aluminum. Originally developed for use in abrasive environments, PAC-CLAD is ideally suited for roofing, curtainwall, storefront and trim applications.

TITE-LOC, TITE-LOC HS AND TITE-LOC PLUS
- 24 gauge PAC-CLAD G-90 galvanized steel
- 22 gauge PAC-CLAD Galvalume steel
- .032 PAC-CLAD prime quality aluminum
- .040 PAC-CLAD prime quality aluminum
- 24 gauge Galvalume® Plus

SNAP-CLAD PANELS
- 24 gauge PAC-CLAD G-90 galvanized steel
- 22 gauge PAC-CLAD Galvalume steel
- .032 PAC-CLAD prime quality aluminum
- .040 PAC-CLAD prime quality aluminum
- 16 oz cold-rolled copper
- 24 gauge Galvalume® Plus

SNAP-ON AND HIGH SNAP-ON PANELS
- 24 gauge PAC-CLAD G-90 Galvanized Steel
- .032 PAC-CLAD prime quality aluminum
- 24 gauge Galvalume® Plus

REDI-ROOF AND REDI-ROOF BATTEN PANELS
- 24 gauge PAC-CLAD G-90 galvanized steel
- 22 gauge PAC-CLAD Galvalume steel
- .032 PAC-CLAD prime quality aluminum
- 16 oz cold-rolled copper
- 24 gauge Galvalume® Plus

INTEGRAL PANELS
- 24 gauge PAC-CLAD G-90 Galvanized Steel
- .032 PAC-CLAD prime quality aluminum
- 24 gauge Galvalume® Plus

FLUSH PANELS
- 24 gauge PAC-CLAD G-90 galvanized steel
- 22 gauge PAC-CLAD Galvalume steel
- .032 PAC-CLAD prime quality aluminum
- .040 PAC-CLAD prime quality aluminum
- 24 gauge Galvalume® Plus

PAC-750 AND PAC-850 SOFFIT PANELS
- .032 PAC-CLAD prime quality aluminum

EXPOSED FASTENER PANELS
- 24 gauge PAC-CLAD G-90 galvanized steel
- 22 gauge PAC-CLAD Galvalume steel
- .032 PAC-CLAD prime quality aluminum
- .040 PAC-CLAD prime quality aluminum
- .050 PAC-CLAD prime quality aluminum
- 24 gauge Galvalume® Plus

TYPES
TITE-LOC, TITE-LOC PLUS AND TITE-LOC HS PANELS
TITE-LOC panels combine structural performance with architectural panel aesthetics. A factory-applied sealant bead offers additional weather resistance. The minimum panel length is 4’ (1.2 m). TITE-LOC panels feature a 2” (51 mm) leg height that requires mechanical field seaming after installation.

Panels include a concealed fastener floating clip system designed to allow for thermal expansion/contraction.

All three panels carry a UL 90 classification over a wide variety of substrates and assemblies, including 5/8” (15.9 mm) plywood, purulins and rigid insulation in conjunction with bearing plates (UL design numbers 90, 176, 238B, 437, 449, 451, 452, 487, 616, and 617).

TITE-LOC and TITE-LOC HS panels are factory formed to length and field-seamed to a 90 degree lock, while TITE-LOC Plus panels are designed to be field-seamed to a 180 degree lock.

TITE-LOC panels are designed for application on roof slopes as low as 1/2:12 pitch. The TITE-LOC seamer is bi-directional, offering labor savings to travel up and down slope. 6:12 roof pitch is the maximum the TITE-LOC seamer will travel upslope. The TITE-LOC Plus seamer runs in one direction only and care should be taken to install panels from left to right to ensure the seamer travels downslope. The seamer will not run up slope on a roof pitch greater than 4:12.

The 90 degree TITE-LOC can be field-curved to a minimum radius of 20’. Contact local factory for more details about curving capabilities. Additional features include:
- Weathertightness warranty available
- Available in four panel condition variations, check with local factory for striation and pencil rib availability
- Corrective leveled

SNAP-CLAD PANELS
Offering architectural panel aesthetics, as well as structural panel performance, SNAP-CLAD panels feature a 1 3/4” (44.5 mm) leg height and a continuous interlock for improved structural performance. A factory-applied sealant bead provides additional weather resistance. The minimum panel length is 4’ (1.2 m).

A concealed fastener clip system allows for thermal expansion/contraction while providing extraordinary hold-down strength. Two clips are available: a standard clip for most mansard and fascia applications and a high-performance clip for roofing application and UL 90 rated assemblies. SNAP-CLAD panels carry a UL 90 classification over a wide variety of substrates and assemblies, including 5/8” (15.9 mm) plywood, purulins and rigid insulation in conjunction with bearing plates.
SNAP-ON AND HIGH SNAP-ON PANELS
These panels are designed for use in roofing, mansard and fascia applications and should be installed over a waterproofed solid substrate with a minimum 3:12 roof pitch. Factory roll formed in continuous lengths, Snap-On panels are ideal for specification on applications where roof transitions are required. The simplicity of the panel design, combined with inline tension leveling, provides superior flatness and allows for greater workability onsite.

Both panels in steel carry a UL 90 rating for wind uplift when fastened to a solid substrate, including 5/8” (15.9 mm) plywood or OSB laminated to rigid insulation (UL design numbers 351 and 352). This is one of the few UL 90 systems that does not require sealant between plywood boards.

The 1” (25.4 mm) Snap-On standing seam panel can now be curved to a concave or convex radius, with a minimum radius of 9’ (2.7 m). This panel is ideal for barrel vaults and entranceways. Curved panels must be installed over a waterproofed solid substrate. The High Snap-On profile features a 1 1/2” (38.1 mm) standing seam. Unlike the Snap-On panel, this panel cannot be curved. Additional features include:
- Stiffener beads available

REDI-ROOF AND REDI-ROOF BATTEN PANELS
This architectural metal roofing system, which is available exclusively from Petersen Aluminum, may be specified in either batten or standing seam profile and is intended for application over a solid substrate with a minimum 3:12 roof pitch. The minimum panel length is 4’ (1.2 mm).

Steel Redi-Roof panels carry a UL 90 rating for wind uplift when fastened to a solid substrate, including 5/8” (15.9 mm) plywood or OSB laminated to rigid insulation (UL design numbers 350, 353 and 615). Additional features include:
- Labor-saving one-piece design
- Factory eave notching
- Stiffener beads

INTEGRAL STANDING SEAM AND INTEGRAL BATTEN PANELS
PAC-CLAD Integral panels are designed for roofing applications, mansards, canopies and fascia. The one-piece design of the integral panels minimizes labor and allows for quick and easy installation. The minimum panel length is 4’ (1.2 mm).

Steel PAC-CLAD Integral panels carry a UL 90 classification for wind uplift when fastened to a solid substrate, including 5/8” (15.9 mm) plywood or OSB laminated to rigid insulation (UL design numbers 346 and 347).

FLUSH PANELS
PAC-CLAD Flush panels are designed for use in wall, fascia and soffit applications where a flush or flat appearance is desired. A rounded interlock leg and concealed fastening system improve the flush appearance while providing additional strength.

These panels are not intended for use in roofing or mansard applications. Panels are factory-formed to length to minimize field cutting. The minimum panel length is 4’ (1.2 m). The maximum panel length is 28’ (8.4 m).

The Flush panels are available with optional stiffening beads, which are recommended for longer panel lengths. One or two beads are available. Flush panels may also be specified for use as soffit panels. The soffit version of this panel is available with venting strips or perforated, in aluminum only, for increased airflow and under eave ventilation. Contact the local factory for venting options. Additional features include:
- Rounded interlock leg providing improved flush fit

PAC-750 AND PAC-850 SOFFIT PANELS
PAC-750 preformed soffit panels are suitable for both commercial and residential use. PAC-850 soffit panels utilize an innovative hook and grab interlock. Both panels are roll-formed of .032 gauge aluminum, and both panels are 12” (305 mm) wide with a “vee” groove every 6” (152 mm) center-to-center. They are furnished in continuous lengths up to 20’ (6.1 m). Steel is not available in either profile.

The PAC-750 and PAC-850 soffit panels can be perforated to allow for airflow and under eave ventilation. Both PAC-750 and PAC-850 can be specified as fully vented, half vented or solid. Petersen Aluminum can provide a soffit “J” channel as trim to match any of their soffit panels. “J” channel is available in lengths up to 12’ (3.7 m) in matching colors. Additional features include:
- Perforation available for ventilation (PAC-750 and PAC-850)
- Roll-formed to exact lengths

EXPOSED FASTENER PANELS
Petersen Aluminum offers a complete line of exposed fastener panels providing design flexibility, cost-effectiveness and aesthetics. The 7.2 Panel, R-36 Panel and 7/8” Corrugated Panels are ideal for a wide range of building envelope applications including roofs, walls, and linear panels. The R-41, M-42, M-36 and 1/2” Corrugated panels are suitable for wall applications and equipment screens.

The exposed fastener panels can also be produced perforated for a variety of exterior projects, such as equipment screens, or interior acoustical applications. Additional features include:
- Matching screws and rivets
- Closure strips available
- Precut short lengths - 2’ (0.61 m) minimum

PRECISION SERIES
The PAC Precision Series Horizontal Wall Panels offer design flexibility, bold visual effect, cost effectiveness and easy installation. Two profiles are available: The HWP has a concealed extended screw leg and the HWPC utilizes a clip leg. Both panels can also be installed vertically in some applications, and can be specified as perforated for use in equipment screen applications. Maximum panel length is 35’.

SIZES
TITE-LOC, TITE-LOC HS and TITE-LOC Plus Panels
- Width - 12”, 16”, 18” - (305, 406, 457 mm)
- Height - 2” (51 mm)

SNAP-CLAD Standing Seam Panels
- Width - 10”, 12”, 16”, 18” - (254, 305, 406, 457 mm)
- Height - 1 3/4” (44.5 mm)

Snap-On Standing Seam Panels
- Width - 12”, 18”, 19”, 20” (305, 457, 483, 508 mm)
- Height - 1” (25.4 mm)

Snap-On Batten Panels
- Width - 11”, 12”, 18” (279, 305, 457 mm)
- Height - 1 1/2” (38.1 mm)

High Snap-On Panels
- Width - 11”, 18”, 19” (279, 457, 483 mm)
- Height - 1 1/2” (38.1 mm)
FLashing & Trim
All flashing and trim shall be fabricated by manufacturer or qualified fabricator. Flashing shall be PAC-CLAD aluminum (.032 - .063 gauge as specified) or PAC-CLAD steel (24 gauge G-90 galvanized or 22 gauge galvalume as specified). Vinyl masking is recommended on all fabrication applications where extra handling is expected. NOTE: The strippable film must be removed immediately after installation.

Colors
Petersen Aluminum panels are available in the following PAC-CLAD finishes:
- 24 gauge G-90 galvanized steel – 37 stocked colors
- 22 gauge galvalume steel – 13 stocked colors
- .022 prime quality aluminum – 36 stocked colors
- .040 prime quality aluminum – 20 stocked colors
- .050 prime quality aluminum – 29 stocked colors
- 24 gauge Galvalume® Plus also available

Accessories
Petersen Aluminum fabricates a wide range of roof accessory systems.

LIMITATIONS
Contact Petersen Aluminum regarding panel limitations as they pertain to your project specific.

4. Technical Data

ASTM International
- ASTM A653 Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
- ASTM A792/A792M Standard Specification for Steel Sheet, 55 % Aluminum-Zinc-Alloy-Coated (Galvannealed) by the Hot-Dip Process
- ASTM B209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate
- ASTM E283 Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen
- ASTM E331 Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference
- ASTM E1680 Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems

Underwriters Laboratories, Inc. (UL)
- UL 263 Fire Tests of Building Construction and Materials
- UL 580 Standard for Tests for Uplift Resistance of Roof Assemblies
- UL 790 Standard Test Methods for Fire Tests of Roof Coverings
- UL 1897 Uplift Tests for Roof Covering Systems
- UL 2218 Standard for Impact Resistance of Prepared Roof Covering Materials

Environmental Considerations
Where possible, Petersen Aluminum products include a high percentage of recycled material, which lowers the environmental footprint. Additionally, PAC products offer a long life span, and are 100% recyclable at the end of their extended service life, which may reduce the solid waste stream.

Petersen also offers 29 finishes that are listed with the Cool Roof Ratings Council, 31 finishes that are Energy Star approved, and 29 finishes that have an SRI of 29 or higher for steep slope roofs, for qualification towards credits for LEED’s Green Building Rating System.

Physical Properties
- TITE-LOC & TITE-LOC Plus – ASTM E331/1646 and ASTM E283/1680
- SNAP-CLAD – ASTM E331/1646 and ASTM E283/1680
- Snap On & High Snap-On – ASTM E331/1646 and ASTM E283/1680 (when applied over a solid substrate)
- Redi-Roof & Redi-Roof Batten – ASTM E331/1646 and ASTM E283/1680 (when applied over a solid substrate)
- Integral Panels – ASTM E331/1646 and ASTM E283/1680 (when applied over a solid substrate)
- Flash Panels – ASTM E330
- PAC 850 – ASTM E330
- Precision Wall Series – ASTM E330, ASTM E283, ASTM E331, AAAM 501.1-05

Test reports are available to design professionals upon request.

5. Installation

Preparatory Work
Handle and store products according to manufacturer’s recommendations. Deliver materials in manufacturer’s original, unopened, undamaged containers with identification labels intact. Store materials protected from exposure to harmful environmental conditions and at temperatures and humidity conditions recommended by the manufacturer.

Verify that site conditions are acceptable.
for installation. Do not proceed with installation until unacceptable conditions are corrected.

METHODS
Contact Petersen Aluminum for complete installation information.

PRECAUTIONS
In coastal applications, Petersen Aluminum recommends that stainless steel clips be used with prefinished aluminum in lieu of prefinished steel.

BUILDING CODES
Current data on building code requirements and product compliance can be obtained from Petersen Aluminum technical support specialists. Installation must comply with the requirements of all applicable local, state and national code jurisdictions.

6. Availability & Cost

AVAILABILITY
Contact manufacturer for information on local availability.

COST
Budget installed cost information can be obtained from the manufacturer upon request.

7. Warranty
A full 20-year pro-rated finish warranty is available covering cracking, peeling and color fade on all PAC-CLAD applications. Finish warranty terms for Cardinal Red, Award Blue and Interstate Blue, and all metallic finishes, as well as embossed finishes, vary slightly. Please refer to www.pac-clad.com for further details.

8. Maintenance
Maintenance is not required. The panel finish is a member of the Teflon® family and is self-cleaning. If cleaning is desired, panels can be washed with mild soap and water followed by a clean water rinse.

9. Technical Services
Technical services are available from Petersen Aluminum Corp. and regional architectural representatives.

10. Filing Systems
- Reed First Source®
- MANU-SPEC®
- Additional product information is available from the manufacturer upon request.