



**Purchasing Department**  
140 Stonewall Avenue West, Ste 204  
Fayetteville, GA 30214  
Phone: 770-305-5420  
[www.fayettecountyga.gov](http://www.fayettecountyga.gov)

October 18, 2022

**Subject: ITB #2052-B: Animal Shelter Construction  
Addendum #4**

Gentlemen/Ladies:

Below, please find responses to questions, clarification, or additional information for the above referenced Invitation to Bid. You will need to consider this information when preparing your bid.

**Item 1.** The County BID SUMMARY FORM is missing Line Item 206.

Response 1. The Bid Summary Form has been updated and is attached (Attachment 1). Bids shall be submitted using the updated Bid Summary Form dated 10/18/2022.

**Item 2.** The County BID SUMMARY FORM is missing several line items that are included in the plans and specifications such as: Lockers, Window Blinds, Ceiling Access Panels, Earthwork, Termite Treatment, Site Sign, Asphalt Paving, Chain-Link Fencing, Parking Bumpers and Resilient Reinforced Panels.

Response 2. The Bid Summary Form has been updated and is attached (Attachment 1). Bids shall be submitted using the updated Bid Summary Form dated 10/18/2022.

**Item 3.** The Site Plans are vague with no information such as sidewalks, Curb and Gutter, Paving and Fencing that is to be included in our Bid. Please clarify.

Response 3. Sheet C-1 depicts Edge of Pavement (EOP), there is no Curb & Gutter. The Standard Pavement Structure Detail is shown on Sheet C-12.

Concrete sidewalks, walkways, and pad locations are shown on Sheet C1, the Concrete Sidewalk detail is on sheet C12.

Details for the rear and side fencing begin on Sheet A-501 and are further specified in Section 32 31 13 of the project manual; 6-foot high **black vinyl coated** chain link fence with fence fabric.

**Perimeter fencing shall be included in the contractor's base bid.**

**Item 4.** A-104 Reflected Ceiling Plan, indicates that the ceilings are to be Hardie Panel, however, the details on A-302 indicate that the ceiling are to be Gyp Board. Please clarify.

Response 4. All ceilings shall be gypsum board. Where moisture is present, moisture-resistant "green board" shall be used.

**Item 5.** The Location of the Sanitary Sewer line from the building shown on P-2 does not match the location indicated on the Civil Utility Plans C3. Also, A-101 indicates the sewer line exits the building in a different location with a note "Connect to sewer lift station Reference page C4." C4 is part of the erosion plans. Please clarify.

Response 5. Contractor is responsible for coordinating the correct location of the utilities in the field. The sanitary sewer line will stop at the grease trap and will be tied in by others. The grease trap shall be placed beside the structure not on the opposite side of the parking lot as depicted on sheet C3.

Reference plan sheet C3 for the location of the sanitary sewer line.

**Item 6.** Millwork/Cabinetry: There is no information as to what is to be built, type of materials, countertop styles. Nothing related to this is seen in the project manual. Please advise.

Response 6. Sheet A-401 specifies typical cabinet and counter details.

- a. All cabinets and surfaces should be stainless-steel in all kennel areas and areas not in the lobby and office section of the building.

Response a. Refer to Attachment 2 Section 12 36 16 Metal Countertops for the spec for kennel areas and areas no in the lobby and office section. Refer to Attachment 3 Section 12 35 70 Stainless Steel Casework for the stainless cabinets.

- b. All cabinets and surfaces in the lobby and office area to be Custom cabinetry and hard surfaces should be granite or equivalent using the following specification:
- Contractor shall install Diamond Vibe Series cabinets or equal.
  - Cabinet style shall be "Bryant" and made of hardwood. Color to be determined after award is made.
  - Cabinets shall be all plywood construction.
  - Cabinets shall consist of lowers and uppers
  - Upper cabinets shall be 32 inches in height.
  - All lower cabinets shall have two shelves.
  - There shall be a cabinet above the over-the- microwave cabinet and a cabinet above the refrigerator (so they both will reach the same height as other upper cabinets).
  - There shall be a set of four 24-inch-wide stack drawers in place of one lower cabinet.
  - One lower cabinet shall be for a trash pull-out to house dual 12.5-gallon trash cans.
  - Cabinets shall all be securely anchored to the wall.
  - Contractor shall provide and install pull handles for cabinets.

**Item 7.** Detail 7&8 on S-102 show a 2x4 exterior stud wall while Detail 5&6 on A-302 show a 2x6 exterior stud wall. What is intended?

Response 7. Exterior walls shall be constructed with 2"x6" studs to accommodate the R-21 batt insulation. Disregard all references to R-19 in the exterior wall cavities.

**Item 8.** There is no line item for the Grease Trap and Trench Drain on the Summary Bid Form.

Response 8. The Bid Summary Form has been updated and is attached (Attachment 1). Bids shall be submitted using the updated Bid Summary Form dated 10/18/2022.

**Item 9.** What are the specs for the water meter, if we are installing, and location of installation of meter?

Response 9. It is a 2" water meter. Meter location is on plans. Refer to sheet C3.

**Item 10.** Epoxy on Concrete: Would this be the Sherwin Williams Traffic Coat 105 Self leveling Slurry under Painting Specs (099100-4) section 2.3?

Response 10. No, because it is not the right specification for this application.

- a. Would the desired finish be an 1/8" broadcast system (heavy texture) for slip resistance or 1/16" smooth/ light texture?
- b. Moisture Tolerant Alternate- 1/8" Urethane Cement Broadcast system (data sheet attached- Fastop Top Floor SL13)

Response 10 a&b. See attached Fastop Specification (Attachment 4). County to select color prior to mockup being installed.

**Item 11.** Cove height: 8" or 10" both are listed in the spec.

Response 11. Contractors shall bid a 10" cove. See Attachment 4 for specification for 10" cove to be installed.

**Item 12.** Are VE options being considered for resinous flooring?

- a. Urethane Cement mortars are moisture insensitive and do not require moisture mitigation primers that are typically needed on new construction projects. The add for moisture Mitigation primers usually makes the epoxy mortar more expensive than urethane cement.
- b. 3/16" or 1/8" system thicknesses are potential alternates.

Response 12. See Attachment 4 for specification.

**Item 13.** Site lighting will it be by power company?

Response 13. Site lighting will be by the power company



**Item 14.** Do we need to include the primary conduit to transformer for the power company? Or is power company providing?

Response 14. Include the conduit to the transformer. The exact location of the transformer is To Be Determined.

**Item 15.** Clarification as to what's concrete, asphalt, etc.?

Response 15. Please see the Civil Drawing set for clarification on exterior materials and compositions of driveways, drive aisles, curb and gutter, etc.

**Item 16.** Our substitution request is for the metal roof panels and metal wall panels.

Note that the proposed products provide an equal appearance and meet the specified product and performance requirements. The spec calls for a 11.5" wide roof panel, but the proposed panel can only be provided in 12", 16" or 18" widths. 16" or 18" is recommended since the 12" option is the most expensive option from both a material and install point of view since there is more waste when producing 12" width. Using a 12" wide vs 16" or 18" will result in more panels that need to be installed.

The proposed products do provide superior warranties with a 35-year finish warranty vs 20-years specified and a 25-year 6-month substrate warranty vs 20-year 6-month specified, thus providing additional value to the owner.

Response 16. See attached Pac Clad Tite-Loc specification (Attachment 5) as the basis of design.

Received by (Name): \_\_\_\_\_ Company \_\_\_\_\_

Note: If this addendum is not returned to the Fayette County Purchasing Department or if it is returned not signed, responding individuals, companies or other organizations will still be responsible for the requirements of this addendum and the specifications or changes herein.

**Addendum 2 changed the opening date for this ITB. The new opening time and date are 3:00 p.m., November 2, 2022.** Bids must be received by the Purchasing Department at the address above, Suite 204, at or before the opening date and time.

The deadline for inquiries has passed, so the Purchasing Department will not be able to accept any additional questions after this time.

If you have questions, please contact Natasha Duggan, Contract Administrator at (770) 305-5150, fax (770) 719-5534 or email at [nduggan@fayettecountyga.gov](mailto:nduggan@fayettecountyga.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Ted L. Burgess", with a large, sweeping flourish at the end.

Ted L. Burgess  
Director of Purchasing

## BID SUMMARY FORM

Addendum 4 - Attachment 1, 10/18/2022

## BID SUMMARY FOR ITB 2052-B: FAYETTE COUNTY ANIMAL SHELTER CONSTRUCTION

A	General Conditions	Cost \$	Sub-total	Proposed Subcontractors
101	Permits (BY OWNER)	\$ -		
102	Mobilization and Field Office			
103	Performance Bond / 100% Material Payment Bond			
104	Project Insurance			
105	Payroll Taxes & Benefits			
106	Job Supervision			
107	Field Eng. / Layout /Construction Staking / Testing			
108	Equipment			
109	Expendables / Job Trailer / Toilets / Misc. Expenses			
110	Construction Utilities (Temporary)			
111	Construction Project Signage Allowance	\$ 1,000.00		
112	General Clean-up & Disposal			
A	<b>Subtotal</b>			
B	<b>Site Development</b>			
201	FEMA Elevation Certificate			
202	Concrete Sidewalks, Drives and Aprons			
203	Erosion Control Maintenance			
204	Landscape Plan			
205	Site Utilities Connections			
206	Line not used			
207	Striping / Signage			
208	Asphalt Paving			
209	Parking Bumpers/Standard 6-ft.			
210	Project signage			
211	Site signage (max. size 32 sq. ft.)			
212	Temporary Fencing			
213	Termite Control 313116			
214	Earthwork 312000			
B	<b>Subtotal</b>		\$ -	
C	<b>Building Construction</b>			
302	Concrete (03 30 00)			
303	Masonry/Masonry Veneer (04 26 13)			
304	Steel			
305	Rough Carpentry, Framing, Ply-wood (including nailers and sheathing)			
306	Cabinetry/Millwork			
307	Batt Insulation/Polyisocyanurate Insulation Board			
308	Pre-engineered wood-frame/wood truss "Mortan" Building including all framed walls, trusses.			
309	Flashing and Sheet Metal			
310	Waterproofing			
311	Cement Board Siding and Trim			
312	Caulking and Sealants			
313	Doors & Frames			
314	Door Finish Hardware (see allowances)			
314a	Interior Door Leaf (23 doors/maximum \$800 per door)	\$ 18,400.00		
314b	Exterior Door Leaf (7 doors/maximum \$1,200 per door)	\$ 8,400.00		
315	Metal Roofing, Gutters & Downspouts			
316	Fiber-Reinforced Panels			
317	Aluminum Windows (08 51 13)			
318	Window Blinds (12 20 00)			
319	Lighting Fixtures			
320	Gypsum Wall Board/Cementitious Backer Board Assemblies			
321	Ceiling Assemblies (2x2) & GWB			
322	Ceiling Access Panels (10 04 03)			
323	Carpet			
324	Rubber base			
325	Ceramic tile (09 30 13)			
326	Resilient Flooring (09 65 19)			
327	Resinous floor covering (Stonclad GS) (09 67 23)			
328	Fastop Multi TopFloor SL45 System including all options (Addendum 4, Attachment 4)			
329	Paint (09 91 00)			
330	Fire Extinguishers and Accessories (Allow for Type A-B-C 10 lb.)			
331	Toilet Accessories			
332	Plumbing			
333	HVAC (23 06 30)			
334	Electrical			
335	Kennels and Veterinary Equipment (13 19 00)			
336	Lockers (10 51 00)			
337	Special Equipment			
338	Exterior Metal Stairs (05 51 00)			
339	Interior Signage			
340	Misc. Finishes			
341	Chainlink Fencing (32 31 13)			
342	Grease Trap			
343	Trench Drain			
C	<b>Subtotal</b>			
Security System Allowance (Fire, Access Control, Security & Cameras)			\$ 60,000.00	
General Contingency Allowance			\$ 60,000.00	
<b>ANIMAL SHELTER TOTAL BID</b>				
E	<b>Alternate Bid Items (01 23 00)</b>			
For Alternates below, please clearly indicate with a plus (+) or minus (-) whether the alternate sum is an addition or deduction from the base bid.				
Alternate 1 - Provide 6:12 roof slope in lieu of 4:12				
Alternate 2 - Provide Sprinkler system and riser room				
Alternate 3 - Provide R-49 Spray-foam attic insulation in lieu of batt				

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Pond Project #1220475

## SECTION 123616 - METAL COUNTERTOPS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes stainless-steel countertops and shelves.
- B. Related Sections:
  - 1. Section 123570 "Stainless Steel Casework."

#### 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Include plans, sections, details, and attachments to other work.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. Stainless-Steel Sheet: ASTM A 240/A 240M, Type 304.
- B. Sealant for Countertops: Manufacturer's standard sealant of characteristics indicated below that complies with applicable requirements in Section 079200 "Joint Sealants."
  - 1. Mildew-Resistant Joint Sealant: Mildew resistant, single component, nonsag, neutral curing, silicone.
  - 2. Color: Clear.

#### 2.2 STAINLESS-STEEL COUNTERTOP

- A. Countertops: Fabricate from 0.062-inch- (1.59-mm-) thick, stainless-steel sheet. Provide smooth, clean exposed tops and edges in uniform plane, free of defects. Provide front and end overhang of 1 inch (25 mm) over the base cabinets.
  - 1. Joints: Fabricate countertops without field-made joints.
  - 2. Weld shop-made joints.
  - 3. Sound deaden the undersurface with heavy-build mastic coating.
  - 4. Extend the top down to provide a 1-inch- (25-mm-) thick edge with a 1/2-inch (12.7-mm) return flange.
  - 5. Form the backsplash coved to and integral with top surface, with a 1/2-inch- (12.7-mm) thick top edge and 1/2-inch (12.7-mm) return flange.

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6. Provide raised (marine) edge around perimeter of tops containing sinks; pitch tops containing sinks two ways to provide drainage without channeling or grooving.
7. Where stainless-steel sinks occur in stainless-steel tops, factory weld into one integral unit.

## 2.3 STAINLESS-STEEL FINISH

- A. Grind and polish surfaces to produce uniform, directional satin finish matching No. 4 finish, with no evidence of welds and free of cross scratches. Run grain with long dimension of each piece. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces clean.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Install metal countertops level, plumb, and true; shim as required, using concealed shims.
- B. Field Jointing: Where possible, make field jointing in the same manner as shop jointing; use fasteners recommended by manufacturer. Prepare edges to be joined in shop so Project-site processing of top and edge surfaces is not required. Locate field joints where shown on Shop Drawings.
- C. Secure tops to cabinets with Z- or L-type fasteners or equivalent; use two or more fasteners at each front, end, and back.
- D. Abut top and edge surfaces in one true plane, with internal supports placed to prevent deflection.
- E. Seal junctures of tops, splashes, and walls with mildew-resistant silicone sealant.
- F. Wall-Mounted Shelves: Fasten to masonry, partition framing, blocking, or reinforcements in partitions. Fasten each shelf through upturned back edge at not less than 24 inches (600 mm) o.c.

### 3.2 CLEANING AND PROTECTION

- A. Protection: Provide 6-mil (0.15-mm) plastic or other suitable water-resistant covering over the countertop surfaces. Tape to underside of countertop at a minimum of 48 inches (1220 mm) o.c.

END OF SECTION 123616



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## SECTION 123570 – STAINLESS STEEL CASEWORK

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes stainless-steel casework.
- B. Related Sections:
  - 1. Section 123616 “Stainless Steel Countertops.”

#### 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Include plans, elevations, sections, and attachment details.
- C. Samples: For units with factory-applied color finishes.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Source Limitations: Obtain stainless steel casework from single source from single manufacturer.

#### 2.2 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design stainless steel casework.

#### 2.3 CASEWORK MATERIALS

- A. Steel Sheet: Cold-rolled commercial steel sheet, complying with ASTM A 1008/A 1008M; matte finish; suitable for exposed applications.
- B. Stainless-Steel Sheet: ASTM A 240/A 240M, Type 304, stretcher-leveled standard of flatness.
- C. Nominal Stainless-Steel Thicknesses for Stainless-Steel Casework:
  - 1. Sides, Ends, Fixed Backs, Bottoms, Cabinet Tops, Soffits, and Items Not Otherwise Indicated: 0.050 inch (1.27). Bottoms may be 0.038 inch (0.95 mm) if reinforced.
  - 2. Back Panels, Doors, Drawer Fronts and Bodies, and Shelves: 0.038 inch (0.95 mm) except 0.050 inch (1.27 mm) for unreinforced shelves more than 36 inches (900 mm) long.

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3. Intermediate Horizontal Rails, Center Posts, Tubular Legs, and Top Gussets: 0.062 inch (1.59 mm).

## 2.4 CABINET FABRICATION

- A. General: Assemble and finish units at point of manufacture. Use precision dies for interchangeability of like-size drawers, doors, and similar parts. Perform assembly on precision jigs to provide units that are square. Reinforce units with angles, gussets, and channels. Integrally frame and weld to form a dirt- and vermin-resistant enclosure. Maintain uniform clearance around door and drawer fronts of 1/16 to 3/32 inch (1.5 to 2.4 mm).
- B. Metal Flush Doors: Outer and inner pans that nest into box formation, with full-height channel reinforcements at center of door. Fill doors with noncombustible, sound-deadening material.
- C. Metal Drawers: Fronts made from outer and inner pans that nest into box formation, with no raw metal edges at top.
- D. Metal Shelves: Front, back, and ends formed down, with edges returned horizontally at front and back to form reinforcing channels. Provide clips, brackets, pilasters, or other means to support shelves from cabinet ends and to allow height of shelves to be adjusted in increments of not more than 2 inches (50 mm).
- E. Filler Strips: Provide as needed to close spaces between cabinets and walls, ceilings, and indicated equipment. Fabricate from same material and with same finish as cabinets and with hemmed or flanged edges.
- F. Trim Flanges: Formed metal trim fabricated from same material and with same finish as cabinets. Provide at perimeter of recessed cabinets.

## 2.5 STAINLESS-STEEL FINISH

- A. Grind and polish surfaces to produce uniform, directional-satin finish matching No. 4 finish, with no evidence of welds and free of cross scratches. Run grain with long dimension of each piece. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces clean.

## 2.6 CABINET HARDWARE

- A. General: Provide stainless steel casework manufacturer's standard, commercial-quality, heavy-duty hardware complying with requirements indicated for each type.
- B. Hinges: Stainless-steel, five-knuckle hinges complying with BHMA A156.9, Grade 1, with antifriction bearings and hospital tips. Provide two hinges for doors 48 inches (1200 mm) high or less, and provide three for doors more than 48 inches (1200 mm) high.
- C. Hinged Door and Drawer Pulls: Back-mounted pulls of stainless steel.
- D. Door Catches: Nylon-roller spring catches. Provide two catches on doors more than 48 inches (1200 mm) high.

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- E. Drawer Slides: Side-mounted, zinc-plated-steel, self-closing, ball-bearing drawer slides; designed to prevent rebound when drawers are closed; complying with BHMA A156.9, Type B05091.
  - 1. Provide Grade 1 for drawers not more than 6 inches (150 mm) high and 24 inches (600 mm) wide.
  - 2. Provide Grade 1HD-100 for drawers more than 6 inches (150 mm) high or 24 inches (600 mm) wide.
  - 3. Provide full-extension type where Grade 1 is indicated.
  - 4. Provide full-extension type where Grade 1HD-100 or Grade 1HD-200 is indicated.
  - 5. Provide locks on all drawers and doors.
  - 6. Keying: Key locks as directed.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION OF CABINETS

- A. Install cabinets level, plumb, and true; shim as required, using concealed shims. Where stainless steel casework abuts other finished work, apply filler strips and scribe for accurate fit, with fasteners concealed where practical.
- B. Recessed Cabinets: Set cabinets in openings and fasten to partition framing, wood blocking, or reinforcements in partitions with fasteners spaced not more than 24 inches (600 mm) o.c. Bolt adjacent cabinets together with joints flush, tight, and uniform.
- C. Base Cabinets: Fasten cabinets to partition framing, wood blocking, or reinforcements in partitions with fasteners spaced not more than 16 inches (400 mm) o.c. Bolt adjacent cabinets together with joints flush, tight, and uniform.
- D. Wall Cabinets: Fasten to hanging strips, masonry, partition framing, blocking, or reinforcements in partitions. Fasten each cabinet through the back, near the top, at not less than 16 inches (400 mm) o.c.
- E. Install hardware uniformly and precisely. Set hinges snug and flat in mortises.
- F. Adjust stainless steel casework and hardware so doors and drawers align and operate smoothly without warp or bind and so contact points meet accurately. Lubricate operating hardware as recommended by manufacturer.

#### 3.2 CLEANING AND PROTECTION

- A. Clean finished surfaces, touch up as required, and remove or refinish damaged or soiled areas to match original factory finish as approved by Architect.

END OF SECTION 123570

## FASTOP® MULTI TOPFLOOR SL45

Sherwin-Williams FasTop Multi Topfloor SL45 is a self-leveling urethane concrete to be applied at 3/16" thickness and broadcast to yield a 1/4" - 3/8" finished system. It is designed to protect concrete, wood and steel substrates from thermal shock, impact, corrosion, mild chemical attack and abrasion.

### BENEFITS

- Can be applied to "green" concrete
- Rapid return to service
- Water based
- Hot cooking oil and steam resistance
- Low temperature cure
- Will not lose bond due to thermal shock
- Impact resistant
- Moisture insensitive
- No moisture testing required
- Acceptable for use in USDA/CFIA inspected facilities

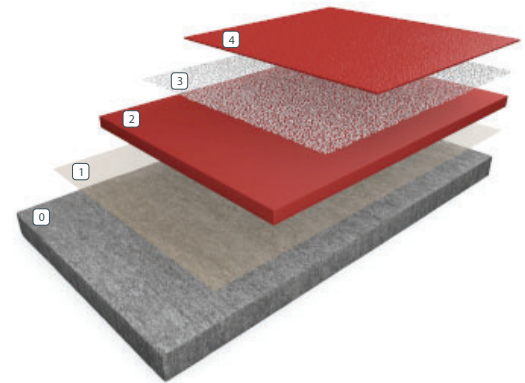
### LIMITATIONS

- Protect material from freezing

### RESISTANCE PROPERTIES

24 HOUR EXPOSURE @ 72°F	RESULT
NE= No Effect DD=Dulling/Discoloration	
Alcohol	NE
Ethylene Glycol	NE
Fats, Oils & Sugars	NE
Gasoline, Diesel & Kerosine	NE
Hydrochloric Acid (10%)	DD
Lactic Acid (Milk)	NE
Mineral Oils	NE
Most Organic Solvents	NE
Muriatic Acid	NE
Nitric Acid (10%)	DD
Nitric Acid (70%)	DD
PM Acetate	NE
Phosphoric Acid (25%)	DD
Potassium Hydroxide (<50%)	NE
Sodium Hydroxide (50%)	NE
Sulfuric Acid (25%)	NE
Water	NE
Xylene	NE

- 4 Topcoat
- 3 Broadcast
- 2 Slurry:  
FasTop Multi SL45
- 1 Primer (optional):  
GP3477 Water Emulsion Primer
- 0 Substrate:  
Concrete/cementitious screed



### USES

- Food and beverage manufacturing and processing areas
- Commercial and institutional kitchens
- Dairies

### TYPICAL PHYSICAL PROPERTIES

Color	Refer to color pack color card
Decorative Upgrade	Selected Ceramic Carpet Blends
Cure Time	Recoat 3-5 Hours Foot Traffic 7-8 Hours Full Service 12 Hours
Abrasion Resistance ASTM D4060	51 mgs Lost
Hardness, Shore D ASTM D 2240	83
Tensile Strength ASTM C 307	944 psi
Compressive Strength ASTM C 579	6,926 psi
Flexural Strength ASTM C 580	1,909 psi
Adhesion ASTM D 7234	523 psi Concrete Failure
Impact Resistance	Withstands 16 ft lbs MIL-D-3134, Sec.4.7.3 without cracking, delamination or chipping
Reaction to Fire	Bfl - s1
Coefficient of Friction ASTM D 2047	>0.80
Slip Resistance ASTM E303	0.7 DCOF
Thermal Expansion Coefficient	<38 PPM
Service Temperature at 3/16"	-50°F to 266°F
Shrinkage	Nil
Water Absorption	Karsten Test (Impermeable) - Nil

DESIGNED TO PERFORM

sherwin-williams.com/resin-flooring

## INSTALLATION

The following information is to be used as a guideline for the installation of the FasTop Multi Topfloor SL45 Urethane Slurry System. Contact the Sherwin-Williams Technical Service Department for assistance prior to application.

### SURFACE PREPARATION - GENERAL

Sherwin-Williams systems can be applied to a variety of substrates if the substrate is properly prepared. Preparation of surfaces other than concrete will depend on the type of substrate, such as wood, concrete block, quarry tile, etc. Should there be any questions regarding a specific substrate or condition, please contact the Sherwin-Williams Technical Service Department prior to starting the project. Refer to Surface Preparation (Form G-1).

### SURFACE PREPARATION - CONCRETE

Concrete surfaces shall be abrasive blasted to remove all surface contaminants and laitance. The prepared concrete shall have a surface profile equal to CSP 4-6. Refer to Form G-1. Consult the Sherwin-Williams Technical Service Department if oil or grease is present.

After initial preparation has occurred, inspect the concrete for bug holes, voids, fins and other imperfections. Protrusions shall be ground smooth while voids shall be filled with a Sherwin-Williams system filler.

For recommendations, consult the Sherwin-Williams Technical Service Department.

## LIMITATIONS

The substrate must be structurally sound and cleaned of any foreign matter that will inhibit adhesion. Do not apply in temperatures below 40°F or above 90°F or when relative humidity is greater than 80%. If substrate is not concrete, wood or metal as described in Surface Preparation (Form G-1), then do not apply. Call the Sherwin-Williams Technical Service Department for recommendation. Working time is reduced with air movement and high humidity. When installing FasTop Multi Topfloor SL45, if encountering concrete outgassing, please discontinue installation and apply 3477 Epoxy Water Emulsion Primer/Sealer. Allow to dry until tack-free and proceed with the FasTop Multi Topfloor SL45 installation.

- Do not featheredge.
- Do not mix partial units.
- Do not hand mix. Do not let mixed material sit in a bucket, even a 2-3 minute delay in pouring will reduce working time.
- To install outside, contact the Sherwin-Williams Technical Service Department.

Full chemical resistance is achieved after a seven (7) day cure. Consult the Sherwin-Williams Technical Service Department for specific chemical resistance.

If using without broadcast media, primer is required.

## APPLICATION INFORMATION — SURFACE PREP PROFILE CSP 4-6

VOC MIXED	APPLICATION STEP	MATERIAL	MIXED RATIO	THEORETICAL COVERAGE PER COAT CONCRETE	PACKAGING
<50 g/L 0	Cove Base	FasTop Multi Cove Base Aggregate	2.0 kg Mix (A+B) 30 lbs	15-20 linear ft @ 6" cove 1" radius 30 lbs	2.0 kg Sold Only in 30-lb Units
<75 g/L	Primer Optional For Outgassing	3477	2:1	250 sq ft / gal	3 or 15 gals
<50 g/L 00	Slurry	FasTop Multi SL45 Aggregate	5.0 kg Mix (A+B) 37 lbs to Excess	28-30 sq ft / Unit @ 1/4" 22-24 sq ft / Unit @ 3/8"	5.0 kg 37 lbs
0	Broadcast (Standard)	5310 Dry Silica Sand 20-40 Mesh	Each	500 lbs / 1,000 sq ft	50 lbs
<50 g/L 0	Optional Topcoat	FasTop Multi T100 Aggregate	5.0 kg Mix (A+B) 11 lbs 2 Color Packs per Mix	80-100 sq ft / Unit	5.0 kg 11 lbs



## COVE BASE

### MIXING AND APPLICATION

Cove base should be installed prior to the floor. Tape out cove with duct tape or a good quality masking tape. Terrazzo strips will also work.

**MIXING:** Do not mix partial units, the fine aggregate and pigment can and will separate. A drill and a paddle work the best, but a KOL mixer works well also. Mix 1.0 kg of Part A with 1 color pack until uniform. Add 1.0 kg of Part B and mix. Slowly add aggregate and mix until thoroughly wet out. Immediately pour mixed material out of bucket, in a bead, next to the wall. Rough apply cove mortar using a trowel. Do not worry about trowel marks at this time; just get all the mixed material applied to the wall. Material will need to be finished within approximately 20 minutes depending on temperature. Placing a halogen light next to cove base will cast shadows and assist on finishing the cove base with minimal waves and/or trowel marks. Use a minimum of a 3/4" radius cove trowel and finish cove base. Any smaller may result in a loss of the radius once the floor is tied in. Lightly misting cove trowel with window cleaner, as a trowel lube, works well. Do not use isopropyl alcohol. Carefully remove tape and finish rough edges. Install floor once cove is hard to the touch, about 2 ½ to 3 hours.

### REQUIRED TOOLS:

Drill, proper mixing paddle, 3" x 8" trowel works best to apply, margin trowel, and a radius cove trowel. Minimum of 3/4" but 1" is preferred.

## PRIMER: OPTIONAL

### MIXING AND APPLICATION

1. Premix 3477A (resin) and 3477B (hardener) separately, using a low speed drill and Jiffy blade. Mix for one minute and until uniform, exercising caution not to whip air into the materials.
2. Add 2 parts 3477A (resin) to 1 part 3477B (hardener) by volume. Mix with low speed drill and Jiffy blade for three minutes and until uniform. DO NOT mix more material than can be used within 4 hours. Apply material with a short nap roller at a spread rate of 250 sq ft per gallon.
3. DO NOT ALLOW TO PUDDLE. Any uneven or textured surfaces will require more material than an even surface.
4. Proceed when tack-free, 1-4 hours on shot-blasted concrete.

## SLURRY

### MIXING AND APPLICATION

1. Add 2.5 kg Part A (resin) with 1 color pack. Mix until uniform. Add 2.5 kg Part B and mix with low speed drill and Jiffy mixer until uniform.
2. Pour one bag, 37 lbs pre-measured unit, into container and mix until no lumps remain. Immediately pour mixed material onto the substrate and pull out using a pin rake, screed rake or flat trowel. Place all material within 15 minutes. Back roll with a spike roller to assist leveling. Allow material to self-level (2-5 minutes).

**NOTE:** At substrate temperature less than 40°F, the application will be adversely affected.

3. Broadcast 5310 Dry Silica Sand (20-40 Mesh) to saturation (about 500# per 1,000 square feet).
4. Allow to cure for a minimum of 3-5 hours prior to topcoating. Sweep off excess aggregate with a clean, stiff bristled broom. Clean sand can be saved for future use. All imperfections such as high spots should be smoothed before the application of the topcoat.

**NOTE:** The broadcast distribution is critical to the success of the application. The floor's finished appearance depends on the manner in which the aggregate has been applied. In grass seed like fashion, allow the aggregate to fall after being thrown upward and out. Do not throw downward at a sharp angle using force.

## TOPCOAT: OPTIONAL

### MIXING AND APPLICATION

Allow slurry to cure for a minimum of 3-5 hours before applying topcoat. DO NOT PREMIX Part A or Part B.

1. Combine 2.5 kg of Part A (resin) with 11 lbs of Part C (aggregate) and mix until lump-free, approximately 60-90 seconds. The product will thicken and become creamy, which lessens the potential for fine cement/pigment balls to form. Add two color packs and mix until fully combined and uniform in color, approximately 30 seconds. Add 2.5 kg of Part B and mix for approximately 1-2 minutes until uniform.
2. Apply T100 using trowel or squeegee and backroll with a 1/4" - 3/8" nap roller to remove any marks. Spread at a rate of 80-100 square feet per unit, evenly, with no puddles making sure of uniform coverage.

**NOTE:** Do not dip and roll. Do not roll out of a puddle or ribbon. Must apply using a trowel or squeegee.

3. Allow to cure 7-8 hours minimum before opening to light foot traffic. If recoating is required, abrade surface before recoating.

## CLEAN UP

Clean up mixing and application equipment immediately after use. Use toluene or xylene. Observe all fire and health precautions when handling or storing solvents.

## SAFETY

Refer to the SDS sheet before use. Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

## MATERIAL STORAGE

Store materials in a temperature controlled environment (40°F to 90°F) and out of direct sunlight.

Keep resins, hardeners and solvents separated from each other, and away from sources of ignition.

## MAINTENANCE

Occasional inspection of the installed material and spot repair can prolong system life. For specific information, contact the Sherwin-Williams Technical Service Department.

## DISCLAIMER

The information and recommendations set forth in this document are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

## WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams.

NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

## THE SHERWIN-WILLIAMS DIFFERENCE

Sherwin-Williams High Performance Flooring delivers world-class industry subject matter expertise, unparalleled technical and specification service, and unmatched regional commercial team support to our customers around the globe.



## 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.  
1005 Tonne Rd.  
Elk Grove Village, IL 60007  
(847) 228-7150  
(800) 323-1960  
Fax: (800) 722-7150  
www.pac-clad.com

## 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, purlins and rigid insulation in conjunction with bearing plates (UL design numbers 90, 176, 180 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, purlins and rigid insulation in conjunction with bearing plates



(UL design numbers 254, 255, 261, 303, 343, 508, 508A, and 614). A minimum slope of 2:12 pitch is recommended on most applications. Additional features include:

- Continuous interlock
- Labor-saving one-piece design
- Striations and factory eave notching
- Stiffener beads
- Weathertightness Warranty Available

#### **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 pan 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 m).

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 m).

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 air flow 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)





**Redi-Roof Standing Seam Panels**

- Width - 12", 16", 18" - (305, 406, 457 mm)
- Height - 1 9/16" (40 mm) with offsets, 1 3/8" (35 mm) without offsets

**Redi-Roof Batten Panels**

- Width - 12" (305 mm)
- Height - 1 1/4" (32 mm)

**Integral Panels**

- Width - 11", 12", 18" (279, 305, 457 mm)
- Height - 1 1/2" (38.1 mm)

**Flush Panels**

- Width - 7", 11", 12" (178, 279, 305 mm)
- Height - 1" (25.4 mm)

**PAC-750 and PAC-850 Soffit Panels**

- Width - 12" (305 mm)

**M-42 Exposed Fastener Panels**

- Width - 42" (1067 mm)
- Height - 3/4" (19.1 mm)

**M-36 Exposed Fastener Panels**

- Width - 36" (914 mm)
- Height - 3/4" (12.7 mm)

**R-41 Exposed Fastener Panels**

- Width - 41" (1041 mm)
- Height - 1 1/4" (31.8 mm)

**R-36 Exposed Fastener Panels**

- Width - 36" (914 mm)
- Height - 1 1/4" (31.8 mm)

**7.2 Exposed Fastener Panels**

- Width - 36" (914 mm)
- Height - 1 1/2" (38.1 mm)

**1/2" Corrugated Exposed Fastener Panels**

- Width - 40" (1016 mm)
- Height - 1/2" (12.7 mm)

**7/8" Corrugated Exposed Fastener Panels**

- Width - 34.6" (879 mm)
- Height - 7/8" (22.2 mm)

**Precision Wall Panels**

- Width - 12" or 16" (305, 406 mm)
- Height - 7/8" (22 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
- .032 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 roofing accessories. Coping, gravel stops, gutters and downspouts are all formed from 38 standard PAC-CLAD colors.

**LIMITATIONS**

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

**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 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 E1592 Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference
- ASTM E1646 Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems 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)
- Flush Panels - ASTM E330
- PAC 850 - ASTM E330
- Precision Wall Series - ASTM E330, ASTM E283, ASTM E331, AAMA 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 temperature 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](http://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.

