

Rollfab Metal Building Products
2529 W. Jackson St. #102
Phoenix, AZ. 85009

SL 175 Standing Seam Guide Specifications

This Guide Specification is to be used to develop an office master specification or specifications for a project

SECTION 07410 — Metal Roofing System Guide Specification for Preformed Roof Panels

This product is suitable for slopes as low as 3:12. Please consult a Rollfab representative for slope design restrictions.

PART 1 - GENERAL

1.01 DESCRIPTION

The work includes furnishing and installation of all preformed metal roofing, and accessories as indicated on the drawings and specified herein. It requires coordination with other trades.

1.02 RELATED SECTIONS

- A. Structural Steel Supports: Section 05100
- B. Structural Metal Roof and Floor Decking: Section 05300 C. Miscellaneous Fabricated Steel: Section 05500
- D. Structural Lumber Supports: Section 06100
- E. Structural Glue Laminated Lumber Supports: Section 06181 F. Thermal Insulation: Section 07200
- G. Fireproofing: Section 07250
- H. Sheetmetal Gutters and Downspouts: Section 07600
- I. Joint Sealants not specified herein: Section 07900
- J. Finish Painting not specified herein: Section 09900

1.03 PERFORMANCE REQUIREMENTS

A. TESTING AND CERTIFICATION

1. Wind Uplift: Meet or exceed 25.2psf at 4.0' span in accordance with ASTM E-1592 for panels 18" wide x 24-gauge steel. Note: SL175Panels test at 41.6psf.
2. Wind Uplift: Meet or exceed 36.5 psf at 5.0' span in accordance with ASTM E -1592 for panels 18" wide x 22-gauge steel. Note: SL175 panels test at 60.26psf
3. Wind Uplift: UL 580 test, Class 90 rating per construction #s 359, 359A and 343. SL175 panels are tested in a structural condition for maximum uplift exposure. SL175 panels should be applied over a solid substrate.
4. Air Infiltration: Panel shall have an air infiltration value of .007 cfm/ft² at a pressure differential of 6.24psf. to meet the standard tested in accordance with ASTM E-283:
5. Water Penetration: Panel shall have no leakage at a pressure differential of 6.24ps to meet the standard when tested in accordance with ASTM E - 331

1.04 SUBMITTALS

A. PRODUCT DATA

1. Submit manufacturer's technical product data, installation instructions and recommendations. Include data substantiating that materials comply with requirements

B. SAMPLES

1. Prior to ordering products, submit Manufacturer's standard color Samples for selection.
2. Prior to starting work, submit 12" long Panel Samples showing shape and a representative color chip for acceptance.

C. SHOP DRAWINGS

1. Submit complete shop drawings detailing all perimeter flashings and joints in accordance with the manufacturer's standard recommendations.

2. Describe all proposed details that deviate from what is shown on the plans.
3. Details must allow for expansion and contraction.
4. On more complex roofs, a roof plan showing the areas of discontinuity (perimeter and corner zones) should be provided.

1.05 QUALITY ASSURANCE

A. INSTALLER'S QUALIFICATIONS

1. Installer must be approved by the Panel Manufacturer in writing prior to work commencing.
2. Installer shall meet the following:
 - a. Successfully applied five metal roofs of comparable size and complexity which reflects a quality weather tight installation.
 - b. Have been in business for a minimum period of two years in the region where the work will be performed.

B. MANUFACTURER'S QUALIFICATIONS

1. Manufacturer shall have a minimum of 10 years experience supplying metal roofing to the region where the work is to be done.
2. Comply with current independent testing and certification as specified.
3. Manufacturer shall provide proof of \$2,000,000 liability insurance for their metal roof system and comply with current independent testing and certification as specified.
4. Panel manufacturers without full supporting literature; Flashings & Details Guides, Guide Specifications and Technical support shall not be considered as a substitute product.

C. REGULATORY AGENCY REQUIREMENTS

1. Comply with UBC and local Building Code requirements if more restrictive than those specified herein.

1.06 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Protect against damage and discoloration.
- B. Handle panels with non-marring slings.
- C. Do not bend panels.
- D. Store panels above ground, with one end elevated for drainage.
- E. Protect panels against standing water and condensation between adjacent surfaces.
- F. If panels become wet, immediately separate sheets, wipe dry with clean cloth, and allow to air dry.
- G. Painted panels shall be shipped with protective plastic sheeting or a strippable film coating between all panels. [Remove any strippable film coating prior to installation and in any case, do not allow the strippable film coating to remain on the panels in extreme heat, cold, or direct sunlight or other UV source.]

1.07 PROJECT CONDITIONS

- A. Examine the conditions and substrates in which metal roofing work is to be installed. Substrate shall be installed level, flat and true to avoid panel stresses and distortion.
- B. Field measurements shall be taken prior to fabrication of panels.
- C. Proceed with roofing installation only after satisfactory conditions are met.

1.08 WARRANTY

A. MANUFACTURER'S PRODUCT WARRANTY

1. Manufacturer's standard performance warranty, as available for specified installation and environmental conditions.

B. CONTRACTOR'S WARRANTY

1. Warrant panels, flashings, sealants, fasteners and accessories against defective materials and/or workmanship, to remain watertight and weatherproof with normal usage for two (2) years following Project Substantial Completion date.

C. MANUFACTURER'S WATERTIGHTNESS WARRANTY

1. Contact Rollfab sales department for watertightness warranty information.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURER

A. Rollfab Metal Building Products
2529 W. Jackson St. #102
Phoenix, AZ 85009
602-275-1676

B. PANEL DESIGNATION: SL 175 Standing Seam Panel

C. ALTERNATES: Approval of substitute systems is required prior to bid. The Architect will be the sole judge of what qualifies as an "equal" system. To be approved as an equal system, submit or respond to all items in "Quality Assurance", "Performance Requirements" and "Submittal" sections of this specification.

MATERIALS

A. PANELS

1. Base Metal:

a. Material: Steel conforming to: (choose one)

(1) ASTM A792 minimum yield 40,000 psi, thickness [choose one] 24 gauge, 22 gauge

(2) Aluminum .032"

(3) Copper conforming to ASTM B370, thickness [choose one] 20 oz. or 16 oz.

b. Protective Coatings: [copper N/A]

(1) Conform to ASTM A792, AZ50 (Zincalume~/Galvalume'1.

2. Exterior Finish: Select from color samples provided

Custom color to be _____

3. Configuration:

a. Standing Seam: Roof panels shall consist of integral self-locking standing seams 1 3/4" high spaced (choose one) 12" or 18" {note: either are recommended but can be any size 12" to 22"}

(1) Striated pan. (standard)

(2) Flat pan. (optional)

Note: All flat metal surfaces can display a waviness commonly referred to as "oil canning". This is caused by steel mill tolerances and is a characteristic, not a defect, of panels manufactured from a light gauge metal. "oil canning" will not be accepted as cause for panel rejection.

B. ACCESSORIES

1. Fastener Clip as used in testing of the panels

C. FLASHING

1. Material, gauge and finish to match panels.

D. FABRICATION

1. Unless otherwise shown on drawings or specified herein, fabricate panels in continuous one-piece lengths and fabricate flashings and accessories in longest practical lengths.

2. Roofing panels can be factory formed or field formed.

PART 3 -EXECUTION

3.01 EXAMINATION

A. EXISTING CONDITIONS

1. Verify that members to receive panels are complete, accurately sized and located, in true plane, secure all nail heads flush with substrate and otherwise properly prepared.
2. Prior to starting work, notify General Contractor about any defects requiring correction.
3. Do not start work until conditions are satisfactory.

3.02 PREPARATION

A. FIELD MEASUREMENTS

1. Verify prior to fabrication.
2. If field measurements differ from drawing dimensions, notify Architect/Engineer prior to fabrication.

B. PROTECTION

1. Treat, or isolate with protective material, and contacting surfaces of dissimilar materials to prevent electrolytic corrosion.
2. Require workmen who will be walking on Roofing Panels to wear clean, soft-soled work shoes that will not pick up stones or other abrasive material which could cause damage or discoloration.
3. Protect Work of other Trades against damage and discoloration.

C. SURFACE PREPARATION

1. Surfaces to be clean and dry prior to applying sealant

3.03 INSTALLATION

A. PANELS

1. Follow roof panel manufacturer's directions.
2. Install panel seams vertically.
3. Lap panels away from prevailing wind direction.
4. Do not stretch or compress panel side-lap.
5. Secure panels without warp or deflection.
6. Fully engage interlocking seams.
7. Remove strippable protective film immediately preceding panel installation.

B. ALLOWABLE ERECTION TOLERANCE

1. Maximum Alignment Variation: 1/4 inch in 40 feet

C. FLASHING

1. Follow Manufacturer's directions and Architect approved Shop Drawings.
2. Install flashings to allow for thermal movement
3. Remove strippable protective film, if used, immediately preceding flashing installation.

D. CUTTING AND FITTING

1. Neat, square and true. Torch cutting is prohibited.
2. Openings 6 inches and larger in any direction: Shop fabricates and reinforces to maintain original load capacity.
3. Deburr cut edge where necessary.

3.04 CLEAN UP AND CLOSE OUT

A. PANEL DAMAGE AND FINISH SCRATCHES

1. Do not apply touch-up paint to damaged paint areas that involve minor scratches.
2. Panels or flashings that have severe paint and/or substrate damage shall be replaced as directed by the Architect's or Owner's representative.

B. CLEANING AND REPAIRING

1. At completion of each day's work and at work completion, sweep Panels, Flashings and clean gutters
Do not allow fasteners, cuttings, filings or scraps to accumulate.
2. Remove debris from Project Site upon work completion or sooner, if directed.

END OF SECTION