

SECTION 07 41 13 – CSI-LG-DLSS DOUBLE LOCK STANDING SEAM ROOFING SYSTEM

(24ga Stainless Steel 316 – RAL Color-Matched Finish)

PART 1 – GENERAL

1.01 RELATED DOCUMENTS

- A. Contract Documents, drawings, and Division 01 specifications apply.
- B. Coordinate with trades affecting roofing, penetrations, flashings, and waterproofing.

1.02 SUMMARY

A. Work includes:

- 1. CSI-LG-DLSS Double Lock Standing Seam Roofing System (180° mechanical seam).
- 2. Accessories: clips, fasteners, trims, ridge/hip caps, valleys, eave details, penetrations, flashings.
- 3. Underlayment and air/water barrier components.

B. Related Sections:

05400 Cold-Formed Metal Framing

06100 Wood Framing

07210 Insulation

07265 Air & Vapor Barriers

07620 Flashing & Trim

07920 Sealants

1.03 SYSTEM DESCRIPTION

- A. Standing seam roof with full 180° mechanical seam.
- B. System engineered for wind uplift, water tightness, and thermal movement.
- C. May be engineered to comply with HVHZ / Miami-Dade NOA requirements.
- D. Panels installed over solid substrate with concealed stainless clips.

1.04 SUBMITTALS

- A. Product Data.

B. Shop Drawings showing layouts, details, and clip spacing.

C. Samples:

1. Two (2) 12-inch double-lock seam samples.
2. Finish samples per RAL or color-matched physical samples.

D. Engineering Calculations (PE stamped).

1.05 QUALITY ASSURANCE

A. Manufacturer: CSI Architectural Metal LLC, Odessa, FL.

B. Installer: Minimum 3 similar projects; trained by CSI.

C. Pre-installation conference required.

D. Mock-up: Minimum 3' × 3'.

1.06 DELIVERY, STORAGE, & HANDLING

A. Deliver labeled and protected.

B. Store elevated, dry, and ventilated.

C. Handle with clean gloves.

1.07 WARRANTIES

A. Material warranty.

B. Fabrication warranty.

C. Installation watertightness warranty.

PART 2 – PRODUCTS

2.01 MANUFACTURER

CSI Architectural Metal LLC

Odessa, FL 33556

Contact: Daniel Schmidt

dan@csimetalinc.com

(310) 447-4749

2.02 MATERIALS

A. Stainless Steel:

1. 24 gauge Stainless Steel 316.

2. ASTM A240/A666.

3. Widths: 12"–18".

4. Seam height: 1" or 1.5".

B. Finish:

1. RAL color-matched architectural PVDF (70% Kynar).

2. CSI can match physical samples.

3. Protective film optional.

C. Clips & Fasteners:

1. Stainless steel sliding clips.

2. Stainless fasteners per engineering.

D. Underlayment (CSI Approved System):

1. Primary membrane: Platinum HT-B Weather Barrier or CSI-approved high-temp membrane.

2. Apply Perm-A-Barrier primer when adhesion is reduced.

3. Low-slope (<2:12): Two (2) fully adhered membrane layers.

4. Flashings sandwiched between membrane layers.

5. Metal roofing acts as rainscreen; underlayment provides waterproofing.

6. Slope limitations must still comply with panel design.

7. UV-exposed assemblies may require DELTA-FASSADE S.

8. CSI waterproofing responsibility applies only under CSI 20-Year Warranty.

E. Sealants: Dow 795, PIB tape, Closed-cell backer rod

2.03 PANEL FABRICATION

A. Fabricate per shop drawings.

B. Full 180° double-lock seam legs.

C. Radiused bends; no sharp breaks.

D. Oil-canning minimized.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Verify substrate is flat, clean, and properly sloped.
- B. Confirm underlayment and flashing readiness.

3.02 PREPARATION

- A. Install approved underlayment per manufacturer and CSI guidelines.
- B. Coordinate penetrations and transitions.

3.03 INSTALLATION

A. Installer Qualifications & Craftsmanship:

1. CSI Light Gauge Panel Systems must be installed by qualified sheet metal workers.
2. Installers must interpret drawings and verify dimensions.
3. Handle materials properly to avoid oil canning.
4. CSI Heavy Gauge systems may be installed by trained construction professionals.
5. Waterproofing beneath panels must be performed by qualified roofers or sheet metal workers.

B. Tools, Training & Safety:

1. CSI recommends product-specific installer training.
2. Use precision tools.
3. Comply with OSHA requirements.

C. Field Coordination:

1. A project-specific mock-up is recommended.
2. Coordinate with waterproofing, framing, and glazing trades.
3. Verify substrate, slope, and underlayment.

D. Panel Installation:

1. Install per approved shop drawings and CSI guidelines.
2. Install concealed clips per engineering.
3. Mechanically seam legs in two passes: 90° then 180°.

4. Allow for thermal movement.
5. Ensure watertight flashing integration.

E. Standards of Practice:

All sheet metal fabrication and installation methods shall follow accepted industry standards, including the SMACNA Architectural Sheet Metal Manual, latest edition, unless otherwise shown or specified.