

CSI ARCHITECTURAL METAL LLC
SECTION 07 42 00
CSI-LG-FLP™
LIGHT GAUGE FLAT LOCK WALL PANEL SYSTEM
Manufacturer Specification

SECTION 07 42 00

CSI-LG-FLP™

LIGHT GAUGE FLAT LOCK WALL PANEL SYSTEM

Manufacturer Specification

CSI Architectural Metal LLC

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes

Provide a complete CSI-LG-FLP™ Light Gauge Flat Lock Wall Panel System, including:

1. Factory-fabricated flat lock wall panels.
2. Concealed fastening system.
3. Interlocking flat lock panel assembly.
4. Stainless steel attachment clips.
5. Panel anchors.
6. Panel fasteners.
7. Flashings.
8. Trim.
9. Corners.
10. Closures.
11. Expansion components.
12. Fabricated sheet metal accessories.
13. Penetration flashings fabricated by CSI.
14. Miscellaneous components required for a complete wall panel installation.

B. Related Sections

Coordinate Work with:

- 05 40 00 Cold-Formed Metal Framing
- 06 10 00 Rough Carpentry
- 07 21 00 Thermal Insulation
- 07 25 00 Weather Barriers
- 07 27 00 Air Barriers
- 07 62 00 Sheet Metal Flashing and Trim

- 07 92 00 Joint Sealants

C. Work Not Included

Unless specifically included within CSI's proposal, the following are by others:

- Structural framing
- Exterior sheathing
- Air barrier
- Weather barrier
- Continuous insulation
- Waterproofing membrane
- Sealants outside CSI's scope
- Structural engineering of supporting wall assembly

1.02 REFERENCES

Comply with applicable editions of ASTM, AAMA, ASCE 7, SMACNA Architectural Sheet Metal Manual, Aluminum Association Design Manual and International Building Code.

1.03 PERFORMANCE REQUIREMENTS

Provide an architectural wall panel system capable of resisting wind loads, dead loads, thermal movement and seismic movement where applicable.

Attachment system shall accommodate thermal expansion and contraction without inducing distortion or excessive stresses into finished panel surfaces.

Provide concealed attachment system allowing replacement of individual panels where practical.

1.04 SUBMITTALS

Submit Product Data, Shop Drawings, Panel Layout Drawings, Engineering Calculations where required, Finish Samples, Panel Samples, Flashing Details, Attachment Details, Installation Instructions and Warranty Documents.

1.05 QUALITY ASSURANCE

Manufacturer shall demonstrate documented experience producing architectural flat lock panel systems.

Installer shall demonstrate successful completion of comparable architectural cladding projects.

Conduct preinstallation conference.

Provide project mock-up when required.

1.06 DELIVERY, STORAGE AND HANDLING

Deliver materials with protective covering.

Store materials elevated above ground.

Protect finished surfaces from damage.

Prevent distortion during transportation and storage.

Handle exposed finished materials with clean gloves.

1.07 WARRANTY

Provide Material Warranty, Finish Warranty, Fabrication Warranty and Installer Workmanship Warranty where required.

PART 2 – PRODUCTS

2.01 MANUFACTURER

Basis of Design:

CSI Architectural Metal LLC

Odessa, Florida

Product:

CSI-LG-FLP™

Light Gauge Flat Lock Wall Panel System

2.02 SYSTEM DESCRIPTION

Factory-fabricated concealed-fastened interlocking flat lock wall panel system.

Install over continuous solid substrate.

Panels may be installed horizontally, vertically, diagonally or in custom layouts.

Panels are interchangeable for architectural accent effects and are available in convex, concave,

diamond, square, rectangular, trapezoidal, honeycomb and other custom geometries.

2.03 MATERIALS

Available materials: Aluminum, Stainless Steel, Copper, Brass and Titanium Zinc.

Material thickness shall be as indicated on the Drawings.

2.04 PANEL DIMENSIONS

Panel dimensions shall be project specific.

Available panel configurations include rectangular, square, diamond, convex, concave, trapezoidal, honeycomb and custom geometric shapes.

Joint coverage (reveal): 3/32 inch, 1/8 inch, 3/16 inch, 1/4 inch.

2.05 ATTACHMENT

Provide concealed fastening system.

Provide stainless steel clips and fasteners compatible with panel material.

Clip spacing shall be determined by project-specific engineering.

Exposed fasteners shall not be permitted unless specifically indicated.

2.06 ACCESSORIES

Provide starter strips, closure pieces, corner assemblies, flashings, window trim, door trim, expansion joints, penetration flashings, closures, fasteners, miscellaneous fabricated sheet metal and sealants furnished within CSI scope.

2.07 FINISHES

Available finishes include PVDF coating complying with AAMA 2605, Anodized, Mill Finish, Stainless Steel, Copper, Brass, Titanium Zinc and Custom RAL colors.

2.08 FABRICATION

Fabricate in accordance with approved Shop Drawings. Use precision CNC fabrication and forming equipment. Maintain consistent panel geometry. Provide radiused bends. Do not permit

cracked bends. Fabricate components to minimize visible oil canning. Maintain uniform interlocking engagement.

2.09 QUALITY CONTROL

Inspect material, panel dimensions, joint geometry, finish, fabrication, packaging and shipping. Document non-conforming work prior to shipment.

PART 3 – EXECUTION

3.01 EXAMINATION

Verify wall substrate is complete, dimensions are correct, adjacent work is ready and unsatisfactory conditions have been corrected before installation.

3.02 INSTALLATION

Install in accordance with approved Shop Drawings, Manufacturer's written instructions and project-specific engineering. Maintain straight panel alignment. Install concealed clips at engineered spacing. Maintain consistent joint dimensions. Allow for thermal movement. Protect finished surfaces during installation. Replace damaged components before completion.

3.03 FLASHING

Install flashings true to line. Coordinate flashing installation with adjacent wall components. Provide continuous water-shedding transitions. Maintain proper overlap and drainage.

3.04 FIELD QUALITY CONTROL

Inspect completed installation. Verify panel alignment, joint engagement, secure attachment and flashing installation. Replace damaged components. Correct deficiencies.

3.05 CLEANING

Remove protective film promptly after installation. Clean finished surfaces in accordance with manufacturer's recommendations. Remove debris. Protect completed work until Substantial Completion.

3.06 WARRANTY CLOSEOUT

Submit Manufacturer's Warranty, Finish Warranty, Maintenance Recommendations, Cleaning Instructions and Record Drawings where required.

Design-Assist Note

This specification is intended to serve as the baseline specification for the CSI-LG-FLP Flat Lock Panel Wall System. During the design-assist phase, CSI Architectural Metal LLC can refine and tailor this specification to meet project-specific requirements including panel geometry, materials, plate thicknesses, attachment methods, engineering criteria, wind uplift performance, finishes, testing requirements and warranty provisions.

END OF SECTION 07 42 00