



PROJECT:

**Merced College -
Merced College - Fascia Tile Replacement**
3600 M Street, Merced, CA

Date : 05/09/2022

TETER Project No.: A 21-12275 D

CLIENT:

Merced Community College District
3600 M Street, Merced, CA
Merced Community College District

Client Project No.: 2022-09
DSA File No.: N/A
DSA Appl. No.: N/A

*The following additions, deletions and revisions to the plans, specifications and Addenda shall become a part of the plans and specifications. It is the responsibility of the General Contractor to submit the information contained in this addendum to all subcontractors and suppliers. The Bidder shall acknowledge receipt of the Addendum in the Bid Proposal. (Addendum number of pages: **14** total pages).*

PROJECT MANUAL:

1 – 01: PROJECT MANUAL, SPECIFICATIONS SECTION,
Remove and Replace:

- A. Remove specification section 074213 - METAL FASCIA PANELS: 10 pages
- B. Add to the project manual; section 074293 - METAL FASCIA PANELS: 13 pages

END OF ADDENDUM NO. 01



Jamie Hickman
Architect of Record

SECTION 074293 - METAL FASCIA PANELS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Metal fascia panels.

B. Related Sections:

1. Division 07 Section "Weather Barriers" for weather barrier sheet located behind metal fascia panels.
2. Division 07 Section "Metal fascia panels" for factory-formed metal fascia panels, fascia, gutters, and downspouts.
3. Division 07 Section "Roof Related Copings/Sheet Metal Flashing and Trim" for field- or shop- formed fascia copings, flashings, roof drainage systems, and other sheet metal work not part of metal roof or wall panel assemblies.
4. Division 07 Section "Joint Sealants" for field-applied sealants not otherwise specified in this Section.

C. Alternates: Refer to Division 01 Section "Alternates" for description of Work in this Section affected by alternates.

D. Allowances: Refer to Division 01 Section "Allowances" for description of Work in this Section affected by allowances.

E. Unit Prices: Refer to Division 01 Section "Unit Prices" for description of Work in this Section affected by unit prices.

1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of wall panel and accessory.
- B. SDS: For each type of product specified.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer, Installer, and manufacturer's technical representative
 - 1. Submit Installer qualifications in the form of an original letter on manufacturer's letterhead signed by authorized manufacturer representative.
- B. Field quality-control reports.
- C. Warranties: Sample of special warranties.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For metal fascia panels to include in maintenance manuals.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A manufacturer of plant-fabricated metal fascia panel systems listed in this Section and meeting performance requirements, with a minimum of five years' experience providing metal fascia panel systems for projects of similar type and scope, offering warranty, and technical inspection specified.
- B. Installer Qualifications: An employer of workers trained and certified by manufacturer, including a full-time on-site supervisor with a minimum of five years' experience installing similar work, able to communicate verbally with Contractor, Architect, and employees, and qualified by the manufacturer to furnish warranty of type specified.
- C. Manufacturer's Technical Representative Qualifications: An authorized full-time employee representative of manufacturer experienced in the installation and maintenance of the specified fascia panel system and qualified to determine Installer's compliance with the requirements of this Project.

- D. Source Limitations: Obtain metal fascia panels and accessories from a single source supplied or approved by metal fascia panel manufacturer.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver metal fascia panels, and other manufactured items so as not to be damaged or deformed. Package metal fascia panels for protection during transportation and handling.
- B. Unload, store, and erect metal fascia panels in a manner to prevent bending, warping, twisting, and surface damage.
- C. Stack metal fascia panels horizontally on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal fascia panels to ensure dryness, with positive slope for drainage of water. Do not store metal fascia panels in contact with other materials that might cause staining, denting, or other surface damage.
- D. Retain strippable protective covering on metal fascia panel for period of metal fascia panel installation.
- E. Protect foam-plastic insulation as follows:
 - 1. Do not expose to sunlight, except to extent necessary for period of installation and concealment.
 - 2. Protect against ignition at all times. Do not deliver foam-plastic insulation materials to Project site before installation time.
 - 3. Complete installation and concealment of plastic materials as rapidly as possible in each area of construction.

1.8 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit assembly of metal fascia panels to be performed according to manufacturers' written instructions and warranty requirements.
- B. Field Measurements: Verify locations of structural members and opening dimensions by field measurements before metal fascia panel fabrication, and indicate measurements on Shop Drawings.

1.9 COORDINATION

- A. Coordinate metal fascia panel assemblies with roofing and wall work, rain drainage work, flashing, trim, and construction of studs, fascia, and other adjoining work to provide a leakproof, secure, and noncorrosive installation.
- B. Air Barrier Coordination: Coordinate installation of fascia panel system with installation of air barrier system wall-to-roof transition material specified in Division 07 Section "Air Barrier" to provide a continuous air barrier across roofing and adjacent assemblies.

1.10 WARRANTY

- A. Manufacturer's Warranty: Metal Fascia System Manufacturer's standard form in which Manufacturer agrees to repair or replace components of metal fascia system that fail in materials or workmanship within warranty period, as follows.
 - 1. Form of Warranty: Manufacturer's standard warranty form.
 - 2. Scope of Warranty: Work of this Section and including sheet metal details and termination details installed by the roof system Installer and approved by the Roof System Manufacturer.
 - 3. Warranty Period: 20 years from date of completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design Manufacturers/Products: Subject to compliance with requirements, provide products by one of the following manufacturers comparable to the Basis of Design product specified:
 - 1. Tremco, Inc., Beachwood, OH, (800) 562-2728, www.tremcoroofing.com.

2.2 PERFORMANCE REQUIREMENTS

- A. General Performance: Metal fascia panel assemblies shall comply with performance requirements without failure due to defective manufacture, fabrication, installation, or other defects in construction.
- B. Recycled Content of Steel Products: Postconsumer recycled content plus one-half of pre-consumer recycled content not less than 25 percent.

- C. Air Infiltration: Air leakage through assembly of not more than 0.06 cfm/sq. ft. (0.3 L/s per sq. m) of wall area when tested according to ASTM E 283 at the following test-pressure difference:
 - 1. Test-Pressure Difference: 1.57 lbf/sq. ft. (75 Pa).

- D. Water Penetration under Static Pressure: No water penetration when tested according to ASTM E 331 at the following test-pressure difference:
 - 1. Test-Pressure Difference: 1.57 lbf/sq. ft. (75 Pa).

- E. Structural Performance: Provide metal fascia panel assemblies capable of withstanding the effects the following loads and stresses within limits and under conditions indicated, based on testing according to ASTM E 1592:
 - 1. Wind Loads: Determine loads based on the following minimum design wind pressures:
 - a. Uniform pressure as indicated on Drawings.
 - b. Design pressure resulting from wind speed of 90 mph (40.2 m/s).
 - 2. Deflection Limits: Metal fascia panel assemblies shall withstand wind loads with horizontal deflections no greater than 1/180of the span.

- F. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
 - 1. Temperature Change (Range): 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.

2.3 METAL FASCIA PANELS

- A. General: Provide factory-formed metal fascia panels designed to be installed by lapping and interconnecting side edges of adjacent panels and mechanically attaching through panel to supports using concealed fasteners inside laps. Include accessories required for weathertight installation.

- B. Flush-Profile, Concealed-Fastener Metal Fascia Panels: Solid panels formed with vertical panel edges and flat pan between panel edges; with flush joint between panels.

1. Basis-of-Design Product: Tremco, Inc. Flush Panel Fascia Panels
2. Metallic-Coated Steel Sheet: Aluminum-Zinc Alloy-Coated Steel Sheet: ASTM A 792/A 792M, Class AZ50 coating designation, Grade 50 (Class AZM150 coating designation, Grade 340); structural quality. Pre-painted by the coil-coating process to comply with ASTM A 755/A 755M.
 - a. Minimum Thickness: 0.0236-inch/24 ga. (0.71-mm).
 - b. Surface: Smooth, flat finish.
 - c. Exposed Coil-Coated Finish: Two-coat fluoropolymer.
 - d. Color: Charcoal Grey.
3. Panel Coverage: 12 inches (305 mm).
4. Panel Height: 1 inch (25.4 mm).

2.4 ACCESSORIES

- A. Panel Accessories: Provide components required for a complete metal panel assembly including trim, copings, fascia, mullions, sills, corner units, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal fascia panels, unless otherwise indicated.
 1. Closures: Provide closures at eaves and rakes, fabricated of same metal as metal fascia panels.
 2. Backing Plates: Provide metal backing plates at panel end splices, fabricated from material recommended by manufacturer.
 3. Closure Strips: Closed-cell, expanded, cellular, rubber or crosslinked, polyolefin-foam or closed-cell laminated polyethylene; minimum 1-inch- (25-mm-) thick, flexible closure strips; cut or pre-molded to match metal fascia panel profile. Provide closure strips where indicated or necessary to ensure weathertight construction.
- B. Flashing and Trim: Formed from 0.018-inch (0.46-mm) minimum thickness, zinc-coated(galvanized) steel sheet or aluminum-zinc alloy-coated steel sheet pre-painted with coil coating. Provide flashing and trim as required to seal against weather and to provide finished appearance. Finish flashing and trim with same finish system as adjacent metal fascia panels.
 1. Basis of Design Product: Tremco, TremLock Sheet

2.5 MISCELLANEOUS MATERIALS

- A. Panel Fasteners: Self-tapping screws, bolts, nuts, self-locking rivets and bolts, end-welded studs, and other suitable fasteners designed to withstand design loads. Provide exposed fasteners with heads matching color of metal fascia panels by means of plastic caps or factory-applied coating. Provide EPDM sealing washers.

2.6 FABRICATION

- A. General: Fabricate and finish metal fascia panels and accessories at the factory to greatest extent possible, by manufacturer's standard procedures and processes, as necessary to fulfill indicated performance requirements demonstrated by laboratory testing. Comply with indicated profiles and with dimensional and structural requirements.
 - 1. Site-rolled fabrication of panels or shop-rolling of panels using fixed equipment designed for site-rolling applications does not meet the requirements of this Section.
- B. Fabricate metal fascia panels in a manner that eliminates condensation on interior side of panel and with joints between panels designed to form weathertight seals.
- C. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of panel.
- D. Sheet Metal Accessories: Fabricate flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to the design, dimensions, metal, and other characteristics of item indicated.
 - 1. Form exposed sheet metal accessories that are without excessive oil canning, buckling, and tool marks and that are true to line and levels indicated, with exposed edges folded back to form hems.
 - 2. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces of accessories exposed to view.
 - 3. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal recommended by metal fascia panel manufacturer.
 - a. Size: As recommended by SMACNA's "Architectural Sheet Metal Manual" or metal fascia panel manufacturer for application but not less than thickness of metal being secured.

2.7 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical and painted finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.8 FINISHES

- A. Protect mechanical and painted finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- B. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- C. Steel Panels and Accessories:
 - 1. Two-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
 - 2. Concealed Finish: Apply pretreatment and manufacturer's standard white or light-colored acrylic or polyester backer finish consisting of prime coat and wash coat with a minimum total dry film thickness of 0.5 mil (0.013 mm).

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, metal fascia panel supports, and other conditions affecting performance of work.

1. Examine framing to verify that girts, angles, channels, studs, and other structural panel support members and anchorage have been installed within alignment tolerances required by metal fascia panel manufacturer.
 2. Examine sheathing to verify that sheathing joints are supported by framing or blocking and that installation is within flatness tolerances required by metal fascia panel manufacturer.
 3. Verify that weather-resistant barrier material has been installed over sheathing or backing substrate to prevent air infiltration or water penetration.
 4. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of work.
- B. Examine roughing-in for components and systems penetrating metal fascia panels to verify actual locations of penetrations relative to seam locations of metal fascia panels before metal fascia panel installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Miscellaneous Framing: Install sub girts, base angles, sills, furring, and other miscellaneous wall panel support members and anchorages according to ASTM C 754 and metal fascia panel manufacturer's recommendations.
1. Fascia Framing: Wire-tie or clip furring channels to supports.

3.3 METAL FASCIA PANEL INSTALLATION

- A. General: Install metal fascia panels according to manufacturer's instructions in orientation, sizes, and locations indicated on Drawings. Install panels perpendicular to girts and sub girts unless otherwise indicated. Anchor metal fascia panels and other components of the Work securely in place, with provisions for thermal and structural movement.
1. Commence metal fascia panel installation and install minimum of 300 sq. ft. (27.8 sq. m.) in presence of factory-authorized representative.
 2. Shim or otherwise plumb substrates receiving metal fascia panels.
 3. Flash and seal metal fascia panels at perimeter of all openings. Fasten with self-tapping screws. Do not begin installation until weather barrier and flashings that will be concealed by metal fascia panels are installed.
 4. Install screw fasteners in predrilled holes.

5. Locate and space fastenings in uniform vertical and horizontal alignment.
6. Install flashing and trim as metal fascia panel work proceeds.
7. Locate panel splices over, but not attached to, structural supports. Stagger panel splices and end laps to avoid a four-panel lap splice condition.
8. Apply sealant continuously between metal base channel (sill angle) and concrete and elsewhere as indicated or, if not indicated, as necessary for weather proofing.
9. Align bottom of metal fascia panels and fasten with blind rivets, bolts, or self-tapping screws. Fasten flashings and trim around openings and similar elements with self-tapping screws.
10. Provide weathertight escutcheons for pipe and conduit penetrating exterior walls.

B. Fasteners:

1. Steel Panels: Use stainless-steel fasteners for surfaces exposed to the exterior; use galvanized steel fasteners for surfaces exposed to the interior.

C. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action as recommended by metal fascia panel manufacturer.

D. Joint Sealers: Install gaskets, joint fillers, and sealants where indicated and where required for weathertight performance of metal fascia panel assemblies. Provide types of gaskets, fillers, and sealants indicated or, if not indicated, types recommended by metal fascia panel manufacturer.

1. Metal Fascia System Manufacturer's Recommended Sealant Basis of Design: TremSeal Pro.
2. Seal metal fascia panel end laps with double beads of tape or sealant, full width of panel. Seal side joints where recommended by metal fascia panel manufacturer.
3. Prepare joints and apply sealants to comply with requirements in Division 07 Section "Joint Sealants."
 - a. Sealant in Moving Joints: Elastomeric.
 - b. Sealant in Non-moving Concealed Joints: Butyl.

E. Lap-Seam Metal fascia panels: Fasten metal fascia panels to supports with fasteners at each lapped joint at location and spacing recommended by manufacturer.

1. Lap ribbed or fluted sheets one full rib corrugation. Apply panels and associated items for neat and weathertight enclosure. Avoid "panel creep" or application not true to line.
 2. Provide metal-backed washers under heads of exposed fasteners bearing on weather side of metal fascia panels.
 3. Locate and space exposed fasteners in uniform vertical and horizontal alignment. Use proper tools to obtain controlled uniform compression for positive seal without rupture of washer.
 4. Install screw fasteners with power tools having controlled torque adjusted to compress washer tightly without damage to washer, screw threads, or panels. Install screws in predrilled holes.
 5. Provide sealant tape at lapped joints of metal fascia panels and between panels and protruding equipment, vents, and accessories.
 6. Apply a continuous ribbon of sealant tape to weather-side surface of fastenings on end laps; on side laps of nesting-type panels; on side laps of corrugated nesting-type, ribbed, or fluted panels; and elsewhere as needed to make panels weathertight.
 7. At panel splices, nest panels with minimum 6-inch (152-mm) end lap, sealed with butyl-rubber sealant and fastened together by interlocking clamping plates.
- F. Zee Clips: Provide Zee clips of size indicated or, if not indicated, as required to act as standoff from sub girts for thickness of insulation indicated. Attach to sub girts with fasteners.

3.4 METAL FASCIA PANEL INSTALLATION

- A. In addition to complying with requirements of "Metal Panel Installation, General" Article, install metal fascia panels to comply with the requirements of this article.
- B. Metal Fascia Panels: Provide metal fascia panels full width of fascias. Install panels perpendicular to support framing.
 1. Flash and seal panels with weather closures where metal fascia panels meet walls and at perimeter of all openings.

3.5 ACCESSORY INSTALLATION

- A. General: Install accessories with positive anchorage to building and weathertight mounting, and provide for thermal expansion. Coordinate installation with flashings and other components.

1. Install components required for a complete metal fascia panel assembly including trim, copings, corners, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items.
- B. Flashing and Trim: Comply with performance requirements, manufacturer's installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.
1. Install exposed flashing and trim that is without excessive oil canning, buckling, and tool marks and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and to result in waterproof and weather-resistant performance.
 2. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet (3 m) with no joints allowed within 24 inches (605 mm) of corner or intersection. Where lapped expansion provisions cannot be used or would not be sufficiently weather resistant and waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with mastic sealant(concealed within joints).

3.6 FIELD QUALITY CONTROL

- A. Manufacturer's Technical Representative: Engage a qualified manufacturer's technical representative acceptable to Owner to perform substrate examination, interim observations, and final roof inspections, and to prepare reports for a minimum of 6 days.
- B. Remove and replace metal fascia panels where inspections indicate that they do not comply with specified requirements.
- C. Additional tests and inspections, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

3.7 CLEANING AND PROTECTION

- A. Remove temporary protective coverings and strippable films, if any, as metal fascia panels are installed, unless otherwise indicated in manufacturer's installation instructions. On completion of metal fascia panel installation, clean finished surfaces as recommended by metal fascia panel manufacturer. Maintain in a clean condition during construction.
- B. After metal fascia panel installation, clear weep holes and drainage channels of obstructions, dirt, and sealant.

- C. Replace metal fascia panels that have been damaged or have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION 074293