SECTION 10530

PROTECTIVE COVERS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Commercial Awning System.
- B. Building Facing System.
- C. Canopy System.

1.2 RELATED SECTIONS

- A. Section 03300 Cast-In-Place Concrete.
- B. Section 03410 Structural Precast Concrete.
- C. Section 04810 Unit Masonry Assemblies.
- D. Section 05400 Cold-Formed Metal Framing.

1.3 REFERENCES

- A. AA ADM-1-516166 Aluminum Design Manual; Aluminum Association.
- B. AAMA 605.2 Voluntary Specification for High Performance Coatings on Architectural Extrusions and Panels.
- C. AAMA 607.1 Voluntary Specification and Inspection Methods for Clear Anodic Finishes for Architectural Aluminum.
- D. ASTM A 500 Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
- E. ASTM A 653/A 653M Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- F. ASTM B 117 Standard Method of Salt Spray (Fog) Testing.
- G. ASTM B 209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.

- H. ASTM B 221 Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes.
- I. ASTM D 1735 Standard Practice for Testing Water Resistance of Coating Using Water Fog Apparatus.
- J. ASTM D 2244 Standard Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates.
- K. ASTM D 4214 Standard Test Method for Evaluating the Degree of Chalking of Exterior Paint Films.
- L. ASTM G 87 Standard Practice for Conducting Moist Sulfur Dioxide Tests.

1.4 SYSTEM DESCRIPTION

A. Systems specified in this section to support live load of _____ pounds per square foot, plus weight of system, and to resist wind uplift of _____ pounds per square foot.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's descriptive literature for specified systems, including all components.
- C. Shop Drawings: Indicate layouts heights, component connection details, and details of interface with adjacent construction.
- D. Selection Samples: Two sets of color chips representing manufacturer's full range of available colors.
- E. Verification Samples: Two samples, minimum size 6 inches square, representing actual color and finish of products to be installed.
- F. Design Data: Computed in accordance with AA "Aluminum Design Manual" for performance requirements specified in SYSTEM DESCRIPTION Article of PART 1 of this section, bearing seal and signature of registered professional Structural Engineer licensed to practice in the State in which the Project is located.
- G. Certificates:

- Contractor's certification that manufacturer of products of this section meet specified qualifications.
- 2. Manufacturer's certification that installer of this section is approved.
- H. Manufacturer's printed installation instructions for specified systems, including each component.
- I. Closeout Submittals: Warranty documents, issued and executed by manufacturer, countersigned by Contractor.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum five (5) years documented experience producing systems specified in this section.
- B. Installer Qualifications: Minimum three (3) years documented experience installing systems specified in this section, and approved by manufacturer.
- C. Regulatory Requirements: Comply with requirements of building authorities having jurisdiction in Project location.
- D. Pre-Installation Meeting:
 - 1. Convene at job site seven (7) calendar days prior to scheduled beginning of construction activities of this section to review requirements of this section.
 - 2. Require attendance by representatives of the installer and other entities directly affecting, or affected by, construction activities of this section.
 - 3. Notify Architect four (4) calendar days in advance of scheduled meeting date.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Store system components in accordance with manufacturer's instructions until installation.

1.8 WARRANTY

A. Furnish systems manufacturer's standard warranty against defects in product workmanship and materials, including deterioration of metal finishes.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Allmet Building Products, Inc.; 227 South Town East Boulevard, Mesquite TX 75149; P.O. Box 850163, Mesquite TX 75185-0163; ASD. Tel: (972) 285-8811, Fax: (800) 998-2898 or (972) 882-8818.
- B. Requests for substitutions will be considered in accordance with provisions of Section 01600.
- C. Substitutions: Not permitted.
- D. Unless otherwise specified for an individual product or material, supply all products specified in this section from the same manufacturer.

2.2 COMMERCIAL AWNING SYSTEM

- A. Acceptable System: Allmet Commercial Awning System.
- B. Face Panels: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28, 0.025 inch sheet thickness, 3-5/16 inches wide; factory formed long edges rolled to 5/16 inch radius.

C. Face Panels:

- 1. Material: Translucent acrylic sheet, 0.025 inch sheet thickness, 3-5/16 inches wide; factory formed long edges rolled to 5/16 inch radius.
- 2. Color: Selected from full range of manufacturer's standard colors.
- 3. Color:
- 4. Color: Specified in SCHEDULES Article of this section.
- D. Stringers: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28, 0.040 inch sheet thickness; formed for snap-in ventilated installation of face panels.
- E. Stringers: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28, 0.040 inch sheet thickness; formed for snap-in sealed installation of face panels.
- F. Stringers: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28, 0.040 inch sheet thickness; formed for snap-in open-louver installation of face panels.

- G. Stringers: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28, 0.040 inch sheet thickness; formed for snap-in closed-louver installation of face panels.
- H. Soffit Panels: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28, 0.032 inch sheet thickness; formed to 6-inch wide flat profile.

I. Structural Components:

- 1. Steel components: Steel sheet conforming to ASTM A 653/A 653M, commercial quality, 0.040 inch sheet thickness, galvanized to G90/Z725 coating.
- 2. Aluminum components: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28, 0.040 inch sheet thickness.
- 3. Mounting brackets: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28, 0.080 inch sheet thickness.
- 4. Fasteners: Non-corrodible, or having non-corrodible finish.
- J. Finish: Baked-on polyester coating, conforming to AAMA 605.2, applied prior to fabrication, except as indicated otherwise; materials for components shall receive chemical cleaning, conversion coating, and baked-on primer coating prior to application of finish coat.
 - 1. High Acid Salt Spray (HASS) Test, conducted in accordance with ASTM B 117: 500 hours.
 - 2. Humidity resistance test, conducted in accordance with ASTM D 1735: 500 hours.
 - 3. Sulfur dioxide test, conducted in accordance with ASTM G 87: 500 hours.
 - 4. Weathering, color retention/chalk test; Dew Cycle Weatherometer test of 300 hours: Chalking not in excess of 8 when rated in accordance with ASTM D 4214; color change not in excess of 7E Hunter units when rated in accordance with ASTM D 2244.
 - 5. Boiling water test: No lifting, discoloration, or blistering after 7 hours; no lifting or discoloration after 72 hours.

К.	Colors:										
	1.	Face	panels:	Manufacturer's	standard	color					

	•
2.	Face panels: Custom color
3.	Soffit panels and structural components:
	Manufacturer's standard color

4. Soffit panels and structural components: Custom color _____.

- L. Colors: Selected from manufacturer's full range of available colors.
- M. Colors: Specified in SCHEDULE Article of PART 3 of this section.

2.3 BUILDING FACING SYSTEM

- A. Face Panels:
 - 1. Material: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28, 0.025 inch sheet thickness, 3-5/16 inches wide; factory formed long edges rolled to 5/16 inch radius.
 - 2. Color: Selected from full range of manufacturer's standard colors.
 - 3. Color: .
 - 4. Color: Specified in SCHEDULES Article of this section.
- B. Stringers: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28, 0.040 inch sheet thickness; formed for snap-in ventilated installation of face panels.
- C. Stringers: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28, 0.040 inch sheet thickness; formed for snap-in sealed installation of face panels.
- D. Stringers: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28, 0.040 inch sheet thickness; formed for snap-in open-louver installation of face panels.
- E. Stringers: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28, 0.040 inch sheet thickness; formed for snap-in closed-louver installation of face panels.
- F. Soffit Panels: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28, 0.032 inch sheet thickness; factory finished and formed to 6-inch wide flat profile.
- G. Fasteners: Non-corrodible, or having non-corrodible finish; type specified in manufacturer's installation instructions for project conditions.
- H. Finish: Baked-on polyester coating, conforming to AAMA 605.2, applied prior to fabrication, except as indicated otherwise; materials for components shall receive chemical cleaning, conversion coating, and baked-on primer coating prior to application of finish coat.

- 1. Face panels: Manufacturer's standard color
- 2. Face panels: Custom color _____.
- 3. Soffit panels and structural components:
 Manufacturer's standard color
- 4. Soffit panels and structural components: Custom color .
- 5. Colors: Selected from manufacturer's full range of available colors.
- 6. Colors: Specified in SCHEDULE Article of PART 3 of this section.

2.4 CANOPY SYSTEM

- A. Acceptable System: Allmet Canopy System.
- B. Roof Panels: Allmet Twin-Vee Panel.
 - 1. Material: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28 or alloy 3004-H36.
 - 2. Material: Galvanized steel sheet conforming to ASTM A 653/A 653M, G90/Z725 coating, cold-rolled, commercial quality.
 - 3. Sheet thickness: In accordance with design data for specified performance requirements.
 - 4. Profile: Twin V-profile with longitudinal ribs at ridges, 12-inch panel width, 2.50 inches profile height; long edges formed to interlock with adjacent panels.
- C. Roof Panels: Allmet Grand Prix Panel.
 - 1. Material: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28.
 - 2. Material: Galvanized steel sheet conforming to ASTM A 653/A 653M, G90/Z725 coating, cold-rolled, commercial quality.
 - 3. Sheet thickness: In accordance with design data for specified performance requirements.
 - 4. Profile: Flat pan profile, 12-inch panel width, 2.50 inches profile height; long edges formed to interlock with adjacent panels.
- D. Roof Panels: Allmet 8-Inch Flat Panel.
 - 1. Material: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28.
 - 2. Material: Galvanized steel sheet conforming to ASTM A 653/A 653M, G90/Z725 coating, cold-rolled, commercial quality.

- 3. Sheet thickness: In accordance with design data for specified performance requirements.
- 4. Profile: Flat pan profile with longitudinal ribs at center of pan, 8-inch panel width, 2.50 inches profile height; with long edges formed to interlock with adjacent panels.
- E. Fascia: Allmet 6-1/2 Inch R-F Fascia.
 - 1. Material: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28.
 - 2. Sheet thickness: 0.050 inch.
 - 3. Profile: Box profile with two continuous horizontal recesses in face, integral gutter, 6.33 inches profile height, 3.25 inches gutter width.
- F. Fascia: Allmet 6-Inch Extruded Fascia.
 - 1. Material: Extruded aluminum conforming to ASTM B 221, alloy 6063-T6.
 - 2. Extrusion wall thickness: 0.080 inch.
 - 3. Profile: Box profile with two longitudinal recessed channels in face for installation of decorative trim, integral gutter, 6.00 inches profile height, 3.44 inches gutter width.
- G. Fascia Corner Sections: Manufacturer's standard for indicated fascia, of same material, sheet thickness, and finish as fascia; factory-fabricated and heliarc-welded, with smooth hairline miter seams.
- H. Fascia Corner Sections: Same material, profile, extrusion wall thickness, and finish as fascia; factory-fabricated and heliarc-welded, with smooth hairline miter seams.
- I. Wall Panels: Allmet Decor Wall Panel.
 - 1. Material: Aluminum sheet conforming to ASTM B 209, alloy 3005-H28, sheet thickness 0.032 inch; formed 6 inches wide by 3/4 inch projection, with long edges formed to interlock with adjacent panels.
 - 2. Profile: Concave.
 - 3. Profile: Convex.
 - 4. Profile: Flat.
- J. I-Beams, C-Beams, and Box Beams:
 - 1. Material: Extruded aluminum conforming to ASTM B 221, alloy 6061-T6 or alloy 6063-T6.
 - Profiles and structural properties: In accordance with design data for specified performance requirements.
- K. Formed Sheet Metal Tubes:

- 1. Material: Aluminum sheet conforming to ASTM B 209, alloy 3004-H36; sheet thickness: 0.050 inch.
- 2. Material: Galvanized steel sheet conforming to ASTM A 653/A 653M, G90/Z725 coating, cold-rolled, commercial quality; sheet thickness 0.050 inch.
- 3. Profile: 3-inch diameter tube.

L. Posts:

- 1. Material: Extruded aluminum conforming to ASTM B 221, alloy 6063-T6.
- 2. Structural properties: In accordance with design data for specified performance requirements.
- 3. Profile: 3-inch by 3-inch, smooth.
- 4. Profile: 3-inch by 3-inch, fluted.
- 5. Profile: 4-inch by 4-inch, smooth.

M. Posts:

- 1. Material: Seamless or welded steel tube conforming to ASTM A 500.
- 2. Profiles and structural properties: In accordance with design data for specified performance requirements.
- N. Overhead Support Assembly: Struts of 2 inch by 2 inch extruded aluminum tube conforming to ASTM B 221, alloy 6063-T6, with brackets, couplings, and connectors of same material, sized in accordance with design data for specified performance requirements; components clear anodized to conform to AAMA 607.1, R204R1.
- O. Fasteners and Connectors: Brackets, clip angles, bolts, nuts, washers, and other items indicated in approved shop drawings or required in design data; bolts, nuts, washer, and other fasteners to be non-corrodible material or to have non-corrodible finish.
- P. Finish: Baked-on polyester coating, conforming to AAMA 605.2, applied prior to fabrication, except as indicated otherwise; materials for components shall receive chemical cleaning, conversion coating, and baked-on primer coating prior to application of finish coat.
 - 1. Roof panels: Manufacturer's standard color
 - 2. Roof panels: Custom color .
 - 3. Wall panels: Manufacturer's standard color
 - 4. Wall panels: Custom color _____.
 - 5. Fascia panels and structural components: Manufacturer's standard color ______.

- 6. Fascia panels and structural components: Custom color
- 7. Colors: Selected from manufacturer's full range of available colors.
- 8. Colors: Specified in SCHEDULE Article of PART 3 of this section.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that project conditions are as indicated on shop drawings.
- B. Installer's Examination:
 - 1. Have installer of this section examine conditions under which construction activities of this section are to be performed, then submit written notification if such conditions are unacceptable.
 - 2. Transmit two copies of installer's report to Architect within 24 hours of receipt.
 - 3. Beginning construction activities of this section before unacceptable conditions have been corrected is prohibited.
 - 4. Beginning construction activities of this section indicates installer's acceptance of conditions.

3.2 PREPARATION

A. Ensure that adjacent surfaces, structures, and finishes are protected from damage by construction activities of this section.

3.3 INSTALLATION

- A. Install systems specified in this section in accordance with shop drawings and manufacturer's installation instructions.
- B. Placing of concrete for post bases is specified in Section 03300.

3.4 CLEANING

A. Remove dust or other foreign matter from component surfaces; clean finishes in accordance with manufacturer's instructions.

3.5 PROTECTION OF INSTALLED PRODUCTS

- A. Ensure that finishes and structure of installed systems are not damaged by subsequent construction activities.
- B. If minor damage to finishes occurs, repair damage in accordance with manufacturer's recommendations; provide replacement components if repaired finishes are unacceptable to Architect.

3.6 SCHEDULE

Α.	Awning Number: Allmet Commerc Location: Employee Entrance.	ial	Awr	ning.		
	Face panels: Color	•				
	Soffit panels: Color					
	Wall facing panels above awning:	Mat	ch	color	of	awning

B. Canopy Number __: Allmet Canopy System.
Location: Loading Dock, Walkway Covers, Carports,
Canopies.

Roof panels: Color white. Fascia: Color dark bronze. Posts: Match color of fascia.

END OF SECTION