DIVISION 10 - SPECIALTIES

SECTION 107300 - PREFABRICATED ALUMINUM WALKWAY CANOPY

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Furnish and install pre-engineered, prefabricated aluminum canopy system(s), either fully free-standing or partially free-standing and partially supported on other construction, as shown on the drawings and specified herein.

1.02 RELATED SECTIONS

A. Division 03 Concrete specification sections.

B. Division 31 Earthwork specification sections.

C. Division 32 Exterior Improvement specification sections.

1.03 REFERENCES

A. Reference Standards:

1. BCNYS – Building Code of NYS for snow and wind load requirements.

2. ASTM - American Society for Testing and Materials.

3. ANSI – American National Standards Institute.

3. AWS - American Welding Society.

1.04 SUBMITTALS

A. General:

1. Submittals shall be in accordance with section 001300.

2. Submit shop drawings and structural calculations, both signed and sealed by a Professional Engineer licensed in the State of New York.

B. Product Design Requirements:

1. Meet design load requirements as shown on the drawings or contained in the BCNYS.

C. Submittal Requirements:

1. Shop drawings and structural calculations shall include, at a minimum:

a. Calculations:

1. References to building codes and design manuals used for calculations.

2. Identification of lateral force-resisting system.

3. Formulas used for determining snow, wind, and seismic loads to specific project location.

4. Connection design for structural bolts, welds, plate thicknesses, and anchorage to the foundation.

5. Required combinations of gravity and lateral loads shall be provided by the manufacturer to the Architect of Record for back-checking foundation design.

b. Shop Drawings

1. Anchor bolt layout.

2. Three-dimensional views of frame.

3. Member sizes and locations.

4. Structural connection details, including bolt sizes and plate thicknesses.

5. Roof trim and connection details.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications:

1. Minimum of 10 years in the industry.

2. Licensed structural engineer.

3. Certified AWS Welding Inspector.

4. AWS certified welders.

5. Controlled finishing system to include, pretreatment, primer, and powder coat.

1.06 MANUFACTURER WARRANTY

A. 5-year limited warranty on canopy and finish.

PART 2 – PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. For purpose of determining quality and performance requirements, this specification is based on products manufactured by Upside Innovations, LLC, 5470 Spellmire Drive, West Chester, OH 45246.

2.02 MATERIALS

A. Aluminum decking constructed of 3004-H36 aluminum alloy or 6036-T6 mill finish with powder coating, extruded flat pan.

1. Extruded flat plan 3”x6”x.065”.

2. Deck panels attached to inner flange of gutters with (2) #12 Tek screws each end.

3. Decking cut to length up to 12 feet.

B. Posts and gutters constructed of 6061-T6 extruded aluminum.

1. Internal drainage system directed from canopy decking into gutter system.

2. 6” gutter fascia, 4” wide. 0.100” thickness.

3. Gutter sections connected with 12” splices.

4. Gutter corners 18” x 18”, prefabricated.

5. 4”x4”x0.125” aluminum posts function as downspouts with drainage holes and deflector plates.

6. 8”x8”x0.5” base plate provided on each post.

7. Posts/base plates anchored to concrete footings or other foundation. Anchorage engineered by the manufacturer. Foundation engineered by the architect.

C. All accessories and fasteners shall be color-matched.

PART 3 – EXECUTION

3.01 STORAGE AND HANDLING

A. Store product elevated from soils to allow air circulation and to prevent introduction mold, fungi, decay or insects to the product.

C. Product must be handled with protective straps or padded forks if lifting with mechanical equipment. Use of chain or cable to lift product into place will not be accepted.

3.02 ERECTION

A. Conditions:

1. Inspect foundation and existing and constructed conditions to ensure satisfactory for erection of canopy.

2. Report any discrepancies or issues. Proceeding with installation is acceptance of all surrounding conditions.

B. Installation:

1. Install plumb and level according to manufacturer's installation instructions, these specifications, and details indicated on the Construction Drawings.

C. Tolerances:

1. Tolerances on prefabricated structural members cannot be increased. No field slotting or opening of holes will be allowed. It is therefore essential that contractors conform to the tolerances specified on the installation drawings for anchor bolt or post layout details.

END OF SECTION