SECTION 133419

METAL BUILDING SYSTEMS

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**NOTE TO SPECIFIER**

*Use this Specification Section for Mail Processing Facilities.*

***This is a Type 2 Specification with primarily editable text; therefore, most of the text can be edited, but there is some required text which is noted within the Section with a “Note to Specifier.” Do not revise these paragraphs without an approved Deviation from USPS Headquarters, Facilities Program Management, through the USPS Project Manager.***

*For Design/Build projects, do not delete the Notes to Specifier in this Section so that they may be available to Design/Build entity when preparing the Construction Documents.*

*For the Design/Build entity, this specification is intended as a guide for the Architect/Engineer preparing the Construction Documents.*

*The MPF specifications may also be used for Design/Bid/Build projects. In either case, it is the responsibility of the design professional to edit the Specifications Sections as appropriate for the project.*

*Text shown in brackets must be modified as needed for project specific requirements.* *See the “Using the USPS Guide Specifications” document in Folder C for more information.*

*The last date that USPS revised this standard specification section occurs in two places, at the end of this section and in the Table of Contents. If the date in this section matches the date in the Table of Contents, then you are using the latest version. Do not delete or revise the “last revised” date at the end of the section during the development of the Project Manual.*

*The footer in this section should be edited to replace the text, “USPS MPF SPECIFICATION” with the project name, and the blank date in the center should be replaced with the submission date, for interim design reviews, or the issue date of the completed Project Manual.*

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PART 1 – GENERAL

1.1 SUMMARY

A. Pre-engineered Building including steel framing, interior and exterior metal wall panels, building insulation, metal roof panels, fasteners, gutters, downspouts, trim, flashings, steel doors, roof curbs, equipment supports, hatches and walkways.

1.2 SUBMITTALS

1. Product Data: Required
2. Shop Drawings: Required
3. Structural Calculations: Required
4. Samples: Required

1.3 QUALITY ASSURANCE

A. Regulatory Requirements

1. Loads:

a) Applicable Building Code

b) American Society of Civil Engineers (ASCE)

2. Roof Uplift: UL and FM classification 1-90

B. Quality Standards

1. Steel Frame: American Iron and Steel Institute (AISI)

2. Flashing, trim, gutters and downspouts: SMACNA – Architectural Steel Metal Manual.

C. Shop drawings and calculations shall be prepared by a professional engineer licensed in the State the project is being built and shall bear his seal.

PART 2 - PRODUCTS

2.1 MANUFACTURERS/PRODUCTS

A. Steel Framing: Multi-span rigid frame, clear span, with standard modules.

B. Exterior Wall Panels:

1. Type: Manufacturer’s standard type installed vertically.

2. Material: 22 gauge, galvanized steel with G90 coating.

3. Finish: Fluoropolymer, Kynar 500, standard color.

C. Interior (liner) Panels

1, Manufacturers standard type, installed vertically.

2. Material: 26 gauge galvanized steel with G 90 coating.

3. Finish: painted.

D. Roof Panels:

1. Type: Manufacturer’s standard standing seam, roll formed panels.

2. Flat panel between seams.

3. Material: 22 gauge galvanized steel with 690 coating.

4. Finish: Fluoropolymer, Kynar 500, standard color.

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**NOTE TO SPECIFIER**

Do not modify the DOE requirements.

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a) DOE Energy Star

b) Solar reflectance per Cool Roof Rating Council (CRRC):

Initial reflectance: 0.65, minimum.

Three years after installation: 0.50, minimum.

E. Roof and wall insulation:

1. Fiberglass roll insulation with 0.6 lb per cubic foot density, thickness as indicated on drawings.

2. Where exposed, insulation to be faced with white polymer film and have a flame spread rating of 25 or less in accordance with ASTM E84

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F. Gutters, Downspouts and Trim

1. Material: 22 gauge galvanized steel with G90 coating.

2. Finish: to match wall panels.

G. Roof Curbs, Equipment Supports, Hatches and Walkways: Manufacturer’s standard construction as applicable to project.

H. Exterior Steel Doors Type: Hollow metal doors and frames.

1. Material: 14 gauge frame and 16 gauge door.

2. Finish: Galvanized steel with G90 coating field painted.

3. Hardware: Ball bearing hinges, mortised lockset, closer, threshold and weatherstripping.

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**NOTE TO SPECIFIER**

Use overhead coiling doors for storage buildings only. See Section 083614 for overhead platform doors for MPFs.

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I. Overhead Coiling Doors

1. Type: Overhead coiling, with counter balance assembly, 18 gauge flat slat curtain, steel guides.

2. Operation: Motor operated, single key activated wall mounted switch, security lockout capability.

3. Finish: Shop primed and field painted.

J. Manufacturer: Butler, Star, or Varco-Pruden, or approved equal.

PART 3 – EXECUTION

3.1 Work from approved shop drawings. Install all components in accordance with manufacturer’s guidelines, printed instructions and approved shop drawings.

END OF SECTION

USPS MPF Specification Last Revised: 10/1/2022