

PART 1 – GENERAL**1.1 STRUCTURE DESCRIPTION**

- A. XYZ

1.2 DESIGN REQUIREMENTS

- A. Meet the design intent shown on the CEAS+ drawings created for this project.
1. Design criteria
 2. Members sizes
 3. Hidden bolted connections between structural members
 4. Architecturally Exposed Structural Steel (AESS) – as defined by the American Institute of Steel Construction (AISC)
 5. Each columns anchored with (4) anchor bolts to comply with OSHA 1926.755(a)(1).
 6. No field welding permitted
 7. No field painting permitted
 8. Roof dimensions and slopes
 9. Exposed steel roof fasteners (if applicable) powder coated by manufacturer

1.3 SUBMITTALS

- A. Drawings and calculations sealed by a professional engineer licensed in the appropriate state.
- B. Only manufacturers that submit drawings and calculations prior to bid shall be considered .
- C. Manufacturer must be able to submit appropriate laboratory tests for the following:
1. Frame finish requirements listed in PART 2 of this specification.

1.4 TECHNICAL SUPPORT

- A. Manufacturer must have in-house engineering department and a professional engineer licensed in the appropriate state to answer technical questions.

1.5 QUALITY ASSURANCE

- A. General
1. Fabrication procedures shall comply with applicable codes and local regulations.
- B. Manufacturer qualifications
1. Minimum (10) years engineering and fabricating pre-engineered structures
 2. Manufacturer owned and operated powder coat paint finish system
 3. All AWS certified welders
 4. Full-time professional engineer on staff licensed in the appropriate state
 5. Full-time AWS certified associate welding inspector on staff
 6. Full-time quality assurance manager on staff
 7. Full-time LEED AP on staff
- C. Manufacturer certifications
1. PCI 4000 certification through Powder Coating Institute (PCI)

1.6 MANUFACTURER WARRANTY

- A. Structure must have (10) year limited warranty on steel frame members.
- B. Structure must have (10) year limited warranty on paint system.
- C. Pass through warranty of roofing manufacturer shall be provided upon request.
- D. Pass through warranty of [xyx] shall be provided upon request.

PART 2 – PRODUCTS**2.1 MANUFACTURER**

- A. Acceptable manufacturers
 - 1. CEAS+, a division of PorterCorp.
 - a. 4240 N 136th Ave., Holland, MI 49424; 844-748-9698; www.ceasplus.com.
 - b. The local sales representative is XYZ
- B. Substitution limitations
 - 1. The engineering for this structure is only applicable if CEAS+ supplies the material.
 - 2. If the contractor elects to substitute a different structure, they are responsible to obtain the necessary local building department approval with:
 - a. No cost to the owner or architect
 - b. No change to the construction schedule
 - 3. Substitutions must be approved a minimum of (10) days before bid.
 - 4. All approved manufacturers shall be notified in writing before the bid date.
 - 5. Substitute manufacturers shall not be allowed to bid without written notification.
 - 6. Substitute manufacturers must meet “Manufacturer qualifications” listed in PART 1 of this specification.
 - 7. Substitute manufacturers must provide proof of “Manufacturer certifications” above.
 - 8. Substitute manufacturers must provide paint finish described in “Frame Finish” below.

2.2 FRAME

- A. Materials
 - 1. Anchor bolts: see drawings for requirements.
 - 2. Structural steel: see drawings for requirements.
 - 3. Structural bolts: see drawings for requirements.
- B. Finish
 - 1. Frame finish: Poli-5000 powder coat. No field painting permitted.
 - a. Components shall be cleaned, pre-treated, and finished at a facility owned and directly supervised by the manufacturer.
 - b. Components shall be shot blasted to SSPC-SP10 near-white blast cleaning. SSPC-SP2 hand tool cleaning will not be an acceptable alternative.
 - c. Components shall be pretreated in a (3) stage iron phosphate or equal washer.
 - d. Components shall receive epoxy primer coat for superior corrosion protection.
 - e. Components shall receive top coat of Super Durable TGIC powder coat.
 - f. Finish shall not have any VOC emissions.
 - g. Manufacturer shall be able to produce documentation stating sample production components have been tested to meet the following:
 - i. Salt spray resistance per ASTM B 117/ ASTM D 1654 to 10,000 hours with no creep from scribe line and rating of 10.
 - ii. Humidity resistance per ASTM D2247-02 to 5,000 hours with no loss of adhesion or blistering.

- iii. Color/UV resistance per ASTM G154-04 to 2,000 hours exposure, alternate cycles with results of no chalking, 75% color retention, color variation maximum 3.0 E variation CIE formula (before and after 2,000 hours exposure).
 2. Frame color: determined by owner.
- C. Fabrication
1. Fabricate components to permit bolted connections on site. No field welding permitted.
 2. Label each member with unique part number to streamline erection.
 3. Welding requirements: see drawings for requirements.

2.3 ROOF

- A. Materials
1. Roof material: see drawings for requirements. **(add additional information as required)**
 2. Roof hardware: see drawings for requirements.
- B. Finish
1. Roof finish: Kynar 500 high-performance resin-based paint **(revise as required)**
 2. Roof color: determined by owner.

2.4 MISCELLANEOUS

- A. Materials
1. Concrete material: see drawings for requirements. Concrete not provided by manufacturer.

PART 3 – EXECUTION**3.1 STORAGE AND HANDLING**

- A. Protect material after delivery from weather, sunlight, and damage.
- B. Elevate material to allow circulation and reduce mold, fungi decay, and insect infestation.
- C. Handle material with protective straps or padded forklift. Handling material with chain or cable will not be accepted and may void manufacturer's warranty.
- D. To prevent moisture damage to any wood material (if applicable), keep wood packaged before installation and cover immediately with any secondary roof material.

3.2 ERECTION

- A. Install components according to manufacturer's installation drawings and these specifications.
- B. Anchor bolt and column layout is critical.
- C. No field slotting or opening of holes will be allowed. Tolerances on steel structural members are set according to AISC construction practices, followed during fabrication, and cannot be increased.
- D. After installation, restore damaged surfaces to the original condition using touch-up paint provided by manufacturer. If the architect does not accept that, replace damaged material at no cost to the owner.
- E. Coordinate as required with other disciplines (electrical, plumbing, etc.)
- F. Comply with all applicable OSHA requirements

3.3 REPAIR

- A. Do not attempt any field changes to the structure without first contacting the manufacturer.

3.4 QUALITY CONTROL

- A. Tests and inspections during erection are not required by the manufacturer, but may be required by others.

END OF SECTION