SP- 157034
(New)

SPECIAL PROVISIONS
FOR
PROTECTIVE COVERS

Johnson County
RT-C052(105)--9H-52

Effective Date
October 17, 2017

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

PART 1 GENERAL

1.1 DESCRIPTION

A. Info Kiosk - IFO 4-6 (Info. Station) with Multi-Rib Metal Roof "R" Panel.

B. Roof Slope: 6/12.

C. Minimum Clearance Height (MCH): Minimum clearance height under the structure indicates the lowest height of a member from finish grade for clearance under the structure. This is generally the clearance under roof eave or frame, whichever is lower.

1.2 REFERENCES

A. AISC - American Institute of Steel Construction Manual of Steel Construction.
B. ASTM - American Society for Testing and Materials.
C. AWS - American Welding Society.
D. LEED - Leadership in Energy and Environmental Design.
E. OSHA - Occupational Safety and Health Administration Steel Erection Standard 29 CFR 1926 Subpart R-Steel Erection.
F. PCI - Powder Coating Institute.
G. SSPC - The Society for Protective Coatings.

1.3 SUBMITTALS

A. Submit four sets of submittal drawings and two sets of calc books, both signed and sealed by a Professional Engineer licensed in the State of IA.

B. Product Design Requirements:

The building shall meet the following design requirements as shown on the drawings:

1. Building Code: IBC 2009.
2. Ground Snow Load (Pg): 25.
3. Basic Wind Speed (V): 90.
4. Seismic Design: See drawings.

C. Submittal Requirements: Calculations and Submittal drawings shall include, at a minimum:

1. Calculations:
   a. References to building codes and design manuals used for calculations.
   b. Identification of lateral force resisting system.
   c. Formulas used for determining snow, wind, and seismic loads to specific project location.
   d. Three-dimensional modeling input, model geometry, and analysis results.
   e. Member design results and controlling load combinations.
   f. Connection design for structural bolts, welds, plate thicknesses, and anchorage to the foundation.
   g. Foundation designs shall include the required combinations of gravity and lateral loads.

2. Submittal Drawings:
   a. Anchor bolt layout.
   b. Foundation design.
   c. Three dimensional views of frame.
   d. Member sizes and locations.
   e. Structural connection details, including bolt sizes and plate thicknesses.
   f. Roof trim and connection details for installation clarity.

D. Foundation Design:

1. The shelter shall be set on foundations designed by manufacturer.
2. Foundation materials shall be provided by contractor.
3. Owner shall provide manufacturer with complete information about the site including soil bearing capacity and lateral load capacity.
4. If soil data are not provided, foundations will be designed to the minimum values identified in the governing building code.

E. Anchor Bolts: Anchor bolts shall be provided by manufacturer.

1.4 QUALITY ASSURANCE.

A. Manufacturer Qualifications:

1. Minimum of 10 years in the shelter construction industry.
2. Full time on-staff Licensed Engineer.
3. Full time on-staff AWS Certified Associate Welding Inspector.
4. Full time on-staff Quality Assurance Manager.
5. Full time on-staff LEED AP.
6. All welders AWS Certified.
7. Manufacturer owned and controlled finishing system to include shot blast, pretreatment, primer, and top coat.
8. Published Quality Management System.
9. Annual audit of Quality System and Plant Processes by Third Party Agency.
10. Annual audit of powder coat finish system by Third Party Agency (PCI).

B. Manufacturer's Certificatons:

1. PCI 4000 S Certified, Certification thru Powder Coating Institute for original equipment manufacturers (OEMs) to evaluate process on entire finish system to add powder coat over steel.
2. City of Los Angeles, CA Approved Fabricator Type I Steel.
3. Clark County, NV Approved Fabricator steel.
4. City of Houston, TX Approved Fabricator Structural Steel and Structural Insulated Panels.
5. Miami Dade County Certificate of Competency for Structural Steel and Miscellaneous Metal Products and Assemblies.
6. State of Utah Approved Fabricator for Medium and High Strength Steel.
7. City of Riverside, CA Approved Fabricator Type I Steel.
8. City of Phoenix, AZ Approved Steel Fabricator.

1.5 FIELD OR SITE CONDITIONS

Foundations shall be at the same elevation unless specifically noted otherwise on the drawings.

1.6 MANUFACTURER WARRANTY

A. Shelter must have a 10 year limited warranty on steel frame members.

B. Shelter must have a 10 year limited warranty on paint system. Pass through warranty of Metal Roof manufacturer shall be provided upon request.

PART 2 - PRODUCTS

2.1 SHELTER SYSTEM AND MATERIALS

A. Manufacturers:

1. Acceptable Manufacturers:

a. Poligon, a Product of Porter Corp, 4240 N 136th Ave., Holland, MI,49424; 616.399.1963; E-mail: info@poligon.com; www.poligon.com. Receive pricing from: Mark Boland, Boland Recreation, 2347 Oak Park Road, MARSHALLTOWN, IA 50158, Phone 800-798-7589, Email Iowaparkplace@mchsi.com.

b. Icon Shelter Systems, Inc. 7900 Logistic Drive, Ste. C, Zeeland, MI 49464 (800)748-0985.Receive pricing from: Larry Rife, CPSI, ABCreative 278 S.E. Cedar Wood Drive, Grimes, Iowa 50111, Phone: 515-333-9800, Email: Larry@ABCreative.net.

c. Classic Recreation Systems, Inc. Fry and Associates, Inc. sales@fryinc.com; (800)444-9787.

2. The product shall be designed, produced, and finished at a facility operated and directly supervised by the supplier who has a minimum of 10 years in the business of making pre-manufactured shelters.

B. Substitution Limitations:

1. Substitutions must be approved a minimum of 10 days before bid. All approved manufacturers shall be notified in writing before the bid date and shall not be allowed to bid without written notification.
2. Alternate suppliers must meet the qualifications and provide proof of certifications listed under Section 1.4 Quality Assurance.

3. Alternate suppliers must provide an equivalent paint system to Poligon's Poli-5000 listed under Section 2.1 C. 8. Finishes.
4. Staff members' cumulative experience in fabrication will not be an acceptable alternative for manufacturer's experience in the shelter construction industry.

C. Product Requirements and Materials:

1. General:
   The pre-engineered package shall be pre-cut unless otherwise noted and prefabricated which will include all parts necessary to field construct the shelter. The shelter shall be shipped knocked down to minimize shipping expenses. Field labor will be kept to a minimum by pre-manufactured parts. Onsite welding is not necessary.

2. Reinforced Concrete:
   a. Concrete shall have minimum 28 day compressive strength of 3000 psi and slump of 4 inches (+/- 1 inch), unless otherwise noted on the drawings.
   b. Reinforcing shall be ASTM A615, grade 60.

3. Steel Columns:
   a. Hollow structural steel tube minimum ASTM A500 grade B with a minimum wall thickness of 3/16 inch.
   b. Unless columns are direct buried, columns shall be anchored directly to concrete foundation with a minimum of four anchor rods to meet OSHA requirement 1926.755(a)(1).

4. Structural Framing:
   Hollow Structural Steel tube minimum ASTM A500 grade B, “I” beams, tapered columns or open channels shall not be accepted for primary beams. Frame will have a STANDARD POLI-5000 finish. Color chosen from manufacturer's standard color chart: “Tudor Brown Texture”.

5. Compression Members:
   Compression Rings of structural channel or welded plate minimum ASTM A36 or compression tubes of structural steel tube minimum ASTM A500 grade B shall only be used.

6. Connection Requirements:
   a. Anchor bolts shall be ASTM F1554 (Grade 36) unless otherwise noted.
   b. Structural fasteners shall be zinc plated ASTM A325 high strength bolts and A563 high strength nuts.
   c. Structural fasteners shall be hidden within framing members wherever possible.
   d. No field welding shall be required to construct the shelter.
   e. All welds shall be free of burrs and inconsistencies.
   f. Exposed fasteners shall be powder coated by manufacturer prior to shipment to match frame or roof colors as applicable.
   g. Manufacturer shall provide extra structural and roofing fasteners.

7. Primary Roof Deck of “R” Panel Metal Roofing (MR):
   a. Roofing shall be 24 gauge ribbed galvalume steel sheets, with ribs 1 3/16 inches high and 12 inches on center.
   b. Roof surface shall be painted with Kynar 500 to the manufacturer’s standard color: “Tudor Brown”. Ceiling surface shall be a "wash coat" primer.
   c. Roof panels shall be factory precut to size and angled to provide ease of one-step installation.
   d. Metal roofing trim shall match the color of the roof and shall be factory made of 26 gauge Kynar 500 painted steel.

e. Trim shall include panel ridge caps, hip caps, eave trim, splice channels, rake trim, roof peak cap, and corner trim as applicable for model selected. Trim may need to be cut to length and notched. Installation drawings shall have detailed information on how to cut and affix roof trim.
f. Ridge, hip, and valley caps shall be pre-formed with a single central bend to match the roof pitch and shall be hemmed on the sides.
g. Roof peak cap shall be pre-manufactured.
h. Manufacturer shall supply painted screws and butyl tape.

8. Standard Poli-5000 Finish:
   a. Steel shall be cleaned, pretreated and finished at a facility owned and directly supervised by the manufacturer.
   b. Steel shall be shot blasted to SSPC-SP10 near-white blast cleaning. SSPC-SP2 hand tool cleaning will not be an acceptable alternative.
   c. Parts shall be pretreated in a three stage iron phosphate or equal washer.
   d. Epoxy primer powder coat shall be applied to parts for superior corrosion protection.
   e. Top coat of Super Durable TGIC powder coat shall be applied over the epoxy primer.
   f. Finish shall not have any VOC emissions.
   g. Sample production parts shall have been tested and meet the following criteria:
      1) Salt spray resistance per ASTM B 117/ ASTM D 1654 to 10,000 hours with no creep from scribe line and rating of 10.
      2) Humidity resistance per ASTM D2247-02 to 5000 hours with no loss of adhesion or blistering.
      3) Color/UV resistance per ASTM G154-04 to 2000hours exposure, alternate cycles with results of no chalking, 75% color retention, color variation maximum 3.0 E variation CIE formula (before and after 2000 hours exposure).
      4) The manufacturer shall be PCI 4000 S Certified.
      5) Exposed fasteners for frame and ornamentation shall be powder coated to match structure.

PART 3 - EXECUTION

3.1 Installers Storage and Handling

A. Protect building products after arrival at destination from weather, sunlight, and damage.

B. Installer shall store product elevated to allow air circulation and to not introduce 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 and may void manufacturer’s warranty.

3.2 Erection

A. Installation:
Install all components according to manufacturer's installation instructions and these specifications.

B. General Contractor:
Interface with other work is to be coordinated by the customer or the customer's agent. Certain designs have electrical or other plumbing requirements that are not supplied by Poligon.

C. Tolerances:
Tolerances on steel structural members are set according to AISC construction practices, abided in the factory, and 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 column layout details.

D. OSHA Compliance:
OSHA Compliance to Steel Erection Standard 29CRF 1926 Subpart R-Steel Erection.

3.3 Repair
Do not attempt any field changes without first contacting Poligon.

3.4 Field or Site Quality Control
Field or Site Tests and Inspections are not required by Poligon but may be required by the customer or by the local building inspector.

PART 4 – METHOD OF MEASUREMENT AND BASIS OF PAYMENT

4.1 Method of Measurement shall be a lump sum for one Info Kiosk, inclusive of provision and installation and all equipment necessary for a fully functioning Info Kiosk.

4.2 Method of Payment shall be in one lump sum for provision and installation of one Info Kiosk. Work includes: all equipment, transportation, material, signed structural engineering drawings by Iowa professional engineer, info kiosk and labor for a fully functioning Info Kiosk.