

PART I - GENERAL**1.01 SCOPE OF WORK**

- A. Provide all Unistrut Metal Framing material, fittings and related accessories (Strut System) as indicated on the Contract Drawings.
- B. Provide all labor, supervision, engineering, and fabrication required for installation of the Strut System in accordance with the Contract Drawings and as specified herein.
- C. Related work specified elsewhere.

1.02 QUALITY ASSURANCE

- A. Manufacturer's qualifications:
 - 1. The manufacturer shall not have had less than 10 year's experience in manufacturing Strut Systems.
 - 2. The manufacturer must certify in writing all components supplied have been produced in accordance with an established quality assurance program.
- B. Installer's qualifications:
 - 1. Installer must be a Unistrut trained manufacturer's authorized representative/installer with not less than 5 years experience in the installation of Strut Systems of this size and conformation.
 - 2. All Strut System components must be supplied by a single manufacturer.
- C. Standards:
 - 1. Work shall meet the requirements of the following standards:
 - a. Federal, State and Local codes.
 - b. American Iron and Steel Institute (AIS) Specification for the Design of Cold-Formed Steel Structural Members 2007 Edition.
 - c. American Society for Testing And Materials (ASTM).

1.03 SUBMITTALS

- A. Structural Calculations and Shop Drawings
 - 1. Submit structural calculations for approval by the project engineer. Calculations may include, but are not limited to:
 - a. Description of design criteria.
 - b. Stress and deflection analysis.
 - c. Selection of Unistrut framing members, fittings, and accessories.
 - 2. Submit all shop/assembly drawings necessary to completely install the Strut System in compliance with the Contract Drawings.
 - 3. Submit all pertinent manufacturer's published data.

1.04 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. All material is to be delivered to the work site in original factory packaging to avoid damage to the finish.
- B. Upon delivery to the work site, all components shall be protected from the elements by a shelter or other covering.

1.05 GUARANTEE

- A. Separate guarantees shall be issued from the erector and manufacturer, valid for a period of 1 year, against any defects that may arise from the installation or manufacture of the Strut System components.

PART 2 - PRODUCTS**2.01 ACCEPTABLE MANUFACTURERS**

- A. All Strut System components shall be as manufactured by UNISTRUT CORPORATION or approved equal as determined by the Architect or Engineer of record in writing 10 days prior to bid date.

2.02 MATERIALS

- A. All channel members shall be fabricated from structural grade steel conforming to one of the following ASTM specifications: A 1011 SS GR 33, A 653 GR 33.
- B. All fittings shall be fabricated from steel conforming to one of the following ASTM specifications: A 575, A 576, A 36 or A 635.
- C. Substitutions
 - Any substitutions of product or manufacturer must be approved in writing ten days prior to bid date, by Architect or Engineer of record.

2.03 FINISHES

- A. Strut System components shall be finished in accordance with one of the following standards:
 - 1. PERMA-GREEN® III (GR)
 - Rust inhibiting epoxy enamel paint applied by electro-deposition, after cleaning and phosphating, and thoroughly baked. Color is per Federal Highway Green, Color Tolerance Chart PR Color No. 4. Finish to withstand minimum 400 hours salt spray when tested in accordance with ASTM B117.
 - 2. ELECTRO-GALVANIZED (EG)
 - Electrolytically zinc coated per ASTM B 633 Type III SC 1

- 3. PRE-GALVANIZED (PG)
 - Zinc coated by hot-dipped process prior to roll forming. The zinc weight shall be G90 conforming to ASTM A 653.
- 4. HOT-DIPPED GALVANIZED (HG)
 - Zinc coated after all manufacturing operations are complete. Coating shall conform to ASTM A 123 or A 153.
- 5. SPECIAL COATING / MATERIAL
 - (Describe as applicable)

PART 3 - EXECUTION**3.01 EXAMINATION**

- A. The installer shall inspect the work area prior to installation. If work area conditions are unsatisfactory, installation shall not proceed until satisfactory corrections are completed.

3.02 INSTALLATION

- A. Installation shall be accomplished by a fully trained manufacturer authorized installer.
- B. Set Strut System components into final position true to line, level and plumb, in accordance with approved shop drawings.
- C. Anchor material firmly in place. Tighten all connections to their recommended torques.

3.03 CLEANUP

- A. Upon completion of this section of work, remove all protective wraps and debris. Repair any damage due to installation of this section of work.

3.04 PROTECTION

- A. During installation, it shall be the responsibility of the installer to protect this work from damage.
- B. Upon completion of this scope of work, it shall become the responsibility of the general contractor to protect this work from damage during the remainder of construction on the project and until substantial completion.