

PVC Coated Strut

This product specification is written according to the Construction Specifications Institute
MasterFormat, 2018 Update.

SECTION 05 43 00

SLOTTED CHANNEL FRAMING

PART I – GENERAL

1.01 SUMMARY

- A. Framing shall be a strut type metal framing system (Strut System)
- B. Strut System shall be used:
 - 1. To support mechanical and electrical equipment and devices.
 - 2. For structural applications as applicable.
- C. Strut System and components must be supplied from a single approved Manufacturer.

1.02 REFERENCES

- A. NFPA 70, National Electrical Code (NEC)
 - 1. NEC Article 384
- B. ASTM Standards
 - 1. ASTM A1011 SS Grade 33 - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength
 - 2. ASTM A575 - Standard Specification for Steel Bars, Carbon, Merchant Quality, M-Grades
 - 3. ASTM A576 - Standard Specification for Steel Bars, Carbon, Hot-Wrought, Special Quality
 - 4. ASTM A36 - Standard Specification for Carbon Structural Steel
 - 5. ASTM A635 - Standard Specification for Steel, Sheet and Strip, Heavy-Thickness Coils, Hot-Rolled, Alloy, Carbon, Structural, High-Strength Low-Alloy, and High-Strength Low-Alloy with Improved Formability, General Requirements for
 - 6. ASTM A1059 - Standard Specification for Zinc Alloy Thermo-Diffusion Coatings (TDC) on Steel Fasteners, Hardware, and Other Products
 - 7. ASTM A1046 - Standard Specification for Steel Sheet, Zinc-Aluminum-Magnesium Alloy-Coated by the Hot-Dip Process

1.03 QUALITY ASSURANCE

- A. Manufacturer's qualifications:
 - 1. The manufacturer shall have at least 10 years' 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.

1.04 SUBMITTALS

- A. Structural calculations by a Registered Professional or Structural Engineer in the State of the Project's location for approval by the Professional of Record. Calculations may include, but are not limited to:
 - 1. Description of design criteria
 - 2. Stress and deflection analysis
 - 3. Selection of framing members, fittings, and accessories CalBond 923 Calpipe Rd, Santa Paula, CA 93060, www.Calbond.com
- B. Assembly drawings necessary to install the Strut System in compliance with the Contract Drawings
- C. Pertinent manufacturers published data

1.05 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.

1.06 WARRANTY

- A. Manufacturer shall warrant for 1 year from the shipment date that products will be free from defects in material or manufacture. In the event of any such defect in violation of the warranty, Manufacturer shall have the option to repair or replace any such defective product.
- B. Installer shall warrant for 1 year from the date of completion of work that the work will be free of defects in installation. In the event of any such defect in violation of the warranty, Installer shall have the option to repair or replace any such defective product.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Strut System and components shall be CalBond®

2.02 MATERIALS

- A. All channel members shall be fabricated conforming to one of the following ASTM specifications:
 - 1. Plain Carbon Steel: ASTM 1011 SS Grade 33
- B. All fittings shall be fabricated conforming to one of the following ASTM specifications:
 - 1. Carbon Steel: All carbon steel fittings shall be fabricated from steel that meets/exceeds the physical requirements of ASTM A1011 SS Grade 33 and conforms to one of the following ASTM specifications:
 - a. ASTM 575
 - b. ASTM 576
 - c. ASTM 36
 - d. ASTM 635
 - e. ASTM 1059
 - f. ASTM 1046

2.03 FINISHES

- A. PVC Coated
 - 2. Channel
 - a. Exterior PVC coating thickness is a minimum 0.02
 - 3. Straps
 - a. Exterior PVC coating thickness is a minimum 0.02

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 drawings.
- C. Anchor material firmly in place, and 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.