

PART I – GENERAL

WORK SPECIFIED HEREIN

All labor, materials, equipment and design services necessary to furnish, transport and install all steel joists and joist girders as indicated or specified.

This Specification is based on the design and fabrication of joists and joist girders by Canam Steel..

- Contractor shall purchase all joists and joist girders under a National Account agreement with Canam Steel.
- General Contractor is to use standard purchase agreement as shown in Section 01010.

SUBSTITUTIONS

No substitutions. **This is a National Account.**

SUBMITTALS

- The contractor shall prepare all shop drawings, product literature, etc. as required to properly coordinate and construct the project, and as per the requirements of the Project Manual.
- Submit the following items for review by the Professional of Record in accordance with Section 01300, Submittals.
 1. Submit steel joists and joist girders shop drawings. Shop drawings shall clearly show all chord and web member sizes, panel point spacing, bearing plate sizes and details, extended end sizes and details and bridging angle connections and length and size of weld at all panel points. Show type of paint and all accessories and details as may be required for proper installation of joists and joist girders. Include the mark, number, type, location and spacing of all joists and bridging.
- Design calculations for joists and joist girders shall be submitted only when requested by the Owner's Representative for submittal to the Building Official or for information. Design calculations will not be reviewed by Professional of Record. All design calculations shall be signed and sealed by the manufacturer's engineer with the registered Professional of Record's seal for the state where the structure is located.

PART II – PRODUCTS

MATERIALS

- Steel for joists and joist girders shall comply with SJI Specifications
- Shop paint shall comply with AISC and SJI Specifications except asphalt type paint will not be permitted.

DESIGN

- Steel joists and joist girders shall be designed by the manufacturer. The manufacturer's engineer shall be responsible for the design, adequacy and safety of all steel joists and joist girders.
- Joists/Joist Girders: See Drawings for Design Information.

FABRICATION

- Steel joists and joist girders shall be fabricated in accordance with SJI Specifications, except as otherwise indicated.
- Joists
 - Provide extended ends, special depth ends, etc. where indicated on the drawings and as job conditions require.
 - Camber all steel joists in accordance with SJI specifications.
- Joist Girders
 - Provide strutted ends of the bottom chord of sufficient strength and rigidity to restrain the lateral movement of the bottom chord.
 - Camber all steel joist girders in accordance with SJI specifications.
- Shop paint all joists and joist girders. Remove loose scale, heavy rust, and other foreign materials from fabricated joists and accessories before application of shop paint in accordance with SSPC SP-2, SP-3, or SP-7. Remove oil, grease, and similar contaminants in accordance with SSPC SP-1. Apply shop coat by spray, dipping or other method to provide a continuous dry paint film not less than 0.75 mil thick.

PART III – EXECUTION

APPLICATION, HANDLING AND ERECTION

- Steel joists and joist girders shall be erected in strict accordance with the "Standard Specifications for Open-Web Steel Joists and Joist Girders".
- The contractor shall provide means for the adequate distribution of all loads during the construction period so that the carrying capacity of any joists or joist girders is not exceeded.
- No other loads shall be placed on the joist girders until the steel joists bearing on the girder are in place and attached thereto.
- All bridging and bridging anchors shall be placed and joist ends fixed prior to the application of any loads.
- Repair or replace all damaged joists or joist girders.

SECTION 05210: STEEL JOISTS AND JOIST GIRDERS

- After installation, paint all field bolt heads and nuts, and abraded or rusty surfaces on joists and joist girders using the same paint as used for shop coat.
- Install bridging so that it will not interfere with mechanical, electrical or other installations.

END OF SECTION