

05100 – Structural Metal Framing

C-Beams (Castellated or Cellular Steel Beams)

1. Materials

The materials used to manufacture Castellated or Cellular Beams shall conform to one of the following ASTM specifications:

- High strength, low alloy Columbium-Vanadium steel of structural quality, ASTM A572/A572M, A529 or A992 Gr. 50.

2. Design

- All Castellated or Cellular Beams are to be designed in accordance with the *AISC Manual of Steel Construction, Allowable Stress Design or Load and Resistance Factor Design, Thirteenth Ed.* and per the design procedures outlined in *The Design of Welded Structures* by Omar W. Blodgett.

3. Manufacturing

- All welding is to be performed in accordance with AWS D1.1 (latest edition).
- Connections for the C-Beam shall be based on the load indicated on contract documents.

4. Erection

- All bracing for erection and handling shall be in accordance with the manufactures recommendations.
- All bracing shown on plan as x-bracing shall be installed prior to releasing the hoisting cables. All bracing shown as horizontal may be applied after beams are erected.
- SteelFab, Inc. assumes no responsibility for the erection of the item furnished.