

STRUCTURAL STEEL① APPLICATION OF GENERAL CONDITIONS:

All of the works described herein are subject to the foregoing general conditions, these General Conditions becoming a part of this specification, and all work shall be carried on in accordance therewith.

WORK INCLUDED:

This contractor shall furnish and erect all structural steel as shown on the plans. It shall include all steel columns, and all steel trusses with all shoe bases, plates, anchors bolts etc., all as shown and detailed.

All structural steel shall be fabricated from shop drawings to be prepared by the contractor and submitted to the architect for his approval which shall be obtained before any material is fabricated. Shop drawings shall be submitted in triplicate and a reasonable time allowed for checking by the architect. One set of such approved drawings shall be retained on the job until steel is erected. Only the best practice will be followed in fabricating steel work. Generally rivets shall be $\frac{3}{4}$ " where rivets are shown. In detailing steel and where field rivets are to be called for the number of shop rivets shown shall be increased by 25%. The minimum spacing shall be $2\frac{1}{2}$ " maximum 6" and an edge distance of $1\frac{1}{2}$ " shall be maintained at all times. Where full details are not shown, the full strength of members shall be developed in the details. Where splices are employed the same condition shall obtain. In plate girders rivet pitch shall be such as to take care of all shear and flange increments as determined from the full strength of main members, or actual loads.

② All contact surfaces shall be painted one coat in the shop before assembly also all inaccessible surfaces shall be painted in shop before assembly.

Rivets carrying a calculated stress and having a grip which exceeds four diameters shall be increased in number one percent for each one-eighth inch additional grip. Rivets carrying a strain and passing thru fillers shall be increased in number one hundred percent when the thickness of the filler equals the diameter of the rivet, the increase being in proportion more or less as the thickness of the fill is more less thick than the diameter of rivet.

Substitutions may be made to match stock materials on hand but only on approval of the architect as specified above, and without unbalancing members. In proportioning rivets the following stresses made be considered.

Shearing on webs, shop rivets and pins,	12000	#	per sq.in.
" field rivets and turned bolts	10000	"	"
Bearing on pins and shop rivets	20000	"	"
" turned bolts and field rivets	16000	"	"
Direct bearing on rolled steel and cast steel	16000	"	"