

2.

TENSION MEMBER

INTRODUCTION

1. Tension member has no stability problem.
2. In tension member net section will be effective whereas in compression member gross section is effective.

Type of member	Max. Slenderness Ratio
1. A tension member in which reversal of direct stress due to loads other than wind or earthquake forces	180
2. A member normally acting as a tie in roof truss or bracing system. But subjected to possible reversal of stress resulting from the action of wind or earthquake forces.	350

NET SECTIONAL AREA

(i) For Plate

$$\text{Net Area} = (b \times t) - nd't + \left(\frac{s_1^2}{4g_1} + \frac{s_2^2}{4g_2} \right) t$$

where,

S_1 = Distance between two consecutive rivets in the direction of load, also called pitch.

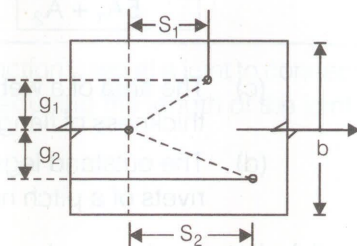
g_1 = Distance between two consecutive rivets perpendicular to the direction of load also called gauge.

b = Width of the plate

n = Number rivets at the section

t = Thickness of the plate

d' = Gross diameter of the rivet



- (ii) Single angle connected by one leg only.