

17. The resistance factor for limit states involving yielding or compression buckling is ____?
90%
18. A wide flange A992 steel column has a length of 4.6 meters and pinned ends. If $S_x = 895 \times 10^3 \text{ mm}^3$, $S_y = 129 \times 10^3 \text{ mm}^3$, $d = 358 \text{ mm}$, $b_f = 172 \text{ mm}$, $A = 7226 \text{ mm}^2$, $F_y = 345 \text{ Mpa}$, Determine the classification of column.
LONG
19. ____ elements are elements of the section which are unsupported.
UNSTIFFENED
20. Which of the following end support conditions of a square compression member will give the highest design capacity?
BOTH END HINGED
21. Which of the following is not a compression member limit state?
RUPTURE
22. T or F, A grade 40 WF steel with $S_r = 130$ will experience yielding rather than buckling
FALSE
23. Based on Euler's buckling theory, the ends of the unsupported length of a compression member is assumed to be ____?
BOTH PINNED
24. T or F, Steel columns with higher slenderness ratio is less prone to lateral buckling
TRUE
25. From AISC specifications, the slenderness ratio of compression members shall not exceed.
200
26. The ASTM A36 wide flange column has a length of 18 feet and fixed ends. If $R_x = 4.9''$, $R_y = 0.85''$, $A = 6.48 \text{ in}^2$, $F_y = 29,000 \text{ ksi}$, Determine the classification of the column
LONG
27. Which of the following steel elements is not a compression member?
GIRTH