

Number of Hits: 00027

# Elastic Buckling Calculator for Columns in Framed Systems, a Generalization to The Alignment Charts

Analyst's Name

Project's Name

Company's Name

Select the Unit:  US Customary Units  SI Units

To simulate traditional boundary conditions, kindly use a rotational stiffness of zero for pinned/roller support and  $10^6$  times the stiffness of the column for fixed/fixed-roller support.

To ignore a supporting beam, simply set its modulus of elasticity or moment of inertia to zero.

- ✓ Elastic buckling analysis of columns in framed systems
- ✓ Simulate various boundary conditions for the column and supporting beams
- ✓ Guidance to users by providing applicable input data entry range upon a mouse hover
- ✓ A generalization for the alignment charts avoiding all corrections for errors and pitfalls
- ✓ Annual reports on site visit and usage analytics
- ✓ Competitive pricing for your company advertisement ( $\$0.142/\text{pixel}^2/\text{month}$ )
- ✓ Premier Ad block (1000x200 pixels) for \$284/month (1-year min.) = \$3,408/year
- ✓ Preferred Ad block (200x300 pixels) for \$85/month (1-year min.) = \$1,020/year
- ✓ Ad block includes company name, logo, selected text and graphics and hyperlink to company website for direct access

Calculate

Calculate & Print PDF

Buckling Mode	Buckling Load (kip)	Effective Length Factor
1	2591.4	2.31
2	23951.68	0.76
3	68964.63	0.45
4	139695.35	0.31
5	237194.44	0.24