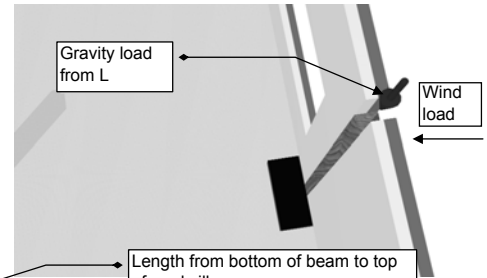


Column, Post, Stud Calculator

Assumptions: 1) Top and bottom connections are considered 'pinned' (not 'fixed' or embedded). 2) Bearing area at top and bottom is not checked. 3) The column is assumed to be laterally supported at its top and bottom. 4) Loads include axial compression and / or uniform wind (bending). 5) Wet or extreme temperature use of the material is not considered. 6) Design based on 1997 National Design Specification for Wood Construction values and equations.



Job Name: Two story wood-framed example
 Member I.D.: Post O
 Other Info: Load from Beam L

General Information

Column, Post, or Stud Length, ft. L = 11.00 ft
 Max. Live Deflection L / 175 = 0.75 in
 Type Of Column, Post, or Stud
 Load Duration Factor
 Off-Center (Eccentric) Compression Loads or Add'l Bending Loads (other than wind)? No

Length from bottom of beam to top of mud sill.
 Allowable deflection due to wind.
 Col Sheathed On Narrow Face (Preventing Weak Axis Buckling)
 This post will have sheathing over its narrow face.

Applied Gravity Loads

Gravity load input table is not used because we know our load from beam L. We could hide these unused cells via the 'Hide / Show Loads' drop-down.

	Live, psf	Dead, psf	x Length, ft	x Width, ft	Live Load	Dead Load	Total
Other 'psf' load and trib. area.					0 lb	0 lb	0 lb
Other point load: all Live, all Dead, or some of each, lbs.					0 lb	0 lb	0 lb
Wall Dead Load					0 lb	0 lb	0 lb
Other 'psf' load and trib. area.					0 lb	0 lb	0 lb
Other point load: all Live, all Dead, or some of each, lbs.					0 lb	0 lb	0 lb
Descrip'n, opt'l:			From L		5,950 lb		3,817 lb
Total Live and Dead Loads:					5,950 lb		3,817 lb
Combined Total Load:					9,767 lb		

The majority of this post's live load comes from floor load.

Wind Load

(Assumes external sheathing of plywood, metal, etc. is applied)

Wind Applied To: Narrow Face
 Tributary Width of Wind Load, ft. z = 1.30 ft
 Wind Pressure q = 22.6 psf

This post takes a small amount of wind load. Trib width is the stud to stud spacing (adjacent studs take their own wind load). Wind pressure comes from Loads program.

4x And Smaller (Lumber)

Lumber Material: Douglas Fir-Larch
 Lumber Grade: No. 2

2 x 12
(2) 2 x 8
3 x 10
4 x 8

5x And Larger (Timbers)

Lumber Material: Douglas Fir - Larch
 Lumber Grade: WCLIB - No. 1

-	-	-
6 x 6	-	-
8 x 8	-	-
-	-	-

Note a 6x6 DF No. 2 won't work, but a No. 1 will.
 Nothing in a 4x works which will fit in a 6" wall.

Glued Laminated Columns

Glulam Combo. 3 - DF (Visually Graded)

2.5 x 7.5	5.125 x 6
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1.8E Parallam PSL Columns

-	5-1/4" x 5-1/4"
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