



INSTRUCTIONS FOR USING LOAD TABLES

Instructions for Using Load Tables

The following Load Tables show maximum PLF for simple span uniformly loaded truss. The design criteria used for establishing these values are based on building code approvals and deflection limits shown on page 17.

ESTABLISH STRESS LEVEL OF TRUSS FROM FOLLOWING TABLE:

STRESS LEVEL	DURATION OF LIVE LOAD	COMMON NAME
100%	CONTINUOUS	Residential, Public or Commercial Floor
115%	60 + DAYS	Snow Load Roof
125%	7 DAYS	Non-Snow Load Roof (Sunshine Load)

NOTE: Min. end = 14", Max. end = 44" for Version 1 and 52" for Version 2, \bar{C} depth = average of end depths.

FOR PARALLEL CHORD TRUSS

1. Determine total load per square foot acting on truss (Live Load + Dead Load + Partition Load).
2. Convert the load per square foot to load per lineal foot. Multiply PSF times truss spacing in feet (PSF x O/C ft. = PLF).
3. Go to tables that corresponds to stress level from above table.
4. Read down "Span" column to the truss Clear Span needed.
5. Read across table to load (PLF) needed. Required depth is indicated in heading of column.
6. If truss depth is deeper than desired or none of the depths shown will carry load, try another series or reduce truss on center spacing and repeat steps 2 thru 5 again.
7. Check truss deflection for limits shown on page 17. If not within limits, try going deeper or try another series. If need be, reduce truss on center spacing and repeat steps 2 thru 6 again.

NOTE: You may want to try various on centers and series to find best combination.

FOR PITCHED: Select end depth and ridge depth desired for needed slope of top chord.

NOTE: Min. end = 14", Max. end = 44" for Version 1 & 52" for Version 2, \bar{C} depth = ridge depth.

FOR TAPER AND PITCHED CHORD TRUSS

1. Determine load acting on truss using steps 1 and 2 above.
2. FOR TAPER: Select shallow and deep end depths desired for needed slope of top chord.

3. On Equivalent Depth Table below, find shallow end depth (on left) and \bar{C} depth (across top) desired. The box at intersection of end and \bar{C} depth shows minimum depth of parallel chord truss that would carry same load as taper or pitched truss being checked.
4. Go to tables that correspond to stress level from above table.
5. Find max load at intersection of truss clear span and Equivalent Depth found in step above.
6. If max load is less than determined load, try another series or repeat steps 2 thru 5 using larger depths or reduce on center spacing and repeat steps 1 thru 5 again.
7. Check truss deflection for limits shown on page 17. If not within limits, try going deeper or try another series. If need be, reduce truss on center spacing and repeat steps 1 thru 6 again.
8. Check to see that truss reaction (PLF x Span/2) does not exceed maximum shown in ICBO Report No. PCF-3246, Table 6.

NOTE: You may want to try various on centers and series to find best combination.

Equivalent Depth Table (in.)

CENTER LINE OR MID-SPAN DEPTH (IN.)

		18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52
SHALLOW END DEPTH (IN.)	14	17.8	19.5	21.2	22.8	24.4	26.0	27.5	29.1	30.6	32.0	33.5	34.9	36.4	37.8	39.2	40.6	42.0	43.4
	16	17.9	19.8	21.6	23.3	24.9	26.6	28.2	29.7	31.3	32.8	34.3	35.8	37.3	38.7	40.2	41.6	43.0	44.5
	18	18.0	19.9	21.8	23.6	25.3	27.0	28.7	30.3	31.9	33.5	35.0	36.5	38.1	39.6	41.0	42.5	44.0	45.4
	20		20.0	22.0	23.8	25.6	27.4	29.1	30.8	32.4	34.0	35.6	37.2	38.8	40.3	41.8	43.3	44.8	46.3
	22			22.0	24.0	25.8	27.7	29.4	31.2	32.9	34.5	36.2	37.8	39.4	40.9	42.5	44.0	45.6	47.1
	24				24.0	26.0	27.8	29.7	31.5	33.2	34.9	36.6	38.3	39.9	41.5	43.1	44.7	46.2	47.8
	26					26.0	28.0	29.9	31.7	33.5	35.3	37.0	38.7	40.4	42.0	43.6	45.2	46.8	48.4
	28						28.0	30.0	31.9	33.7	35.5	37.3	39.0	40.8	42.4	44.1	45.7	47.4	49.0
	30							30.0	32.0	33.9	35.7	37.6	39.3	41.1	42.8	44.5	46.2	47.8	49.5
	32								32.0	34.0	35.9	37.8	39.6	41.4	43.1	44.9	46.6	48.3	49.9
34									34.0	36.0	37.9	39.8	41.6	43.4	45.2	46.9	48.6	50.3	
36										36.0	38.0	39.9	41.8	43.6	45.4	47.2	49.0	50.7	
38											38.0	40.0	41.9	43.8	45.6	47.5	49.2	51.0	