MITEK® POSI-STRUTS™: DESIGNED TO REDUCE COSTS

Posi-Strut metal web trusses offer clear span flexibility, lighter floor systems, and provide more space between chords for easier plumbing, mechanical and electrical installations.



Building Design Freedom

REDUCE LABOR AND OVERALL WEIGHT OF THE SYSTEM WITH THE POSI-STRUT FLOOR TRUSS SYSTEM.

- Longer spans allow design freedom while reducing structural costs of beams, columns and posts.
- Wide nailing surface helps minimize shrinkage and makes attaching the floor deck and ceiling simple.
- → Lighter weight systems can reduce total costs related to lateral system components and foundations.
- Floor systems are easier to handle, reduce installer fatigue and can improve overall installation time.

PLUS, ALL THE BENEFITS OF STANDARD FLOOR TRUSSES:

- 24" o.c. reduces the total number of framing members, resulting in less material costs and handling across the value chain.
- → Optimized for load and lumber efficiency.
- → Eliminates the need for on-site sawing.
- Avoids the need to conceal mechanicals with additional framing.
- Reduced rim board and hanger costs in top chord bearing conditions.
- → A wide range of end details possible.

FLOOR SYSTEM SELF-WEIGHT						
МРР	Wood-Web	2x12	l-Joist	Posi-Strut		
14psf	2.75psf	2psf	1.80psf	1.50psf		

Assumptions: 24" o.c members (except for MPP). MPP= Mass Plywood Panel 11-7/8" deep members

Bottom Chord Bearing



Top Chord Mid-Bearing



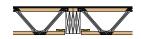
Cantilever



Top Chord Bearing



Interior Top Chord Bearing



Trimmable End

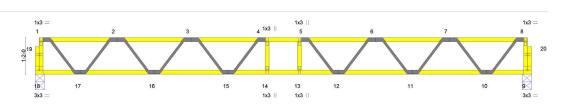




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FLOOR TRUSS SPAN CHARTS

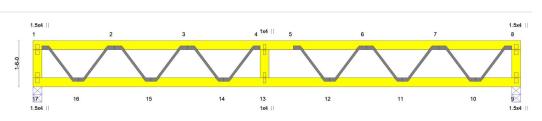
Flat (4x2) Orientation



40-10-5 Loading **On-center Spacing** Posi-Strut Size Depth 16" o.c. 24"o.c. PS10 9.25" 20-6-0 17-10-0 PS12 11.25" 23-10-0 20-9-0 PS12I* 11.875" 24-10-0 21-7-0 **PS13** 12.75" 26-2-0 22-8-0 PS14 14" 28-0-0 24-4-0 **PS16** 16" 30-11-0 26-10-0

60-10-5 Loading		On-center Spacing	
Posi-Strut Size	Depth	16" o.c.	24"o.c.
PS10	9.25"	17-10-0	15-5-0
PS12	11.25"	20-9-0	17-5-0
PS12I*	11.875"	21-7-0	17-6-0
PS13	12.75"	22-9-0	19-8-0
PS14	14"	24-4-0	20-4-0
PS16	16"	26-10-0	20-6-0

Edge (2x4) Orientation



40-10-5 Loading		On-center Spacing	
Posi-Strut Size	Depth	16" o.c.	24"o.c.
PS10	13.25"	24-6-0	21-4-0
PS12	15.25"	27-6-0	24-0-0
PS12I*	15.875"	28-5-0	24-9-0
PS13	16.75"	29-8-0	25-9-0
PS14	18"	31-5-0	27-3-0
PS16	20"	34-1-0	29-8-0

60-10-5 Loading		On-center Spacing	
Posi-Strut Size	Depth	16" o.c.	24"o.c.
PS10	13.25"	21-4-0	18-7-0
PS12	15.25"	24-0-0	20-3-0
PS12I*	15.875"	24-9-0	20-4-0
PS13	16.75"	25-10-0	22-4-0
PS14	18"	27-3-0	22-10-0
PS16	20"	29-8-0	22-10-0

The chord max-spans shown above, presented for four representative floor loadings, are intended for use in bidding, estimating, and preliminary design applications. While these are standard spans, longer spans are possible with alternate designs and lumber usage. For proper interpretation of these max-spans, note:

- \rightarrow The max-spans are valid for the following (or better) lumber: SPF 2400. Shorter spans can be achieved using lesser grade 4x2 lumber, while longer spans are generally possible with higher grade lumber.
- → The max-spans represent truss overall lengths, assuming 3-1/2" bearing at each end. The spans are equally valid for top chord-bearing and bottom chord bearing support conditions.
- → The minimum truss span-to-live load deflection is 360 for floor application. For example, the maximum permissible live load deflection for a 20' span floor truss is (20 x 12)/360 = 0.67".
- → Span to depth ratios that exceed 20 may exhibit excessive bounce or vibration. Additional strongback bracing or other considerations may be necessary to reduce this effect.
- *Extended delivery times possible due to supply chain constraints.



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