SPAN TABLE FOR NAIL-LAMINATED COLUMNS MANUFACTURED BY WB COMPONENTS
WITH KNEE BRACES

3-PLY 2x6	MAXIMUM TRUSS SPAN															
	ROOF LOAD															
	25 PSF SNOW + 10 PSF DL				30 PSF SNOW + 10 PSF DL				35 PSF SNOW + 10 PSF DL				40 PSF SNOW + 10 PSF DL			
	SIDEWALL HEIGHT				SIDEWALL HEIGHT				SIDEWALL HEIGHT				SIDEWALL HEIGHT			
COLUMN SPACING	12 FT	14 FT	16 FT	18 FT	12 FT	14 FT	16 FT	18 FT	12 FT	14 FT	16 FT	18 FT	12 FT	14 FT	16 FT	18 FT
4'-0" OC	100	100	100	65	100	100	100	55	100	100	95	50	100	100	85	45
6'-0" OC	100	90	50	-	100	80	45	-	100	70	40	-	100	65	35	-
8'-0" OC	100	45	-	-	100	40	-	-	85	35	-	-	75	30	-	-
10'-0" OC	60	-	-	-	55	-	-	-	50	-	-	-	45	-	-	-

4-PLY 2x6	MAXIMUM TRUSS SPAN															
	ROOF LOAD															
	25 PSF SNOW + 10 PSF DL				30 PSF SNOW + 10 PSF DL				35 PSF SNOW + 10 PSF DL				40 PSF SNOW + 10 PSF DL			
	SIDEWALL HEIGHT				SIDEWALL HEIGHT				SIDEWALL HEIGHT				SIDEWALL HEIGHT			
COLUMN SPACING	12 FT	14 FT	16 FT	18 FT	12 FT	14 FT	16 FT	18 FT	12 FT	14 FT	16 FT	18 FT	12 FT	14 FT	16 FT	18 FT
4'-0" OC	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	95
6'-0" OC	100	100	100	60	100	100	95	50	100	100	85	45	100	100	75	40
8'-0" OC	100	100	60	-	100	90	50	-	100	80	45	-	100	70	40	-
10'-0" OC	100	60	-	-	100	50	-	-	100	45	-	-	90	40	-	-

3-PLY 2x8	MAXIMUM TRUSS SPAN															
	ROOF LOAD															
	25 PSF SNOW + 10 PSF DL				30 PSF SNOW + 10 PSF DL				35 PSF SNOW + 10 PSF DL				40 PSF SNOW + 10 PSF DL			
	SIDEWALL HEIGHT				SIDEWALL HEIGHT				SIDEWALL HEIGHT				SIDEWALL HEIGHT			
COLUMN SPACING	14 FT	16 FT	18 FT	20 FT	14 FT	16 FT	18 FT	20 FT	14 FT	16 FT	18 FT	20 FT	14 FT	16 FT	18 FT	20 FT
4'-0" OC	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
6'-0" OC	100	100	100	80	100	100	100	70	100	100	100	65	100	100	100	60
8'-0" OC	100	100	75	-	100	100	65	-	100	100	60	-	100	100	55	-
10'-0" OC	100	75	-	-	100	65	-	-	100	60	-	-	90	55	-	-

4-PLY 2x8	MAXIMUM TRUSS SPAN															
	ROOF LOAD															
	25 PSF SNOW + 10 PSF DL				30 PSF SNOW + 10 PSF DL				35 PSF SNOW + 10 PSF DL				40 PSF SNOW + 10 PSF DL			
	SIDEWALL HEIGHT				SIDEWALL HEIGHT				SIDEWALL HEIGHT				SIDEWALL HEIGHT			
COLUMN SPACING	16 FT	18 FT	20 FT	22 FT	16 FT	18 FT	20 FT	22 FT	16 FT	18 FT	20 FT	22 FT	16 FT	18 FT	20 FT	22 FT
4'-0" OC	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
6'-0" OC	100	100	100	100	100	100	100	100	100	100	100	90	100	100	100	80
8'-0" OC	100	100	90	60	100	100	80	50	100	100	70	45	100	100	60	40
10'-0" OC	100	90	50	-	100	85	45	-	100	75	40	-	100	65	35	-

NOTES:

1. MAXIMUM WIND SPEED: 90 MPH, EXPOSURE C (PER ASCE 7-05).
2. MAXIMUM WALL GIRT SPACING = 36"
3. OCCUPANCY CATEGORY I (AGRICULTURAL AND MINOR STORAGE FACILITIES).
4. STRUCTURE IS ASSUMED TO BE UNHEATED AND ENCLOSED.
5. EXTERIOR WALLS ARE ASSUMED TO HAVE FLEXIBLE FINISHES.
6. COLUMNS ARE EMBEDDED 4'-0" MIN BELOW GRADE.
7. THIS TABLE ASSUMES THAT THE STRUCTURE HAS A RIGID DIAPHRAGM AND LATERAL WIND RESISTING SYSTEM.
8. TRUSS SPANS DO NOT INCLUDE THE OVERHANG. TRUSS SPANS NOTED IN TABLE ARE TO BE DECREASED BY 2 x OVERHANG LENGTH.
9. ASSUMES ADEQUATE SOIL PROPERTIES TO RESIST VERTICAL AND HORIZONTAL LOADS.

NOTES CONT:

10. THIS TABLE IS FOR PRELIMINARY USE ONLY. A COMPLETE BUILDING ANALYSIS IS TO BE COMPLETED BY A DESIGN PROFESSIONAL FOR EACH INDIVIDUAL STRUCTURE.
11. LATERTAL LOADS ARE APPLIED TO THE STRONG AXIS ONLY.
12. DESIGN IS BASED ON THE 2005 NDS (ASD), ASAE EP 559.1 AUG2010 AND ASCE 7-05.
13. COLUMNS ARE CONSTRUCTED WITH TREATED SYP NO. 1 GRADE BELOW GRADE AND SYP MSR 1650f-1.8E ABOVE GRADE.
14. THE BOTTOM OF THE KNEE BRACE IS TO BE LOCATED A MINIMUM OF 3'-0" BELOW THE TOP OF THE COLUMN WHICH REDUCES THE UNBRACED LENGTH OF THE COLUMN BUT IS ASSUMED TO HAVE NO EFFECT ON THE WIND LOADING ASSUMPTIONS.

PREPARED BY:

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