

Job Spradley House -	Truss A01G	Truss Type Attic Supported Gable	Qty 1	Ply 1	Barefoot - Spradley House Job Reference (optional)	T32847762
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Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557,

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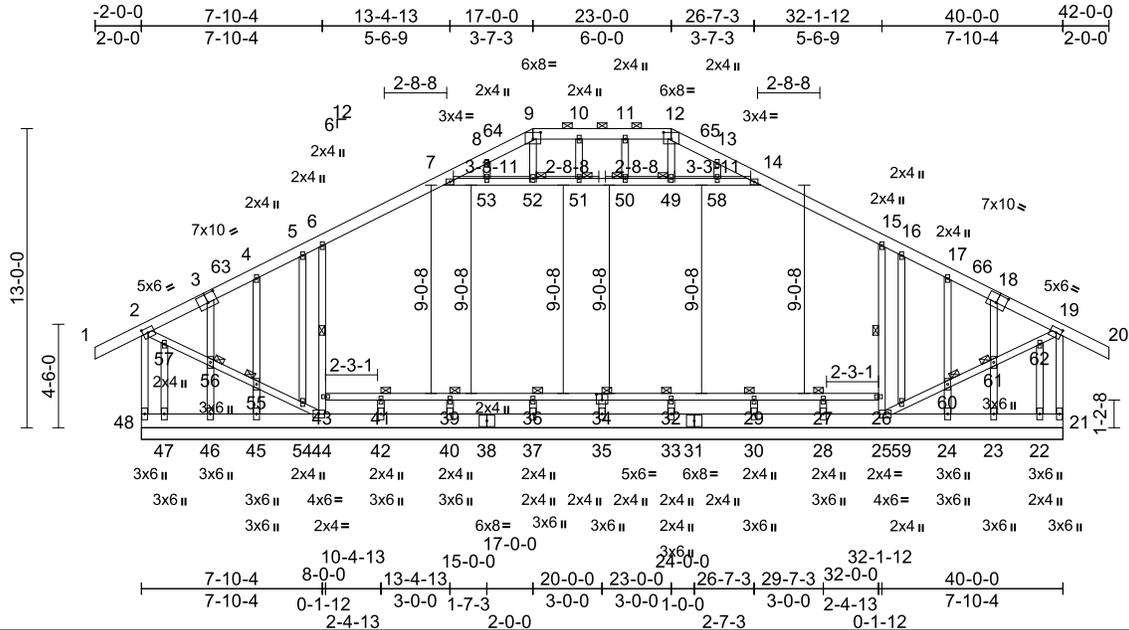


Plate Offsets (X, Y): [2:0-2-11,0-2-8], [3:0-5-0,0-4-8], [9:0-4-0,0-3-8], [12:0-4-0,0-3-8], [18:0-5-0,0-4-8], [19:0-2-11,0-2-8], [34:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Ps/Pf)	14.5/20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.01	21	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 429 lb	FT = 20%

LUMBER		Max Grav	21=1088 (LC 40), 22=65 (LC 15), 23=103 (LC 56), 24=329 (LC 40), 25=117 (LC 13), 28=223 (LC 7), 30=273 (LC 7), 33=273 (LC 7), 35=221 (LC 7), 37=273 (LC 7), 40=273 (LC 7), 42=223 (LC 7), 44=121 (LC 12), 45=329 (LC 40), 46=103 (LC 55), 47=65 (LC 14), 48=103 (LC 40)	WEBS	2-57=-123/944, 56-57=-126/928, 55-56=-119/901, 54-55=-124/923, 44-54=-130/994, 43-44=-364/64, 6-43=-344/76, 25-26=-364/64, 15-26=-344/76, 25-59=-128/994, 59-60=-122/923, 60-61=-117/901, 61-62=-124/928, 19-62=-121/944, 7-53=-161/133, 52-53=-162/133, 51-52=-162/133, 50-51=-162/133, 49-50=-162/133, 49-58=-162/133, 14-58=-161/133, 12-49=-25/100, 11-50=-57/14, 10-51=-57/14, 9-52=-25/100, 8-53=-70/20, 5-54=-13/155, 4-55=-227/82, 45-55=-278/92, 3-56=-101/59, 46-56=-65/73, 47-57=-4/35, 13-58=-70/20, 16-59=-13/155, 17-60=-227/81, 24-60=-278/90, 18-61=-101/59, 23-61=-65/73, 22-62=-4/35, 39-40=-135/0, 29-30=-135/0, 36-37=-137/0, 32-33=-137/0, 34-35=-111/0, 41-42=-119/0, 27-28=-119/0
TOP CHORD	2x6 SP No.2				
BOT CHORD	2x8 SP DSS *Except* 43-34,34-26:2x4 SP No.3				
WEBS	2x4 SP No.3 *Except* 6-44,15-25,7-14:2x4 SP No.2				
OTHERS	2x4 SP No.3				
<b>BRACING</b>					
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 9-12.				
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.				
WEBS	1 Row at midpt 6-44, 15-25				
JOINTS	1 Brace at Jt(s): 49, 50, 51, 52, 55, 56, 60, 61, 39, 29, 36, 32, 34, 41, 27				
<b>REACTIONS</b> (size)	21=40-0-0, 22=40-0-0, 23=40-0-0, 24=40-0-0, 25=40-0-0, 28=40-0-0, 30=40-0-0, 33=40-0-0, 35=40-0-0, 37=40-0-0, 40=40-0-0, 42=40-0-0, 44=40-0-0, 45=40-0-0, 46=40-0-0, 47=40-0-0, 48=40-0-0				
Max Horiz	48=180 (LC 14)				
Max Uplift	21=130 (LC 13), 22=13 (LC 39), 23=36 (LC 22), 24=-24 (LC 16), 25=-266 (LC 24), 44=-266 (LC 25), 45=-24 (LC 17), 46=-36 (LC 22), 47=-13 (LC 39), 48=-133 (LC 12)				
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension				
TOP CHORD	2-48=-1073/295, 1-2=0/96, 2-4=-971/227, 4-5=-977/274, 5-6=-832/273, 6-7=-947/303, 7-8=-972/247, 8-9=-966/268, 9-10=-882/264, 10-11=-880/264, 11-12=-882/264, 12-13=-966/268, 13-14=-972/247, 14-15=-947/303, 15-16=-832/276, 16-17=-977/272, 17-19=-971/229, 19-20=0/96, 19-21=-1073/293				
BOT CHORD	47-48=-164/139, 46-47=-164/139, 45-46=-164/139, 44-45=-164/139, 42-44=-128/806, 40-42=-128/806, 37-40=-128/806, 35-37=-128/806, 33-35=-128/806, 30-33=-128/806, 28-30=-128/806, 25-28=-128/806, 24-25=-43/49, 23-24=-43/49, 22-23=-43/49, 21-22=-43/49, 41-43=-3/19, 39-41=-3/19, 36-39=-3/19, 32-36=-3/19, 29-32=-3/19, 27-29=-3/19, 26-27=-3/19				
<b>NOTES</b>					



February 7, 2024

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**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Barefoot - Spradley House	T32847762
Spradley House -	A01G	Attic Supported Gable	1	1	Job Reference (optional)	

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- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed.C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.00); Pf=20.0 psf (flat roof snow); Ps= varies (min. roof snow=14.5 psf Lumber DOL=1.15 Plate DOL=1.00) see load cases; Category II; Exp B; Fully Exp.; Ct=1.10; Unobstructed slippery surface
- 5) Roof design snow load has been reduced to account for slope.
- 6) Unbalanced snow loads have been considered for this design.
- 7) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 8) Provide adequate drainage to prevent water ponding.
- 9) Gable requires continuous bottom chord bearing.
- 10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 11) Gable studs spaced at 2-0-0 oc.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 13) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 14) Ceiling dead load (5.0 psf) on member(s). 6-7, 14-15, 7-53, 52-53, 51-52, 50-51, 49-50, 49-58, 14-58; Wall dead load (5.0psf) on member(s).43-44, 6-43, 25-26, 15-26
- 15) All bearings are assumed to be SP DSS crushing capacity of 660 psi.
- 16) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 133 lb uplift at joint 48, 130 lb uplift at joint 21, 266 lb uplift at joint 44, 266 lb uplift at joint 25, 24 lb uplift at joint 45, 36 lb uplift at joint 46, 13 lb uplift at joint 47, 24 lb uplift at joint 24, 36 lb uplift at joint 23 and 13 lb uplift at joint 22.
- 17) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 18) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 19) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 1-2=-49, 2-6=-49, 7-9=-49, 9-12=-60,  
12-14=-49, 15-19=-49, 19-20=-49, 21-48=-20,  
26-43=-20

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