DE
DANSCO ENGINEERING, PA

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The truss drawing(s) attached have been prepared by Dansco Engineering, PA under my direct supervision and control based on the parameters provided by **Simpson Strong-Tie Co., Inc.** We have reviewed the requirements of the 2018 North Carolina Building Code/Residential Code and hereby certify that the attached trusses are in compliance with letter and intent of said code.

Job: Q0498

1 truss design(s)

72504-W1

02/19/2020

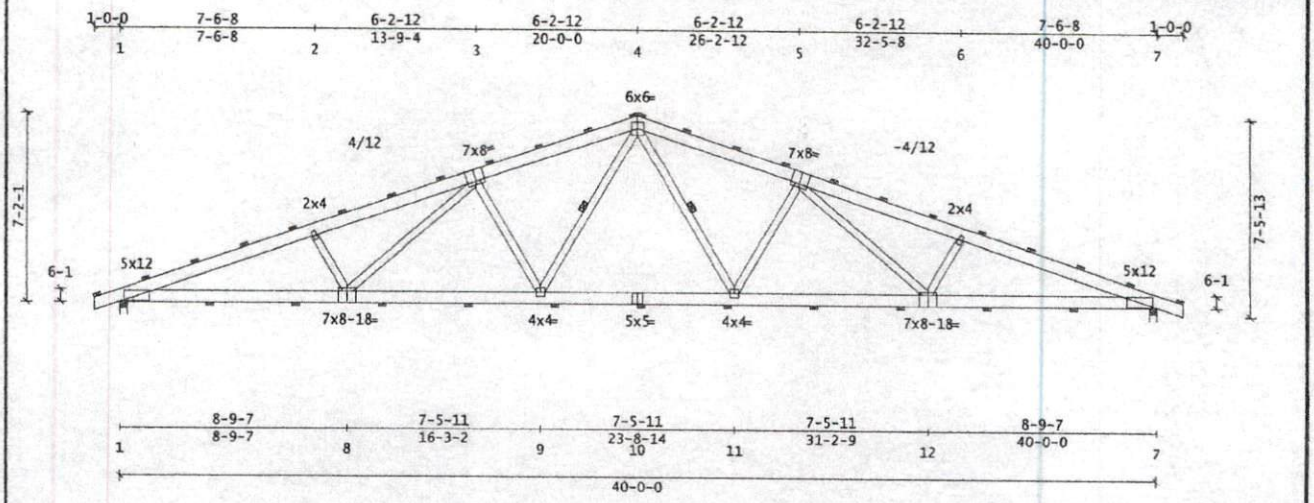
Samuel A. Greenberg, P.E.
N.C. Reg. #16977
License Number C-3462

Note: Gable end frames with stud lengths exceeding 4' require permanent bracing. On structural gables, where studs may be made from two or more boards as they cross diagonals, the 4' length is the distance from the top chord to bottom chord.

The seal on these drawings indicate acceptance of professional engineering responsibility solely for the truss components shown. The suitability and use of this component for any particular building is the responsibility of the building designer, per ANSI/TPI 1-2014 Chapter 2.

Warning !—Verify design parameters and read notes before use.
These designs are based only upon parameters shown, and are for individual building components to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 Guide to *Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719

Q0498 - Pope	Qty: 9	Truss: T01
Customer: David & Shelly Johnson		SID: 0000686561 TID: 104902 Date: 02 / 19 / 20 Page: 1 of 1
Truss Mfr. Contact: Terrance Kirby		



Code/Design: IBC-2015/TPI-2014

PSF	Live	Dead		Dur Factors		
				Live	Wind	Snow
TC	19.8	5.0				
BC	0.0	5.0	Lum	1.25	1.60	N/A
Total	29.8		Plt	1.25	1.60	N/A

Spacing: 5-00-00 o.c. Plies: 1
Repetitive Member Increase: No
Green Lumber: No Wet Service: No
Fab Tolerance: 20% Creep (Kcr) = 2.0
OH Soffit Load: 2.0 psf

----------Snow Load Specs----------
ASCE7-10 Ground Snow(Pg) = N/A
Risk Cat: I Terrain Cat: C
Roof Exposure: Partially Exposed
Thermal Condition: Unheated(1.2)
Unobstructed Slippery Roof: Yes
Low-Slope Minimums(Pfmin): No
Unbalanced Snow Loads: No
Rain Surcharge: No Ice Dam Chk: Yes

----------Wind Load Specs----------
ASCE7-10 Wind Speed(V) = 120 mph
Risk Cat: I Exposure Cat: C
Bldg Dims: L = 0.0 ft B = 0.0 ft
M.R.H(h) = 15.0 ft Kzt = 1.0
Bldg Enclosure: Enclosed
Wind DL(psf): TC = 4.0 BC = 1.0
End Vertical Exposed: L = Yes R = Yes
Wind Uplift Reporting: HybridMW

-------Additional Design Checks------

10 psf Non-Concurrent BCLL:	No
20 psf BC Limited Storage:	No
200 lb BC Accessible Ceiling:	No
300 lb TC Maintenance Load:	No
2000 lb TC Safe Load:	No
Unbalanced TCLL:	Yes

Material Summary

TC	2x6	SP (ALSC6-2013)	#1	
BC	2x6	SP (ALSC6-2013)	#1	
Webs	2x4	SP (ALSC6-2013)	#3/Stud	

Member Forces Summary

...Mem...		Ten	Comp	.CSI.
TC	OH- 1	47	0	0.06
	1- 2	4804	7504	0.92
	2- 3	4729	7133	0.73
	3- 4	3884	5557	0.67
	4- 5	3884	5557	0.67
	5- 6	4729	7133	0.73
	6- 7	4804	7504	0.92
	7-OH	47	0	0.06
BC	1- 8	7009	4290	0.98
	7-12	7009	4282	0.98
	8- 9	5788	3480	0.78
	9-10	4353	2451	0.57
	10-11	4353	2451	0.57
	11-12	5788	3505	0.78
Web	2- 8	648	757	0.19
	3- 8	1253	774	0.68
	3- 9	1074	1343	0.70
	4- 9	1579	1058	0.60
	4-11	1579	1058	0.60
	5-11	1074	1343	0.70
	5-12	1253	774	0.68
	6-12	648	757	0.19

Reaction Summary

----------Reaction Summary(Lbs)----------

Jnt	--X-Loc-	React	-Up-	--Width-	-Reqd	-Mat	PSI
1	01-12	3113	1056	03-08	04-07**	SPF	470
7	39-10-04	3114	1056	03-08	04-07**	SPF	470

Max Horiz = -262 / +262 at Joint 1
(**) indicates Reqd Width > actual Width; enhancement may be required.

See bearing block detail TD-BRG-0001A.

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [20-00-00] using a 1.00 Full and 0.00 Reduced load factor.

See Loadcase Report for loading combinations and additional details.
Dead Loads may be slope adjusted: > 12.0/12

Notes

Plates designed for Cq at 0.80 and Rotational Tolerance of 10.0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints.
Designed with hybrid plate values. See TD-SUB-0001 for info.
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE. Alternatively, see D-WEBREINFORCE.
Roof live load has been reduced in accordance Section 1607 of the IBC.
Reduced live load has been computed based on an Unreduced live load of 20 psf.

Deflection Summary

TrussSpan	Limit	Actual(in)	Location
Vert LL	L/240	L/931(-0.51)	9-11
Vert DL	L/120	L/999(-0.27)	9-11
Vert CR	L/180	L/605(-0.78)	9-11
Horz LL	0.75in	(0.15)	@Jt 7
Horz CR	1.25in	(0.23)	@Jt 7
Ohng CR	2L/90	L/999(0.00)	1- 1
Ohng CR	2L/90	L/999(0.00)	7- 7

Vert CR and Horz CR are the vertical and horizontal deflections due to live load plus the creep component of deflection due to dead load, computed as Defl_LL + (Kcr - 1) x Defl_DL in accordance with ANSI/TPI 1.

Bracing Data Summary

----------Bracing Data----------
Chords: Sheathing required or bracing indicated:

----------Purlins----------

	---@c---	--From--	---To---	#Bays
TC	2-00-00	-1-00-00	41-00-00	23
BC	3-04-00	0	40-00-00	12

------- Web Bracing -- CLR ----------
Single: 9- 4 4-11
Continuous Restraint Bracing Req'd
See BCSI-B3 3.0

Plate offsets (X, Y):

(None unless indicated below)
Jnt3(-00-10,01-14), Jnt5(00-10,01-14), Jnt8(0,-02-00), Jnt12(0,-02-00)

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COA License Number 3449
Date: 02/19/2020
DE Job# 72504-W1

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Component Solutions
Truss Studio V
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EngUrwg: 2019r3RGT_Eng