

TFS Live Dead Dur Factors TPI-2014
 BC 75.0 2.0 Live Wind Snow
 0.0 2.0 Lim 1.00 N/A N/A
 Total: 83.0 Plt 1.00 N/A N/A
 Spacing: 6'-00"-00 o.c. Piles: 2
 Repetitive Member Increase: No
 Green Number: No Wet Surfaces No
 FWD Tolerance: 10% Creep (MC2) = 2.0

Material Summary
 TC 2x8 SP 2400/2.0 #1 3-4
 4-5 2x8 SP 2400/2.0 #1
 BC 2x8 SP (ALSC6-2013) #1
 2x4 SP (ALSC6-2013) #1
 2x11 SP (ALSC6-2013) #1 4-11
 9-3 9-4 11-5
 Kedge 2x12 SP (ALSC6-2013) #1

Member Forces Summary
 Max CSI in TC PANEL 3 - 4 0.56
 Max CSI in BC PANEL 1 - 8 0.33
 Max CSI in Web 9 - 4 0.30

--Mem-- Ten Comp .CSI
 TC 1-1-2 0 13435 0.45
 2-2-4 0 13057 0.26
 3-3-6 0 12991 0.23
 4-5 0 12391 0.56
 5-6 0 13036 0.26
 6-7 13434 0.45
 BC 7-8 11301 0
 8-9 11301 0.33
 8-9 10575 0 0.49
 9-10 8160 0 0.22
 10-11 8160 0 0.22
 11-12 10575 0 0.49
 Web 3-8 1208 0.11
 3-9 0 3529 0.23
 4-9 4310 0 0.30
 4-10 432 0 0.02
 4-11 0 0.92
 5-11 0 3529 0.23
 5-12 1207 0 0.11
 6-12 0 1686 0.11

Notes
 Plates designed for C_u at 0.90 and Rotational Tolerance of 5.0 degrees
 A "p" next to the plate size indicates that the plate has been user
 modified; see Plate Offsets for any special positioning requirements.
 Single pass roller reduction factor has been used.

Reaction Summary
 Jnt -X-loc- React
 7 35-06-04 8901

Deflection Summary
 TrussSpan Limit Accn3 (in) Location
 Vert DL L/1200 L/999(-0.31) 11-12
 Vert DL L/120 L/999(-0.03) 11-12
 Vert CR L/180 L/999(-0.34) 11-12
 Hezz LR 1.0014 (0.12) 8x2 7
 Hezz CR 1.5014 (0.13) 8x2 7

Bracing Data Summary
 Chords: continuous except where shown
 --Purlins--
 TC 2-00-00 0 35-09-00 20
 2-00-00 0 35-09-00 20
 Web Bracing: None

Plate Offsets (X, Y):
 (None unless indicated below)
 Jnt1 (02-09-01-01), Jnt1 (09-08-02-06),
 Jnt2 (02-09-01-01), Jnt2 (09-08-02-06),
 Jnt3 (02-02-03), Jnt3 (01-13-00-15),
 Jnt4 (02-09-01-01), Jnt4 (09-08-02-06),
 Jnt5 (01-01-04), Jnt5 (01-00-01),
 Jnt6 (01-01-04)

Joint Stress Index (JSI):
 Jnt3 (0.60), Jnt3 (0.60),
 Jnt3 (0.45), Jnt4 (0.53), Jnt5 (0.45),
 Jnt6 (0.60), Jnt7 (0.72), Jnt7 (0.71),
 Jnt8 (0.60), Jnt9 (0.56), Jnt10 (0.50),
 Jnt11 (0.56), Jnt12 (0.60)

GENERAL FEEL, DESIGN, AND FABRICATION NOTES:

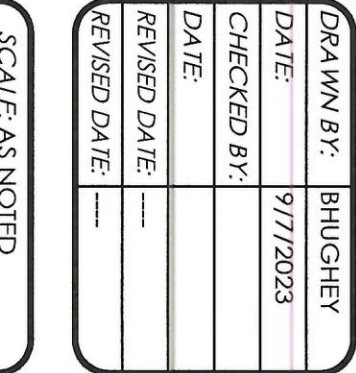
1. PROVIDE COMES OF THIS TRUSS DESIGN TO THE BUILDING DESIGNER, ERECTION SUPERVISOR, PROPERTY OWNER AND ALL OTHER INTERESTED PARTIES.
2. CUT MEMBERS TO BEAR TOGETHLY AGAINST EACH OTHER.
3. PLACE PLATES ON EACH FACE OF TRUSS AT EACH JOINT AND ENDED FULLY. AVOID KNOTS AND WANE AT JOINT LOCATIONS.
4. MOISTURE CONTENT OF LUMBER SHALL NOT EXCEED 19% AT THE TIME OF FABRICATION.
5. THIS DESIGN IS NOT APPLICABLE FOR USE WITH FIRE RETARDING OR PRESERVATIVE TREATED LUMBER.
6. CAMBER IS A NON-STRUCTURAL CONSIDERATION AND IS THE RESPONSIBILITY OF THE RUSS FABRICATOR. GENERAL

*ROOF SNOW LOAD CALCULATIONS

LIVE LOAD	<u>74</u>	PSF
DEAD LOAD	<u>6</u>	PSF
CEILING LOAD	<u>2</u>	PSF
TOTAL LOAD	<u>82</u>	PSF

CON

MICHAEL L. MCCORMICK, P.
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DATE: 9-7-23 REG. #



JOB NO.

CO
ALLIED DESIGN ARCHITECTURAL & ENGINEERING GROUP, P.C.
100 S. PERSHING P.O. BOX 110 MORTON, IL 61550 PHONE NUMBER: 309-263-4105

PHONE NUMBER: 309-263-4105

145125512 - Coletta	Qty: 1	Truss: R1
Customer: Sales		SID:
Truss Mfr: MBI		TID:
		Date: 08/24/23
		Page: 1 of 1

RF Live Dead BC 0.0 1.0 Total 0.0 1.0 Spacing: 8'-00" o.c. Pile: 2 Repetitive Member Increase: No Green Lumber: No Wet Service: No End Tolerance: 10% Creep (MCr) = 2.0	TP1-2014 Dur Factors: Lum 1.00 Mod N/A Shap N/A Pile 1.00 Wet N/A
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Material Summary TC 2x12 SP 2250/1.9 2x6 SP (ALSC6-2013) Web 2x6 SP (ALSC6-2013)	Reaction Summary Int --X-Log-React 1 1-10-03 5301 3 13-07-12 4109
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Member Forces Summary Max CSI in TC PANEL 1 - 2 0.84 Max CSI in BC PANEL 1 - 3 0.68 Max CSI in Web 3 - 2 0.17	Notes Plates designed for Cq at 0.90 and Rotational Tolerance of 5.0 degrees Plates designed for Cq at 0.90 and Rotational Tolerance of 5.0 degrees Modified: See Plate Details for an additional detailing requirements. Single pass roller reduction factor has been used.
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Deflection Summary TrussSpan Limit Actual (in) Location Vert DL L/120 L/120 1-3 Vert UL L/120 L/120 1-3 Vert CR L/180 L/475 (-0.30) 1-3 Horz DL 1.001n (0.08) @Jt 1 Horz CR 1.501n (0.08) @Jt 1	Bracing Data Summary Bracing Data Indicated --Bracing required or Bracing Indicated --Purlins----- OC -- --From-- --To-- TC 2-00-00 0 13-10-08 8 BC 6-00-00 0 13-10-08 3 Web Bracing -- None
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Plate offsets (X, Y): (None unless indicated below) Jnt1(01-14,0), Jnt1(-00-12,0), Jnt2(-00-14,-00-04), Jnt3(-00-14,0) Joint Stress Index (JSI): Jnt1(0.60), Jnt1(0.60), Jnt2(0.78), Jnt3(0.09)		Component Solutions Truss Studio V 2022.5.2.5
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ALLIED DESIGN ARCHITECTURAL AND ENGINEERING GROUP, A LIMITED CERTIFIED TRUST DESIGN, ONLY, AND DOES NOT GUARANTEE DESIGN OR OTHER ENGINEERING OF THE BUILDING IN WHICH THE TRUSS WILL BE INCORPORATED. ALLIED EXPRESSLY RELIES THAT THE BUILDING DESIGN AND/OR OTHER ENGINEERING WILL BE PROVIDED BY OTHERS, AND ALLIED ASSUMES NO LIABILITY FOR PLANS OR DESIGN OF OTHERS WHICH INCORPORATE THIS TRUSS DESIGN. IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER TO REVIEW THIS TRUSS DESIGN AND VERIFY THAT DIMENSIONS AND LOADS CONFORM TO APPLICABLE STANDARDS FOR DESIGN AND ENGINEERING FOR THE USE IN A BUILDING.

1. GENERAL SAFETY, DESIGN, AND FABRICATION NOTES:
 1. PROVIDE COPIES OF THIS TRUSS DESIGN TO THE BUILDING DESIGNER, ERECTION SUPERVISOR, PROPERTY OWNER AND ALL OTHER INTERESTED PARTIES.
 2. CUT MEMBERS TO BEAR TIGHTLY AGAINST EACH OTHER.
 3. PLACE PLATES ON EACH FACE OF TRUSS AT EACH JOINT AND ENBED FULLY. AVOID KNOTS AND WANE AT JOINT LOCATIONS.
 4. MOISTURE CONTENT OF LUMBER SHALL NOT EXCEED 19% AT THE TIME OF FABRICATION.
 5. THIS DESIGN IS NOT APPLICABLE FOR USE WITH FIRE RETARDING OR PRESERVATIVE TREATED LUMBER.
 6. CAMBER IS A NON-STRUCTURAL CONSIDERATION AND IS THE RESPONSIBILITY OF THE TRUSS FABRICATOR. GENERAL PRACTICE IS TO CAMBER FOR DEAD LOAD DEFLECTION.
 7. PLATE TYPE AND SIZE SHOWN ARE MINIMUM REQUIREMENTS.
 8. LUMBER SHALL BE THE SIZE AND SPECIES SHOWN. THE GRADES SHOWN ARE MINIMUM REQUIREMENTS.
 9. TOP CHORDS MUST BE Laterally Braced NOT TO EXCEED 24' O.C.
 10. BOTTOM CHORDS MUST BE Laterally Braced NOT TO EXCEED 8' O.C.
 11. ANCHORAGE AND/OR LOAD TRANSFERRING CONNECTIONS TO RUSSERS ARE THE RESPONSIBILITY OF THE BUILDING DESIGNER.
 12. DO NOT OVERLOAD TRUSSES WITH STACKS OF CONSTRUCTION MATERIAL.
 13. DO NOT CUT OR ALTER TRUSS MEMBERS OR PLATES WITHOUT WRITTEN APPROVAL OF THE TRUSS DESIGNER.
 14. CARE SHOULD BE EXERCISED WHEN HANDLING, ERECTING, AND INSTALLING THESE TRUSSES TO AVOID DAMAGE.

GROUND SNOW LOAD: 11.1 PSF
WIND SPEED (VULT) (EXP. B): 11.5 MPH

*ROOF SNOW LOAD CALCULATIONS

Pf	= 0.7 x Ce x Pg x Ct		
Ce	= SNOW EXPOSURE FACTOR = 1.0		
I	= IMPORTANCE FACTOR = 0.8		
Pg	= GROUND SNOW LOAD = 111 PSF	LIVE LOAD	74 PSF
Ct	= THERMAL FACTOR = 1.2	DEAD LOAD	8 PSF
Pf	= 0.7 x 1.0 x 0.8 x 111 x 1.2 = 74.59 PSF	CEILING LOAD	- PSF
Cs	= ROOF SLOPE FACTOR = 0.98		
	= Pf x Cs = 74.59 x 0.98 = 73.10 PSF	TOTAL LOAD	82 PSF

$$\begin{aligned} \text{REQUIRED TRUSS LOAD} &= \frac{82}{8'-0"} \text{ O.C.} = 656 \text{ PLF} \\ \text{TRUSS DESIGN LOAD (SEE DESIGN OUTPUT)} &= \frac{672}{8'-0"} \text{ O.C.} = 672 \text{ PLF} \end{aligned}$$

I HEREBY CERTIFY THAT THE STRUCTURAL DESIGN FOR THIS BUILDING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED/REGISTERED PROFESSIONAL ENGINEER.

MICHAEL L. MCCORMICK, P.
mlmccormick@aol.com
DATE 9-1-9 REG. # 38347

OFFICE:
MONTROSE, CO

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DRAWN BY:	BHUGHEY
DATE:	9/7/2023
CHECKED BY:	
DATE:	
REVISED DATE:	
REVISED DATE:	

SCALE: AS NOTED
SHEET NO.
T2 OF T2