

Trenco 818 Soundside Rd Edenton, NC 27932

Re: P03988-17010 Brann Residence - Schumacher

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Lumber 2383 (Dunn, NC).

Pages or sheets covered by this seal: I68972565 thru I68972588

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844



October 21,2024

# Gilbert, Eric

**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	A1E	Common Supported Gable	1	1	Job Reference (optional)	168972565

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Thu Oct 17 09:35:19 ID:cX0QOG\_LbfsfFKzPGpuE7wyVnEn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





#### Scale - 1:59 5

20-11-0

Loading	(ps	f)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.	0	Plate Grip DOL	1.15		TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf/Pa)	7 7/10	0	Lumber DOI	1 15		BC	0.04	Vert(CT)	n/a	-	n/a	999			
	10	0	Ren Stress Incr	YES		WB	0.09	Horz(CT)	0.00	12	n/a	n/a			
BCU	10.	0*	Code	IRC2	18/TDI2014	Matrix-MS	0.00	11012(01)	0.00	12	n/a	n/a			
	10	0	Code	11102	510/11/2014	Wath A-WO							Woight: 116 lb	ET _ 200	0/
BCDL	10.	0		-									weight. The b	FT = 20,	/0
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood 6-0-0 oc purlins Rigid ceiling dire bracing.	shea ectly	athing directly applie applied or 10-0-0 oc	ed or	BOT CHORD WEBS NOTES	2-23=-48/108, 22- 21-22=-46/108, 22 19-20=-46/108, 17 16-17=-46/108, 15 14-15=-46/108, 12 7-19=-118/20, 6-2 4-22=-134/74, 3-2 9-16=-141/80, 10-	23=-46/1 D-21=-46/ 7-19=-46/ 5-16=-46/ 2-14=-46/ 0=-145/7 3=-163/9 15=-134/	08, '108, '108, '108, '108 '5, 5-21=-141 '2, 8-17=-145 '74, 11-14=-1	/80, /75, 63/91	11) This cho 12) * Th on 1 3-00 cho 13) All I 14) Pro bea	s truss h rd live lo his truss the botto 6-00 tall rd and a bearings vide met ring plat	as bee bad nor has be om cho by 2-0 iny oth are as chanic te capa	n designed for a nooncurrent with een designed for rd in all areas wh 0-00 wide will the er members. ssumed to be SP al connection (by ble of withstand	10.0 psf b any other I a live load iere a recta between th ' No.2. / others) of ing 24 lb up	ottom live loads. of 20.0psf angle he bottom
REACTIONS	(size) 2=20 14=20 16=22 19=20 21=22 23=20 Max Horiz 2=15 Max Uplift 2=-24 17=-6 23=-6 Max Grav 2=150 17=-6 23=-6 17=-6 23=-6 14=22 16=11 19=11 21=11 23=21 28=11	-11-0 0-11- 0-11- 0-11- 0-11- 0-11- 0-11- 0-11- 55 (LC 55	$\begin{array}{l} ,12=20\text{-}11\text{-}0,\\ 0,15=20\text{-}11\text{-}0,\\ 0,22=20\text{-}11\text{-}0,\\ 0,22=20\text{-}11\text{-}0,\\ 0,22=20\text{-}11\text{-}0,\\ 0,22=20\text{-}11\text{-}0,\\ 0,22=20\text{-}11\text{-}0,\\ 0,22=20\text{-}11\text{-}0,\\ 0,24=20\text{-}11\text{-}0,\\ 0,24=20\text{-}11\text{-}0,\\ 12),14=\text{-}82\ (\text{LC 17})\\ 17),16=-65\ (\text{LC 17})\\ 17),12=-65\ (\text{LC 12})\\ 17),22=-55\ (\text{LC 12})\\ 16),24=24\ (\text{LC 12})\\ 23),12=156\ (\text{LC 2})\\ 23),15=155\ (\text{LC 2})\\ 23),15=155\ (\text{LC 2})\\ 23),12=154\ (\text{LC 2})\\ 23),22=154\ (\text{LC 2})\\ 234),22=154\ (\text{LC 2})\\ 24\right)\end{array}$	5) ), 7), 6), 6), 6), 2) 35), 35), 34), 34), 2),	<ol> <li>Unbalanced this design.</li> <li>Wind: ASCE Vasd=103m II; Exp B; En and C-C Cor to 10-5-8, CC 13-5-8 to 21 end vertical forces &amp; MW DOL=1.60 p</li> <li>Truss design only. For stu see Standar or consult qt</li> <li>TCLL: ASCE Plate DOL= 1.15 Plate D</li> <li>Exp.; Ce=1.0</li> <li>Unbalanced</li> </ol>	roof live loads have 7-16; Vult=130mp ph; TCDL=6.0psf; closed; MWFRS ( rer(3E) -0-10-8 to orner(3R) 10-5-8 to 9-8 zone; cantileve left and right expo- /FRS for reactions late grip DOL=1.60 red for wind loads uds exposed to wind a Industry Gable E ualified building de 5-16; Pr=20.0 psf OL = 1.15); Is=1.00 ; Cs=1.00; Ct=1.1 ; Snow loads have	ve been of BCDL=3 BCDL=3 envelope b 2-1-8, E o 13-5-8, ver left ar sed;C-C s shown; 0 in the pl. nd (norm End Deta signer as of (roof LL ; Pf=7.7 ); Rough 10 been cor	considered fo cond gust) .0psf; h=25ft; ) exterior zor ixterior(2N) 2 Exterior(2N) nd right expos for members Lumber ane of the tru al to the face is as applical s per ANSI/TF .: Lum DOL=: psf (Lum DOI Cat B; Partia	r ; Cat. ne -1-8 sed ; and ss ), ble, PI 1. 1.15 _ = Illy nis	2, 6 at jc 65 l join 15) This Inte R8( <b>LOAD (</b>	i3 lb upli pint 22, 8 b uplift a t 14 and s truss is rrnationa 02.10.2 a CASE(S)	ft at joi 35 lb up 24 lb u 24 lb u 35 desig 11 Resid and ref 3 Star	nt 20, 65 lb uplift polift at joint 23, 6 16, 56 lb uplift at uplift at joint 2. ned in accordand Jential Code sec erenced standar ndard	at joint 21 2 Ib uplift a joint 15, 8 ce with the tions R502 d ANSI/TPI	, 55 lb uplift t joint 17, 2 lb uplift at 2018 .11.1 and I 1.
F <b>ORCES</b> TOP CHORD	(lb) - Maximum Tension 1-2=0/26, 2-3=- 4-5=-96/90, 5-6: 7-8=-109/167, 8 10-11=-64/30, 1	Com 123/1 =-86/ -9=-{ 1-12	pression/Maximum 111, 3-4=-108/86, 119, 6-7=-109/167, 36/117, 9-10=-65/65 =-79/51, 12-13=0/26	,	<ul> <li>design.</li> <li>This truss ha load of 120 overhangs n</li> <li>Building Des verifying Rai requirement:</li> <li>All plates are</li> <li>Gable requir</li> <li>Gable studs</li> </ul>	as been designed psf or 1.00 times f on-concurrent with signer/Project engi in Load = $5.0$ (psf) s specific to the us $\geq 2x4$ (II) MT20 ur res continuous bot spaced at 2-0-0 o	for great flat roof lo h other liv neer res covers r se of this hless oth tom chor hc.	er of min roof pad of 7.7 psf ve loads. ponsible for ain loading truss compor erwise indicat d bearing.	live on nent. ted.		THE DAY ST			L 22 E.F.R	

- 10) Gable studs spaced at 2-0-0 oc.

October 21,2024

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 BCEL Building Component Schut Information, purplication component component durate propagate component component to the prevent collapse with possible for the Studyer Building Component Advance and Adva and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	A1	Common	4	1	Job Reference (optional)	168972566

6-11-6

3x6=

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Thu Oct 17 09:35:18 ID:QhOhfJ26BVcpzFRZd4\_eMByVnEh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:61.2			7-1-1 7-1-1		<u>13-9-1</u> 6-8-1	5 5		<u>20-11-</u> 7-1-1	0			
Loading	(psf)	Spacing Plate Grip DOI	2-0-0	CSI TC	0.34	<b>DEFL</b>	in -0.08	(loc) 8-10	l/defl	L/d 240	PLATES	<b>GRIP</b> 244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL Rep Stress Incr	1.15 YES	BC	0.61	Vert(CT)	-0.14	8-10 6	>999 n/a	180 n/a	WIT20	244/130
BCLL BCDL	0.0* 10.0	Code	IRC2018/TPI2014	Matrix-MS	0.11	11012(01)	0.00	Ū	n/u	n/a	Weight: 101 lb	FT = 20%
LUMBER		<b>!</b>	4) Unbalance	d snow loads ha	ave been cor	nsidered for t	his					

21

10

3x6=

9

3x6=

8

3x6=

3x6=

LUMBER		
TOP CHORD	2x4 SP N	0.2
BOT CHORD	2x4 SP N	0.2
WEBS	2x4 SP N	o.2 *Except* 8-5,10-3:2x4 SP No.3
BRACING		
TOP CHORD	Structura	wood sheathing directly applied or
	4-4-12 oc	purlins.
BOT CHORD	Rigid ceili bracing.	ing directly applied or 10-0-0 oc
REACTIONS	(size)	2=0-3-8, 6=0-3-8
	Max Horiz	2=155 (LC 15)
	Max Uplift	2=-157 (LC 16), 6=-157 (LC 17)
	Max Grav	2=999 (LC 34), 6=1000 (LC 35)
FORCES	(lb) - Max Tension	imum Compression/Maximum
TOP CHORD	1-2=0/26,	2-3=-1631/220, 3-4=-1515/257,
	4-5=-151	6/257, 5-6=-1632/221, 6-7=0/26
BOT CHORD	2-10=-210	0/1345, 8-10=-55/867,
	6-8=-116/	/1348
WEBS	4-8=-142/ 3-10=-348	/660, 5-8=-348/183, 4-10=-142/658, 8/183
	2.5 0.0	

## NOTES

 Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-5-8, Exterior(2R) 10-5-8 to 13-5-8, Interior (1) 13-5-8 to 21-9-8 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=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* 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, with BCDL = 10.0psf.
  9) All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 157 lb uplift at joint 2 and 157 lb uplift at joint 6.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	A2	Common	6	1	Job Reference (optional)	168972567

10-5-8

-0-10-8

5-4-13

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334.

Run: 8.82 S. Oct 10 2024 Print: 8.820 S. Oct 10 2024 MiTek Industries. Inc. Thu Oct 17 09:35:19 ID:coYry4B?bt?FoxmgmthDJWyVnEW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

15-6-3

20-11-0

Page: 1



Scale = 1:61.2			7-1-1 7-1-1		<u>13-9</u> 6-8-	- <u>15</u> 15	1	<u>20-1</u> 7-1	<u>1-0</u> -1			
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL	(psf) 20.0 7.7/10.0 10.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MS	0.35 0.61 0.14	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.08 -0.14 0.03	(loc) 7-9 7-9 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL	10.0										Weight: 99 lb	FT = 20%
LUMBER			5) This truss h	as been des	igned for great	er of min root	live					

LOWIDER		
TOP CHORD	2x4 SP N	0.2
BOT CHORD	2x4 SP N	0.2
WEBS	2x4 SP N	o.2 *Except* 7-5,9-3:2x4 SP No.3
BRACING		
TOP CHORD	Structural 4-4-9 oc p	l wood sheathing directly applied or purlins.
BOT CHORD	Rigid ceil bracing.	ing directly applied or 10-0-0 oc
REACTIONS	(size)	2=0-3-8, 6=0-3-8
	Max Horiz	2=151 (LC 15)
	Max Uplift	2=-157 (LC 16), 6=-139 (LC 17)
	Max Grav	2=1000 (LC 34), 6=950 (LC 35)
FORCES	(lb) - Max Tension	imum Compression/Maximum
TOP CHORD	1-2=0/26,	2-3=-1633/221, 3-4=-1517/257,
	4-5=-1520	0/259, 5-6=-1636/223
BOT CHORD	2-9=-218/	/1344, 7-9=-63/863, 6-7=-133/1347
WEBS	4-7=-144/	664, 5-7=-350/184, 4-9=-142/658,
	3-9=-348/	(183

#### NOTES

- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) 2) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-5-8, Exterior(2R) 10-5-8 to 13-5-8, Interior (1) 13-5-8 to 20-11-0 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=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.: Ce=1.0: Cs=1.00: Ct=1.10
- Unbalanced snow loads have been considered for this 4) design.

- load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom 7) chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf 8) 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, with BCDL = 10.0psf. 9)
- All bearings are assumed to be SP No.2. 10) Provide mechanical connection (by others) of truss to
- bearing plate capable of withstanding 139 lb uplift at joint 6 and 157 lb uplift at joint 2.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. LOAD CASE(S) Standard



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818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	A2E	Common Supported Gable	1	1	Job Reference (optional)	168972568

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Thu Oct 17 09:35:20 ID:V2fVbJIfBFZonckzSzRxoqyVnJX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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22-11-8

Scale = 1:68														
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	8/TPI2014	CSI TC BC WB Matrix-MS	0.47 0.13 0.14	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 15	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 161	<b>GRIP</b> 244/190 b FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS TOP CHORD BOT CHORD WEBS REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 *Excep 21-8,23-7,24-6,25-4 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing. 1 Row at midpt (size) 2=22-11- 18=22-11 20=22-11 23=25 (L 23=39 (L 23=159	ot* ,26-3:2x4 SP No.3 athing directly applied cept end verticals. applied or 10-0-0 oc 11-18 8, 15=22-11-8, -8, 17=22-11-8, -8, 21=22-11-8, -8, 21=22-11-8, -8, 24=22-11-8, -8, 24=22-11-8, -8, 24=22-11-8, -8, 24=22-11-8, -8, 24=22-11-8, -8, 24=22-11-8, -8, 26=22-11-8, -8, 26=22-11-8, -8, 26=22-11-8, -8, 26=22-11-8, -8, 26=22-11-8, -8, 26=22-11-8, -8, 26=22-11-8, -10, 21=250 (LC 16, C 16), 21=-55 (LC 16, C 16), 24=-60 (LC 16, C 16), 24=-60 (LC 16, C 16), 26=-105 (LC 16, C 16), 26=-105 (LC 17, C 13), 19=-168 (LC 4, -C 2), 21=160 (LC 2), -C 40), 24=165 (LC 4, -C 2), 26=217 (LC 40, -C 35) pression/Maximum	TC bor W N( 1) ), 2) ), ), (1), 3) (0), 4)	DP CHORD DT CHORD EBS Unbalancer this design. Wind: ASC Vasd=103n II; Exp B; E and C-C Cc to 16-9-8, C 19-9-8 to 2: exposed ; e members a Lumber DC Truss desig only. For s see Standa or Consult C TCLL: ASC Plate DOL= 1.15 Plate I	1-2=0/23, 2-3=-2 4-6=-163/158, 6- 8-9=-125/171, 9- 10-11=-156/261, 12-13=-139/216, 14-15=-111/133 2-26=-230/194, 2 24-25=-96/129, 2 21-23=-96/129, 2 11-23=-96/129, 1 15-16=-96/129, 1	66/201, 3 7=-147/1 10=-141/2 11-12=-1 13-14=-1 25-26=-96 (23-24=-96 (20-21=-96 (20-21=-96 (20-21=-96 (6-17=-96) (20-21=-96 (6-17=-96) (20-21=-96 (10-19=-13) 21=-127/7 25=-115/6 (3-16=-16) ave been of the second s	-4=-203/168, 11, 7-8=-134/ 118, 56/261, 34/185, 1/129, 1	5/77, 5/121, or ; Cat. ne -1-8 ; ss ;), ble, PI 1. 1.15 L = ully	<ul> <li>6) The loss ov ov</li></ul>	is truss h d of 12.0 erhangs ilding De ifying Ra quiremen plates a bble requible stud- is truss the botto 6-00 tall bearings byide me aring pla 33 lb uplift in t 25, 10 uplift at jo	has beed opsf or non-co- signer, signer, in Loa ts spect re 2x4 tires co- bad noi has be bord cho- by 2-C any oth s are a: chanic te capa ff at joint 5 lb up point 16	en designed for 1.00 times flat incurrent with c (Project engine d = 5.0 (psf) cc cific to the use (III) MT20 unle ntinuous bottor ed at 2-0-0 oc. an designed for nconcurrent wi een designed for source for s	greater of min roof load of 7. ther live loads. er responsible vers rain loadii of this truss con ss otherwise in n chord bearing a 10.0 psf bott h any other live or a live load of vhere a rectang it between the iP No.2. by others) of tri ding 25 lb uplift at joint 18, 5 55 lb uplift at joint 18, 5 55 lb uplift at joint 24, 39 joint at joint 2. ARO SIANA AL 322	roof live 7 psf on for ng mponent. dicated. g. tom e loads. 20.0psf gle bottom uss to t at joint 55 lb uplift at nt 17, 60
FUKGES	(io) - Maximum Con Tension	ipression/iviaximum	5)	Exp.; Ce=1 Unbalanced design.	.0; Cs=1.00; Ct=1 d snow loads have	.10 e been cor	nsidered for t	his			in the second se	AC A.	GILBER	

Continued on page 2 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 RCSI Building Component Safety (Information, available from the Structural Building Component Association (www.shearcomponent Safety Information, available from the Structural Building Component Association (www.shearcomponent Safety Information, available from the Structural Building Component Association (www.shearcomponent Association). and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

818 Soundside Road Edenton, NC 27932

October 21,2024

Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	A2E	Common Supported Gable	1	1	Job Reference (optional)	168972568
84 Lumber-2383 (Dunn, NC), Du	ber-2383 (Dunn, NC), Dunn, NC - 28334, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Thu Oct 17 09:35:20					Page: 2

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Thu Oct 17 09:35:20 ID:V2fVbJIfBFZonckzSzRxoqyVnJX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

15) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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 outlapse 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/TP11 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)

![](_page_5_Picture_6.jpeg)

Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	A3	Common	6	1	Job Reference (optional)	168972569

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Thu Oct 17 09:35:20 ID:GnZEZcnhJ28u7?xjRR9sZlyVnKC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

![](_page_6_Figure_4.jpeg)

		8-5-12	16-9-8	22-11-8	
Scale = 1:70	Γ	8-5-12	8-3-12	6-2-0	
Plate Offsets (X, Y): [2:Edge,0-0-8]					

	( ) <b>L</b> - <b>J</b>												
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MS	0.64 0.81 0.84	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.15 -0.25 0.03	(loc) 9-11 9-11 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 134 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: ASG Vasd=103 II; Exp B; and C-C E to 16-9-8, 19-9-8 to 2 exposed ; members Lumber D	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Eft: 2x4 SP No.3 Structural wood she 4-2-15 oc purlins, e Rigid ceiling directly bracing. (size) 2=0-3-8, £ Max Horiz 2=250 (LC Max Uplift 2=-190 (L Max Grav 2=1033 (L (lb) - Maximum Com Tension 1-2=0/23, 2-3=-1849 5-6=-807/251, 6-7=- 2-11=-473/1697, 9-1 6-9=-73/320, 5-9=-7 3-11=-324/173, 7-9= ed roof live loads have n. CE 7-16; Vult=130mph imph; TCDL=6.0psf; Be Enclosed; MWFRS (er Exterior(2R) 16-9-8 to 22-9-12 zone; cantileve end vertical left and rig and forces & MWFRS	t* 0-0,11-3:2x4 SP N athing directly applie xcept end verticals. applied or 8-6-15 oc 3=0-3-8 C15) C 16), 8=-158 (LC 1) LC 3), 8=989 (LC 3) pression/Maximum 1/336, 3-5=-1634/323 805/237, 7-8=-1049/ 1=-345/1208, 8-9=-£ 46/244, 5-11=-82/62 -176/847 been considered for (3-second gust) CDL=3.0psf; h=25ft; ivelope) exterior zon 2-1-8, Interior (1) 2-1 19-9-8, Interior (1) 2-1 91-9-8, Interior (1) 2-1 ght exposed;C-C for for reactions shown; L=1.60	4) 5) klo.3 6) kld or 7) 8) 6) 9) 10 3, 242 2, 11 35/98 11 35/98 11 35/98 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,	Unbalanced design. This truss ha load of 12.0 overhangs n Building Des verifying Rai requirement: This truss ha chord live loa * This truss ha on the bottor 3-06-00 tall I chord and at All bearings D) Provide mec bearing plate 2 and 158 lb D) This truss is International R802.10.2 a <b>DAD CASE(S)</b>	snow loads have as been designed psf or 1.00 times to on-concurrent with igner/Project engi is specific to the us as been designed ad nonconcurrent has been designed ad nonconcurrent has been designed are assumed to be thanical connection e capable of withst uplift at joint 8. designed in accor Residential Code nd referenced star Standard	been cor for great flat roof le h other lin ineer res covers r se of this for a 10.0 with any d for a liv with any d for a liv es P No. n (by oth tanding 1 rdance w sections ndard AN	sidered for t er of min roo aad of 7.7 ps ve loads. oonsible for ain loading truss compo 0 ps bottom other live loa e load of 20. a rectangle veen the bott DL = 10.0ps 2. ers) of truss 90 lb uplift a isth the 2018 is R502.11.1 a ISI/TPI 1.	his f live f on nent. ds. Opsf f. to t joint				SEA 0363	ROWARD L
<ol> <li>TCLL: AS Plate DOI</li> </ol>	CE 7-16; Pr=20.0 psf ( =1 15): Pg=10.0 psf: F	roof LL: Lum DOL=1 Pf=7.7 psf (Lum DOL	.15								11	AUGINI	EPIN

members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

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 BCEL Building Component Schut Information, purplication component component durate propagate component component to the prevent collapse with possible for the Studyer Building Component Advance and Adva and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

![](_page_6_Picture_9.jpeg)

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October 21,2024

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Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	АЗА	Common	5	1	Job Reference (optional)	168972570

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Thu Oct 17 09:35:20 ID:8HGKrAdXN2Vk3?SDACQpX0yVnKP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

![](_page_7_Figure_3.jpeg)

![](_page_7_Figure_4.jpeg)

			L	8-5-1	2	13-11-0	16-	-9-8	22-	11-8			
Scale = 1:70			1	8-5-12	2 1	5-5-4	2-1	0-8	6-2	2-0	I		
Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15		TC	0.97	Vert(LL)	-0.05	11-14	>999	240	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15		BC	0.48	Vert(CT)	-0.11	9-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES		WB	0.89	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018	/TPI2014	Matrix-MS								
BCDL	10.0											Weight: 169 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x6 SP No.2 2x4 SP No.2 *Excep Structural wood she 4-0-2 oc purlins, ex Rigid ceiling directly bracing.	ot* 8-7,11-3:2x4 SP I athing directly applic cept end verticals. applied or 10-0-0 o 8-0-3-8	5) No.3 6) ed or 7) c 8)	This truss h load of 12.0 overhangs r Building De verifying Ra requirement 200.0lb AC from left end This truss h chord live lo	as been designe psf or 1.00 time: ion-concurrent w signer/Project en in Load = 5.0 (ps s specific to the unit load placed d, supported at tw as been designe ad nonconcurrer	d for great s flat roof lo rith other lin gineer res sf) covers r use of this on the bott wo points, s d for a 10.0 nt with any	er of min roo bad of 7.7 ps ve loads. bonsible for ain loading truss compo om chord, 1: 5-0-0 apart. 0 psf bottom other live loa	of live of on onent. 2-3-0 ads.					
FORCES	Max Horiz 2=247 (LC Max Uplift 2=-98 (LC Max Grav 2=1119 (L (lb) - Maximum Com Tension	C 15) C 16), 8=-50 (LC 16) LC 3), 8=1154 (LC 3	9) ) 10) 11)	* This truss on the botto 3-06-00 tall chord and a All bearings	has been design m chord in all are by 2-00-00 wide ny other membe are assumed to	ed for a liv eas where will fit betv rs, with BC be SP No.	e load of 20. a rectangle veen the bot DL = 10.0ps 2. ers) of truss	.0psf tom sf.					
TOP CHORD	1-2=0/23, 2-3=-2061	1/137, 3-5=-1848/12	1,	bearing plat	e capable of with	istanding 9	8 lb uplift at	joint					

....

....

5-6=-918/161, 6-7=-915/147, 7-8=-1177/123 BOT CHORD 2-11=-296/1893, 9-11=-223/1353, 8-9=-89/99 WEBS 7-9=-59/971, 6-9=0/419, 3-11=-325/175, 5-11=0/722, 5-9=-809/170

### NOTES

- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) 2) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 16-9-8, Exterior(2R) 16-9-8 to 19-9-8, Interior (1) 19-9-8 to 22-9-12 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=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this 4) design.

2 and 50 lb uplift at joint 8. 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

![](_page_7_Picture_14.jpeg)

Page: 1

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Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	A3E	Common Supported Gable	1	1	Job Reference (optional)	168972571

### Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Thu Oct 17 09:35:20 ID:jhgCHe6AYXotdGTZ2hbLClyVnFv-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

![](_page_8_Figure_4.jpeg)

13-11-0

Scale = 1:38

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MS	0.22 0.14 0.11	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 8	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 64 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 10-0-0 oc purlins. Rigid ceiling directly bracing. (size) 2=13-11-C 11=13-11- 13=13-11- 15=13-11- Max Horiz 2=62 (LC 11=-39 (L 14=-90 (L) Max Grav 2=99 (LC 11=112 (L 13=141 (L 15=99 (LC	athing directly applied applied or 6-0-0 oc ), 8=13-11-0, 10=13- -0, 12=13-11-0, -0, 14=13-11-0, -0 16), 15=62 (LC 16) : 41), 10=-101 (LC 17 C 17), 13=-47 (LC 16) C 16), 15=-72 (LC 41 40), 10=313 (LC 2), .C 23), 14=260 (LC 2 2 40)	2; d or 11-0, <sup>3;</sup> (), (), (), (), (), (), (), (), (), (),	<ul> <li>Wind: ASCE Vasd=103mµ</li> <li>II; Exp B; En and C-C Cor to 6-11-8, Cc</li> <li>9-11-8 to 14</li> <li>end vertical I forces &amp; MW</li> <li>DOL=1.60 pI</li> <li>Truss design only. For stu- see Standar- or consult qu</li> <li>TCLL: ASCE Plate DOL=1</li> <li>1.15 Plate D</li> <li>Exp.; Ce=1.0</li> <li>Unbalanced design.</li> <li>This truss ha load of 12.0</li> </ul>	7-16; Vult=130m bi; TCDL=6.0psf; closed; MWFRS ner(3E) -0-10-8 ti rmer(3R) 6-11-8 9-8 zone; cantile eft and right expo (FRS for reaction: ate grip DOL=1.6 red for wind loads ids exposed to wi d Industry Gable I alified building de : 7-16; Pr=20.0 ps OL = 1.15; Is=1.1 b; Cs=1.00; Ct=1. snow loads have us been designed psf or 1.00 times	ph (3-set BCDL=2 (envelopp 2-1-8, E to 9-11-8 ver left at ossed;C-C s in the pl ind (norm End Deta ssigner a sf (roof LL f; Pf=7.7 0; Rough 10 been col for great flat roof I	cond gust) cond gust) cond gust) cond gust) exterior zor exterior(2N) 2: , Exterior(2N) 2: , Exterior(2N) dright expose for members Lumber ane of the true ane of the true so for the face ils as applical so for the face is per ANSI/TF psf (Lum DOL=' psf (Lum DOL Cat B; Partia nsidered for the er of min roof pad of 7.7 psf	Cat. ie -1-8 and ss ), ble, -1.15 -= lly nis live on	14) Prov bea 2, 4 at jc 2. 15) This Inte R80 LOAD C	vide me ring plat 7 lb upli int 11, - truss is rnationa 2:10.2 a <b>CASE(S</b> )	chanic te capa ft at joi 101 lb s desig Il Resi and ref ) Sta	al connection (by able of withstandi int 13, 90 lb uplift uplift at joint 10 a dential Code sect erenced standard ndard	others) of truss to ng 72 lb uplift at joint at joint 14, 39 lb uplift nd 72 lb uplift at joint we with the 2018 ions R502.11.1 and d ANSI/TPI 1.
FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design	(b) - Maximum Com Tension 1-2=0/23, 2-3=-169/ 4-5=-34/287, 5-6=-3 7-8=-174/312, 8-9=0 2-14=-246/218, 13-1 12-13=-246/218, 13-1 12-13=-246/218, 8-1 5-12=-347/105, 4-13 3-14=-191/153, 6-11 ed roof live loads have n.	pression/Maximum 307, 3-4=-88/284, 4/288, 6-7=-83/278, //23 4=-246/218, 12=-246/218, 0=-246/218, 0=-246/218 =-104/90, 7-10=-214 been considered for	7, 8 9j 11 1 1 //170	overhangs n Building Des verifying Rai requirements All plates are Gable requir D) Gable studs 1) This truss ha chord live loa 2) * This truss h on the bottor 3-06-00 tall t chord and ar 3) All bearings	on-concurrent wit igner/Project eng n Load = 5.0 (psf s specific to the u e 2x4 (  ) MT20 u es continuous bo spaced at 2-0-0 o is been designed ad nonconcurrent has been designed n chord in all are: by 2-00-00 wide v ny other members are assumed to b	h other li ineer res ) covers I se of this nless oth ttom choro oc. for a 10. with any d for a liv as where vill fit betv s. e SP No	ve loads. ponsible for ain loading truss compor erwise indicat d bearing. 0 psf bottom other live loa e load of 20.0 a rectangle veen the botto 2.	nent. æd. ds. )psf om		Gunner		SEA 0363	L 22 BERRER HUM

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 BCEL Building Component Schut Information, purplication component component durate propagate component component to the prevent collapse with possible for the Studyer Building Component Advance and Adva and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

![](_page_8_Picture_9.jpeg)

818 Soundside Road Edenton, NC 27932

G A. GIL October 21,2024

Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	A5	Common	1	1	Job Reference (optional)	168972572

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Thu Oct 17 09:35:21 ID:?1brl1BZvhgtyLVvyfD\_\_DyVnFo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

![](_page_9_Figure_4.jpeg)

	6-11-8	13-11-0	
	6-11-8	6-11-8	1
Scale = 1:39.1			
Plate Offsets (X, Y): [2:0-3-4,Edge], [4:0-3-4,Edge]			

	, , , , , , , , , , , , , , , , , , ,	[1.0 0 1,Edg0]											
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC20	8/TPI2014	CSI TC BC WB Matrix-MS	0.49 0.35 0.13	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.03 -0.06 0.01	(loc) 6-9 6-9 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 64 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES	2x4 SP No.2 2x6 SP No.2 2x4 SP No.3 Structural wood she 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 2=0-3-8, 4 Max Horiz 2=62 (LC Max Uplift 2=-112 (L Max Grav 2=609 (LC (lb) - Maximum Com	athing directly applie applied or 10-0-0 or 4=0-3-8 16) C 16), 4=-112 (LC 1 C 2), 4=609 (LC 2) ipression/Maximum	5 ed or 7 c 8 7) g 1	<ul> <li>This truss hi load of 12.0 overhangs r</li> <li>Building Desverifying Ra requirement</li> <li>This truss hi chord live lo</li> <li>* This truss on the botto 3-06-00 tall chord and a</li> <li>All bearings</li> <li>Provide mee bearing plat</li> </ul>	as been designed psf or 1.00 times ion-concurrent wit signer/Project eng in Load = 5.0 (psf) s specific to the us as been designed ad nonconcurrent has been designe m chord in all area by 2-00-00 wide w ny other members are assumed to b chanical connectio e capable of withs	for great flat roof k h other livin ineer res ) covers r se of this for a 10.1 with any d for a livin as where vill fit betv s. e SP No. n (by oth tanding 1	er of min rooi pad of 7.7 ps /e loads. ponsible for ain loading truss compo 0 psf bottom other live loa e load of 20. a rectangle veen the bott 2. ers) of truss 12 lb uplift a	f live f on nent. ads. 0psf com t joint					
TOP CHORD	1-2=0/23, 2-3=-796/2 4-5=0/23	275, 3-4=-796/275,	1	2 and 112 lb 1) This truss is Internationa	uplift at joint 4. designed in acco Residential Code	rdance w sections	ith the 2018 R502.11.1 a	and					
BOICHORD	2-6=-119/623, 4-6=-	119/623		R802.10.2 a	nd referenced sta	ndard AN	ISI/TPI 1.						
NOTES	3-0=-27/343		L	OAD CASE(S)	Standard								
1) Unbalance	ed roof live loads have	been considered for	r										un.
<ul> <li>this design</li> <li>Wind: ASC</li> <li>Vasd=103</li> <li>II; Exp B; I</li> <li>and C-C E</li> <li>to 6-11-8,</li> <li>9-11-8 to 1</li> <li>end vertica</li> <li>forces &amp; M</li> <li>DOL=1.60</li> <li>TCLL: ASC</li> <li>Plate DOL</li> <li>1.15 Plate</li> <li>Exp.; Ce=</li> <li>4) Unbalance</li> <li>design.</li> </ul>	n. CE 7-16; Vult=130mph mph; TCDL=6.0psf; Bt Enclosed; MWFRS (en- xterior(2E) -0-10-8 to : Exterior(2E) -0-10-8 to : Exterior(2E) 6-11-8 to 14-9-8 zone; cantilever al left and right expose WFRS for reactions si VWFRS for reactions si voltage rip DOL=1.60 CE 7-16; Pr=20.0 psf ( .=1.15); Pg=10.0 psf; F DOL = 1.15); Is=1.0; F 1.0; Cs=1.00; Ct=1.10 ed snow loads have be	(3-second gust) CDL=3.0psf; h=25ft; hvelope) exterior zon 2-1.8, Interior (1) 2- 9-11-8, Interior (1) r left and right expos d;C-C for members hown; Lumber roof LL: Lum DOL=1 2f=7.7 psf (Lum DOL Rough Cat B; Partial even considered for th	Cat. ne 1-8 wed ; and 1.15 _ = Ily							(Walling)		SEA 0363	L L L L L L L L L L L L L L L L L L L

October 21,2024

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Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	A1G	Common Girder	1	2	Job Reference (optional)	168972573

Run: 8.82 S. Oct 10 2024 Print: 8.820 S. Oct 10 2024 MiTek Industries. Inc. Thu Oct 17 09:35:19 ID:74xcc6m2q7bD5ZbxD1Z0O7yVnF3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

![](_page_10_Figure_5.jpeg)

Weight: 136 lb FT = 20%

Vert: 14=-722 (F), 15=-722 (F), 16=-722 (F), 17=-722

Concentrated Loads (lb)

(F), 18=-722 (F), 19=-722 (F)

GRIP

244/190

LOWIDEN		
TOP CHORD	2x4 SP N	0.2
BOT CHORD	2x6 SP D	SS
WEBS	2x4 SP N	0.3
BRACING		
TOP CHORD	Structural	wood sheathing directly applied.
BOT CHORD	Rigid ceili	ing directly applied or 10-0-0 oc
	bracing.	0 7 11
REACTIONS	(size)	1=0-3-8, 3=0-3-8
	Max Horiz	1=-56 (LC 13)
	Max Uplift	1=-685 (LC 12), 3=-699 (LC 13)
	Max Grav	1=3833 (LC 3), 3=3914 (LC 3)
FORCES	(lb) - Max	imum Compression/Maximum
	Tension	
TOP CHORD	1-2=-6497	7/1154, 2-3=-6567/1167
BOT CHORD	1-5=-998/	5746, 4-5=-696/4041,
	3-4=-974/	/5810
WEBS	2-5=-564/	/3202, 2-4=-585/3320
NOTES		
1) 2-ply truss	to be conn	ected together with 10d
(0 131"v3	') nails as fo	llows:

10.0

Scale = 1:38.2

Loading

TCDL

BCLL

BCDL

TCLL (roof)

Snow (Pf/Pg)

Top chords connected as follows: 2x4 - 1 row at 0-9-0 00 Bottom chords connected as follows: 2x6 - 2 rows

staggered at 0-9-0 oc.

Web connected as follows: 2x4 - 1 row at 0-9-0 oc. All loads are considered equally applied to all plies,

- 2) except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.

- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 5) Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 6) Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for 7) verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component. This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. \* This truss has been designed for a live load of 20.0psf 9)
- 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.
- 10) All bearings are assumed to be SP No.2 .
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 685 lb uplift at joint 1 and 699 lb uplift at joint 3.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Use Simpson Strong-Tie HUS26 (14-16d Girder, 4-16d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 12-0-12 to connect truss(es) to front face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber.
- LOAD CASE(S) Standard 1)
- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (lb/ft)
  - Vert: 1-2=-35, 2-3=-35, 6-9=-20

 $\cap$ MILLION MANY SEAL 036322 G mmm October 21,2024

818 Soundside Road

Edenton, NC 27932

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Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	A9	Common	8	1	Job Reference (optional)	168972574

9-4-1

Scale = 1:70.7

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Thu Oct 17 09:35:21 ID:HUqVFkqJHHZmW7xOO8CjScyVnHY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

![](_page_11_Figure_4.jpeg)

Loading TCLL (roof) Snow (Pf/Pg) TCDL	(psf) 20.0 7.7/10.0 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES		CSI TC BC WB	0.55 0.86 0.83	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.15 -0.26 0.05	(loc) 14-16 14-16 11	l/defl >999 >999 n/a	L/d 240 180 n/a	<b>PLATES</b> MT20	<b>GRIP</b> 244/190
BCLL BCDL	0.0* 10.0	Code	IRC2018	3/TPI2014	Matrix-MS							Weight: 179 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEDS WEDGE BRACING TOP CHORD BOT CHORD REACTIONS	MBER           P CHORD         2x4 SP No.2           T CHORD         2x4 SP No.2           TES         2x4 SP No.2 *Except* 16-2,8-12,8-11:2x4 SF No.3           SEDGE         Left: 2x4 SP No.3           ACING         P CHORD           P CHORD         Structural wood sheathing directly applied or 3-10-2 oc purlins.           T CHORD         Rigid ceiling directly applied or 6-0-0 oc bracing.           ACTIONS         (size)           1 = Mechanical, 9=0-3-8, 11=0-3-8 Max Horiz           Max Uplift         1=-153 (LC 17)           Max Horiz         1=-153 (LC 17)           Max Grav         1=1148 (LC 3), 9=-77 (LC 40), 11=-249 (LC 17)           Max Grav         1=1148 (LC 3), 9=134 (LC 41), 11=1839 (LC 3)           RCES         (lb) - Maximum Compression/Maximum Tension           P CHORD         1-2=-2196/345, 2-4=-1983/325, 4-5=-1178/265, 5-6=-1175/263, 6-8=-503/14 8-9=-107/662, 9-10=0/23				7-16; Vult=130mp bh; TCDL=6.0psf; I closed; MWFRS (i erior(2E) 0-0-0 to 3 tterior(2R) 16-9-8 t 9-13 zone; cantile id vertical left and id vertical left and id vertical left and id forces & MWFRS =1.60 plate grip D ; 7-16; Pr=20.0 psf; OL = 1.15); Is=1.0 ; Cs=1.00; Ct=1.1 ; Cs=4.00; Ct=1.1 ; snow loads have t is been designed f psf or 1.00 times fl on-concurrent with igner/Project engir	wh (3-sec BCDL=3 BCDL=3 BCDL=3 BCDL=3 BCDL=3 Constant of the sec Stor reas OL=1.60 f (roof LL Pf=7.7 ; Rough 0 peen cor or great at roof lo o other lin peer res	wond gust) .0psf; h=25ft ) exterior zon hterior (1) 3-4 , Interior (1) und right wosed;C-C for ctions showr ) .: Lum DOL= psf (Lum DOL= psf (Lum DOL= state of min rool pad of 7.7 ps re loads. ponsible for	;; Cat. ne 4-12 r ;; :1.15 L = ally his f live f on					
TOP CHORD	1-2=-2196/345, 2-4: 4-5=-1178/265, 5-6: 8-9=-107/662, 9-10:	=-1983/325, =-1175/263, 6-8=-503 =0/23	/141, 7) 8)	<ul> <li>verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.</li> <li>7) All plates are 3x6 (=) MT20 unless otherwise indicated.</li> <li>8) This trues hear designed for a 10.0 psf hottom</li> </ul>									unin.
BOT CHORD	1-16=-365/1892, 14 12-14=-23/734, 11- 9-11=-537/127	-16=-211/1423, 12=-537/127,	9)	chord live loa * This truss h on the bottor	ad nonconcurrent v nas been designed n chord in all areas	with any I for a liv s where	other live loa e load of 20.0 a rectangle	ads. Opsf			- NI	ORTH CA	ROLLIN
WEBS	5-14=-107/683, 4-14 4-16=-83/592, 2-16 6-12=-912/153, 8-12 8-11=-1875/258	4=-736/246, =-312/172, 6-14=-28/3 2=-125/1353,	325, 10 11	3-06-00 tall b chord and an All bearings a Refer to gird	3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf. All bearings are assumed to be SP No.2. SEAL								L
NOTES 1) Unbalanced roof live loads have been considered for this design.				<ul> <li>Provide mec bearing plate</li> <li>1, 77 lb uplift</li> <li>This truss is International R802.10.2 ar</li> <li>DAD CASE(S)</li> </ul>	hanical connection e capable of withsta at joint 9 and 249 designed in accorr Residential Code nd referenced stan Standard	b (by oth anding 1 Ib uplift dance w sections idard AN	ers) of truss f 93 lb uplift at at joint 11. ith the 2018 R502.11.1 a ISI/TPI 1.	to t joint and		THERE	A MARTINE AND A	0363	

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Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	A12	Common	7	1	Job Reference (optional)	168972575

Run: 8.82 S. Oct 10 2024 Print: 8.820 S. Oct 10 2024 MiTek Industries. Inc. Thu Oct 17 09:35:21

Page: 1

![](_page_12_Figure_5.jpeg)

	· · · 9··· · · · · · · 9 · · · · · · / · · [- [- · · · · · · · · · · · · · · ·
	bracing.
REACTIONS	(size) 2=0-3-8, 12=0-3-8
	Max Horiz 2=-146 (LC 17)
	Max Uplift 2=-218 (LC 16), 12=-307 (LC 17)
	Max Grav 2=1187 (LC 3), 12=1865 (LC 3)
FORCES	(Ib) - Maximum Compression/Maximum
TOP CHORD	1-2=0/23, 2-3=-2205/360, 3-5=-1993/341,
	5-6=-1192/236, 6-7=-1190/255, 7-9=-547/131,
BOT CHORD	2-17=-378/1899, 15-17=-226/1436,
	13-15=-55/763, 12-13=-512/366,
	10-12=-512/366
WEBS	6-15=-123/697, 5-15=-734/245,
	5-17=-80/588, 3-17=-309/170, 7-15=-54/308,
	7-13=-893/267, 9-13=-208/1353,
	9-12=-1866/388

#### NOTES

Scale = 1:71

Loading

TCDL

BCLL

BCDL

WEBS

WEDGE

BRACING

TOP CHORD

BOT CHORD

LUMBER

TOP CHORD

BOT CHORD

TCLL (roof)

Snow (Pf/Pg)

1) Unbalanced roof live loads have been considered for this design.

TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL =

- 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10 4) Unbalanced snow loads have been considered for this
- design.
- This truss has been designed for greater of min roof live 5) load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads. 6) Building Designer/Project engineer responsible for
- verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component. All plates are 3x6 (=) MT20 unless otherwise indicated. 7)
- This truss has been designed for a 10.0 psf bottom 8)
- chord live load nonconcurrent with any other live loads. 9) \* 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, with BCDL = 10.0psf. 10) All bearings are assumed to be SP No.2.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 218 lb uplift at joint 2 and 307 lb uplift at joint 12.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

![](_page_12_Figure_21.jpeg)

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818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	A15	Common	6	1	Job Reference (optional)	168972576

16-9-8

5-6-8

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

-0-10-8 0-10-8

5-8-8

5-8-8

11-3-0

5-6-8

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Thu Oct 17 09:35:21 ID:Bci9wAv8Jdm8ioFU6KJbYNyVnG9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

22-4-0

5-6-8

33-11-8

27-10-8

5-6-8

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0-10-1

33-11-8

6-1-0

		23 2 2 3 4x6=	3x6 = 2x4 3 4 2 3	6 <sup>12</sup> 5 16 1 <b>2</b> 7 3x6= 3x6=	x6 = 24 28	4x6= 6 14 3x8=	25	3×6≈ 7 30 13 4×6	12 3x6=	2x4 3x6 8 9	*	26 10 1 3x8=	1°+70
		<u>8-5-1</u> 8-5-1	22	-	<u>16-9-8</u> 8-3-12		<u>25-1-4</u> 8-3-12			3	<u>33-11-0</u> 8-9-12	) 33-11-8	
Scale = 1:70.7	(X V): [2:Edge 0-0-12	1 [10:0-8-0 0-0-1/]										0-0-0	
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(^, r). [2::::dge,0-0-12 (psf) 20.0 7.7/10.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/	TPI2014	CSI TC BC WB Matrix-MS	0.59 0.97 0.88	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.24 -0.43 0.10	(loc) 14-16 14-16 10	l/defl >999 >939 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 177 lb	<b>GRIP</b> 244/190 FT = 20%
TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Unbalancc this desig 2) Wind: ASI Vasd=103 II; Exp B; and C-C E to 16-9-8, 20-2-4 to end vertic forces & M DOL=1.60	2x4 SP No.2 2x4 SP No.1 *Excep 2x4 SP No.1 *Excep Left: 2x4 SP No.3 Structural wood she 2-9-7 oc purlins. Rigid ceiling directly bracing. (size) 2=0-3-8, ~ (size) 2=0-3-8, ~ (max Horiz 2=-146 (L Max Uplift 2=-248 (L Max Grav 2=1527 (L (h) - Maximum Com Tension 1-2=0/23, 2-3=-2972 5-6=-1992/366, 6-7= 7-9=-2878/422, 9-10 2-16=-433/2576, 14 12-14=-199/2181, 10 6-14=-196/1414, 7-1 7-12=-94/681, 9-12= 5-14=-721/243, 5-16 ed roof live loads have n. CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; Bi Enclosed; MWFRS (er Exterior(2E) -0-10-8 to 2 Exterior(2E) 10-9-8 to 3 4-9-9 zone; cantilever al left and right exposes WWFRS for reactions s 0 plate grip DOL=1.60	et* 15-13:2x4 SP No.2 et* 12-9,16-3:2x4 SP athing directly applie applied or 2-2-0 oc 10=0-3-8 C 17) C 16), 10=-251 (LC - C 3), 10=1524 (LC 3 pression/Maximum 2/422, 3-5=-2767/409 1990/366, )=-3096/443, 10-11=( -16=-284/2142, 0-12=-314/2729 14=-777/251, =-373/181, ]=-77/558, 3-16=-284 been considered for (3-second gust) CDL=3.0psf; h=25ft; ivelope) exterior zon 2-6-4, Interior (1) 2-6 20-2-4, Interior (1) 2-6 20-2-4, Interior (1) r left and right expose d;C-C for members a hown; Lumber	2 No.3 d or 5) 6) 7) 8) 7) 8) 9) 2/22 10) 11) /169 LOA Cat. 2 -4 cat. 2 -4	Plate DOL= 1.15 Plate I Exp.; Ce=1. Unbalanced design. This truss h load of 12.0 overhangs r Building De verifying Ra requiremenh chord live lc * This truss on the botto 3-06-00 tall chord and a All bearings Provide met bearing plat 2 and 251 Ik This truss is Internationa R802.10.2 a AD CASE(S)	1.15); Pg=10.0 p DOL = 1.15); Is= (0; Cs=1.00; Ct= d snow loads have as been designed psf or 1.00 time on-concurrent v signer/Project er tin Load = 5.0 (p ts specific to the as been designed m chord in all ar by 2-00-00 wide my other member are assumed to chanical connect te capable of with b uplift at joint 10 s designed in acc al Residential Co and referenced s ) Standard	Sif; Pf=7.7 1.0; Rough 1.10 ve been cor ed for great s flat roof I li ogineer res sif) covers r use of this ed for a 10.1 to d for a 10.1 to a 10.1 to be SP No. tion (by oth hstanding 2 D. cordance w de sections tandard AN	psf (Lum DO Cat B; Partia nsidered for the er of min roof oad of 7.7 psi ve loads. ponsible for rain loading truss compo 0 psf bottom other live load of 20.1 a rectangle veen the both 2 DL = 10.0psi 2 L ers) of truss 1 248 lb uplift at ith the 2018 a R502.11.1 a NSI/TPI 1.	L = Illy his f live f on nent. dds. 0psf om f. to t joint				SEA 0363	ROLL 22 E.B.B.H.I.I.
WARN Design a truss s building is alway fabricati and BC	NING - Verify design parameter valid for use only with MiTeki system. Before use, the build design. Bracing indicated is /s required for stability and to ion, storage, delivery, erection SI Building Component Sa	ers and READ NOTES ON 1 © connectors. This design ling designer must verify th to prevent buckling of indi prevent collapse with post n and bracing of trusses ar fiety information available	THIS AND INCL is based only u e applicability o vidual truss we sible personal in d truss system e from the Stru	UDED MITEK F pon parameter of design param b and/or chord njury and prope is, see <b>ANSI</b> ctural Building	REFERENCE PAGE I s shown, and is for a neters and properly ir members only. Addi arty damage. For ger IP11 Quality Criteria Component Associa	MII-7473 rev. 1 n individual bu ncorporate this itional tempora neral guidance and DSB-22 tion (www.sbc	/2/2023 BEFORE uilding componer design into the ary and permane e regarding the available from 1 acomponents.co	E USE. ht, not overall ht bracing fruss Plate m)	Institute (1	www.tpins	t.org)	818 Soundside R	NG BY NCCO A MiTek Atfiliate 00ad

Job	Truss Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	A4E	Common Supported Gable	1	1	Job Reference (optional)	168972577

#### Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries. Inc. Thu Oct 17 09:35:21 ID:QKIYpF0nCOvtHBRD8jziQGyVnG0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

![](_page_14_Figure_3.jpeg)

Page: 1

![](_page_14_Figure_5.jpeg)

![](_page_14_Figure_6.jpeg)

33-11-8

Scale = 1:68.7																	
Loading	(ps	sf)	Spacing	2-0-0					DEFL	in n/a	(loc)	l/defl	L/d	PLATES	GRIP		
Spow (Pf/Pg)	7 7/10	0		1.15			PC 0.03		Vert(CT)	n/a	-	n/a	000	101120	244/130	•	
	1.1/10.	0	Lumber DOL	1.15 VES			DC 0.07			11/a	- 20	n/a	999				
TCDL	10.	.0	Rep Stress Incr	TES			VVB 0.13		HOIZ(CT)	0.01	20	n/a	n/a				
BCLL	0.	.0^	Code	IRC2	018/19/2014		Matrix-MS										
BCDL	10.	.0												Weight: 214 lb	$FI = 20^{\circ}$	%	
LUMBER TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2					Ма	ax Grav 2=165 (LC 2), 2 22=246 (LC 41) 24=168 (LC 41)	20: ), 1 ), 1	=171 (LC 2), 23=129 (LC 2 25=158 (LC 2	:), :),	2) Wi Va II;	nd: ASCE sd=103m Exp B; Ei	E 7-16 iph; T( nclose	; Vult=130mph (3 CDL=6.0psf; BCD d; MWFRS (enve	second g L=3.0psf; lope) exte	ust) h=25ft; Cat. erior zone	
OTHERS	2x4 SP No.3 *E 30-11,31-10,32-	xcept -9,29-	* 12,28-13:2x4 SP No	0.2			27=160 (LC 41) 29=168 (LC 41)	), i ), :	28=159 (LC 2 30=181 (LC 3	.), 7),	an to	a C-C Co 16-9-8, C	orner(3	(3R) 16-9-8 to 2-9-	8, Exterio 2-4, Exter	rior(2N) 2-9-8 rior(2N)	
BRACING							31=168 (LC 40)	), :	32=159 (LC 2	:),	20	-2-4 to 34	-9-8 z	one; cantilever le	it and righ	nt exposed ;	
TOP CHORD	Structural wood 6-0-0 oc purlins	l shea	thing directly applie	ed or			33=160 (LC 40) 36=165 (LC 40)	), : ), :	35=159 (LC 2 37=142 (LC 2	!), !),	en for	end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber					
BOT CHORD	Rigid ceiling dire	ectly	applied or 10-0-0 oc	2			38=215 (LC 40) 42=171 (LC 2)	), :	39=165 (LC 2	2),	DC 3) Tri	DL=1.60 p uss desig	late g ned fo	rip DOL=1.60 r wind loads in th	e plane of	the truss	
WEBS	1 Row at midpt		11-30		FORCES	(I T	b) - Maximum Compress	sio	n/Maximum		on	ly. For st	uds ex	exposed to wind (normal to the face),			
REACTIONS	1 Row at midpt       11-30       PORCE         1 Row at midpt       11-30       PORCE         1 Row at midpt       22=33-11-0, 22=33-11-0, 22=33-11-0, 22=33-11-0, 22=33-11-0, 22=33-11-0, 22=33-11-0, 32=33-11-0, 33=33-11-0, 35=33-11-0, 35=33-11-0, 35=33-11-0, 38=33-11-0, 38=33-11-0, 38=33-11-0, 38=33-11-0, 38=33-11-0, 22=87 (LC 17), 22=87 (LC 17), 22=87 (LC 17), 22=87 (LC 17), 23=-44 (LC 17), 22=-87 (LC 17), 23=-44 (LC 17), 22=-87 (LC 17), 23=-44 (LC 16), 32=-55 (LC 17), 23=-55 (LC 17), 23=-55 (LC 17), 23=-55 (LC 16), 33=-55 (LC 16), 33=-100 (LC 16), 39=-24 (LC 17)       WEBS         NOTES				TOP CHORD	1 4 8 1 1 1	ension -2=0/23, 2-3=-162/68, 3 6=-87/93, 6-7=-67/116, 1 -9=-80/175, 9-10=-94/22 1-12=-112/264, 12-13=-5 3-14=-80/175, 14-15=-65 5-16=-57/85, 16-18=-47/ 9-20=-108/43, 20-21=0/2	=-110/75, 8=-69/140, 10-11=-112/2 /222, 130, 9, 18-19=-72/2	264, 21,	4) TC Pla 1.1 Ex 5) Ur de	or consult qualified building designer as per ANSI/TPI TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1. Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL 1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partiall Exp.; Ce=1.0; Cs=1.00; Ct=1.10 Unbalanced snow loads have been considered for thi design.						
					BOT CHORD WEBS NOTES	2 3 3 2 2 2 2 2 1 9 6 1 1 1 1 1	$\begin{array}{l} 36\text{-}37\text{=-}43/145, \ 35\text{-}36\text{=-}43/145, \\ 33\text{-}35\text{=-}43/145, \ 32\text{-}33\text{=-}43/145, \\ 31\text{-}32\text{=-}43/145, \ 30\text{-}31\text{=-}43/145, \\ 29\text{-}30\text{=-}43/145, \ 28\text{-}29\text{=-}43/145, \\ 27\text{-}28\text{=-}43/145, \ 25\text{-}27\text{=-}43/145, \\ 24\text{-}25\text{=-}43/145, \ 20\text{-}22\text{=-}43/145, \\ 22\text{-}23\text{=-}43/145, \ 20\text{-}22\text{=-}43/145, \\ 22\text{-}32\text{=-}43/145, \ 20\text{-}22\text{=-}43/145, \\ 11\text{-}30\text{=-}168/38, \ 10\text{-}31\text{=-}130/70, \\ 9\text{-}32\text{=-}127/81, \ 8\text{-}38\text{=-}126/76, \ 7\text{-}35\text{=-}126/77, \\ 6\text{-}36\text{=-}129/81, \ 4\text{-}37\text{=-}115/69, \ 3\text{-}38\text{=-}165/137, \\ 12\text{-}29\text{=-}130/70, \ 13\text{-}28\text{=-}127/81, \\ 14\text{-}27\text{=-}126/76, \ 15\text{-}25\text{=-}126/77, \\ 16\text{-}24\text{=-}131/81, \ 18\text{-}23\text{=-}109/69, \\ 19\text{-}22\text{=-}178/125 \end{array}$				6) Th loa ov	Icad of 12.0 psf or 1.00 times flat roof load of 7.7 psf overhangs non-concurrent with other live loads.				nin roof live 7.7 psf on ds.	
					<ol> <li>Unbalance this design</li> </ol>	ed r	oof live loads have been	C	onsidered for					A. G October	1LBE 21,202	24	

![](_page_14_Figure_9.jpeg)

![](_page_14_Picture_11.jpeg)

Continued on page 2

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 MTek connectors. This design is based only upon parameters and property incorporate this design is based only upon parameters and property incorporate this design into the overall building designer must verify the applicability of design parameters and property 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)

Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	A4E	Common Supported Gable	1	1	Job Reference (optional)	168972577
84 Lumber-2383 (Dunn, NC), Du	Run: 8.82 S Oct 10 2	024 Print: 8.	820 S Oct 10	2024 MiTek Industries, Inc. Thu Oct 17 09:35:21	Page: 2	

ID:QKIYpF0nCOvtHBRD8jziQGyVnG0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334.

- 7) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 (||) MT20 unless otherwise indicated. 8)
- Gable studs spaced at 2-0-0 oc. 9)

10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 11) \* 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.
- 12) All bearings are assumed to be SP No.2.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 2, 54 lb uplift at joint 31, 58 lb uplift at joint 32, 55 lb uplift at joint 33, 55 lb uplift at joint 35, 59 lb uplift at joint 36, 40 lb uplift at joint 37, 100 lb uplift at joint 38, 52 lb uplift at joint 29, 59 lb uplift at joint 28, 55 lb uplift at joint 27, 55 lb uplift at joint 25, 58 lb uplift at joint 24, 44 lb uplift at joint 23, 87 lb uplift at joint 22 and 24 lb uplift at joint 2.
- 14) Non Standard bearing condition. Review required.
- 15) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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 PCB Building Component Science Michael Component Advancement description (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

![](_page_15_Picture_13.jpeg)

Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	V1A	Valley	1	1	Job Reference (optional)	168972578

### Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Thu Oct 17 09:35:22 ID:LH7T7cB4m\_ulf\_OCoVIIoQyVnIN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

![](_page_16_Figure_3.jpeg)

**GRIP** 244/190

FT = 20%

![](_page_16_Figure_5.jpeg)

10-1-0

Scale =	1:30.7
---------	--------

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	)/TPI2014	CSI TC BC WB Matrix-MS	0.28 0.26 0.12	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 33 lb
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 10-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=10-1-0 Max Horiz 1=38 (LC Max Uplift 1=-15 (L0 4=-114 (I) Max Grav 1=86 (LC (LC 2)	eathing directly applied y applied or 6-0-0 oc 1, 3=10-1-0, 4=10-1-0 2 40), 3=-21 (LC 17), _C 16) 3 39), 3=86 (LC 40), 4=7	4) 5) or 6) 7) 8) 9) 713	TCLL: ASCE Plate DOL= 1.15 Plate D Exp.; Ce=1. Unbalanced design. Building Des verifying Ra requirement Gable requi Gable studs This truss h chord live lo * This truss on the botto \$2,06,00 tall	E 7-16; Pr=20.0 p 1.15); Pg=10.0 ps IOL = 1.15); Is=1. 0; Cs=1.00; Ct=1. snow loads have signer/Project eng in Load = 5.0 (psi s specific to the u res continuous be spaced at 4-0-0 u as been designed ad nonconcurrent has been designed m chord in all are v 200-00 wide b	sf (roof LI sf; Pf=7.7 .0; Rough .10 b been col gineer res f) covers I isse of this bittom chol oc. I for a 10. t with any ed for a linias where will fit hen	L: Lum DOL= psf (Lum DO Cat B; Partia nsidered for t ponsible for rain loading truss compo rd bearing. 0 psf bottom other live loa re load of 20. a rectangle	1.15 L = Illy his nent. ds. 0psf				
FORCES TOP CHORD BOT CHORD WEBS	(lb) - Maximum Cor Tension 1-2=-161/375, 2-3= 1-4=-311/200, 3-4= 2-4=-576/299	npression/Maximum -154/375 -311/200	11) 12)	chord and a All bearings Provide med bearing plat 1, 21 lb uplif	ny other members are assumed to t chanical connection e capable of withs t at joint 3 and 11	s. be SP No. on (by oth standing 1 4 lb uplift	.2 . hers) of truss t 15 lb uplift at j at joint 4.	to joint				

#### NOTES

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 5-1-0, Exterior(2R) 5-1-0 to 8-1-0, Interior (1) 8-1-0 to 10-1-8 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=1.60
- 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.
- the uplift at joint 3 and 114 lb uplift at joint 4.
   This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

![](_page_16_Figure_14.jpeg)

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)

Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	V2A	Valley	1	1	Job Reference (optional)	168972579

1-6-8

0-0-4

## Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Thu Oct 17 09:35:22 ID:pUhrKyCiXI09H8zOLDHXLeyVnIM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

![](_page_17_Figure_5.jpeg)

6-1-0

### Scale = 1:15.5

Plate Offsets (X, Y): [2:0-3-0.Edge]

	,Edge]											
Loading ( TCLL (roof) 2 Snow (Pf/Pg) 7.7/* TCDL BCLL BCDL	(psf)Spacing20.0Plate Grip DOL10.0Lumber DOL10.0Rep Stress Incr0.0*Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MP	0.29 0.23 0.00	<b>DEFL</b> Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.01	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 17 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 BRACING TOP CHORD Structural wo 6-0-0 oc purli BOT CHORD Rigid ceiling of bracing. REACTIONS (size) 1=1 Max Horiz 1=: Max Uplift 1=: Max Uplift 1=: Max Uplift 1=: Max Uplift 1=: Max Grav 1=: FORCES (Ib) - Maximu Tension TOP CHORD 1-2=-502/295 BOT CHORD 1-2=-502/295 BOT CHORD 1-3=-265/437 NOTES 1) Unbalanced roof live load this design. 2) Wind: ASCE 7-16; Vult=1 Vasd=103mph; TCDL=6.0 II; Exp B; Enclosed; MWF and C-C Exterior(2E) zon exposed ; end vertical left members and forces & MI Lumber DOL=1.60 plate (2 3) Truss designed for wind lk only. For studs exposed 1 see Standard Industry Ga or consult qualified buildir 4) TCLL: ASCE 7-16; Pg=10. 1.15 Plate DOL= 1.15); Pg=10. 1.15 Plate DOL= 1.15); Pg=10. 1.15 Plate DOL= 1.15); Is Exp.; Ce=1.0; Cs=1.00; C 5) Unbalanced snow loads h design.	and sheathing directly appli- ins. directly applied or 10-0-0 o 6-1-0, 3=6-1-0 22 (LC 20) -42 (LC 16), 3=-42 (LC 17) 243 (LC 2), 3=243 (LC 2) m Compression/Maximum 5, 2-3=-502/274 shave been considered fo 30mph (3-second gust) 0psf; BCDL=3.0psf; h=25ft r, antilever left and right t and right exposed;C-C for WFRS for reactions shown grip DOL=1.60 oads in the plane of the tru to wind (normal to the face able End Details as applica ng designer as per ANSI/TI 0 psf; Pf=7.7 psf (Lum DOL= 0 psf; Pf=7.7 psf	<ul> <li>6) Building Deverifying Rarequiremer</li> <li>7) Gable requiremer</li> <li>7) Gable studies</li> <li>8) Gable studies</li> <li>9) This truss for the bottime of the bottime of the chord live level on the bottime of the chord and a straining from the bottime of the chord and a straining from the chord</li></ul>	signer/Project eng ain Load = 5.0 (psf its specific to the us ires continuous boi s spaced at 4-0-0 c as been designed bad nonconcurrent has been designed or chord in all area by 2-00-00 wide w any other members s are assumed to b chanical connectio te capable of withs uplift at joint 3. s designed in acco al Residential Code and referenced sta ) Standard	ineer res ) covers r se of this ittom choro- toc. for a 10.0 with any d for a liva as where ill fit betw s. e SP No. n (by oth tanding 4 rdance w e sections ndard AN	ponsible for ain loading truss compon d bearing. D psf bottom other live load e load of 20.0 a rectangle veen the botto 2. ers) of truss to 2 lb uplift at jo ith the 2018 R502.11.1 at ISI/TPI 1.	ent. ds. psf m point nd		A tritter.		SEA 0363		· Manualan

# October 21,2024

INFEDING 818 Soundside Road Edenton, NC 27932

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 outlapse 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)

Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	V3A	Valley	1	1	Job Reference (optional)	168972580

10-7-12

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries. Inc. Thu Oct 17 09:35:22 ID:MBdRumTqLRzCxE7Czg2oa9yVkt5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

PLATES

Weight: 52 lb

MT20

GRIP

244/190

FT = 20%

Page: 1

![](_page_18_Figure_5.jpeg)

10-7-12

Scale	- 1	·17	3
Scale	= 1	.47	.ວ

TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(pst) 20.0 7.7/10.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC20	18/TPI2014	TC BC WB Matrix-MS	0.20 0.23 0.05	Vert(LL) Vert(TL) Horiz(TL)	n/a n/a 0.00	(IOC) - - 6	n/a n/a n/a n/a	L/d 999 999 n/a
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood she 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=10-7-1 8=10-7-1 Max Horiz 1=187 (L Max Uplift 6=-19 (L0 8=-27 (L0 Max Grav 1=151 (L (L 2) 8	eathing directly applie y applied or 10-0-0 oc 2, 6=10-7-12, 7=10-7 2, 9=10-7-12 C 16) C 16), 7=-66 (LC 16), C 16), 9=-120 (LC 16 C 2), 6=54 (LC 2), 7= =57 (I C 22) 9=384 (	d or 	<ul> <li>3) TCLL: ASCE Plate DOL=' 1.15 Plate D Exp.; Ce=1.</li> <li>4) Unbalanced design.</li> <li>5) Building Des verifying Rai requirement</li> <li>5) Gable requir</li> <li>7) Gable studs</li> <li>8) This truss ha chord live lo</li> <li>9) * This truss lo</li> <li>on the botton 3-06-00 tall li chord and an</li> </ul>	7-16; Pr=20.0 ps .15); Pg=10.0 ps .0L = 1.15); Is=1.0; .); Cs=1.00; Ct=1. snow loads have igner/Project eng n Load = 5.0 (psf) a specific to the us es continuous bol spaced at 2-0-0 c is been designed ad nonconcurrent nas been designed ad nonconcurrent nas been designed ad nonconcurrent nas been designed ad nonconcurrent ps 2-00-00 wide w by other members	If (roof LI f; Pf=7.7 ; Rough 10 been col ineer res ocovers i se of this tom choic for a 10. with any d for a liv as where vill fit betw	L: Lum DOL= psf (Lum DO Cat B; Partia hisidered for the ponsible for rain loading truss compo- rd bearing. 0 psf bottom other live loa re load of 20.1 a rectangle ween the bott	1.15 L = Illy his nent. ds. Opsf om			
FORCES	(lb) - Maximum Con Tension	npression/Maximum	, .	<ol> <li>All bearings</li> <li>Provide med bearing plat</li> </ol>	hanical connectio	e SP No. n (by oth	.2. ers) of truss t	to oint			
TOP CHORD BOT CHORD WEBS	1-2=-244/116, 2-3= 4-5=-34/17 1-9=-134/240, 8-9= 4-7=-158/116, 3-8= 5-6=-48/37	-132/46, 3-4=-89/51, 0/0, 7-8=0/0, 6-7=0/0 -75/72, 2-9=-272/135	,	6, 66 lb uplif uplift at joint 12) This truss is International	: at joint 7, 27 lb u 9. designed in acco Residential Code	plift at jo rdance w sections	with the 2018	lb			

#### NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust) 1) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 10-6-8 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=1.60
- Truss designed for wind loads in the plane of the truss 2) 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.
- R802.10.2 and referenced standard ANSI/TPI 1.

![](_page_18_Picture_13.jpeg)

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 PCB Building Component Science Michael Component Advancement description (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

LOAD CASE(S) Standard

Job	Truss		Truss Type		Qty	Ply	Brann Re	sidence	macher	169072594	
P03988-17010	V4A		Valley		1	1	Job Refer	1887/2881			
84 Lumber-2383 (D	unn, NC), Dunn, NC - 2	28334,		Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTe ID:MBdRumTqLRzCxE7Czg2oa9yVkt5-RfC?PsB70Hq3Nξ					MiTek Industries, Inc. Thu Oct 17 09:35:22 a3NSaPanL8w3uITXbGKWrCDoi7J4zJC?f		
								,			
				8-3-12							
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		2		0 2	"//			Q			
		4-2-	10	8				4-2-			
			6 Г								
		4	1								
		ė ₀	-					_			
			2x4 ≠	5			2x4 II				
				28-3-12							
Scale = 1:35.1											
Loading	(psf)	Spacing	2-0-0	CSI	DEFI	L	in (loc)	l/defl	L/d	PLATES	GRIP
Snow (Pf/Pg)	20.0 7.7/10.0	Lumber DOL	1.15	BC 0.	24 Vert( 16 Vert(	LL) r TL) r	1/a - 1/a -	n/a n/a	999 999	MT20	244/190
TCDL BCLL	10.0 0.0*	Rep Stress Incr Code	YES IRC2018/TPI2014	WB 0. Matrix-MP	07 Horiz	:(TL) 0.	00 4	n/a	n/a		
BCDL	10.0									Weight: 33 lb	FT = 20%
LUMBER TOP CHORD 2 BOT CHORD 2 OTHERS 2 BRACING TOP CHORD 5 BOT CHORD 5 BOT CHORD 5 BOT CHORD 7 REACTIONS (si Ma Ma Ma FORCES (( TOP CHORD 1 BOT CHORD	x4 SP No.2 x4 SP No.2 x4 SP No.3 x4 SP No.3 xt sp No.3	athing directly applied cept end verticals. applied or 10-0-0 oc . 4=8-3-12, 5=8-3-12 C 13), 5=-134 (LC 16) C 2), 4=113 (LC 22), C 2) ppression/Maximum 112/84, 3-4=-122/113 66/71 (3-second gust) CDL=3.0psf; h=25ft; C tyelope) exterior zone 0-8, Interior (1) 3-0-81 ght exposed ; end C for members and hown; Lumber	<ul> <li>4) Unbalanced design.</li> <li>5) Building Des verifying Ra requirement</li> <li>6) Gable requirement</li> <li>7) Gable studs</li> <li>8) This truss ha chord live lo</li> <li>9) * This truss on the botto 3-06-00 tall chord and a</li> <li>10) All bearings</li> <li>11) Provide met bearing platt</li> <li>4 and 134 lb</li> <li>12) This truss is Internationa R802.10.2 a</li> <li>LOAD CASE(S)</li> </ul>	snow loads have been signer/Project engineer in Load = 5.0 (psf) cove s specific to the use of t res continuous bottom of spaced at 4-0-0 oc. as been designed for a ad nonconcurrent with a has been designed for a m chord in all areas wh by 2-00-00 wide will fit t by 2-00-00 wide will fit th y other members. are assumed to be SP shanical connection (by e capable of withstandir o uplift at joint 5. designed in accordanc I Residential Code secti and referenced standard Standard	considere responsibl rs rain loa his truss o hord bear 10.0 psf b any other I a live load ere a recta between th No.2. others) of ng 29 lb up e with the ons R502 ANSI/TPI	d for this le for ding component. ing. ottom ive loads. of 20.0psf angle ne bottom truss to oblift at joint 2018 .11.1 and I 1.				ORTH CA	
<ul> <li>only. For stu- see Standard or consult qua</li> <li>TCLL: ASCE Plate DOL=1, 1.15 Plate DOL Exp.; Ce=1.0</li> </ul>	Industry Gable Enabling design Industry Gable Enabling design 7-16; Pr=20.0 psf ( 15); Pg=10.0 psf; F $U_c$ = 1.15); Is=1.0; Cs=1.00; Ct=1.10	(normal to the face), d Details as applicable gner as per ANSI/TPI roof LL: Lum DOL=1. <sup>-</sup> Pf=7.7 psf (Lum DOL= Rough Cat B; Partially	e, 1. 15 =					1102		0363	22 EER.K.
	- Verify design parameter	ers and READ NOTES ON TH	HIS AND INCLUDED MITEK R	EFERENCE PAGE MII-7473 n	ev. 1/2/2023	BEFORE USE				ENGINEER	ING BY

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 buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing fabrication, storage, delivery, erection and bracing of trusses sate truss systems, see **ANSI/TPII Quality Criteria and DSP-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

RE

JOD	Truss	Truss T	уре	Qty	Ply	Brann Res	sidence -	Schur	nacher	100070500
P03988-17010	V5A	Valley		1	1	Job Refer	ence (op	tional)		168972582
4 Lumber-2383 (Dunn, NC),	Dunn, NC - 28334,		Run: 8.	82 S Oct 10 2024 Print:	8.820 S Oct 1	0 2024 MiTek sB70Ha3NSaE	Industries	, Inc. Th	u Oct 17 09:35:22	Page: 1
			D.qOA	43013013310102171	IY V KI4-IKIC ! F	SD7011q3143gr	'qncowsu	TADGR	.0000000420091	
				5-11-12						
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						2x4 II				
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		N		8			N			
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			6							
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			3x6 ≠			2x4 II				
			I	5-11-12		I				
Scale = 1:30.7										
_oading	(psf) Spacing	2-0-0	CSI	DE	FL	in (loc)	l/defl	L/d	PLATES	GRIP
CLL (roof) Snow (Pf/Pg)	20.0 Plate Grip 7.7/10.0 Lumber D	DOL 1.15 DL 1.15	TC BC	0.49 Ve 0.47 Ve	t(LL) t(TL)	n/a - n/a -	n/a n/a	999 999	MT20	244/190
	10.0 Rep Stress	s Incr YES	WB 8/TPI2014 Matrix-M	0.00 Ho	riz(TĹ) (	0.01 3	n/a	n/a		
BCDL	10.0 Code	11(02010							Weight: 21 lb	FT = 20%
<ul> <li>3RACING</li> <li>TOP CHORD Structural 5-11-12 o</li> <li>3OT CHORD Rigid ceili bracing.</li> <li>3EACTIONS (size) Max Horiz Max Uplift Max Grav</li> <li>FORCES (lb) - Max Tension</li> <li>TOP CHORD 1-2=-461/ 3OT CHORD 1-2=-461/ 3OT CHORD 1-3=-273/</li> <li>VOTES</li> <li>I) Wind: ASCE 7-16; Vu Vasd=103mph; TCDL II; Exp B; Enclosed; N and C-C Exterior(2E)</li> <li>5-10-8 zone; cantileve vertical left and right e forces &amp; MWFRS for 1 DOL=1.60 plate grip I</li> <li>2) Truss designed for wii only. For studs expos see Standard Industry or consult qualified bu</li> <li>3) TCLL: ASCE 7-16; Pr Plate DOL=1.15); Pg=1.15 Plate DOL=1.0; Cs=1.0</li> <li>4) Unbalanced snow loa design.</li> </ul>	wood sheathing direct c purlins, except end v ng directly applied or 1 1=5-11-12, 3=5-11-12 1=102 (LC 13) 1=-42 (LC 16), 3=-67 1=233 (LC 2), 3=233 ( imum Compression/Ma 178, 2-3=-193/161 452 tt=130mph (3-second g =6.0psf; BCDL=3.0psf; WFRS (envelope) exte 0-0-8 to 3-0-8, Interior or left and right exposed C-0-6 to 3-0-8, Interior or left and right exposed cC-C for memb- eactions shown; Lumb DOL=1.60 nd loads in the plane of ed to wind (normal to t Gable End Details as ilding designer as per =20.0 psf (roof LL: Lum 10.0 psf; Pf=7.7 psf (L 0; Reugh Cat E 0; Ct=1.10 ds have been consider	(LC 16) = (1) $(LC 16) = (1)$ $(LC 16) = (1)$ $(LC 2) = (1)$ $($	Gable study spaced at This truss has been de chord live load noncon * This truss has been do on the bottom chord in 3-06-00 tall by 2-00-00 chord and any other m ) All bearings are assum ) Provide mechanical co bearing plate capable do 3 and 42 lb uplift at joir ) This truss is designed International Residenti R802.10.2 and referen DAD CASE(S) Standard	4-0-0 dc. signed for a 10.0 psf current with any othe lesigned for a live loa all areas where a re- wide will fit between embers. led to be SP No.2 . nnection (by others) of withstanding 67 lb tt 1. in accordance with tf al Code sections R50 ced standard ANSI/T d	bottom r live loads. d of 20.0psi tangle the bottom of truss to uplift at joint e 2018 (2.11.1 and PI 1.	f			SEA 0363	ROLL 22 LBERT
WARNING - Verify de	sign parameters and READ N	OTES ON THIS AND IN		ACE MI 7472 4/2/20		_			October	21,2024

a duss system. Betole use, the building designer must vering the applicationity of design parameters and property incorporate runs 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/TPI Quality Criteria and DSR-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)

Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	V6A	Valley	1	1	Job Reference (optional)	168972583

3-7-12

3-7-12

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.82 S. Oct 10 2024 Print: 8.820 S. Oct 10 2024 MiTek Industries. Inc. Thu Oct 17 09:35:22 ID:qOAq56TS6I53YOiOXNZ17MyVkt4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

2x4 ı

-10-2

l/defl

n/a 999

n/a 999

n/a n/a

L/d

PLATES

Weight: 12 lb

MT20

GRIP

244/190

FT = 20%

2

0 3

2x4 II

![](_page_21_Figure_3.jpeg)

3-7-12 Spacing 2-0-0 CSI DEFL in (loc) Plate Grip DOL 1.15 TC 0.14 Vert(LL) n/a BC 1 15 Lumber DOL 0.17 Vert(TL) n/a Rep Stress Incr YES WB 0.00 Horiz(TL) 0.00 3 Code IRC2018/TPI2014 Matrix-MP 5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component. Gable requires continuous bottom chord bearing. 6) Gable studs spaced at 4-0-0 oc. 7) This truss has been designed for a 10.0 psf bottom 8) Structural wood sheathing directly applied or chord live load nonconcurrent with any other live loads. 3-7-12 oc purlins, except end verticals. 9) \* This truss has been designed for a live load of 20.0psf Rigid ceiling directly applied or 10-0-0 oc on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom 1=3-7-12, 3=3-7-12 chord and any other members. Max Horiz 1=58 (LC 13) 10) All bearings are assumed to be SP No.2 . Max Uplift 1=-26 (LC 16), 3=-40 (LC 16) 11) Provide mechanical connection (by others) of truss to Max Grav 1=140 (LC 2), 3=140 (LC 2) bearing plate capable of withstanding 40 lb uplift at joint (lb) - Maximum Compression/Maximum 3 and 26 lb uplift at joint 1. 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. LOAD CASE(S) Standard

12 6 Г

2x4 🧔

1-10-2

#### Scale = 1:26.3

Loading

TCDL

BCLL

BCDL

WFBS

LUMBER

TOP CHORD

BOT CHORD

TOP CHORD

BOT CHORD

FORCES

**REACTIONS** (size)

BRACING

TCLL (roof)

Snow (Pf/Pg)

		Tension
TO	P CHORD	1-2=-250/105, 2-3=-111/92
BO	T CHORD	1-3=-172/243
NO	TES	
1)	Wind: ASC	E 7-16; Vult=130mph (3-second gust)
	Vasd=103n	nph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat.
	II; Exp B; E	nclosed; MWFRS (envelope) exterior zone
	and C-C Ex	terior(2E) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to
	3-6-8 zone;	cantilever left and right exposed ; end
	vertical left	and right exposed;C-C for members and
	forces & M	WFRS for reactions shown; Lumber
	DOL=1.60	plate grip DOL=1.60

(psf)

20.0

10.0

0.0

10.0

7 7/10 0

2x4 SP No.2

2x4 SP No.2

2x4 SP No.2

bracing.

Tension

2) 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.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.: Ce=1.0: Cs=1.00: Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.

![](_page_21_Picture_10.jpeg)

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Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	V7A	Valley	1	1	Job Reference (optional)	168972584

Run: 8.82 S. Oct 10 2024 Print: 8.820 S. Oct 10 2024 MiTek Industries. Inc. Thu Oct 17 09:35:22 ID:qOAq56TS6I53YOiOXNZ17MyVkt4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

![](_page_22_Figure_4.jpeg)

![](_page_22_Figure_5.jpeg)

![](_page_22_Figure_6.jpeg)

![](_page_22_Figure_8.jpeg)

1-3-12

Scale = 1:21.9

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MP	0.02 0.02 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 2	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 3 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD BRACING TOP CHORD BOT CHORD REACTIONS FORCES	2x4 SP No.2 2x4 SP No.2 Structural wood shea 1-3-12 oc purlins. Rigid ceiling directly bracing. (size) 1=1-3-12, Max Horiz 1=19 (LC Max Uplift 1=-9 (LC Max Grav 1=52 (LC (LC 2) (lb) - Maximum Com	athing directly applie applied or 10-0-0 or 2=1-3-12, 3=1-3-12 16), 3=-16 (LC 16) 2), 2=20 (LC 7), 3=3 pression/Maximum	<ul> <li>6) Gable rec</li> <li>7) Gable stu</li> <li>8) This truss chord live</li> <li>ed or</li> <li>9) * This truss on the boot on the b</li></ul>	juires continuous I dis spaced at 4-0-0 has been design load nonconcurre ss has been desig ttom chord in all a all by 2-00-00 widd any other member gs are assumed to t joint(s) 2 conside SI/TPI 1 angle to g should verify capa techanical connect late capable of wit upplift at joint 1	bottom chor 0 oc. ed for a 10.0 ent with any ned for a liv reas where reas where e will fit betw ers. b be SP No. ers parallel i city of bear city of bear tition (by oth hstanding 1	d bearing. D psf bottom other live loz e load of 20. a rectangle veen the bott 2. o grain value a. Building ng surface. ers) of truss 6 lb uplift at	ads. Opsf com e to joint						

13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

FORCES	(lb) - Maximum Compression/Maximum
	Tension
TOP CHORD	1-2=-43/10
BOT CHORD	1-3=-27/39
NOTES	

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 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=1.60
- Truss designed for wind loads in the plane of the truss 2) 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this desian. 5)
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.

![](_page_22_Picture_19.jpeg)

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![](_page_22_Picture_21.jpeg)

Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher	
P03988-17010	V8A	Valley	1	1	Job Reference (optional)	168972585

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Thu Oct 17 09:35:22 ID:MBdRumTqLRzCxE7Czg2oa9yVkt5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

9-8-11

![](_page_23_Figure_4.jpeg)

Scale = 1:37.8

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL	(psf) 20.0 7.7/10.0 10.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MS	0.34 0.33 0.08	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.01	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL	10.0		1102010	5/11/2011								Weight: 39 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD WEBS NOTES	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 Structural wood she 6-0-0 cc purlins, ex Rigid ceiling directly bracing. (size) 1=9-8-11, Max Horiz 1=172 (LC 5=-163 (L Max Uplift 1=-3 (LC 5=-163 (L Max Grav 1=185 (LC 5=492 (LC (lb) - Maximum Com Tension 1-2=-336/174, 2-3=- 1-5=-170/357, 4-5=- 2-5=-385/234	athing directly applied cept end verticals. applied or 10-0-0 oc 4=9-8-11, 5=9-8-11 C 13) 16), 4=-30 (LC 13), C 16) C 2), 4=100 (LC 22), C 2) pression/Maximum 113/86, 3-4=-106/104 78/85	4) 5) d or 7) 8) 9) 10 11 12 4 <b>LC</b>	Unbalanced design. Building Des verifying Rain requirements Gable requirr Gable studs: This truss ha chord live loa * This truss ha on the bottom 3-06-00 tall b chord and ar ) All bearings a ) Provide mecl bearing plate 4, 3 lb uplite 4, 3 lb uplite a) This truss is International R802.10.2 ar DAD CASE(S)	snow loads have b igner/Project engin a Load = 5.0 (psf) of specific to the use es continuous bott spaced at 4-0-0 oc s been designed for ad nonconcurrent v has been designed in chord in all areas by 2-00-00 wide will yo other members. are assumed to be hanical connection capable of withsta designed in accord Residential Code and referenced stan Standard	peen cor heer res covers r e of this om chor c or a 10.0 vith any for a liv s where Il fit betw SP No. (by oth anding 3 o uplift a dance w sections dard AN	sidered for the consible for ain loading truss compored bearing. Dipsf bottom other live load e load of 20.0 a rectangle veen the botto 2. ers) of truss t i0 lb uplift at ju t joint 5. th the 2018 is F502.11.1 a ISI/TPI 1.	nis nent. ds. Dpsf om oint nd					
<ol> <li>Wind: ASt Vasd=103 II; Exp B; and C-C E 9-7-7 zon- vertical lei forces &amp; N DOL=1.60</li> <li>Truss des only. For see Stanc or consult</li> <li>TCLL: AS Plate DOI 1.15 Plate</li> </ol>	CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; Bi Enclosed; MWFRS (er Exterior(2E) 0-0-8 to 3- e; cantilever left and rig ft and right exposed;C- MWFRS for reactions s 0 plate grip DOL=1.60 signed for wind loads in studs exposed to wind dard Industry Gable En- c qualified building desig (CE 7-16; Pr=20.0 psf; L=1.15); Pg=10.0 psf; F = DOL = 1.15); Is=1.0; I	(3-second gust) CDL=3.0psf; h=25ft; (velope) exterior zone 0-8, Interior (1) 3-0-8 jht exposed; end C for members and hown; Lumber the plane of the trus: (normal to the face), d Details as applicabl gner as per ANSI/TPI roof LL: Lum DOL=1. 2f=7.7 psf (Lum DOL Rough Cat B; Partiall	Cat. to to s le, 1. 15 = y							Contraction of the second seco		SEA 0363	ROUNT INTERNET

or consult qualified building designer as per ANSI/TPI 1. TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL= 1.15 Plate DOL= 1.15); Is=1.0; Rough Cat B; Partially 3) Exp.; Ce=1.0; Cs=1.00; Ct=1.10

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![](_page_23_Picture_9.jpeg)

October 21,2024

A. GI A. GIL

Programmer 1970 (a) (a) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	Use det 2 hours MD1 Dare, MC - 2003.       Use det 2 hour MD1 Dare, MC - 2003.     Det det 2 hour MD2 the 200 Dour MD2 Hours Hours MD2 Hour	Job	Truss		Truss Type		Qty	Ply	Brann Res	sidence	- Schu	macher	168072586
Pge1 10000-2016 Pfer ADR Der ADR DE	Lunner 238 (Corr, NC), Den, NC 2834 Mener 238 (Corr, NC), Den, NC 2834	P03988-17010	V9A		Valley		1	1	Job Refer	ence (op	otional)		100312300
74-11         74-11         100 model         74-11         100 model         74-11         100 model         74-11         100 model         100 mod	<pre>7.4.11 7.4.11</pre>	34 Lumber-2383 (Du	ınn, NC), Dunn, NC - 2	28334,		Run: 8.82 S Oct 10 2 ID:MBdRumTqLRzC>	024 Print: 8. E7Czg2oa9	820 S Oct 10 /Vkt5-RfC?P	) 2024 MiTek sB70Hq3NSq	Industries PqnL8w3	s, Inc. Th uITXbG	nu Oct 17 09:35:23 KWrCDoi7J4zJC?f	Page: 1
Amount of the product of the produc	1000000000000000000000000000000000000					7-4-1	1			. 4			
Amount of the second of the	Extend of the second s				L	7-4-1	1						
Amount of the second provide of the	$\frac{1}{9} - \frac{1}{9} - \frac{1}$				I				2x4 <b>॥</b>				
The second seco	The second standard inductor when the second standard in ASICF 7-16, Vuln-1300 (1.5 mm			6-8-8	6F	2x4 II 8 2			3	3-8-9	_		
State = 1:33.4       7.4-11         CitL (root)       200       Spacing Plate Grip DOL 1:15       TC       0.20       Ver(L1)       n/a       n/a       N/a       999       Mi120       244/190         Sinue (PIPB)       7.7100       Rep Stress Incr       YES       0.00       BC       0.31       Ver(L1)       n/a       n/a       n/a       999       Mi120       244/190         Sinue (PIPB)       7.7100       Rep Stress Incr       YES       0.00       Ver(L1)       n/a	Art II       Inde = 1334       Index = 1334					x4 = 5			4 2x4 II		_		
Loading     (pst)     Spacing     2-0-0     CSI     TC     0.0     Itel Grip DOL     1.15     TC     0.0       CICL (root)     0.00     10.0     1.15     BC     0.01     Vert(L)     n'a     - n/a     999       MIZD     0.00     10.0     Code     IRC2018/TPI2014     WB     0.07     Vert(L)     n'a     - n/a     999       Matrix-MP     Matrix-MP     WB     0.07     Horiz(TL)     0.00     4     n/a     n/a       VEBS     2x4 SP No.2     Verticity     No.2     Strate dame     - N/a     999       VEBS     2x4 SP No.3     Building Designer/Project engineer responsible for     - N/a     n/a     n/a       VEBS     2x4 SP No.3     Building Designer/Project engineer for sponsible for     - N/a     - N/a     - N/a       OP CHORD     Structural wood sheathing directly applied or 10-0-0 or bracting     - N/a     - N/a     - N/a     - N/a       Matching directly applied to ration tail a strass what been designed for a 10.0 pb totoda     - N/a     - N/a     - N/a     - N/a       OP CHORD     Structural wood sheathing directly applied to ration tail a strass what been designed for a 10.0 pb totoda     - N/a     - N/a     - N/a     - N/a     - N/a       OP CHORD     Structural wood shea	stading         (pr)         Spacing         2-0-0         CSI         0.20         VerILL         in         (loc)         Videl         L// Loc           2LL (rod)         2.00         7.710.0         1.15         BC         0.20         VerILL         n/a         999         MT20         244190           DL         0.0°         Code         IRC2018/TP12014         BC         0.07         VerILL         n/a         999         MT20         244190           DL         0.0°         Code         IRC2018/TP12014         BC         0.07         VerILL         n/a         n/a         999           MBER         Code         IRC2018/TP12014         Marix-MP         Marix-MP         Weight: 29 Ib         FT = 20%           MBER         PC CNRD         224 SP No.2         5         buffing Ran Load = 5.0 (paf covers rain loading regures continuous botom chord bearing.         6         Gaber regures continuous botom chord bearing.         7         Gaber regures continuous botom chord bearing.	Scale = 1:33.4				2x4 <b>I</b> 7-4-1	1						
<ul> <li>JUMBER (100 pc) 2x4 SP No.2</li> <li>OP CHORD 2x4 SP No.3</li> <li>OT LEARS (2x4 SP No.3)</li> <li>STUCURAI wood sheathing directly applied or 100-00 cb maxing.</li> <li>OP CHORD STUCURAI wood sheathing directly applied or 100-00 cb maxing.</li> <li>REACING (Size) 1=7-4-11, 4=7-4-11, 5=7-4-11 Max Horiz 1=128 (LC 13) Max You T 1=128 (LC 13) S=118 (LC 16) Max Grav 1=102 (LC 34), 4=120 (LC 2), 5=332 (LC 2)</li> <li>ORCES (b) - Maximum Compression/Maximum Tension</li> <li>OP CHORD 1-22-222/142, 2-3=-108/80, 3-4=-128/116 VIES 2-5=-307/230</li> <li>VIES 2-5=-307/230</li> <li>VIIII 4-20-58/63 VIES 2-5-807/230</li> <li>VIIII 5-79 Sincolesch, MURFS for reactions shown, Lumber DOL-1-160 plate grip DOL=16.0</li> <li>VIIII 4-80 Sincer 101 y-10-60.0 st; BCDL=3.0 pst; h=257r. (2a. 11; Exp B; Incoloset, MURFS for reactions shown, Lumber DOL=1-160 plate grip DOL=16.0</li> <li>VIIII 4-20-20, Pri (Lum DOL=1.15; Pate DOL=16.0 pri (1) 3-0-8 to rais only, For stude seposed 0: end housing dates in the pine of the truss only, For stude seposed 0: end housing dates in the pine of the truss only, For stude seposed 0: end housing dates in the pine of the truss only, For stude seposed 0: end housing rais as policiable, or consult qualified building designer as per ANS/ITPI 1.</li> <li>CASE 7-16; Pri-2.0 pst (LL 1: Lum DOL=1.15; Pate DOL=</li></ul>	<ul> <li>Junt 2012 (100) (24 SP No.2)</li> <li>JUND 24 SP No.2</li> <li>JUND 24 SP No.3</li> <li>JUND 24 SP No.4</li> <li>JUND 24 SP No.4</li> <li>JUND 24 SP NO.4</li> <li>JUND 24 SP NO.4</li> <li>JUND 24 SP NO.3</li> <li>JUND 24 SP NO.3</li> <li>JUND 24 SP NO.4</li> <li< td=""><td>Coading CLL (roof) Snow (Pf/Pg) CDL SCLL</td><td>(psf) 20.0 7.7/10.0 10.0 0.0*</td><td>Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code</td><td>2-0-0 1.15 1.15 YES IRC2018/TPI2014</td><td>CSI TC 0 BC 0 WB 0 Matrix-MP</td><td>.20 Vert( .13 Vert( .07 Horiz</td><td>- LL) ı TL) ı :(TL) 0.</td><td>in (loc) n/a - n/a - .00 4</td><td>l/defl n/a n/a n/a</td><td>L/d 999 999 n/a</td><td>PLATES MT20</td><td><b>GRIP</b> 244/190</td></li<></ul>	Coading CLL (roof) Snow (Pf/Pg) CDL SCLL	(psf) 20.0 7.7/10.0 10.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC 0 BC 0 WB 0 Matrix-MP	.20 Vert( .13 Vert( .07 Horiz	- LL) ı TL) ı :(TL) 0.	in (loc) n/a - n/a - .00 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	<b>GRIP</b> 244/190
4 45 Diata DOL 4 45); la 4 0; Dauria Cat D; Daurially	1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10 October 21,2024	UMBER OP CHORD 2: 30T CHORD 2: 30T CHORD 2: 30T CHORD 2: 30T CHORD 2: 30T CHORD 3: 50T CHORD 8 60T CHORD 8 60T CHORD 8 60T CHORD 1: 70P	k4 SP No.2 k4 SP No.3 k4 SP No.3 k4 SP No.3 k4 SP No.3 tructural wood she: -0-0 oc purlins, exc igid ceiling directly racing. ze) $1=7-4-11$ , k Horiz $1=128$ (LC k3 Uplift 4=-28 (LC k3	athing directly applied cept end verticals. applied or 10-0-0 oc 4=7-4-11, 5=7-4-11 C 13) C 34), 4=120 (LC 2), C 2) pression/Maximum 108/80, 3-4=-126/116 8/63 (3-second gust) CDL=3.0psf; h=25ft; C ivelope) exterior zone 0-8, Interior (1) 3-0-8 i the texposed ; end C for members and hown; Lumber the plane of the truss (normal to the face), d Details as applicable gner as per ANSI/TPI toof LL: Lum DOL=1. 2f=7.7 psf (Lum DOL=1	<ul> <li>4) Unbalance design.</li> <li>5) Building D verifying F requireme</li> <li>6) Gable req</li> <li>7) Gable stu</li> <li>8) This truss chord live</li> <li>9) * This truss on the bol 3-06-00 ta chord and</li> <li>10) All bearing pl 4 and 118</li> <li>12) This truss Internation R802.10.2</li> <li>LOAD CASE(</li> </ul>	ad snow loads have beer resigner/Project engineer ain Load = 5.0 (psf) cov nts specific to the use of uires continuous bottom ds spaced at 4-0-0 oc. has been designed for a load nonconcurrent with s has been designed for tom chord in all areas wi ll by 2-00-00 wide will fit any other members. gs are assumed to be SF echanical connection (b) ate capable of withstand b uplift at joint 5. is designed in accordan nal Residential Code sec P and referenced standar S) Standard	n considere responsiblers rain loa this truss of chord bear 10.0 psf b any other I a live load here a recta between th No.2. v others) of ing 28 lb up ce with the tions R502 d ANSI/TPI	d for this le for ding component. ing. ottom ive loads. of 20.0psf angle ne bottom truss to olift at joint 2018 .11.1 and 1.				ORTH CA ORTEES SEA 0363	L 22 EER C

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 buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing fabrication, storage, delivery, erection and bracing of trusses sate truss systems, see **ANSI/TPII Quality Criteria and DSP-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)

![](_page_24_Picture_2.jpeg)

Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher		
P03988-17010	V10A	Valley	1	1	Job Reference (optional)	168972587	

5-0-11

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Thu Oct 17 09:35:23 ID:qOAq56TS6I53YOiOXNZ17MyVkt4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

![](_page_25_Figure_5.jpeg)

5-0-11

. ...

Scale = 1:29													
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	/TPI2014	CSI TC BC WB Matrix-MP	0.32 0.33 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.01	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	<b>GRIP</b> 244/190
ECDL LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES	10.0 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 5-0-11 oc purlins, e Rigid ceiling directly bracing. (size) 1=5-0-11, Max Horiz 1=84 (LC Max Uplift 1=-36 (LC (lb) - Maximum Com Tension	athing directly applie xcept end verticals. applied or 10-0-0 oc , 3=5-0-11 13) C 16), 3=-56 (LC 16) C 2), 3=196 (LC 2) apression/Maximum	5) 6) 7) d or 8) 5; 9) 10) 11)	Building Des verifying Rai requirement Gable requir Gable studs This truss ha chord live lo * This truss on the botton 3-06-00 tall chord and at All bearings Provide met bearing plate 3 and 36 lb o	igner/Project eng n Load = 5.0 (psf) s specific to the us es continuous boi spaced at 4-0-0 c as been designed ad nonconcurrent has been designed n chord in all aree by 2-00-00 wide yo other members are assumed to b hanical connectio e capable of withs uplifit at joint 1.	ineer res; ) covers r se of this ttom chor oc. for a 10.0 with any d for a liv as where vill fit betv s. e SP No. on (by oth tanding 5	consible for ain loading truss compor d bearing. D psf bottom other live loa e load of 20.0 a rectangle veen the botto 2. ers) of truss t i6 lb uplift at j ith the 2018	nent. Ids. Dpsf om io oint				Weight: 18 lb	FT = 20%
TOP CHORD BOT CHORD NOTES 1) Wind: AS Vasd=100 II; Exp 8; and C-C 4-11-7 zc vertical le forces & 1 DOL=1.6 2) Truss des only. For	CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; B Enclosed; MWFRS (er Exterior(2E) 0-0-8 to 3- one; cantilever left and r off and right exposed;C- MWFRS for reactions s 0 plate grip DOL=1.60 signed for wind loads in studs exposed to wind	162/137 (3-second gust) CDL=3.0psf; h=25ft; tvelope) exterior zon 0-8, Interior (1) 3-0-8 ight exposed ; end C for members and hown; Lumber the plane of the trus (normal to the face)	LO Cat. e b to ss	Inis fruss is International R802.10.2 a AD CASE(S)	designed in accoo Residential Code nd referenced sta Standard	raance w e sections Indard AN	ith the 2018 ; R502.11.1 a ISI/TPI 1.	Ind			Z	TH CA	ROUT

- see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3)
- Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15; Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10 4) Unbalanced snow loads have been considered for this
- design.

![](_page_25_Figure_11.jpeg)

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![](_page_25_Picture_13.jpeg)

Job	Truss	Truss Type	Qty	Ply	Brann Residence - Schumacher				
P03988-17010	V11A	Valley	1	1	Job Reference (optional)	168972588			

2-8-11

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Thu Oct 17 09:35:23 ID:qOAq56TS6I53YOiOXNZ17MyVkt4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

VIIIIIIIIII SEAL 036322 11111111

![](_page_26_Picture_5.jpeg)

GI

111111111

1111111

C

CAR

818 Soundside Road Edenton, NC 27932

ructural wood sheathing directly applied or 8-11 oc purlins, except end verticals. gid ceiling directly applied or 10-0-0 oc acing. e) 1=2-8-11, 3=2-8-11 k Horiz 1=41 (LC 13) k Uplift 1=-19 (LC 16), 3=-29 (LC 16) k Grav 1=103 (LC 2), 3=103 (LC 2) o) - Maximum compression/Maximum ension 2=-164/66, 2-3=-77/62 3=-113/159	<ul> <li>9) * 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.</li> <li>10) All bearings are assumed to be SP No.2.</li> <li>11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 3 and 19 lb uplift at joint 1.</li> <li>12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.</li> <li>LOAD CASE(S) Standard</li> </ul>
-16; Vult=130mph (3-second gust) ;; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. osed; MWFRS (envelope) exterior zone ior(2E) zone; cantilever left and right vertical left and right exposed C-C for	

- II; Exp B; Encl and C-C Exter exposed ; end vertical left and right expos ed:C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 Truss designed for wind loads in the plane of the truss 2)
- 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10 4)
- Unbalanced snow loads have been considered for this design. 5) Building Designer/Project engineer responsible for
- verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.

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 PCB Building Component Science Michael Component Advancement description (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

![](_page_26_Figure_14.jpeg)

![](_page_26_Picture_15.jpeg)

#### Scale = 1:24.6

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	/TPI2014	CSI TC BC WB Matrix-MP	0.06 0.09 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 9 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 2-8-11 oc purlins, ex Rigid ceiling directly bracing. (size) 1=2-8-11, Max Horiz 1=41 (LC Max Grav 1=41 (LC Max Grav 1=103 (LC (lb) - Maximum Com Tension 1-2=-164/66, 2-3=-77 1-3=-113/159	athing directly applie kcept end verticals. applied or 10-0-0 oc 3=2-8-11 13) 16), 3=-29 (LC 16) 2), 3=103 (LC 2) pression/Maximum 7/62	6) 7) 8) 9) d or 10) 11) 12) LO	Gable require Gable studs of This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an All bearings a Provide mecl bearing plate 3 and 19 lb u This truss is International R802.10.2 ar AD CASE(S)	es continuous botto spaced at 4-0-0 oc s been designed fo d nonconcurrent w as been designed n chord in all areas y 2-00-00 wide will y other members. are assumed to be nanical connection capable of withsta plift at joint 1. designed in accord Residential Code s of referenced stand Standard	om chor or a 10. vith any for a liv where I fit betw SP No. (by oth inding 2 ance w sections dard AN	d bearing. D psf bottom other live loa e load of 20.0 a rectangle veen the botto 2. ers) of truss t 29 lb uplift at j b the 2018 s R502.11.1 a USI/TPI 1.	ds. )psf om o oint nd					
NOTES 1) Wind: ASC Vasd=103	Vertes       Wind: ASCE 7-16; Vult=130mph (3-second gust)       Vacd=103mph; TCDL=6 0nsf; BCDL=3 0nsf; b=25ff; Cat												

![](_page_27_Figure_0.jpeg)