

RE: Belhaven DEF Belhaven DEF **Trenco** 818 Soundside Rd Edenton, NC 27932

Site Information:Customer:
Lot/Block:Project Name: Belhaven DEF
Model:Address:Subdivision:City:State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPI2014 Wind Code: ASCE 7-10 Roof Load: 40.0 psf Design Program: MiTek 20/20 8.7 Wind Speed: 130 mph Floor Load: N/A psf

This package includes 21 individual, dated Truss Design Drawings and 0 Additional Drawings.

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision

based on the parameters provided by 84 Components - #2383.

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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	Belhaven DEF	
Belhaven DEF	A01	Common	6	1	Job Reference (optional)	161952849

Run: 8.72 S Oct 5 2023 Print: 8.720 S Oct 5 2023 MiTek Industries, Inc. Fri Nov 10 10:51:35 ID:uudXsR2jkNbtYs13u3t6cTz6mEm-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Plate Offsets (X, Y): [2:Edge,0-0-12], [12:0-4-0,0-3-0], [13:0-4-0,0-3-0]

-		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	0.60	Vert(LL)	-0.36	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15		BC	0.84	Vert(CT)	-0.66	12-13	>623	180		
BCLL	0.0*	Rep Stress Incr	YES		WB	0.39	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2	2014	Matrix-MS							Weight: 183 lb	FT = 20%
LUMBER			4) * Th	is truss h	as been designed	for a liv	e load of 20.0	Opsf					
TOP CHORD	2x4 SP No.2		on th	he botton	n chord in all areas	s where	a rectangle						
BOT CHORD	2x4 SP No.1		3-06	6-00 tall b	y 2-00-00 wide wi	ll fit betv	veen the botto	om					
WEBS	2x4 SP No.2 *Except	t*	chor	rd and an	y other members,	with BC	DL = 10.0psf						
	14-3,5-13,7-12,11-9:	2x4 SP No.3	5) All b	earings a	are assumed to be	SP No.	1.						
WEDGE	Left: 2x4 SP No.3		6) Prov	/ide mecl	nanical connection	ı (by oth	ers) of truss t	0					
	Right: 2x4 SP No.3		bear	ring plate	capable of withsta	anding 1	70 lb uplift at	joint					
BRACING			∠an 7) This	truce ic	uplift at joint 10.	tonco w	ith the 2015						
TOP CHORD	Structural wood shea	athing directly applie	dor () Inis	national	Residential Code	sections	R502 11 1 a	nd					
	3-2-2 oc purlins.		R80	2 10 2 ar	nd referenced stan	dard AN	ISI/TPI 1	nu					
BOICHORD	Rigia celling airectly	applied or 9-1-5 oc	LOAD C	ASE(S)	Standard	aara / a							
REACTIONS	(size) 2=0-3-8 1	0=0-3-8			otanidara								
REACTIONO	Max Horiz 2=150 (I C	2 12)											
Max 10/12 2-100 (C0 12) 10=-159 (I C 13)													
	Max Grav 2=1390 (L	.C 1), 10=1360 (LC 1)										
FORCES	(lb) - Maximum Com	pression/Maximum											
	Tension												
TOP CHORD	1-2=0/13, 2-3=-2467	/607, 3-5=-2346/643	,										
	5-6=-2011/636, 6-7=	-2010/636,											
	7-9=-2353/648, 9-10	=-2453/607											
BUICHURD	2-14=-4/4/2134, 11-	14=-335/1849,										minin	1111.
WEBS	6-13=-214/810 6-12	=-213/809										IN TH CA	ROUL
112BC	3-14=-225/170, 5-14	=-110/337.									11	R	- City
	5-13=-524/298, 7-12	=-525/300,								/	5.	O' FESS	12. 11
	7-11=-116/348, 9-11	=-223/165								2	50	AP' /	AN L
NOTES										11		: x	K
1) Unbalance	ed roof live loads have	been considered for									:	SEA	1 : =
this desigr	٦.									=	:	JLA	
2) Wind: ASC	CE 7-10; Vult=130mph	(3-second gust)	- .							Ξ		0363	22 : E
Vasd=103	mph; TCDL=6.0psf; B0	CDL=6.0psf; h=30ft;	Cat.							-		:	: :
II; EXP B; I	Enclosed; MVVFRS (en	velope) exterior zone	2							-	1	·	01. 3
& MWERS	S for reactions shown I	umber DOI =1.60 pl	s ate								20	NGINI	FERIA
arip DOI =	:1.60										11,	710	- Frist
3) This truss	has been designed for	a 10.0 psf bottom										11. A. G	ILDUN
chord live	load nonconcurrent wit	th any other live load	s.									1111111	(1111)



November 14,2023

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 before the Structure Building former the Advance interventione and the properties and trust set of trust the provide former the Advance interventione. and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	Belhaven DEF	
Belhaven DEF	A01E	Common Supported Gable	1	1	Job Reference (optional)	161952850

Run: 8.72 E Sep 21 2023 Print: 8.720 E Sep 21 2023 MiTek Industries, Inc. Tue Nov 14 09:40:16 ID:7Akou8Zhca0nCTpJva9CrXz6mE5-7CclVitNespKEeiicUp5HaFEe1lbS6zMDSASnYyJULI

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818 Soundside Road

Edenton, NC 27932



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- REACTIONS. (lb/size) 2=1581/0-3-8 (min. 0-2-8), 12=1615/0-3-8 (min. 0-2-9) Max Horz 2=150(LC 12) Max Uplift 2=-35(LC 12)
- FORCES.
 (ib) Max. Comp./Max. Ten. All forces 250 (ib) or less except when shown.

 TOP CHORD
 2-25=-788/8, 3-25=-2853/329, 3-4=-2716/349, 4-5=-2601/365, 5-6=-2422/335, 6-7=-51/799, 7-8=-70/485, 8-9=-2172/240, 9-10=-2802/293, 10-11=-2901/285, 11-28=-2957/235, 12-28=-1186/60

 BOT CHORD
 24-26=-189/537, 23-26=-230/2473, 22-23=-85/2228, 21-22=-30/600, 18-21=-38/590, 15-19=0/0452, 14, 14=-246/2440, 12, 14=-234/2652, 14, 20=-132/0580, 27, 20=-93/02
- 15-18=0/2452, 14-15=-246/3140, 13-14=-231/3062, 13-29=-137/2580, 27-29=-82/926, 19-20=-559/9, 17-19=-559/9, 16-17=-595/44

 WEBS
 6-22=-264/434, 5-23=-113/299, 5-22=-532/260, 9-13=-269/899, 11-13=-396/196, 6-20=0/1092, 9-16=-354/319, 18-19=-515/0, 18-20=0/2276, 15-16=-1035/410, 13-16=-1336/406, 6-8=-2727/343, 20-22=-16/1608, 2-24=-570/18, 24-25=-848/90, 2-26=0/399, 12-27=-885/67, 27-28=-1108/73, 12-29=-57/1038

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Ceiling dead load (5.0 psf) on member(s). 8-9, 6-8; Wall dead load (5.0psf) on member(s).6-20, 9-16
- 6) Bottom chord live load (20.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 19-20, 17-19, 16-17
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 2.

8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

9) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

LOAD CASENCE) VSIDE CONTROL OF A CONTROL OF 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 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.sbaccomponents.com)





818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Belhaven DEF	
Belhaven DEF	A02	Common	5	1	Job Reference (optional)	161952852

84 Components (Dunn, NC), Dunn, NC - 28334, Run: 8.72 S Oct 5 2023 Print: 8.720 S Oct 5 2023 MiTek Industries, Inc. Fri Nov 10 10:51:38 Page: 1 ID:c_SkWMpIME_93IB6RjVLWFz6mCU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 5-0-0 10-6-0 17-0-0 23-6-0 29-0-0 33-8-8 5-0-0 5-6-0 6-6-0 6-6-0 5-6-0 4-8-8 4x6= 6 12 61 3x6 ≠ 3x6 ≈ 5 7 3x6 ≠ 3x6 👟 9-0-15 Δ 8 9-0-6 1.5x4 v 1.5x4 // 3 9 3x6 👟 10 Ð 9-9-0 24 13 15 14 23 12 4x6 II 5x8= 3x6= 3x6= 5x8= 4x6 =6-2-0 12-0-0 22-0-0 27-10-0 33-8-8 6-2-0 5-10-0 10-0-0 5-10-0 5-10-8 Scale = 1:62.3 Plate Offsets (X, Y): [2:Edge,0-0-12], [11:0-4-0,0-0-7], [13:0-4-0,0-3-0], [14:0-4-0,0-3-0] DEFL PLATES GRIP Loading (psf) Spacing 2-0-0 CSI in (loc) l/defl L/d _L) -0.36 13-14 >999 240 MT20 244/190

-0.65

0.09

13-14

11

>622

n/a

180

n/a

Weight: 184 lb

FT = 20%

TCLL (roof) TCDL BCLL BCDL		20.0 10.0 0.0* 10.0	Plate Grip DOL Lumber DOL Rep Stress Incr Code	1.15 1.15 YES IRC20 ⁷	15/TPI2014	BC WB Matrix-MS	0.73 0.84 0.39	Vert(LL) Vert(CT) Horz(CT)	-0.: -0.6 0.0
LUMBER TOP CHORD BOT CHORD WEBS WEDGE SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No 2x4 SP No 2x4 SP No 15-3,14-5, Left: 2x4 S Right 2x4 Structural 2-6-9 oc p Rigid ceili bracing. (size)	0.2 0.1 0.2 *Excepi ,13-7,12-9: SP No.3 SP No.3 wood shea ourlins. ng directly 2=0-3-8, 1 	2x4 SP No.3 1-6-0 athing directly applie applied or 9-1-1 oc 1= Mechanical	4 5 6 7 vd or 8 L	 * This truss h on the bottor 3-06-00 tall b chord and ar Bearings are Refer to gird Provide mec bearing plate 2 and 156 lb This truss is International R802.10.2 ai OAD CASE(S) 	has been design n chord in all ar yy 2-00-00 wide assumed to be er(s) for truss to hanical connect e capable of witi uplift at joint 11 designed in acc Residential Co nd referenced s Standard	ned for a liv eas where will fit betw ers, with BC bound of the second tion (by oth hstanding 1 l. cordance w de sections standard AN	e load of 20. a rectangle veen the bott :DL = 10.0ps > No.1 . tections. ers) of truss 69 lb uplift a ith the 2015 s R502.11.1 a JSI/TPI 1.	Opsf .om .f. to .t joint and
	Max Horiz Max Uplift Max Grav	2=153 (LC 2=-169 (LC 2=1379 (L	C 12) C 12), 11=-156 (LC C 1), 11=1348 (LC	13) 1)					
FORCES	(lb) - Maxi Tension	imum Com	pression/Maximum						
TOP CHORD	1-2=0/13, 5-6=-1986 7-9=-2200	2-3=-2443 5/630, 6-7= 0/612, 9-11	/602, 3-5=-2323/63 ⁻ -1968/626, =-2304/577	7,					
BOT CHORD	2-15=-475 11-12=-44	5/2113, 12 <mark>-</mark> 45/1993	15=-336/1826,						
WEBS	6-14=-214 3-15=-225 5-14=-525 7-12=-90/	4/810, 6-13 5/170, 5-15 5/299, 7-13 '245, 9-12=	=-206/782, =-111/339, =-494/292, -168/149						
NOTES	ad so of live 1	, aada bay	haan aanaldan dife						
this desig	ea root live li n.	oads have	been considered to	-					
Wind: AS	CE 7-10; Vul	lt=130mph	(3-second gust)						

Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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



11

0-8-3

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Job	Truss	Truss Type	Qty	Ply	Belhaven DEF	
Belhaven DEF	A02E	Common Supported Gable	1	1	Job Reference (optional)	l61952853

Run: 8.72 S Oct 5 2023 Print: 8.720 S Oct 5 2023 MiTek Industries. Inc. Fri Nov 10 10:51:38 ID:zUJThhHmADvdFHgcDPiVbTz6mBt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



TCDL		10.0	Lumber DOL	1.15		BC	0.06	Vert(CT)	n/a	-	n/a	a 999	
BCDL		0.0^	Rep Stress Incr Code	IRC2015/TPI2014		Matrix-N	0.09 //S	Horz(CT)	0.01	29	n/a	a n/a	Weight: 267 lb FT = 20%
BCLL BCDL LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 42-15,43-14, 2x4 SP No.2 Structural wc 6-0-0 oc purl Rigid ceiling bracing. 1 Row at mid (size) 2= 31 34 37 41 44 48 51 54 Max Horiz 2= Max Uplift 2= Max Uplift 2= 33 33 35 37 40 43 45 48 50 52 54	0.0* 10.0 *Except 44-13,4! bod sheat directly dat 33-8-8, 133-8, 133-8,	Rep Stress Incr Code 5-12,41-16,40-17,39- athing directly applied sept end verticals. applied or 10-0-0 oc 15-42 29=33-8-8, 30=33-8, 32=33-8-8, 36=33-4, 32=33-8-8, 36=33-4, 39=33-8-8, 40=33-4, 42=33-8-8, 40=33-4, 42=33-8-8, 40=33-4, 42=33-8-8, 40=33-4, 55=33-8-8, 50=33-4, 55=33-8-8, 50=33-4, 55=33-8-8, 50=33-4, 55=33-8-8, 50=33-4, 55=33-8-8, 51=33-4, 55=33-8-8, 51=33-4, 55=33-8-8, 51=33-4, 55=33-8-8, 51=33-4, 55=33-8-8, 51=33-4, 55=33-8-8, 51=33-4, 55=33-8-8, 51=33-4, 51=33-8-33 (LC 13) C 13), 36=-33 (LC 13) C 13), 34=-31 (LC 12) C 12), 47=-32 (LC 12) C 12), 51=-24 (LC 13)	YES IRC2015/TPI2014 18: 1 or 8, FORCES 3-8, TOP CHOR 3-8, 3-8, 3-8, 3-8, 3-8, 3-8, 3-8, 3-8,		WB Matrix-N ax Grav (b) - Maxi Tension 1-2=0/13, 4-5=-111/2 7-9=-60/13 11-12=-77 13-14=-10 15-16=-10 15-16=-10 15-16=-10 15-26=-49 28-29=-64 2-54=-10 352-54=-25 32-54=-25 32-54=-25 39-40	0.09 AS 2=133 (LC 21), 30=152 (LC 24) 32=110 (LC 24) 34=107 (LC 24) 39=107 (LC 24) 39=107 (LC 1), 41=109 (LC 23) 50=107 (LC 23) 50=107 (LC 23) 50=107 (LC 23) 52=113 (LC 23) 52=113 (LC 23) 54=181 (LC 23) 55=113 (LC 23) 54=181 (LC 23) 54=181 (LC 23) 55=113 (LC 23) 55=1	Horz(CT) 29=91 (LC 22, 31=93 (LC 1, 33=106 (LC 35=107 (LC, 40=107 (LC 2, 42=167 (LC, 40=107 (LC 2, 47=106 (LC 1, 47=106 (LC 1, 47=1	0.01 2), 1), 1), 1), 1), 23), 1), 1), 23), 23), 1), 1), 23), 21) 10, 11, 10, 11, 23), 21), 11, 23), 21,	29 WEBS 1) Un thi 2) Wi 3) Tr on set or 4) All 5) Ga 6) Ga	n/a balancc s desigi nd: AS(sd=102 Exp 8; o DOL= uss der s Stanc consult plates ble req ble stu	a n/a 15-42 12-45 9-49= 5-52= 16-4 ² 19-37 23-32 26-3 ² ed roof n. CE 7-10 Signed f studs e lard Ind qualifie are 1.55 uires cc ds space	Weight: 267 lb FT = 20% 2=-170/36, 14-43=-82/34, 13-44=-81/64, i=-80/55, 11-47=-80/55, 0-48=-80/55, -80/55, 7-50=-80/55, 6-51=-80/55, -83/57, 4-53=-65/43, 3-54=-125/90, =-82/29, 17-40=-81/64, 18-39=-80/55, 2=-80/55, 20-36=-80/55, 21-35=-80/55, 1=-80/55, 24-33=-80/55, 25-32=-82/57, 1=-71/43, 27-30=-111/95 live loads have been considered for ty Vult=130mph (3-second gust) CDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. ed; MWFRS (envelope) exterior zone (2) zone; C-C for members and forces cutions shown; Lumber DOL=1.60 plate or wind loads in the plane of the truss xposed to wind (normal to the face), ustry Gable End Details as applicable, d building designer as per ANSI/TPI 1. 4MT20 unless otherwise indicated. ontinuous bottom chord bearing. ed at 1-4-0 oc.
					;	30-31-25	C A CIN	BERIN	C.				
							11111111	inni					November 14 2023

Continued on page 2

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November 14,2023



Job	Truss	Truss Type	Qty	Ply	Belhaven DEF	
Belhaven DEF	A02E	Common Supported Gable	1	1	Job Reference (optional)	161952853

- 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.
- 9) All bearings are assumed to be SP No.2.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 2, 18 lb uplift at joint 43, 38 lb uplift at joint 44, 32 lb uplift at joint 45, 32 lb uplift at joint 47, 33 lb uplift at joint 48, 32 lb uplift at joint 50, 31 lb uplift at joint 51, 37 lb uplift at joint 52, 9 lb uplift at joint 54, 11 lb uplift at joint 41, 40 lb uplift at joint 40, 32 lb uplift at joint 39, 32 lb uplift at joint 37, 33 lb uplift at joint 36, 32 lb uplift at joint 35, 33 lb uplift at joint 34, 32 lb uplift at joint 39, 32 lb uplift at joint 37, 33 lb uplift at joint 36, 32 lb uplift at joint 35, 33 lb uplift at joint 34, 32 lb uplift at joint 33, 37 lb uplift at joint 32, 12 lb uplift at joint 31, 92 lb uplift at joint 30 and 24 lb uplift at joint 2.
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Run: 8.72 S Oct 5 2023 Print: 8.720 S Oct 5 2023 MiTek Industries, Inc. Fri Nov 10 10:51:38 ID:zUJThhHmADvdFHgcDPiVbTz6mBt-RfC?PsB70Hg3NSgPgnL8w3uITXbGKWrCDoi7J4zJC?f 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 BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcaccomponents.com)





LUMBER-BRACING-2x6 SP DSS *Except* TOP CHORD TOP CHORD Structural wood sheathing directly applied or 2-8-12 oc purlins. 8-9,1-4: 2x4 SP No.2, 10-13: 2x4 SP DSS BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: BOT CHORD 2x4 SP No.2 *Except* 2-2-0 oc bracing: 24-27. 5-1-0 oc bracing: 17-21 13-16,16-23: 2x4 SP DSS WEBS 2x4 SP No.2 WEBS 1 Row at midpt 6-23 WEDGE Left: 2x4 SP No.3 Right 2x4 SP No.2 1-6-3 SI IDFR

REACTIONS. (lb/size) 2=1567/0-3-8 (min. 0-2-7), 13=1605/Mechanical Max Horz 2=153(LC 12) Max Uplift 2=-36(LC 12)

- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown.
- TOP CHORD 2-26=-746/7, 3-26=-2826/327, 3-4=-2689/346, 4-5=-2574/363, 5-6=-2394/333, 6-7=-59/820, 7-8=-72/492, 8-9=-2147/240, 9-10=-2597/258, 10-11=-2704/244, 11-12=-2794/232, 12-29=-843/17, 13-29=-1069/0 BOT CHORD 25-27=-182/541, 24-27=-235/2447, 23-24=-89/2204, 22-23=-36/625, 19-22=-45/616,
- WEBS 6-23=-263/454, 5-24=-114/301, 5-23=-538/261, 9-14=-246/700, 11-14=-270/178, 6-21=0/1087, 15-17=0/276, 9-17=-359/326, 19-20=-479/0, 6-8=-2708/347,
 - 16-17=-1080/437, 14-17=-1416/429, 19-21=0/2303, 21-23=-23/1563, 2-25=-552/25, 26-27=-311/189, 25-26=-837/91, 2-27=-8/413, 13-28=-949/5, 30-31=0/307, 29-31=0/470, 13-31=0/681, 28-31=-780/106, 12-31=-2059/206

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

- 5) Ceiling dead load (5.0 psf) on member(s). 8-9, 6-8; Wall dead load (5.0 psf) on member(s).6-21, 9-17
- 6) Bottom chord live load (20.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 20-21, 18-20, 17-18

7) Refer to girder(s) for truss to truss connections.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2.

9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

ChitAuelConpage 2000 IS DESIGNED AS UNINHABITABL

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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Belhaven DEF			
Belhaven DEF	A02M	Common	1	1				
					Job Reference (optional)			
84 Lumber, Mansfield, Ohio					8.720 s Sep 6 2023 MiTek Industries, Inc. Tue Nov 14 09:44:12 2023 Page 2			
	ID:n7hJUJ4Dfnqroc056pjCu4z6m?E-GuvwO1BB6N6MzrodthD1oBQZ5K4hYpLybeZUk9yJIsn							

LOAD CASE(S) Standard

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 6-2-0
 11-2-4
 13-6-12
 15-8-8
 17-8-8
 20-2-3
 21-8-8
 23-8-8
 27-10-0
 33-8-8

 Plate Offsets (X,Y)- [4:0-3-0,Edge], [7:0-7-1,0-3-8], [8:0-2-8,Edge], [11:0-4-0,Edge], [14:0-4-8,0-0-3], [18:0-2-8,0-2-0], [23:0-4-8,0-2-8], [26:0-8-0,0-4-8], [27:0-7-0,0-5-4],

×.	[29:0-3-8,0-2-8]									
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 * Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.93 BC 0.94 WB 0.92 Matrix-MS	DEFL. in Vert(LL) -0.43 Vert(CT) -1.05 Horz(CT) 0.69 Attic -0.09	(loc) I/defl L/d 19 >942 240 19 >386 180 14 n/a n/a 18-23 1100 360	PLATES GRIP MT20 244/190 Weight: 262 lb FT = 20%					
LUMBER- TOP CHORD BOT CHORD WEBS WEDGE Left: 2x4 SP No SLIDER	2x6 SP DSS *Except* 9-10: 2x4 SP No.2, 1-4: 2x4 SP DSS, 11-14: 2x 2x4 SP No.2 *Except* 26-27: 2x6 SP DSS, 6-25: 2x6 SP No.2, 17-25: 14-17,18-23: 2x4 SP DSS 2x4 SP No.3 *Except* 27-29,6-27: 2x4 SP No.2, 3-27,23-26,7-26: 2x4 .3 Right 2x4 SP No.2 1-6-0	4 SP No.1 2x4 SP No.1 SP No.1	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood sheathin Rigid ceiling directly appl 6-0-0 oc bracing: 25-26,2 2-2-0 oc bracing: 20-22. 5-1-0 oc bracing: 18-23 2 Rows at 1/3 pts	ng directly applied or 1-7-8 oc purlins. lied or 10-0-0 oc bracing, Except: 24-25 7-23					
REACTIONS. (Ib/size) 2=1567/0-3-8 (min. 0-2-7), 14=1604/Mechanical Max Horz 2=153(LC 12) Max Uplift 2=-36(LC 12)										
FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-31=-1210/98, 3-31=-2803/308, 3-4=-8034/394, 4-5=-7918/416, 5-6=-7771/455, 6-7=-4821/237, 7-8=-56/727, 8-9=-149/459, 9-10=-2191/235, 10-11=-2579/259, 11.12=-2885/245 12-3786/233 11.12=-2786/245 12-378/63/2 11.12=-2786/245 12-378/63/2 11.12=-2786/245 12-378/63/2 11.12=-2786/245 12-378/63/2 11.12=-2786/245 12-378/63/2 11.12=-2786/245 12-378/63/2 11.12=-2786/245 12-378/63/2 11.12=-2786/245 12-378/63/2 11.12=-2786/245 12-378/63/2 11.12=-12885/245 12-378/63/2 11.12=-12885/245 12-378/63/2 11.12=-12885/245 12-378/63/2 11.12=-12885/245 12-378/63/2 11.12=-12885/245 12-378/63/2 11.12=-12885/245 12-378/63/2 12-378/63/2 12-378/63/2 13-378/63/2 14-34=-1183/0										
BOT CHORD	30-32=-104/888, 29-32=-200/2433, 26-27=0/- 24-25=-747/73, 22-24=0/2159, 20-22=0/2159 15-16=-267/3050, 15-35=-145/2417, 33-35=- 18-1914/29/483	4648, 25-26=-287/27, 6-26=-), 17-20=0/2159, 16-17=0/21 106/780, 21-23=0/2748, 19-2	1540/183, 59, 21=-335/187,							
WEBS	18-19=-1429/483 EBS 3-29=-1904/224, 27-29=-260/3072, 3-27=0/4746, 6-27=-308/3503, 10-15=-246/627, 23-24=0/1089, 7-23=-2803/11, 16-18=-290/201, 10-18=-343/315, 12-15=-260/176, 21-22=-2/317, 21-24=-3058/0, 7-9=-2576/339, 15-18=-1304/431, 23-25=-60/929, 16-19=-458/1332, 23-26=0/4106, 7-26=-2/5530, 2-30=-915/131, 31-32=-289/157, 30-31=-985/100, 2-32=-103/1021, 14-33=-1018/7, 35-36=0/352, 34-36=0/675, 14-36=0/776, 33-36=-731/106, 13-36=-2087/229									
NOTES- 1) Unbalanced f 2) Wind: ASCE gable end zo DOL=1.60 3) This truss ha 4) * This truss ha	NOTES- 1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide									
will fit betwee 5) Ceiling dead 6) Bottom chorc	will fit between the bottom chord and any other members. 5) Ceiling dead load (5.0 psf) on member(s). 9-10, 7-9; Wall dead load (5.0 psf) on member(s).7-23, 10-18 Control live load (20.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 21-23, 19-21, 18-19 Control live load (20.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 21-23, 19-21, 18-19 Control live load (20.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 21-23, 19-21, 18-19 Control live load (20.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 21-23, 19-21, 18-19 Control live load (20.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 21-23, 19-21, 18-19 Control live load (20.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 21-23, 19-21, 18-19 Control live load (20.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 21-23, 19-21, 18-19 Control live load (20.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 21-23, 19-21, 18-19 Control live load (20.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 21-23, 19-21, 18-19 Control live load (20.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 21-23, 19-21, 18-19 Control live load (20.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 21-23, 19-21, 18-19 Control live load (20.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 21-23, 19-21, 18-19 Control live load (20.0 psf) applied only to room. 21-23, 19-21, 18-19 Control live load (20.0 psf) applied only to room. 21-23, 19-21, 18-19 Control live load (20.0 psf) applied only to room. 21-23, 19-21, 18-19 Control live load (20.0 psf) applied only to room. 21-23, 19-21, 18-19 Control live load (20.0 psf) applied only to room. 21-23, 19-21, 18-19 Control live load (20.0 psf) applied only to room. 21-23, 19-21, 18-19 Control l									
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and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	Belhaven DEF
Belhaven DEF	A03M	Roof Special	3	1	Job Reference (optional)
84 Lumber, Mansfield, Ohio			ID:sgN	rjtingsL3_8	8.720 s Sep 6 2023 MiTek Industries, Inc. Tue Nov 14 10:11:44 2023 Page 2 3wjTVkZmyz6m4t-ujjS6wAQ3yEy9j47edsRlZrpdGvActr6TfkviPyJISz

NOTES-

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2.

9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 10) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

LOAD CASE(S) Standard



Job	Truss	Truss Type	Qty	Ply	Belhaven DEF	
Belhaven DEF	B01	Common	1	1	Job Reference (optional)	161952856

Run: 8.72 S Oct 5 2023 Print: 8.720 S Oct 5 2023 MiTek Industries, Inc. Fri Nov 10 10:51:40 ID:z3UdWtvFkozd_2kHC9kNcrz6mIp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Sca	e =	1:44	

Plate Offsets ((X, Y): [2:Edge,0-0-12]], [6:Edge,0-0-12], [8	3:0-4-0,0-3-0]										
Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015/T	PI2014	CSI TC BC WB Matrix-MS	0.31 0.88 0.23	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.14 -0.29 0.03	(loc) 8-14 8-14 6	l/defl >999 >807 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 89 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Left: 2x4 SP No.3 Right: 2x4 SP No.3 Structural wood shee 5-0-1 oc purlins. Rigid ceiling directly bracing. (size) 2=0-3-8, 6 Max Horiz 2=-86 (LC Max Uplift 2=-102 (L	athing directly applie applied or 10-0-0 oc 3=0-3-8 : 13) C 12), 6=-102 (LC 1:	6) P 2 7) T Ir R LOAL	Provide mecl earing plate and 102 lb his truss is nternational 802.10.2 ar D CASE(S)	hanical connectior capable of withsta uplift at joint 6. designed in accorr Residential Code nd referenced stan Standard	n (by oth anding 1 dance w sections dard AN	ers) of truss t IO2 Ib uplift at ith the 2015 \$ R502.11.1 a \SI/TPI 1.	o joint nd					
FORCES TOP CHORD WEBS NOTES 1) Unbalance this design 2) Wind: ASG Vasd=103 II; Exp B; I and C-C E & MWFRS grip DOL= 3) This truss chord live 4) * This trus on the bot 3-06-00 and 5) All bearing	(lb) - Maximum Com Tension 1-2=0/13, 2-3=-1294 4-5=-963/259, 5-6=- 2-6=-250/1107 4-8=-65/551, 3-8=-30 ed roof live loads have n. CE 7-10; Vult=130mph Enclosed; MWFRS (en Enclosed; MWFRS (en Enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zone;C-C fc S for reactions shown; I enclosed; MWFRS (en Exterior (2) zon	yression/Maximum y/363, 3-4=-963/259, 1294/363, 6-7=0/13 67/218, 5-8=-367/21 been considered for (3-second gust) CDL=6.0psf; h=30ft; ivelope) exterior zon or members and forc Lumber DOL=1.60 p a 10.0 psf bottom th any other live load or a live load of 20.0 where a rectangle fit between the botto SP No.2.	8 e es late ds. psf							A Manual Contraction of the second se		SEA 0363	L L L L L B H H H H H H H H H H H H H H

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Job	Truss	Truss Type	Qty	Ply	Belhaven DEF	
Belhaven DEF	B01E	Common Supported Gable	1	1	Job Reference (optional)	161952857

Run: 8.72 E Oct 5 2023 Print: 8.720 E Oct 5 2023 MiTek Industries, Inc. Tue Nov 14 10:13:34 ID:NNeKZ5kT1VCclvfbODU52uz6mJ1-gtM1CXVQ9l5LMdVG5kqEDmPqlcgCNrkImmOja1yJIRF



Scale = 1:42.4

Plate Offsets (X, Y): [2:0-3-8,Edge], [18:0-3-8,Edge], [27:0-3-0,0-3-0]

Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015	5/TPI2014	CSI TC BC WB Matrix-S	0.04 0.02 0.04	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 18	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 126 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS WEDGE BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS (Ib) - FORCES NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=103 II; Exp B; and C-C B & MWFR grip DOL= 3) Truss de only. For see Stanc or consult 4) All plates 5) Gable req 6) Gable stu	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Left: 2x4 SP No.3 Right: 2x4 SP No.3 Structural wood s 6-0-0 oc purlins. Rigid ceiling direc bracing. All bearings 19-8-0 Max Horiz 2=86 (I Max Uplift All uplif 2, 20, 2 30, 31, Max Grav All reac (s) 2, 1 27, 28, (lb) - Max. Comp (lb) or less except ed roof live loads ha n. CE 7-10; Vult=130m Smph; TCDL=6.0psf; Enclosed; MWFRS i Exterior (2) zone;C-O S for reactions show =1.60 signed for wind loads studs exposed to wi lard Industry Gable I qualified building de are 1.5x4 MT20 unle jures continuous boi ds spaced at 1-2-0 c	A heathing directly applied by applied or 10-0-0 or C 12) 100 (b) or less at joi 1, 22, 23, 24, 25, 26, 1 32, 33, 34 tions 250 (b) or less at 3, 20, 21, 22, 23, 24, 2 29, 30, 31, 32, 33, 34 Max. Ten All forces when shown. We been considered for bh (3-second gust) BCDL=6.0psf; h=30ft envelope) exterior zor for members and ford by (3-second gust) BCDL=6.0psf; h=30ft envelope) exterior zor for members and ford by (1, 1) and the face ind petails as applicated signer as per ANSI/TI ss otherwise indicated for member and petails as applicated to the face for the face ind Details as applicated so therwise indicated for member and bearing. c.	7) 8) ed or 10 11 11 128, 29, 28, 29, 250 250 250 or ; Cat. ne ces plate uss e), ble, Pl 1. d.	This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an Provide med bearing plate (s) 2, 28, 29, 20.) Beveled plate surface with 1) This truss is of International R802.10.2 ar DAD CASE(S)	s been designed fo d nonconcurrent w as been designed n chord in all areas y 2-00-00 wide will y other members. nanical connection capable of withsta 30, 31, 32, 33, 34, e or shim required t russ chord at joint designed in accord Residential Code s ad referenced stand Standard	or a 10.0 rith any for a liv where fit betw (by oth nding 1 26, 25, to provie (s) 18. ance w sections dard AN	D psf bottom other live load e load of 20.0 a rectangle veen the botto ers) of truss to 00 lb uplift at 24, 23, 22, 2 de full bearing th the 2015 R502.11.1 a ISI/TPI 1.	ds. Ipsf om joint 1, g nd				SEAL 03632	RO 22 E.F.F.F.F.F.F.F.F.F.F.F.F.F.F.F.F.F.F.F



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	Belhaven DEF	
Belhaven DEF	B01G	Common Girder	1	3	Job Reference (optional)	161952858

Scale = 1:42

Run: 8.72 S Oct 5 2023 Print: 8.720 S Oct 5 2023 MiTek Industries, Inc. Fri Nov 10 10:51:40 ID:RCtq1JdZF?_4Clt4Jxw4J9z6lsn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



	(,,, ,): [::===ge;e = e];	[0:2490;0 2 0]											
Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC201	5/TPI2014	CSI TC BC WB Matrix-MS	0.42 0.42 0.97	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.11 -0.22 0.05	(loc) 7-9 7-9 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 324 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD WEBS	2x4 SP No.2 2x6 SP DSS 2x4 SP No.3 Structural wood shea 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=0-3-8, 5 Max Horiz 1=-82 (LC Max Uplift 1=-837 (L Max Grav 1=6655 (L (lb) - Maximum Com Tension 1-2=-11927/1675, 2- 3-4=-8300/1217, 4-5 1-9=-1431/10607, 7- 6-7=-1421/10525, 5- 3-7=-934/7050, 2-9= 2-7=-3677/583, 4-6= 4-7=-3584/571	athing directly applied applied or 10-0-0 oc 5=0-3-8 : 13) C 12), 5=-864 (LC 13 C 1), 5=6871 (LC 1) pression/Maximum 3=-8299/1217, i=-11829/1662 9=-1431/10607, 6=-1421/10525 -334/3108, -322/3007,	4) d or 5) 6) 8) 7) 8) 9) 10	Wind: ASCE Vasd=103mp II; Exp B; Enn- and C-C Exte & MWFRS for grip DOL=1.6 This truss ha chord live loa * This truss ha chord live loa * This truss ha chord and an All bearings a Provide mecl bearing plate 1 and 864 lb This truss is International R802.10.2 ar 9) Use Simpsor Truss) or equ 2-0-12 from t to back face	7-10; Vult=130mp h; TCDL=6.0psf; I closed; MWFRS (e erior (2) zone;C-C or reactions shown 50 is been designed fi ad nonconcurrent w has been designed in chord in all areas by 2-00-00 wide will by other members. are assumed to be hanical connectione capable of withsta uplift at joint 5. designed in accord Residential Code nd referenced stann o Strong-Tie HUS2 uivalent spaced at the left end to 18-00 of bottom chord.	h (3-sec BCDL=6 envelope for mem; ; Lumbe or a 10.0 with any for a liv s where Il fit betv s SP DS: a (by oth anding 8 dance w sections dard AN 66 (14-10 2-0-0 oc -12 to c	cond gust) .0psf; h=30ft; e) exterior zor ibers and force r DOL=1.60 p D psf bottom other live load e load of 20.0 a rectangle veen the botto S. ers) of truss t i37 lb uplift at ith the 2015 R502,11.1 a ISI/TPI 1. JO dGirder, 4-1 r max. starting onnect truss(i	c Cat. he bes ces olate ds. opsf om o joint nd 0d g at es) ber					
 3-ply truss (0.148"x3" Top chord oc. Bottom ch staggered Web conn Except in CASE(S) provided t unless ott Unbalance this design 	s to be connected togef ") nails as follows: Is connected as follows are connected as follows at 0-7-0 oc. Hected as follows: 2x4 - ember 3-7 2x4 - 1 row a are considered equally noted as front (F) or bar section. Ply to ply conr o distribute only loads herwise indicated. ed roof live loads have n.	ther with 10d s: 2x4 - 1 row at 0-9-0 ows: 2x6 - 2 rows 1 row at 0-9-0 oc, at 0-8-0 oc. applied to all plies, ck (B) face in the LO/ nections have been noted as (F) or (B), been considered for	LC 1) AD	DAD CASE(S) Dead + Roc Plate Increa Uniform Loa Vert: 1-3: Concentrate Vert: 8=- 17=-1325 (B), 21=-	Standard of Live (balanced): ase=1.15 ads (lb/ft) =-60, 3-5=-60, 10- ed Loads (lb) 1328 (B), 7=-1328 3 (B), 18=-1328 (B 1328 (B), 22=-132	Lumber 13=-20 (B), 16=), 19=-1 8 (B)	Increase=1. ⁻ 1328 (B), 328 (B), 20=-	15, 1328		Martin Inter		SEA 0363	ROLL 22 EER.H.H.

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818 Soundside Road Edenton, NC 27932

November 14,2023

Job	Truss	Truss Type	Qty	Ply	Belhaven DEF	
Belhaven DEF	M1	Monopitch	6	1	Job Reference (optional)	161952859

-0-6-0

84 Components (Dunn, NC), Dunn, NC - 28334,

Run: 8.72 S Oct 5 2023 Print: 8.720 S Oct 5 2023 MiTek Industries, Inc. Fri Nov 10 10:51:41 ID:jADp4I9ItFhC4m8PDCdNEGz6mL4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





Scale = 1:28.5

L oading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015/TPI2014	CSI TC BC WB Matrix-MP	0.19 0.18 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.01 -0.02 0.00	(loc) 4-7 4-7 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 15 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD 3OT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 4-0-0 oc purlins, exc Rigid ceiling directly bracing. (size) 2=0-3-8, 4 Max Horiz 2=58 (LC Max Uplift 2=-41 (LC Max Grav 2=186 (LC	athing directly applie cept end verticals. applied or 10-0-0 oc 4=0-1-8 8) : 8), 4=-36 (LC 12) C 1), 4=152 (LC 1)	7) One H2. recomme UPLIFT and doer 8) This trus Internatic R802.10 LOAD CASE	5A Simpson Strong-T ended to connect trus: a not consider lateral f s is designed in accor onal Residential Code .2 and referenced star (S) Standard	ie connec s to beari onnection forces. rdance wi sections ndard AN	ctors ing walls due n is for uplift ith the 2015 R502.11.1 a ISI/TPI 1.	e to only and						
FORCES FOP CHORD 3OT CHORD NOTES 1) Wind: ASC Vasd=103n II; Exp B; E and C-C E & MWFRS grip DOL=1 2) This truss f chord live le 3) * This truss f chord live le 3) * This truss f chord live le 3) * This truss f chord and a SP No.3 . 5) Bearing at using ANSi designer sf	 (Ib) - Maximum Com Tension 1-2=0/9, 2-3=-85/25, 2-4=-45/72 E 7-10; Vult=130mph mph; TCDL=6.0psf; B0 inclosed; MWFRS (en kterior (2) zone;C-C fc for reactions shown; I 1.60 has been designed for oad nonconcurrent wi is has been designed will any other members. re assumed to be: Joi joint(s) 4 considers pain //TPI 1 angle to grain in nould verify capacity o 	(3-second gust) (DL=6.0psf; h=30ft; ivelope) exterior zon or members and forc Lumber DOL=1.60 p r a 10.0 psf bottom th any other live load or a live load of 20.0 where a rectangle fit between the botto nt 2 SP No.2 , Joint arallel to grain value formula. Building of bearing surface.	Cat. e es late ds. psf m 4						A summer		SEA 0363	ROLINA L 22	Mamming

 Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4. November 14,2023

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/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)

A MITER Affilia 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Belhaven DEF	
Belhaven DEF	M1G	Half Hip Girder	1	1	Job Reference (optional)	161952860

-0-6-0

84 Components (Dunn, NC), Dunn, NC - 28334,

Run: 8.72 S Oct 5 2023 Print: 8.720 S Oct 5 2023 MiTek Industries. Inc. Fri Nov 10 10:51:41 ID:zXQmNFVwkLgSuq7ID07PEgz6mJL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1









Scale = 1:30.3

Plate Offsets (X, Y): [3:0-3-0,0-2-8], [5:Edge,0-2-0]

Loading	(psf)	Spacing	2-0-0		CSI	0.28	DEFL	in 0.01	(loc)	l/defl	L/d	PLATES	GRIP
TCDI	10.0	Lumber DOI	1.15		BC	0.20	Vert(CT)	-0.01	5-8	>999	180	101120	244/130
BCLL	0.0*	Rep Stress Incr	NO		WB	0.00	Horz(CT)	0.00	5	n/a	n/a	1	
BCDL	10.0	Code	IRC20	15/TPI2014	Matrix-MR		()		-			Weight: 14 lb	FT = 20%
LUMBER			7) Bearing at jo	int(s) 5 considers	s parallel t	o grain value	Э					
TOP CHORD	2x4 SP No.2			using ANSI/	[PI 1 angle to gra	ain formula	a. Building						
BOT CHORD	2x4 SP No.2			designer sho	ould verify capacit	ty of beari	ng surface.						
WEBS	2x4 SP No.3		6) Provide med	hanical connectio	on (by oth	ers) of truss	to					
BRACING				bearing plate	e at joint(s) 5.		toro						
TOP CHORD	Structural wood she	eathing directly applie	ed or ^e	recommende	ad to connect trus	ss to heari	na walls due	e to					
	4-0-0 oc purlins, ex	cept end verticals, a	ind	UPLIFT at it	s) 2 and 5. This of	connectio	n is for uplift	only					
	2-0-0 oc punins: 3-4 Rigid ceiling directly	+. (applied or 10-0-0 o	<u>_</u>	and does no	t consider lateral	forces.	'	,					
	bracing.		1	0) This truss is	designed in acco	ordance w	th the 2015						
REACTIONS	(size) 2=0-3-8.	5=0-1-8		International	Residential Code	e sections	R502.11.1 a	and					
	Max Horiz 2=51 (LC	8)	4	1) Graphical p	na referencea sta urlin roprosontatio	andard AN	SI/TPL1.	cizo					
	Max Uplift 2=-54 (LC	C 8), 5=-45 (LC 8)		or the orient	ation of the purlin	along the	top and/or	5120					
	Max Grav 2=209 (L	C 1), 5=179 (LC 1)		bottom chore	d.	along alo	top ana/or						
FORCES	(lb) - Maximum Con	npression/Maximum	1	2) "NAILED" in	dicates 3-10d (0.1	148"x3") c	r 3-12d						
		6 0 4- 404/60		(0.148"x3.25	") toe-nails per N	IDS guidlii	nes.	,					
TOP CHORD	4-5=-91/75	10, 3-4=-124/03,	1	 In the LOAD of the truss a 	CASE(S) section	n, loads ap t (E) or ba	plied to the	face					
BOT CHORD	2-5=-63/124		L	OAD CASE(S)	Standard		5K (D).						
NOTES			1) Dead + Ro	of Live (balanced): Lumber	Increase=1.	15,					
1) Unbalance	ed roof live loads have	e been considered fo	r	Plate Increa	ase=1.15								
this desig	n.	(0)		Uniform Lo	ads (lb/ft)							munn	11111
2) Wind: AS	CE 7-10; Vult=130mph	1 (3-second gust)	0-4	Vert: 1-3	=-60, 3-4=-60, 5-	6=-20						"TH CA	Rollin
Vaso=103	Smpn; ICDL=6.0pst; B Enclosed: MW/ERS (e)	CDL=6.0pst; n=30π; nvelone) exterior zor	; Cat.	Concentrat	ed Loads (lb)						S'	R	ALIN'S
and C-C F	Enclosed, MWT RO (el	or members and for	ces	vent 9=-	50 (F)						25	CEESS	ST You
& MWFRS	S for reactions shown;	Lumber DOL=1.60 p	olate							4	ŨĎ	0/ /	A.H.
grip DOL=	=1.60									-		.4	1
3) Provide a	dequate drainage to p	revent water ponding	g.							=		SEA	LE
4) This truss	has been designed fo	r a 10.0 psf bottom								-	:	0262	22 : =
5) * This true	load nonconcurrent w	for a live lead of 20 (as. Doct							1		0303	22 : I
on the hot	tom chord in all areas	where a rectangle	pol							-		1	1 E
3-06-00 ta	all by 2-00-00 wide will	fit between the botto	om							5	- 1	N. En	Rich
chord and	any other members.										25	GIN	EFICAN
6) Rearings	are assumed to be. Io	int 2 SP No 2 Joint	5								1,	10	OFIN

- & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 Provide adequate drainage to prevent water ponding. 3)
- This truss has been designed for a 10.0 psf bottom 4)
- chord live load nonconcurrent with any other live loads. 5) * 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.
- Bearings are assumed to be: Joint 2 SP No.2 , Joint 5 SP No.3 . 6)

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and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



A. GI minim November 14,2023

Job	Truss	Truss Type	Qty	Ply	Belhaven DEF	
Belhaven DEF	M2	Half Hip	1	1	Job Reference (optional)	161952861

Run: 8.72 S Oct 5 2023 Print: 8.720 S Oct 5 2023 MiTek Industries. Inc. Fri Nov 10 10:51:41 ID:kFKWLY_yt8GYEDLUCUrK_cz6mK0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1







Scale = 1:39.2

Loa	ding	(psf)	Spacing	2-0-0	csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCL	L (roof)	20.0	Plate Grip DOL	1.15	тс	0.02	Vert(LL)	0.00	6-9	>999	240	MT20	244/190
TC)L	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00	6-9	>999	180		
BCI	1	0.0*	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	2	n/a	n/a		
BCI		10.0	Code	IRC2015/TPI2014	Matrix-MP	0.01	(01)	0.00	-			Weight: 8 lb	FT = 20%
		10.0	oode	11(02010/11/12014	WIGUTA-IVIT							Weight. 0 lb	11-2070
LUN	/IBER			8) One H2.5	A Simpson Strong-T	ie conneo	ctors						
TOF		2x4 SP No 2		recommer	ded to connect trus	s to beari	ing walls due	to					
ROT		2x4 SP No 2		UPLIFT at	it(s) 5 and 2. This c	onnectio	n is for uplift o	only					
	RS	2x4 SP No 3		and does	not consider lateral f	forces		,					
		214 01 110.0		9) This truss	is designed in accor	rdance wi	ith the 2015						
BR/	ACING			Internation	al Residential Code	sections	R502 11 1 a	nd					
TOP	CHORD	Structural wood shea	athing directly applie	ed or R802 10 2	and referenced sta	ndard AN	ISI/TPI 1						
		2-0-0 oc puriins, exc	cept end verticals, ar	10) Graphical	purlin representation	n does no	ot depict the s	ize					
D O		2-0-0 oc purlins: 3-4.		or the orie	ntation of the purlin	along the	top and/or						
BO	CHORD	Rigid ceiling directly	applied or 10-0-0 oc	bottom ch	ord.								
		bracing.		LOAD CASE(S) Standard								
KE/	ACTIONS	(size) 2=0-3-8, 5	= Mechanical	20/10 0/102(o, otandara								
		Max Horiz 2=31 (LC	12)										
		Max Uplift 2=-18 (LC	\$ 12), 5=-11 (LC 9)										
		Max Grav 2=108 (LC	C 1), 5=70 (LC 1)										
FOF	RCES	(lb) - Maximum Com	pression/Maximum										
		Tension											
TOF	P CHORD	1-2=0/13, 2-3=-22/5,	, 3-4=0/0, 4-5=-21/17	7									
BO	CHORD	2-6=-14/17, 5-6=0/0											
WE	BS	3-6=-54/44											
NO	TES												
1)	Unbalance	ed roof live loads have	been considered for										
•)	this design	n											
2)	Wind AS(CF 7-10 [.] Vult=130mph	(3-second gust)										
_/	Vasd=103	mnh TCDI =6 0nsf B(CDI = 6 Onsf: h=30ft	Cat								, uninnin	
	II: Exp B: I	Enclosed: MWERS (en	velope) exterior zon	e							10	"TH CA	Ro
	and C-C E	xterior (2) zone:C-C fo	or members and force	es							A.	RU	
	& MWFRS	S for reactions shown. I	umber DOI =1 60 p	late						/	5.	O'. FESS	101. Via
	arip DOL=	:1.60	24111801 B 0 2 1100 p								20	200	1 A A A A
3)	Provide ad	dequate drainage to pre	event water ponding							-		:0	K. 1-
4)	This truss	has been designed for	a 10.0 psf bottom							-		054	. : =
.,	chord live	load nonconcurrent wit	th any other live load	ds.								SEA	L : =
5)	* This trus	s has been designed for	or a live load of 20.0	nsf						=	:	0363	22 : =
0)	on the bot	tom chord in all areas v	where a rectangle	P0.						1	•	0303	44 : 2
	3-06-00 ta	Il by 2-00-00 wide will	fit between the botto	m						-			· · · · ·
	chord and	any other members									2	·	air S
6)	Bearings a	are assumed to be Joi	nt 2 SP No 2								20	NGIN	FERMAN
7)	Refer to di	irder(s) for truss to true	ss connections								1	20	Er N
')	i terer to g		33 001116000113.								1	ICA C	II BEN'

- * This truss has been designed for a live load of 20.0psf 5) 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.
- 6) Bearings are assumed to be: Joint 2 SP No.2 .
- 7) Refer to girder(s) for truss to truss connections.

The annual GILB A. A. GIL November 14,2023

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 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 is always required for stability and to prevent oclapse 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 Science Lange the fabrication component com and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	Belhaven DEF	
Belhaven DEF	V1	Valley	1	1	Job Reference (optional)	161952862

Run: 8.72 S Oct 5 2023 Print: 8.720 S Oct 5 2023 MiTek Industries. Inc. Fri Nov 10 10:51:41 ID:mi_LOMJONkt7h0oy6VNyOVz6mMA-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale	=	1:53.6	
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Loading TCLL (roof) TCDL BCLL BCDL		(psf) 20.0 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	15/TPI2014	CSI TC BC WB Matrix-MS	0.19 0.16 0.19	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.01	(loc) - - 9	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 127 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No 2x4 SP No 2x4 SP No Structural v 6-0-0 oc pu Rigid ceilin bracing. (size) Max Horiz Max Uplift Max Grav	.2 .2 .3 *Excep wood she urlins. g directly 1=29-8-0, 11=29-8-0, 11=29-8-0 15=29-8-0 11=-121 (LC 11=-15 (LC 11=-99 (L 11=-99 (L 11=-99 (L 11=-91 (LC (LC 1), 11 26), 13=3 26), 16=3	t* 13-5:2x4 SP No.2 athing directly applied applied or 6-0-0 oc 9=29-8-0, 10=29-8-0 0, 12=29-8-0, 13=29-1 0, 16=29-8-0, 17=29-1 C 17) C 13), 10=-77 (LC 13) C 13), 12=-107 (LC 1 C 12) 21), 9=83 (LC 1), 10= =321 (LC 1), 12=416 99 (LC 22), 15=416 (21 (LC 1), 17=304 (L	d or), 2 8-0, 5 8-0, 7 8-0, 7 8-	 Wind: ASCE Vasd=103m II; Exp B; En and C-C Ext & MWFRS fc grip DOL=1. Truss desig only. For st see Standar or consult qu All plates are of Gable requir Gable studs This truss ha chord live loa * This truss ha chord live loa * This truss ha on the bottor 3-06-00 tall b chord and ar All bearings Provide mec 	7-10; Vult=130m oh; TCDL=6.0msf closed; MWFRS erior (2) zone;C-(or reactions show 60 ned for wind load dis exposed to w d Industry Gable tailified building di a 1.5x4 MT20 unl es continuous bo spaced at 4-0-0 as been designed ad nonconcurrent has been designed ad nonconcurrent as been designed by 2-00-00 wide v y other members are assumed to b	ph (3-sec ; BCDL=€ (envelope C for men n; Lumbe ls in the p ind (norm End Deta esigner a: ess other ttom chor oc. if or a 10.1 t with any ed for a liv as where will fit betv s, with BC pe SP No. on (by oth	 cond gust) .0psf; h=30ft; .0psf; h=30ft; .0psf; h=30ft; .0psf and forr r DOL=1.60 p lane of the tru lane of the tru al to the face ger ANSI/TF wise indicated d bearing. D psf bottom other live loa e load of 20.0 a rectangle ueen the bottom DL = 10.0psf 2. ers) of truss t 	Cat. ne plate plate plate plate plate plate ds. ppsf pm o pom					
FORCES	(lb) - Maxir Tension 1-2=-151/7	num Com 3, 2-3=-1	pression/Maximum 05/95, 3-4=-69/133,		1, 107 lb upl uplift at joint	ift at joint 15, 98 l 17, 107 lb uplift at join	b uplift at at joint 12	joint 16, 79 lt 99 lb uplift a) t				mm	1111.
BOT CHORD	4-5=-88/20 7-8=-65/55 1-17=-33/1 15-16=-33/ 12-13=-33/ 10-11=-33/ 5-13=-210/ 2-17=-220/ 7-11=-241/	5, 5-6=-8 6, 8-9=-11 28, 16-17 (106, 13-1 (106, 11-1 (106, 9-10 (0, 4-15=- (140, 6-12 (169, 8-10)	8/205, 6-7=-61/106, 3/45 7=-33/106, 15=-33/106, 2=-33/106, 0=-33/106 259/173, 3-16=-241/1 2=-259/173, 0=-220/140	1 L 169,) This truss is International R802.10.2 a	designed in acco Residential Code nd referenced sta Standard	andard AN	ith the 2015 R502.11.1 a ISI/TPI 1.	nd		Gunn		SEA 0363	ROUT A
1) Unbalance	ed roof live lo	ads have	been considered for									-	· · · ·	A 1. E

this design.



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818 Soundside Road Edenton, NC 27932

C A. GI A. GILUN November 14,2023

Job	Truss	Truss Type	Qty	Ply	Belhaven DEF	
Belhaven DEF	V1E	Roof Special	1	1	Job Reference (optional)	161952863

Run: 8.72 S Oct 5 2023 Print: 8.720 S Oct 5 2023 MiTek Industries, Inc. Fri Nov 10 10:51:42 ID:bPPTn1oUy1wSU9seSv5L0xz6mLY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:59.7

Plate Offsets (X, Y): [7:0-2-4,Edge], [18:0-4-13,Edge], [25:0-4-0,0-1-0]

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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	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
TCDL		10.0	Lumber DOL	1.15		BC	0.13	Vert(TL)	n/a	-	n/a	999			
BCLL		0.0*	Rep Stress Incr	YES		WB	0.08	Horiz(TL)	0.00	18	n/a	n/a			
BCDL		10.0	Code	IRC202	15/TPI2014	Matrix-MS							Weight: 168 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD	2x4 SP N 2x4 SP N	o.2 o.2		Т	OP CHORD	1-2=-216/103, 2-3=- 4-5=-115/53, 5-6=-8 3-9=-29/61, 9-10=-8	169/62 6/54, 6	, 3-4=-145/65 -8=-57/55, -11=-15/78,	,	9) All 10) Pro bea	bearings wide me aring plat	are as chanica e capa	sumed to be SP al connection (by ble of withstandin	No.2. others) of truss to ng 13 lb uplift at joint	
OTHERS	2x4 SP N SP No.2	o.3 *Excep	t* 23-13,24-12,25-11	:2x4		11-12=-26/108, 12-1 13-14=-36/135, 14-1 15-16=-14/74, 16-17	13=-36/ 15=-26/ 7=-7/58	135, 108, . 17-18=-40/5	7	18, upl 28	26 lb up ift at joini 33 lb up	lift at jo 26, 33 lift at jo	oint 24, 30 lb uplit 3 lb uplift at joint 2 pint 29, 32 lb uplit	t at joint 25, 29 lb 27, 32 lb uplift at joint t at joint 30_35 lb	
TOP CHORD	Structura 10-0-0 oc	l wood shea purlins.	athing directly applie	dor B	OT CHORD	1-33=-82/136, 32-33 30-31=-29/35, 29-30	3=-29/3)=-29/3	5, 31-32=-29/ 5, 28-29=-29/	'35, '35,	upl 33,	ift at join 25 lb up	int at jo 31, 19 lift at jo	bint 20, 02 ib upli bint 22, 36 lb uplif	82, 65 lb uplift at joint t at joint 21, 31 lb	
BOT CHORD	Rigid ceil bracing.	ing directly	applied or 6-0-0 oc			27-28=-29/35, 26-27 24-25=-39/44, 23-24 21-22=-40/43, 20-21	7=-29/3 1=-40/4 1=-40/4	5, 25-26=-30/ 4, 22-23=-40/ 4 19-20=-38/	'35, '43, '43	upl 11) Ber	ift at join veled pla face with	te or sl	d 35 lb uplift at jo him required to pl chord at joint(s) 1	int 19. rovide full bearing 18 23 24 22 21	
REACTIONS	(size) Max Horiz	1=24-0-8, 20=24-0-8 23=24-0-8 26=24-0-8 29=24-0-8 32=24-0-8 1=241 (10)	18=24-0-8, 19=24-0 6, 21=24-0-8, 22=24- 7, 24=24-0-8, 25=24- 7, 27=24-0-8, 28=24- 7, 30=24-0-8, 31=24- 8, 33=24-0-8 5, 12)	-8, 0-8, V 0-8, V 0-8, 0-8,	/EBS	18-1946/44 13-23=-97/0, 12-24= 10-26=-80/54, 9-27= 3-29=-80/55, 5-30=- 3-32=-37/42, 2-33=- 15-21=-81/60, 16-20	=-86/44 =-80/55 79/55, 177/91)=-76/5	, 11-25=-79/6 , 8-28=-80/55 4-31=-88/58, , 14-22=-85/4 4, 17-19=-97/	4, 58	20, 12) Thi Inte R8	19. s truss is ernationa 02.10.2 a CASE(S)	design Resic and refe	ned in accordanc lential Code secti erenced standarc ndard	e with the 2015 ons R502.11.1 and I ANSI/TPI 1.	
	Max Uplift	18=-13 (Lu 20=-31 (Lu 22=-25 (Lu 25=-30 (Lu 27=-33 (Lu 29=-33 (Lu 31=-35 (Lu 33=-65 (Lu	C 12), 19=-35 (LC 13 C 13), 21=-36 (LC 13 C 13), 24=-26 (LC 12 C 12), 26=-29 (LC 12 C 12), 28=-32 (LC 12 C 12), 30=-32 (LC 12 C 12), 32=-19 (LC 12 C 12)	3), N 3), 1 2), 2), 2), 2), 2), 2), 2),	OTES) Unbalanced this design.) Wind: ASCE Vasd=103mj II; Exp B; En and C-C Ext & MWFRS for	roof live loads have 7-10; Vult=130mph oh; TCDL=6.0psf; B closed; MWFRS (er erior (2) zone;C-C fo or reactions shown;	been o (3-sec CDL=6 nvelope or mem Lumbe	considered for ond gust) .0psf; h=30ft; .) exterior zon bers and forc r DOL=1.60 p	Cat. e es late				TH CA	ROLIN	
	Max Grav	1=116 (LC 19=147 (L 21=109 (L 23=124 (L 25=114 (L 27=106 (L 31=127 (L 33=291 (L	21), 18=51 (LC 24) C 24), 20=95 (LC 1) C 24), 22=111 (LC 1 C 22), 24=112 (LC 2 C 23), 26=110 (LC 1 C 1), 28=107 (LC 23 C 1), 30=102 (LC 23) C 1), 32=18 (LC 23) C 1)	, 3), (3),), 4), 5), 5 , 6 , 7	 grip DOL=1.) Truss desig only. For stu see Standari or consult qu) All plates are) Gable requir) Gable studs) This truss ha chord live load 	50 ned for wind loads in ids exposed to wind d Industry Gable En- tailified building desi a 1.5x4 MT20 unless es continuous botto spaced at 1-4-0 oc. Is been designed fo ad nonconcurrent wi	n the pl l (norm d Detai gner as s othen m chor r a 10.0 ith any	ane of the tru: al to the face) Is as applicab s per ANSI/TP vise indicated d bearing.) psf bottom other live load	ss ble, bl 1. l. ds.			2 A	SEA 0363	L 22	•
FURGES	Tension	imum Com	pression/maximum	8	 * This truss I on the bottor 3-06-00 tall I chord and ar 	has been designed f n chord in all areas by 2-00-00 wide will ny other members.	for a liv where fit betw	e load of 20.0 a rectangle veen the botto	psf m				A. G	ILBER III	

November 14,2023



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Job	Truss	Truss Type	Qty	Ply	Belhaven DEF	
Belhaven DEF	V2	Valley	1	1	Job Reference (optional)	161952864

Run: 8.72 S Oct 5 2023 Print: 8.720 S Oct 5 2023 MiTek Industries, Inc. Fri Nov 10 10:51:42

n/a

0.00

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84 Components (Dunn, NC), Dunn, NC - 28334,



TCDL		10.0	Lumber DOL	1.15			BC	0.22	Vert(TL)	n				
BCLL		0.0*	Rep Stress Incr	YES			WB	0.23	Horiz(TL)	0.0				
BCDL		10.0	Code	IRC	2015/T	PI2014	Matrix-MS							
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP N 2x4 SP N 2x4 SP N Structura 10-0-0 oc Rigid ceil bracing. (size)	o.2 o.2 o.3 I wood shea purlins. ing directly 1=25-8-0, 9=25-8-0,	athing directly applie applied or 6-0-0 oc 7=25-8-0, 8=25-8-0 10=25-8-0, 12=25-8	d or ,	 5) 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 4) All plates are 1.5x4 MT20 unless otherwise indicated. 5) 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 chord live load nonconcurrent with any other live loads 8) * This truss has been designed for a live load of 20.0p: on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom 									
	Max Horiz Max Uplift Max Grav	13=25-8-0 1=-105 (LC 1=-9 (LC 1 (LC 13), 9 (LC 12), 1 1=125 (LC 8=400 (LC 10=498 (L 13=400 (L) C 13) 13), 7=-1 (LC 13), 8= =-103 (LC 13), 12=- 3=-113 (LC 12) 2 23), 7=125 (LC 24) 2 24), 9=331 (LC 26) C 19), 12=331 (LC 2 C 23)	112 103 , , 25),	9) A 10) F 1 j 11) T	chord and an All bearings a Provide mech bearing plate 1 lb uplift at ju oint 13, 103	een the bottom DL = 10.0psf. rs) of truss to Ib uplift at joint 1 12, 113 Ib uplift at b uplift at joint 8. th the 2015	nt 1, ift at t 8.						
FORCES	(lb) - Max Tension	(lb) - Maximum Compression/Maximum Tension					R802.10.2 and referenced standard ANSI/TPI 1.							
TOP CHORD	1-2=-185 4-5=0/18	/181, 2-3=-3 3, 5-6=0/16	32/178, 3-4=0/194, 2, 6-7=-185/176		LUA	D CASE(S)	Standard							
BOT CHORD	1-13=-10 10-12=-1 8-9=-103	3/164, 12-1 03/115, 9-1 /115, 7-8=-	3=-103/115, 0=-103/115, 103/160											
WEBS	4-10=-31	9/0, 3-12=-2 /172, 6-8=-2	249/172, 2-13=-272/ 272/170	170,										
NOTES 1) Unbalance this design 2) Wind: ASC Vasd=103 II; Exp B;	ed roof live n. CE 7-10; Vu Bmph; TCDL Enclosed; N	loads have lt=130mph .=6.0psf; B0 /WFRS (en	been considered for (3-second gust) CDL=6.0psf; h=30ft; velope) exterior zon	Cat.										

and C-C Exterior (2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate

grip DOL=1.60

H CAROLIN	
SEAL 036322	WILLING THE
November 14,2023	in the second se

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Weight: 105 lb

FT = 20%

n/a

n/a n/a

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Job	Truss	Truss Type	Qty	Ply	Belhaven DEF	
Belhaven DEF	V3	Valley	1	1	Job Reference (optional)	161952865

10-10-0

84 Components (Dunn, NC), Dunn, NC - 28334,

Run: 8.72 S Oct 5 2023 Print: 8.720 S Oct 5 2023 MiTek Industries, Inc. Fri Nov 10 10:51:42 ID:iY3FgQwKvvrgr5LpEnoS5lz6mMg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

21-1-1





Scale = 1:42.7

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Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 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	5/TPI2014	CSI TC BC WB Matrix-MS	0.21 0.16 0.11	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 7	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 85 lb	GRIP 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 she 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=21-8-0 9=21-8-0 13=21-8- Max Horiz 1=-88 (LC (9=-112 (I 13=-79 (I Max Grav 1=83 (LC (LC 1), 9 19), 12=5 1)	eathing directly applied y applied or 6-0-0 oc , 7=21-8-0, 8=21-8-0, , 10=21-8-0, 12=21-8-0, C 17) C 13), 8=-78 (LC 13), C 13), 12=-112 (LC 1 C 12) 1), 7=83 (LC 1), 8=2 =346 (LC 24), 10=384 (46 (LC 23), 13=298 (3) d or 6) 7) -0, 9) 12), 98 ¢ (LC 11	Truss design only. For stu see Standard or consult qu All plates are Gable requird Gable studs This truss ha chord live loa * This truss ha chord live loa * This truss ha on the botton 3-06-00 tall b chord and an All bearings a 0) Provide mect bearing plate 1, 112 lb upli uplift at joint 1) This truss is International B80/2 10.2 ar	the d for wind loads ds exposed to wird a Industry Gable E alified building de: 1.5x4 MT20 unle as continuous bott spaced at 4-0-0 or s been designed f d nonconcurrent to as been designed n chord in all area y 2-00-00 wide wi y 2-00-00 wide wi y other members, are assumed to be nanical connectior capable of withst f at joint 12, 79 lb 9 and 78 lb uplift a designed in accord Residential Code of referenced star	in the pl in the pl ind (norm ind Deta signer as ss othen om chor c. for a 10.0 with any i for a liv s where ll fit betw with BC s S No. n (by oth anding 1 uplift at op the anding 1 dance w sections of ard a dance w	ane of the tru: al to the face) ils as applicab s per ANSI/TP vise indicated d bearing.) psf bottom other live loac e load of 20.0 DL = 10.0psf. 2. ers) of truss to 2 lb uplift at jc joint 13, 112 l ith the 2015 R502.1.1.1 at	ss ,le, l 1. ls. psf m o int b						
FORCES	(lb) - Maximum Con Tension	npression/Maximum	LC	DAD CASE(S)	Standard									
TOP CHORD	1-2=-124/66, 2-3=-7 4-5=-63/141, 5-6=-5	'0/91, 3-4=-63/141, 54/63, 6-7=-108/45										mm	IIII.	
BOT CHORD	1-13=-26/111, 12-1	3=-26/76, 10-12=-26/3	76,									"TH CA	RO	
WEBS	4-10=-26/180, 6-8=-2 5-9=-266/180, 6-8=-	-266/180, 2-13=-213/ ⁻ -213/138	138,							L	in a	OREESS	10 No	5
NOTES												:047	N. I	-
 Unbalance this design Wind: ASS Vasd=103 II; Exp B; and C-C E & MWFRS grip DOL= 	ed roof live loads have n. CE 7-10; Vult=130mpł 3mph; TCDL=6.0psf; B Enclosed; MWFRS (e Exterior (2) zone;C-C f S for reactions shown; =1.60	e been considered for n (3-second gust) CDL=6.0psf; h=30ft; nvelope) exterior zone or members and force Lumber DOL=1.60 pl	Cat. e es late							1111111	A A A A A A A A A A A A A A A A A A A	SEA 0363	L 22 EER.K	MULTIN,

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2 GI A. GIL November 14,2023

Job	Truss	Truss Type	Qty	Ply	Belhaven DEF	
Belhaven DEF	V4	Valley	1	1	Job Reference (optional)	161952866

Run: 8.72 S Oct 5 2023 Print: 8.720 S Oct 5 2023 MiTek Industries. Inc. Fri Nov 10 10:51:42 ID:XRu5MfnQVXSE1P?h5z6t9Rz6mMr-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Page: 1



Scale =	1:39
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Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 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	5/TPI2014	CSI TC BC WB Matrix-MS	0.29 0.19 0.12	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 9	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 65 lb	GRIP 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 she 10-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=17-8-0, 7=17-8-0, Max Horiz 1=-71 (LC Max Uplift 1=-5 (LC 6=-127 (L Max Grav 1=109 (LC 6=421 (LC 9=421 (LC	athing directly applied applied or 6-0-0 oc 5=17-8-0, 6=17-8-0, 9=17-8-0 ; 13), 13), 5=-10 (LC 13), C 13), 9=-128 (LC 12 C 23), 5=109 (LC 24) C 24), 7=393 (LC 1), C 23)	6) 7) d or 8) 9) 1(2) L(This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar All bearings Provide mec bearing plate 10 lb uplift at uplift at joint This truss is International R802.10.2 a OAD CASE(S) 	as been designed ad nonconcurren has been designe m chord in all are by 2-00-00 wide v y other member are assumed to I thanical connecti e capable of with t joint 5, 128 lb u 6. designed in acco Residential Cod nd referenced sta Standard	I for a 10.1 t with any ed for a liv as where will fit betv s. be SP No. on (by oth standing 5 plift at join ordance w e sections andard AN) psf bottom other live load e load of 20.0 a rectangle veen the botto 2. ers) of truss to i lb uplift at joi t 9 and 127 lb ith the 2015 R502.11.1 at ISI/TPI 1.	ds. psf m nt 1,					
	(lb) - Maximum Com Tension 1-2=-150/223 2-3=0	pression/Maximum											
BOT CHORD WEBS	4-5=-150/223 IORD 1-9=-140/128, 7-9=-140/98, 6-7=-140/98, 5-6=-140/128 3-7=-339/62, 2-9=-296/183, 4-6=-296/183												
NOTES 1) Unbalance this design	ed roof live loads have 1.	been considered for									and a	OPTESS	HO IN THE

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone;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 3) 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.
- Gable requires continuous bottom chord bearing. 4)
- 5) Gable studs spaced at 4-0-0 oc.



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 frusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and PCB Building Component Science Information and information Science Information Component Advance International Information Component Information Component International Information Component International Information Component International Information Component Information and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	Belhaven DEF	
Belhaven DEF	V5	Valley	1	1	Job Reference (optional)	161952867

1)

2)

3)

4) 5)

Run: 8.72 S Oct 5 2023 Print: 8.720 S Oct 5 2023 MiTek Industries. Inc. Fri Nov 10 10:51:43 ID:t7AZrYeuJryxaZ5OOSu3fvz6mN1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

818 Soundside Road

Edenton, NC 27932



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Job	Truss	Truss Type	Qty	Ply	Belhaven DEF			
Belhaven DEF	V6	Valley	1	1	Job Reference (optional)	161952868		



9-8-0

Run: 8.72 S Oct 5 2023 Print: 8.720 S Oct 5 2023 MiTek Industries, Inc. Fri Nov 10 10:51:43

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Loading TCLL (roof) TCDL BCLL BCDL LUMBER	(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015 7)	5/TPI2014 * This truss f	CSI TC BC WB Matrix-MP	0.30 0.28 0.11 ed for a liv	DEFL Vert(LL) Vert(TL) Horiz(TL) e load of 20.0	in n/a n/a 0.00 Dpsf	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 31 lb	GRIP 244/190 FT = 20%
TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	LUMBER TOP CHORD 2x4 SP No.2 3OT CHORD 2x4 SP No.2 OTHERS 2x4 SP No.3 BRACING TOP CHORD Structural wood sheathing directly applied or 9-8-0 oc purlins. BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. REACTIONS (size) 1=9-8-0, 3=9-8-0, 4=9-8-0 Max Horiz 1=38 (LC 16) Max Uplift 1=-19 (LC 24), 3=-19 (LC 23), 4=-78 (LC 12) Max Grav 1=77 (LC 23), 3=77 (LC 24), 4=697 (LC 12) Max Grav 1=77 (LC 23), 3=77 (LC 24), 4=697 (LC 12) Max Grav 1=77 (LC 23), 3=77 (LC 24), 4=697 (LC 12) Max Grav 1=77 (LC 23), 3=77 (LC 24), 4=697 (LC 12) Max Grav 1=77 (LC 23), 3=77 (LC 24), 4=697 (LC 12) Max Grav 1=77 (LC 23), 3=77 (LC 24), 4=697					eas where will fit betv 's. be SP No. on (by oth standing 1 3 lb uplift a ordance w le sections andard AN	a rectangle veen the botto 2 . ers) of truss t 9 lb uplift at j t joint 4. ith the 2015 is R502.11.1 a ISI/TPI 1.	om to oint und					
FORCES	(Ib) - Maximum Con Tension 1-2=-142/375 2-3=-	npression/Maximum											

BOT CHORD 1-4=-303/192, 3-4=-303/192 WEBS 2-4=-511/241

NOTES

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

- Wind: ASCE 7-10; Vult=130mph (3-second gust) 2) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing. 4)
- 5) Gable studs spaced at 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 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 frusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and PCB Building Component Science Information and information Science Information Component Advance International Information Component Information Component International Information Component International Information Component International Information Component Information

and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Page: 1



Job	Truss	Truss Type	Qty	Ply	Belhaven DEF	
Belhaven DEF	V7	Valley	1	1	Job Reference (optional)	161952869

2-10-0

2-10-0

84 Components (Dunn, NC), Dunn, NC - 28334,

Run: 8.72 S Oct 5 2023 Print: 8.720 S Oct 5 2023 MiTek Industries, Inc. Fri Nov 10 10:51:43 ID:6ahX9pYtCNx4dKUrwnIBLDz6mN9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

5-1-1

2-3-1

5-8-0



Ра





5-8-0

Scale = 1:22.7

Loading TCLL (roof) TCDL BCLL BCDL	(p: 20 10 0 10	sf) Spacing 0.0 Plate Grip 0.0 Lumber D 0.0* Rep Stres 0.0 Code	2 DOL 1 OL 1 ss Incr Y II	2-0-0 1.15 1.15 /ES RC2015	5/TPI2014	CSI TC BC WB Matrix-MP	0.08 0.09 0.04	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: 17 lb	GRIP 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 5-8-0 oc purlins Rigid ceiling dir bracing. (size) 1=5- Max Horiz 1=21 Max Uplift 1=-1 4=-3 Max Grav 1=7 (LC	d sheathing directs arectly applied or (8-0, 3=5-8-0, 4= (LC 12) 2 (LC 12), 3=-16 1 (LC 12) 2 (LC 23), 3=72 (1)	tly applied o 6-0-0 oc 5-8-0 (LC 13), LC 24), 4=33	7) ,r 9) 10 LC	* This truss h on the botton 3-06-00 tall b chord and an All bearings a Provide mecl bearing plate 1, 16 lb uplift) This truss is International R802.10.2 ar PAD CASE(S)	as been designed n chord in all area by 2-00-00 wide w y other members are assumed to b hanical connectio capable of withsi at joint 3 and 31 designed in accor Residential Code nd referenced star Standard	d for a liv as where ill fit betw e SP No. n (by oth tanding 1 lb uplift a rdance w sections ndard AN	e load of 20.0 a rectangle veen the botto 2 . ers) of truss t 2 lb uplift at ji t joint 4. ith the 2015 R502.11.1 a ISI/TPI 1.	0psf om o oint nd					
FORCES TOP CHORD BOT CHORD WEBS NOTES	(Ib) - Maximum Tension 1-2=-77/133, 2- 1-4=-102/83, 3- 2-4=-207/103	Compression/M -3=-77/133 -4=-102/83	aximum											

 Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone;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.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

SEAL 036322

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November 14,2023



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General Safety Notes

Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building all other interested parties. designer, erection supervisor, property owner and
- Cut members to bear tightly against each other
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- 11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted
- 15. Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone
- . Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.