

All Truss Reactions are Less than 3,000 lbs. Unless Noted Otherwise.  
 -- Denotes Reaction Greater than 3,000 lbs. Reaction / # of Studs

All Headers Are Considered 2X10 Beams Unless Otherwise Noted

All Walls Shown Are Considered Load Bearing

Roof Area = 2902.47 sq.ft.  
 Ridge Line = 111.78 ft.  
 Hip Line = 0 ft.  
 Horiz. OH = 110.06 ft.  
 Raked OH = 138.77 ft.  
 Decking = 100 sheets

Dimension Notes  
 1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise  
 2. All interior wall dimensions are to face of stud unless noted otherwise  
 3. All exterior wall to truss dimensions are to face of stud unless noted otherwise

Hatch Legend  
 5' 11-3/4" Walls  
 Second Floor Walls  
 Vaulted Ceiling  
 Drop Beam  
 Flush Beam

Connector Information				Nail Information		
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
■	HUS26	USP	25	NA	16d/3-1/2"	16d/3-1/2"
■	THDH210-3	USP	1	Varies	16d/3-1/2"	16d/3-1/2"

1 Truss Placement Plan  
 Scale: 1/4"=1'

▲ = Denotes Left End of Truss  
 (Reference Engineered Truss Drawing)

LOAD CHART FOR JACK STUDS

(BASED ON TABLES R502.5(1) & (2))  
 NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADERS/BEAMS

END REACTOR (UP TO)	END REACTOR (UP TO)	END REACTOR (UP TO)
NO. OF HEADERS	NO. OF HEADERS	NO. OF HEADERS
1700	2550	3400
3400	5100	6800
5100	7650	10200
6800	10200	13600
8500	12750	17000
10200	15300	
11900		
13600		
15300		

<b>BUILDER</b>	New Home, Inc.
<b>JOB NAME</b>	Lot 22 Duncan's Creek
<b>PLAN</b>	The Guilford - Traditional "B"
<b>SEAL DATE</b>	10/31/23
<b>QUOTE #</b>	
<b>JOB #</b>	J0224-1264

<b>CITY / CO.</b>	Lillington / Harnett
<b>ADDRESS</b>	327 Beacon Hill Road
<b>MODEL</b>	Roof
<b>DATE REV.</b>	03/06/24
<b>DRAWN BY</b>	Jonathan Landry
<b>SALES REP.</b>	Paul Hawkins

**THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.**  
 These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BC3-B1 and BC3-B3 provided with the truss delivery package or online @ sbcindustry.com

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature: Jonathan Landry  
 Jonathan Landry

**comTECH**  
**ROOF & FLOOR TRUSSES & BEAMS**  
 Reilly Road Industrial Park  
 Fayetteville, N.C. 28309  
 Phone: (910) 864-8787  
 Fax: (910) 864-4444

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0224-1264  
Lot 22 Duncan's Creek

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: I64068458 thru I64068492

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

North Carolina COA: C-0844



March 7, 2024

Johnson, Andrew

**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	Lot 22 Duncan's Creek	I64068458
J0224-1264	A1	PIGGYBACK BASE	3	1		
					Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

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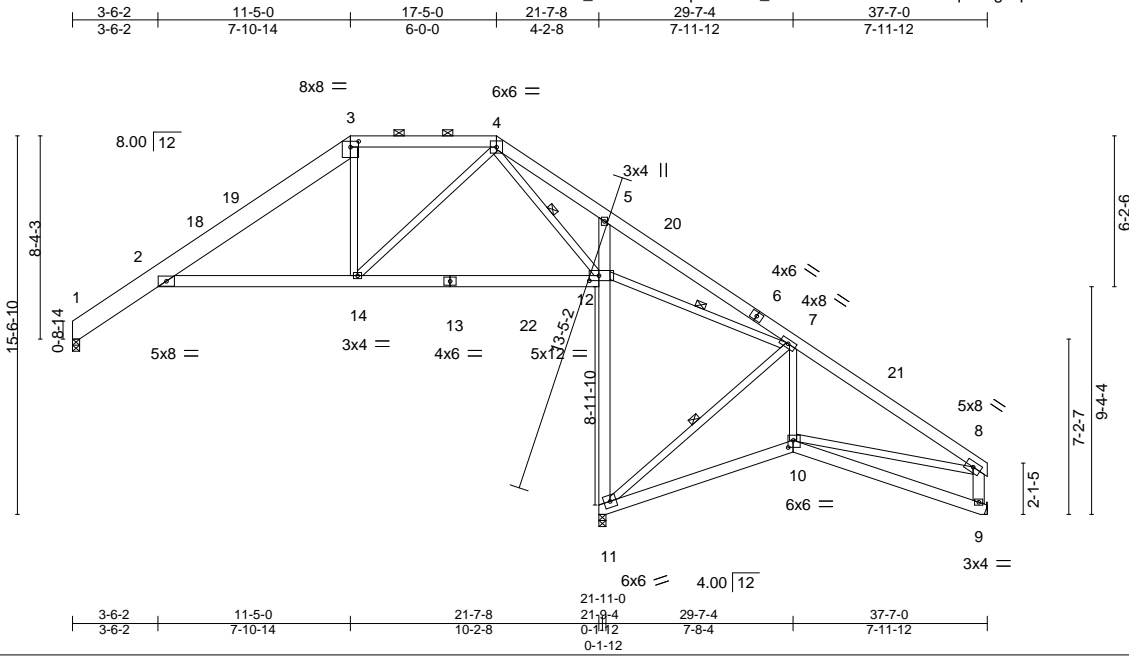


Plate Offsets (X,Y)--	[3:0-4-0,0-2-13], [10:0-2-8,0-3-8], [12:0-4-12,0-2-8]
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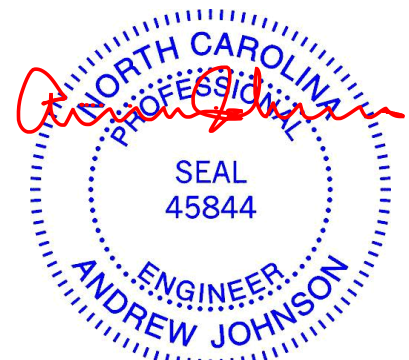
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.68	Vert(LL)	-0.16 14-17	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.49	Vert(CT)	-0.33 14-17	>784	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.35	Horz(CT)	0.18 9	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL)	0.18 14-17	>999	240		
	Code IRC2015/TPI2014						Weight: 313 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 1-3: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2 *Except* 8-9: 2x6 SP No.1	WEBS 1 Row at midpt 4-12, 7-12, 7-11

**REACTIONS.** (size) 1=0-3-8, 11=0-3-8, 9=Mechanical  
 Max Horz 1=-415(LC 8)  
 Max Uplift 1=-141(LC 12), 11=-84(LC 13), 9=-250(LC 13)  
 Max Grav 1=791(LC 1), 11=1737(LC 1), 9=569(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-697/475, 2-3=-858/364, 3-4=-799/452, 4-5=-128/914, 5-7=-100/1019,  
 7-8=-790/447, 8-9=630/382  
 BOT CHORD 2-14=-186/852, 12-14=-310/380, 11-12=-1452/403, 5-12=-603/379, 10-11=-249/560  
 WEBS 4-14=-159/804, 4-12=-1455/339, 7-12=-1001/481, 7-10=-10/472, 8-10=-158/322,  
 7-11=-686/304

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 11-5-0, Exterior(2) 11-5-0 to 23-7-11, Interior(1) 23-7-11 to 37-2-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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 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, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Bearing at joint(s) 1, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 141 lb uplift at joint 1, 84 lb uplift at joint 11 and 250 lb uplift at joint 9.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

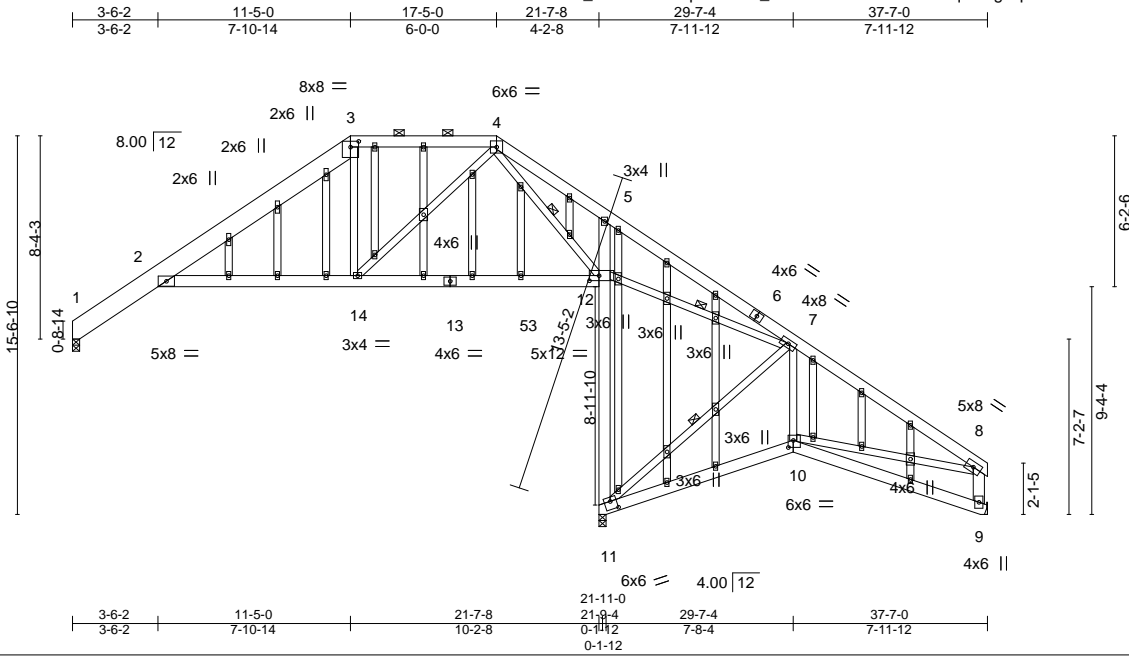


Job	Truss	Truss Type	Qty	Ply	Lot 22 Duncan's Creek	I64068459
J0224-1264	A1SG	GABLE	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

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Scale = 1:94.6

Plate Offsets (X,Y)--	[3:0-4-0,0-2-13], [10:0-2-8,0-3-8], [11:0-3-0,0-4-0], [12:0-4-12,0-2-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.68	Vert(LL)	-0.16 14-52	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.49	Vert(CT)	-0.33 14-52	>784	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.35	Horz(CT)	0.18 9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.24 14-52	>999	240		
								Weight: 405 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 1-3: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2 *Except* 8-9: 2x6 SP No.1	WEBS 1 Row at midpt 4-12, 7-12, 7-11
OTHERS 2x4 SP No.2	

**REACTIONS.** (size) 1=0-3-8, 11=0-3-8, 9=Mechanical  
 Max Horz 1=-552(LC 13)  
 Max Uplift 1=-290(LC 12), 11=-305(LC 13), 9=-426(LC 13)  
 Max Grav 1=791(LC 1), 11=1737(LC 1), 9=599(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-697/623, 2-3=-858/383, 3-4=-799/468, 4-5=-217/964, 5-7=-235/1050,  
 7-8=-790/660, 8-9=-632/503  
 BOT CHORD 2-14=-340/968, 12-14=-310/534, 11-12=-1453/439, 5-12=-604/432, 10-11=-413/571  
 WEBS 4-14=-235/817, 4-12=-1455/461, 7-12=-1000/539, 7-10=-82/472, 8-10=-260/344,  
 7-11=-700/514

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; 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) 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) Provide adequate drainage to prevent water ponding.
  - 5) All plates are 2x4 MT20 unless otherwise indicated.
  - 6) Gable studs spaced at 2-0-0 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 20.0psf 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, with BCDL = 10.0psf.
  - 9) Refer to girder(s) for truss to truss connections.
  - 10) Bearing at joint(s) 1, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 290 lb uplift at joint 1, 305 lb uplift at joint 11 and 426 lb uplift at joint 9.
  - 12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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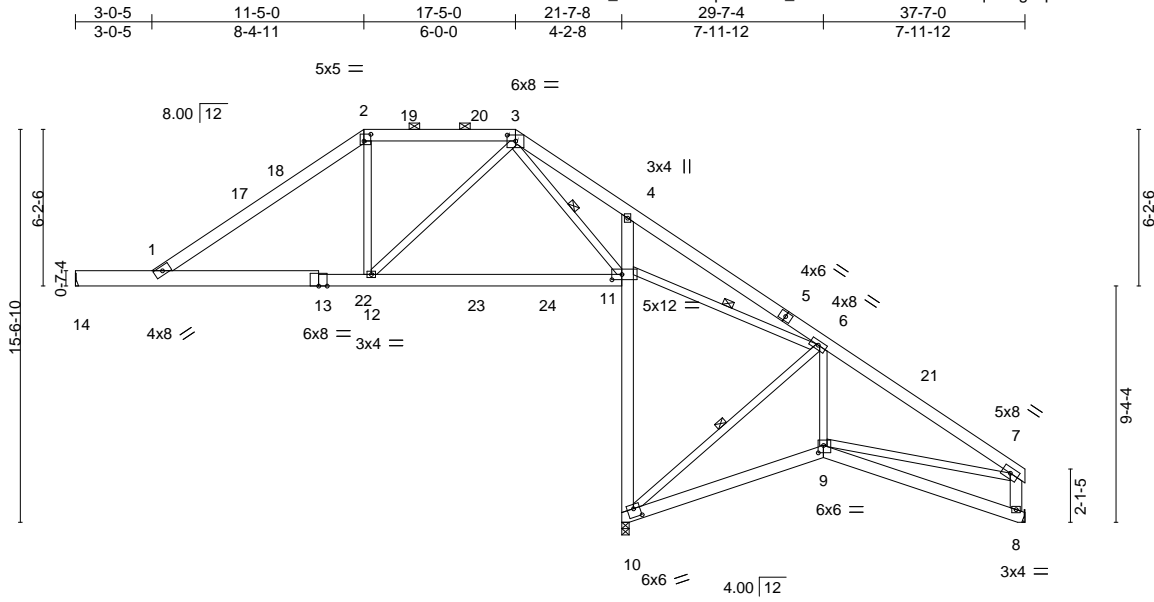


Job J0224-1264	Truss A2	Truss Type PIGGYBACK BASE	Qty 2	Ply 1	Lot 22 Duncan's Creek Job Reference (optional)	I64068460
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Comtech, Inc. Fayetteville, NC - 28314,

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Scale = 1:91.2

Plate Offsets (X,Y)--	[2:0-3-4,0-3-4], [3:0-4-0,0-2-13], [9:0-2-8,0-3-8], [10:0-3-0,0-4-0], [11:0-4-12,0-2-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.42	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.82	Vert(LL) -0.24 12-15 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.42	Vert(CT) -0.48 12-15 >547 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) -0.03 10 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.24 12-15 >999 240	Weight: 296 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD 2x6 SP No.1 *Except* 13-14: 2x8 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2 *Except* 7-8: 2x6 SP No.1	WEBS 1 Row at midpt 3-11, 6-11, 6-10

**REACTIONS.** (size) 14=Mechanical, 10=0-3-8, 8=Mechanical  
 Max Horz 14=420(LC 13)  
 Max Uplift 14=48(LC 12), 10=-174(LC 13), 8=-218(LC 13)  
 Max Grav 14=732(LC 1), 10=1823(LC 1), 8=499(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-859/380, 2-3=-775/441, 3-4=-182/1194, 4-6=-361/1269, 6-7=-647/376, 7-8=-561/348  
 BOT CHORD 1-14=-371/420, 1-12=-159/837, 11-12=-438/419, 10-11=-1589/529, 4-11=-612/366, 9-10=-192/443  
 WEBS 3-12=-234/882, 3-11=-1747/557, 6-11=-1381/679, 6-9=0/447, 7-9=-106/254, 6-10=-534/233

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 3-0-5 to 7-5-2, Interior(1) 7-5-2 to 11-5-0, Exterior(2) 11-5-0 to 15-9-13, Interior(1) 15-9-13 to 17-5-0, Exterior(2) 17-5-0 to 21-11-12, Interior(1) 21-11-12 to 37-2-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 14, 174 lb uplift at joint 10 and 218 lb uplift at joint 8.
  - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



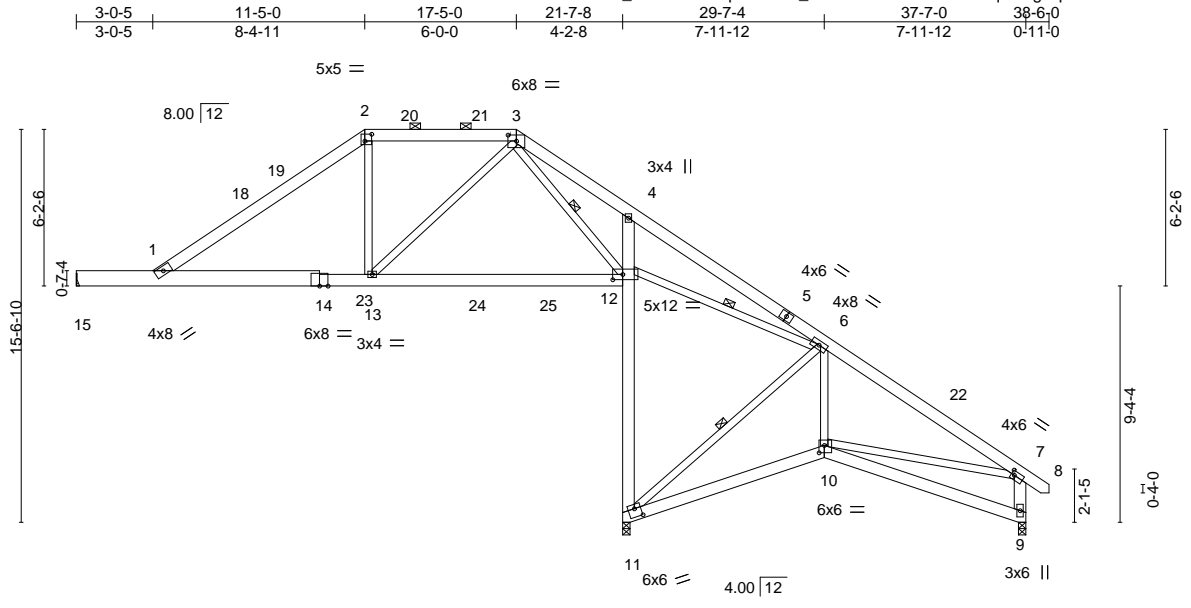
March 7, 2024

Job	Truss	Truss Type	Qty	Ply	Lot 22 Duncan's Creek	164068461
J0224-1264	A3	PIGGYBACK BASE	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

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Scale = 1:91.2

Plate Offsets (X,Y)--	[2:0-3-4,0-3-4], [3:0-4-0,0-2-13], [7:0-1-8,0-2-0], [10:0-2-8,0-3-8], [11:0-3-0,0-4-0], [12:0-4-12,0-2-8]
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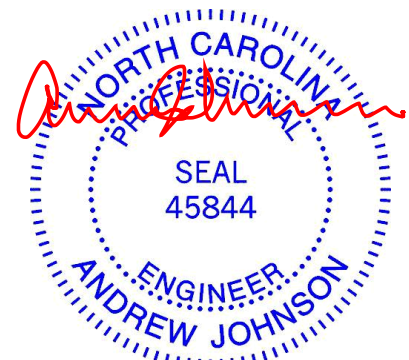
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.42	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.82	Vert(LL) -0.24 13-16 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.42	Vert(CT) -0.48 13-16 >547 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) -0.03 11 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.24 13-16 >999 240	Weight: 298 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD 2x6 SP No.1 *Except* 14-15: 2x8 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2 *Except* 7-9: 2x6 SP No.1	WEBS 1 Row at midpt 3-12, 6-12, 6-11

**REACTIONS.** (size) 15=Mechanical, 11=0-3-8, 9=0-3-8  
 Max Horz 15=-446(LC 13)  
 Max Uplift 15=-49(LC 12), 11=-159(LC 13), 9=-257(LC 13)  
 Max Grav 15=732(LC 1), 11=1825(LC 1), 9=568(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-859/384, 2-3=-777/446, 3-4=-169/1194, 4-6=-348/1273, 6-7=-683/421, 7-9=-658/459  
 BOT CHORD 1-15=-401/446, 1-13=-148/854, 12-13=-465/452, 11-12=-1590/516, 4-12=-614/367, 10-11=-185/449, 9-10=-124/299  
 WEBS 3-13=-231/883, 3-12=-1747/547, 6-12=-1400/702, 6-10=0/455, 6-11=-547/225

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 3-0-5 to 7-5-2, Interior(1) 7-5-2 to 11-5-0, Exterior(2) 11-5-0 to 15-9-13, Interior(1) 15-9-13 to 17-5-0, Exterior(2) 17-5-0 to 21-11-12, Interior(1) 21-11-12 to 38-4-1 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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 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, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Bearing at joint(s) 11, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 15, 159 lb uplift at joint 11 and 257 lb uplift at joint 9.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



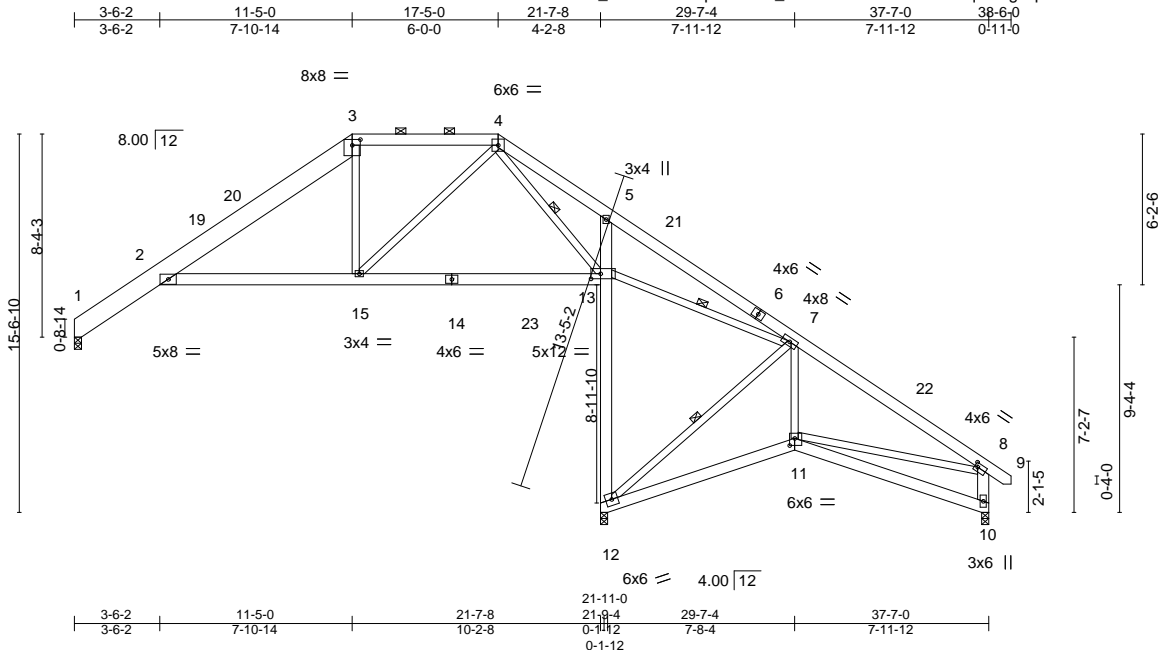
March 7, 2024

Job J0224-1264	Truss A4	Truss Type PIGGYBACK BASE	Qty 1	Ply 1	Lot 22 Duncan's Creek Job Reference (optional)	I64068462
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Scale = 1:94.7

Plate Offsets (X,Y)--	[3:0-4-0,0-2-13], [8:0-1-8,0-2-0], [11:0-2-8,0-3-8], [13:0-4-12,0-2-8]
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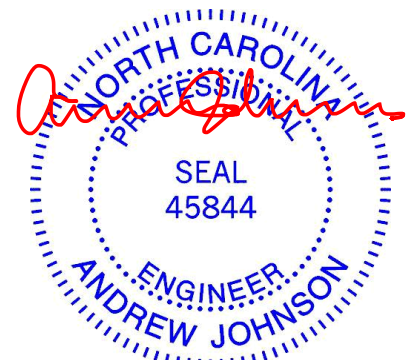
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.68	Vert(LL)	-0.16 15-18	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.49	Vert(CT)	-0.33 15-18	>784	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.35	Horz(CT)	0.18 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.18 15-18	>999	240	Weight: 315 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 1-3: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2 *Except* 8-10: 2x6 SP No.1	WEBS 1 Row at midpt 4-13, 7-13, 7-12

**REACTIONS.** (size) 1=0-3-8, 12=0-3-8, 10=0-3-8  
 Max Horz 1=-431(LC 8)  
 Max Uplift 1=-143(LC 12), 12=-72(LC 12), 10=-289(LC 13)  
 Max Grav 1=791(LC 1), 12=1739(LC 1), 10=637(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-725/503, 2-3=-857/369, 3-4=-798/453, 4-5=-116/924, 5-7=-87/1030, 7-8=-831/502,  
 8-10=-729/497  
 BOT CHORD 2-15=-174/871, 13-15=-335/401, 12-13=-1455/382, 5-13=-606/379, 11-12=-246/571,  
 10-11=-127/304  
 WEBS 4-15=-142/808, 4-13=-1456/289, 7-13=-1008/491, 7-11=-11/481, 8-11=-133/286,  
 7-12=-699/300

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 11-5-0, Exterior(2) 11-5-0 to 23-7-11, Interior(1) 23-7-11 to 38-4-1 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Bearing at joint(s) 1, 12, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 143 lb uplift at joint 1, 72 lb uplift at joint 12 and 289 lb uplift at joint 10.
  - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 7, 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 **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbccomponents.com)

**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 22 Duncan's Creek	I64068463
J0224-1264	A5	PIGGYBACK BASE	4	1		

Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:02 2024 Page 1

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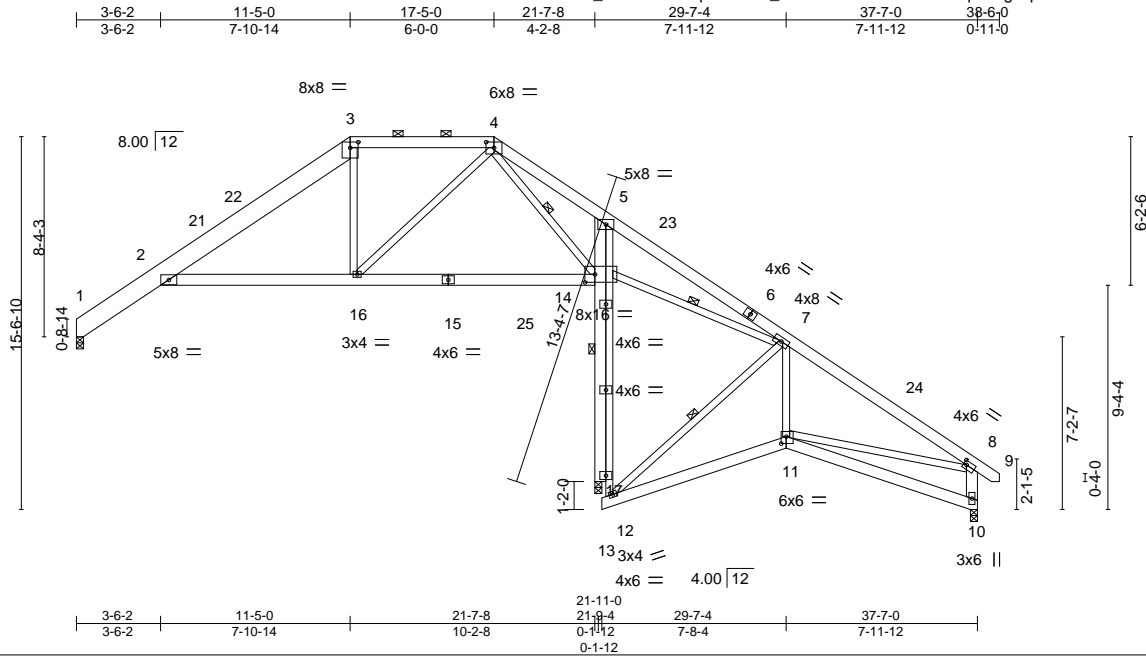


Plate Offsets (X,Y)--	[3:0-4-0,0-2-13], [4:0-4-0,0-2-13], [8:0-1-8,0-2-0], [11:0-2-8,0-3-8], [14:0-5-0,0-4-0]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.66	Vert(LL)	-0.16	16-20	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.48	Vert(CT)	-0.32	16-20	>832		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.37	Horz(CT)	0.17	17	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.17	16-20	>999	Weight: 328 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1 *Except* 1-3: 2x10 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2 *Except* 8-10: 2x6 SP No.1	WEBS 1 Row at midpt 5-12, 4-14, 7-14, 7-12
OTHERS 2x6 SP No.1	

<b>REACTIONS.</b>	(size) 1=0-3-8, 10=0-3-8, 17=0-3-8
	Max Horz 1=-431(LC 8)
	Max Uplift 1=-139(LC 12), 10=-287(LC 13), 17=-88(LC 12)
	Max Grav 1=772(LC 23), 10=579(LC 20), 17=1831(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-714/499, 2-3=-821/347, 3-4=-763/434, 4-5=-106/1082, 5-7=-108/1059, 7-8=-687/457, 8-10=-659/474
BOT CHORD	2-16=-164/846, 14-16=-403/402, 11-12=-240/442, 10-11=-123/296
WEBS	12-17=-91/393, 14-17=-1526/409, 5-14=-573/403, 4-16=-144/866, 4-14=-1580/268, 7-14=-951/500, 7-11=-9/445, 7-12=-667/298

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 11-5-0, Exterior(2) 11-5-0 to 23-7-11, Interior(1) 23-7-11 to 38-4-1 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Bearing at joint(s) 1, 10, 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 139 lb uplift at joint 1, 287 lb uplift at joint 10 and 88 lb uplift at joint 17.
  - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 7, 2024

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>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 <b>ANSI/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbccomponents.com)</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job J0224-1264	Truss A5-GR	Truss Type PIGGYBACK BASE	Qty 1	Ply <b>2</b>	Lot 22 Duncan's Creek I64068464 Job Reference (optional)
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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:04 2024 Page 2  
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**NOTES-**

- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-19=-84, 3-19=-60, 3-4=-60, 4-8=-60, 8-9=-60, 14-18=-20, 11-13=-20, 10-11=-20

Concentrated Loads (lb)

Vert: 25=-500(F)

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

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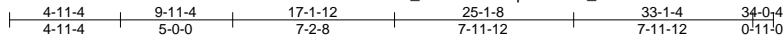
818 Soundside Road  
Edenton, NC 27932

Job J0224-1264	Truss A6	Truss Type ROOF SPECIAL	Qty 1	Ply 1	Lot 22 Duncan's Creek Job Reference (optional)	164068465
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:06 2024 Page 1

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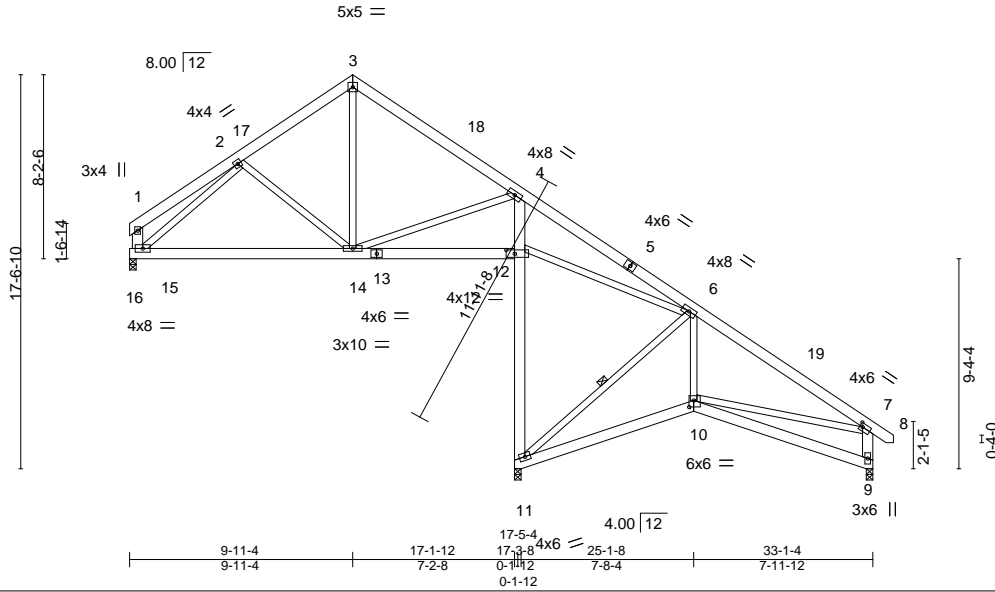


Plate Offsets (X,Y)-- [7:0-1-8,0-2-0], [10:0-2-8,0-3-8], [12:0-4-8,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.21	Vert(LL) -0.04 14-15 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.49	Vert(CT) -0.07 14-15 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) -0.03 11 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.02 10 >999 240	Weight: 293 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2 *Except* 1-15,7-9: 2x6 SP No.1	WEBS 1 Row at midpt 6-11

**REACTIONS.** (size) 11=0-3-8, 15=0-3-8, 9=0-3-8  
 Max Horz 15=-511(LC 13)  
 Max Uplift 11=-139(LC 13), 15=-119(LC 12), 9=-271(LC 13)  
 Max Grav 11=1366(LC 1), 15=656(LC 1), 9=710(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-358/128, 2-3=-669/342, 3-4=-666/316, 4-6=-34/254, 6-7=-1055/552,  
 1-15=-330/160, 7-9=-837/522  
 BOT CHORD 14-15=-153/688, 12-14=-371/358, 11-12=-977/218, 4-12=-1005/365, 10-11=-262/769,  
 9-10=-131/316  
 WEBS 2-14=-292/227, 3-14=-80/286, 4-14=0/487, 6-12=-437/365, 6-11=-942/322,  
 6-10=-23/541, 2-15=-451/267, 7-10=-128/439

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-3, Interior(1) 4-9-3 to 9-11-4, Exterior(2) 9-11-4 to 14-4-1, Interior(1) 14-4-1 to 33-10-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 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.
  - Bearing at joint(s) 11, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 139 lb uplift at joint 11, 119 lb uplift at joint 15 and 271 lb uplift at joint 9.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



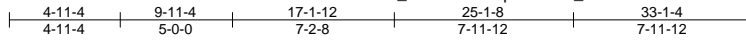
March 7, 2024

Job J0224-1264	Truss A7	Truss Type ROOF SPECIAL	Qty 4	Ply 1	Lot 22 Duncan's Creek Job Reference (optional)	164068466
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:07 2024 Page 1

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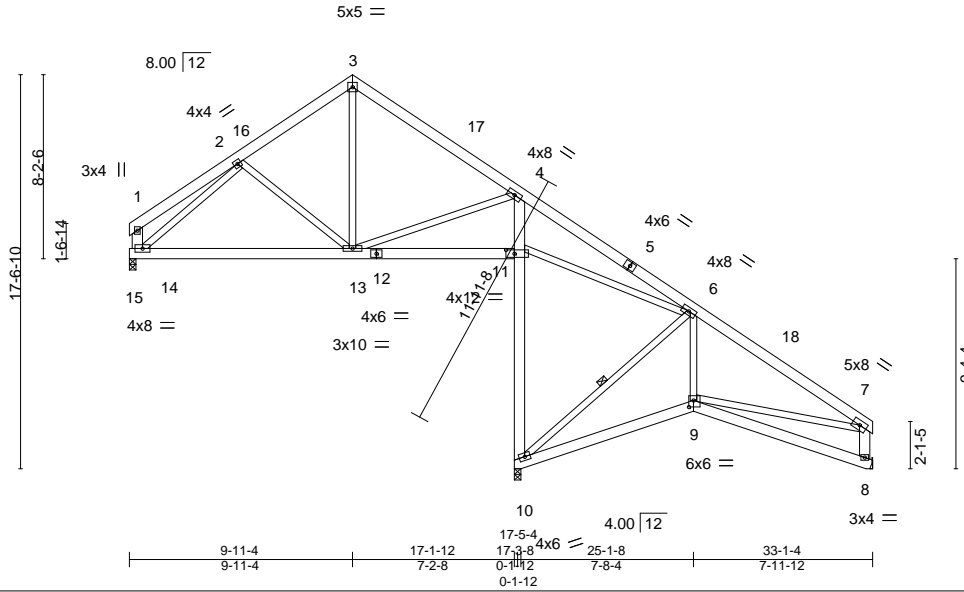


Plate Offsets (X,Y)--	[9:0-2-8,0-3-8], [11:0-4-8,0-2-0]
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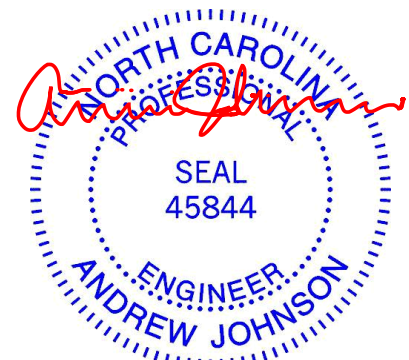
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	Vert(LL)	-0.04	13-14	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.21	Vert(CT)	-0.07	13-14	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.47	Horz(CT)	-0.03	10	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL)	0.02	9	>999		
	Code IRC2015/TPI2014						Weight: 290 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2 *Except* 1-14,7-8: 2x6 SP No.1	WEBS 1 Row at midpt 6-10

**REACTIONS.** (size) 10=0-3-8, 14=0-3-8, 8=Mechanical  
 Max Horz 14=-485(LC 13)  
 Max Uplift 10=-155(LC 13), 14=-118(LC 12), 8=-232(LC 13)  
 Max Grav 10=1362(LC 1), 14=656(LC 1), 8=643(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-358/128, 2-3=-666/339, 3-4=-663/309, 4-6=-24/251, 6-7=-1015/503,  
 1-14=-330/160, 7-8=-739/410  
 BOT CHORD 13-14=-164/678, 11-13=-351/328, 10-11=-974/233, 4-11=-993/374, 9-10=-286/755  
 WEBS 2-13=-291/228, 3-13=-76/283, 4-13=0/481, 6-11=-418/337, 6-10=-925/353, 6-9=-29/530,  
 2-14=-449/261, 7-9=-161/491

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-3, Interior(1) 4-9-3 to 9-11-4, Exterior(2) 9-11-4 to 14-4-1, Interior(1) 14-4-1 to 32-9-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 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.
  - Refer to girder(s) for truss to truss connections.
  - Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 155 lb uplift at joint 10, 118 lb uplift at joint 14 and 232 lb uplift at joint 8.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



March 7, 2024

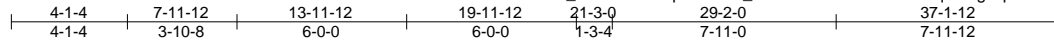


Job J0224-1264	Truss A8	Truss Type Attic	Qty 2	Ply 1	Lot 22 Duncan's Creek Job Reference (optional)	164068467
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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:09 2024 Page 1

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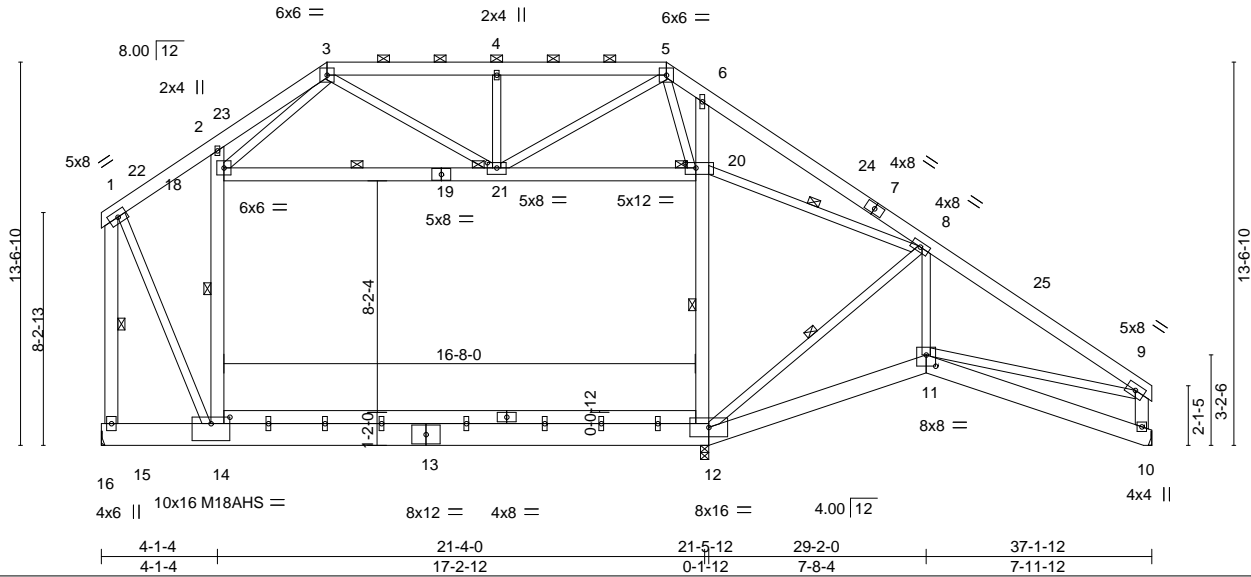


Plate Offsets (X,Y)--	[11:0-4-0,0-4-12], [14:0-8-0,0-2-12], [20:0-4-8,0-2-4], [21:0-4-0,0-2-4]
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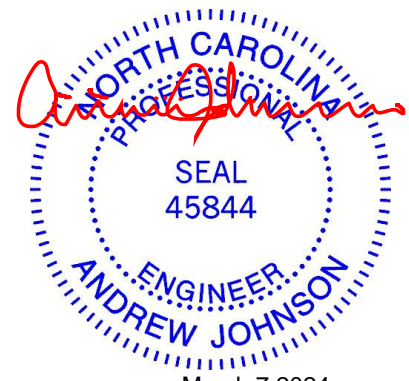
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	-0.39	12-14	>653	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.56	Vert(CT)	-0.59	12-14	>429	M18AHS	186/179
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.54	Horz(CT)	0.04	10	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-AS	Wind(LL)	0.02	12-14	>999		
								Weight: 477 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD 2x6 SP No.1 *Except* 12-13,13-16: 2x10 SP 2400F 2.0E, 11-12,10-11: 2x8 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2 *Except* 2-14,6-12,18-19,1-15,9-10,19-20: 2x6 SP No.1	WEBS 1 Row at midpt 14-18, 12-20, 8-12, 18-21, 1-15, 8-20
	JOINTS 1 Brace at Jt(s): 20, 21

**REACTIONS.** (size) 12=0-3-8, 15=Mechanical, 10=Mechanical  
 Max Horz 15=350(LC 8)  
 Max Uplift 12=126(LC 13)  
 Max Grav 12=1911(LC 21), 15=1818(LC 26), 10=914(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1067/15, 2-3=-1076/200, 3-4=-849/406, 4-5=-849/406, 5-6=-92/257, 6-8=-55/352, 8-9=-1548/74, 1-15=-2382/0, 9-10=-848/201  
 BOT CHORD 14-15=-286/352, 12-14=-50/986, 11-12=0/1252, 10-11=-108/268  
 WEBS 14-18=-452/386, 2-18=-336/310, 12-20=-1021/473, 6-20=-648/482, 8-12=-772/356, 8-11=0/563, 18-21=-384/102, 20-21=-894/62, 1-14=0/1908, 9-11=0/1018, 5-20=-707/163, 4-21=-390/311, 5-21=-284/925, 8-20=-1028/62, 3-21=-104/260, 3-18=-125/538

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 7-11-12, Exterior(2) 7-11-12 to 13-11-12, Interior(1) 13-11-12 to 19-11-12, Exterior(2) 19-11-12 to 26-2-7, Interior(1) 26-2-7 to 36-9-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) All plates are MT20 plates unless otherwise indicated.
  - 5) All plates are 2x6 MT20 unless otherwise indicated.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* 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.
  - 8) Ceiling dead load (10.0 psf) on member(s). 18-21, 20-21; Wall dead load (5.0psf) on member(s).14-18, 12-20
  - 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
  - 10) Refer to girder(s) for truss to truss connections.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 126 lb uplift at joint 12.
  - 12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 14) Attic room checked for L/360 deflection.



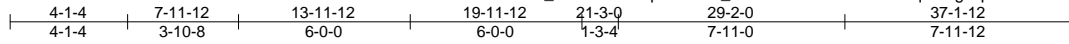
March 7, 2024

Job J0224-1264	Truss A8-GR	Truss Type ATTIC	Qty 1	Ply 3	Lot 22 Duncan's Creek Job Reference (optional)	164068468
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:12 2024 Page 1

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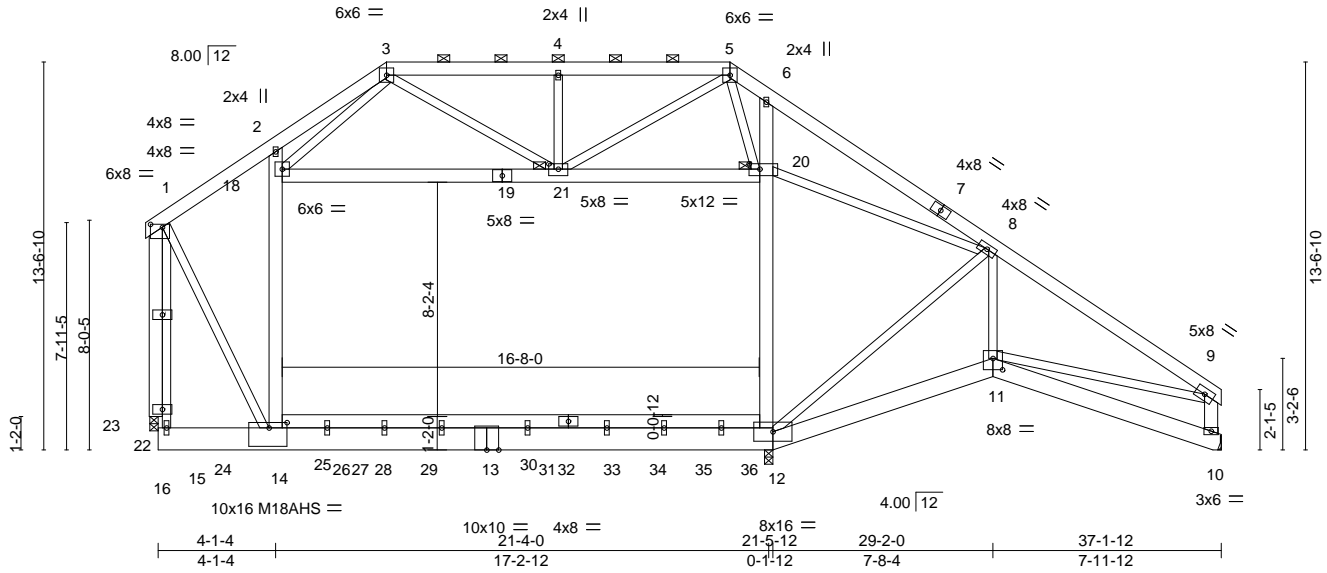


Plate Offsets (X,Y)-- [1:0-5-0,0-1-4], [11:0-4-0,0-4-12], [14:0-7-8,0-2-4], [20:0-4-8,0-2-4], [21:0-4-0,0-2-4]

LOADING (psf)	SPACING-	1-4-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	-0.56 12-14	>454	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.81	Vert(CT)	-0.76 12-14	>336	240	M18AHS	186/179
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.61	Horz(CT)	0.04 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.00 14	>999	240		
								Weight: 1460 lb	FT = 20%

**LUMBER-**

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1 *Except* 12-13,13-16: 2x10 SP 2400F 2.0E, 11-12,10-11: 2x8 SP 2400F 2.0E
WEBS	2x4 SP No.2 *Except* 2-14,6-12,18-19,9-10,19-20: 2x6 SP No.1
OTHERS	2x6 SP No.1

**BRACING-**

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 20, 21

**REACTIONS.** (size) 12=0-3-8, 10=Mechanical, 23=0-3-8  
 Max Horz 23=-233(LC 4)  
 Max Uplift 12=-84(LC 9)  
 Max Grav 12=2480(LC 14), 10=1792(LC 14), 23=5871(LC 14)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-3687/0, 2-3=-3536/37, 3-4=-860/143, 4-5=-860/143, 8-9=-3484/0, 9-10=-1701/9  
 BOT CHORD 12-14=-21/3001, 11-12=0/2865  
 WEBS 14-18=-77/2086, 12-20=-535/450, 6-20=-357/232, 8-12=-440/187, 8-11=0/764,  
 18-21=-2023/0, 20-21=-2830/5, 15-22=-2135/0, 1-22=-2135/0, 1-14=0/6516,  
 9-11=0/2650, 5-20=-471/103, 4-21=-262/147, 5-21=-69/827, 8-20=-3000/0,  
 3-21=-273/107, 3-18=0/2790, 1-23=-5873/0

**NOTES-**

- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, 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.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 2x6 MT20 unless otherwise indicated.
- The Fabrication Tolerance at joint 14 = 19%

Continued on page 2



March 7, 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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 22 Duncan's Creek	I64068468
J0224-1264	A8-GR	ATTIC	1	<b>3</b>	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

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**NOTES-**

9) n/a

- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 12) Ceiling dead load (10.0 psf) on member(s). 18-21, 20-21; Wall dead load (5.0psf) on member(s).14-18, 12-20
- 13) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
- 14) Refer to girder(s) for truss to truss connections.
- 15) Bearing at joint(s) 23 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 16) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 84 lb uplift at joint 12.
- 17) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 18) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 513 lb down at 0-6-8, 511 lb down at 2-1-11, 511 lb down at 3-8-14, 511 lb down at 5-4-1, 511 lb down at 6-11-4, 511 lb down at 7-8-14, 511 lb down at 9-4-1, 511 lb down at 10-11-4, 595 lb down at 12-6-7, 595 lb down at 14-1-10, 595 lb down at 15-8-13, 595 lb down at 17-4-0, and 595 lb down at 18-11-3, and 595 lb down at 20-6-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 19) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-40, 3-5=-40, 5-9=-40, 14-16=-13, 12-14=-27, 11-12=-13, 10-11=-13, 18-20=-13

Drag: 14-18=-7, 12-20=-7

Concentrated Loads (lb)

Vert: 15=-107(B) 24=-105(B) 25=-105(B) 26=-105(B) 27=-105(B) 28=-105(B) 29=-105(B) 30=-105(B) 31=-154(B) 32=-154(B) 33=-154(B) 34=-154(B) 35=-154(B)  
36=-154(B)

**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/TPI Quality Criteria and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))



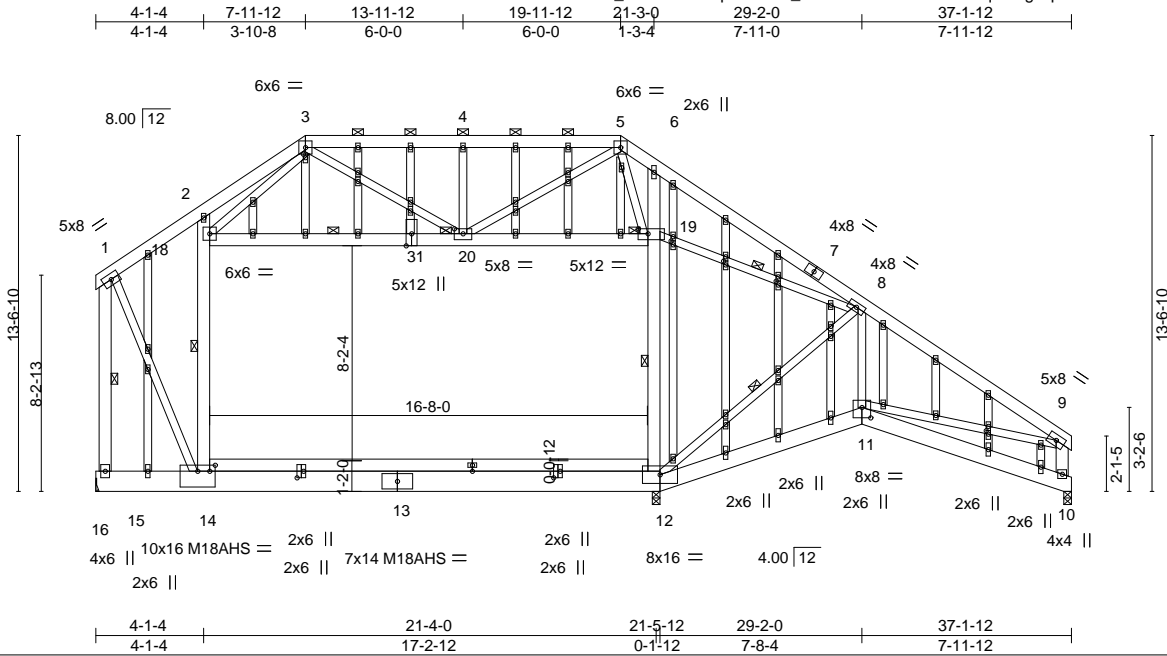
818 Soundside Road  
Edenton, NC 27932

Job J0224-1264	Truss A8SG	Truss Type GABLE	Qty 1	Ply 1	Lot 22 Duncan's Creek Job Reference (optional)	164068469
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8.430 s Jan 6 2022 MITek Industries, Inc. Wed Mar 6 09:40:18 2024 Page 1

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Scale = 1:87.7

Plate Offsets (X,Y)-- [3:0-1-10,0-1-0], [11:0-4-0,0-4-12], [12:0-3-0,3-1-2], [13:0-3-0,3-3-14], [14:0-8-0,0-2-12], [19:0-4-8,0-2-4], [20:0-4-0,0-2-4], [31:0-5-8,0-2-8], [43:0-1-12,0-1-0], [45:0-1-12,0-1-0], [49:0-1-12,0-1-0], [61:0-1-9,0-1-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL)	-0.39 12-14	>653	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.56	Vert(CT)	-0.59 12-14	>429	240	M18AHS	186/179
BCLL 0.0 *	Rep Stress Incr YES	WB 0.54	Horz(CT)	0.04 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL)	0.02 12-14	>999	240		
							Weight: 575 lb	FT = 20%

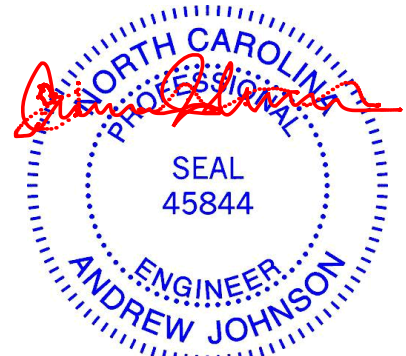
**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1 \*Except\*  
12-13,13-16: 2x10 SP 2400F 2.0E, 11-12,10-11: 2x8 SP 2400F 2.0E  
WEBS 2x4 SP No.2 \*Except\*  
2-14,6-12,18-31,1-15,9-10,19-31: 2x6 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 14-18, 12-19, 8-12, 18-20, 1-15, 8-19  
JOINTS 1 Brace at Jt(s): 19, 20

**REACTIONS.** (size) 12=0-3-8, 15=Mechanical, 10=0-3-8  
Max Horz 15=-520(LC 13)  
Max Uplift 12=-433(LC 13), 15=-1(LC 12), 10=-65(LC 12)  
Max Grav 12=1867(LC 21), 15=1818(LC 26), 10=902(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1067/30, 2-3=-1063/221, 3-4=-849/454, 4-5=-849/454, 6-8=-92/352, 8-9=-1550/100, 1-15=-2382/0, 9-10=-835/202  
BOT CHORD 14-15=-340/518, 12-14=-149/1083, 11-12=-29/1262, 10-11=-115/275  
WEBS 14-18=-452/408, 2-18=-336/341, 12-19=-1021/519, 6-19=-649/528, 8-12=-772/461, 8-11=0/563, 18-20=-384/102, 19-20=-919/116, 1-14=0/1908, 9-11=-57/1033, 5-19=-706/333, 4-20=-390/344, 5-20=-327/925, 8-19=-1031/92, 3-20=-191/260, 3-18=-125/540

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; 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) 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) Provide adequate drainage to prevent water ponding.
  - 5) All plates are MT20 plates unless otherwise indicated.
  - 6) All plates are 2x4 MT20 unless otherwise indicated.
  - 7) Gable studs spaced at 2-0-0 oc.
  - 8) This truss has been designed for a 10.0 psf bottom 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 10) Ceiling dead load (10.0 psf) on member(s). 18-20, 19-20; Wall dead load (5.0psf) on member(s).14-18, 12-19
  - 11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
  - 12) Refer to girder(s) for truss to truss connections.
  - 13) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify compatibility of bearing surface.



March 7, 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 **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Lot 22 Duncan's Creek	I64068469
J0224-1264	A8SG	GABLE	1	1	Job Reference (optional)	

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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:18 2024 Page 2  
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**NOTES-**

- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 433 lb uplift at joint 12, 1 lb uplift at joint 15 and 65 lb uplift at joint 10.
- 15) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 17) Attic room checked for L/360 deflection.

**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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))



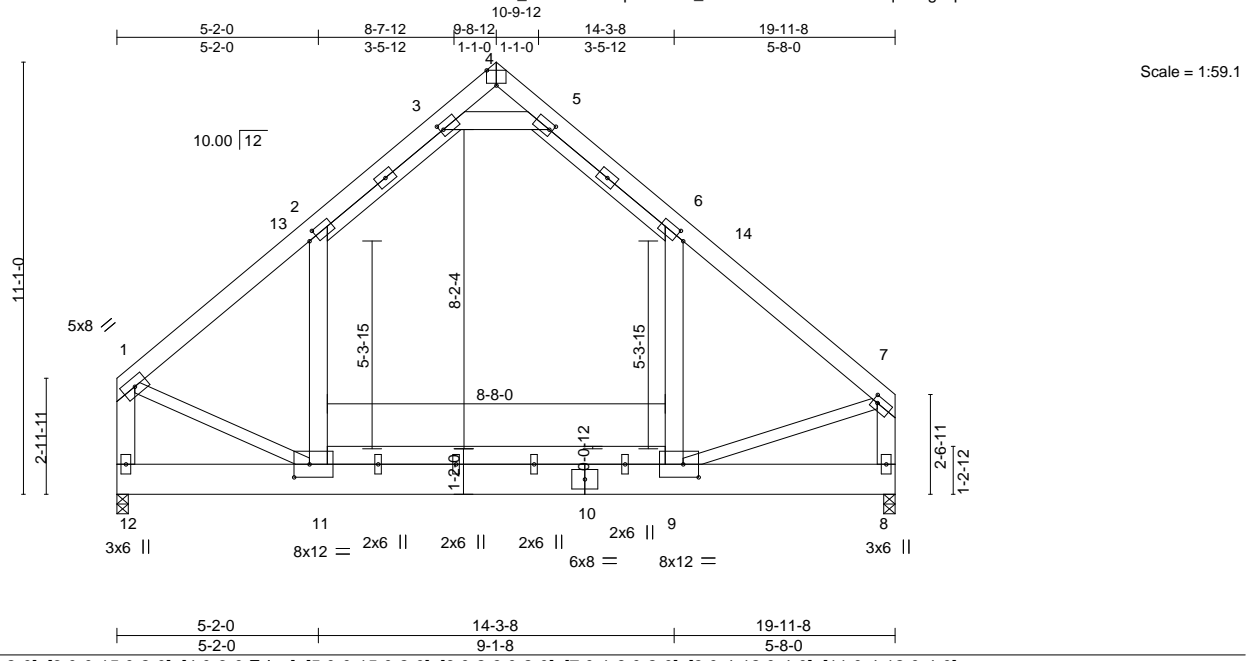
818 Soundside Road  
 Edenton, NC 27932

Job J0224-1264	Truss B1	Truss Type ATTIC	Qty 3	Ply 1	Lot 22 Duncan's Creek Job Reference (optional)	I64068470
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Comtech, Inc. Fayetteville, NC - 28314,

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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.73	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.46	Vert(LL) -0.10 9-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.18	Vert(CT) -0.18 9-11 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.00 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.07 9-11 >999 240	Weight: 233 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x10 SP No.1 *Except* 9-11: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x6 SP No.1 *Except* 1-11,7-9,2-3,5-6: 2x4 SP No.2	

REACTIONS.
(size) 12=0-3-8, 8=0-3-8
Max Horz 12=-265(LC 8)
Max Grav 12=1252(LC 21), 8=1219(LC 20)

FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1269/100, 2-3=-852/261, 3-4=-198/722, 4-5=-196/734, 5-6=-846/263, 6-7=-1276/88, 1-12=-1329/115, 7-8=-1224/114
BOT CHORD 11-12=-284/365, 9-11=0/872
WEBS 2-11=-37/407, 6-9=-36/403, 3-5=-1851/578, 1-11=0/872, 7-9=0/780

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 9-8-12, Exterior(2) 9-8-12 to 14-3-8, Interior(1) 14-3-8 to 19-8-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are 4x6 MT20 unless otherwise indicated.
  - 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 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.
  - Ceiling dead load (10.0 psf) on member(s). 2-3, 5-6, 3-5; Wall dead load (5.0psf) on member(s).2-11, 6-9
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-11
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Attic room checked for L/360 deflection.



March 7, 2024



Job	Truss	Truss Type	Qty	Ply	Lot 22 Duncan's Creek	I64068472
J0224-1264	C1	COMMON	5	1		

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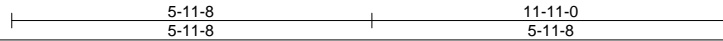
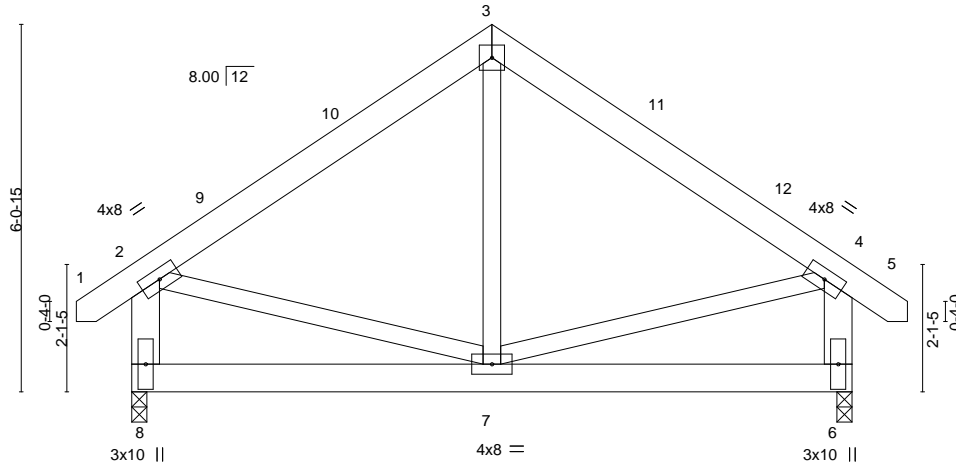
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:22 2024 Page 1

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5x5 =

Scale = 1:38.1



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.12	Vert(LL)	0.02 7-8	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.01 7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.17	Horz(CT)	-0.00 6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS					Weight: 98 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 2-8,4-6: 2x6 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 8=0-3-0, 6=0-3-0  
 Max Horz 8=-143(LC 10)  
 Max Uplift 8=-131(LC 9), 6=-131(LC 8)  
 Max Grav 8=517(LC 1), 6=517(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-412/568, 3-4=-412/568, 2-8=-481/569, 4-6=-481/569  
 WEBS 3-7=-343/164

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 5-11-8, Exterior(2) 5-11-8 to 10-4-5, Interior(1) 10-4-5 to 12-8-1 zone; porch left and right exposed; 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=131, 6=131.
  - 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



March 7, 2024

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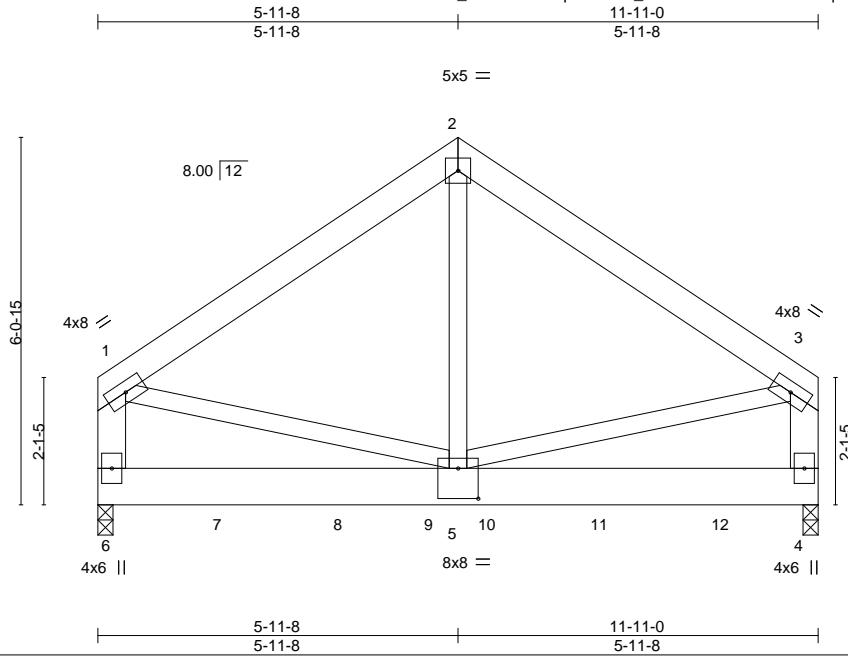


Job J0224-1264	Truss C1-GR	Truss Type Common Girder	Qty 1	Ply 2	Lot 22 Duncan's Creek Job Reference (optional)	I64068473
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:25 2024 Page 1

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Scale = 1:38.1

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.25	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.22	Vert(LL) -0.03 4-5 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.34	Vert(CT) -0.05 4-5 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.00 4 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.02 5-6 >999 240	Weight: 202 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x8 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 1-6,3-4: 2x6 SP No.1	

REACTIONS.	(size)
Max Horz	6=122(LC 5)
Max Uplift	6=365(LC 8)
Max Grav	6=2513(LC 2), 4=3154(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-2606/144, 2-3=-2607/143, 1-6=-2100/99, 3-4=-2045/155
BOT CHORD	5-6=-241/362, 4-5=0/424
WEBS	2-5=-2/2555, 1-5=0/1946, 3-5=-175/1746

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, 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.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - 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 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=365.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 569 lb down and 252 lb up at 2-0-13, 569 lb down and 252 lb up at 4-0-13, 569 lb down and 252 lb up at 5-6-13, 1778 lb down at 6-5-8, and 872 lb down at 8-3-13, and 872 lb down at 10-3-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S)	Standard
1) Dead + Roof Live (balanced):	Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)	
Vert:	1-2=-60, 2-3=-60, 4-6=-20



March 7, 2024

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.**

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**ENGINEERING BY**  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job J0224-1264	Truss C1-GR	Truss Type Common Girder	Qty 1	Ply <b>2</b>	Lot 22 Duncan's Creek I64068473 Job Reference (optional)
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:25 2024 Page 2  
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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 7=-560(F) 8=-560(F) 9=-560(F) 10=-835(F) 11=-787(F) 12=-787(F)

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Job J0224-1264	Truss C1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 22 Duncan's Creek Job Reference (optional)	I64068474
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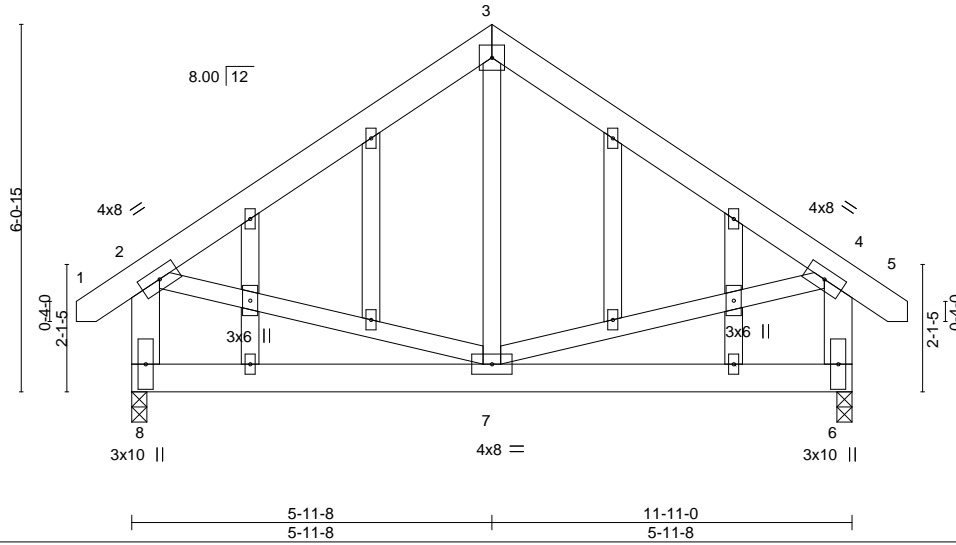
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:24 2024 Page 1

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5x5 =

Scale = 1:38.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	0.02	7-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.01	7-8	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.17	Horz(CT)	-0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS						
								Weight: 114 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 2-8,4-6: 2x6 SP No.1  
 OTHERS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS.**

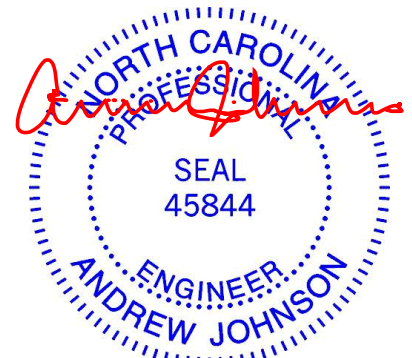
(size) 8=0-3-0, 6=0-3-0  
 Max Horz 8=-179(LC 10)  
 Max Uplift 8=-188(LC 12), 6=-188(LC 13)  
 Max Grav 8=517(LC 1), 6=517(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-412/579, 3-4=-412/579, 2-8=-481/579, 4-6=-481/579  
 WEBS 3-7=-340/163

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- 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 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=188, 6=188.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



March 7, 2024

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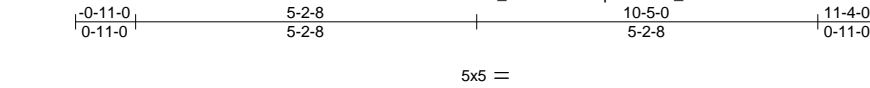
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Job J0224-1264	Truss D1	Truss Type COMMON	Qty 5	Ply 1	Lot 22 Duncan's Creek I64068475
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Scale = 1:35.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.00 6-7	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.01 6-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00 6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.00 7	>999	240		
								Weight: 87 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 2-8,4-6: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS.**

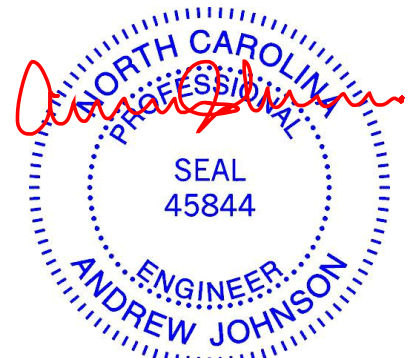
(size) 8=0-3-8, 6=0-3-8  
 Max Horz 8=-127(LC 10)  
 Max Uplift 8=-80(LC 12), 6=-80(LC 13)  
 Max Grav 8=457(LC 1), 6=457(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-373/202, 3-4=-373/202, 2-8=-459/292, 4-6=-459/292

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 5-2-8, Exterior(2) 5-2-8 to 9-7-5, Interior(1) 9-7-5 to 11-2-1 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



March 7, 2024

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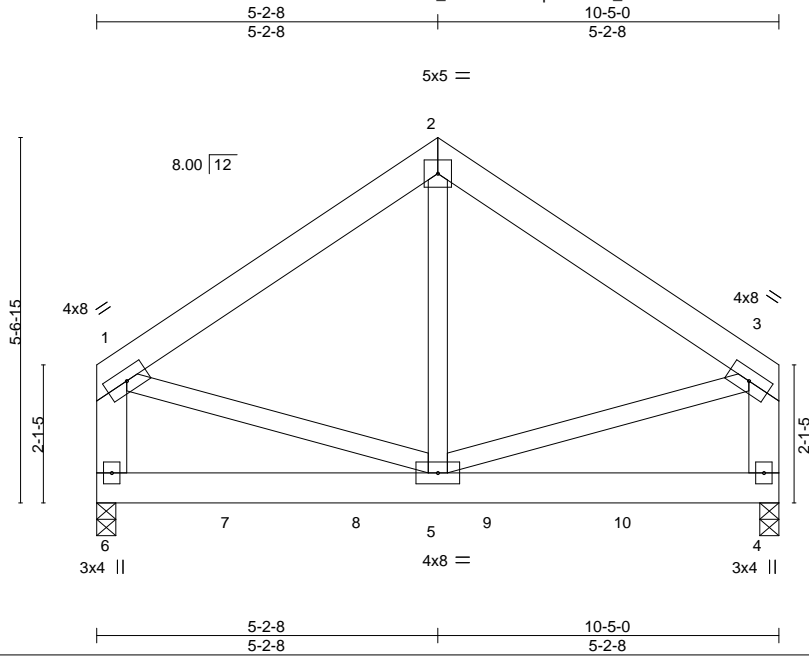


Job J0224-1264	Truss D1-GR	Truss Type Common Girder	Qty 1	Ply 2	Lot 22 Duncan's Creek Job Reference (optional)	I64068476
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Scale = 1:35.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	0.02 5-6	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	-0.02 5-6	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.12	Horz(CT)	0.00 4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS					Weight: 165 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 1-6,3-4: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 6=0-3-8, 4=0-3-8  
 Max Horz 6=-106(LC 4)  
 Max Uplift 6=-590(LC 8), 4=-767(LC 9)  
 Max Grav 6=1406(LC 1), 4=1803(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

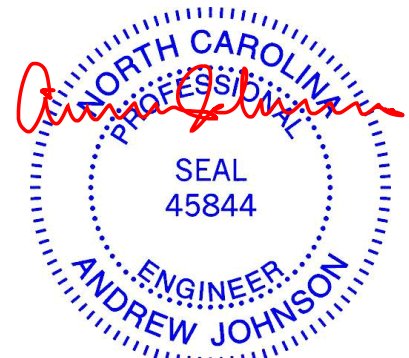
TOP CHORD 1-2=-1180/531, 2-3=-1180/531, 1-6=-1019/433, 3-4=-1026/438  
 BOT CHORD 5-6=-185/267  
 WEBS 2-5=-460/959, 1-5=-345/821, 3-5=-363/853

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, 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.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 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 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=590, 4=767.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 506 lb down and 270 lb up at 2-0-12, 506 lb down and 270 lb up at 4-0-12, 506 lb down and 270 lb up at 6-0-12, and 463 lb down and 238 lb up at 8-0-12, and 472 lb down and 230 lb up at 10-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-60, 2-3=-60, 4-6=-20



March 7, 2024

Continued on page 2

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Job J0224-1264	Truss D1-GR	Truss Type Common Girder	Qty 1	Ply <b>2</b>	Lot 22 Duncan's Creek I64068476 Job Reference (optional)
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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:29 2024 Page 2  
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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 4=-472(F) 7=-492(F) 8=-492(F) 9=-492(F) 10=-463(F)

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

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818 Soundside Road  
Edenton, NC 27932

Job J0224-1264	Truss D1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 22 Duncan's Creek Job Reference (optional)	I64068477
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Comtech, Inc. Fayetteville, NC - 28314,

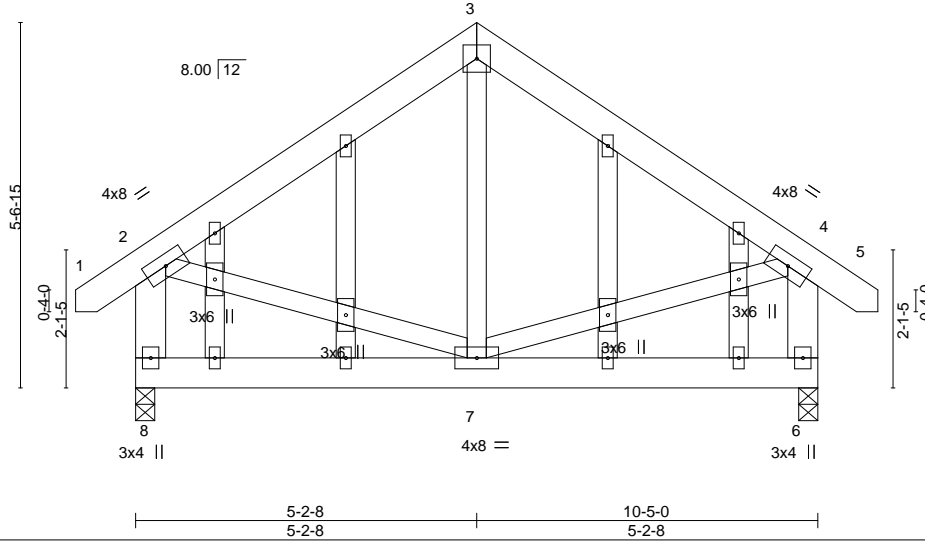
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:27 2024 Page 1

ID:w\_NkYaQd4RDpmohcDk\_iObzuUsG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



5x5 =

Scale = 1:35.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.00 6-7	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.01 6-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00 6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.00 7	>999	240		
								Weight: 102 lb	FT = 20%

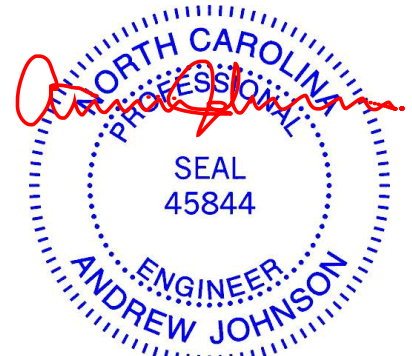
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 2-8,4-6: 2x6 SP No.1  
 OTHERS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 8=0-3-8, 6=0-3-8  
 Max Horz 8=-159(LC 10)  
 Max Uplift 8=-166(LC 12), 6=-166(LC 13)  
 Max Grav 8=457(LC 1), 6=457(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-373/208, 3-4=-373/208, 2-8=-459/298, 4-6=-459/297

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; 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
  - 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - 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 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=166, 6=166.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



March 7, 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 **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road  
 Edenton, NC 27932

Job J0224-1264	Truss G1	Truss Type COMMON	Qty 2	Ply 1	Lot 22 Duncan's Creek Job Reference (optional)	I64068478
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Comtech, Inc. Fayetteville, NC - 28314,

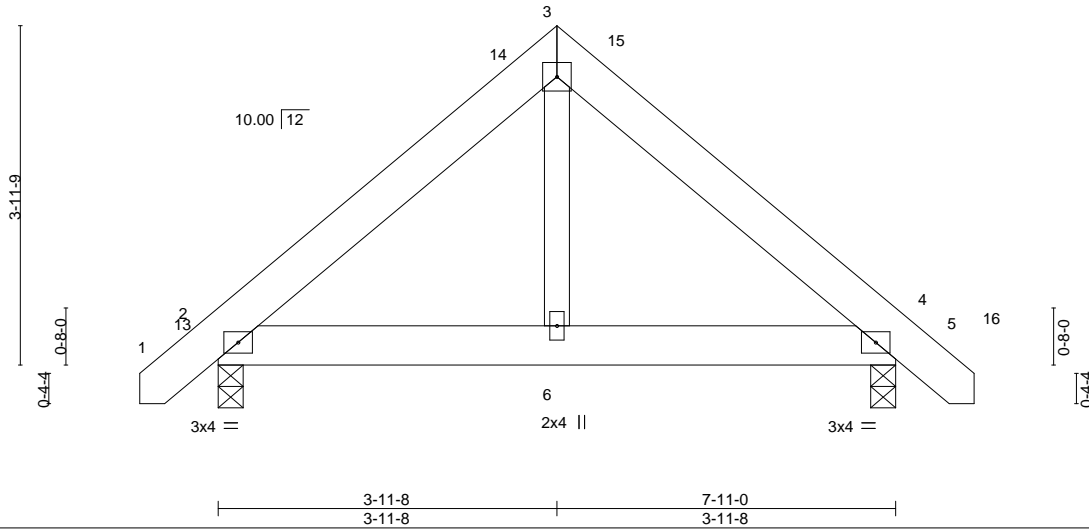
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:30 2024 Page 1

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4x4 =

Scale = 1:26.9



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	-0.00 6-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	-0.00 6-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00 4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.00 6-9	>999	240	Weight: 54 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

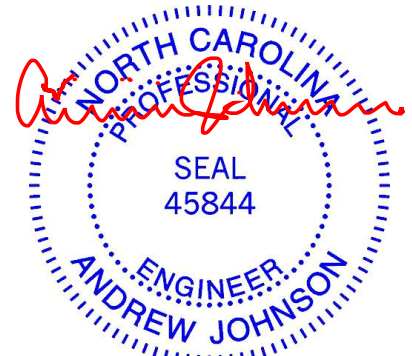
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=-126(LC 10)  
 Max Uplift 2=-67(LC 12), 4=-67(LC 13)  
 Max Grav 2=363(LC 1), 4=363(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-357/176, 3-4=-357/176

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-4 to 3-7-9, Interior(1) 3-7-9 to 3-11-8, Exterior(2) 3-11-8 to 8-4-5, Interior(1) 8-4-5 to 8-8-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



March 7, 2024

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

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818 Soundside Road  
 Edenton, NC 27932

Job J0224-1264	Truss G1-GR	Truss Type COMMON GIRDER	Qty 1	Ply 2	Lot 22 Duncan's Creek Job Reference (optional)	I64068479
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Comtech, Inc. Fayetteville, NC - 28314,

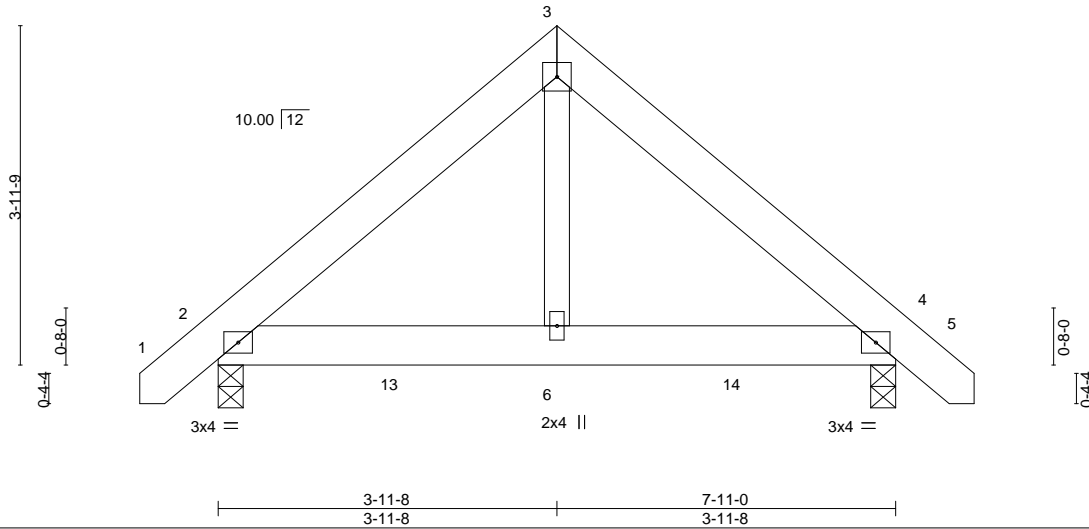
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:32 2024 Page 1

ID:w\_NkYaQd4RDpmohcDk\_iObzuUsG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:26.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15		TC 0.07	Vert(LL) -0.01	6-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.26	Vert(CT) -0.02	6-9	>999	240		
BCLL 0.0 *	Rep Stress Incr NO		WB 0.19	Horz(CT) 0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP	Wind(LL) 0.01	6-9	>999	240		
								Weight: 107 lb	FT = 20%

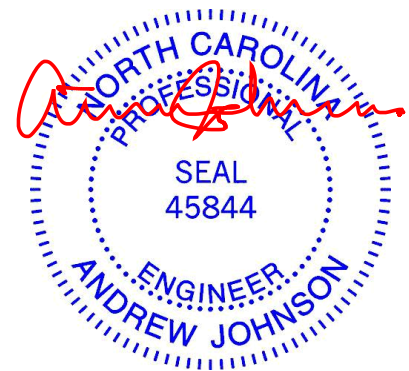
LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=126(LC 26)  
 Max Uplift 2=-156(LC 8), 4=-159(LC 9)  
 Max Grav 2=1413(LC 1), 4=1450(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1469/178, 3-4=-1468/177  
 BOT CHORD 2-6=-69/1101, 4-6=-69/1101  
 WEBS 3-6=-121/1567

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, 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.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - 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 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=156, 4=159.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 712 lb down and 68 lb up at 2-0-12, and 712 lb down and 68 lb up at 4-0-12, and 712 lb down and 69 lb up at 6-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-5=-60, 7-10=-20  
 Concentrated Loads (lb)  
 Vert: 6=-712(B) 13=-712(B) 14=-712(B)





Job J0224-1264	Truss G1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 22 Duncan's Creek Job Reference (optional)	I64068480
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Comtech, Inc. Fayetteville, NC - 28314,

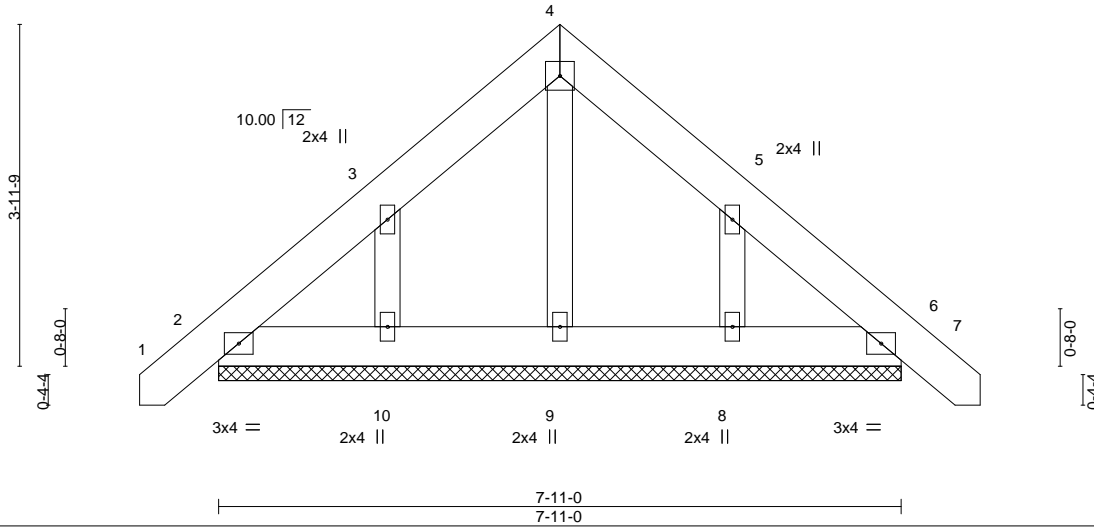
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:31 2024 Page 1

ID:w\_NkYaQd4RDpmohcDk\_iObzuUsG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



4x4 =

Scale = 1:26.7



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	0.00	6	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	0.00	6	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 58 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2

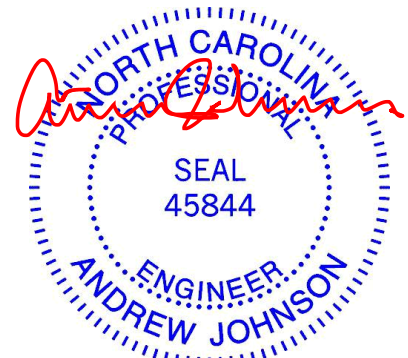
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 7-11-0.  
 (lb) - Max Horz 2=157(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=191(LC 12), 8=189(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-10=273/227, 5-8=274/227

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; 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
- 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.
- Gable studs spaced at 2-0-0 oc.
- 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 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 10=191, 8=189.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



March 7, 2024

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

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818 Soundside Road  
 Edenton, NC 27932

Job J0224-1264	Truss H1	Truss Type COMMON	Qty 2	Ply 1	Lot 22 Duncan's Creek I64068481
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Comtech, Inc. Fayetteville, NC - 28314,

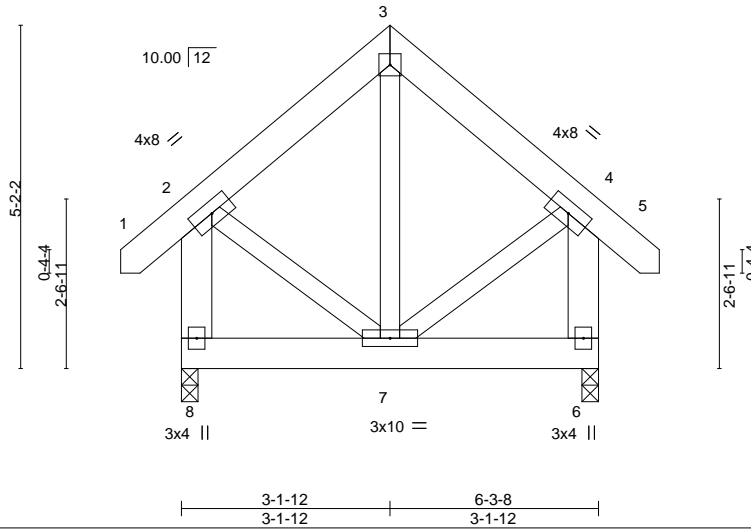
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:33 2024 Page 1

ID:w\_NkYaQd4RDpmohcDk\_iObzuUsG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



4x4 =

Scale = 1:34.8



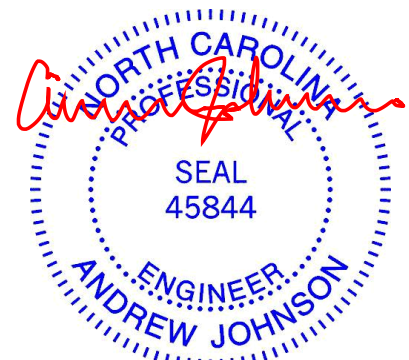
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.00	7	>999		
								Weight: 65 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2 *Except*	
2-8,4-6: 2x6 SP No.1	

**REACTIONS.** (size) 8=0-3-0, 6=0-3-0  
 Max Horz 8=-104(LC 10)  
 Max Uplift 8=-54(LC 13), 6=-54(LC 12)  
 Max Grav 8=293(LC 1), 6=293(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-8=-296/219, 4-6=-296/219

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
  - 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



March 7, 2024

Job J0224-1264	Truss H1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 22 Duncan's Creek I64068482
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Comtech, Inc. Fayetteville, NC - 28314,

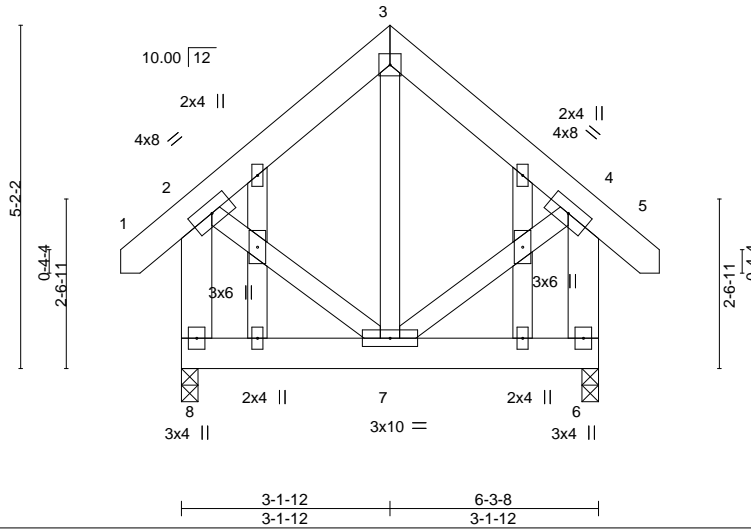
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:34 2024 Page 1

ID:w\_NkYaQd4RDpmohcDk\_iObzuUsG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



4x4 =

Scale = 1:34.8



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	0.00	8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS					Weight: 72 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 2-8,4-6: 2x6 SP No.1  
 OTHERS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS.**

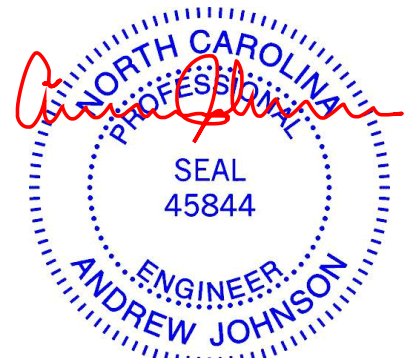
(size) 8=0-3-0, 6=0-3-0  
 Max Horz 8=130(LC 10)  
 Max Uplift 8=111(LC 13), 6=111(LC 12)  
 Max Grav 8=293(LC 1), 6=293(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-160/270, 3-4=-160/270, 2-8=-271/368, 4-6=-271/368

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; 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.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=111, 6=111.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



March 7, 2024

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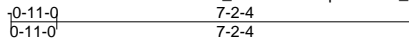
818 Soundside Road  
 Edenton, NC 27932

Job J0224-1264	Truss M1	Truss Type MONOPITCH	Qty 5	Ply 1	Lot 22 Duncan's Creek I64068483
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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:35 2024 Page 1

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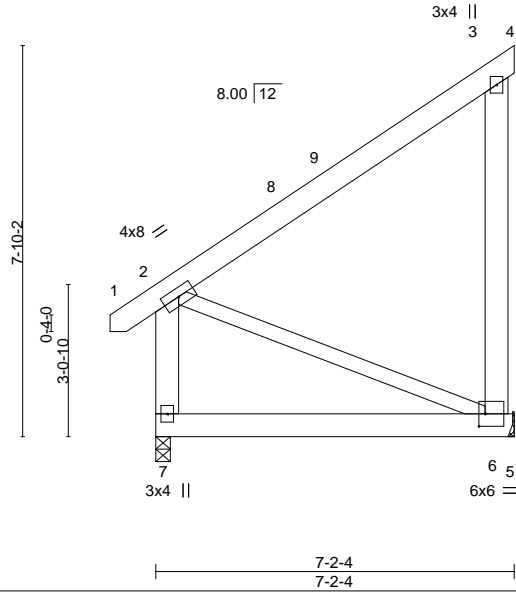


Plate Offsets (X,Y)--	[6:0-1-8,0-3-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.30	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.17	Vert(LL) -0.03 6-7 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.24	Vert(CT) -0.05 6-7 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) -0.00 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.00 7 **** 240	Weight: 71 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x6 SP No.1 *Except* 2-6: 2x4 SP No.2	

**REACTIONS.** (size) 7=0-3-8, 6=Mechanical  
 Max Horz 7=222(LC 12)  
 Max Uplift 6=225(LC 12)  
 Max Grav 7=327(LC 1), 6=355(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-6=-341/292, 2-7=-261/16  
 BOT CHORD 6-7=-358/271  
 WEBS 2-6=-293/387

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 7-2-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* 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.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=225.
  - 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



March 7, 2024



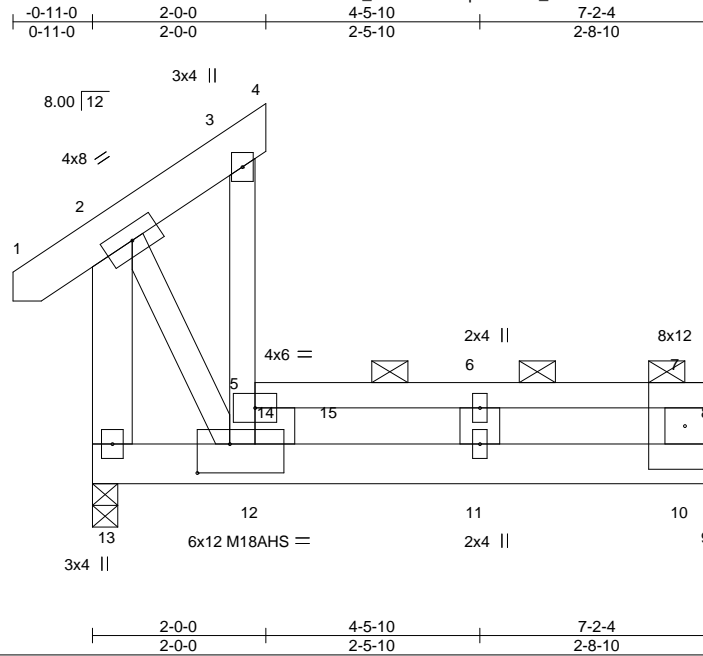


Job J0224-1264	Truss M2	Truss Type HALF HIP	Qty 3	Ply 1	Lot 22 Duncan's Creek Job Reference (optional)	I64068485
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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:37 2024 Page 1

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Scale = 1:26.6

Plate Offsets (X,Y)--	[7:0-6-0,Edge], [12:0-4-8,0-4-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.55	Vert(LL) -0.03 11-12 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.62	Vert(CT) -0.06 11-12 >999 240	M18AHS	186/179
BCLL 0.0 *	Rep Stress Incr NO	WB 0.06	Horz(CT) -0.00 10 n/a n/a		
BCDL 10.0	Code IRC2015/TP12014	Matrix-MS	Wind(LL) 0.08 11-12 >969 240		
				Weight: 51 lb	FT = 20%

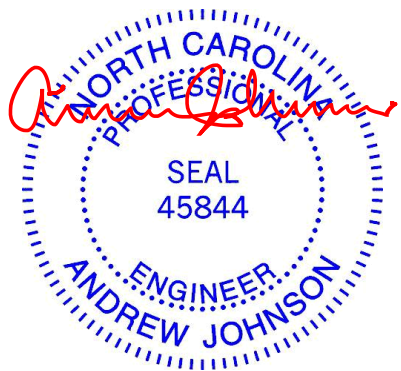
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1 *Except* 5-8: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-10-9 max.): 3-12, 5-8.
BOT CHORD 2x6 SP No.1	Exception: 6-0-0 oc bracing: 3-5
WEBS 2x6 SP No.1 *Except* 3-12,2-12: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 7-6-8 oc bracing.

**REACTIONS.** (size) 10=Mechanical, 13=0-3-8  
 Max Horz 13=169(LC 13)  
 Max Uplift 10=-161(LC 13), 13=-143(LC 9)  
 Max Grav 10=429(LC 1), 13=692(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 5-12=-543/395, 5-6=-990/860, 6-7=-990/860  
 BOT CHORD 12-13=-335/309, 11-12=-860/990, 10-11=-860/990  
 WEBS 2-12=-214/318

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 2-0-0, Interior(1) 1-8-12 to 7-2-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) All plates are MT20 plates unless otherwise indicated.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* 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.
  - 7) Refer to girder(s) for truss to truss connections.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=161, 13=143.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.
  - 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-60, 2-3=-60, 3-4=-20, 5-7=-60, 7-8=-60, 9-13=-20



Continued on page 2

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**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 22 Duncan's Creek	I64068485
J0224-1264	M2	HALF HIP	3	1	Job Reference (optional)	

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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:37 2024 Page 2  
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**LOAD CASE(S)** Standard  
 Concentrated Loads (lb)  
 Vert: 14=-500(F)

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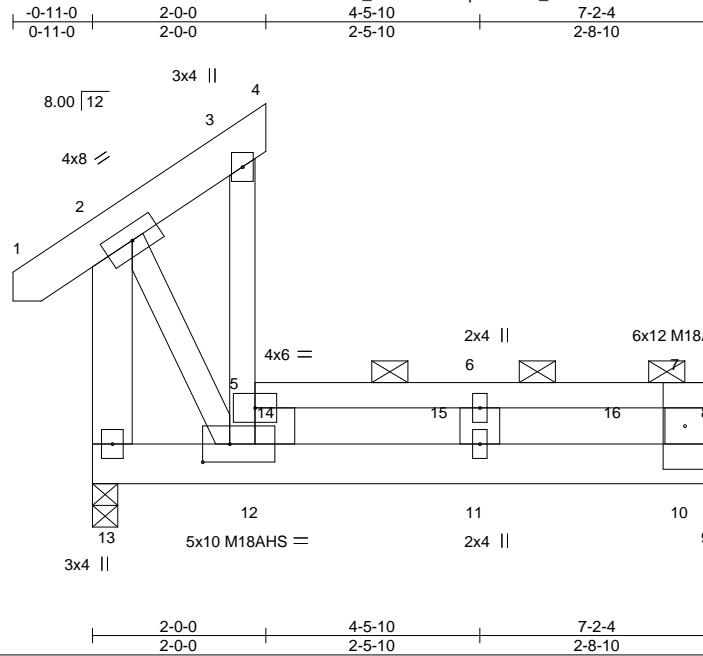
818 Soundside Road  
 Edenton, NC 27932

Job J0224-1264	Truss M2-GR	Truss Type HALF HIP	Qty 2	Ply 2	Lot 22 Duncan's Creek Job Reference (optional)	I64068486
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Scale = 1:26.6

Plate Offsets (X,Y)--	[12:0-3-12,0-2-8]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.41	Vert(LL)	-0.03 11-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.06 11-12	>999	240	M18AHS	186/179
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.02	Horz(CT)	0.00 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-MS	Wind(LL)	0.04 11-12	>999	240		
								Weight: 101 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1 *Except* 5-8: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-12, 5-8.
BOT CHORD 2x6 SP No.1	Exception: 10-0-0 oc bracing: 3-5
WEBS 2x6 SP No.1 *Except* 3-12,2-12: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 10=Mechanical, 13=0-3-8  
 Max Horz 13=169(LC 9)  
 Max Uplift 10=734(LC 9), 13=223(LC 5)  
 Max Grav 10=3256(LC 16), 13=1045(LC 16)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 5-12=405/125, 5-6=-1807/555, 6-7=-1807/555, 7-10=-2547/563, 2-13=-274/28  
 BOT CHORD 11-12=-555/1807, 10-11=-555/1807  
 WEBS 6-11=-780/218

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-2-0 oc, 2x4 - 1 row at 0-2-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x6 - 2 rows staggered at 0-2-0 oc, 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, 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.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - 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 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.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=734, 13=223.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s). The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

Continued on page 2



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Job J0224-1264	Truss M2-GR	Truss Type HALF HIP	Qty 2	Ply <b>2</b>	Lot 22 Duncan's Creek I64068486 Job Reference (optional)
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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:39 2024 Page 2  
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**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-60, 2-3=-60, 3-4=-20, 5-7=-180(F=-120), 7-8=-180(F=-120), 9-13=-20

Concentrated Loads (lb)

Vert: 7=-1450(F) 14=-363(F) 15=-363(F) 16=-363(F)

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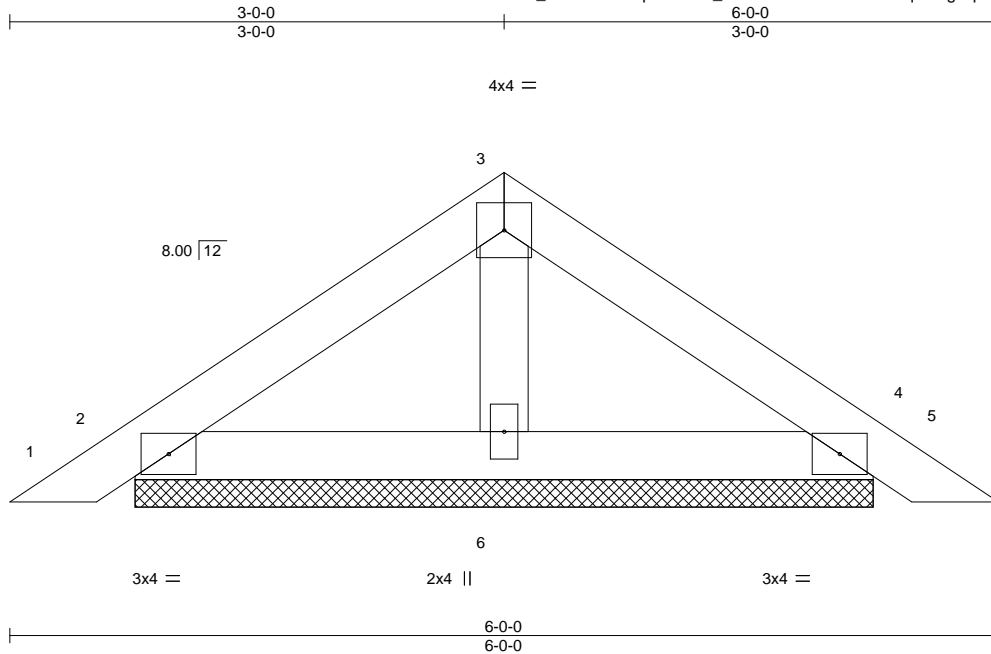
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Job J0224-1264	Truss PB1	Truss Type Piggyback	Qty 13	Ply 1	Lot 22 Duncan's Creek I64068487
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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:39 2024 Page 1

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Scale = 1:14.0

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.08	Vert(LL)	0.00	5	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT)	0.00	5	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 19 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.2

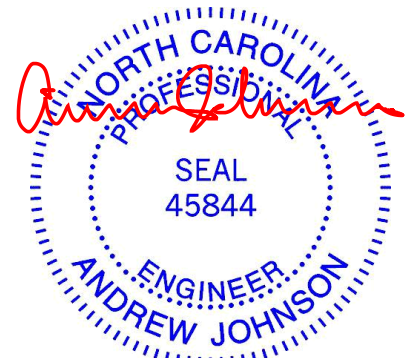
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.

**REACTIONS.** (size) 2=4-5-12, 4=4-5-12, 6=4-5-12  
 Max Horz 2=58(LC 11)  
 Max Uplift 2=-43(LC 12), 4=-48(LC 13)  
 Max Grav 2=130(LC 1), 4=131(LC 20), 6=158(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom 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'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 7, 2024

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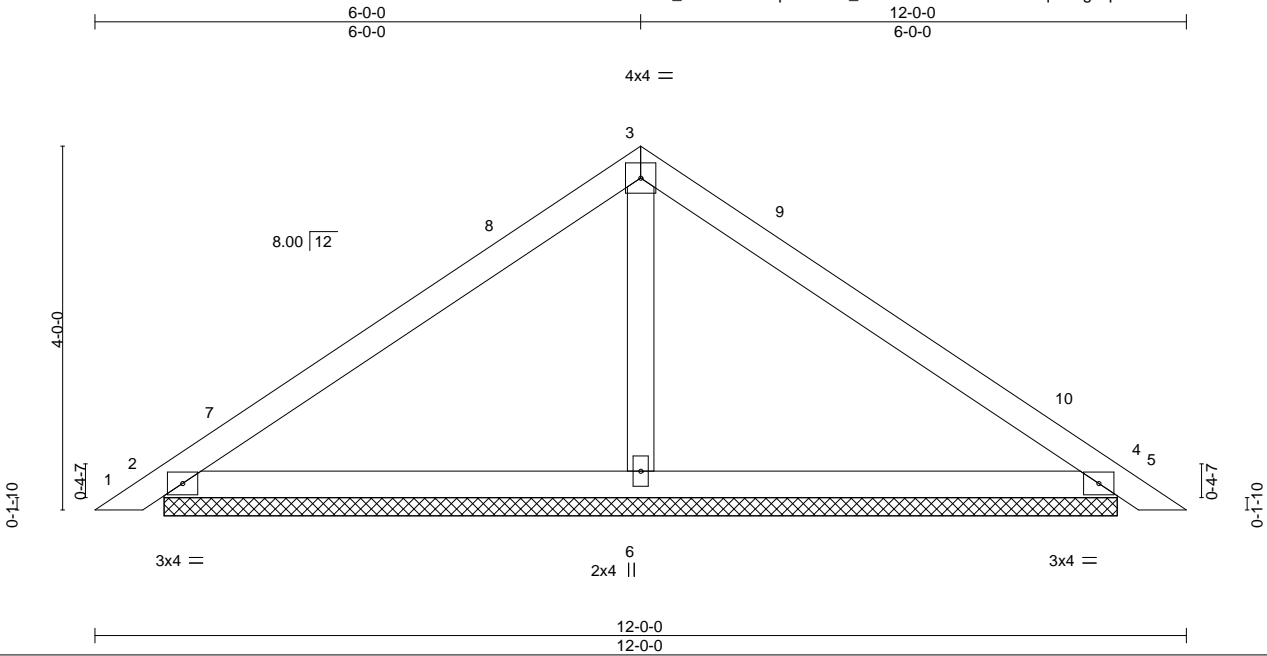


Job J0224-1264	Truss PB2	Truss Type PIGGYBACK	Qty 3	Ply 1	Lot 22 Duncan's Creek I64068488
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.28	Vert(LL)	0.01	5	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.20	Vert(CT)	0.02	5	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 42 lb	FT = 20%
	Code IRC2015/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	

**REACTIONS.** (size) 2=10-5-12, 4=10-5-12, 6=10-5-12  
 Max Horz 2=-122(LC 10)  
 Max Uplift 2=-65(LC 12), 4=-77(LC 13), 6=-35(LC 12)  
 Max Grav 2=238(LC 1), 4=243(LC 20), 6=421(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-6=-280/160

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-2 to 4-7-15, Interior(1) 4-7-15 to 6-0-0, Exterior(2) 6-0-0 to 10-4-13, Interior(1) 10-4-13 to 11-8-14 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
  - 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 7, 2024

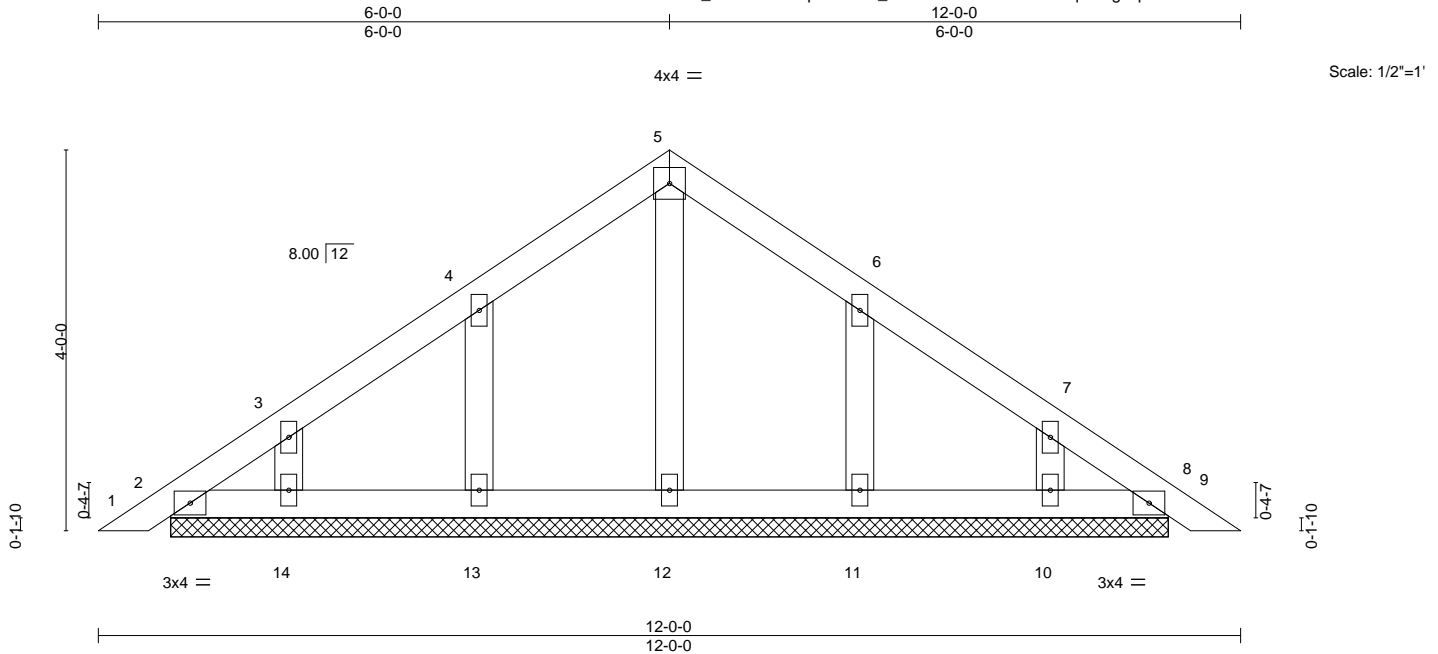
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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 <b>ANSI/TP1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (<a href="http://www.tpinst.org">www.tpinst.org</a>) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (<a href="http://www.sbcacomponents.com">www.sbcacomponents.com</a>)</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job J0224-1264	Truss PB2GE	Truss Type GABLE	Qty 1	Ply 1	Lot 22 Duncan's Creek Job Reference (optional)	I64068489
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:42 2024 Page 1

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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	-0.00	8	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	8	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 50 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 10-5-12.  
 (lb) - Max Horz 2=-153(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8 except 13=-145(LC 12), 14=-115(LC 12), 11=-144(LC 13), 10=-114(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; 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
- 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- 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 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8 except (jt=lb) 13=145, 14=115, 11=144, 10=114.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 7, 2024

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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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road  
 Edenton, NC 27932

Job J0224-1264	Truss VC1	Truss Type VALLEY	Qty 1	Ply 1	Lot 22 Duncan's Creek I64068490
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Comtech, Inc. Fayetteville, NC - 28314,

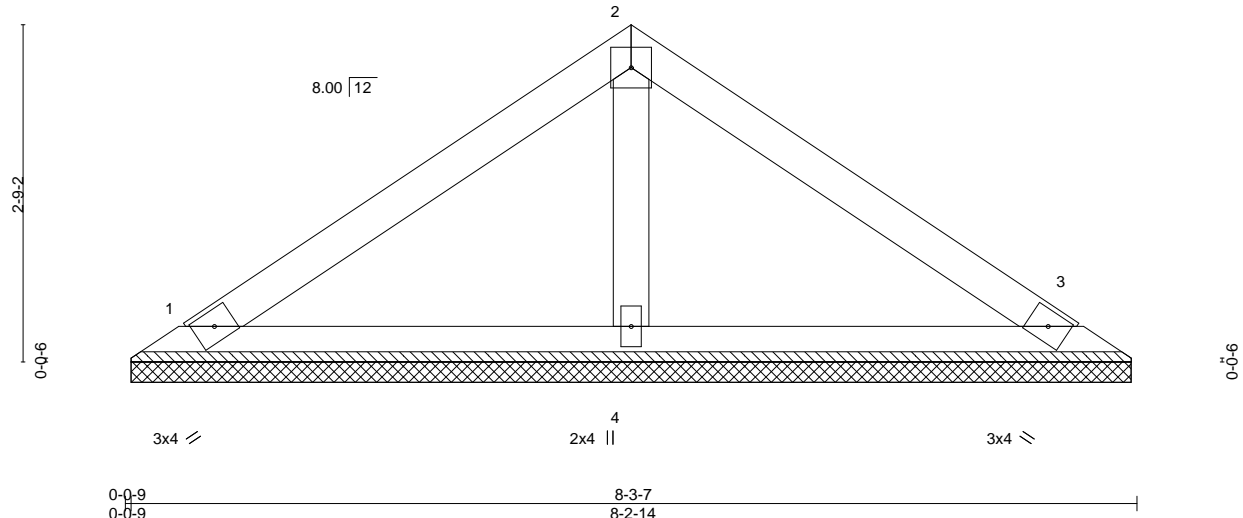
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:43 2024 Page 1

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4x4 =

Scale = 1:18.9



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.21	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 28 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.2

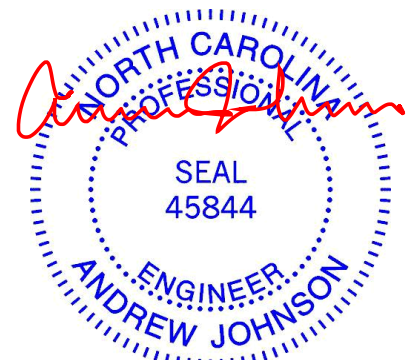
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=8-2-5, 3=8-2-5, 4=8-2-5  
 Max Horz 1=-78(LC 8)  
 Max Uplift 1=-48(LC 12), 3=-55(LC 13), 4=-4(LC 12)  
 Max Grav 1=159(LC 1), 3=161(LC 20), 4=266(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- 6) Non Standard bearing condition. Review required.



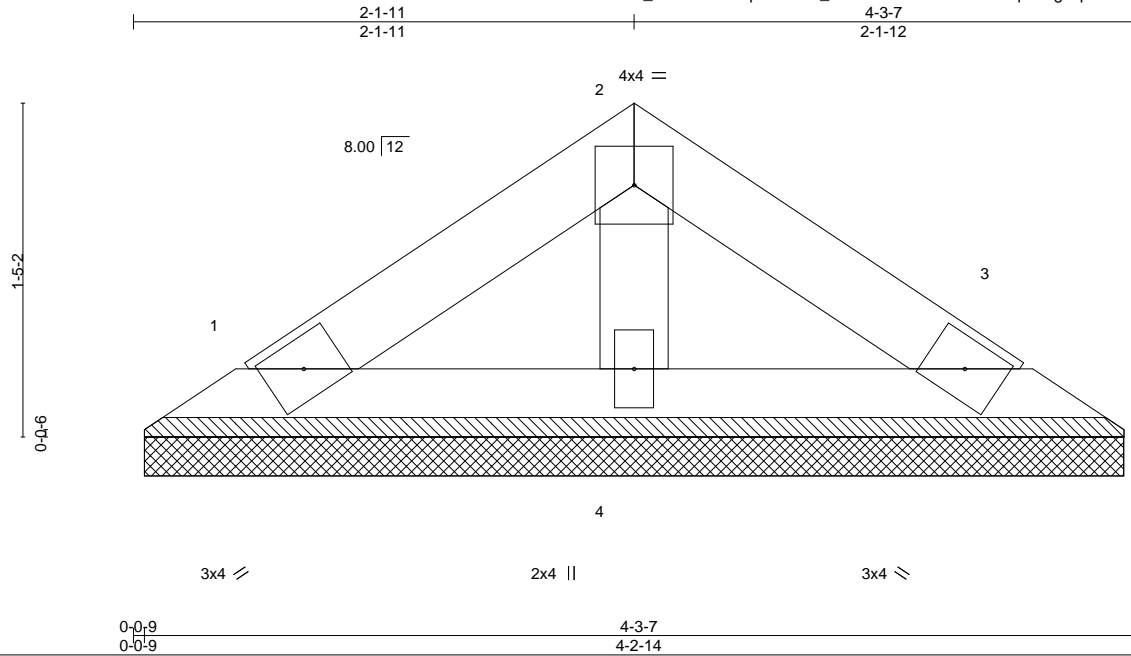
March 7, 2024

Job J0224-1264	Truss VC2	Truss Type VALLEY	Qty 1	Ply 1	Lot 22 Duncan's Creek Job Reference (optional)	I64068491
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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:44 2024 Page 1

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Scale = 1:9.9

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.04	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 13 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.2

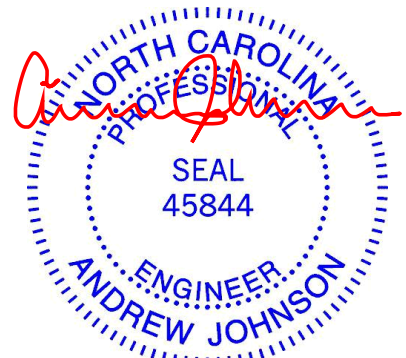
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-3-7 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=4-2-5, 3=4-2-5, 4=4-2-5  
 Max Horz 1=-35(LC 8)  
 Max Uplift 1=-21(LC 12), 3=-25(LC 13), 4=-2(LC 12)  
 Max Grav 1=72(LC 1), 3=73(LC 20), 4=120(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- 6) Non Standard bearing condition. Review required.



March 7, 2024

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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/TP1 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)



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 Edenton, NC 27932

Job J0224-1264	Truss VD1	Truss Type VALLEY	Qty 1	Ply 1	Lot 22 Duncan's Creek I64068492
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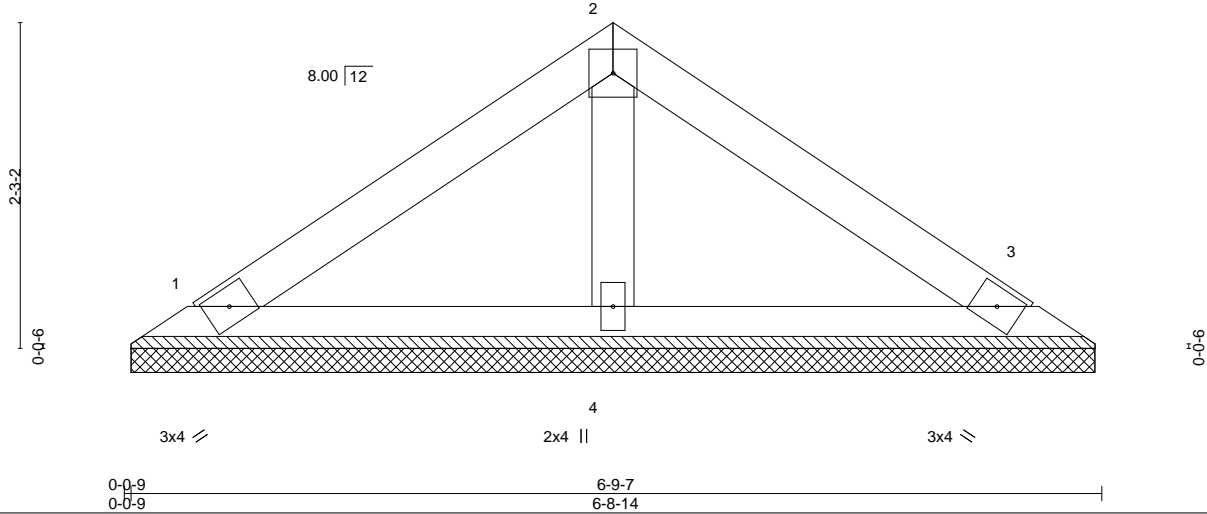
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:40:45 2024 Page 1

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4x4 =

Scale: 3/4"=1'



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
BCLL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P						Weight: 23 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=6-8-5, 3=6-8-5, 4=6-8-5  
 Max Horz 1=62(LC 11)  
 Max Uplift 1=38(LC 12), 3=-44(LC 13), 4=-3(LC 12)  
 Max Grav 1=126(LC 1), 3=128(LC 20), 4=212(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
  - 6) Non Standard bearing condition. Review required.



March 7, 2024

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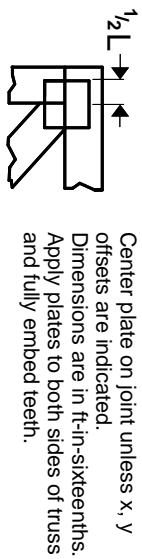


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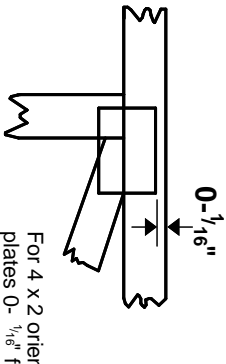


# Symbols

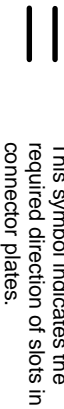
## PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16\" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

\* Plate location details available in MITek software or upon request.

## PLATE SIZE

4 X 4

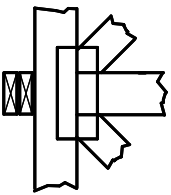
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

## BEARING

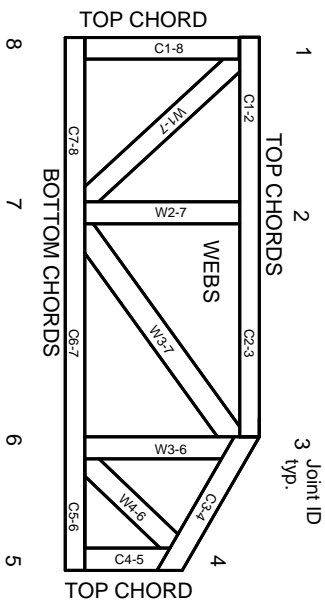


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-22: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

## Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282  
ESR-4722, ESL-1388

## Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on Lumber values established by others.

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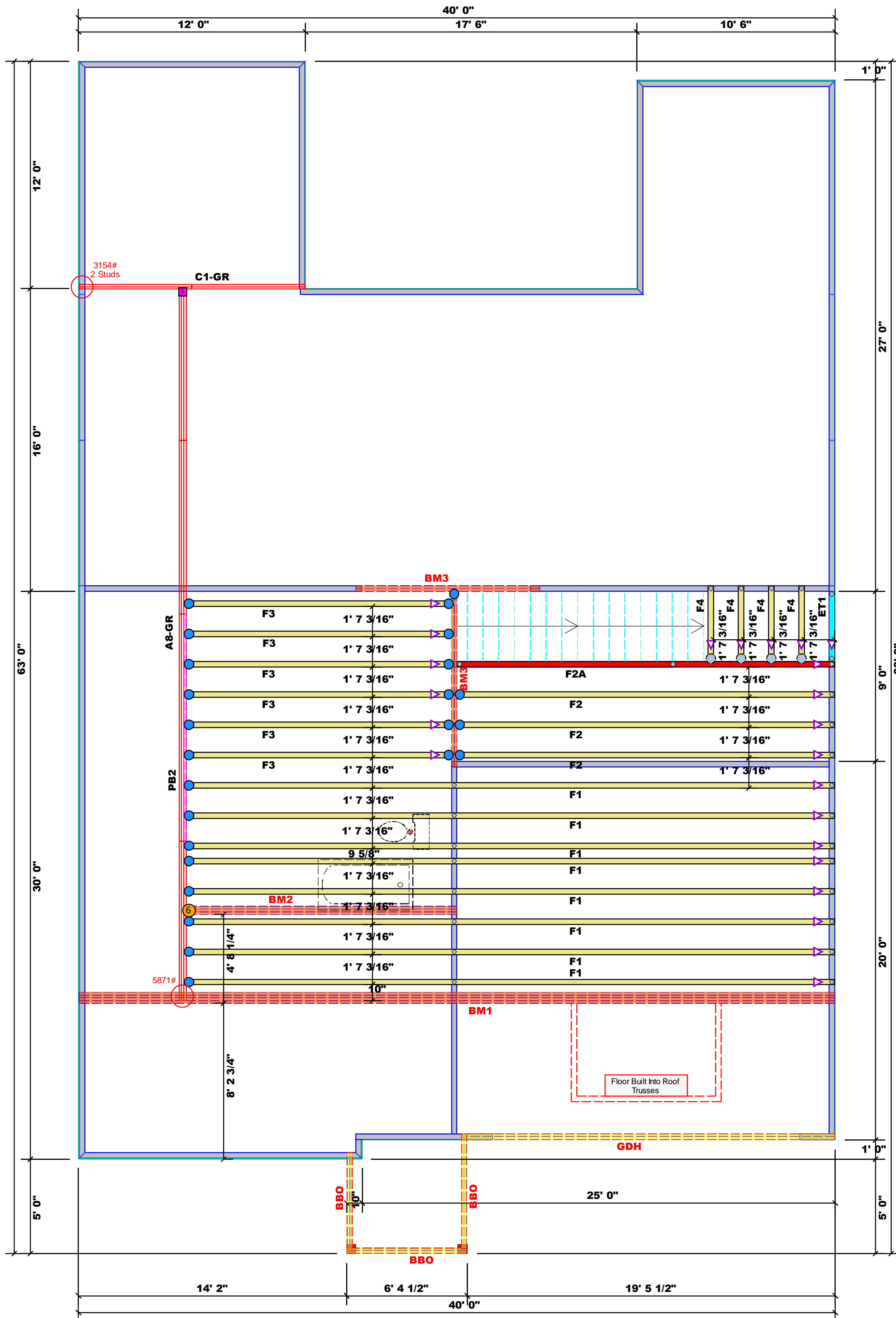
ENGINEERING BY  
**TRENGO**  
A MITek Affiliate

MITek Engineering Reference Sheet: MIL-7473 rev. 1/2/2023

# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability/bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. 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.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. 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.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.



All Truss Reactions are Less than 3,000 lbs. Unless Noted Otherwise.  
 -- Denotes Reaction Greater than 3,000 lbs. Reaction / # of Studs

All Headers Are Considered 2X10 Beams Unless Otherwise Noted

All Walls Shown Are Considered Load Bearing

Plumbing Drop Notes  
 1. Plumbing drop locations shown are NOT exact.  
 2. Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses.  
 3. Adjust spacing as needed not to exceed 24" oc.

Dimension Notes  
 1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise  
 2. All interior wall dimensions are to face of stud unless noted otherwise  
 3. All exterior wall to truss dimensions are to face of stud unless noted otherwise

Hatch Legend  
 5' 11-3/4" Walls  
 Second Floor Walls  
 Vaulted Ceiling  
 Drop Beam  
 Flush Beam

Connector Information				Nail Information		
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
●	HUS410	USP	24	NA	16d/3-1/2"	16d/3-1/2"
●	MSH422	USP	4	Varies	10d/3"	10d/3"
●	THDH612	USP	1	NA	16d/3-1/2"	16d/3-1/2"

Products				
PlotID	Length	Product	Plies	Net Qty
BM1	40' 0"	1-3/4"x 14" LVL Kerto-S	4	4
BM2	15' 0"	1-3/4"x 14" LVL Kerto-S	3	3
BM3	10' 0"	1-3/4"x 14" LVL Kerto-S	2	4
GDH	20' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2

1 Truss Placement Plan  
 Scale: 1/4"=1'

▲ = Denotes Left End of Truss (Reference Engineered Truss Drawing)

LOAD CHART FOR JACK STUDS  
 (BASED ON TABLES R502.5(1) & (2))  
 NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADERS/ROOF

END REACTOR (UP TO) # OF JACK STUDS	END REACTOR (UP TO) # OF JACK STUDS	END REACTOR (UP TO) # OF JACK STUDS
1700	2550	3400
3400	5100	6800
5100	7650	10200
6800	10200	13600
8500	12750	17000
10200	15300	
11900		
13600		
15300		

<b>BUILDER</b>	New Home, Inc.	<b>CITY / CO.</b>	Lillington / Harnett
<b>JOB NAME</b>	Lot 22 Duncan's Creek	<b>ADDRESS</b>	327 Beacon Hill Road
<b>PLAN</b>	The Guilford - Traditional "B"	<b>MODEL</b>	Floor
<b>SEAL DATE</b>	10/31/23	<b>DATE REV.</b>	03/06/24
<b>QUOTE #</b>		<b>DRAWN BY</b>	Jonathan Landry
<b>JOB #</b>	J0224-1265	<b>SALES REP.</b>	Paul Hawkins

**THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.**  
 These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BC3-B1 and BC3-B3 provided with the truss delivery package or online @ sbcindustry.com

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature: Jonathan Landry  
 Jonathan Landry

**comTECH**  
**ROOF & FLOOR TRUSSES & BEAMS**  
 Reilly Road Industrial Park  
 Fayetteville, N.C. 28309  
 Phone: (910) 864-8787  
 Fax: (910) 864-4444

Trenco  
818 Soundside Rd  
Edenton, NC 27932

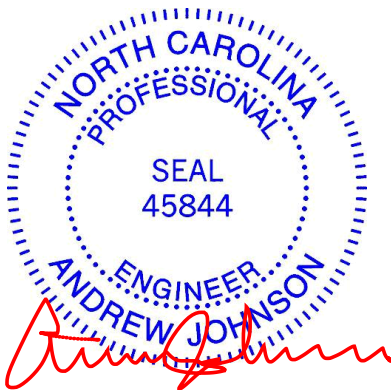
Re: J0224-1265  
Lot 22 Duncan's Creek

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: I64069317 thru I64069322

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

North Carolina COA: C-0844



March 7, 2024

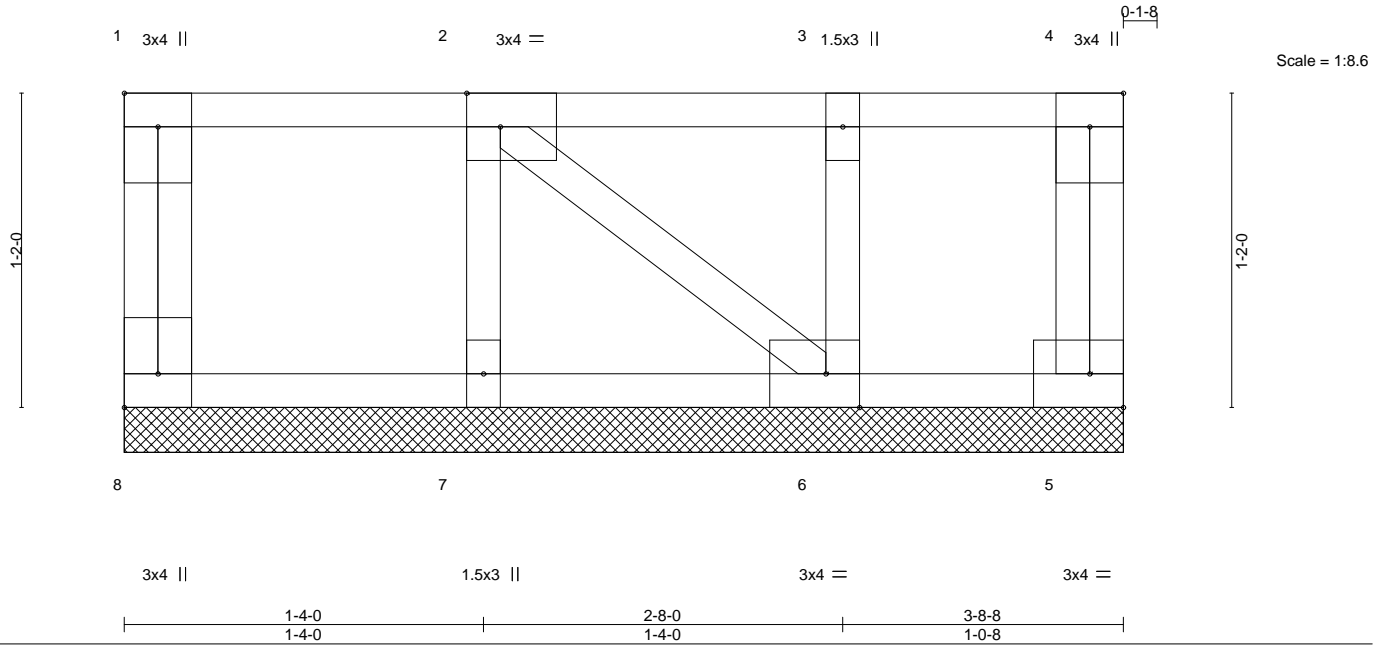
Johnson, Andrew

**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 J0224-1265	Truss ET1	Truss Type GABLE	Qty 1	Ply 1	Lot 22 Duncan's Creek Job Reference (optional)	I64069317
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:59:42 2024 Page 1  
ID:w\_NkYaQd4RDpmohcDk\_iObzuUsG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P								
											Weight: 21 lb	FT = 20%F, 11%E

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1(flat)	TOP CHORD	Structural wood sheathing directly applied or 3-8-8 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.1(flat)	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3(flat)		
OTHERS	2x4 SP No.3(flat)		

**REACTIONS.** All bearings 3-8-8.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 8, 5, 7, 6

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- Plates checked for a plus or minus 1 degree rotation about its center.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - CAUTION, Do not erect truss backwards.



March 7, 2024

Job J0224-1265	Truss F1	Truss Type FLOOR	Qty 8	Ply 1	Lot 22 Duncan's Creek I64069318 Job Reference (optional)
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:59:44 2024 Page 1  
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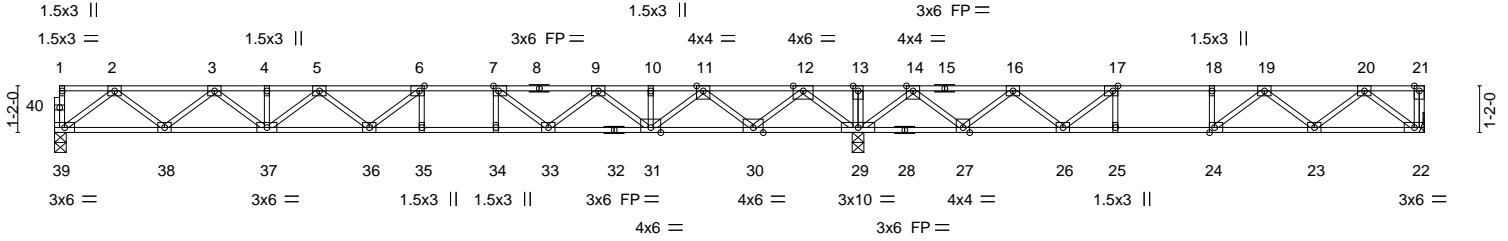


Plate Offsets (X, Y)--	[6:0-1-8,Edge], [7:0-1-8,Edge], [17:0-1-8,Edge], [24:0-1-8,Edge]
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<b>LOADING</b> (psf)	<b>SPACING-</b> 1-7-3	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.66	Vert(LL) -0.30 35-36 >789 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.99	Vert(CT) -0.41 35-36 >587 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.59	Horz(CT) 0.05 29 n/a n/a		
BCDL 5.0	Code IRC2015/TP12014	Matrix-S		Weight: 171 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 39=0-3-8, 22=Mechanical, 29=0-3-8  
Max Grav 39=767(LC 3), 22=521(LC 4), 29=1826(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**TOP CHORD** 2-3=-1627/0, 3-4=-2694/0, 4-5=-2694/0, 5-6=-3168/0, 6-7=-3177/0, 7-9=-2719/0, 9-10=-1733/66, 10-11=-1733/66, 11-12=-130/599, 12-13=0/2624, 13-14=0/2624, 14-16=-190/1307, 16-17=-1087/753, 17-18=-1441/369, 18-19=-1441/369, 19-20=-1001/13

**BOT CHORD** 38-39=0/964, 37-38=0/2260, 36-37=0/3072, 35-36=0/3177, 34-35=0/3177, 33-34=0/3177, 31-33=0/2331, 30-31=-318/1022, 29-30=-1361/0, 27-29=-1706/0, 26-27=-1033/757, 25-26=-369/1441, 24-25=-369/1441, 23-24=-113/1325, 22-23=0/637

**WEBS** 2-39=-1207/0, 2-38=0/863, 3-38=-825/0, 3-37=0/554, 12-29=-1585/0, 12-30=0/1235, 11-30=-1213/0, 11-31=0/963, 9-31=-807/0, 9-33=0/603, 7-33=-802/0, 5-37=-482/0, 6-36=-225/326, 7-34=-19/269, 20-22=-799/0, 20-23=-28/473, 19-23=-422/130, 19-24=-327/149, 14-29=-1253/0, 14-27=0/910, 16-27=-870/0, 16-26=0/616, 17-26=-812/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 6) CAUTION, Do not erect truss backwards.



<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>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 <b>ANSI/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (<a href="http://www.tpinst.org">www.tpinst.org</a>) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (<a href="http://www.sbcacomponents.com">www.sbcacomponents.com</a>)</p>	<p>ENGINEERING BY <b>TRENCO</b> A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job J0224-1265	Truss F2	Truss Type FLOOR	Qty 3	Ply 1	Lot 22 Duncan's Creek I64069319 Job Reference (optional)
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:59:45 2024 Page 1  
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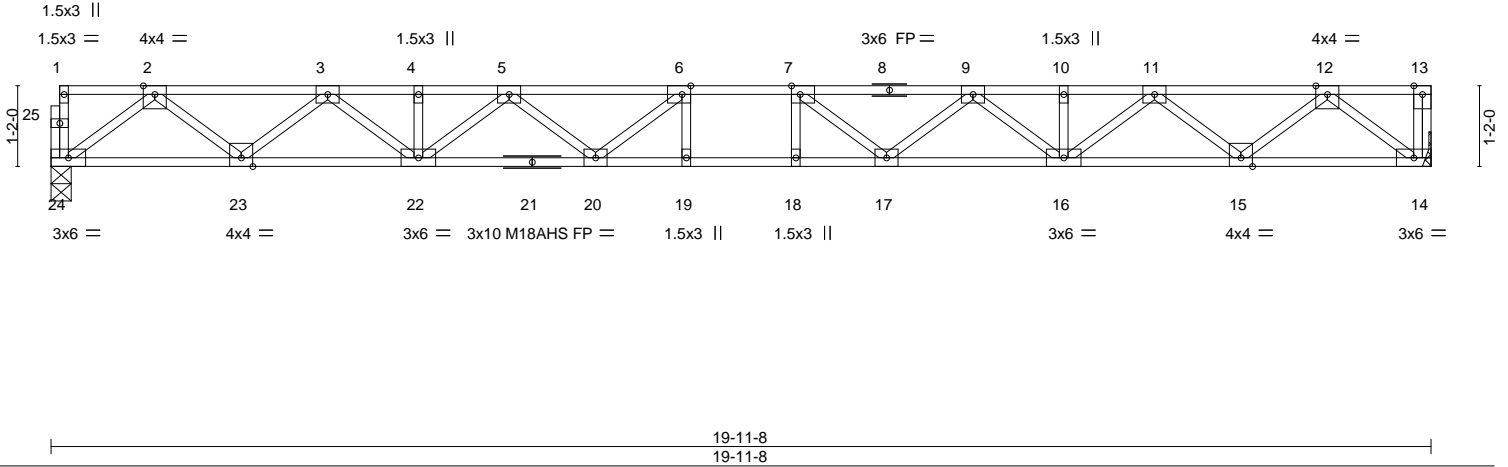
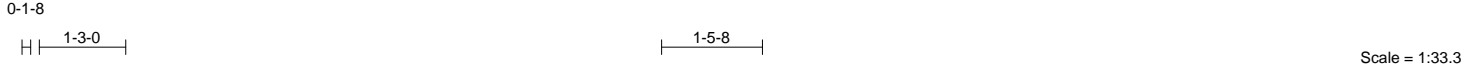


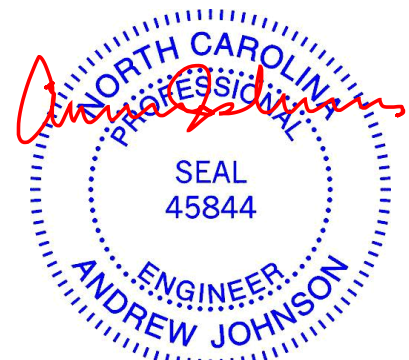
Plate Offsets (X,Y)--	[6:0-1-8,Edge], [7:0-1-8,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 1-7-3	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.48	Vert(LL) -0.35 18-19 >677 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.85	Vert(CT) -0.48 18-19 >492 360	M18AHS	186/179
BCLL 0.0	Rep Stress Incr YES	WB 0.48	Horz(CT) 0.08 14 n/a n/a		
BCDL 5.0	Code IRC2015/TP12014	Matrix-S		Weight: 102 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 24=0-3-8, 14=Mechanical  
Max Grav 24=862(LC 1), 14=867(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-3=-1862/0, 3-4=-3166/0, 4-5=-3166/0, 5-6=-3867/0, 6-7=-4083/0, 7-9=-3867/0, 9-10=-3166/0, 10-11=-3166/0, 11-12=-1862/0  
**BOT CHORD** 23-24=0/1087, 22-23=0/2609, 20-22=0/3640, 19-20=0/4083, 18-19=0/4083, 17-18=0/4083, 16-17=0/3640, 15-16=0/2609, 14-15=0/1088  
**WEBS** 2-24=-1362/0, 2-23=0/1008, 3-23=-973/0, 3-22=0/711, 5-22=-605/0, 5-20=0/410, 6-20=-506/75, 12-14=-1365/0, 12-15=0/1008, 11-15=-972/0, 11-16=0/711, 9-16=-605/0, 9-17=0/410, 7-17=-506/75

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are MT20 plates unless otherwise indicated.
  - 3) All plates are 3x4 MT20 unless otherwise indicated.
  - 4) Plates checked for a plus or minus 1 degree rotation about its center.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 7) CAUTION, Do not erect truss backwards.



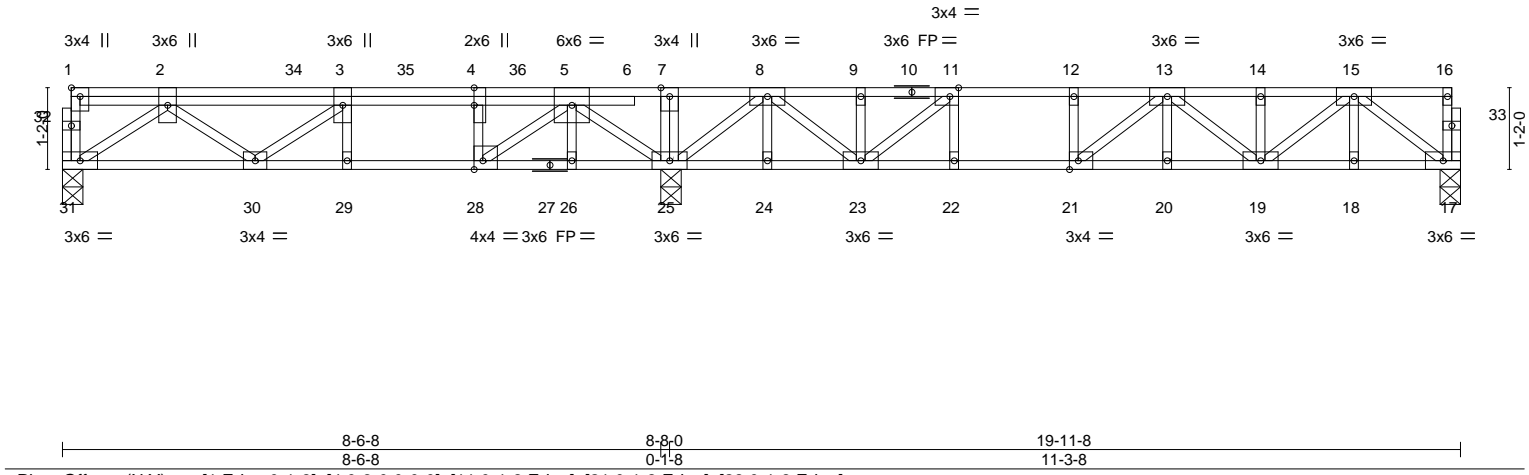
March 7, 2024



Job J0224-1265	Truss F2A	Truss Type FLOOR GIRDER	Qty 1	Ply 1	Lot 22 Duncan's Creek Job Reference (optional)	I64069320
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:59:46 2024 Page 1  
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-3	TC 0.31	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.48	Vert(LL) -0.06 20-21 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.51	Vert(CT) -0.08 20-21 >999 360		
BCDL 5.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.02 17 n/a n/a		
	Code IRC2015/TP12014			Weight: 118 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 2x4 SP No.1(flat)  
WEBS 2x4 SP No.3(flat)

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 24-25,23-24.

**REACTIONS.** (size) 31=0-3-8, 17=0-3-8, 25=0-3-8  
Max Grav 31=606(LC 3), 17=437(LC 7), 25=1224(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1075/0, 3-4=-1258/0, 4-5=-1258/0, 5-7=0/556, 7-8=0/554, 8-9=-560/0, 9-11=-560/0, 11-12=-983/0, 12-13=-983/0, 13-14=-845/0, 14-15=-845/0  
BOT CHORD 30-31=0/837, 29-30=0/1258, 28-29=0/1258, 26-28=0/499, 25-26=0/499, 22-23=0/983, 21-22=0/983, 20-21=0/1054, 19-20=0/1054, 18-19=0/523, 17-18=0/523  
WEBS 5-25=-957/0, 5-28=0/1067, 4-28=-538/0, 2-31=-1027/0, 2-30=0/303, 8-25=-781/0, 15-17=-649/0, 15-19=0/409, 13-19=-265/0, 8-23=0/559, 11-23=-568/0

**NOTES-**  
1) Unbalanced floor live loads have been considered for this design.  
2) All plates are 1.5x3 MT20 unless otherwise indicated.  
3) Plates checked for a plus or minus 1 degree rotation about its center.  
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.  
5) CAUTION, Do not erect truss backwards.  
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 190 lb down at 1-8-15, 190 lb down at 3-4-2, and 190 lb down at 4-11-5, and 190 lb down at 6-6-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.  
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard  
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 17-31=8, 1-16=80  
Concentrated Loads (lb)  
Vert: 2=-126(B) 34=-126(B) 35=-126(B) 36=-126(B)



Job J0224-1265	Truss F3	Truss Type FLOOR	Qty 6	Ply 1	Lot 22 Duncan's Creek I64069321
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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:59:47 2024 Page 1

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1-3-0

2-0-4

Scale = 1:22.9

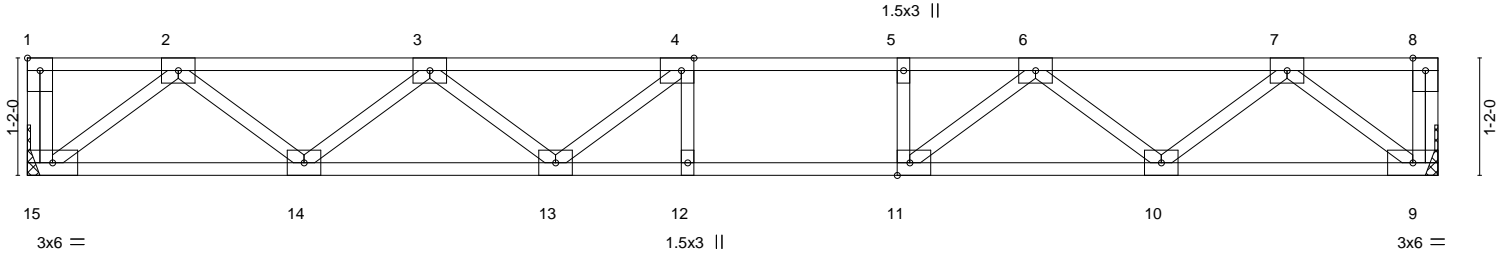


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-1-8,Edge], [11:0-1-8,Edge]		14-0-4 14-0-4			
<b>LOADING</b> (psf)	<b>SPACING-</b> 1-7-3	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.40	Vert(LL) -0.12 12-13 >999 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.64	Vert(CT) -0.17 12-13 >994 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.29	Horz(CT) 0.03 9 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 71 lb	FT = 20%F, 11%E

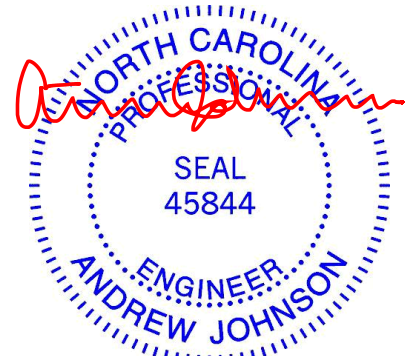
**LUMBER-**  
TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 2x4 SP No.1(flat)  
WEBS 2x4 SP No.3(flat)

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 15=Mechanical, 9=Mechanical  
Max Grav 15=606(LC 1), 9=606(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1212/0, 3-4=-1838/0, 4-5=-1955/0, 5-6=-1955/0, 6-7=-1197/0  
BOT CHORD 14-15=0/739, 13-14=0/1663, 12-13=0/1955, 11-12=0/1955, 10-11=0/1643, 9-10=0/745  
WEBS 2-15=-927/0, 2-14=0/616, 3-14=-587/0, 3-13=0/294, 7-9=-934/0, 7-10=0/589,  
6-10=-581/0, 6-11=0/542, 4-13=-319/27

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



March 7, 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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road  
Edenton, NC 27932

Job J0224-1265	Truss F4	Truss Type Floor	Qty 4	Ply 1	Lot 22 Duncan's Creek I64069322
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 6 09:59:48 2024 Page 1

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Job Reference (optional)

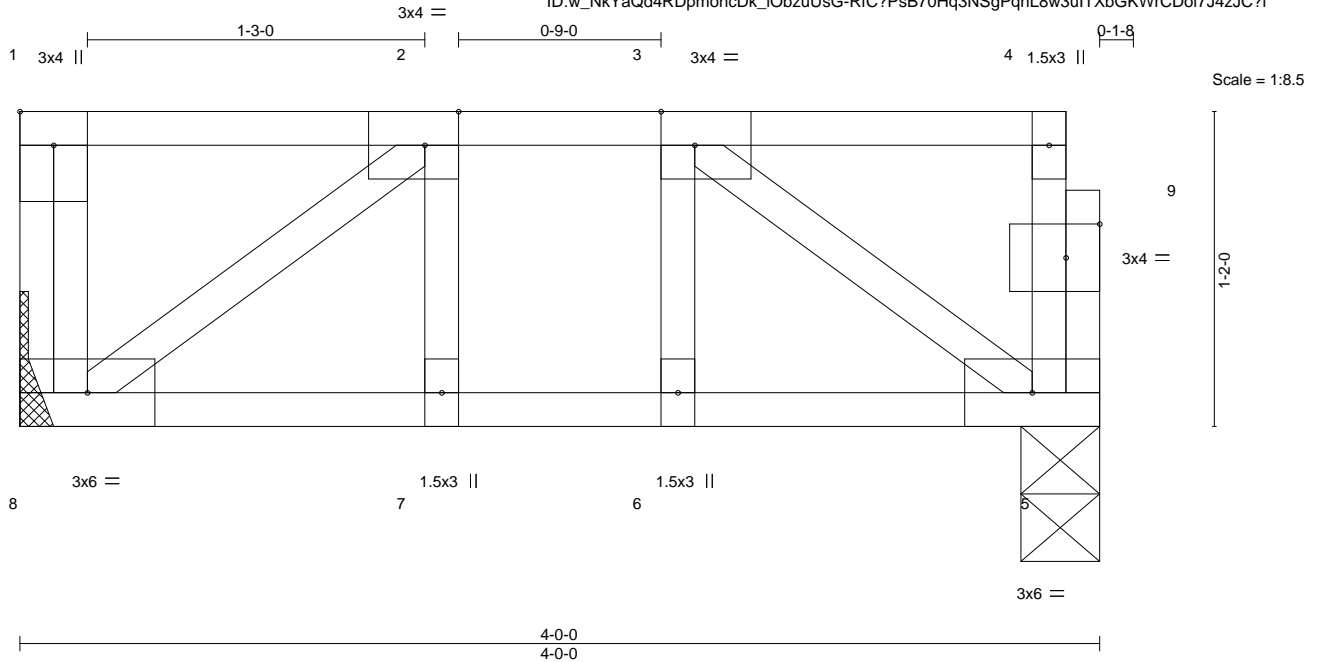


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [2:0-1-8,Edge], [3:0-1-8,Edge], [9:0-1-8,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.09	Vert(LL)	-0.00	7	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.06	Vert(CT)	-0.00	7	>999	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S						Weight: 24 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 8=Mechanical, 5=0-3-8  
Max Grav 8=206(LC 1), 5=200(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

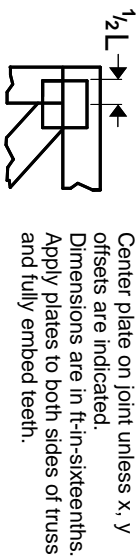
- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Refer to girder(s) for truss to truss connections.
  - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 5) CAUTION, Do not erect truss backwards.



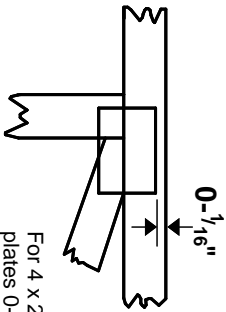
March 7, 2024

# Symbols

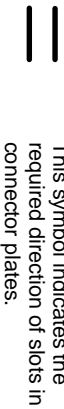
## PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16\" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

\* Plate location details available in MITek software or upon request.

## PLATE SIZE

4 X 4

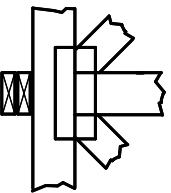
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

## BEARING



Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

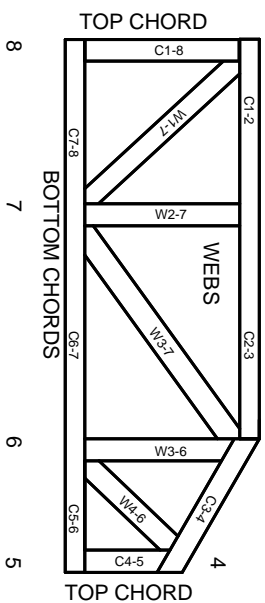
## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-22: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



1 TOP CHORDS  
2 Joint ID typ.



**JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.**

**CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.**

# Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282  
ESR-4722, ESL-1388

# Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on Lumber values established by others.

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# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability/bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. 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.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. 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.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

**MITek**

ENGINEERING BY  
**TRENGO**  
A MITek Affiliate

MITek Engineering Reference Sheet: MIL-7473 rev. 1/2/2023