

### **Trenco**

818 Soundside Rd Edenton, NC 27932

Re: J1220-5661

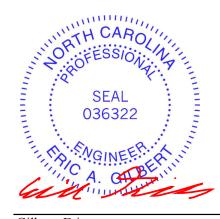
Precision/Lot 35 Summerlin/Harnett

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: E15334465 thru E15334495

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844



January 21,2021

Gilbert, Eric

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

Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334465 J1220-5661 **GABLE** 1 A01-GE Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:20 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExlrbuZyFiSD-dhlYra\_2unhQJbWdmlNosaloFy0eL6YUTPiO\_Tzt6aP

32-4-0

23-0-0

Scale: 1/8"=1

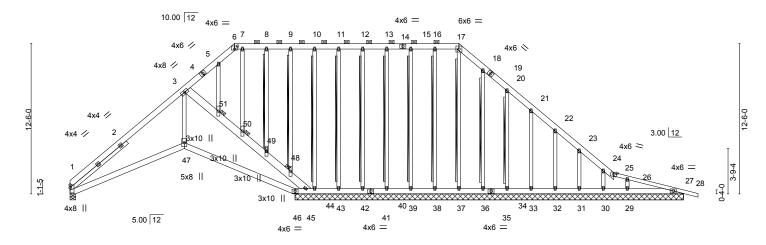


Plate Off	Plate Offsets (X,Y) [6:0-3-0,0-3-0]												
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.07	1-47	>999	360	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.15	1-47	>999	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.08	27	n/a	n/a			
BCDL	10.0	Code IRC2015/TP	12014	Matri	x-S	Wind(LL)	0.04	1-47	>999	240	Weight: 534 lb	FT = 20%	

27-8-8

9-0-0

LUMBER-TOP CHORD 2x6 SP No 1 \*Except\*

25-28: 2x4 SP No.1

**BOT CHORD** 2x6 SP No.1 **WEBS** 2x4 SP No.2 \*Except\*

3-45: 2x8 SP No.1 **OTHERS** 2x4 SP No.2

**SLIDER** Left 2x4 SP No.2 -x 6-2-10 **BOT CHORD** WEBS

**BRACING-**

TOP CHORD

JOINTS

9-0-0

Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-17.

Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 1-47,46-47,45-46.

45-8-8

9-0-0

45-2-5

51-0-0

5-9-11

2x4 SPF No.2 - 17-37, 16-38, 15-39, 13-40

, 12-42, 11-43, 10-44, 9-48, 8-49, 18-36,

20-34

45-10-11 51-0-0 0-2-3 5-1-5

Fasten (2X) T and I braces to narrow edge of web with 10d

(0.131"x3") nails. 6in o.c. with 3in minimum end distance. Brace must cover 90% of web length.

1 Brace at Jt(s): 48, 49, 50, 51

REACTIONS. All bearings 32-3-8 except (jt=length) 1=0-5-8.

9-6-0

9-6-0

Max Horz 1=-376(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 38, 39, 40, 42, 43, 36, 30 except

1=-151(LC 12), 27=-140(LC 9), 45=-153(LC 13), 44=-712(LC 9), 34=-123(LC 13),

33=-111(LC 13), 32=-107(LC 13), 31=-142(LC 13), 29=-125(LC 9)

18-8-8

Max Grav All reactions 250 lb or less at joint(s) 37, 38, 39, 40, 42, 43, 36, 34,

33, 32, 31, 30 except 1=853(LC 1), 27=262(LC 24), 45=759(LC 3), 44=950(LC

22), 29=389(LC 24)

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

1-3=-1530/310, 3-5=-301/385, 5-6=-208/319, 6-7=-204/313, 7-8=-204/312,

8-9=-205/313, 9-10=-205/313, 10-11=-205/313, 11-12=-205/313, 12-13=-205/313,

13-15=-205/313, 15-16=-205/313, 16-17=-205/313, 17-18=-233/352, 18-20=-185/274,

23-24=-264/242, 26-27=-284/219

BOT CHORD 1-47=-396/1314, 46-47=-385/1287, 45-46=-340/1154, 44-45=-214/311, 43-44=-214/311,

42-43=-214/311, 40-42=-214/311, 39-40=-214/311, 38-39=-214/311, 37-38=-214/311,

36-37=-214/311, 34-36=-214/311, 33-34=-214/311, 32-33=-214/311, 31-32=-214/311,

30-31=-214/311, 29-30=-214/311, 27-29=-214/311

WFBS 3-47=-172/1156, 3-51=-1346/550, 50-51=-1334/488, 49-50=-1401/489, 48-49=-1393/506,

45-48=-1406/523, 10-44=-365/155, 26-29=-268/170

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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.



January 21,2021

Continued on page 2 WARNING Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MITE-keep component. 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

\*\*ANSITPIT Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\*

available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Precision/Lot 35 Summerlin/Harnett
J1220-5661	A01-GE	GABLE	1	1	E15334465
31220-3001	AUI-GL	GABLE	'	'	Joh Deference (antional)

Comtech, Inc, Fa

Fayetteville, NC - 28314,

| Job Reference (optional)

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:21 2021 Page 2
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## NOTES-

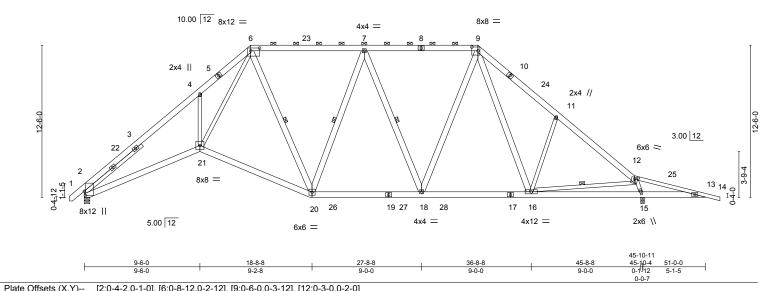
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 38, 39, 40, 42, 43, 36, 30 except (jt=lb) 1=151, 27=140, 45=153, 44=712, 34=123, 33=111, 32=107, 31=142, 29=125.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334466 J1220-5661 PIGGYBACK BASE 2 A02 Job Reference (optional)

Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:22 2021 Page 1 Comtech, Inc.

ID:52SygMJAaHxrWTaExlrbuZyFiSD-Z4QJGG?JPPx8Zvg0tAQGx?q0VleHpw\_mxjBV3Lzt6aN

Scale = 1:94.6



	0010 (71,17	[2:0 : 2;0 : 0]; [0:0 0 :2;0 2 :2]; [0:0 0	,	,	
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.77	Vert(LL) -0.19 18-20 >999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.55	Vert(CT) -0.34 20-21 >999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.68	Horz(CT) 0.22 15 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.09 21 >999 240	Weight: 462 lb FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

TOP CHORD 2x6 SP No 1 \*Except\* 12-14: 2x4 SP No.1

**BOT CHORD** 2x6 SP No.1 **WEBS** 2x6 SP No.1 \*Except\*

4-21,6-21,11-16,12-16,12-15: 2x4 SP No.2

**SLIDER** Left 2x4 SP No.2 -x 6-2-10

REACTIONS.

(size) 2=0-5-8, 15=0-3-8 Max Horz 2=-297(LC 10)

Max Uplift 2=-60(LC 12), 15=-107(LC 13) Max Grav 2=1868(LC 1), 15=2359(LC 2)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-4=-3975/649, 4-6=-3719/921, 6-7=-1724/538, 7-9=-1774/525, 9-11=-2221/573,

11-12=-2317/408, 12-13=-1129/1108

**BOT CHORD** 2-21=-307/3220, 20-21=-115/1965, 18-20=-109/1841, 16-18=-21/1509, 15-16=-84/809,

13-15=-1048/1156

**WEBS** 4-21=-396/402, 6-21=-479/2565, 6-20=-304/140, 7-20=-419/210, 7-18=-438/232, 9-18=-116/785, 9-16=-137/529, 11-16=-498/319, 12-16=-890/1613, 12-15=-2377/805

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-1 to 3-3-12, Interior(1) 3-3-12 to 13-8-0, Exterior(2) 13-8-0 to 18-0-13, Interior(1) 18-0-13 to 32-4-0, Exterior(2) 32-4-0 to 36-8-12, Interior(1) 36-8-12 to 52-2-8 zone; cantilever right exposed ;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 4x6 MT20 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 30.0psf 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.
- 7) Bearing at joint(s) 2 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 100 lb uplift at joint(s) 2 except (jt=lb)
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 2-8-3 oc purlins, except

6-20, 7-20, 7-18, 12-16

2-0-0 oc purlins (5-7-2 max.): 6-9.

1 Row at midpt

Rigid ceiling directly applied or 6-0-0 oc bracing.

January 21,2021

M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

Design valid for use only with MITEK® connectors. This design is based only upon parameters and roperly incorporate this design in the overall 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

ANSITPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information

available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334467 J1220-5661 PIGGYBACK BASE 3 A02-A Job Reference (optional)

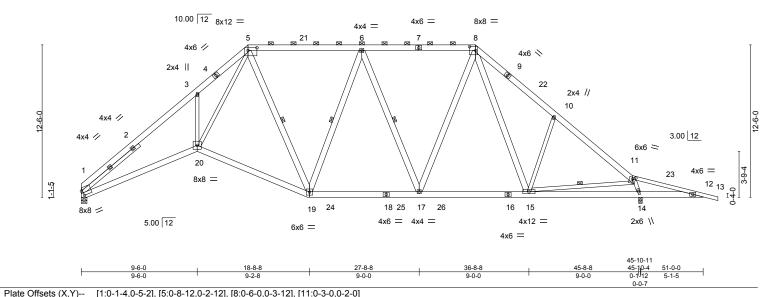
Fayetteville, NC - 28314, Comtech, Inc.

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:24 2021 Page 1 ID:52SygMJAaHxrWTaExlrbuZyFiSD-WSX3hx1Zx0BroDqP?bSk1QvSCZJlHqF3O1gb7Ezt6aL

Structural wood sheathing directly applied or 3-9-14 oc purlins,

5-19, 6-19, 6-17, 11-15

Scale = 1:94.5



	. , ,	, ,, ,		1	
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.44	Vert(LL) -0.18 17-19 >999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.55	Vert(CT) -0.32 19-20 >999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.69	Horz(CT) 0.21 14 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.09 20 >999 240	Weight: 458 lb FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

WEBS

except

2-0-0 oc purlins (5-7-1 max.): 5-8.

Rigid ceiling directly applied or 6-0-0 oc bracing.

LUMBER-TOP CHORD 2x6 SP No 1 \*Except\*

11-13: 2x4 SP No.1, 1-4: 2x6 SP 2400F 2.0E

**BOT CHORD** 2x6 SP No.1

**WEBS** 2x6 SP No.1 \*Except\*

3-20,5-20,10-15,11-15,11-14: 2x4 SP No.2

**SLIDER** Left 2x4 SP No.2 -x 6-2-10

REACTIONS. (size) 1=0-5-8, 14=0-3-8 Max Horz 1=-295(LC 10)

Max Uplift 1=-42(LC 12), 14=-107(LC 13) Max Grav 1=1791(LC 1), 14=2360(LC 2)

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

TOP CHORD  $1-3 = -3984/672, \ 3-5 = -3724/957, \ 5-6 = -1725/544, \ 6-8 = -1775/529, \ 8-10 = -2222/577, \ 3-10 = -$ 

10-11=-2318/412, 11-12=-1129/1108

**BOT CHORD** 1-20=-330/3228, 19-20=-115/1968, 17-19=-114/1843, 15-17=-24/1510, 14-15=-83/809,

12-14=-1048/1156

**WEBS** 3-20=-390/409, 5-20=-489/2570, 5-19=-306/140, 6-19=-419/210, 6-17=-439/232, 8-17=-116/786, 8-15=-137/529, 10-15=-498/319, 11-15=-890/1613, 11-14=-2378/805

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-2 to 4-6-15, Interior(1) 4-6-15 to 13-8-0, Exterior(2) 13-8-0 to 18-0-13, Interior(1) 18-0-13 to 32-4-0, Exterior(2) 32-4-0 to 36-8-12, Interior(1) 36-8-12 to 52-2-8 zone; cantilever right exposed ;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 30.0psf 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 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 100 lb uplift at joint(s) 1 except (jt=lb) 14=107
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



January 21,2021

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 bucking 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334468 2 J1220-5661 A03 PIGGYBACK BASE Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:26 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExlrbuZyFiSD-Srfq6d2pTdRZ1W\_n60UC6r?oLN0BlmNMsL9iC6zt6aJ

32-4-0

9-4-0

38-9-2

45-2-5

6-5-2

Structural wood sheathing directly applied or 4-4-8 oc purlins, except

4-22, 7-20, 11-18

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

2-0-0 oc purlins (5-2-0 max.): 6-9.

6-0-0 oc bracing: 13-15.

1 Row at midpt

23-0-0

9-4-0

9-4-0

Scale: 1/8"=1

51-0-0 5-9-11

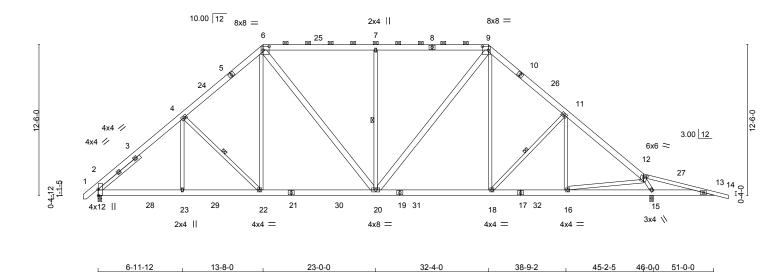


Plate Off	fsets (X,Y)	[2:0-6-3,Edge], [6:0-6-0,0-3	3-12], [9:0-6-0	0,0-3-12], [1	<u>2:0-3-0,0-2-0</u>							
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.14 2	0-22	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.23 2	0-22	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.07	15	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI	2014	Matri	x-S	Wind(LL)	0.04	20	>999	240	Weight: 442 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-

TOP CHORD 2x6 SP No.1 \*Except\* 12-14: 2x4 SP No.1

**BOT CHORD** 2x6 SP No.1

**WEBS** 2x4 SP No.2 \*Except\*

6-20,9-20: 2x6 SP No.1

**SLIDER** Left 2x4 SP No.2 -x 4-5-13

REACTIONS. (size) 2=0-3-8, 15=0-3-8

Max Horz 2=-296(LC 10)

Max Uplift 2=-58(LC 12), 15=-107(LC 13) Max Grav 2=2148(LC 2), 15=2458(LC 2)

6-11-12

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-4=-2817/509, 4-6=-2345/584, 6-7=-2056/584, 7-9=-2057/584, 9-11=-2294/543,

11-12=-2417/379, 12-13=-1007/1031

**BOT CHORD** 2-23=-209/2111, 22-23=-209/2111, 20-22=-56/1752, 18-20=-26/1670, 16-18=-131/1807, 15-16=0/724, 13-15=-965/1034

13-8-0

6-8-4

4-23=0/345, 4-22=-499/240, 6-22=-72/734, 6-20=-176/605, 7-20=-628/301,

9-20=-191/694, 9-18=-40/670, 11-18=-441/184, 11-16=-204/262, 12-16=-694/1407,

12-15=-2565/807

# NOTES-

**WEBS** 

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-1 to 3-3-12, Interior(1) 3-3-12 to 13-8-0, Exterior(2) 13-8-0 to 18-0-13, Interior(1) 18-0-13 to 32-4-0, Exterior(2) 32-4-0 to 36-8-12, Interior(1) 36-8-12 to 52-2-8 zone; cantilever right exposed ;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 4x6 MT20 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 30.0psf 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 15=107
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



January 21,2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334469 J1220-5661 A04 PIGGYBACK BASE 2 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:27 2021 Page 1 ID:52SygMJAaHxrWTaExlrbuZyFiSD-w1DCJz3RExZQfgYzgj?Re2X?8mFwUGmV4?uFkZzt6al 13-8-0 23-0-0 32-4-0 38-9-2 45-2-5 51-0-0 9-4-0 5-9-11

Scale: 1/8"=1

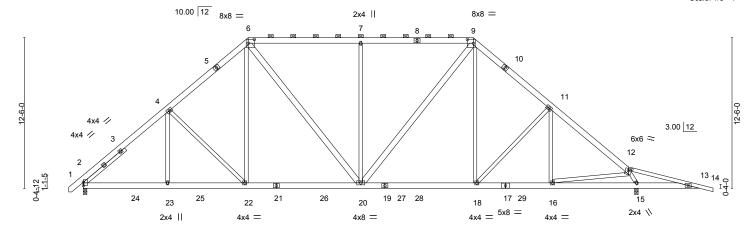


Plate Of	fsets (X,Y)	[6:0-6-0,0-3-12], [9:0-6-0	,0-3-12], [12:0	0-3-0,0-2-0]							
LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.26 18-20	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	ВС	0.90	Vert(CT)	-0.45 18-20	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.33	Horz(CT)	0.05 15	n/a	n/a		
BCDL	10.0	Code IRC2015/T	PI2014	Matrix	:-S	Wind(LL)	0.15 18-20	>999	240	Weight: 883 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

23-0-0

9-4-0

LUMBER-

TOP CHORD 2x6 SP No 1 \*Except\* 12-14: 2x4 SP No.1

**BOT CHORD** 2x6 SP No.1 \*Except\* 17-19: 2x6 SP 2400F 2.0E

**WEBS** 2x4 SP No.2 \*Except\*

6-20,9-20: 2x6 SP No.1 **SLIDER** Left 2x4 SP No.2 -x 4-5-13

REACTIONS. (size) 2=0-3-8, 15=0-3-8

Max Horz 2=-296(LC 25)

Max Uplift 2=-133(LC 8), 15=-219(LC 9)

6-11-12

Max Grav 2=2797(LC 2), 15=3436(LC 2)

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

TOP CHORD 2-4=-3774/189, 4-6=-3267/259, 6-7=-3377/282, 7-9=-3377/282, 9-11=-3905/325,

11-12=-3724/201, 12-13=-557/948 **BOT CHORD** 

2-23=-213/2703, 22-23=-213/2703, 20-22=-139/2451, 18-20=-41/2895, 16-18=-32/2824, 15-16=-54/1158. 13-15=-884/574

> 4-23=0/386, 4-22=-491/217, 6-22=-137/741, 6-20=-290/1590, 7-20=-611/232, 9-20=-210/850, 9-18=-143/1448, 11-18=-380/319, 11-16=-598/201, 12-16=-314/1851,

13-8-0

6-8-4

12-15=-3585/314

## NOTES-

WEBS

1) 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, 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.

- 2) 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.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 6) All plates are 4x6 MT20 unless otherwise indicated.
- 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 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=133, 15=219.
- 10) 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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January 21,2021

Edenton, NC 27932

Structural wood sheathing directly applied or 6-0-0 oc purlins, except

ORTH

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

2-0-0 oc purlins (6-0-0 max.): 6-9.

6-0-0 oc bracing: 13-15.

Job	Truss	Truss Type	Qty	Ply	Precision/Lot 35 Summerlin/Harnett
14000 5004	404	DIO OVERA CIVERA OF			E15334469
J1220-5661	A04	PIGGYBACK BASE	1	2	Job Reference (optional)

Comtech, Inc,

Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:27 2021 Page 2 ID:52SygMJAaHxrWTaExlrbuZyFiSD-w1DCJz3RExZQfgYzgj?Re2X?8mFwUGmV4?uFkZzt6al

### NOTES-

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1627 lb down and 195 lb up at 27-8-0 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: 1-6=-60, 6-9=-60, 9-12=-60, 12-14=-60, 2-13=-20 Concentrated Loads (lb)

Vert: 28=-1449(B)



818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334470 J1220-5661 PIGGYBACK BASE 3 A05 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:28 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExlrbuZyFiSD-OEnaWJ44?FhHHq7AERXgBG4AHAl3DbdfJfepG?zt6aH 13-8-0 22-8-8 27-9-8 9-0-8 6-8-4 Scale = 1:75.8 10.00 12 8x8 = 2x4 || 6x12 = 4x6 // 4x6 = 3x6 // 17 4 4x4 // 4x6 = -5-I 19 20 12 21 11 3x10 || 10 14 13 9 3x4 || 3x4 || 2x4 II 4x12 =4x8 = 3x4 || 4x6 = 11 3x4 4x4 = 6-11-12 13-8-0 22-8-8 27-9-8 6-11-12 6-8-4 9-0-8 5-1-0 Plate Offsets (X,Y)--[2:0-5-11,0-0-13], [6:0-6-4,0-4-0], [8:0-3-8,0-4-0] LOADING (psf) SPACING-2-0-0 DEFL. (loc) I/defl L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.31 Vert(LL) -0.05 10-13 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.27 Vert(CT) -0.09 10-13 >999 240

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

0.03

0.02 10-13

16

n/a

>999

1 Row at midpt

n/a

240

Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-8.

Rigid ceiling directly applied or 10-0-0 oc bracing.

Weight: 329 lb

4-13, 6-10, 7-10, 8-16

FT = 20%

LUMBER-

**BCLL** 

BCDL

TOP CHORD 2x6 SP No.1 **BOT CHORD** 2x6 SP No.1

2x4 SP No.2 \*Except\* **WEBS** 8-9,6-10,8-10: 2x6 SP No.1

**OTHERS** 2x4 SP No.2

0.0

10.0

SLIDER Left 2x4 SP No.2 -x 4-5-13

REACTIONS. (size) 2=0-3-8, 16=0-3-8 Max Horz 2=400(LC 12)

Max Uplift 2=-7(LC 12), 16=-143(LC 9)

Max Grav 2=1359(LC 19), 16=1275(LC 2)

Rep Stress Incr

Code IRC2015/TPI2014

YES

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

2-4=-1606/165, 4-6=-1133/237, 6-7=-469/136, 7-8=-468/136 **BOT CHORD** 2-14=-466/1223, 13-14=-466/1223, 10-13=-275/800

**WEBS**  $4-14=0/388,\, 4-13=-580/272,\, 6-13=-94/776,\, 6-10=-597/228,\, 7-10=-507/264,\, 6-10=-597/228,\, 7-10=-507/264,\,$ 

8-10=-354/1194, 8-16=-1276/336

# NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-1 to 3-3-12, Interior(1) 3-3-12 to 13-8-0, Exterior(2) 13-8-0 to 19-10-11, Interior(1) 19-10-11 to 27-3-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

WB

Matrix-S

0.86

- Provide adequate drainage to prevent water ponding.
- 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 30.0psf 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.
- 5) Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb)
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord



January 21,2021



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Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334471 J1220-5661 PIGGYBACK BASE A06 2 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:30 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExIrbuZyFiSD-KcvKx?5KXsx?W8HYLsZ8Gh9X7\_TrhZrynz7wLuzt6aF 13-<u>8-0</u> 23-0-0 32-4-0 6-8-4 Scale = 1:78.8 2x4 || 4x6 = 8x8 = 8x8 =10.00 12 a 8 3x4 | 4x6 // 3x6 4 10-10-6 4x4 // . 5. 1. ΓΦ Φ 20 22 16 15 11 3x6 | 19 18 12 3x4 || 13 24 2x4 || 3x10 = 4x12 = 4x6 =4x6 =4x6 = 3x4 II 3x4 II 6-11-12 13-8-0 23-0-0 27-9-8 28<sub>T</sub>1-0 0-3-8 32-4-0 6-11-12 9-4-0 4-9-8 1-11-8 Plate Offsets (X,Y)--[6:0-6-4,0-4-0], [9:0-5-0,0-4-8] LOADING (psf) SPACING-CSI. DEFL. (loc) I/defl L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.22 Vert(LL) -0.04 14-18 >999 360 MT20 244/190

LUMBER-

10.0

0.0

10.0

**TCDL** 

**BCLL** 

BCDL

TOP CHORD 2x6 SP No 1 2x6 SP No.1

**BOT CHORD** 2x4 SP No.2 \*Except\* WFBS 6-14,9-14,10-12: 2x6 SP No.1

SLIDER Left 2x4 SP No.2 -x 4-5-13

Wind(LL) **BRACING-**TOP CHORD

Vert(CT)

Horz(CT)

-0.07 14-18

0.02 14-18

12

0.02

>999

>999

n/a

BOT CHORD

WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9. Rigid ceiling directly applied or 10-0-0 oc bracing.

Weight: 736 lb

FT = 20%

2x4 SPF No.2 - 10-12 T-Brace: 2x6 SPF No.2 - 6-14

240

n/a

240

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 6-6-0 except (jt=length) 2=0-3-8, 13=0-3-8.

Lumber DOL

Rep Stress Incr

Code IRC2015/TPI2014

Max Horz 2=371(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 12 except 11=-607(LC 14),

1.15

NO

BC

WB

Matrix-S

0.18

0.62

13=-230(LC 5)

Max Grav All reactions 250 lb or less at joint(s) except 2=1563(LC 15), 12=1796(LC

2), 12=1277(LC 1), 13=2707(LC 2)

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

TOP CHORD 2-4=-1934/51, 4-6=-1479/140, 6-7=-891/139, 7-9=-892/139

**BOT CHORD** 2-19=-280/1450, 18-19=-280/1450, 14-18=-154/1048

**WEBS** 4-19=0/373, 4-18=-552/210, 6-18=-47/790, 6-14=-366/94, 7-14=-644/226,

9-14=-175/1181, 9-12=-1215/239

## NOTES-

1) 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, 2x6 2 rows staggered at 0-9-0 oc. 2) 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.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 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 30.0psf 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12 except (jt=lb) 11=607, 13=230.
- 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) 2373 lb down and 291 lb up at 27-8-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others

Connuctroling design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 

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Job	Truss	Truss Type	Qty	Ply	Precision/Lot 35 Summerlin/Harnett
11000 5661	406	PIGGYBACK BASE	1		E15334471
J1220-5661	A06	PIGGTBACK BASE		2	Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:30 2021 Page 2 ID:52SygMJAaHxrWTaExIrbuZyFiSD-KcvKx?5KXsx?W8HYLsZ8Gh9X7\_TrhZrynz7wLuzt6aF

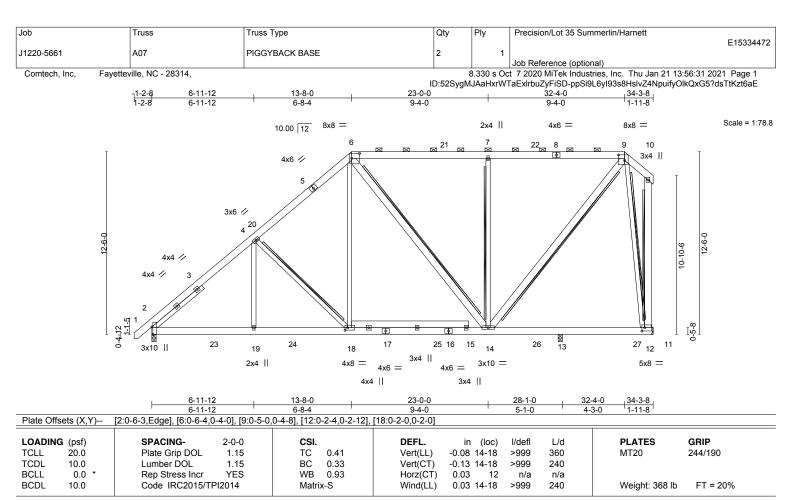
## LOAD CASE(S) Standard

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

Vert: 1-6=-60, 6-9=-60, 9-10=-60, 2-11=-20 Concentrated Loads (lb) Vert: 13=-2081(F)



818 Soundside Road Edenton, NC 27932



LUMBER-

TOP CHORD 2x6 SP No 1 **BOT CHORD** 2x6 SP No.1

2x4 SP No.2 \*Except\* WFBS

6-14,9-14,10-12: 2x6 SP No.1 **SLIDER** Left 2x4 SP No.2 -x 4-5-13

**BRACING-**TOP CHORD

**BOT CHORD** 

**WEBS** 

Structural wood sheathing directly applied or 5-7-13 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9.

Rigid ceiling directly applied or 10-0-0 oc bracing. T-Brace:

2x4 SPF No.2 - 4-18, 7-14, 9-14, 10-12,

9-12 2x6 SPF No.2 - 6-14

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. (size) 2=0-3-8, 12=Mechanical, 13=0-3-8

Max Horz 2=371(LC 12)

Max Uplift 2=-41(LC 12), 12=-163(LC 9)

Max Grav 2=1561(LC 19), 12=1340(LC 2), 13=428(LC 18)

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

TOP CHORD 2-4=-1932/318, 4-6=-1477/394, 6-7=-888/346, 7-9=-888/347 **BOT CHORD** 2-19=-522/1448, 18-19=-522/1448, 14-18=-338/1046

**WEBS** 4-19=0/373, 4-18=-552/261, 6-18=-90/791, 6-14=-370/93, 7-14=-644/319,

9-14=-358/1172, 9-12=-1208/484

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-1 to 3-3-12, Interior(1) 3-3-12 to 13-8-0, Exterior(2) 13-8-0 to 19-10-11, Interior(1) 19-10-11 to 32-4-0, Exterior(2) 32-4-0 to 33-11-4 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) 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 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 12=163
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



January 21,2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334473 ATTIC J1220-5661 A08 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:33 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExlrbuZyFiSD-IBaTa08CqnJaNb071\_6ruJnu2BPVurZOTxLayDzt6aC 6-10-4 6-10-4 9-8-5 10-7-10 13-8-0 2-10-1 0-11-5 3-0-6 22-3-12 8-7-12 27-3-14 27<sub>-</sub>11-4 0-7-6 32-4-0 5-0-2 10.00 12 8x8 = Scale = 1:76.6 4x6 8x8 = 10x10 = 8 10 3x4 || 6x8 / 3x6 =5 19 4x12 || 3x6 II 5x8 / 21 3 3x10 =10-10-6 8-2-4 20 15-0-0 Ø × <sup>26</sup> 12 16 15 11 5x8 // 17 14 13 7x14 M18SHS =  $6x8 = {}_{3x10}$  || 4x12 || 5x8 = 5x8 = 6-10-4 13-8-0 27-11-4 34-3-8 6-10-4 6-9-12 8-7-12 5-7-8 6-4-4 Plate Offsets (X,Y)--[2:0-2-1,0-2-8], [6:0-4-0,0-3-15], [8:0-4-0,0-6-0], [9:0-7-8,0-5-0], [12:0-3-8,0-3-0],[14:0-7-12,0-1-8], [18:0-3-12,0-2-4], [18:0-0-8,0-2-4] SPACING-2-0-0 CSI. DEFL. (loc) I/defl **PLATES** GRIP

LOADING (psf) **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.88 Vert(LL) -0.33 14-17 >999 360 MT20 244/190 TCDL -0.55 14-17 M18SHS 244/190 10.0 Lumber DOL 1.15 BC 0.51 Vert(CT) >601 240

WB **BCLL** 0.0 Rep Stress Incr YES 0.95 Horz(CT) 0.02 12 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) 0.10 14-17 >999 240

**BRACING-**TOP CHORD

Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9.

Weight: 440 lb

FT = 20%

**BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS 1 Row at midpt 4-19, 8-13, 10-12, 9-12 13-18 2 Rows at 1/3 pts

**JOINTS** 1 Brace at Jt(s): 18, 19

Left: 2x4 SP No.3

3-17,4-18,7-14,10-12: 2x6 SP No.1

2x8 SP No 1

2x10 SP 2400F 2 0F

2x4 SP No.2 \*Except\*

(size) 2=0-3-8, 13=0-3-8, 12=Mechanical Max Horz 2=367(LC 12)

Max Uplift 13=-1(LC 8), 12=-80(LC 12)

Max Grav 2=2017(LC 20), 13=1769(LC 27), 12=851(LC 20)

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

TOP CHORD 2-3=-2559/0, 3-4=-1766/63, 4-6=-373/154, 6-7=-253/101, 7-8=-193/304, 8-9=-312/126

BOT CHORD 2-17=-127/1763, 14-17=-127/1763, 13-14=-130/1733

**WEBS**  $3-17=0/1039,\ 4-19=-1852/72,\ 18-19=-1899/374,\ 14-18=0/1861,\ 7-18=-700/316,$ 8-18=-703/364, 9-13=-110/564, 9-12=-570/176, 6-19=-32/307, 7-19=-101/321,

13-18=-2741/127

## NOTES-

LUMBER-

WFBS

WEDGE

TOP CHORD

**BOT CHORD** 

REACTIONS.

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-11 to 3-5-2, Interior(1) 3-5-2 to 13-8-0, Exterior(2) 13-8-0 to 19-10-11, Interior(1) 19-10-11 to 32-4-0, Exterior(2) 32-4-0 to 33-11-4 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 30.0psf 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.
- 7) Ceiling dead load (10.0 psf) on member(s). 3-4, 4-19, 18-19; Wall dead load (5.0psf) on member(s).3-17, 14-18
- 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 14-17
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 12.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Attic room checked for L/360 deflection.



January 21,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTlek® 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, DSB-89 and BCSI Building Component Safety Information

available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Plv Precision/Lot 35 Summerlin/Harnett E15334474 J1220-5661 ATTIC 3 A09 2 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:35 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExlrbuZyFiSD-haiD\_i9TMOalcvAW8P9JzktH2?3pMl8hwFqh05zt6aA 6-10-4 6-10-4 9-8-5 10-7-10 13-8-0 2-10-1 0-11-5 3-0-6 22-3-12 8-7-12 27-3-14 32-4-0 10.00 12 8x8 = Scale = 1:76.6 4x6 = 8x8 = 10x10 = 8 10 3x4 || 6x12 // 3x6 =19 4x12 || 8x12 = 3x6 || 21 ⋬ 3 10-10-6 15-0-0 × <sup>26</sup> 12 16 15 11 5x8 // 17 14 13 7x14 M18SHS =  $6x8 = {}_{3x10} |$ 4x12 || 5x8 = 5x8 = 6-10-4 34-3-8 6-10-4 6-9-12 8-7-12 5-7-8 Plate Offsets (X,Y)--[2:0-2-1,0-2-8], [6:0-4-0,0-3-15], [8:0-4-0,0-6-0], [9:0-7-8,0-5-0], [12:0-3-8,0-3-0], [14:0-7-12,0-1-8], [18:0-4-8,0-2-12]

LOADIN	G (psf)	<b>SPACING-</b> 4-3-0	CSI.	DEFL. in (loc)	I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.59	Vert(LL) -0.33 14-17	>999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.58	Vert(CT) -0.55 14-17	>602 240	M18SHS 244/190
BCLL	0.0 *	Rep Stress Incr NO	WB 0.94	Horz(CT) 0.02 12	n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.10 14-17	>999 240	Weight: 881 lb FT = 20%

**BOT CHORD** 

WFBS

JOINTS

LUMBER-BRACING-TOP CHORD

TOP CHORD 2x8 SP 2400F 2.0E BOT CHORD 2x10 SP 2400F 2 0F WFBS 2x4 SP No.2 \*Except\*

3-17,4-18,7-14,10-12: 2x6 SP No.1, 13-18: 2x4 SP No.1

WEDGE

Left: 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 13=0-3-8, 12=Mechanical

Max Horz 2=781(LC 12)

Max Uplift 13=-50(LC 8), 12=-170(LC 12)

Max Grav 2=4318(LC 20), 13=3629(LC 27), 12=1953(LC 20)

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

TOP CHORD  $2-3 = -5521/0, \ 3-4 = -3799/134, \ 4-6 = -809/320, \ 6-7 = -556/200, \ 7-8 = -430/890, \ 8-9 = -719/273, \ 3-4 = -3799/134, \ 4-6 = -809/320, \ 6-7 = -556/200, \ 7-8 = -430/890, \ 8-9 = -719/273, \ 3-4 = -3799/134, \ 4-6 = -809/320, \ 6-7 = -556/200, \ 7-8 = -430/890, \ 8-9 = -719/273, \ 3-4 = -3799/134, \ 4-6 = -809/320, \ 6-7 = -556/200, \ 7-8 = -430/890, \ 8-9 = -719/273, \ 8-9 = -$ 

10-12=-257/114

**BOT CHORD** 2-17=-268/3802, 14-17=-268/3802, 13-14=-266/3788

**WEBS** 3-17=0/2279, 4-19=-3979/142, 18-19=-4480/844, 14-18=0/3910, 7-18=-1701/716,

8-18=-1787/781, 8-13=-450/534, 9-13=-243/1355, 9-12=-1322/382, 6-19=-42/655,

7-19=-299/1090, 13-18=-5929/242

## NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.

Bottom chords connected as follows: 2x10 - 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.

2) 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.

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

4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-11 to 3-5-2, Interior(1) 3-5-2 to 13-8-0, Exterior(2) 13-8-0 to 19-10-11, Interior(1) 19-10-11 to 32-4-0, Exterior(2) 32-4-0 to 33-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

5) Provide adequate drainage to prevent water ponding.

6) All plates are MT20 plates unless otherwise indicated.

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 30.0psf 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) Ceiling dead load (10.0 psf) on member(s). 3-4, 4-19, 18-19; Wall dead load (5.0psf) on member(s).3-17, 14-18

10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 14-17

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

M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

Design valid for use only with MITEK® connectors. This design is based only upon parameters and roperly incorporate this design in the overall 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

ANSITPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information

available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



2-0-0 oc purlins (6-0-0 max.), except end verticals

Rigid ceiling directly applied or 10-0-0 oc bracing.

10-12, 13-18

(Switched from sheeted: Spacing > 2-8-0).

1 Brace at Jt(s): 6, 9, 18, 10, 19

1 Row at midpt



	Job	Truss	Truss Type	Qty	Ply	Precision/Lot 35 Summerlin/Harnett
				_		E15334474
	J1220-5661	A09	ATTIC	3	2	Job Reference (optional)
ı					_	Job Reference (optional)

Comtech, Inc,

Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:35 2021 Page 2 ID:52SygMJAaHxrWTaExlrbuZyFiSD-haiD\_i9TMOalcvAW8P9JzktH2?3pMl8hwFqh05zt6aA

## NOTES-

- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 12=170.
- 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.



818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Plv Precision/Lot 35 Summerlin/Harnett E15334475 J1220-5661 ATTIC 1 A09-A 2 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:36 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExlrbuZyFiSD-9mGbC2A56ii8E3kii6gYWyPQrPOB5FWq9vaEYXzt6a9 6-10-4 6-10-4 9-8-5 10-7-10 13-8-0 2-10-1 0-11-5 3-0-6 22-3-12 8-7-12 27-3-14 27<sub>-</sub>11-4 0-7-6 32-4-0 Scale = 1:78.6 4x6 = 8x8 = 3x4 || 10.00 12 8x8 = 8x8 = 25 10 6x6 =8x8 / 3x6 = 20 4x12 || 8x12 = 4x6 II 3x6 II 23 3 10-10-6 15-0-0 T

	6-10-4	13-8-0	22-3-12	27-11-4	34-3-8	- 1
	6-10-4	6-9-12	8-7-12	5-7-8	6-4-4	1
Plate Offsets (X,Y) [	[2:0-2-0,0-2-4], [5:0-4-0,Edge]	, [6:0-4-0,0-3-15], [8:0-4-0,0-6-0	0], [9:0-4-0,0-3-15], [14:0-8-0,0-	1-8], [17:0-6-4,0-1-8]	, [18:0-4-8,0-2-12]	

16

7x14 M18SHS =

15

14

T-Brace:

 $8x8 = _{3x10 \ ||}$ 

26

13

5x5 =

2-0-0 oc purlins (6-0-0 max.), except end verticals

Rigid ceiling directly applied or 10-0-0 oc bracing.

Fasten (2X) T and I braces to narrow edge of web with 10d

(0.131"x3") nails, 6in o.c., with 3in minimum end distance.

2x6 SPF No.2 - 13-18

(Switched from sheeted: Spacing > 2-8-0).

Brace must cover 90% of web length.

1 Brace at Jt(s): 6, 9, 18, 19, 10, 20, 21

LOADING (psf)	SPACING- 5-1-8	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.72	Vert(LL) -0.39 14-17 >847 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.70	Vert(CT) -0.66 14-17 >502 240	M18SHS 244/190
BCLL 0.0 *	Rep Stress Incr NO	WB 0.74	Horz(CT) 0.02 12 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.12 14-17 >999 240	Weight: 863 lb FT = 20%

BOT CHORD

WEBS

**JOINTS** 

LUMBER-BRACING-TOP CHORD

17

3x10 ||

TOP CHORD 2x8 SP 2400F 2.0E BOT CHORD 2x10 SP 2400F 2 0F

WFBS 2x4 SP No.2 \*Except\*

3-17,4-18,7-14,10-12,19-20: 2x6 SP No.1, 13-18: 2x4 SP 2400F 2.0E WEDGE

Left: 2x6 SP No.2

REACTIONS. (size) 2=0-3-8, 13=0-3-8, 12=Mechanical

5x12 //

Max Horz 2=941(LC 12)

Max Grav 2=4886(LC 20), 13=6465(LC 2), 12=1446(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  $2\text{-}3\text{=-}6241/0,\ 3\text{-}4\text{=-}4150/0,\ 4\text{-}6\text{=-}758/550,\ 6\text{-}7\text{=-}845/1106,\ 7\text{-}8\text{=-}1541/2847,}$ TOP CHORD

8-9=-346/256, 9-10=-297/432, 12-20=-619/24, 10-20=-287/330

**BOT CHORD** 2-17=-827/4206, 14-17=-827/4206, 13-14=-821/4188, 12-13=-330/316

**WEBS** 3-17=0/2727, 4-21=-4771/101, 18-21=-6277/1709, 14-18=0/4707, 7-18=-2337/1174,

8-18=-2871/1323, 13-19=-854/754, 8-19=-390/990, 9-19=-542/644, 9-20=-465/181,

6-21=-746/1085, 7-21=-867/2181, 13-18=-7879/932, 19-20=-537/457

## NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.

Bottom chords connected as follows: 2x10 - 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. 2) 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.

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

4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-11 to 3-5-2, Interior(1) 3-5-2 to 13-8-0, Exterior(2) 13-8-0 to 19-10-11, Interior(1) 19-10-11 to 32-4-0, Exterior(2) 32-4-0 to 33-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

5) Provide adequate drainage to prevent water ponding.

6) All plates are MT20 plates unless otherwise indicated.

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 30.0psf 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) Ceiling dead load (10.0 psf) on member(s). 3-4, 4-21, 18-21, 19-20; Wall dead load (5.0psf) on member(s). 3-17, 14-18, 13-19

10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 14-17, 12-13

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

Continued on page 2 continued on this and included mitek reference page mil-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MITE-Ke on Notes on This AND INCLUDES WHITE A REPERCE FACE MITE-14/3 fev. \$1920.0 Berche Use. Design valid for use only with MITE-Ke on 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

\*\*ANSITPIT Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\*

available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



11

12

4x6 II

January 21,2021



Job	Truss	Truss Type	Qty	Ply	Precision/Lot 35 Summerlin/Harnett
					E15334475
J1220-5661	A09-A	ATTIC	1	2	Job Reference (optional)
				_	Job Releice (optional)

Comtech, Inc,

Fayetteville, NC - 28314,

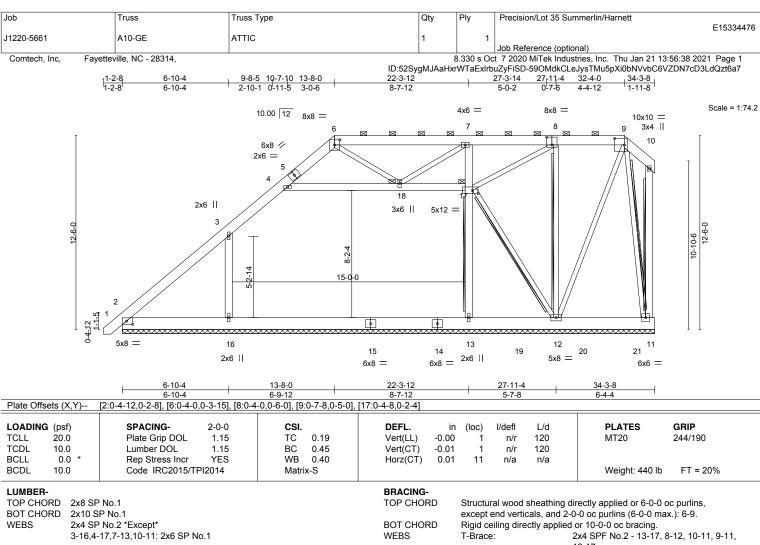
8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:36 2021 Page 2 ID:52SygMJAaHxrWTaExlrbuZyFiSD-9mGbC2A56ii8E3kii6gYWyPQrPOB5FWq9vaEYXzt6a9

## NOTES-

- 13) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- 14) Attic room checked for L/360 deflection.



818 Soundside Road Edenton, NC 27932



**JOINTS** 

12-17

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

1 Brace at Jt(s): 17, 18

REACTIONS. All bearings 34-3-8.

Max Horz 2=533(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 13, 11 except 16=-253(LC 12),

12=-227(LC 9)

Max Grav All reactions 250 lb or less at joint(s) except 2=607(LC 24), 16=1378(LC

20), 13=1295(LC 27), 12=698(LC 1), 11=410(LC 2)

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

TOP CHORD 2-3=-697/25, 3-4=-750/140, 4-6=-514/172

**BOT CHORD** 2-16=-172/426, 13-16=-172/426, 12-13=-173/429

**WEBS** 3-16=-734/385, 17-18=-596/232, 13-17=-480/260, 7-17=-777/327, 8-17=-303/115,

7-18=-43/483, 12-17=-694/271

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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) Provide adequate drainage to prevent water ponding.
- 4) Gable requires continuous bottom chord bearing.
- 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 30.0psf 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.
- 7) Ceiling dead load (10.0 psf) on member(s). 3-4, 4-18, 17-18; Wall dead load (5.0psf) on member(s).3-16, 13-17
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 11 except (jt=lb) 16=253, 12=227.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- 11) Attic room checked for L/360 deflection.



January 21,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE Mil-7473 rev. 5/19/2020 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 chorembers 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, DSB-89 and BCSI Building Component Safety Information

available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334477 J1220-5661 Flat A11 2 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:40 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExlrbuZyFiSD-2XV62PDbAwCajg2TxykUgoaFG0qB1ADQ4XYRhJzt6a5 Scale = 1:16.3 3x10 =2 10 11 5 4x6 = 4 3x10 || 4x6 = 3-2-12 3-2-12 3-2-12 Plate Offsets (X,Y)-- [4:0-1-12,0-2-0], [6:0-1-12,0-2-0]

LOADIN	<b>G</b> (psf) 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.18	DEFL. Vert(LL)	in -0.01	(loc) 5-6	l/defl >999	L/d 360	PLATES MT20	<b>GRIP</b> 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.38	Vert(CT)	-0.02	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.25	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL)	0.01	5-6	>999	240	Weight: 98 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

2-0-0 oc purlins: 1-3, except end verticals.

Rigid ceiling directly applied or 10-0-0 oc bracing.

LUMBER-

TOP CHORD 2x6 SP No 1 BOT CHORD 2x6 SP No.1

2x4 SP No.2 \*Except\* WFBS 1-6,3-4: 2x6 SP No.1

REACTIONS.

(size) 6=Mechanical, 4=Mechanical Max Uplift 6=-211(LC 8), 4=-278(LC 8) Max Grav 6=1725(LC 2), 4=2444(LC 2)

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

TOP CHORD 3-4=-1141/162

BOT CHORD 5-6=-293/1726 4-5=-293/1726

WFBS 2-4=-2084/353, 2-6=-2084/353, 2-5=-195/2012

## NOTES-

- 1) 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.
- 2) 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.
- 3) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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 6-2-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 4) Provide adequate drainage to prevent water ponding.
- 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 30.0psf 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) 6=211, 4=278.
- 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) 1239 lb down and 169 lb up at 5-9-12 on top chord, and 1255 lb down and 163 lb up at 1-9-12, and 1255 lb down and 163 lb up at 3-9-12 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

January 21,2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Salety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Precision/Lot 35 Summerlin/Harnett
14000 5004		Flot	_		E15334477
J1220-5661	A11	Flat	1	2	Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:41 2021 Page 2 ID:52SygMJAaHxrWTaExlrbuZyFiSD-Wk3UFIEDxEKRKqdgVgGjD?7Q0QAQmdTZJBH?Elzt6a4

LOAD CASE(S) Standard Uniform Loads (plf) Vert: 1-3=-60, 4-6=-20 Concentrated Loads (lb) Vert: 9=-1032 10=-1055 11=-1055 Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334478 J1220-5661 B1-GE **GABLE** Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:42 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExlrbuZyFiSD-\_wdtS5FsiYSly\_Cs2NnylDfd?pbAV6QjXq1YmBzt6a3 9-6-0 9-6-0 19-0-0 Scale = 1:51.6 5x5 = 7 8 10.00 12

> 5.00 12 3x6 || 3x6 II 22 9-6-0 19-0-0 9-6-0 9-6-0

5x8 ||

17

16

15

19

20

21

Plate Off	sets (X,Y)	[3:0-2-0,0-2-0], [11:0-2-0,	0-2-0]									
LOADIN	G (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	12	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	13	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TP	PI2014	Matri	x-S						Weight: 154 lb	FT = 20%

**BOT CHORD** 

LUMBER-**BRACING-**TOP CHORD

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

Left 2x4 SP No.2 -x 1-10-12, Right 2x4 SP No.2 -x 1-10-12

4x6 //

REACTIONS. All bearings 19-0-0.

(lb) -Max Horz 2=-264(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 18, 12, 19, 17 except 2=-213(LC 8), 20=-117(LC 12), 21=-117(LC

12), 22=-215(LC 12), 16=-120(LC 13), 15=-115(LC 13), 14=-188(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 12, 19, 20, 21, 22, 17, 16, 15, 14 except 2=300(LC 20),

18=405(LC 13)

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

TOP CHORD 2-3=-340/258, 11-12=-259/177

## NOTES-

SLIDER

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 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 30.0psf 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 12, 19, 17 except (jt=lb) 2=213, 20=117, 21=117, 22=215, 16=120, 15=115, 14=188.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 18, 19, 20, 21, 22, 17, 16, 15, 14.



4x6 🛇

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

January 21,2021



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ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334479 J1220-5661 B2 **SCISSORS** Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:43 2021 Page 1 Comtech, Inc.

5x5 =

9-6-0 9-6-0

ID:52SygMJAaHxrWTaExlrbuZyFiSD-S6BFgRFUTra9a7n2c4lBIQCjkDsDEXSsmUm6ldzt6a2 19-0-0 9-6-0

Scale = 1:53.9

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

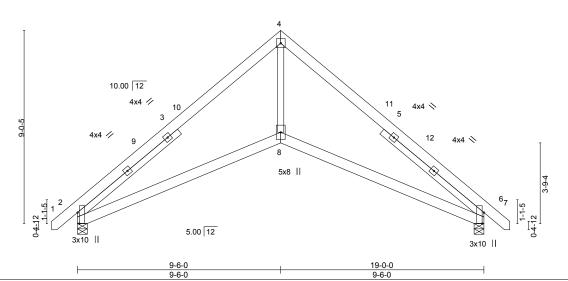


Plate Offsets (X,Y)--[2:0-6-3,Edge], [6:0-6-3,Edge] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defl L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.36 Vert(LL) -0.06 6-8 >999 360 MT20 244/190 TCDL Vert(CT) 10.0 Lumber DOL 1.15 BC 0.29 -0.13 6-8 >999 240 0.0 WB **BCLL** Rep Stress Incr YES 0.21 Horz(CT) 0.05 6 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) -0.04 8 >999 240 Weight: 140 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No.1 **BOT CHORD** 2x6 SP No.1 2x4 SP No 2 WFBS

**SLIDER** Left 2x4 SP No.2 -x 6-2-10, Right 2x4 SP No.2 -x 6-2-10

REACTIONS.

(size) 2=0-5-8, 6=0-5-8 Max Horz 2=-212(LC 10) Max Uplift 2=-46(LC 12), 6=-46(LC 13) Max Grav 2=822(LC 1), 6=822(LC 1)

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

TOP CHORD 2-4=-1228/128, 4-6=-1228/123

**BOT CHORD** 2-8=0/957, 6-8=0/952

WEBS 4-8=0/912

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-1 to 3-3-12, Interior(1) 3-3-12 to 9-6-0, Exterior(2) 9-6-0 to 13-10-13, Interior(1) 13-10-13 to 20-1-1 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 30.0psf 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) Bearing at joint(s) 2, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.





Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334480 J1220-5661 **SCISSORS** 2 B2-A Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:44 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExlrbuZyFiSD-wJldtnG6E9i0BHMFAopQrekuPdClz\_h0?8Wfq4zt6a1

9-6-0 9-6-0

19-0-0 9-6-0

> Scale = 1:53.9 5x5 =

> > Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

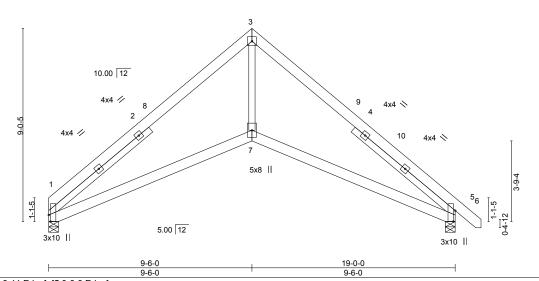


Plate Offsets (X,Y)--[1:0-3-11,Edge], [5:0-6-3,Edge] LOADING (psf) SPACING-CSI. DEFL. (loc) I/defl L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.36 Vert(LL) -0.07 >999 360 MT20 244/190 TCDL Vert(CT) 10.0 Lumber DOL 1.15 BC 0.30 -0.14 1-7 >999 240 0.0 WB 0.22 **BCLL** Rep Stress Incr YES Horz(CT) 0.05 5 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) -0.04 >999 240 Weight: 136 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No.1 **BOT CHORD** 2x6 SP No.1 2x4 SP No 2 WFBS

**SLIDER** Left 2x4 SP No.2 -x 6-2-10, Right 2x4 SP No.2 -x 6-2-10

REACTIONS.

(size) 1=0-5-8, 5=0-5-8 Max Horz 1=-210(LC 10) Max Uplift 1=-28(LC 12), 5=-47(LC 13) Max Grav 1=743(LC 1), 5=824(LC 1)

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

TOP CHORD 1-3=-1234/139, 3-5=-1236/125

**BOT CHORD** 1-7=0/963, 5-7=0/958

**WEBS** 3-7=0/917

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-2 to 4-6-15, Interior(1) 4-6-15 to 9-6-0, Exterior(2) 9-6-0 to 13-10-13, Interior(1) 13-10-13 to 20-1-1 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 30.0psf 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) Bearing at joint(s) 1, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.





Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334481 J1220-5661 ATTIC C1-GE Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:46 2021 Page 1 ID:52SygMJAaHxrWTaExlrbuZyFiSD-shsNITIMmmykRbVdHDruw2qARRmmRonISS?mvyzt6a?

18-3-4 7-11-4 8<sub>-</sub>6-1 2-3-8 0-6-12 15-4-15 15-11<sub>1</sub>12 11-11-8 23-11-0 3-5-7 3-5-7 0-6-12 2-3-8 5-7-12

Scale = 1:79.7

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 8-11-2 oc bracing.

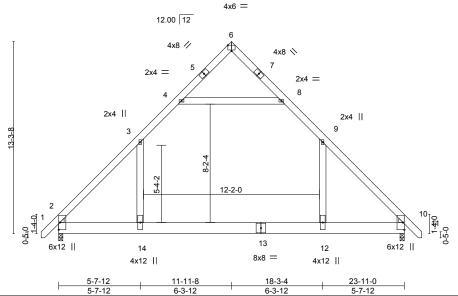


Plate Offsets (X,Y)-- [2:0-1-1,0-3-6], [2:0-0-8,0-0-8], [6:0-3-0,Edge], [10:0-0-8,0-0-8], [10:0-1-1,0-3-6]

LOADING	G (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.58	Vert(LL) -0.28 12-14 >999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.81	Vert(CT) -0.48 12-14 >593 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.63	Horz(CT) 0.01 10 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.13 12-14 >999 240	Weight: 227 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SP No.1 \*Except\*

1-5,7-11: 2x6 SP 2400F 2.0E **BOT CHORD** 2x10 SP No.1

**WEBS** 2x6 SP No.1

WEDGE

Left: 2x4 SP No.2 , Right: 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 10=0-3-8

Max Horz 2=-391(LC 10)

Max Grav 2=1601(LC 20), 10=1601(LC 21)

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

2-3=-2166/4, 3-4=-1166/186, 8-9=-1165/186, 9-10=-2165/3 TOP CHORD

**BOT CHORD** 2-14=0/1268, 12-14=0/1268, 10-12=0/1268 WEBS 9-12=0/1051, 3-14=0/1051, 4-8=-1360/239

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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) 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Ceiling dead load (10.0 psf) on member(s). 3-4, 8-9, 4-8; Wall dead load (5.0psf) on member(s).9-12, 3-14
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14 7) Attic room checked for L/360 deflection.





Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334482 J1220-5661 C2 ATTIC 3 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:47 2021 Page 1 ID:52SygMJAaHxrWTaExlrbuZyFiSD-LuQmWpJ\_X44b2l4prwM7SGMGMq5WAF?Sh6kJRPzt6a\_

Structural wood sheathing directly applied.

Rigid ceiling directly applied or 8-2-13 oc bracing.

18-3-4 7-11-4 8<sub>1</sub>6-1 2-3-8 0-6-12 15-4-15 15-<sub>1</sub>11<sub>t</sub>12 11-11-8 23-11-0 5-7-12 3-5-7 5-7-12

3-5-7 0-6-12 2-3-8

Scale = 1:79.7

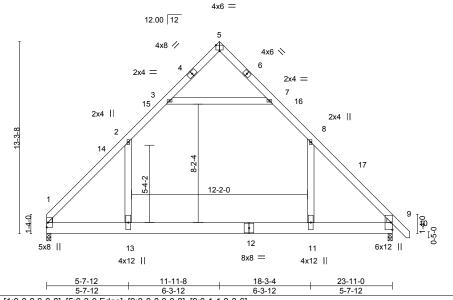


Plate Offsets (X,Y)-- [1:0-1-1,0-3-6], [1:0-0-8,0-0-8], [5:0-3-0,Edge], [9:0-0-8,0-0-8], [9:0-1-1,0-3-6]

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.96	Vert(LL) -0.30 11-13 >936 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.84	Vert(CT) -0.52 11-13 >544 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.63	Horz(CT) 0.01 9 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.10 11-13 >999 240	Weight: 224 lb FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SP No 1 \*Except\* 6-10: 2x6 SP 2400F 2.0E

**BOT CHORD** 2x10 SP No.1 **WEBS** 2x6 SP No.1

WEDGE

Left: 2x4 SP No.2 , Right: 2x4 SP No.2

REACTIONS. (size) 1=0-3-8, 9=0-3-8

Max Horz 1=-309(LC 8)

Max Grav 1=1549(LC 21), 9=1608(LC 21)

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

TOP CHORD 1-2=-2094/0, 2-3=-1164/148, 7-8=-1152/141, 8-9=-2143/0

1-13=0/1237, 11-13=0/1237, 9-11=0/1237 **BOT CHORD** WEBS 8-11=0/1061, 2-13=0/984, 3-7=-1374/163

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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 11-11-8, Exterior(2) 11-11-8 to 16-4-5, Interior(1) 16-4-5 to 25-0-2 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Ceiling dead load (10.0 psf) on member(s). 2-3, 7-8, 3-7; Wall dead load (5.0psf) on member(s).8-11, 2-13
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- 7) Attic room checked for L/360 deflection.



January 21,2021



Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334483 J1220-5661 С3 ATTIC 6 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:49 2021 Page 1 ID:52SygMJAaHxrWTaExlrbuZyFiSD-HGYWwUKF2hKII2ECzLPbYhSbQenUe9Ql8QDQVHzt6Zy

Structural wood sheathing directly applied.

Rigid ceiling directly applied or 7-6-8 oc bracing.

18-3-4 7-11-4 8<sub>-</sub>6-1 2-3-8 0-6-12 15-4-15 15-11<sub>1</sub>12 11-11-8 23-11-0 3-5-7 3-5-7 0-6-12 2-3-8

Scale = 1:79.7

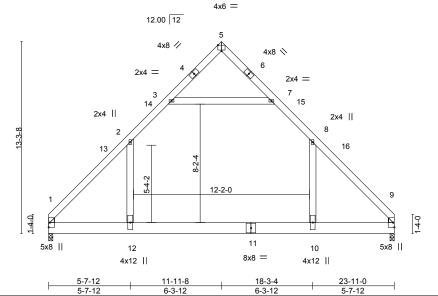


Plate Offsets (X,Y)-- [1:0-1-1,0-3-6], [1:0-0-8,0-0-8], [5:0-3-0,Edge], [9:0-0-8,0-0-8], [9:0-1-1,0-3-6]

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	<b>DEFL</b> . in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.98	Vert(LL) -0.33 10-12 >869 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.88	Vert(CT) -0.56 10-12 >502 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.63	Horz(CT) 0.01 9 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.11 10-12 >999 240	Weight: 220 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SP No 1 BOT CHORD 2x10 SP No.1 WFBS 2x6 SP No.1

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. (size) 1=0-3-8, 9=0-3-8

Max Horz 1=302(LC 9)

Max Grav 1=1551(LC 21), 9=1551(LC 20)

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

TOP CHORD 1-2=-2096/0, 2-3=-1155/148, 7-8=-1154/148, 8-9=-2095/0

**BOT CHORD**  $1-12=0/1226,\ 10-12=0/1226,\ 9-10=0/1226$ **WEBS** 8-10=0/994, 2-12=0/994, 3-7=-1375/166

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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 11-11-8, Exterior(2) 11-11-8 to 16-4-5, Interior(1) 16-4-5 to 23-9-4 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Ceiling dead load (10.0 psf) on member(s). 2-3, 7-8, 3-7; Wall dead load (5.0psf) on member(s).8-10, 2-12
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
- 7) Attic room checked for L/360 deflection.



January 21,2021



Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334484 J1220-5661 C4 ATTIC GIRDER 2 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:50 2021 Page 1 ID:52SygMJAaHxrWTaExlrbuZyFiSD-IT6u8qLtp?T9wCpOW3wq4u\_r529pNfXuN4zz1jzt6Zx

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

15-11-12 14-11-10 18-3-4 3-0-2 1-0-1 2-3-8 7-11-4 8-11-6 11-11-8 2-3-8 1-0-1 3-0-2 23-11-0

Scale = 1:80.3

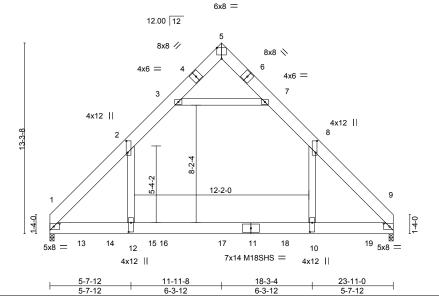


Plate Offsets (X,Y)-- [1:0-4-13,0-2-8], [2:0-9-12,0-1-4], [5:0-4-0,Edge], [8:0-9-12,0-1-4], [9:0-4-13,0-2-8], [10:0-7-12,0-2-0], [12:0-7-12,0-2-0]

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.67	Vert(LL) -0.28 10-12 >999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.68	Vert(CT) -0.53 10-12 >537 240	M18SHS 244/190
BCLL	0.0 *	Rep Stress Incr NO	WB 0.38	Horz(CT) 0.02 9 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.17 10-12 >999 240	Weight: 546 lb FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x10 SP 2400F 2.0E BOT CHORD 2x10 SP 2400F 2.0E

WFBS 2x6 SP No 1

REACTIONS. (size) 1=0-3-8, 9=0-3-8

Max Horz 1=296(LC 25) Max Uplift 1=-319(LC 9)

Max Grav 1=6989(LC 2), 9=5997(LC 2)

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

1-2=-7801/108, 2-3=-3338/69, 3-5=-129/1537, 5-7=-28/1263, 7-8=-3612/175, TOP CHORD

8-9=-7484/0

BOT CHORD 1-12=0/4427, 10-12=0/4470, 9-10=0/4432 **WEBS** 8-10=0/5228, 2-12=-224/6048, 3-7=-6388/189

# NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.

Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-6-0 oc. Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.

2) 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.

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

4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60

5) All plates are MT20 plates 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 30.0psf 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). 2-3, 7-8, 3-7; Wall dead load (5.0psf) on member(s).8-10, 2-12 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1 = 319
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1320 lb down and 183 lb up at 2-0-12, 1320 lb down and 183 lb up at 4-0-12, 747 lb down and 100 lb up at 6-0-12, 1719 lb down and 213 lb up at 7-9-8, 1719 lb down and 213 lb up at 11-10-8, and 1402 lb down at 16-3-0, and 1723 lb down and 208 lb up at 22-1-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) Attic room checked for L/360 deflection.

## LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





Job	Truss	Truss Type	Qty	Ply	Precision/Lot 35 Summerlin/Harnett
		ATTIC 010000			E15334484
J1220-5661	C4	ATTIC GIRDER	1	2	Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:50 2021 Page 2 ID:52SygMJAaHxrWTaExlrbuZyFiSD-IT6u8qLtp?T9wCpOW3wq4u\_r529pNfXuN4zz1jzt6Zx

## 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=-80, 3-5=-60, 5-7=-60, 7-8=-80, 8-9=-60, 1-12=-20, 10-12=-40, 9-10=-20, 3-7=-20

Drag: 8-10=-10, 2-12=-10

Concentrated Loads (lb)

Vert: 13=-1222(B) 14=-1222(B) 15=-607(B) 16=-1395(B) 17=-1395(B) 18=-969(B) 19=-1400(B)



818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334485 J1220-5661 D1-SG **GABLE** Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:51 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExlrbuZyFiSD-DfgGLAMVaJb0XMOb4mR3d6X8SSes6CN2ckiXZAzt6Zw 5-0-0 5-0-0 10-0-0 11-2-8 5-0-0 Scale = 1:29.0 4x4 = 5 6 8.00 12 0-4-8 13 12 11 10 3x4 =3x4 3x10 || 3x10 || 5-0-0 10-0-0 5-0-0 5-0-0 Plate Offsets (X,Y)--[2:0-0-0,0-0-12], [8:0-0-0,0-0-12] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defl L/d **PLATES GRIP TCLL** 20.0 Plate Grip DOL 1.15 TC 0.12 Vert(LL) 0.01 13 >999 240 MT20 244/190 TCDL Vert(CT) 10.0 Lumber DOL 1.15 BC 0.11 -0.01 10-11 >999 240

Horz(CT)

BRACING-

TOP CHORD

**BOT CHORD** 

0.00

8

n/a

n/a

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

Weight: 72 lb

FT = 20%

LUMBER-

**BCLL** 

**BCDL** 

TOP CHORD 2x6 SP No 1 BOT CHORD 2x6 SP No.1 2x4 SP No 2 OTHERS

0.0

10.0

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS.

(size) 2=0-3-8, 8=0-3-8 Max Horz 2=121(LC 11)

Max Uplift 2=-108(LC 12), 8=-108(LC 13) Max Grav 2=462(LC 1), 8=462(LC 1)

Rep Stress Incr

Code IRC2015/TPI2014

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

TOP CHORD 2-3=-423/391, 3-4=-367/422, 4-5=-290/336, 5-6=-290/336, 6-7=-367/422, 7-8=-423/391 **BOT CHORD**  $2-13 = -211/273,\ 12-13 = -211/273,\ 11-12 = -211/273,\ 10-11 = -211/273,\ 8-10 = -211/273$ 

YES

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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

WB

Matrix-S

0.03

- 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) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 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 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=108, 8=108.



January 21,2021



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334486 J1220-5661 D2 COMMON 4 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:52 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExlrbuZyFiSD-hrEfZWM7Lcjt9WzneTyl9J4lcryWre0BqOS46czt6Zv 5-0-0 5-0-0 10-0-0 5-0-0 Scale = 1:29.0 4x4 = 3 8.00 12 10 0-4-8 6 2x4 || 3x4 = 3x4 3x10 || 3x10 || 5-0-0 10-0-0 5-0-0 5-0-0 Plate Offsets (X,Y)--[2:0-0-0,0-0-12], [4:0-0-0,0-0-12] LOADING (psf) SPACING-CSI. DEFL. (loc) I/defl L/d **PLATES GRIP TCLL** 20.0 Plate Grip DOL 1.15 TC 0.16 Vert(LL) 0.01 4-6 >999 240 MT20 244/190 TCDL Vert(CT) 10.0 Lumber DOL 1.15 BC 0.21 -0.01 2-6 >999 240 0.0 WB 0.07 **BCLL** Rep Stress Incr YES Horz(CT) 0.00 n/a n/a **BCDL** 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 65 lb FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SP No 1 BOT CHORD 2x6 SP No.1 2x4 SP No.2 WFBS

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 4=0-3-8

Max Horz 2=97(LC 11) Max Uplift 2=-62(LC 9), 4=-62(LC 8)

Max Grav 2=462(LC 1), 4=462(LC 1)

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

2-3=-438/417, 3-4=-438/417 **BOT CHORD** 2-6=-214/278, 4-6=-214/278

WEBS 3-6=-305/230

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 5-0-0, Exterior(2) 5-0-0 to 9-4-13, Interior(1) 9-4-13 to 11-0-15 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 30.0psf 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) 2, 4.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.



Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334487 J1220-5661 D3 COMMON Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:53 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExlrbuZyFiSD-92o1msNl6wrkngYzCBTXiXcTaFl1a5FK32Bee2zt6Zu 5-0-0 5-0-0 10-0-0 Scale = 1:28.6 4x4 = 8.00 12 5 <sup>3</sup> 8 0-10-10 0-10-10 4 2x4 || 3x4 =3x4 =3x10 || 3x10 || 5-0-0 10-0-0 5-0-0

Plate Offsets (X,Y)	[1:0-0-0,0-0-12], [3:0-0-0,0-0-12]

LOADING TCLL	<b>G</b> (psf) 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.14	DEFL. Vert(LL)	in 0.01	(loc) 1-4	l/defl >999	L/d 240	PLATES MT20	<b>GRIP</b> 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.20	Vert(CT)	-0.01	1-4	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.07	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S						Weight: 59 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SP No 1 BOT CHORD 2x6 SP No.1 2x4 SP No.2 WFBS

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. (size) 1=0-3-8, 3=0-3-8

Max Horz 1=-89(LC 10)

Max Uplift 1=-56(LC 9), 3=-56(LC 8) Max Grav 1=388(LC 1), 3=388(LC 1)

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

1-2=-452/429, 2-3=-452/429 TOP CHORD **BOT CHORD** 1-4=-245/294, 3-4=-245/294

**WEBS** 2-4=-309/235

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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 5-0-0, Exterior(2) 5-0-0 to 9-4-13, Interior(1) 9-4-13 to 9-10-4 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 30.0psf 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.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.



Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334488 J1220-5661 M1 ROOF SPECIAL 3 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:54 2021 Page 1 ID:52SygMJAaHxrWTaExlrbuZyFiSD-dELP\_CONtEzbOq7Alu\_mEk9cJfeMJN8UlixBAVzt6Zt

Structural wood sheathing directly applied or 5-2-1 oc purlins,

Rigid ceiling directly applied or 7-1-3 oc bracing.

except end verticals.

5-9-11 5-9-11 12-5-0

Scale = 1:40.2

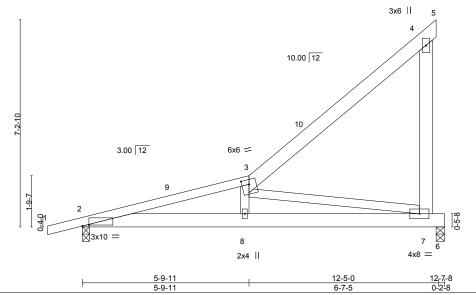


Plate Offsets (X,Y)-- [2:0-2-12,0-0-7], [3:0-3-0,0-2-0]

LOADIN	\( \( \)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	I/defl L/		GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.27	Vert(LL) -0	0.04 8	>999 36	) MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.25	Vert(CT) -0	0.09 7-8	>999 24	)	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.79	Horz(CT) (	0.01 6	n/a n/	a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) (	0.09 7-8	>999 24	Weight: 86 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No.1 \*Except\* 3-5: 2x6 SP No.1

**BOT CHORD** 2x6 SP No.1 **WEBS** 2x4 SP No.2 \*Except\*

4-7: 2x6 SP No.1

REACTIONS.

(size) 2=0-3-0, 6=0-3-8 Max Horz 2=225(LC 12)

Max Uplift 2=-182(LC 8), 6=-178(LC 9) Max Grav 2=578(LC 1), 6=481(LC 1)

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

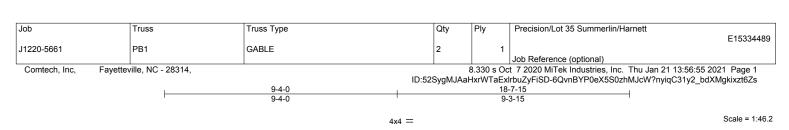
TOP CHORD 2-3=-1260/945, 4-7=-259/190 **BOT CHORD** 2-8=-1158/1186, 7-8=-1119/1170 WEBS 3-8=-353/280, 3-7=-1151/1093

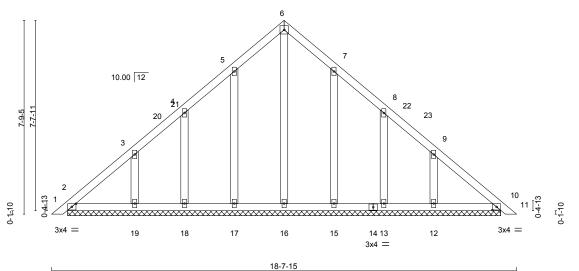
## NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 12-4-0 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
- 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 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=182, 6=178.









	10110											
Plate Offsets (X,Y) [2:0-2-1,0-1-8], [7:0-0-0,0-0-0], [8:0-0-0,0-0-0], [9:0-0-0,0-0-0], [10:0-2-1,0-1-8]												
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	10	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	11	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code IRC2015/T	PI2014	Matri	x-S						Weight: 106 lb	FT = 20%

18-7-15

LUMBER-TOP CHORD **BOT CHORD** 

OTHERS

2x4 SP No 1

2x4 SP No.1 2x4 SP No.2 **BRACING-**

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 17-4-8.

(lb) -Max Horz 2=-182(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 17, 18, 19, 15, 13, 12

Max Grav All reactions 250 lb or less at joint(s) 2, 16, 17, 18, 10, 19, 15, 13, 12

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=130mph (3-second gust) Vasd=103mph; 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 9-4-0, Exterior(2) 9-4-0 to 13-8-12, Interior(1) 13-8-12 to 18-5-3 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) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 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 30.0psf 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 17, 18, 19, 15, 13, 12,
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.





Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334490 PB2 12 J1220-5661 **PIGGYBACK** Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:56 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExlrbuZyFiSD-acT9OuQePrDJe7GYtJ1EK9EyASH\_nPdnl0QIFNzt6Zr 9-4-0 18-7-15 Scale = 1:46.2 4x4 = 10.00 12 2-6-2 2x4 || 2x4 5 0-1-10 3v4 = 3x4 =11 16 10 9 17 8 3x4 = 2x4 || 2x4 || 2x4 || 18-7-15

Plate Offsets (X,Y)--[2:0-2-1,0-1-8], [5:0-0-0,0-0-0], [6:0-2-1,0-1-8]

LOADIN	G (psf)	SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	5	TC	0.31	Vert(LL)	-0.00	7	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	5	BC	0.37	Vert(CT)	-0.00	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr YES	3	WB	0.22	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matri	x-S						Weight: 79 lb	FT = 20%

18-7-15

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 17-4-8.

(lb) -Max Horz 2=-182(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 11=-187(LC 12), 8=-187(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 6 except 10=624(LC 19), 11=558(LC 19), 8=557(LC 20)

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

**WEBS** 3-11=-463/320, 5-8=-463/320

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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 9-4-0, Exterior(2) 9-4-0 to 13-8-12, Interior(1) 13-8-12 to 18-5-3 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 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 11=187, 8=187.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.





Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334491 PB3 3 J1220-5661 **PIGGYBACK** Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:57 2021 Page 1 Comtech, Inc.

ID:52SygMJAaHxrWTaExlrbuZyFiSD-2p1YcDQGA9LAFHrkR1YTsNn7vseBWrAw\_g9rnpzt6Zq 14-1-8

9-4-0 4-9-8

4x4 =

Scale = 1:46.1

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

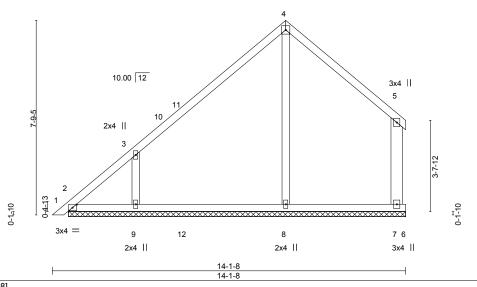


Plate Offsets (X,Y)--[2:0-2-1,0-1-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defl L/d **PLATES GRIP TCLL** 20.0 Plate Grip DOL 1.15 TC 0.31 Vert(LL) -0.00 120 MT20 244/190 n/r TCDL 10.0 Lumber DOL 1.15 ВС 0.31 Vert(CT) -0.00 120 n/r WB 0.26 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.00 n/a n/a **BCDL** 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 69 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-TOP CHORD 2x4 SP No.1

BOT CHORD 2x4 SP No.1 WFBS

2x6 SP No.1 **OTHERS** 2x4 SP No.2

REACTIONS. All bearings 13-5-12.

(lb) - Max Horz 2=176(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 7, 2 except 9=-187(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 2 except 7=306(LC 20), 8=647(LC 19), 9=575(LC 19)

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

**WEBS** 4-8=-285/67, 3-9=-481/339

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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 9-4-0, Exterior(2) 9-4-0 to 13-9-4 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 30.0psf 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2 except (jt=lb) 9 = 187
- 6) Non Standard bearing condition. Review required.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.





Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334492 PB4 J1220-5661 **PIGGYBACK** Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:58 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExlrbuZyFiSD-W?bwpZRuxST1tRQx\_k3iPaKJxGqQFG?3DKvOJGzt6Zp 18-7-15 Scale = 1:46.2 6x8 || 10.00 12 2x6 || 2x6 | |

Plate Offsets (X,Y)	[2:Edge,0-0-4],	[5:0-0-0,0-0-0], [6:0-0-0,0-0-4]

4x8 =

0-1-10

LOADIN	G (psf)	SPACING-	5-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.00	7	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	0.00	6	n/r	120		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.42	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2	2014	Matri	x-S						Weight: 114 lb	FT = 20%

10

2x4 ||

18-7-15

**BRACING-**LUMBER-

11

2x4 ||

TOP CHORD 2x8 SP No 1 BOT CHORD 2x4 SP No.1 2x4 SP No.2 TOP CHORD 2-0-0 oc purlins (6-0-0 max.)

9

3x6 =

(Switched from sheeted: Spacing > 2-8-0). **BOT CHORD** Rigid ceiling directly applied or 7-2-13 oc bracing.

8

2x4 ||

REACTIONS. All bearings 16-4-13.

(lb) -Max Horz 2=442(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 6 except 2=-207(LC 8), 11=-473(LC 12), 8=-463(LC 13) Max Grav All reactions 250 lb or less at joint(s) except 2=384(LC 20), 10=1466(LC 19), 11=1332(LC 19), 8=1332(LC 20), 6=311(LC 1)

14

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

TOP CHORD 2-3=-548/363, 3-4=-627/458, 4-5=-588/466, 5-6=-415/185 **BOT CHORD** 2-11=-95/311, 10-11=-94/290, 8-10=-94/290, 6-8=-79/300

**WEBS** 4-10=-505/6, 3-11=-1111/786, 5-8=-1113/785

# NOTES-

OTHERS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-11 to 4-10-7, Interior(1) 4-10-7 to 9-4-0, Exterior(2) 9-4-0 to 13-8-12, Interior(1) 13-8-12 to 18-2-4 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 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=207, 11=473, 8=463.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



0-1-10

4x8 =



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information

available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334493 J1220-5661 VA1 **GABLE** Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:56:59 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExlrbuZyFiSD-\_B9I1vSWimbuVb?7YSaxxosXOgN3\_p7DR\_eyrizt6Zo 5-9-14 5-9-14 11-7-13 5-9-15 Scale = 1:34.6 3x4 = 4

5 12.00 12 3x4 📏 11 10 9 8

Plate Off	ate Offsets (X,Y) [4:0-2-0,Edge]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TI	PI2014	Matri	x-S						Weight: 56 lb	FT = 20%

11-7-13

**BRACING-**

TOP CHORD

**BOT CHORD** 

TOP CHORD 2x4 SP No 1

BOT CHORD 2x4 SP No.1

2x4 SP No.2 OTHERS

REACTIONS. All bearings 11-7-13.

(lb) -Max Horz 1=-164(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 10=-109(LC 12), 11=-160(LC 12), 9=-105(LC 13),

8=-161(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 11, 8 except 10=298(LC 19), 9=293(LC 20)

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

# NOTES-

LUMBER-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; 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) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 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 30.0psf 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 10=109, 11=160, 9=105, 8=161.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

January 21,2021



Edenton, NC 27932

Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334494 J1220-5661 VA2 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:57:00 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExlrbuZyFiSD-SOjgEFT8T4jl6laJ695AU?Pfw4icjGBMgeOVO8zt6Zn Scale = 1:31.1 4x4 = 12.00 12 3x4 // 4 3x4 N 2x4 || 9-2-14 9-2-14

LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TF	PI2014	Matri	ix-S						Weight: 38 lb	FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1

2x4 SP No.2 **OTHERS** 

(size) 1=9-2-14, 3=9-2-14, 4=9-2-14

Max Horz 1=-102(LC 8)

Max Uplift 1=-25(LC 13), 3=-25(LC 13)

Max Grav 1=194(LC 1), 3=194(LC 1), 4=296(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=130mph (3-second gust) Vasd=103mph; 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 30.0psf 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) 1, 3.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE Mil-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Edenton, NC 27932

Job Truss Truss Type Qty Ply Precision/Lot 35 Summerlin/Harnett E15334495 J1220-5661 VA3 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Jan 21 13:57:01 2021 Page 1 Comtech, Inc. ID:52SygMJAaHxrWTaExlrbuZyFiSD-waG2SbTmENrbku9WgscP1Dys2T4ASj2WvI73wbzt6Zm 2-11-7 2-11-7 5-10-14 2-11-7 Scale = 1:20.9 4x4 = 12.00 12 3x4 // 3x4 📏 2x4 ||

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-P						Weight: 23 lb	FT = 20%

5-10-14 5-10-14

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS.

(size) 1=5-10-14, 3=5-10-14, 4=5-10-14

Max Horz 1=-62(LC 8)

Max Uplift 1=-23(LC 13), 3=-23(LC 13)

Max Grav 1=127(LC 1), 3=127(LC 1), 4=163(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=130mph (3-second gust) Vasd=103mph; 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 30.0psf 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) 1, 3.



Structural wood sheathing directly applied or 5-10-14 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE Mil-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



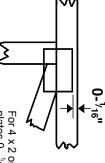
Edenton, NC 27932

# Symbols

# PLATE LOCATION AND ORIENTATION



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



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

connector plates required direction of slots in This symbol indicates the

\* Plate location details available in MiTek 20/20 software or upon request

# PLATE SIZE

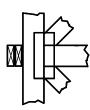
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

# LATERAL BRACING LOCATION



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

# **BEARING**



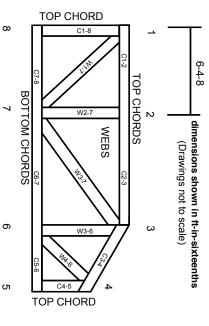
Min size shown is for crushing only number where bearings occur. reaction section indicates joint (supports) occur. Icons vary but Indicates location where bearings

# Industry Standards:

National Design Specification for Metal Building Component Safety Information Installing & Bracing of Metal Plate Connected Wood Trusses. Guide to Good Practice for Handling Design Standard for Bracing. Plate Connected Wood Truss Construction.

DSB-89: ANSI/TPI1:

# 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-1311, ESR-1352, ESR1988 ER-3907, ESR-2362, ESR-1397, ESR-3282

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

established by others. section 6.3 These truss designs rely on lumber values Lumber design values are in accordance with ANSI/TPI 1

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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

# **General Safety Notes**

# Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ Truss bracing must be designed by an engineer. For bracing should be considered. may require bracing, or alternative Tor I wide truss spacing, individual lateral braces themselves
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

ω

designer, erection supervisor, property owner and all other interested parties. Provide copies of this truss design to the building

4

- Cut members to bear tightly against each other
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.

ტ 5

- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication

œ

- 9 Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted
- Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.



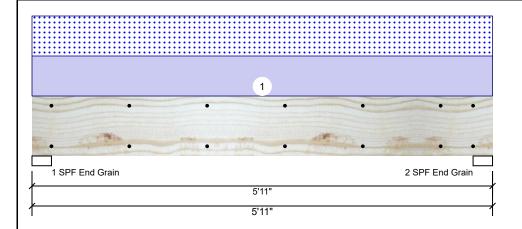
1/21/2021 Input by:

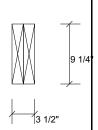
Neal Baggett Job Name: LOT 35 SUMMERLIN

Project #:

1.750" X 9.250" 2-Ply - PASSED **Kerto-S LVL** BM1

Level: Level





Page 1 of 10

## Member Information

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal - II
Temperature:	Temp <= 100°F

Application: Design Method: ASD **Building Code: IBC/IRC 2015** Load Sharing: No Deck: Not Checked

Read	Reactions UNPATTERNED lb (Uplift)													
Brg	Live	Dead	Snow	Wind	Const									
1	0	1764	1742	0	0									
2	0	1764	1742	0	0									

# **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4550 ft-lb	2'11 1/2"	14423 ft-lb	0.315 (32%)	D+S	L
Unbraced	4550 ft-lb	2'11 1/2"	11027 ft-lb	0.413 (41%)	D+S	L
Shear	2370 lb	11 1/2"	7943 lb	0.298 (30%)	D+S	L
LL Defl inch	0.035 (L/1894)	2'11 1/2"	0.139 (L/480)	0.250 (25%)	S	L
TL Defl inch	0.071 (L/941)	2'11 1/2"	0.185 (L/360)	0.380 (38%)	D+S	L

# **Bearings**

Bearing Length	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
1 - SPF 3.000" End Grain	38% 1764 / 1742	3506 L	D+S
2 - SPF 3.000" End Grain	38% 1764 / 1742	3506 L	D+S

# **Design Notes**

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

		3 1 7									
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
1	Uniform			Ton	589 PLF	0 PI F	589 PLF	0 PLF	0 PLF	A02	

Self Weight 7 PLF

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive

# Handling & Installation

- LVL beams must not be cut or drilled
  Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

  2 Damaged Beams must not be used
- Danaged Beams must not be used
  Design assumes top edge is laterally restrained
  Provide lateral support at bearing points to avoid
  lateral displacement and rotation
- For flat roofs provide proper drainage to prevent ponding

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info

Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS



Client: Project: Address: Date: 1/21/2021 Input by:

Neal Baggett Job Name: LOT 35 SUMMERLIN

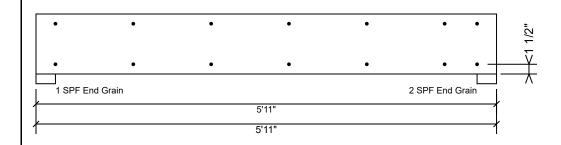
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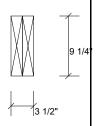
**Kerto-S LVL** BM1

1.750" X 9.250"

2-Ply - PASSED

Level: Level





Page 2 of 10

# Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

# Notes

NOtes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive

# Handling & Installation

- Handling & Installation

  1. UVI beams must not be cut or drilled

  2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

  3. Damaged Beams must not be used

  4. Design assumes top edge is laterally restrained

  5. Provide lateral support at bearing points to avoid lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

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Manufacturer Info

Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS





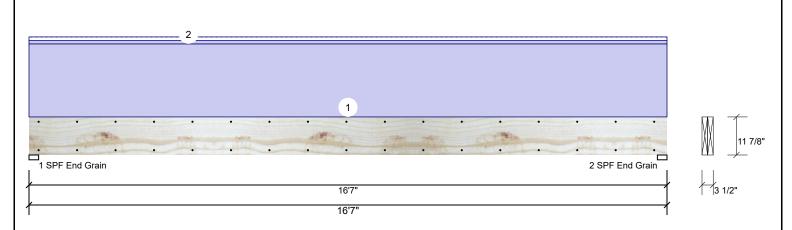
Date: 1/21/2021

Input by: Neal Baggett Job Name: LOT 35 SUMMERLIN Page 3 of 10

Project #:

1.750" X 11.875" 2-Ply - PASSED **Kerto-S LVL GDH** 

Level: Level



Member Inforn	nation						Reaction	ns UNPAT	TERNED	lb (Uplift)			
Type:	Girder		Application	n:	Floor		Brg	Live	Dead	Snow	١	Wind	Const
Plies:	2		Design Me	ethod:	ASD		1	0	1901	83		0	0
Moisture Condition:	: Dry		Building C	ode:	BC/IRC 2015		2	0	1901	83		0	0
Deflection LL:	480		Load Shar	ring:	No								
Deflection TL:	360		Deck:		Not Checked								
Importance:	Normal - II												
Temperature:	Temp <= 100°F												
							Bearing	s					
							Bearing	Length	Cap. R	React D/L lb	Total	Ld. Case	Ld. Comb.
							1 - SPF	3.000"	22%	1901 / 83	1984	L	D+S
							End						
Analysis Result	s						Grain						
Analysis Act	ual Loc	ation /	Allowed	Capacity	Comb.	Case	2 - SPF	3.000"	22%	1901 / 83	1984	L	D+S
Moment 752	28 ft-lb 8'	3 1/2"	17919 ft-lb	0.420 (429	%) D	Uniform	End Grain						

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	7528 ft-lb	8'3 1/2"	17919 ft-lb	0.420 (42%)	D	Uniform
Unbraced	7856 ft-lb	8'3 1/2"	7862 ft-lb	0.999 (100%)	D+S	L
Shear	1631 lb	15'4 7/8"	7980 lb	0.204 (20%)	D	Uniform
LL Defl inch	0.017 (L/11572)	8'3 9/16"	0.405 (L/480)	0.040 (4%)	S	L
TL Defl inch	0.402 (L/484)	8'3 9/16"	0.540 (L/360)	0.740 (74%)	D+S	L

# **Design Notes**

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only. 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 12'4 1/2" o.c.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
1	Uniform			Тор	210 PLF	0 PLF	0 PLF	0 PLF	0 PLF	C1-GE	
2	Tie-In	0-0-0 to 16-7-0	0-6-0	Тор	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	RAKE OH	
	Self Weight				9 PLF						

# Notes

NOtes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- Informing & Installation

  I. VIL beams must not be cut or drilled

  Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

  Damaged Beams must not be used

  Design assumes top edge is laterally restrained

  Design assumes top edge is laterally restrained is provide lateral support at bearing points to avoid lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info

Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS



This design is valid until 11/27/2023 CSD DESIGN

Client: Project: Address:

1/21/2021 Input by: Neal Baggett

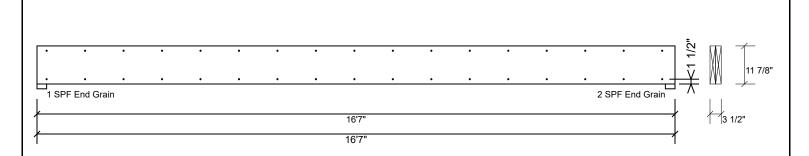
Job Name: LOT 35 SUMMERLIN

Page 4 of 10

Project #:

1.750" X 11.875" 2-Ply - PASSED **Kerto-S LVL GDH** 

Level: Level



# Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

		•
Capacity	0.0 %	
Load	0.0 PLF	
Yield Limit per Foot	163.7 PLF	
Yield Limit per Fastener	81.9 lb.	
Yield Mode	IV	
Edge Distance	1 1/2"	
Min. End Distance	3"	
Load Combination		
Duration Factor	1.00	

# Notes

NOtes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive

# Handling & Installation

- Handling & Installation

  1. UVI beams must not be cut or drilled

  2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

  3. Damaged Beams must not be used

  4. Design assumes top edge is laterally restrained

  5. Provide lateral support at bearing points to avoid lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

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Manufacturer Info

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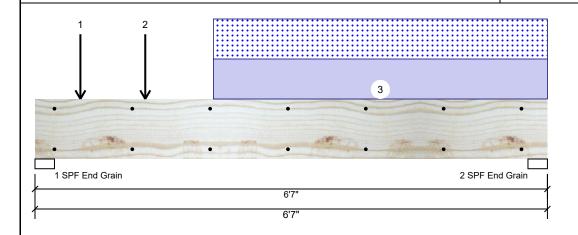
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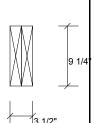
Neal Baggett Job Name: LOT 35 SUMMERLIN

Project #:

1.750" X 9.250" 2-Ply - PASSED **Kerto-S LVL** BM4

Level: Level





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# Member Information

Type: Plies: 2 Moisture Condition: Dry Deflection LL: 480 Deflection TL: 360 Importance: Normal - II Temperature: Temp <= 100°F

Application: Floor Design Method: ASD **Building Code: IBC/IRC 2015** Load Sharing: No Deck: Not Checked

Reactions UNPATTERNED Ib (Uplift) Brg Live Wind Const Dead Snow 0 1806 1783 0 0 1 2 0 1366 1342 0 0

# Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4163 ft-lb	3'1 3/4"	14423 ft-lb	0.289 (29%)	D+S	L
Unbraced	4163 ft-lb	3'1 3/4"	10370 ft-lb	0.401 (40%)	D+S	L
Shear	2930 lb	11 1/2"	7943 lb	0.369 (37%)	D+S	L
LL Defl inch	0.039 (L/1911)	3'2 11/16"	0.155 (L/480)	0.250 (25%)	S	L
TL Defl inch	0.079 (L/948)	3'2 11/16"	0.207 (L/360)	0.380 (38%)	D+S	L

# **Bearings**

Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1-SPF 3.000" 1806 / 1783 3589 L D+S End Grain 2 - SPF 3.000" 1366 / 1342 2708 L D+S End Grain

# **Design Notes**

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width

1 Laterar 3	icriacificaa fallo baaca oi	i single ply width.									
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
1	Point	0-7-0		Тор	670 lb	0 lb	670 lb	0 lb	0 lb	A05	
2	Point	1-5-0		Тор	781 lb	0 lb	781 lb	0 lb	0 lb	A06	
3	Part. Uniform	2-3-8 to 6-7-0		Тор	390 PLF	0 PLF	390 PLF	0 PLF	0 PLF	A07	
	Self Weight				7 PLF						

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals Damaged Beams must not be used

- Design assumes top edge is laterally restrained
  Provide lateral support at bearing points to avoid
  lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

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Manufacturer Info

Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS



Client: Project: Address: Date: 1/21/2021 Input by:

Neal Baggett Job Name: LOT 35 SUMMERLIN

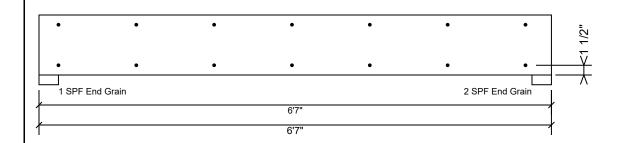
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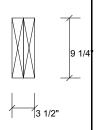
**Kerto-S LVL** BM4

1.750" X 9.250"

2-Ply - PASSED

Level: Level





Page 6 of 10

# Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

# Notes

NOtes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive

# Handling & Installation

- Handling & Installation

  1. UVI beams must not be cut or drilled

  2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

  3. Damaged Beams must not be used

  4. Design assumes top edge is laterally restrained

  5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

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Manufacturer Info

Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS





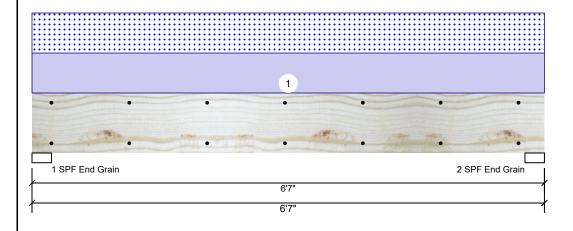
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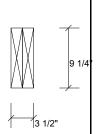
Neal Baggett Job Name: LOT 35 SUMMERLIN

Project #:

1.750" X 9.250" 2-Ply - PASSED Kerto-S LVL BM<sub>2</sub>

Level: Level





Page 7 of 10

# **Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal - II
Temperature:	Temp <= 100°F

Application: Design Method: ASD **Building Code: IBC/IRC 2015** Load Sharing: No Deck: Not Checked

Reaction	ons UNPAT	TERNED IL	(Uplift)		
Brg	Live	Dead	Snow	Wind	Const
1	0	1495	1471	0	0
2	0	1495	1471	0	0

# **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4342 ft-lb	3'3 1/2"	14423 ft-lb	0.301 (30%)	D+S	L
Unbraced	4342 ft-lb	3'3 1/2"	10370 ft-lb	0.419 (42%)	D+S	L
Shear	2103 lb	5'7 1/2"	7943 lb	0.265 (26%)	D+S	L
LL Defl inch	0.040 (L/1861)	3'3 1/2"	0.155 (L/480)	0.260 (26%)	S	L
TL Defl inch	0.081 (L/923)	3'3 1/2"	0.207 (L/360)	0.390 (39%)	D+S	L

# **Bearings**

Bearing	Length	Cap. F	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	32%	1495 / 1471	2966	L	D+S
2 - SPF End Grain	3.000"	32%	1495 / 1471	2966	L	D+S

# **Design Notes**

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Тор	447 PLF	0 PLF	447 PLF	0 PLF	0 PLF	A02

Self Weight 7 PLF

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- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive

# Handling & Installation

LVL beams must not be cut or drilled
Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

2 Damaged Beams must not be used

Danaged Beams must not be used
Design assumes top edge is laterally restrained
Provide lateral support at bearing points to avoid
lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info

Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS



Client: Project: Address: Date: 1/21/2021 Input by:

Neal Baggett Job Name: LOT 35 SUMMERLIN

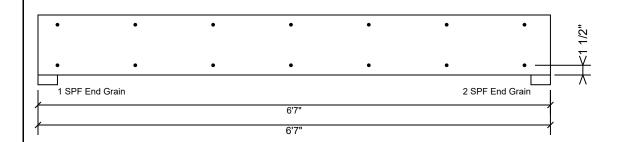
Project #:

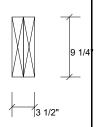
**Kerto-S LVL BM2** 

1.750" X 9.250"

2-Ply - PASSED

Level: Level





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# Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

, ,		`	,
Capacity	0.0 %		
Load	0.0 PLF		
Yield Limit per Foot	163.7 PLF		
Yield Limit per Fastener	81.9 lb.		
Yield Mode	IV		
Edge Distance	1 1/2"		
Min. End Distance	3"		
Load Combination			
Duration Factor	1.00		

# Notes

NOtes

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- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive

# Handling & Installation

- Handling & Installation

  1. UVI beams must not be cut or drilled

  2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

  3. Damaged Beams must not be used

  4. Design assumes top edge is laterally restrained

  5. Provide lateral support at bearing points to avoid lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/27/2023

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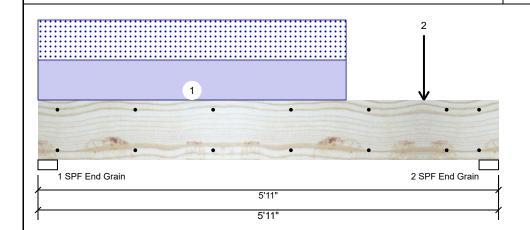
Date: 1/21/2021 Input by: Neal Baggett

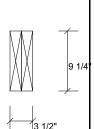
Job Name: LOT 35 SUMMERLIN

Project #:

1.750" X 9.250" 2-Ply - PASSED **Kerto-S LVL** BM<sub>3</sub>

Level: Level





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# Member Information

Type: Plies: 2 Moisture Condition: Dry Deflection LL: 480 Deflection TL: 360 Importance: Normal - II Temp <= 100°F Temperature:

Application: Design Method: ASD **Building Code: IBC/IRC 2015** Load Sharing: No Deck: Not Checked

Reactions UNPATTERNED Ib (Uplift) Brg Live Wind Const Dead Snow 0 1653 1632 0 0 1 2 0 1920 1899 0 0

# **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4395 ft-lb	3' 7/16"	14423 ft-lb	0.305 (30%)	D+S	L
Unbraced	4395 ft-lb	3' 7/16"	11027 ft-lb	0.399 (40%)	D+S	L
Shear	3811 lb	4'11 1/2"	7943 lb	0.480 (48%)	D+S	L
LL Defl inch	0.034 (L/1933)	3' 1/16"	0.139 (L/480)	0.250 (25%)	S	L
TL Defl inch	0.069 (L/961)	3' 1/16"	0.185 (L/360)	0.370 (37%)	D+S	L

# **Bearings**

Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1-SPF 3.000" 1653 / 1632 3286 L D+S End Grain 2 - SPF 3.000" 1920 / 1899 3818 L D+S End Grain

# **Design Notes**

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Part. Uniform	0-0-0 to 3-11-8		Тор	537 PLF	0 PLF	537 PLF	0 PLF	0 PLF	A03
2	Point	4-11-8		Тор	1405 lb	0 lb	1405 lb	0 lb	0 lb	A04
	Self Weight				7 PLF					

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- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive

# Handling & Installation

LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code

approvals

Damaged Beams must not be used

- Design assumes top edge is laterally restrained
  Provide lateral support at bearing points to avoid
  lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/27/2023

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Client: Project: Address: Date: 1/21/2021 Input by: Neal Baggett

Job Name: LOT 35 SUMMERLIN

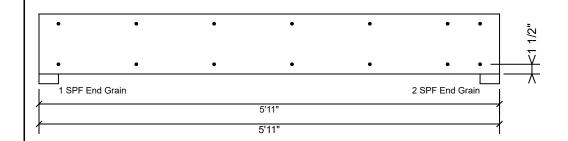
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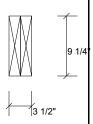
**Kerto-S LVL BM3** 

1.750" X 9.250"

2-Ply - PASSED

Level: Level





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# Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

rusteri un pries using E rows or rou box riuns (: 120x3 ) ut	
Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

# Notes

NOtes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive

# Handling & Installation

- Handling & Installation

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  3. Damaged Beams must not be used

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  5. Provide lateral support at bearing points to avoid lateral displacement and rotation

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