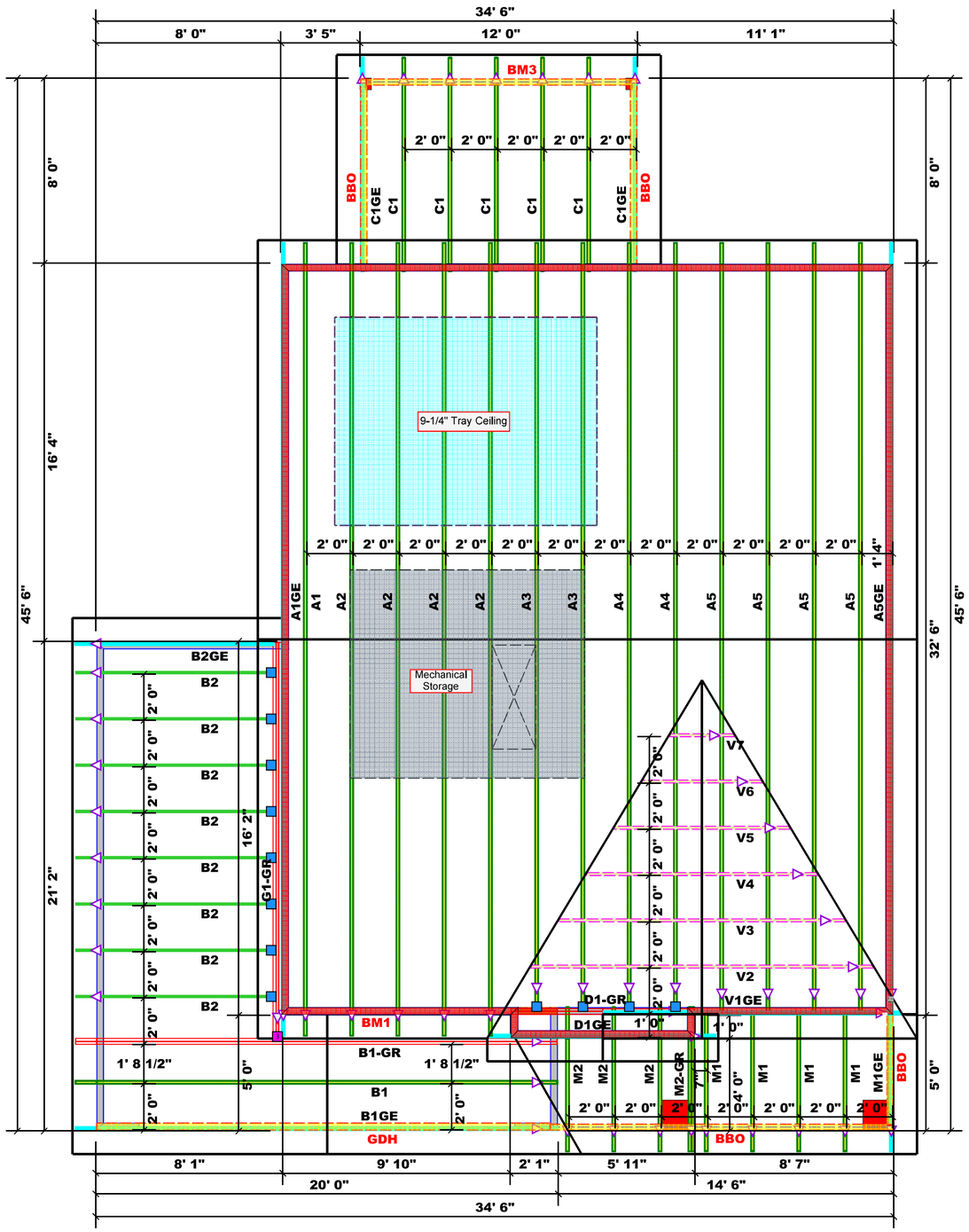


Dimension Notes
1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
2. All interior wall dimensions are to face of frame wall unless noted otherwise
3. All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

All Walls Shown Are Considered Load Bearing

Roof Area = 1692.08 sq.ft.
Ridge Line = 52.07 ft.
Hip Line = 0 ft.
Horiz. OH = 115.69 ft.
Raked OH = 175.3 ft.
Decking = 58 sheets

Hatch Legend
Padded HVAC
2nd Floor Walls
Tray Ceiling
Drop Beam

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
	HUS26	USP	12	NA	16d/3-1/2"	16d/3-1/2"
3	THDH210-3	USP	1	Varies	16d/3-1/2"	16d/3-1/2"

Products				
PlotID	Length	Product	Plies	Net Qty
BM1	12' 0"	1-3/4"x 16" LVL Kerto-S	2	2
BM2	15' 0"	1-3/4"x 16" LVL Kerto-S	2	2
BM3	12' 0"	2x10 SPF No.2	2	2
GDH	20' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2

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

= Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

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

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

Signature David Landry

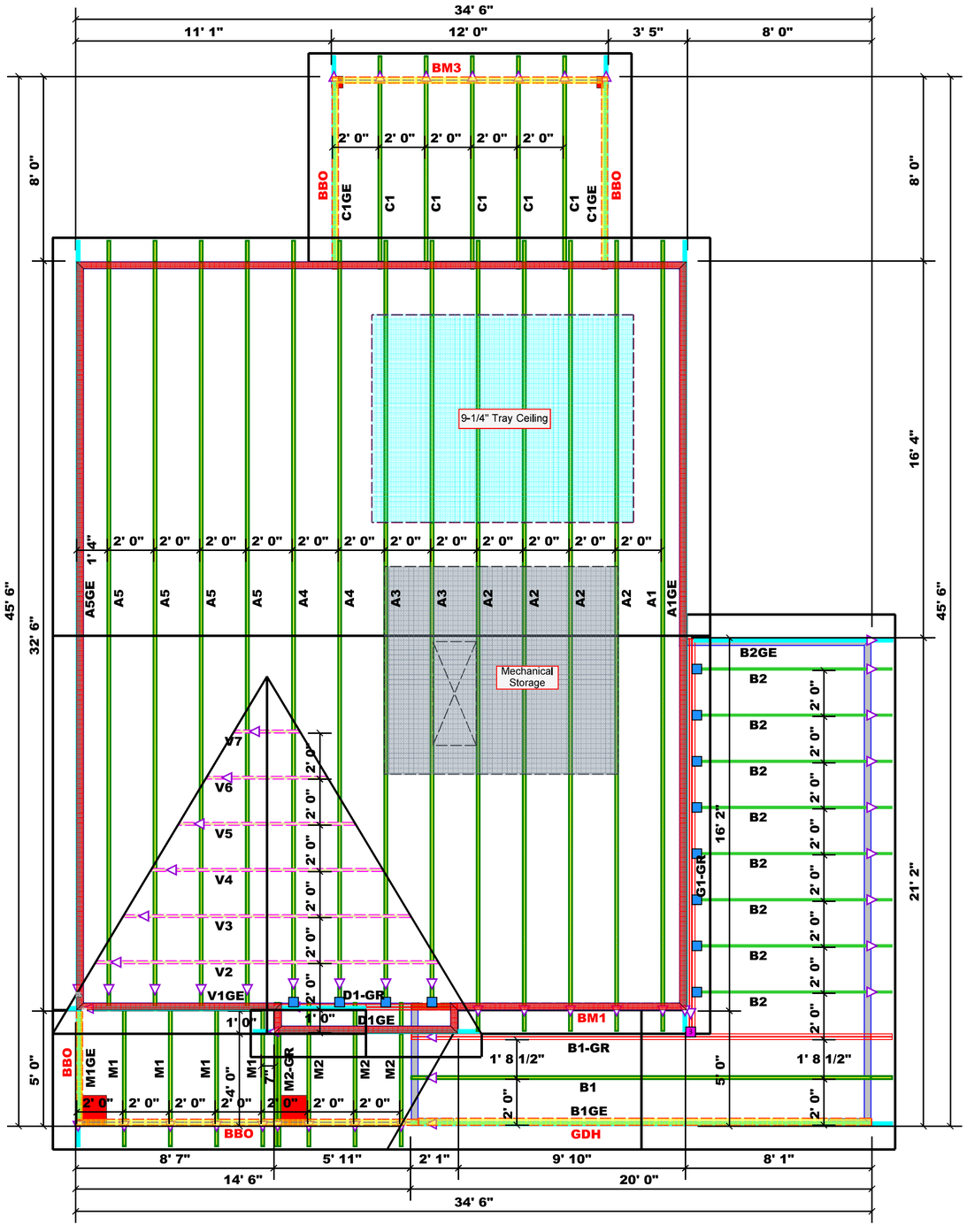
David Landry

LOAD CHART FOR JACK STUDS

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

END REACTION (LB #'S)	REQ'D STUDS FOR (2 PLY) HEADER	END REACTION (LB #'S)	REQ'D STUDS FOR (1) PLY HEADER	END REACTION (LB #'S)	REQ'D STUDS FOR (3) PLY HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

BUILDER	Weaver Development Co. Inc.
JOB NAME	Lot 1 Wire Road
PLAN	Hickory "A"
SEAL DATE	
QUOTE #	
JOB #	J0521-2780
CITY / CO.	Harnett / Harnett
ADDRESS	Lot 1 Wire Road
MODEL	Roof
DATE REV.	05/11/21
DRAWN BY	David Landry
SALES REP.	Lenny Norris



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

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

All Walls Shown Are Considered Load Bearing

Roof Area = 1692.08 sq.ft.
Ridge Line = 52.07 ft.
Hip Line = 0 ft.
Horiz. OH = 115.69 ft.
Raked OH = 175.3 ft.
Decking = 58 sheets

Hatch Legend
Padded HVAC
2nd Floor Walls
Tray Ceiling
Drop Beam

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
	HUS26	USP	12	NA	16d/3-1/2"	16d/3-1/2"
3	THDH210-3	USP	1	Varies	16d/3-1/2"	16d/3-1/2"

Products				
PlotID	Length	Product	Plies	Net Qty
BM1	12' 0"	1-3/4"x 16" LVL Kerto-S	2	2
BM2	15' 0"	1-3/4"x 16" LVL Kerto-S	2	2
BM3	12' 0"	2x10 SPF No.2	2	2
GDH	20' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2

= Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

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

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

Signature David Landry

David Landry

LOAD CHART FOR JACK STUDS

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

END REACTION (LB TOT)	(2) PLY HEADER	END REACTION (LB TOT)	(3) PLY HEADER	END REACTION (LB TOT)	(4) PLY HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

BUILDER	Weaver Development Co. Inc.
JOB NAME	Lot 1 Wire Road
PLAN	Hickory "A"
SEAL DATE	
QUOTE #	
JOB #	J0521-2780
CITY / CO.	Harnett / Harnett
ADDRESS	Lot 1 Wire Road
MODEL	Roof
DATE REV.	05/11/21
DRAWN BY	David Landry
SALES REP.	Lenny Norris

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

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0521-2780
Lot 1 Wire Road

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: E15716428 thru E15716455

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

North Carolina COA: C-0844

May 11,2021

Gilbert, Eric

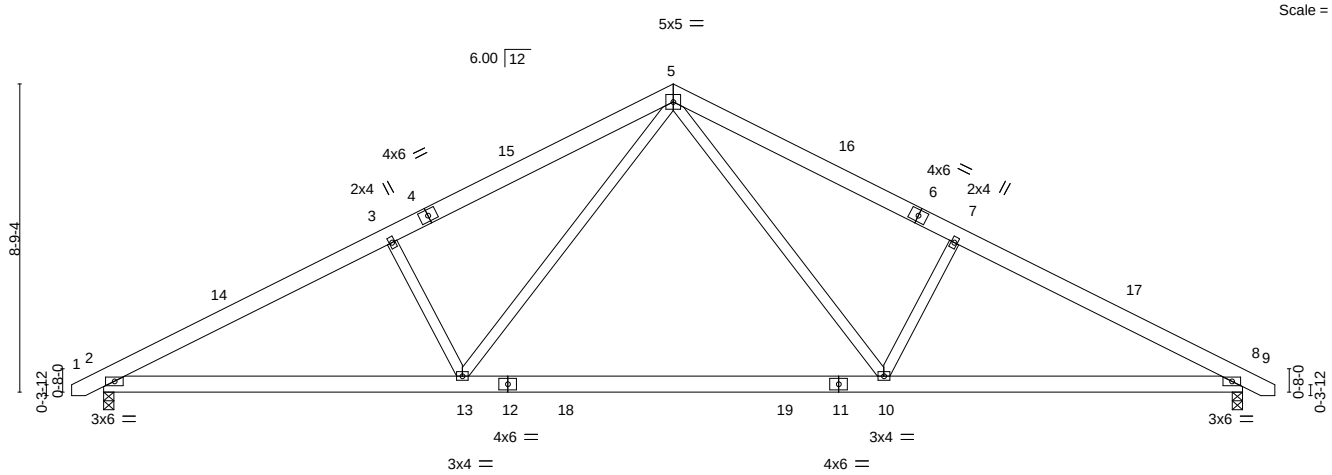
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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	Lot 1 Wire Road
J0521-2780	A1	COMMON	1	1	E15716428
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:35 2021 Page 1
ID:1yUksKympIk2404ufZYCrxyoKUD-lSMIunsTfQzK1AdAR2r4wxX6b5d3RfI6H3e_O3zHaMc

-0-11-0	8-2-8	16-2-8	24-2-8	32-5-0	33-4-0
0-11-0	8-2-8	8-0-0	8-0-0	8-2-8	0-11-0

Scale = 1:61.7



10-2-8	22-2-8	32-5-0
10-2-8	12-0-0	10-2-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.34	10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.47	10-13	>824	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	2-13	>999	240	Weight: 208 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-110(LC 10)
Max Uplift 2=-89(LC 12), 8=-89(LC 13)
Max Grav 2=1337(LC 1), 8=1337(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2307/486, 3-5=-2125/534, 5-7=-2125/534, 7-8=-2307/486
BOT CHORD 2-13=-316/2007, 10-13=-106/1303, 8-10=-320/1964
WEBS 5-10=-147/921, 7-10=-454/288, 5-13=-147/921, 3-13=-454/288

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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 16-2-8, Exterior(2) 16-2-8 to 20-7-5, Interior(1) 20-7-5 to 33-1-10 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 89 lb uplift at joint 2 and 89 lb uplift at joint 8.
6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

May 11,2021

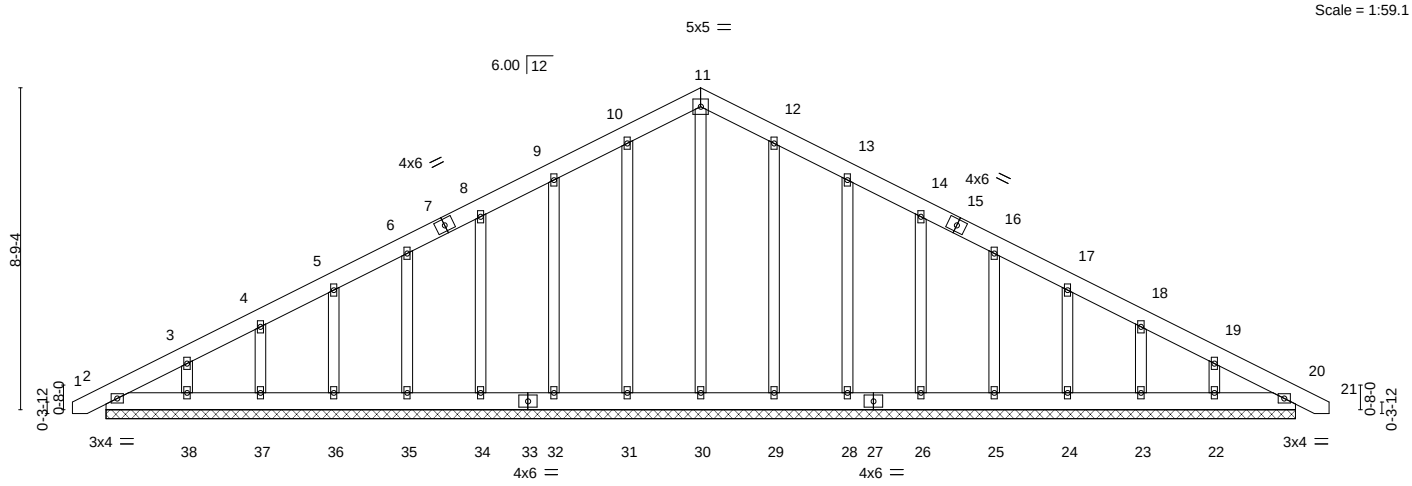
TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	A1GE	COMMON SUPPORTED GAB	1	1	E15716429
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:37 2021 Page 1
ID:1yUksKymplk2404ufZYCrxyoKUD-hqT2JTujB2D2GUmYZTuY?McWtvSKvbTPkN75TyzHaMa

-0-11-0 17-1-8 33-4-0 34-3-0
0-11-0 16-2-8 16-2-8 0-11-0

Scale = 1:59.1



-0-11-0 33-4-0 34-3-0
0-11-0 32-5-0 0-11-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	0.00	20	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	20	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	20	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 258 lb	FT = 20%

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

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

REACTIONS. All bearings 32-5-0.
(lb) - Max Horz 2=-171(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 2, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22
Max Grav All reactions 250 lb or less at joint(s) 2, 30, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22, 20

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 10-11=-114/284, 11-12=-114/284

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) 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) 2, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

May 11,2021

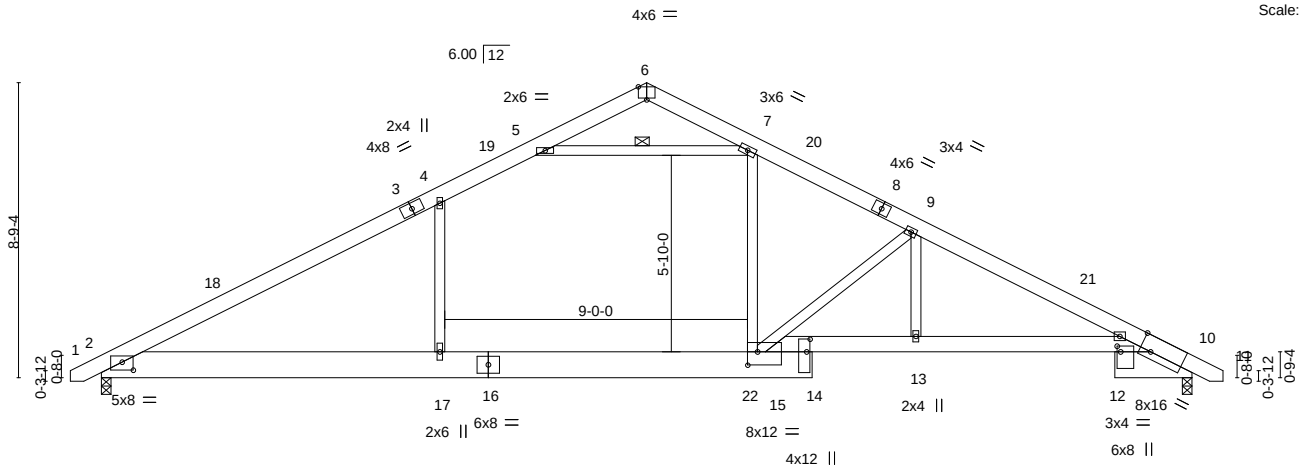
TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	A2	ROOF SPECIAL	4	1	E15716430
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:39 2021 Page 1
ID:1yUksKymplk2404ufZYCrxyoKUD-dDbpj8wzifTmWnwxguw04nhhKj_fNNXhCgcCXqzHaMY

-0-11-0 10-2-8 16-2-8 19-2-8 24-2-8 30-1-8 32-5-0 33-4-0
0-11-0 10-2-8 6-0-0 3-0-0 5-0-0 5-11-0 2-3-8 0-11-0

Scale: 3/16"=1'



10-2-8 16-2-8 19-2-8 21-1-8 24-2-8 30-1-8 32-5-0
10-2-8 6-0-0 3-0-0 1-11-0 3-1-0 5-11-0 2-3-8

Plate Offsets (X,Y)-- [2:0-4-0,0-2-14], [6:0-3-0,Edge], [10:0-4-0,Edge], [12:0-2-0,0-1-4], [14:0-4-8,0-1-4], [15:0-3-8,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.21	17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.38	17	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.17	2-17	>999	240	Weight: 247 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except*
10-15: 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-7

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=-110(LC 10)
Max Uplift 2=-90(LC 12), 10=-90(LC 13)
Max Grav 2=1393(LC 2), 10=1353(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2217/403, 4-5=-1870/483, 7-9=-2258/519, 9-10=-2889/551
BOT CHORD 2-17=-193/1848, 15-17=-195/1860, 13-15=-371/2525, 10-13=-380/2525
WEBS 4-17=-29/402, 7-15=-114/967, 9-15=-1075/232, 9-13=0/616, 5-7=-1955/459

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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 16-2-8, Exterior(2) 16-2-8 to 20-7-5, Interior(1) 20-7-5 to 33-1-10 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) 2, 10.
6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

May 11,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	A3	ROOF SPECIAL	2	1	E15716431
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:40 2021 Page 1
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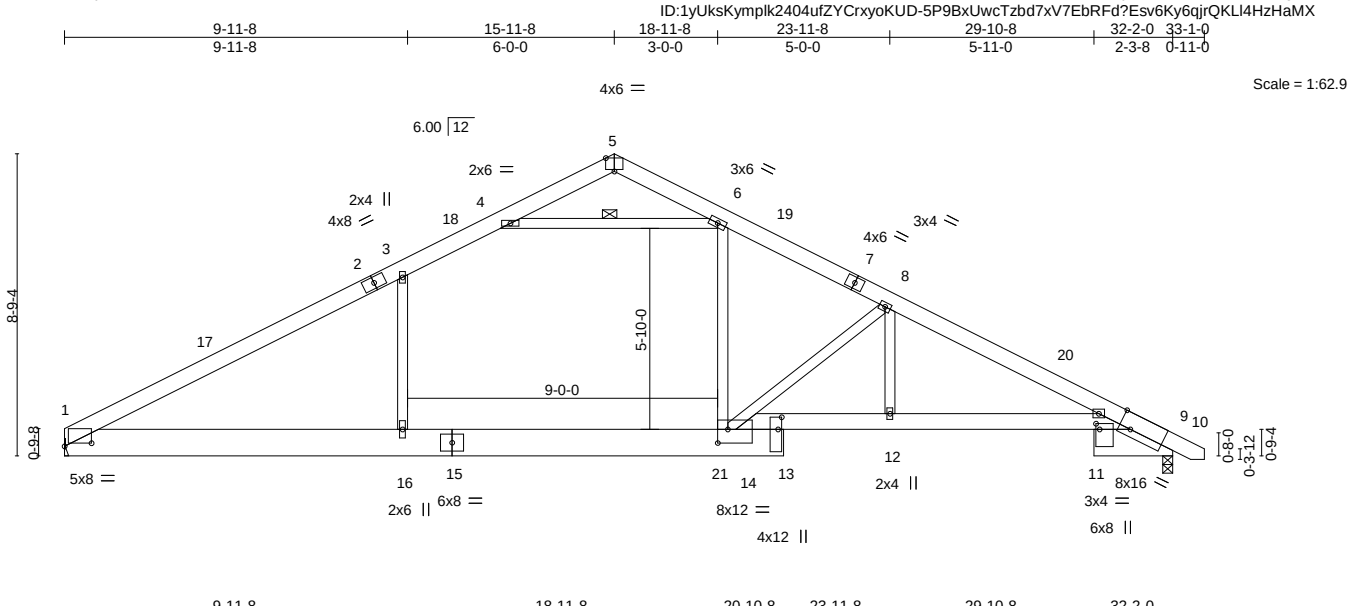

Plate Offsets (X,Y)-- [1:0-9-6,0-1-2], [5:0-3-0,Edge], [9:0-4-0,Edge], [11:0-2-0,0-1-4], [13:0-4-4,0-1-4], [14:0-3-8,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.21	16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.36	16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.16	1-16	>999	240	Weight: 243 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except*
9-14: 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-6

REACTIONS. (size) 1=Mechanical, 9=0-3-8
Max Horz 1=-111(LC 8)
Max Uplift 1=-76(LC 12), 9=-90(LC 13)
Max Grav 1=1345(LC 2), 9=1347(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-2189/401, 3-4=-1853/491, 6-8=-2237/517, 8-9=-2874/549
BOT CHORD 1-16=-198/1827, 14-16=-200/1839, 12-14=-375/2511, 9-12=-384/2511
WEBS 6-14=-117/966, 3-16=-53/392, 4-6=-1931/474, 8-14=-1081/228, 8-12=0/620

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) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 15-11-8, Exterior(2) 15-11-8 to 20-4-5, Interior(1) 20-4-5 to 32-10-10 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9.

May 11,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	A4	COMMON	2	1	E15716432
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:41 2021 Page 1
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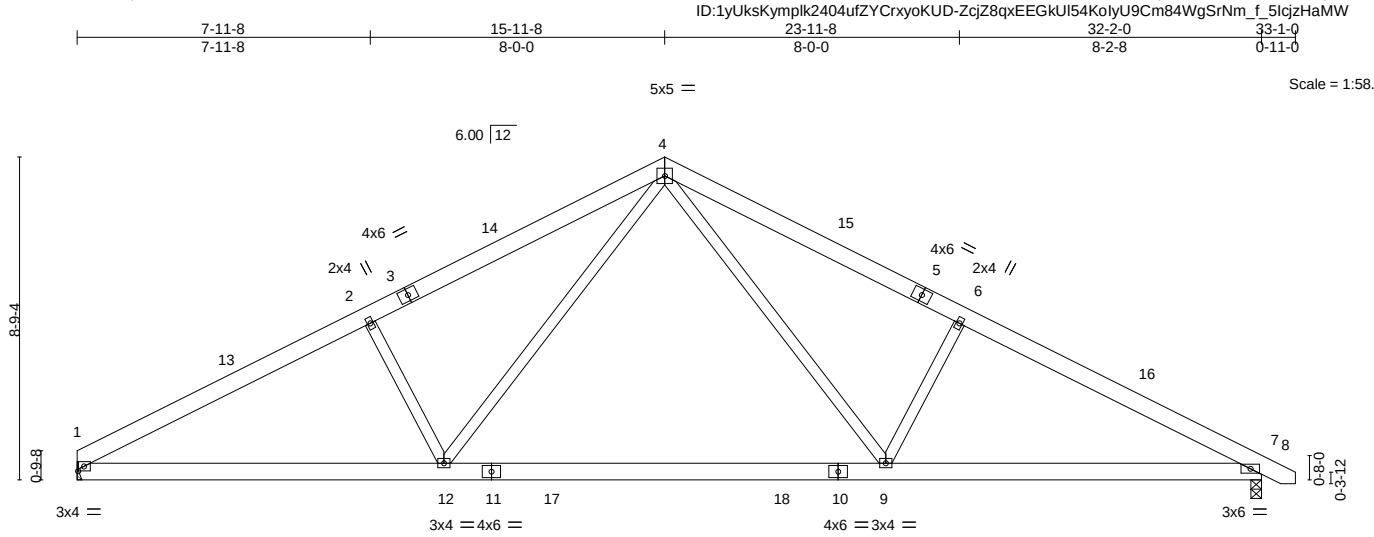

Plate Offsets (X,Y)-- [1:0-1-14,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.34	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.47	9-12	>822	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	12	>999	240	Weight: 204 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=Mechanical, 7=0-3-8
Max Horz 1=-111(LC 8)
Max Uplift 1=-76(LC 12), 7=-89(LC 13)
Max Grav 1=1278(LC 1), 7=1331(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2276/496, 2-4=-2096/546, 4-6=-2113/532, 6-7=-2294/484
BOT CHORD 1-12=-319/1973, 9-12=-109/1291, 7-9=-324/1953
WEBS 4-9=-147/922, 6-9=-454/288, 4-12=-144/897, 2-12=-437/286

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) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 15-11-8, Exterior(2) 15-11-8 to 20-4-5, Interior(1) 20-4-5 to 32-10-10 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.

May 11,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	A5	COMMON	4	1	E15716433
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:41 2021 Page 1
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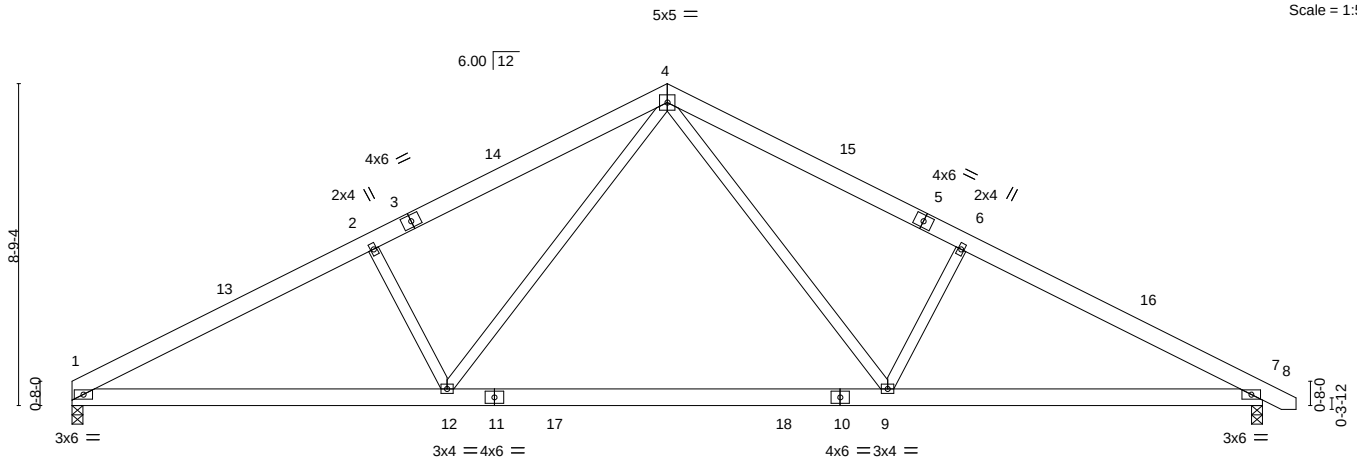
8-2-8 | 16-2-8 | 24-2-8 | 32-5-0 | 33-4-0
8-2-8 | 8-0-0 | 8-0-0 | 8-2-8 | 0-11-0

Scale = 1:59.1



10-2-8 | 22-2-8 | 32-5-0
10-2-8 | 12-0-0 | 10-2-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.34	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.47	9-12	>822	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	12	>999	240	Weight: 206 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=-111(LC 10)
Max Uplift 1=-77(LC 12), 7=-89(LC 13)
Max Grav 1=1284(LC 1), 7=1337(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2310/503, 2-4=-2129/551, 4-6=-2126/535, 6-7=-2308/487
BOT CHORD 1-12=-327/2012, 9-12=-111/1304, 7-9=-326/1966
WEBS 4-9=-147/921, 6-9=-454/288, 4-12=-149/924, 2-12=-458/292

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 16-2-8, Exterior(2) 16-2-8 to 20-7-5, Interior(1) 20-7-5 to 33-1-10 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) 1, 7.

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TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	A5GE	COMMON SUPPORTED GAB	1	1	E15716434
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:43 2021 Page 1
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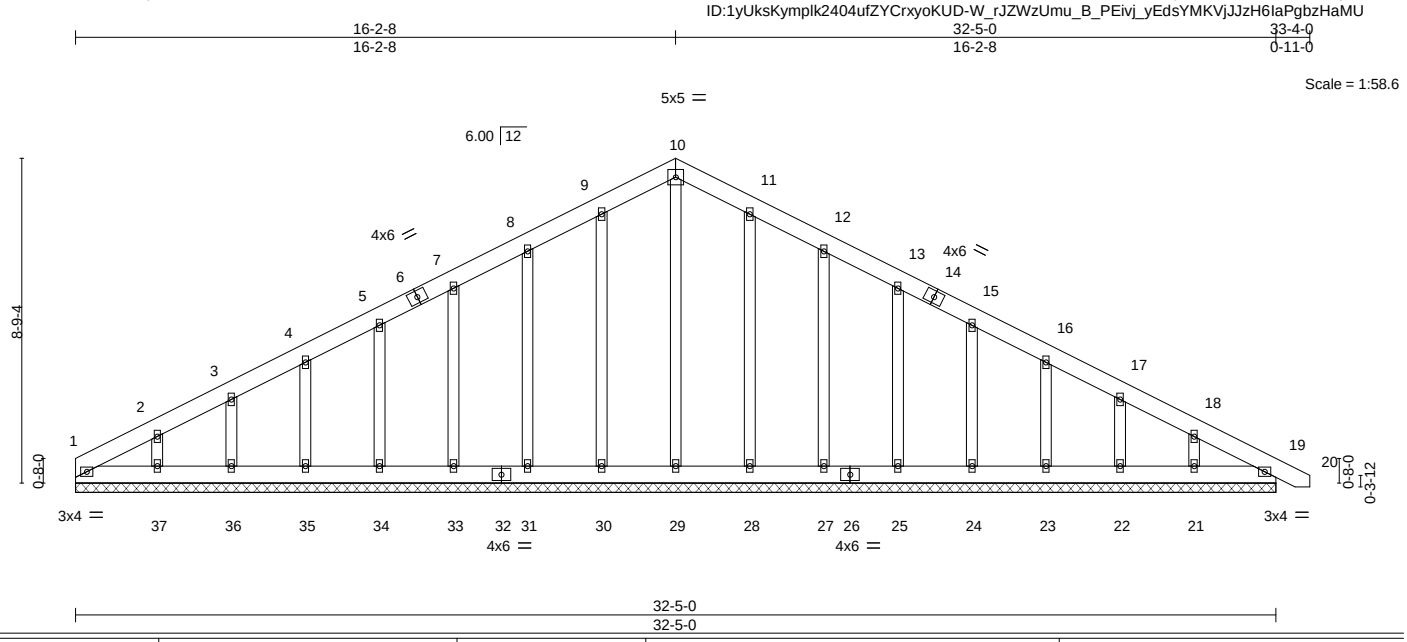

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	0.00	19	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	19	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	19	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 256 lb	FT = 20%

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

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

REACTIONS. All bearings 32-5-0.
(lb) - Max Horz 1=-175(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 1, 30, 31, 33, 34, 35, 36, 28, 27, 25, 24, 23, 22, 21 except 37=-101(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 29, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, 22, 21, 19

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-10=-114/284, 10-11=-114/284

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) 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) 1, 30, 31, 33, 34, 35, 36, 28, 27, 25, 24, 23, 22, 21 except (jt=lb) 37=101.

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TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	B1	COMMON	1	1	E15716435
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:44 2021 Page 1
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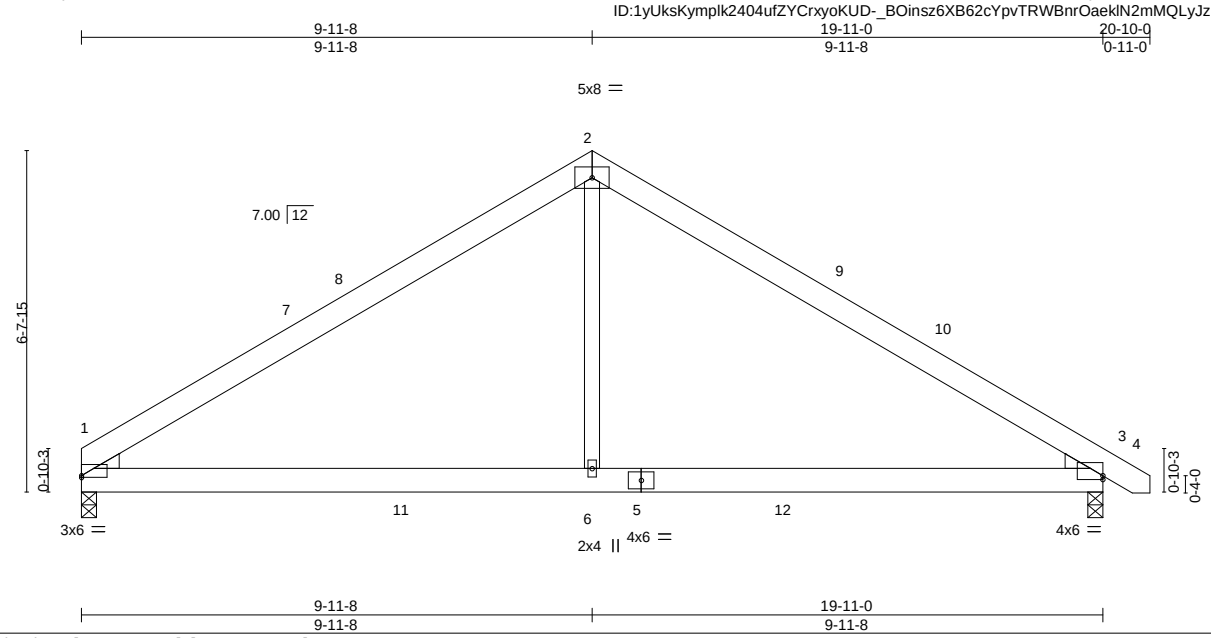

Plate Offsets (X,Y)-- [1:0-0-0,0-0-7], [3:0-0-0,0-0-15]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.06	3-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.13	3-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.02	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.04	3-6	>999	240	Weight: 114 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 3=0-3-8
Max Horz 1=-149(LC 8)
Max Uplift 1=-43(LC 12), 3=-56(LC 13)
Max Grav 1=900(LC 19), 3=951(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1193/217, 2-3=-1221/216
BOT CHORD 1-6=-30/956, 3-6=-30/956
WEBS 2-6=0/660

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 9-11-8, Exterior(2) 9-11-8 to 14-4-5, Interior(1) 14-4-5 to 20-8-0 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) 1, 3.

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TRENCO
818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	B1-GR	COMMON GIRDER	1	2	E15716436
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:46 2021 Page 1
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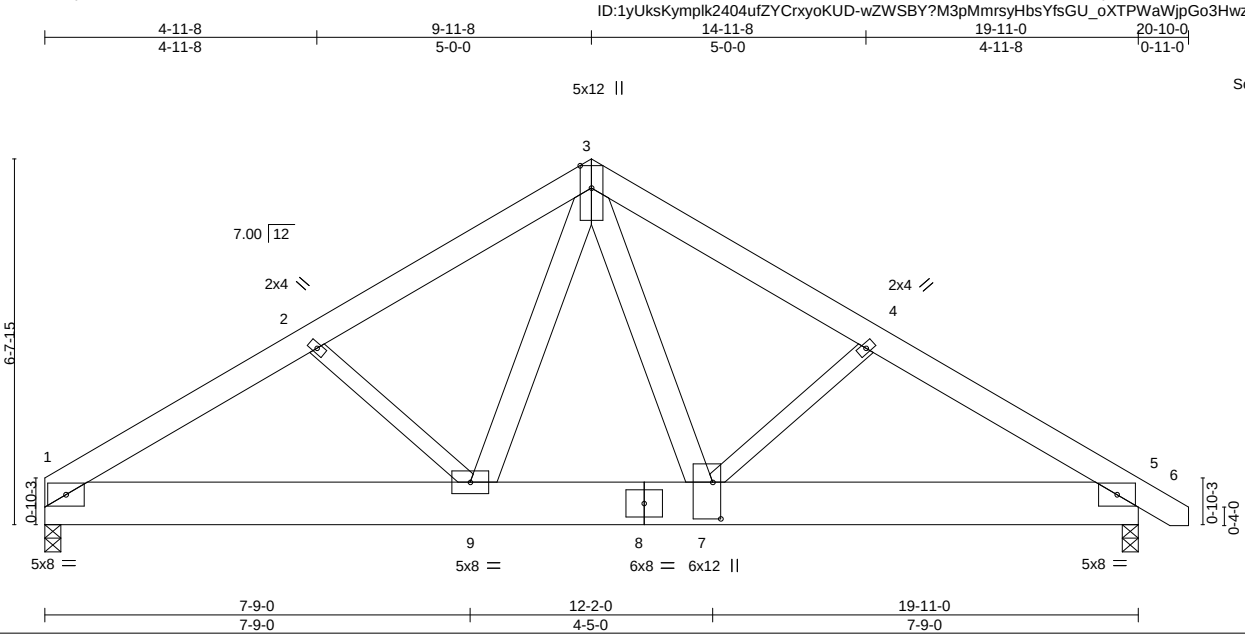

Plate Offsets (X,Y)-- [7:0-8-0,0-1-12]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.07	7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.14	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.55	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	7	>999	240	Weight: 348 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x6 SP No.1 *Except*
4-7,2-9: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=-148(LC 6)
Max Uplift 1=-423(LC 8), 5=-642(LC 9)
Max Grav 1=4234(LC 2), 5=6219(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-7519/795, 2-3=-7422/798, 3-4=-10665/1144, 4-5=-10716/1136
BOT CHORD 1-9=-679/6256, 7-9=-581/6251, 5-7=-887/8935
WEBS 3-7=-953/8888, 4-7=-281/487, 3-9=-44/404, 2-9=-284/309

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: 2x10 - 4 rows staggered at 0-2-0 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); Lumber DOL=1.60 plate grip DOL=1.60
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=423, 5=642.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 9034 lb down and 972 lb up at 12-1-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-6=-60, 1-5=-20
Concentrated Loads (lb)
Vert: 7=-7520(B)

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TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	B1GE	COMMON SUPPORTED GAB	1	1	E15716437
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:45 2021 Page 1
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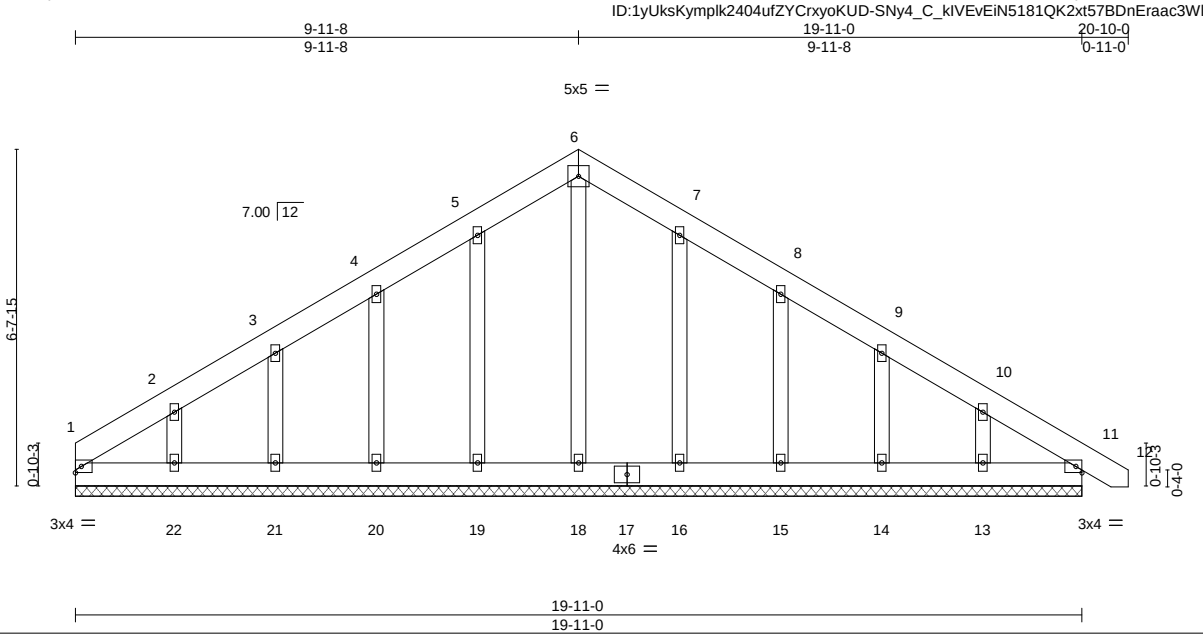

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	0.00	11	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	11	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 146 lb	FT = 20%

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

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

REACTIONS. All bearings 19-11-0.
(lb) - Max Horz 1=-186(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 19, 20, 21, 16, 15, 14, 11 except 22=-116(LC 12), 13=-103(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 18, 19, 20, 21, 22, 16, 15, 14, 13, 11

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) 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) 1, 19, 20, 21, 16, 15, 14, 11 except (jt=lb) 22=116, 13=103.

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TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	B2	JACK-CLOSED	8	1	E15716438
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:47 2021 Page 1
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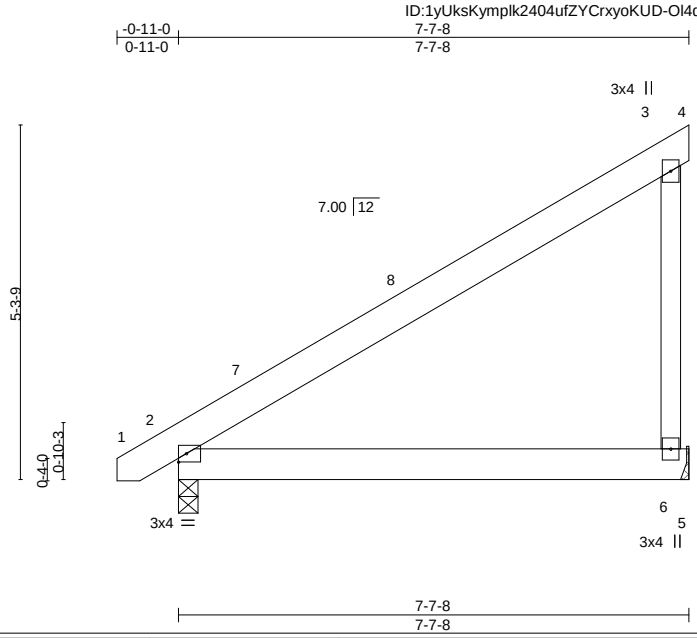

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.04	2-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.07	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.00	2	****	240	Weight: 48 lb	FT = 20%

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

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

REACTIONS. (size) 6=Mechanical, 2=0-3-8
Max Horz 2=158(LC 12)
Max Uplift 6=-82(LC 12)
Max Grav 6=318(LC 19), 2=345(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-6=-288/220

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) -0-9-0 to 3-7-13, Interior(1) 3-7-13 to 7-7-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6.

May 11,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	B2GE	MONOPITCH SUPPORTED	1	1	E15716439
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:48 2021 Page 1
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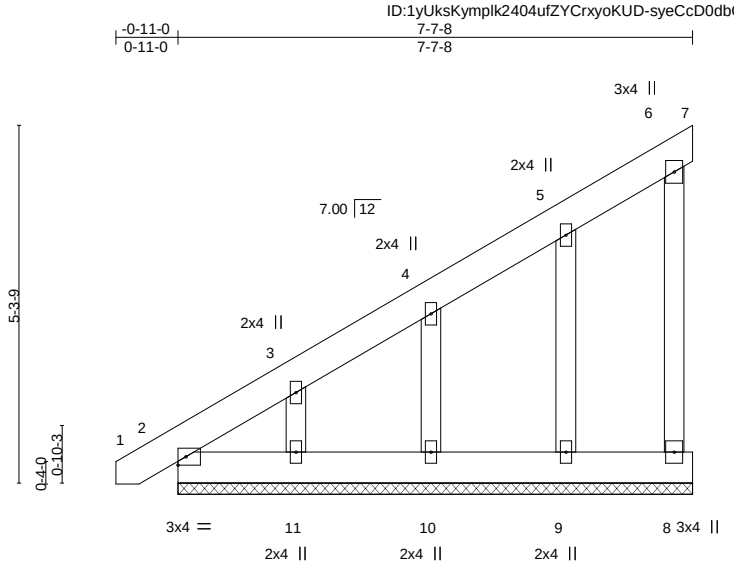

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 57 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 7-7-8.
(lb) - Max Horz 2=228(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 7, 8, 9, 10 except 11=-117(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 7, 8, 2, 9, 10, 11

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-269/227

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) 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
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 8, 9, 10 except (jt=lb) 11=117.

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TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	C1	Monopitch	5	1	E15716440
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:48 2021 Page 1
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Scale = 1:17.0

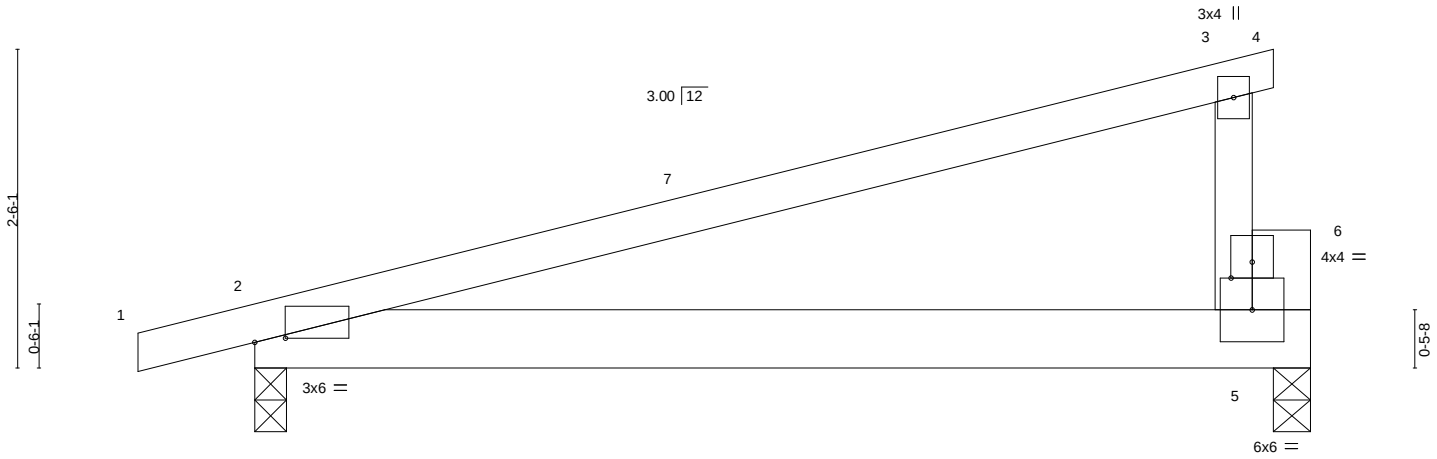

Plate Offsets (X,Y)-- [2:0-2-14,0-0-6], [6:0-2-0,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.05	2-5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.10	2-5	>969	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.10	2-5	>886	240	Weight: 37 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 5=0-3-8
Max Horz 2=74(LC 8)
Max Uplift 2=-150(LC 8), 5=-127(LC 8)
Max Grav 2=375(LC 1), 5=314(LC 1)

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

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) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 8-0-0 zone; porch left 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=150, 5=127.

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TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	C1GE	GABLE	2	1	E15716441
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:49 2021 Page 1
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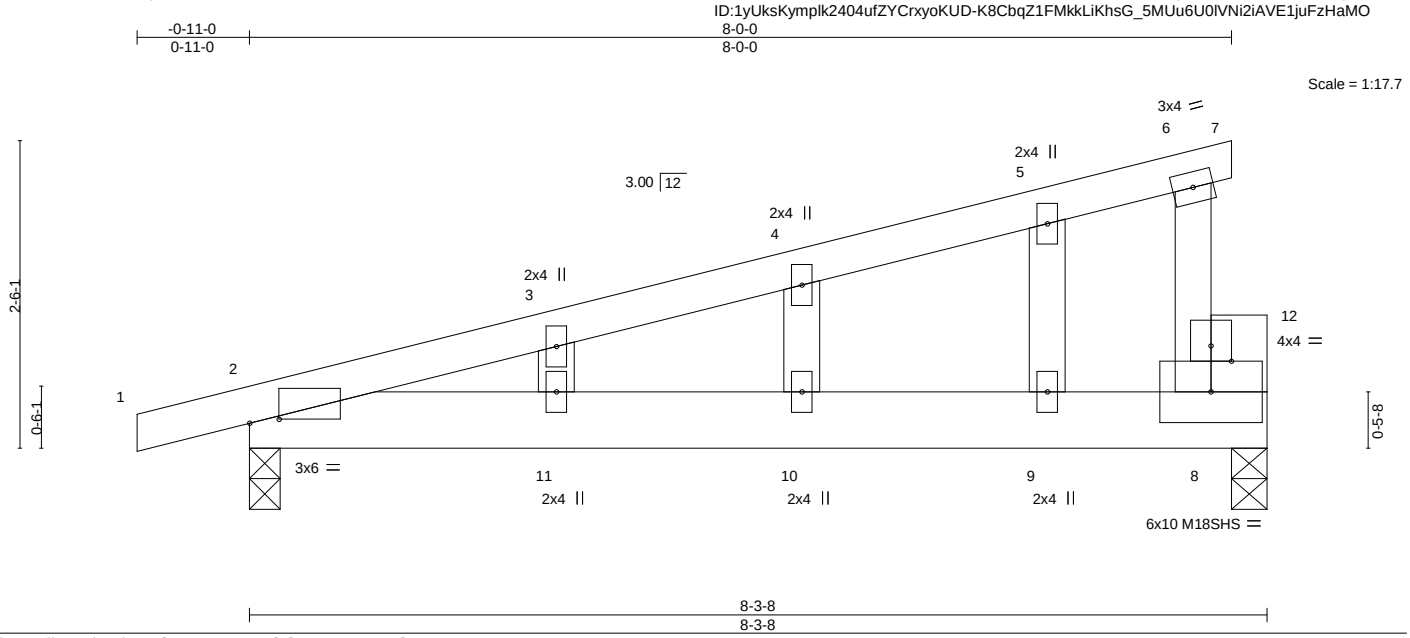

Plate Offsets (X,Y)-- [2:0-2-14,0-0-6], [12:0-2-0,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	0.09	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.08	10-11	>999	240	M18SHS	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	-0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 41 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2 *Except*
8-12: 2x6 SP No.1

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

REACTIONS. (size) 2=0-3-0, 8=0-3-8
Max Horz 2=105(LC 8)
Max Uplift 2=-216(LC 8), 8=-188(LC 8)
Max Grav 2=375(LC 1), 8=314(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 2-11=-284/207, 10-11=-284/207, 9-10=-284/207, 8-9=-284/207

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) gable end zone and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) All plates are MT20 plates unless otherwise indicated.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=216, 8=188.

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TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	D1-GR	Common Girder	1	2	E15716442

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:51 2021 Page 1
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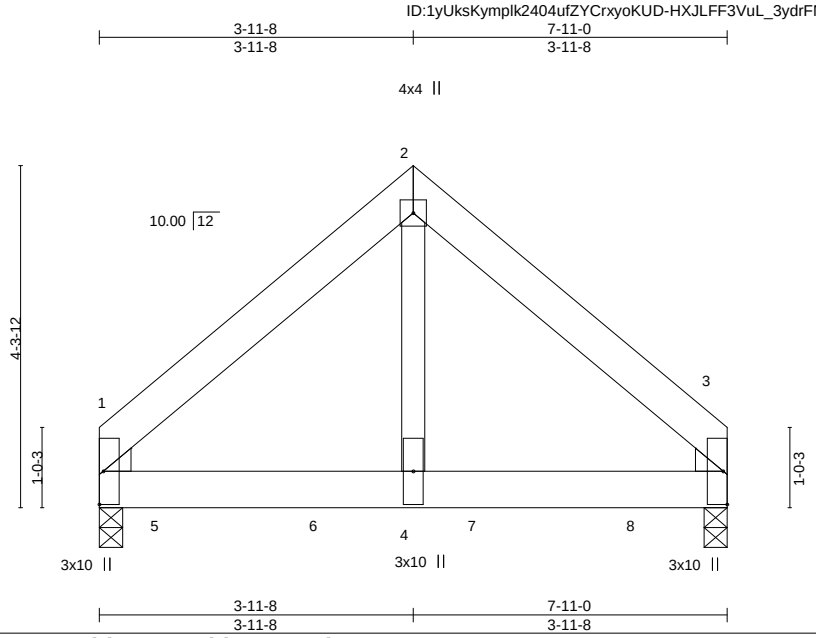

Plate Offsets (X,Y)-- [1:0-0-4,0-0-5], [1:0-0-8,0-3-6], [3:0-0-4,0-0-5], [3:0-0-8,0-3-6]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.02	3-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.04	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.39	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.01	3-4	>999	240	Weight: 100 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

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

REACTIONS. (size) 1=0-3-8, 3=0-3-8
Max Horz 1=91(LC 24)
Max Uplift 1=-191(LC 8), 3=-180(LC 9)
Max Grav 1=2919(LC 1), 3=2779(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2418/177, 2-3=-2418/177
BOT CHORD 1-4=-100/1678, 3-4=-100/1678
WEBS 2-4=-154/3142

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 0-6-0 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) 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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=191, 3=180.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1261 lb down and 93 lb up at 0-9-12, 1258 lb down and 96 lb up at 2-9-12, and 1325 lb down and 96 lb up at 4-9-12, and 1325 lb down and 96 lb up at 6-9-12 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
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 1-3=-20

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Continued on page 2

TRENCO
818 Soundside Road
Edenton, NC 27932

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 5=-1261(B) 6=-1258(B) 7=-1258(B) 8=-1258(B)

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	D1GE	COMMON SUPPORTED GAB	1	1	E15716443
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:50 2021 Page 1
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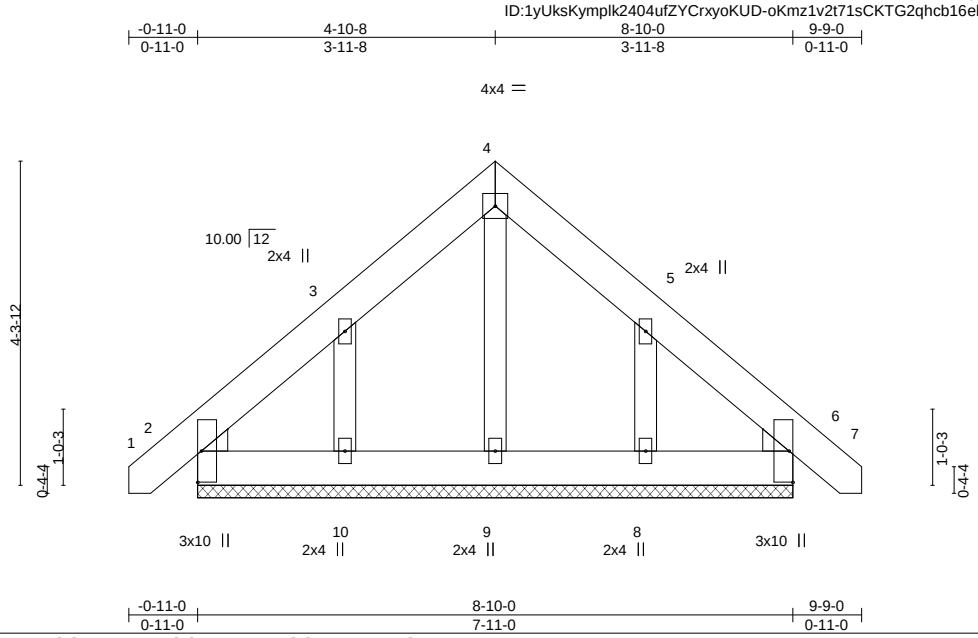

Plate Offsets (X,Y)-- [2:0-0-4,0-0-5], [2:0-0-8,0-3-6], [6:0-0-4,0-0-5], [6:0-0-8,0-3-6]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	0.00	6	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 60 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

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

REACTIONS. All bearings 7-11-0.
(lb) - Max Horz 2=-118(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-152(LC 12), 8=-148(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 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) 2, 6 except (jt=lb) 10=152, 8=148.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	G1-GR	FLAT GIRDER	1	3	E15716444
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:53 2021 Page 1
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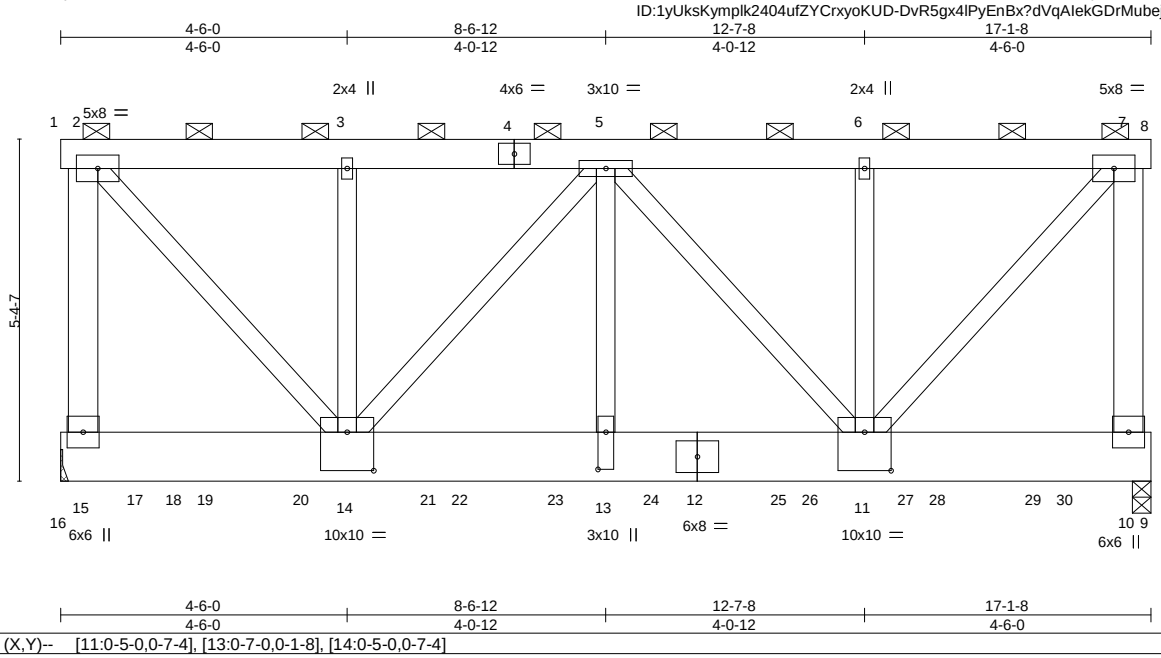

Plate Offsets (X,Y)-- [11:0-5-0,0-7-4], [13:0-7-0,0-1-8], [14:0-5-0,0-7-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.04	13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.06	13	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.64	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.01	13	>999	240	Weight: 535 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except*
2-15,7-10: 2x6 SP No.1

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-8, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 15=Mechanical, 10=0-3-8
Max Uplift 15=-952(LC 4), 10=-496(LC 5)
Max Grav 15=9054(LC 2), 10=5626(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-15=-4975/485, 2-3=-4304/388, 3-5=-4304/388, 5-6=-4015/329, 6-7=-4015/329, 7-10=-4617/423
BOT CHORD 13-14=-445/5324, 11-13=-445/5324
WEBS 2-14=-563/6318, 5-14=-1814/442, 7-11=-484/5958, 5-13=-233/2762, 5-11=-2058/179

NOTES-
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 5 rows staggered at 0-4-0 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); 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) 15=952, 10=496.
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) 5000 lb down and 537 lb up at 1-2-8, 276 lb down and 102 lb up at 1-9-12, 1048 lb down at 2-3-12, 276 lb down and 102 lb up at 3-9-12, 1048 lb down at 4-3-12 , 276 lb down and 102 lb up at 5-9-12, 1048 lb down at 6-3-12, 276 lb down and 102 lb up at 7-9-12, 1122 lb down at 8-3-12, 1122 lb down at 9-3-12, 276 lb down and 102 lb up at 9-9-12, 1122 lb down at 11-3-12, 276 lb down and 102 lb up at 11-9-12, 1122 lb down at 13-3-12, 276 lb down and 102 lb up at 13-9-12, and 1122 lb down at 15-3-12, and 276 lb down and 102 lb up at 15-9-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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LOAD CASE(S) Standard

Continued on page 2

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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-7=-60, 7-8=-60, 9-16=-20
   Concentrated Loads (lb)
   Vert: 12=-276(F) 14=-259(B) 13=-291(B) 17=-5000(B) 18=-276(F) 19=-259(B) 20=-276(F) 21=-276(F) 22=-259(B) 23=-276(F) 24=-291(B) 25=-291(B) 26=-276(F) 27=-291(B) 28=-276(F) 29=-291(B) 30=-276(F)

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Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	M1	MONOPITCH	4	1	E15716445
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:53 2021 Page 1
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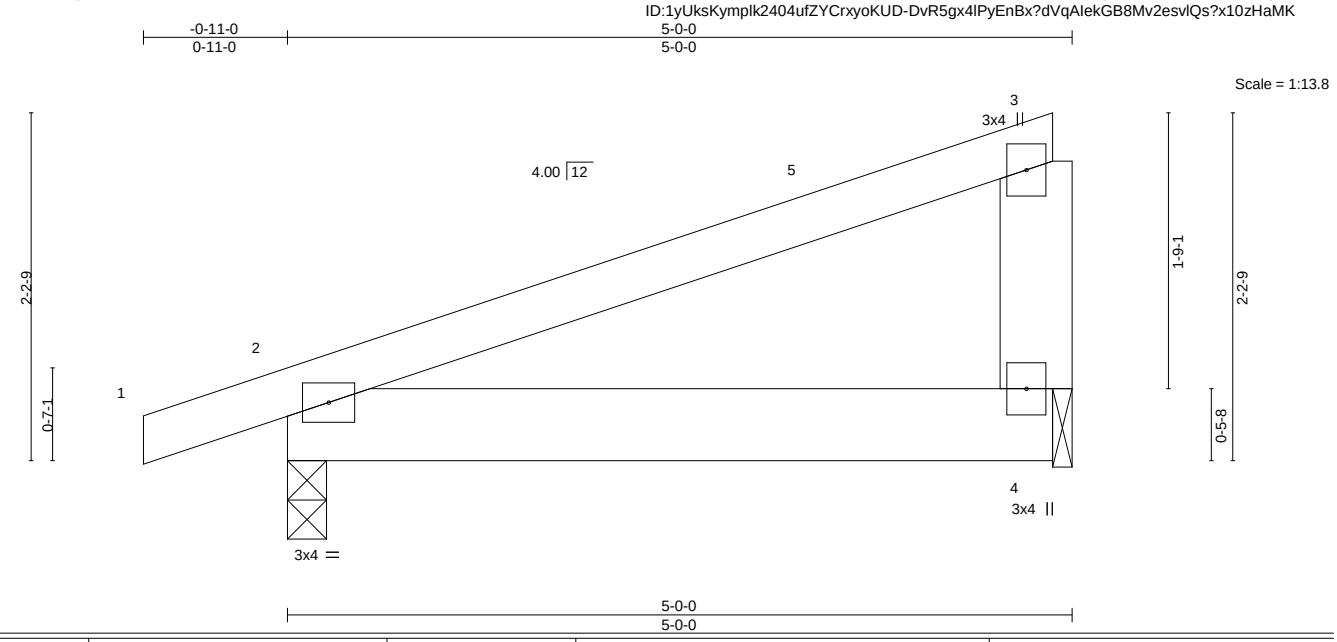

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.01	2-4	>999	240	Weight: 24 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 4=0-1-8
Max Horz 2=63(LC 8)
Max Uplift 2=-102(LC 8), 4=-79(LC 8)
Max Grav 2=255(LC 1), 4=179(LC 1)

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

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) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 4-9-4 zone; porch left 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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=102.

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Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	M1GE	GABLE	1	1	E15716446
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:54 2021 Page 1
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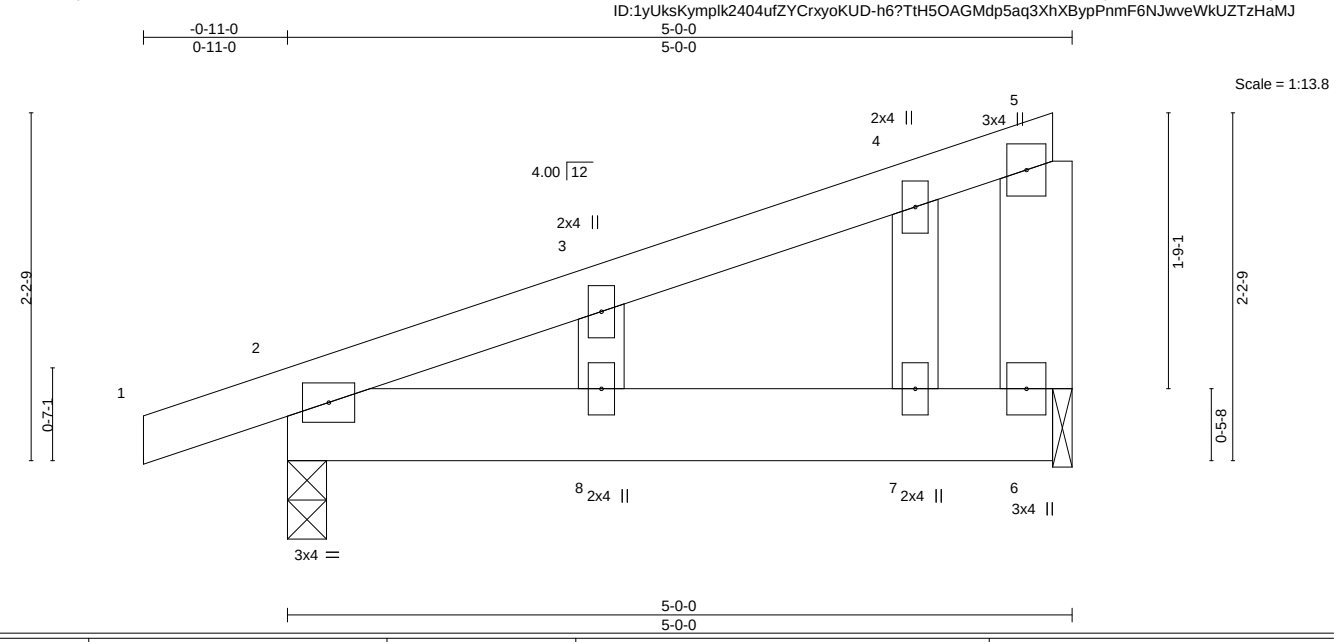

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.01	8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 27 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 6=0-1-8
Max Horz 2=90(LC 8)
Max Uplift 2=-147(LC 8), 6=-115(LC 8)
Max Grav 2=255(LC 1), 6=179(LC 1)

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

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) gable end zone and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable studs spaced at 2-0-0 oc.
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) Bearing at joint(s) 6 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 at joint(s) 6.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=147, 6=115.

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Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	M2	Half Hip	3	1	E15716447
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:55 2021 Page 1
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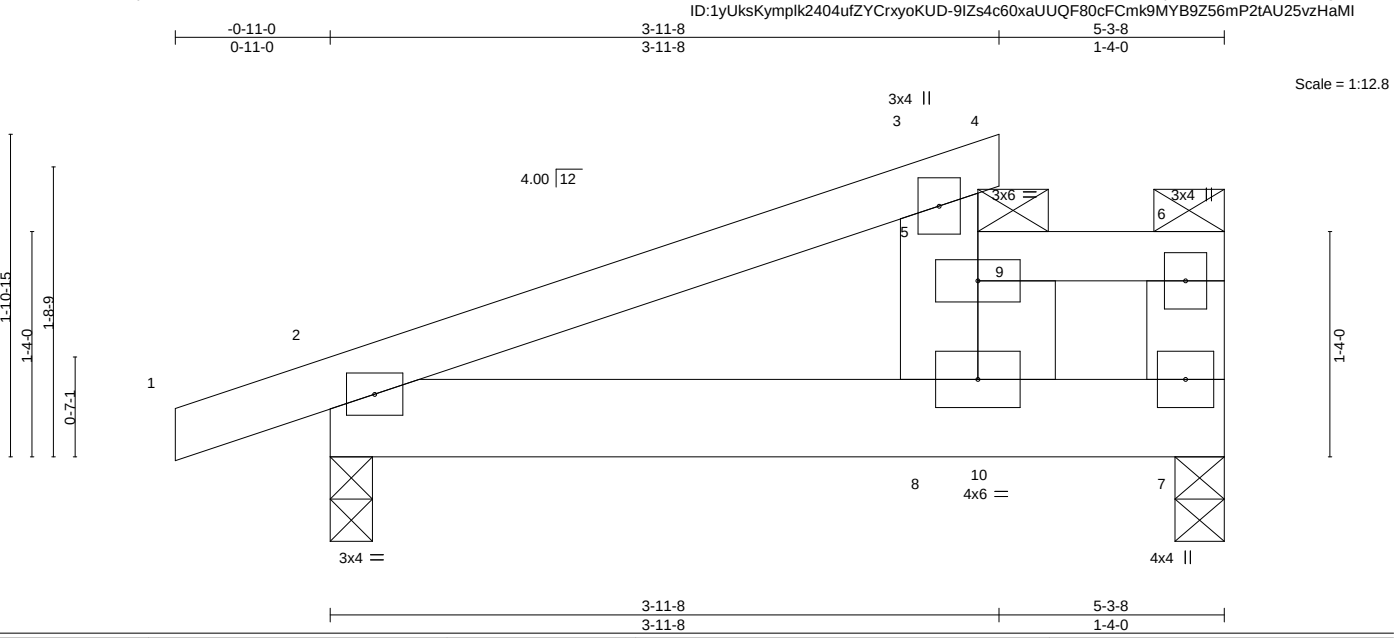

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.00	8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.01	8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-R		Wind(LL)	0.02	8	>999	240	Weight: 28 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-8, 5-6. Except: 10-0-0 oc bracing: 3-5
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 2=0-3-0
Max Horz 2=69(LC 12)
Max Uplift 7=-173(LC 8), 2=-138(LC 8)
Max Grav 7=561(LC 19), 2=349(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-425/505, 5-8=-279/265, 5-6=-233/338, 6-7=-292/309
BOT CHORD 2-8=-546/359, 7-8=-338/233

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) -0-11-0 to 3-7-4, Interior(1) 3-7-4 to 5-0-12 zone; porch left 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=173, 2=138.
7) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 5-9=-40, 6-9=-80, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-400
2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-50, 3-4=-50, 5-9=-100, 6-9=-130, 2-7=-20

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LOAD CASE(S) Standard

Concentrated Loads (lb)
Vert: 9=-350

3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-20, 5-6=-40, 2-7=-40
Concentrated Loads (lb)
Vert: 9=-300

4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=70, 2-3=58, 3-4=153, 5-6=12, 2-8=52, 8-10=115, 7-10=52
Horz: 1-2=-82, 2-3=-70, 3-4=-165, 3-5=-55
Concentrated Loads (lb)
Vert: 9=548

5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=51, 2-3=58, 3-4=51, 5-6=42, 2-8=52, 8-10=115, 7-10=52
Horz: 1-2=-63, 2-3=-70, 3-4=-63, 3-5=-55
Concentrated Loads (lb)
Vert: 9=566

6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-1, 2-3=-45, 3-4=17, 5-6=-58, 2-8=-9, 8-10=2, 7-10=-9
Horz: 1-2=-19, 2-3=25, 3-4=-37, 3-5=51
Concentrated Loads (lb)
Vert: 9=-420

7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-39, 2-3=-45, 3-4=-39, 5-6=-58, 2-8=-9, 8-10=2, 7-10=-9
Horz: 1-2=19, 2-3=25, 3-4=19, 3-5=51
Concentrated Loads (lb)
Vert: 9=-420

8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=36, 2-3=21, 3-4=14, 5-6=-11, 2-8=10, 8-10=33, 7-10=10
Horz: 1-2=-48, 2-3=-33, 3-4=-26, 3-5=7
Concentrated Loads (lb)
Vert: 9=154

9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-3=12, 3-4=28, 5-6=1, 2-7=-12
Horz: 1-2=-18, 2-3=-24, 3-4=-40, 3-5=-27
Concentrated Loads (lb)
Vert: 9=43

10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-3=-1, 3-4=6, 5-6=-33, 2-8=2, 8-10=25, 7-10=2
Horz: 1-2=-26, 2-3=-19, 3-4=-26, 3-5=34
Concentrated Loads (lb)
Vert: 9=-339

11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-2, 2-3=-9, 3-4=-2, 5-6=-21, 2-7=-20
Horz: 1-2=-18, 2-3=-11, 3-4=-18, 3-5=-0
Concentrated Loads (lb)
Vert: 9=-234

12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=14, 2-3=21, 3-4=14, 5-6=-11, 2-7=-12
Horz: 1-2=-26, 2-3=-33, 3-4=-26, 3-5=-39
Concentrated Loads (lb)
Vert: 9=43

13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=2, 2-3=9, 3-4=2, 5-6=1, 2-7=-12
Horz: 1-2=-14, 2-3=-21, 3-4=-14, 3-5=-27
Concentrated Loads (lb)
Vert: 9=43

14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=14, 2-3=21, 3-4=14, 5-6=-11, 2-7=-12
Horz: 1-2=-26, 2-3=-33, 3-4=-26, 3-5=-39
Concentrated Loads (lb)
Vert: 9=43

15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60

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LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-2=2, 2-3=9, 3-4=2, 5-6=1, 2-7=-12
Horz: 1-2=-14, 2-3=-21, 3-4=-14, 3-5=-27
Concentrated Loads (lb)
Vert: 9=43

16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-3=-1, 3-4=6, 5-6=-33, 2-7=-20
Horz: 1-2=-26, 2-3=-19, 3-4=-26, 3-5=-12
Concentrated Loads (lb)
Vert: 9=-234

17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-6, 2-3=-13, 3-4=-6, 5-6=-21, 2-7=-20
Horz: 1-2=-14, 2-3=-7, 3-4=-14, 3-5=-0
Concentrated Loads (lb)
Vert: 9=-234

18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-20, 5-6=-120, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-200

19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-31, 2-3=-36, 3-4=-31, 5-9=-95, 6-9=-125, 2-8=-3, 8-10=13, 7-10=-3
Horz: 1-2=-19, 2-3=-14, 3-4=-19, 3-5=26
Concentrated Loads (lb)
Vert: 9=-454

20) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-37, 2-3=-42, 3-4=-37, 5-9=-86, 6-9=-116, 2-7=-20
Horz: 1-2=-13, 2-3=-8, 3-4=-13, 3-5=-0
Concentrated Loads (lb)
Vert: 9=-375

21) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-31, 2-3=-36, 3-4=-31, 5-9=-95, 6-9=-125, 2-7=-20
Horz: 1-2=-19, 2-3=-14, 3-4=-19, 3-5=-9
Concentrated Loads (lb)
Vert: 9=-375

22) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-40, 2-3=-45, 3-4=-40, 5-9=-86, 6-9=-116, 2-7=-20
Horz: 1-2=-10, 2-3=-5, 3-4=-10, 3-5=-0
Concentrated Loads (lb)
Vert: 9=-375

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 5-6=-40, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-400

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-20, 5-9=-40, 6-9=-80, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-400

25) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-50, 3-4=-50, 5-6=-100, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-350

26) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-20, 5-9=-100, 6-9=-130, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-350

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	M2-GR	HALF HIP	1	2	E15716448

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:55 2021 Page 1
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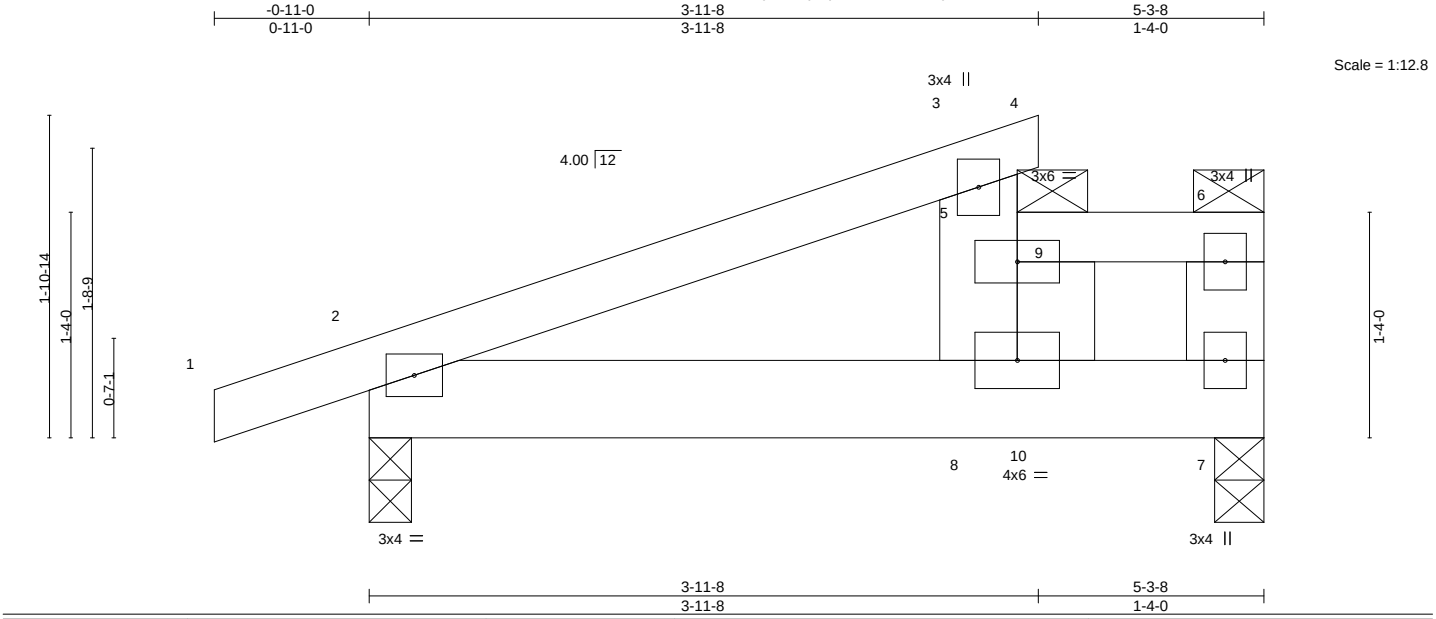

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00	8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.01	8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-R		Wind(LL)	0.01	8	>999	240	Weight: 55 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-8, 5-6. Except: 10-0-0 oc bracing: 3-5
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 2=0-3-0
Max Horz 2=69(LC 12)
Max Uplift 7=-24(LC 8), 2=-112(LC 8)
Max Grav 7=710(LC 19), 2=375(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-484/446, 5-8=-334/210, 5-6=-280/291, 6-7=-390/210
BOT CHORD 2-8=-491/415, 7-8=-291/280

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 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: 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) and C-C Exterior(2) -0-11-0 to 3-7-4, Interior(1) 3-7-4 to 5-0-12 zone; porch left exposed;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) 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) 7 except (jt=lb) 2=112.
9) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 5-9=-160, 6-9=-200, 2-7=-20

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LOAD CASE(S) Standard

Concentrated Loads (lb)
Vert: 9=-400

2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-50, 3-4=-50, 5-9=-220, 6-9=-250, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-350

3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-20, 5-6=-160, 2-7=-40
Concentrated Loads (lb)
Vert: 9=-300

4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=70, 2-3=58, 3-4=153, 5-6=-108, 2-8=52, 8-10=115, 7-10=52
Horz: 1-2=-82, 2-3=-70, 3-4=-165, 3-5=-55
Concentrated Loads (lb)
Vert: 9=548

5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=51, 2-3=58, 3-4=51, 5-6=-78, 2-8=52, 8-10=115, 7-10=52
Horz: 1-2=-63, 2-3=-70, 3-4=-63, 3-5=-55
Concentrated Loads (lb)
Vert: 9=566

6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-1, 2-3=-45, 3-4=17, 5-6=-178, 2-8=-9, 8-10=2, 7-10=-9
Horz: 1-2=-19, 2-3=25, 3-4=-37, 3-5=51
Concentrated Loads (lb)
Vert: 9=-420

7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-39, 2-3=-45, 3-4=-39, 5-6=-178, 2-8=-9, 8-10=2, 7-10=-9
Horz: 1-2=19, 2-3=25, 3-4=19, 3-5=51
Concentrated Loads (lb)
Vert: 9=-420

8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=36, 2-3=21, 3-4=14, 5-6=-131, 2-8=10, 8-10=33, 7-10=10
Horz: 1-2=-48, 2-3=-33, 3-4=-26, 3-5=7
Concentrated Loads (lb)
Vert: 9=154

9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-3=12, 3-4=28, 5-6=-119, 2-7=-12
Horz: 1-2=-18, 2-3=-24, 3-4=-40, 3-5=-27
Concentrated Loads (lb)
Vert: 9=43

10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-3=-1, 3-4=6, 5-6=-153, 2-8=2, 8-10=25, 7-10=2
Horz: 1-2=-26, 2-3=-19, 3-4=-26, 3-5=34
Concentrated Loads (lb)
Vert: 9=-339

11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-2, 2-3=-9, 3-4=-2, 5-6=-141, 2-7=-20
Horz: 1-2=-18, 2-3=-11, 3-4=-18, 3-5=-0
Concentrated Loads (lb)
Vert: 9=-234

12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=14, 2-3=21, 3-4=14, 5-6=-131, 2-7=-12
Horz: 1-2=-26, 2-3=-33, 3-4=-26, 3-5=-39
Concentrated Loads (lb)
Vert: 9=43

13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=2, 2-3=9, 3-4=2, 5-6=-119, 2-7=-12
Horz: 1-2=-14, 2-3=-21, 3-4=-14, 3-5=-27
Concentrated Loads (lb)
Vert: 9=43

14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60

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LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-2=14, 2-3=21, 3-4=14, 5-6=-131, 2-7=-12
Horz: 1-2=-26, 2-3=-33, 3-4=-26, 3-5=-39
Concentrated Loads (lb)
Vert: 9=43

15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=2, 2-3=9, 3-4=2, 5-6=-119, 2-7=-12
Horz: 1-2=-14, 2-3=-21, 3-4=-14, 3-5=-27
Concentrated Loads (lb)
Vert: 9=43

16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-3=-1, 3-4=6, 5-6=-153, 2-7=-20
Horz: 1-2=-26, 2-3=-19, 3-4=-26, 3-5=-12
Concentrated Loads (lb)
Vert: 9=-234

17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-6, 2-3=-13, 3-4=-6, 5-6=-141, 2-7=-20
Horz: 1-2=-14, 2-3=-7, 3-4=-14, 3-5=-0
Concentrated Loads (lb)
Vert: 9=-234

18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-20, 5-6=-240, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-200

19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-31, 2-3=-36, 3-4=-31, 5-9=-215, 6-9=-245, 2-8=-3, 8-10=13, 7-10=-3
Horz: 1-2=-19, 2-3=-14, 3-4=-19, 3-5=26
Concentrated Loads (lb)
Vert: 9=-454

20) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-37, 2-3=-42, 3-4=-37, 5-9=-206, 6-9=-236, 2-7=-20
Horz: 1-2=-13, 2-3=-8, 3-4=-13, 3-5=-0
Concentrated Loads (lb)
Vert: 9=-375

21) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-31, 2-3=-36, 3-4=-31, 5-9=-215, 6-9=-245, 2-7=-20
Horz: 1-2=-19, 2-3=-14, 3-4=-19, 3-5=-9
Concentrated Loads (lb)
Vert: 9=-375

22) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-40, 2-3=-45, 3-4=-40, 5-9=-206, 6-9=-236, 2-7=-20
Horz: 1-2=-10, 2-3=-5, 3-4=-10, 3-5=-0
Concentrated Loads (lb)
Vert: 9=-375

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 5-6=-160, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-400

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-20, 5-9=-160, 6-9=-200, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-400

25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-50, 3-4=-50, 5-6=-220, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-350

26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-20, 5-9=-220, 6-9=-250, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-350

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	V1GE	ROOF SPECIAL STRUCTU	1	1	E15716449
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:56 2021 Page 1
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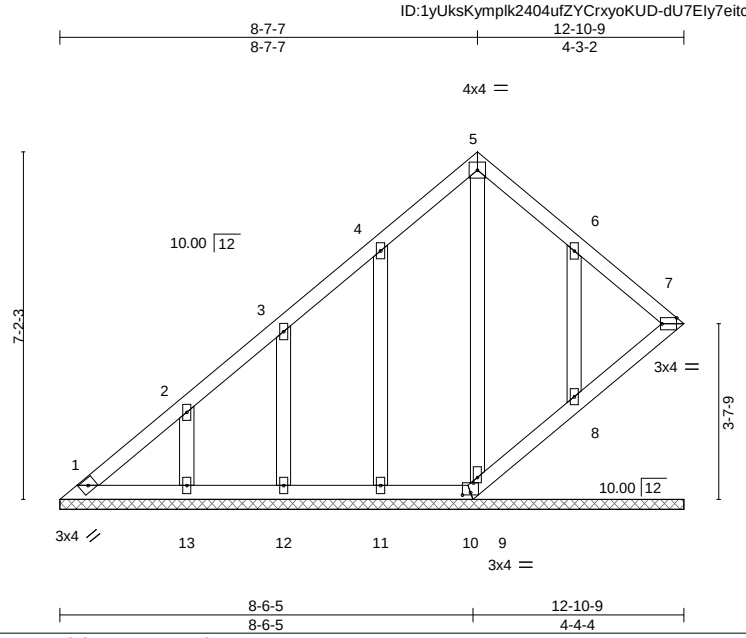

Plate Offsets (X,Y)-- [7:0-3-11,Edge], [9:0-1-6,0-1-0], [10:0-2-0,0-0-10]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 75 lb	FT = 20%

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

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

REACTIONS. All bearings 12-10-9.
(lb) - Max Horz 1=231(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 10 except 11=-112(LC 12), 12=-107(LC 12), 13=-133(LC 12), 8=-126(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 9, 11, 12, 13, 8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-295/189

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) 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) Bearing at joint(s) 7, 9, 8 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) 1, 7, 10 except (jt=lb) 11=112, 12=107, 13=133, 8=126.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 7, 9, 8.

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Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	V2	VALLEY	1	1	E15716450
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:57 2021 Page 1
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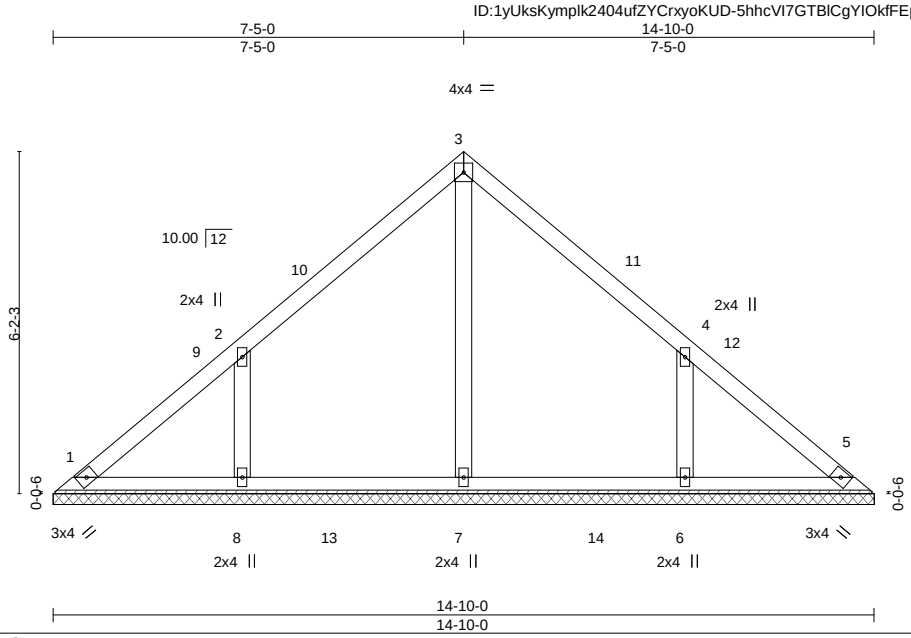

Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 64 lb	FT = 20%

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

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

REACTIONS. All bearings 14-10-0.
(lb) - Max Horz 1=-140(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-135(LC 12), 6=-135(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=400(LC 19), 8=393(LC 19), 6=393(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-338/247, 4-6=-338/247

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) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 7-5-0, Exterior(2) 7-5-0 to 11-9-13, Interior(1) 11-9-13 to 14-5-3 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) 1 except (jt=lb) 8=135, 6=135.

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Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	V3	VALLEY	1	1	E15716451
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:58 2021 Page 1
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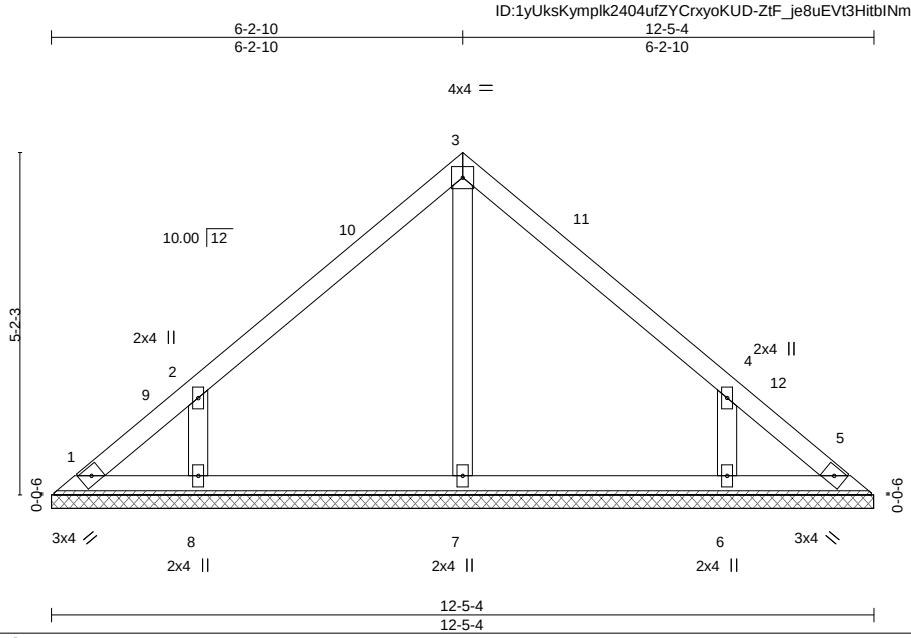

Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
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	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 52 lb	FT = 20%

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

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

REACTIONS. All bearings 12-5-4.
(lb) - Max Horz 1=-116(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-123(LC 12), 6=-123(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=326(LC 19), 6=326(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-312/241, 4-6=-312/241

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) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 6-2-10, Exterior(2) 6-2-10 to 10-7-7, Interior(1) 10-7-7 to 12-0-7 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, 5 except (jt=lb) 8=123, 6=123.

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Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	V4	VALLEY	1	1	E15716452
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:07:59 2021 Page 1
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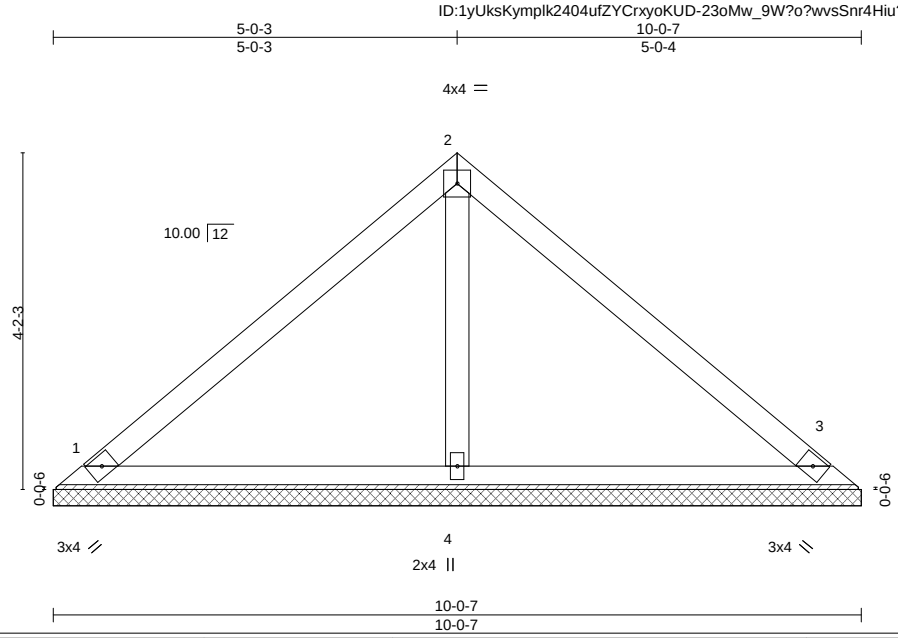


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 38 lb	FT = 20%

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

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

REACTIONS. (size) 1=10-0-7, 3=10-0-7, 4=10-0-7
Max Horz 1=-92(LC 8)
Max Uplift 1=-22(LC 13), 3=-30(LC 13)
Max Grav 1=197(LC 1), 3=197(LC 1), 4=344(LC 1)

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

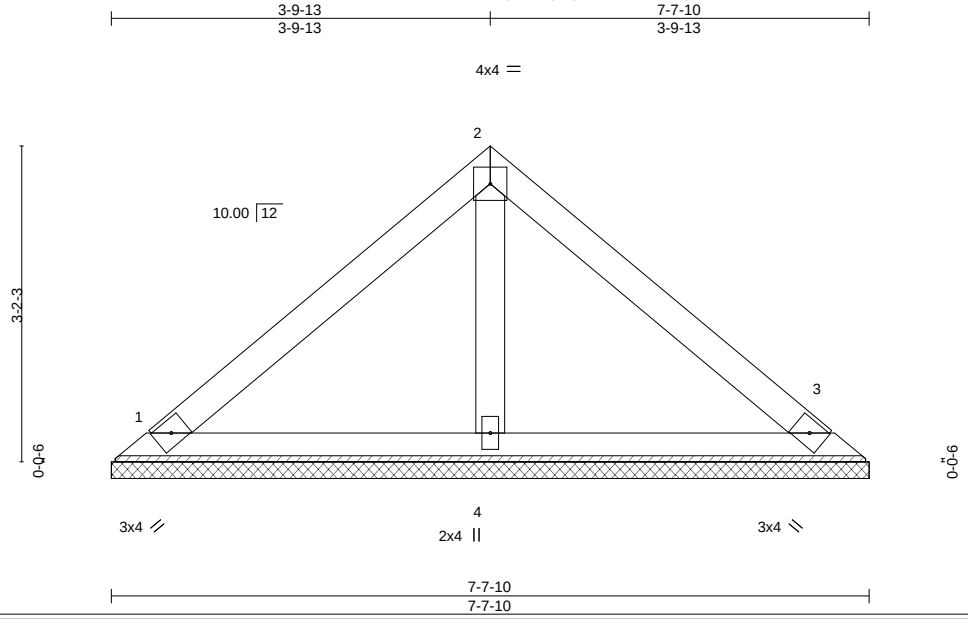
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber 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.

May 11,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	V5	VALLEY	1	1	E15716453
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:08:00 2021 Page 1
ID:1yUksKymplk2404ufZYCrxyoKUD-WGMl8KA8m67nX01zPooxRD3P2AIdn1Gn1SBpn6zHaMD



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.17	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	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 28 lb	FT = 20%

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

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

REACTIONS. (size) 1=7-7-10, 3=7-7-10, 4=7-7-10
Max Horz 1=68(LC 9)
Max Uplift 1=-24(LC 13), 3=-30(LC 13)
Max Grav 1=158(LC 1), 3=158(LC 1), 4=230(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.

May 11,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	V6	VALLEY	1	1	E15716454
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:08:00 2021 Page 1
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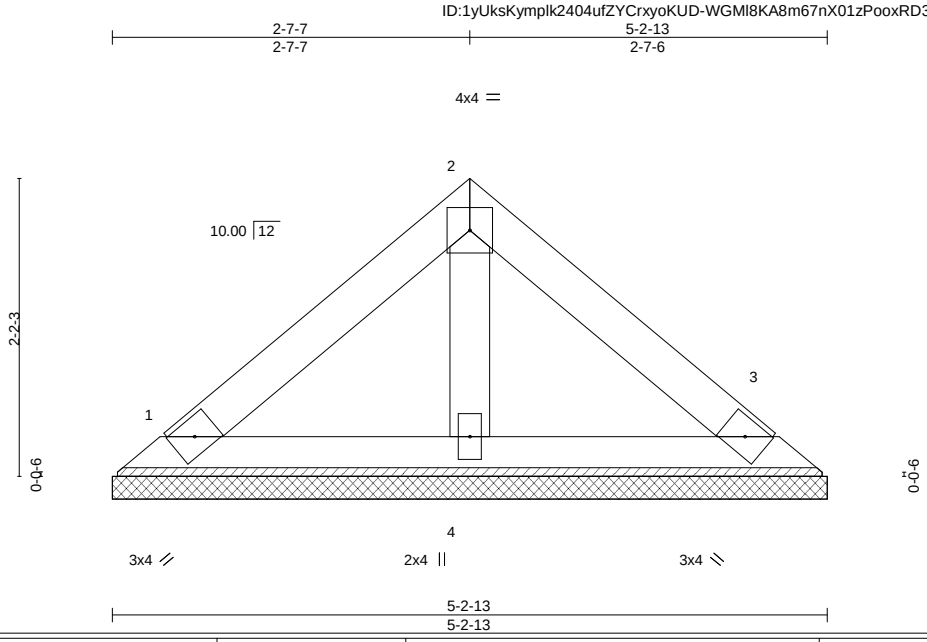

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 19 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-2-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-2-13, 3=5-2-13, 4=5-2-13
Max Horz 1=-44(LC 8)
Max Uplift 1=-15(LC 13), 3=-19(LC 13)
Max Grav 1=102(LC 1), 3=102(LC 1), 4=149(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.

May 11,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2780	V7	VALLEY	1	1	E15716455
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 12:08:01 2021 Page 1
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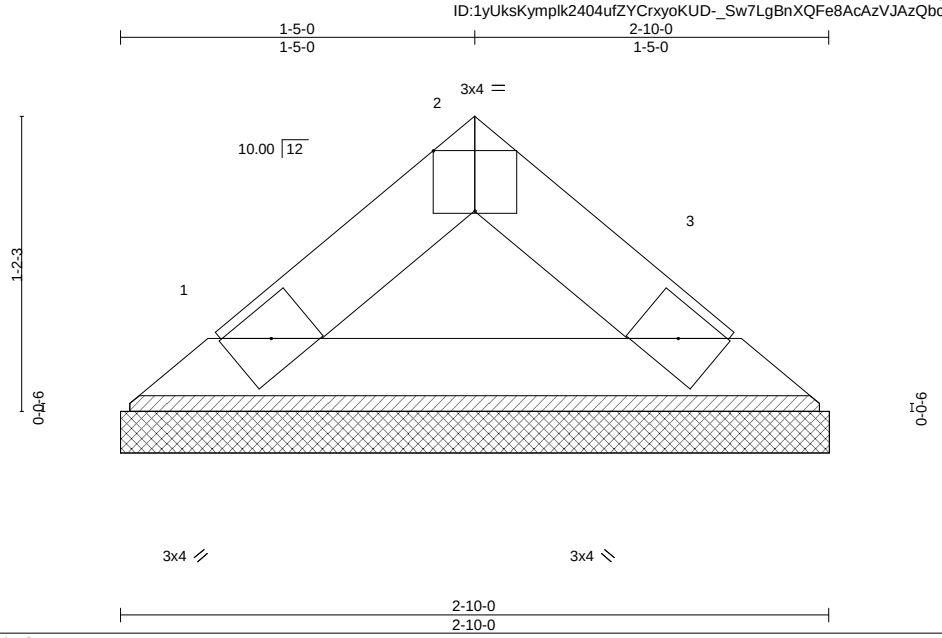


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.01	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 8 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-10-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-10-0, 3=2-10-0
Max Horz 1=-20(LC 8)
Max Uplift 1=-4(LC 12), 3=-4(LC 13)
Max Grav 1=81(LC 1), 3=81(LC 1)

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

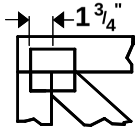
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber 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.

May 11,2021

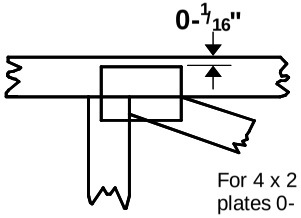
TRENCO
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

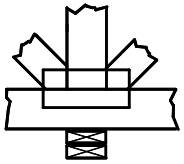
4 x 4

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

LATERAL BRACING LOCATION

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

BEARING

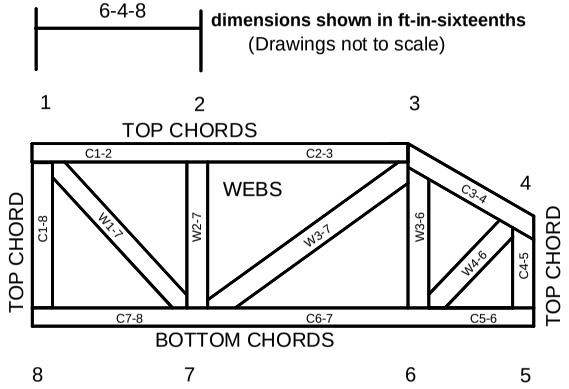


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

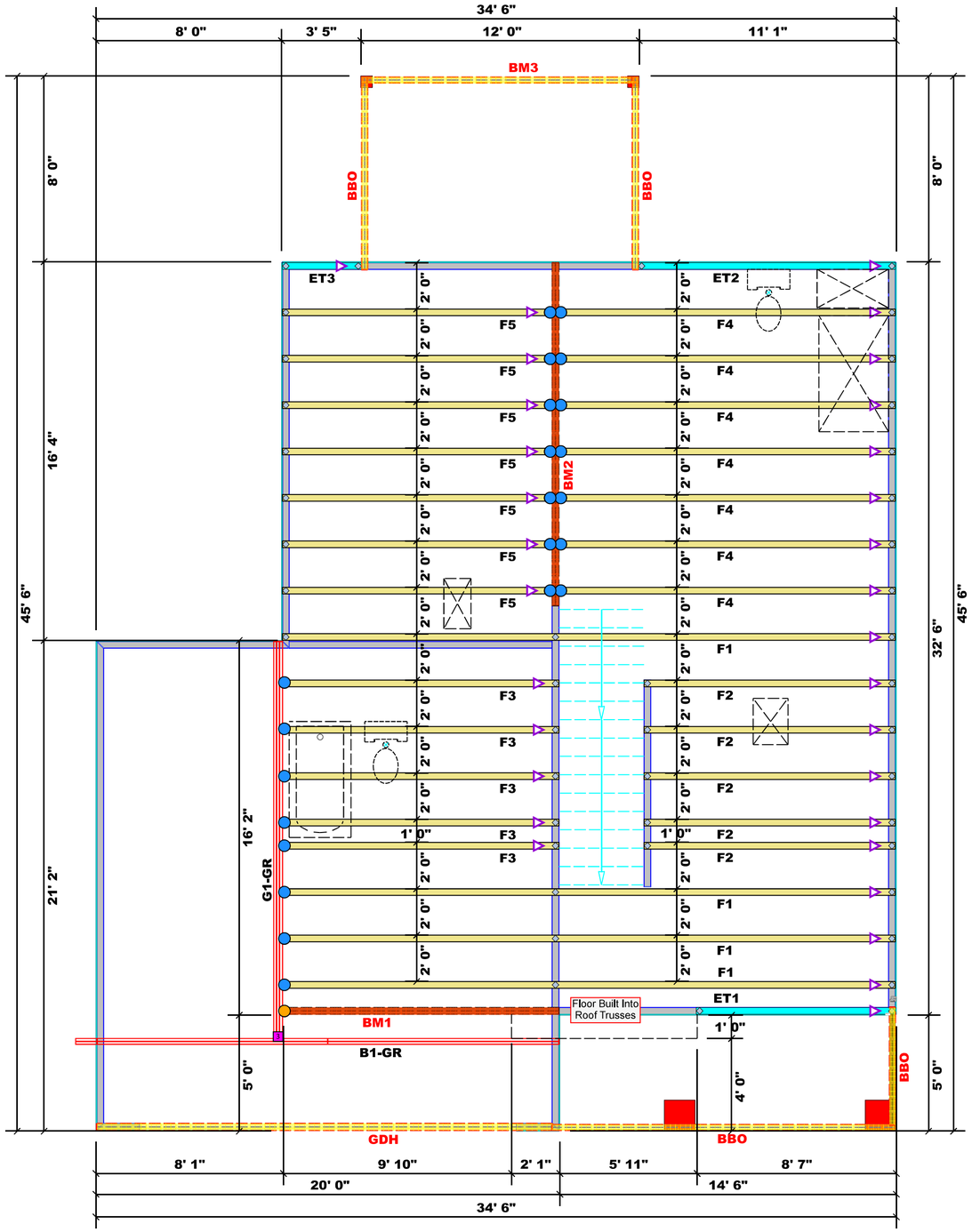
Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

21. The design does not take into account any dynamic or other loads other than those expressly stated.



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

All Walls Shown Are Considered Load Bearing

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

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
●	HUS410	USP	22	NA	16d/3-1/2"	16d/3-1/2"
●	THDH412	USP	1	NA	16d /3-1/2"	16d /3-1/2"

Products				
PlotID	Length	Product	Plies	Net Qty
BM1	12' 0"	1-3/4"x 16" LVL Kerto-S	2	2
BM2	15' 0"	1-3/4"x 16" LVL Kerto-S	2	2
BM3	12' 0"	2x10 SPF No.2	2	2
GDH	20' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2

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

▲ = Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

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

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

Signature David Landry

David Landry

LOAD CHART FOR JACK STUDS

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

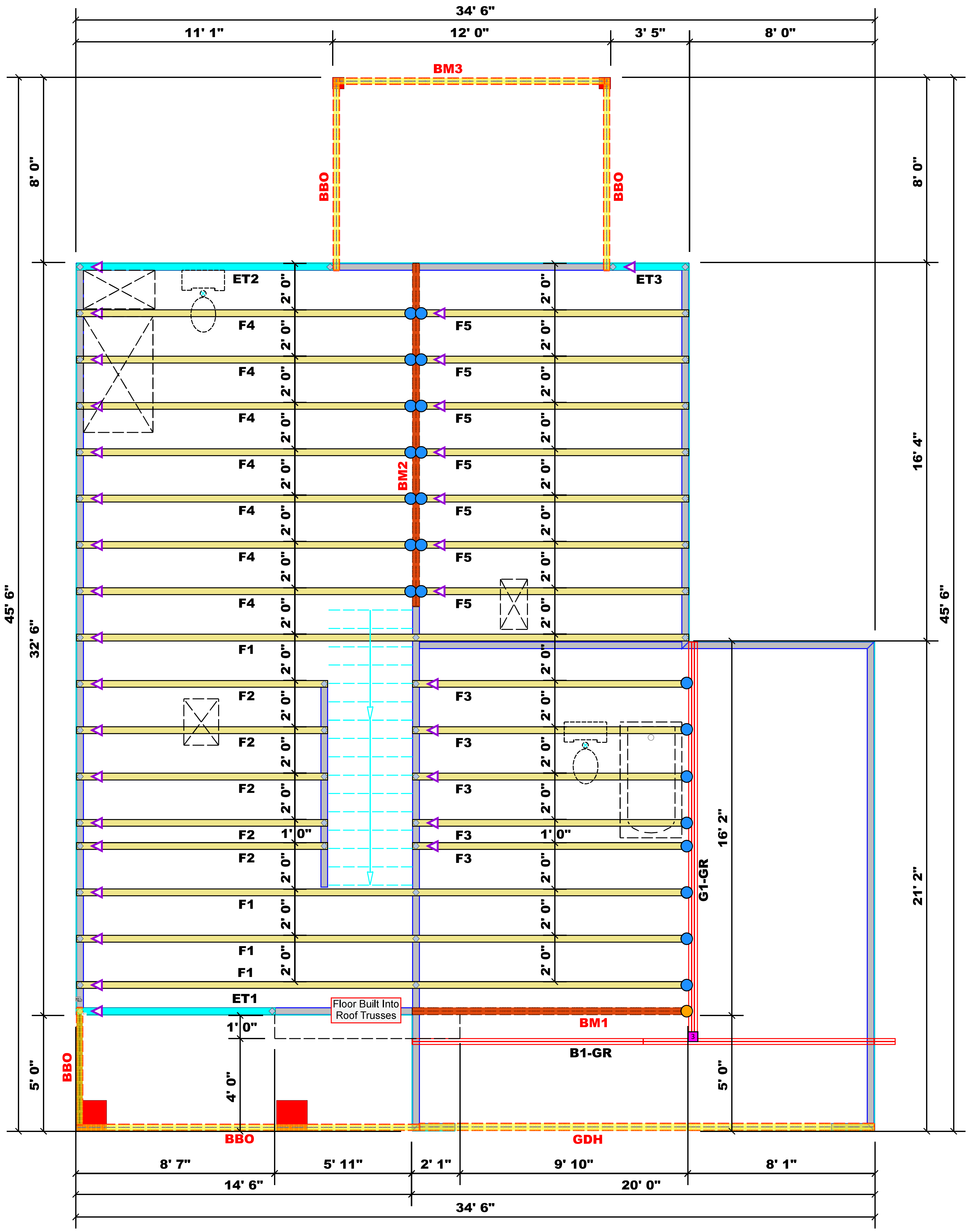
PAD REACTION (UP TO)	REQ'D STUDS FOR (2 PLY) HEADER
1700	1
3400	2
5100	3
6800	4
8500	5
10200	6
11900	7
13600	8
15300	9

PAD REACTION (UP TO)	REQ'D STUDS FOR (1) PLY HEADER
2550	1
5100	2
7650	3
10200	4
12750	5
15300	6

PAD REACTION (UP TO)	REQ'D STUDS FOR (3) PLY HEADER
3400	1
6800	2
10200	3
13600	4
17000	5

BUILDER	Weaver Development Co. Inc.
JOB NAME	Lot 1 Wire Road
PLAN	Hickory "A"
SEAL DATE	Seal Date
QUOTE #	Quote #
JOB #	J0521-2781
CITY / CO.	Harnett / Harnett
ADDRESS	Lot 1 Wire Road
MODEL	Floor
DATE REV.	05/11/21
DRAWN BY	David Landry
SALES REP.	Lenny Norris

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



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

All Walls Shown Are Considered Load Bearing

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

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
(blue)	HUS410	USP	22	NA	16d/3-1/2"	16d/3-1/2"
(orange)	THDH412	USP	1	NA	16d /3-1/2"	16d /3-1/2"

Products				
PlotID	Length	Product	Plies	Net Qty
BM1	12' 0"	1-3/4"x 16" LVL Kerto-S	2	2
BM2	15' 0"	1-3/4"x 16" LVL Kerto-S	2	2
BM3	12' 0"	2x10 SPF No.2	2	2
GDH	20' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2

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

= Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

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

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

Signature David Landry

David Landry

LOAD CHART FOR JACK STUDS

(BASED ON TABLES R502.5(1) & (b))

NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

END REACTION (UP TO)	REQ'D STUDS FOR (2) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (3) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (4) PLY HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

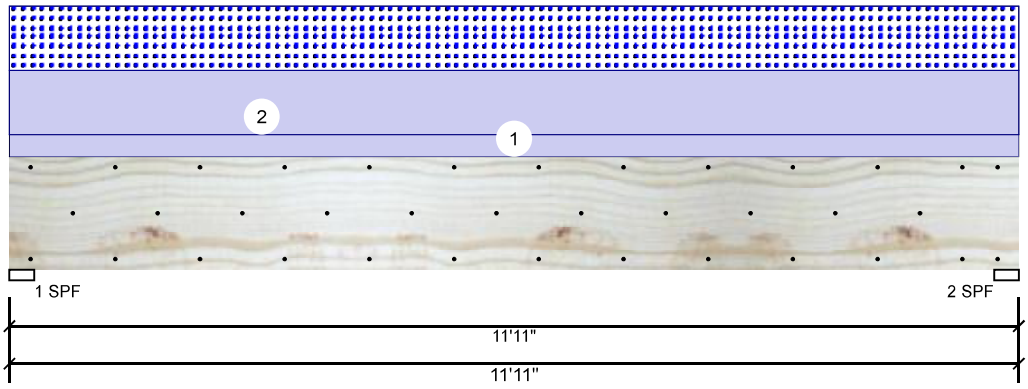
CITY / CO.	Harnett / Harnett
ADDRESS	Lot 1 Wire Road
MODEL	Floor
DATE REV.	05/11/21
DRAWN BY	David Landry
SALES REP.	Lenny Norris
BUILDER	Weaver Development Co. Inc.
JOB NAME	Lot 1 Wire Road
PLAN	Hickory "A"
SEAL DATE	Seal Date
QUOTE #	Quote #
JOB #	J0521-2781

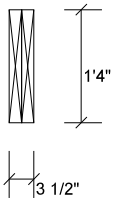
THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer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

Client:	Weaver Development	Date:	5/18/2021
Project:		Input by:	David Landry
Address:		Job Name:	The Hickory II Plan
		Project #:	J0521-2781

BM1 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level





Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	2869	2079	0	0
2	Vertical	0	2869	2079	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	95%	2869 / 2079	4948	L	D+S
2 - SPF	3.500"	Vert	95%	2869 / 2079	4948	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	13679 ft-lb	5'11 1/2"	39750 ft-lb	0.344 (34%)	D+S	L
Unbraced	13679 ft-lb	5'11 1/2"	13699 ft-lb	0.999 (100%)	D+S	L
Shear	3615 lb	1'7 1/2"	13739 lb	0.263 (26%)	D+S	L
LL Defl inch	0.069 (L/2000)	5'11 1/2"	0.287 (L/480)	0.240 (24%)	S	L
TL Defl inch	0.164 (L/840)	5'11 1/2"	0.383 (L/360)	0.428 (43%)	D+S	L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
3 Refer to last page of calculations for fasteners required for specified loads.
4 Girders are designed to be supported on the bottom edge only.
5 Top loads must be supported equally by all plies.
6 Top must be laterally braced at a maximum of 8'8 3/8" o.c.
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			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Uniform			Top	349 PLF	0 PLF	349 PLF	0 PLF	0 PLF	A2
	Self Weight				12 PLF					

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.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL 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

This design is valid until 4/7/2024

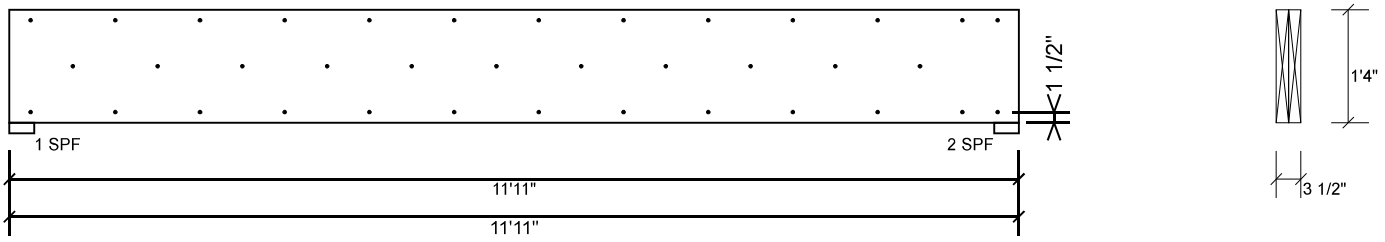
Manufacturer Info

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

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

BM1 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 3 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	245.6 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

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.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL 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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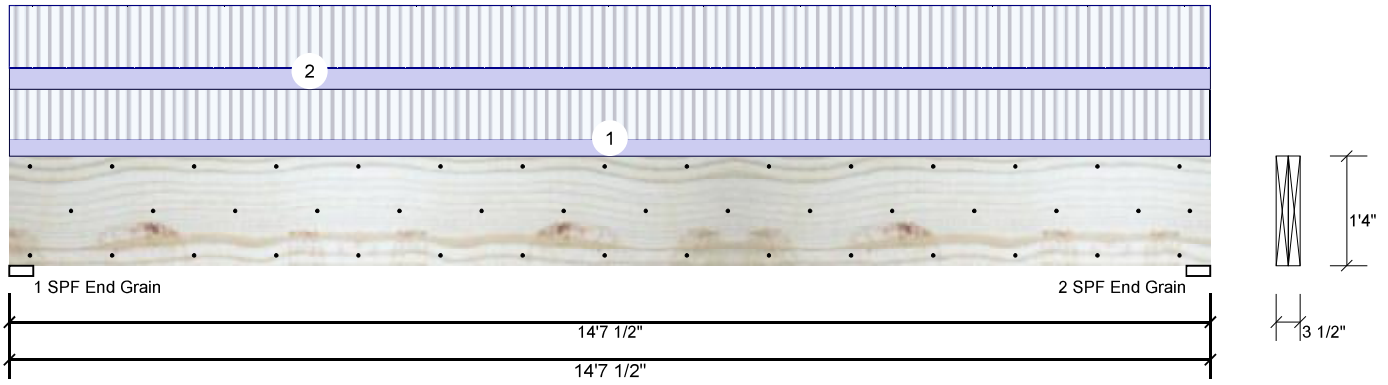
ICC-ES: ESR-3633

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

Client:	Weaver Development	Date:	5/18/2021
Project:		Input by:	David Landry
Address:		Job Name:	The Hickory II Plan
		Project #:	J0521-2781

BM2 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	3868	1385	0	0	0
2	Vertical	3868	1385	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	49%	1385 / 3868	5254	L	D+L
2 - SPF End Grain	3.500"	Vert	49%	1385 / 3868	5254	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	18077 ft-lb	7'3 3/4"	34565 ft-lb	0.523 (52%)	D+L	L
Unbraced	18077 ft-lb	7'3 3/4"	18085 ft-lb	1.000 (100%)	D+L	L
Shear	5044 lb	1'7 1/2"	11947 lb	0.422 (42%)	D+L	L
LL Defl inch	0.229 (L/743)	7'3 13/16"	0.355 (L/480)	0.646 (65%)	L	L
TL Defl inch	0.311 (L/547)	7'3 13/16"	0.473 (L/360)	0.658 (66%)	D+L	L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
3 Refer to last page of calculations for fasteners required for specified loads.
4 Girders are designed to be supported on the bottom edge only.
5 Top must be laterally braced at a maximum of 6'5 1/8" o.c.
6 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			Near Face	79 PLF	235 PLF	0 PLF	0 PLF	0 PLF	F5
2	Uniform			Far Face	98 PLF	294 PLF	0 PLF	0 PLF	0 PLF	F4
	Self Weight				12 PLF					

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.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL 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

This design is valid until 4/7/2024

Manufacturer Info

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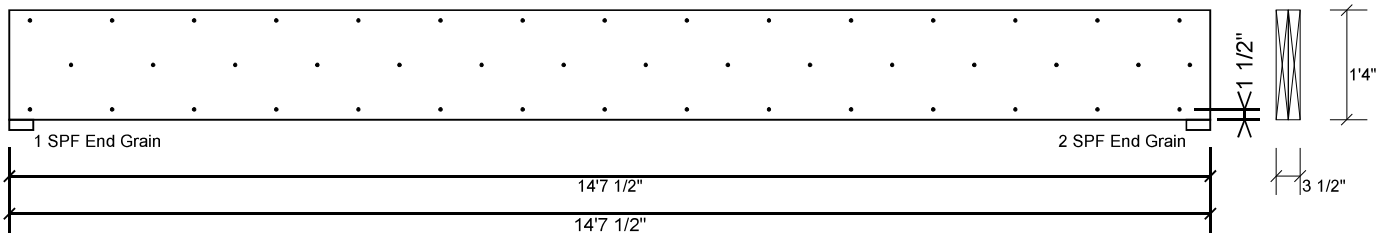
www.metsawood.com/us
ICC-ES: ESR-3633

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

Client:	Weaver Development	Date:	5/18/2021
Project:		Input by:	David Landry
Address:		Job Name:	The Hickory II Plan
		Project #:	J0521-2781

BM2 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	79.8 %
Load	196.0 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+L
Duration Factor	1.00

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.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL 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

This design is valid until 4/7/2024

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ICC-ES: ESR-3633

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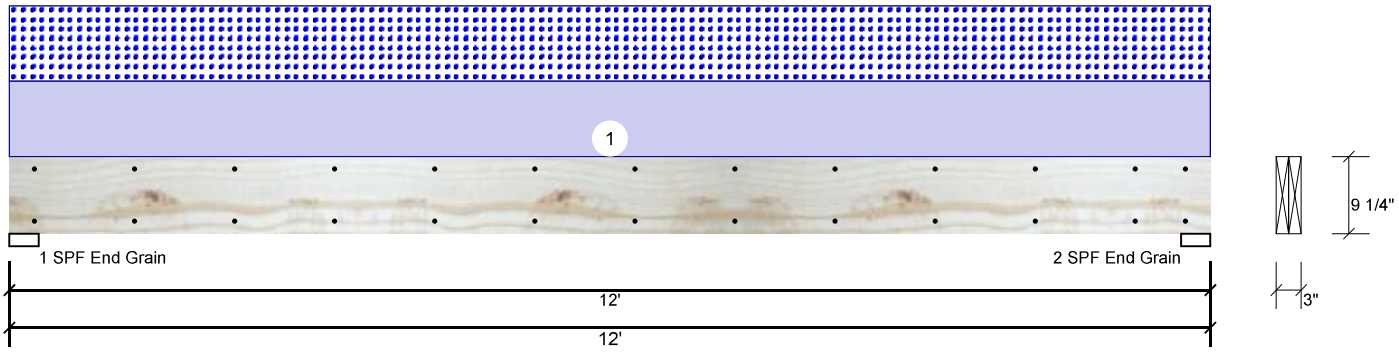
28314
910-864-TRUS

Client:	Weaver Development	Date:	5/18/2021
Project:		Input by:	David Landry
Address:		Job Name:	The Hickory II Plan
		Project #:	J0521-2781

BM3 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	564	564	0	0
2	Vertical	0	564	564	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	25%	564 / 564	1128	L	D+S
2 - SPF End Grain	3.500"	Vert	25%	564 / 564	1128	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3130 ft-lb	6'	3946 ft-lb	0.793 (79%)	D+S	L
Unbraced	3130 ft-lb	6'	3131 ft-lb	1.000 (100%)	D+S	L
Shear	928 lb	10'11 1/4"	2872 lb	0.323 (32%)	D+S	L
LL Defl inch	0.135 (L/1022)	6'	0.289 (L/480)	0.470 (47%)	S	L
TL Defl inch	0.271 (L/511)	6'	0.385 (L/360)	0.704 (70%)	D+S	L

Design Notes

1. Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2. Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
3. Refer to last page of calculations for fasteners required for specified loads.
4. Girders are designed to be supported on the bottom edge only.
5. Top loads must be supported equally by all plies.
6. Top must be laterally braced at a maximum of 8'8 11/16" o.c.
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			Top	94 PLF	0 PLF	94 PLF	0 PLF	0 PLF	C1

This design is valid until 4/7/2024

Manufacturer Info

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1001 S. Reilly Road, Suite #639
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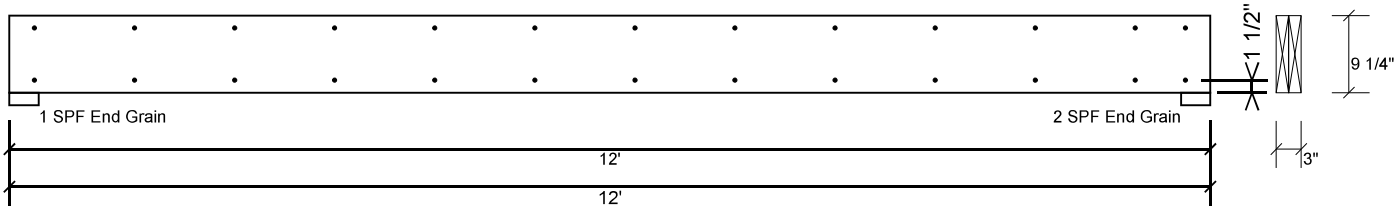
28314
910-864-TRUS

BM3 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

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	157.4 PLF
Yield Limit per Fastener	78.7 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

This design is valid until 4/7/2024

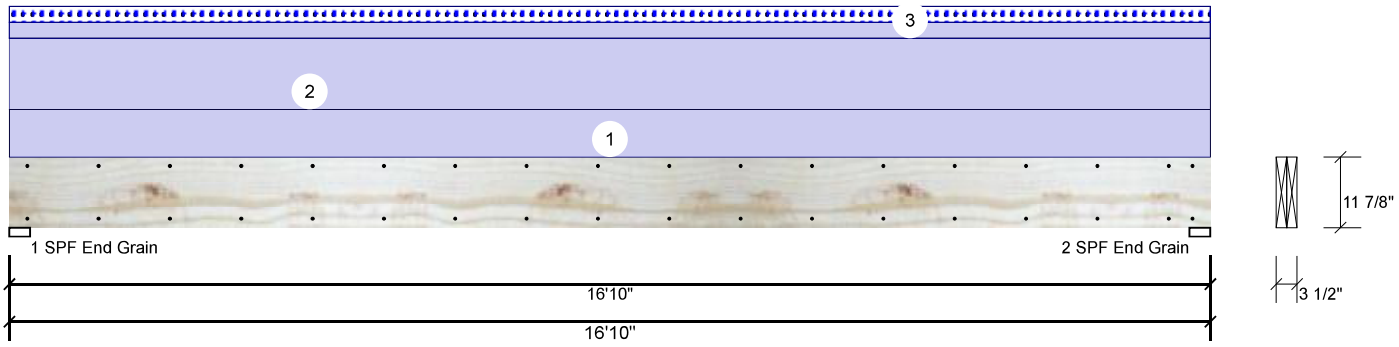
Manufacturer Info

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

Client:	Weaver Development	Date:	5/18/2021
Project:		Input by:	David Landry
Address:		Job Name:	The Hickory II Plan
		Project #:	J0521-2781

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

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	1509	168	0	0
2	Vertical	0	1509	168	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	16%	1509 / 168	1677	L	D+S
2 - SPF End Grain	3.500"	Vert	16%	1509 / 168	1677	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6008 ft-lb	8'5"	17919 ft-lb	0.335 (34%)	D	Uniform
Unbraced	6678 ft-lb	8'5"	6684 ft-lb	0.999 (100%)	D+S	L
Shear	1288 lb	1'3 3/8"	7980 lb	0.161 (16%)	D	Uniform
LL Defl inch	0.035 (L/5617)	8'5 1/16"	0.409 (L/480)	0.085 (9%)	S	L
TL Defl inch	0.348 (L/564)	8'5 1/16"	0.546 (L/360)	0.638 (64%)	D+S	L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
3 Refer to last page of calculations for fasteners required for specified loads.
4 Girders are designed to be supported on the bottom edge only.
5 Top loads must be supported equally by all plies.
6 Top must be laterally braced at a maximum of 14'10 7/16" o.c.
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			Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Uniform			Top	90 PLF	0 PLF	0 PLF	0 PLF	0 PLF	B1GE
3	Tie-In	0-0-0 to 16-10-0	1-0-0	Top	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	Roof Load
	Self Weight				9 PLF					

Notes

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Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL 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
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6. For flat roofs provide proper drainage to prevent ponding

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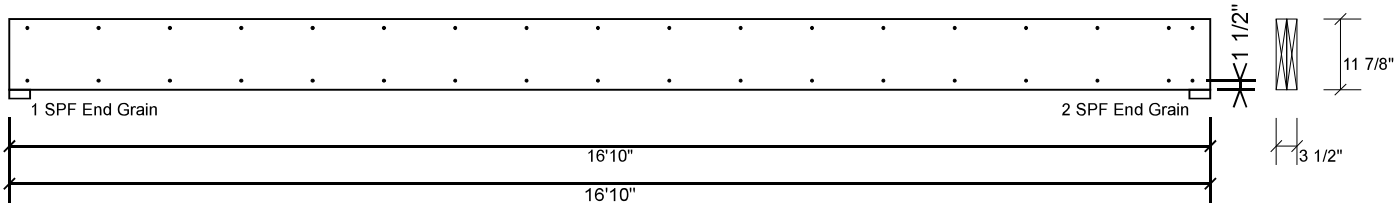
GDH Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

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

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(800) 622-5850
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Comtech, Inc.
1001 S. Reilly Road, Suite #639
Fayetteville, NC
USA
28314
910-864-TRUS

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0521-2781
Lot 1 Wire Road

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: E15739897 thru E15739904

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

North Carolina COA: C-0844

May 18,2021

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	Lot 1 Wire Road
J0521-2781	ET1	Floor Supported Gable	1	1	E15739897
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 18 09:51:57 2021 Page 1
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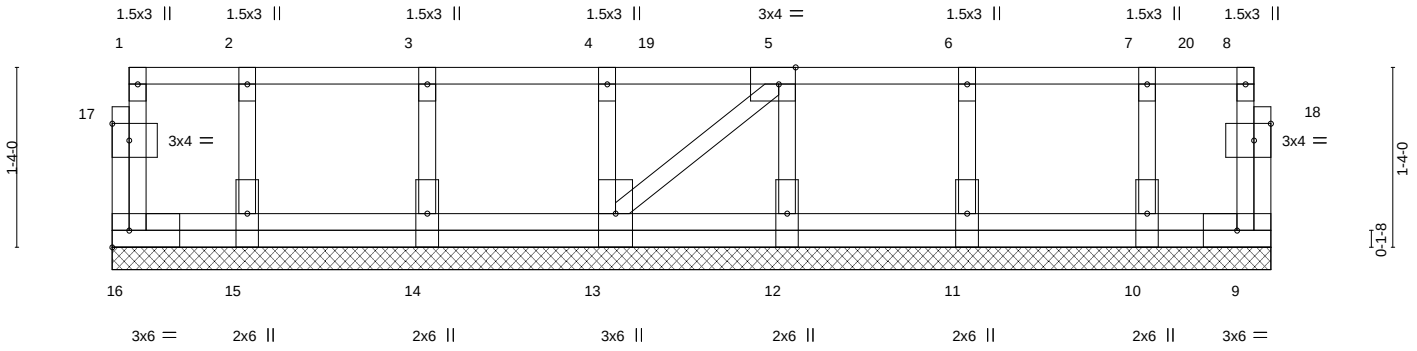

8-7-0
8-7-0

Plate Offsets (X,Y)-- [5:0-1-8,Edge], [17:0-1-8,0-1-8], [18:0-1-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.00	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 54 lb	FT = 20%F, 11%E

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

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

REACTIONS. All bearings 8-7-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 16, 9, 15, 14, 13, 12, 11, 10

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

NOTES-
1) Plates checked for a plus or minus 1 degree rotation about its center.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 9-16=-10, 1-8=-100
Concentrated Loads (lb)
Vert: 3=-71 6=-71 19=-71 20=-77

May 18,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2781	ET2	Floor Supported Gable	1	1	E15739898
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 18 09:51:58 2021 Page 1
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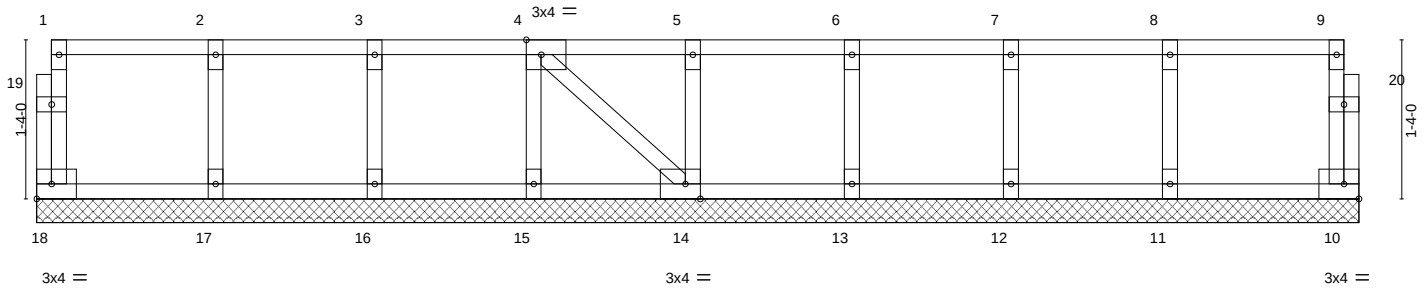

11-1-0
11-1-0

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [14:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	10	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 52 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD	2x4 SP No.1(flat)
BOT CHORD	2x4 SP No.1(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

BRACING-

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

REACTIONS. All bearings 11-1-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 18, 10, 17, 16, 15, 14, 13, 12, 11

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

NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

May 18,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2781	ET3	Floor Supported Gable	1	1	E15739899
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 18 09:51:59 2021 Page 1
ID:1yUksKymplk2404ufZYCrxyoKUD-bR?fdcEhTsDtrTv3zv72AJYpt_LdpAOqyCJpGWzFIhk

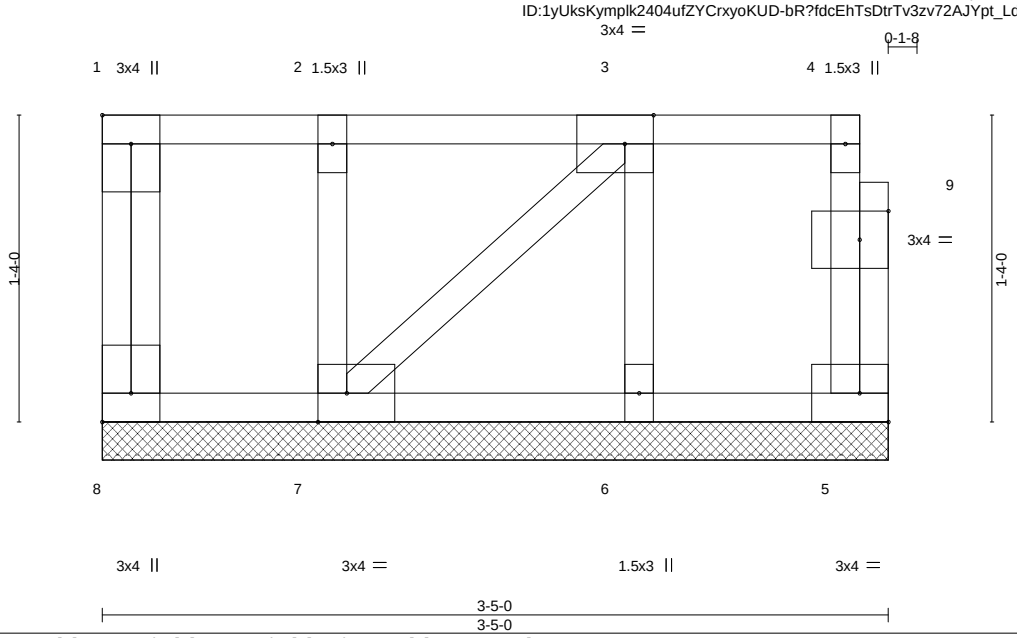

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [3:0-1-8,Edge], [7:0-1-8,Edge], [8:Edge,0-1-8], [9:0-1-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%F, 11%E

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-5-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 3-5-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 8, 5, 7, 6

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

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

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TRENCO
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Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2781	F1	Floor	4	1	E15739900
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 18 09:52:01 2021 Page 1
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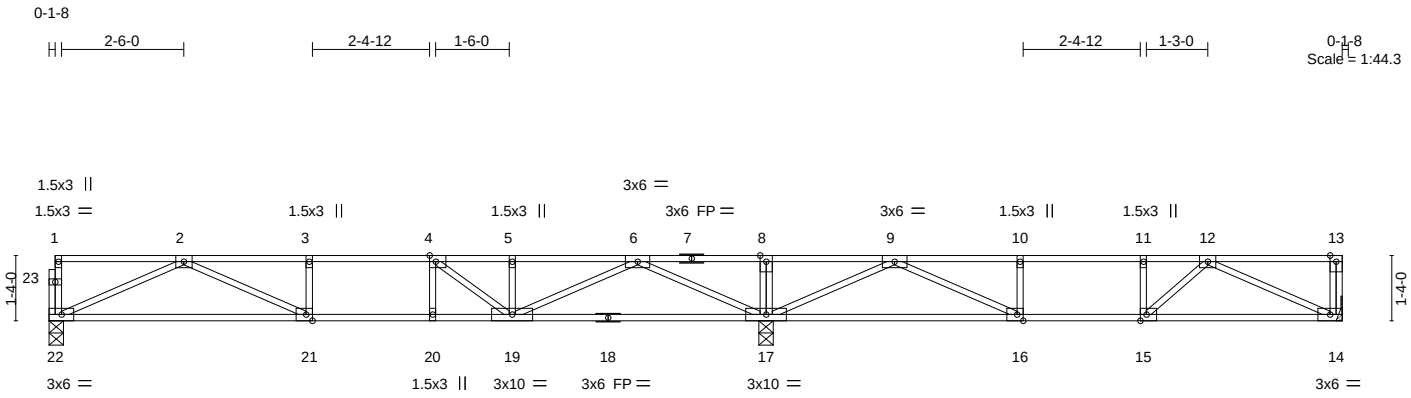

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [15:0-1-8,Edge], [16:0-1-8,Edge], [21:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.63	Vert(LL)	-0.17	21-22	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.25	21-22	>697	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.53	Horz(CT)	0.03	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 129 lb	FT = 20%F, 11%E

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 17-19,16-17.

REACTIONS. (size) 22=0-3-8, 17=0-3-8, 14=Mechanical
Max Grav 22=727(LC 10), 17=1669(LC 1), 14=1068(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 13-14=-611/0, 2-3=-1987/0, 3-4=-1987/0, 4-5=-1739/0, 5-6=-1739/0, 6-8=0/1282, 8-9=0/1282, 9-10=-1182/0, 10-11=-1182/0, 11-12=-1182/0
BOT CHORD 21-22=0/1314, 20-21=0/1987, 19-20=0/1987, 17-19=-192/817, 16-17=-367/573, 15-16=0/1182, 14-15=0/957
WEBS 8-17=-284/0, 2-22=-1440/0, 2-21=0/744, 3-21=-260/0, 6-17=-1781/0, 6-19=0/1122, 4-19=-647/0, 9-17=-1466/0, 9-16=0/918, 10-16=-330/0, 12-14=-1053/0, 12-15=-87/307

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

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 14-22=-10, 1-13=-100
Concentrated Loads (lb)
Vert: 13=-500

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Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2781	F2	Floor	5	1	E15739901
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 18 09:52:02 2021 Page 1
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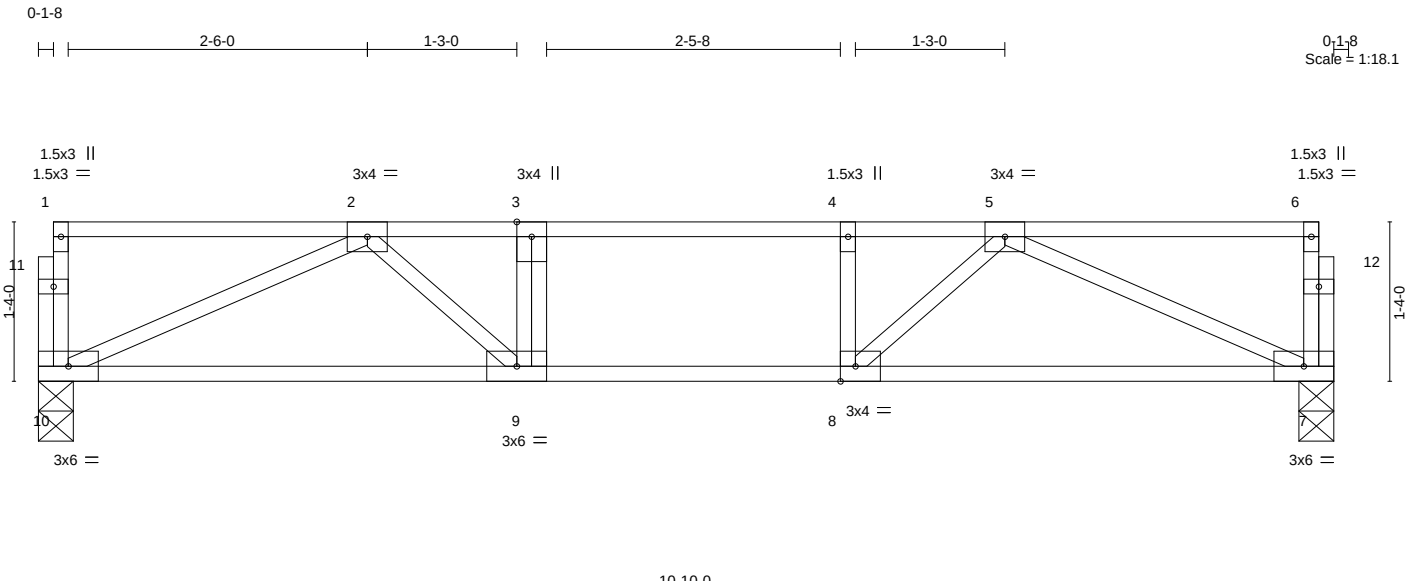

Plate Offsets (X,Y)-- [8:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.42	Vert(LL)	-0.08	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.35	Vert(CT)	-0.11	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.02	7	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 56 lb	FT = 20%F, 11%E

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

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

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Grav 10=576(LC 1), 7=576(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1234/0, 3-4=-1234/0, 4-5=-1234/0
BOT CHORD 9-10=0/981, 8-9=0/1234, 7-8=0/982
WEBS 2-10=-1073/0, 5-7=-1075/0, 5-8=0/485, 2-9=0/478, 3-9=-255/0, 4-8=-266/0

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

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Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2781	F3	Floor	5	1	E15739902
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 18 09:52:03 2021 Page 1
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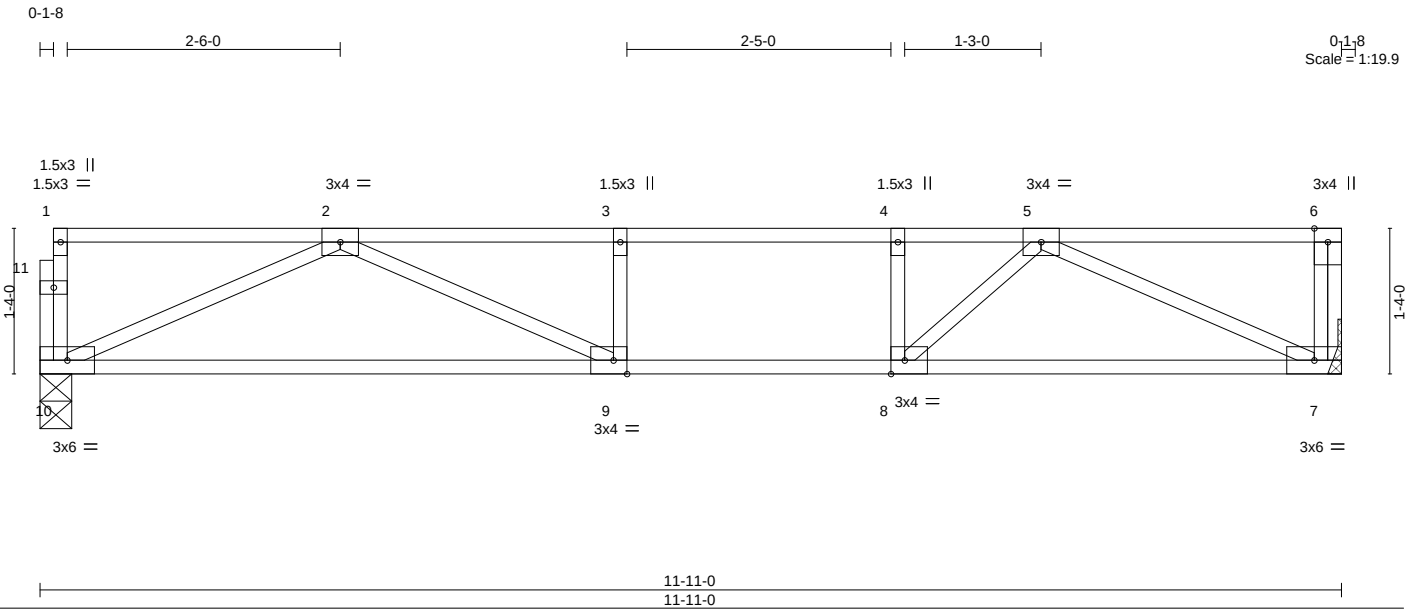

Plate Offsets (X,Y)-- [8:0-1-8,Edge], [9:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.78	Vert(LL)	-0.19	9-10	>740	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.61	Vert(CT)	-0.29	9-10	>490	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.34	Horz(CT)	0.02	7	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 59 lb	FT = 20%F, 11%E

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

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

REACTIONS. (size) 10=0-3-8, 7=Mechanical
Max Grav 10=635(LC 1), 7=1142(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 6-7=-616/0, 2-3=-1508/0, 3-4=-1508/0, 4-5=-1508/0
BOT CHORD 9-10=0/1112, 8-9=0/1508, 7-8=0/1124
WEBS 2-10=-1219/0, 2-9=0/558, 5-7=-1238/0, 5-8=0/654, 4-8=-352/0

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

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 7-10=-10, 1-6=-100
Concentrated Loads (lb)
Vert: 6=-500

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Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2781	F4	Floor	7	1	E15739903
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 18 09:52:04 2021 Page 1
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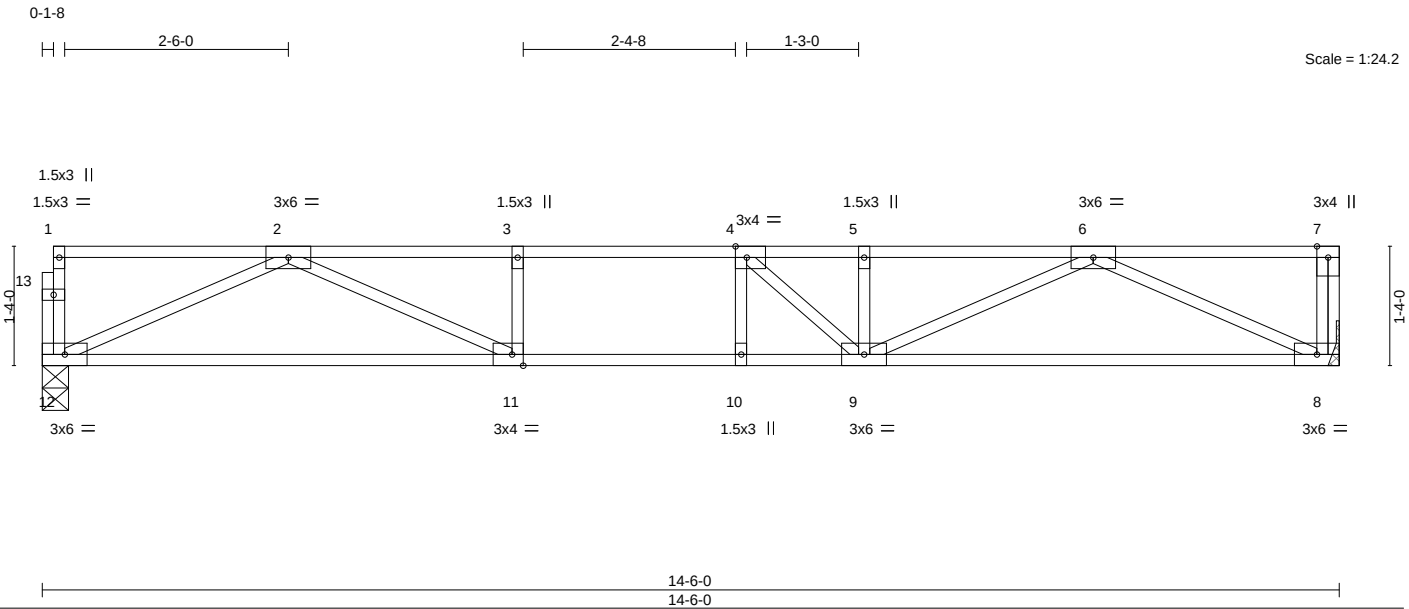

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [11:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.61	Vert(LL)	-0.20	9-10	>838	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.25	9-10	>684	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.03	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 73 lb	FT = 20%F, 11%E

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

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

REACTIONS. (size) 12=0-3-8, 8=Mechanical
Max Grav 12=778(LC 1), 8=784(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2243/0, 3-4=-2243/0, 4-5=-2186/0, 5-6=-2186/0
BOT CHORD 11-12=0/1424, 10-11=0/2243, 9-10=0/2243, 8-9=0/1429
WEBS 2-12=-1561/0, 2-11=0/958, 3-11=-303/0, 6-8=-1573/0, 6-9=0/836, 5-9=-271/41, 4-9=-428/186

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

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TRENCO
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 1 Wire Road
J0521-2781	F5	Floor	7	1	E15739904
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 18 09:52:05 2021 Page 1
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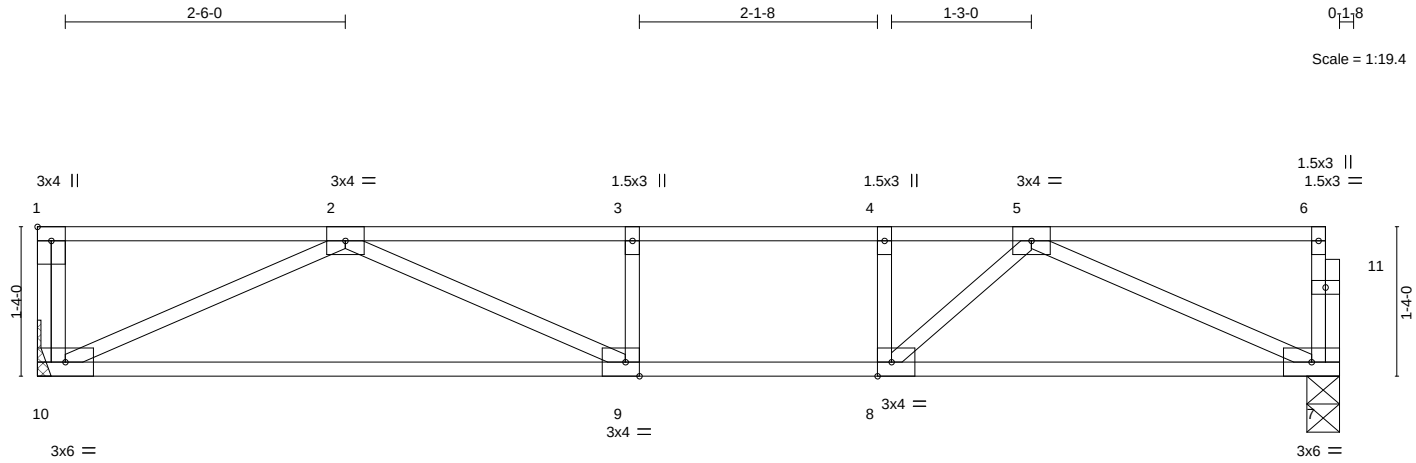

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [8:0-1-8,Edge], [9:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.60	Vert(LL)	-0.16	9-10	>846	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.51	Vert(CT)	-0.25	9-10	>540	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.02	7	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 58 lb	FT = 20%F, 11%E

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

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

REACTIONS. (size) 10=Mechanical, 7=0-3-8
Max Grav 10=626(LC 1), 7=619(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1441/0, 3-4=-1441/0, 4-5=-1441/0
BOT CHORD 9-10=0/1081, 8-9=0/1441, 7-8=0/1087
WEBS 2-10=-1190/0, 2-9=0/515, 5-7=-1190/0, 5-8=0/606, 4-8=-323/0

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

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TRENCO
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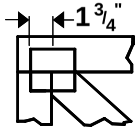
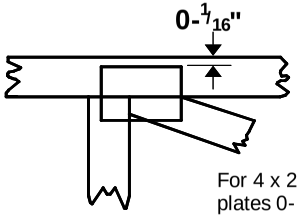
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

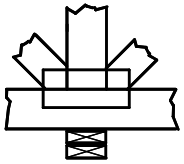
4 x 4

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

LATERAL BRACING LOCATION

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

BEARING

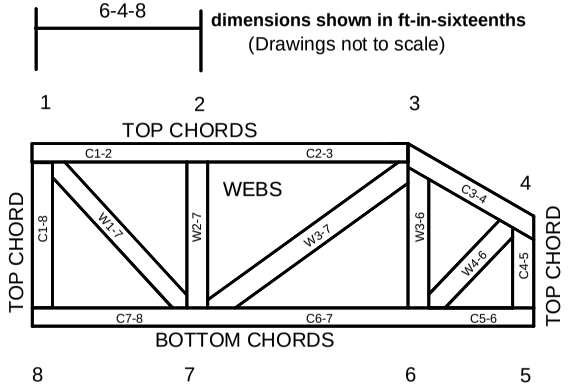


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

21. The design does not take into account any dynamic or other loads other than those expressly stated.