ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: Master
H&H/Kent/

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Builders FirstSource (Albermarle,NC).

Pages or sheets covered by this seal: E13078425 thru E13078467

My license renewal date for the state of North Carolina is December 31, 2019.

North Carolina COA: C-0844

May 22,2019

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	H&H/Kent/ E13078425
Master	A01	GABLE	5	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:36:41 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-Sy8wne2mL0eIFtSLeWDC2nDVZOpYO0N?S_8pYDzE_Y4

-0-10-8 11-6-2 18-1-8
0-10-8 11-6-2 6-7-6

Scale = 1:46.5

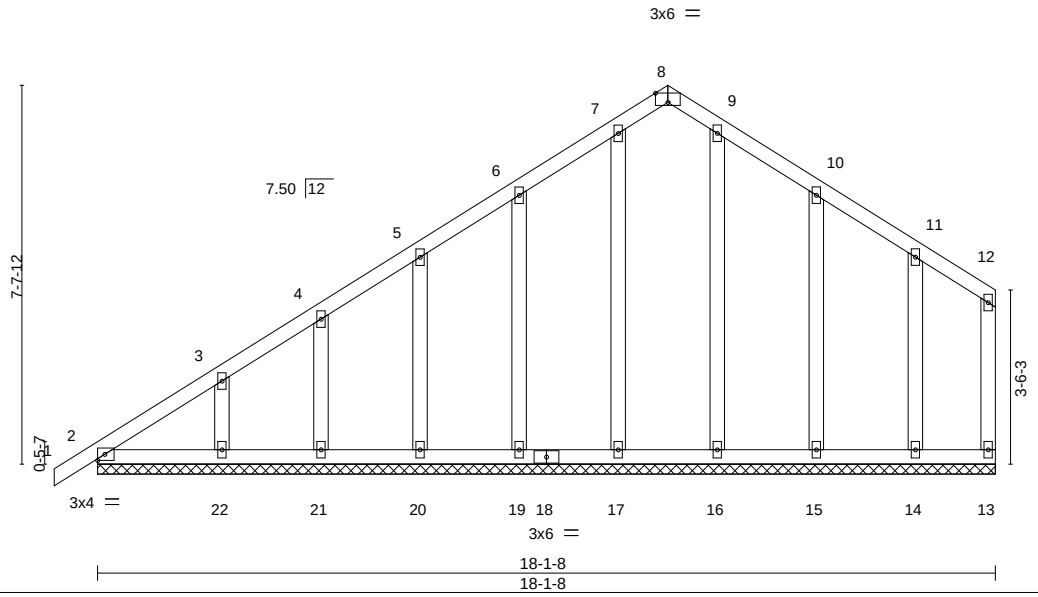


Plate Offsets (X,Y)-- [8:0-3-0,Edge]

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	0.12	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	13	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 118 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

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 18-1-8.
(lb) - Max Horz 2=239(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 13, 2, 17, 19, 20, 21, 14 except 22=-104(LC 12), 15=-105(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 13, 2, 17, 19, 20, 21, 22, 16, 15, 14

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

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be User Defined crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 2, 17, 19, 20, 21, 14 except (jt=lb) 22=104, 15=105.
11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078426
Master	A02	Common	63	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:36:42 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-w9iI__3O6Kn9t11XBEkRb?mbNo_n7RF8hetM4fzE_Y3

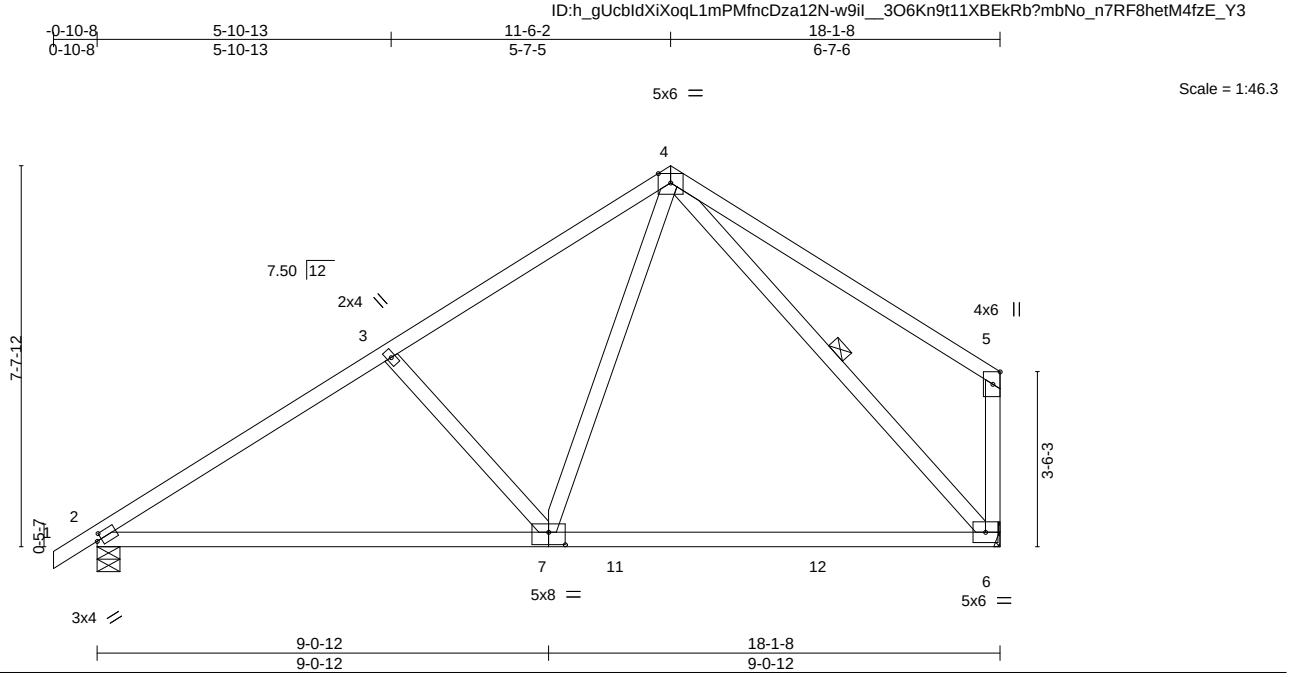


Plate Offsets (X,Y)-- [2:0-1-2,0-1-8], [5:0-3-0,Edge], [7:0-4-0,0-3-0]

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	0.43	Vert(LL)	-0.24	6-7	>904	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.36	6-7	>599	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.06	7-10	>999	240	Weight: 97 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
5-6: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-6

REACTIONS. (lb/size) 2=773/0-5-8, 6=718/Mechanical
Max Horz 2=238(LC 12)
Max Uplift 2=-149(LC 12), 6=-117(LC 12)
Max Grav 2=773(LC 1), 6=737(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-993/241, 3-4=-791/242, 5-6=-277/171
BOT CHORD 2-7=-285/895, 6-7=-87/470
WEBS 3-7=-372/260, 4-7=-89/594, 4-6=-601/132

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) All bearings are assumed to be User Defined crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=149, 6=117.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

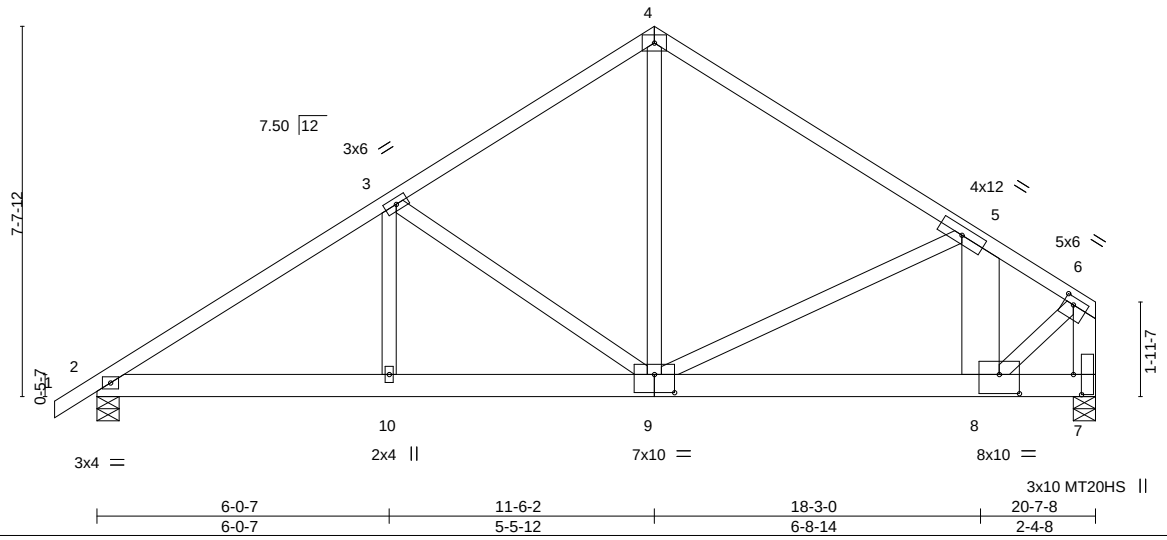
Job	Truss	Truss Type	Qty	Ply	H&H/Kent/
Master	A03	Common Girder	2	2	E13078427

Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:36:44 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-tXq2Pf4eex1t6KBwJfmvgQrvFchJbDpR8yMT9YzE_Y1

-0-10-8	6-0-7	11-6-2	18-3-0	20-7-8
0-10-8	6-0-7	5-5-12	6-8-14	2-4-8

Scale: 1/4"=1'



6-0-7	11-6-2	18-3-0	20-7-8
6-0-7	5-5-12	6-8-14	2-4-8

Plate Offsets (X,Y)-- [6:0-2-8,0-1-12], [7:0-5-0,0-2-0], [8:0-5-0,0-4-12], [9:0-5-0,0-4-8]

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	0.47	Vert(LL)	-0.04	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.10	8-9	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.03	8-9	>999	240	Weight: 278 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2 *Except*
5-8: 2x10 SP DSS, 6-7: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=1666/0-5-8, 7=7586/0-5-8
Max Horz 2=170(LC 5)
Max Uplift 2=-58(LC 8), 7=-143(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2670/91, 3-4=-2294/116, 4-5=-2314/118, 5-6=-6174/127, 6-7=-7282/130
BOT CHORD 2-10=-115/2194, 9-10=-115/2194, 8-9=-110/5240
WEBS 3-9=-490/167, 4-9=-29/1979, 5-9=-3778/187, 5-8=-240/3482, 6-8=-149/6460

NOTES- (11)
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 - 3 rows staggered at 0-2-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x10 - 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=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be User Defined crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 7=143.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 7567 lb down and 144 lb up at 18-3-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

May 22,2019

Continued on page 2

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

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-4=-60, 4-6=-60, 7-11=-20

Concentrated Loads (lb)

Vert: 8=-7567(F)

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078428
Master	A04	Common	63	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:36:46 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-pwypqL6vAZHbLeKIQ4pNlrxEIPIP3FekcGraDRzE_Y?

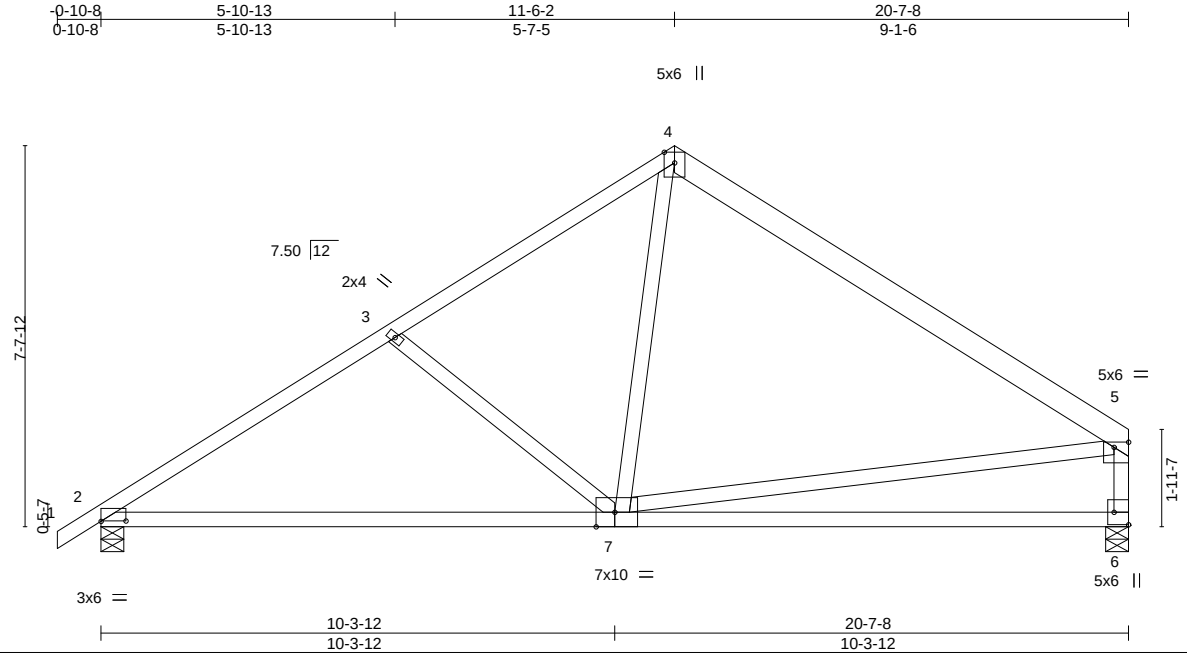


Plate Offsets (X,Y)-- [2:0-6-0,0-0-2], [5:Edge,0-1-4], [6:Edge,0-3-8], [7:0-4-8,Edge]

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	0.56	Vert(LL)	-0.19	6-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.38	6-7	>643	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.07	7-10	>999	240	Weight: 114 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
4-5: 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
5-6: 2x4 SP No.2

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

REACTIONS. (lb/size) 6=818/0-5-8, 2=873/0-5-8
Max Horz 2=210(LC 9)
Max Uplift 6=-125(LC 13), 2=-168(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1142/306, 3-4=-880/271, 4-5=-867/231, 5-6=-725/241
BOT CHORD 2-7=-276/968
WEBS 3-7=-383/259, 4-7=-27/505, 5-7=-67/451

NOTES- (8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be User Defined crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=125, 2=168.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078429
Master	A05	GABLE	5	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:36:47 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-H6WB1h6XxsPSzovV_nKcI2TVXpstokrtrwb7mtzE_Y_

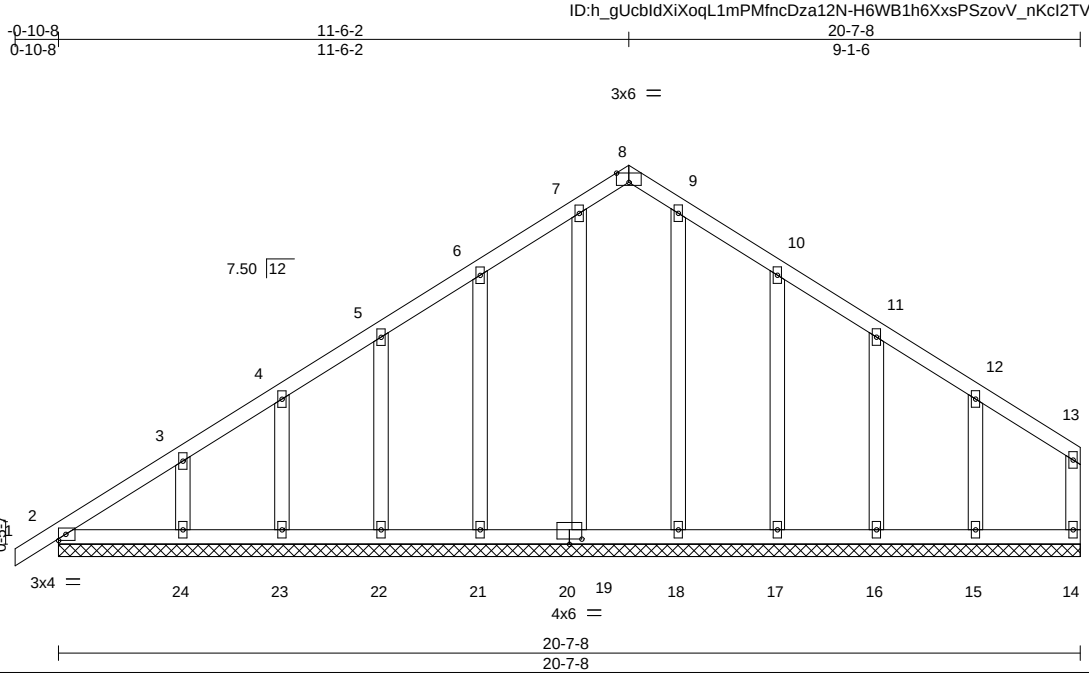


Plate Offsets (X,Y)-- [8:0-3-0,Edge], [19:0-1-12,0-0-0], [20:0-3-0,0-1-4], [20:0-0-0,0-1-12]

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	0.15	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 128 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

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 20-7-8.
(lb) - Max Horz 2=211(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 21, 22, 23, 16 except 24=-103(LC 12), 17=-117(LC 13), 15=-122(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 14, 2, 19, 21, 22, 23, 24, 18, 17, 16, 15

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

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be User Defined crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 21, 22, 23, 16 except (jt=lb) 24=103, 17=117, 15=122.
11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078430
Master	A06	Hip Girder	3	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:36:48 2019 Page 1
ID:h_gUcbldXiXoqL1mPMfncDza12N-lJ4ZF179iAXIbyUhYVrrqG0VCD33X7j13aKhHJzE_Xz

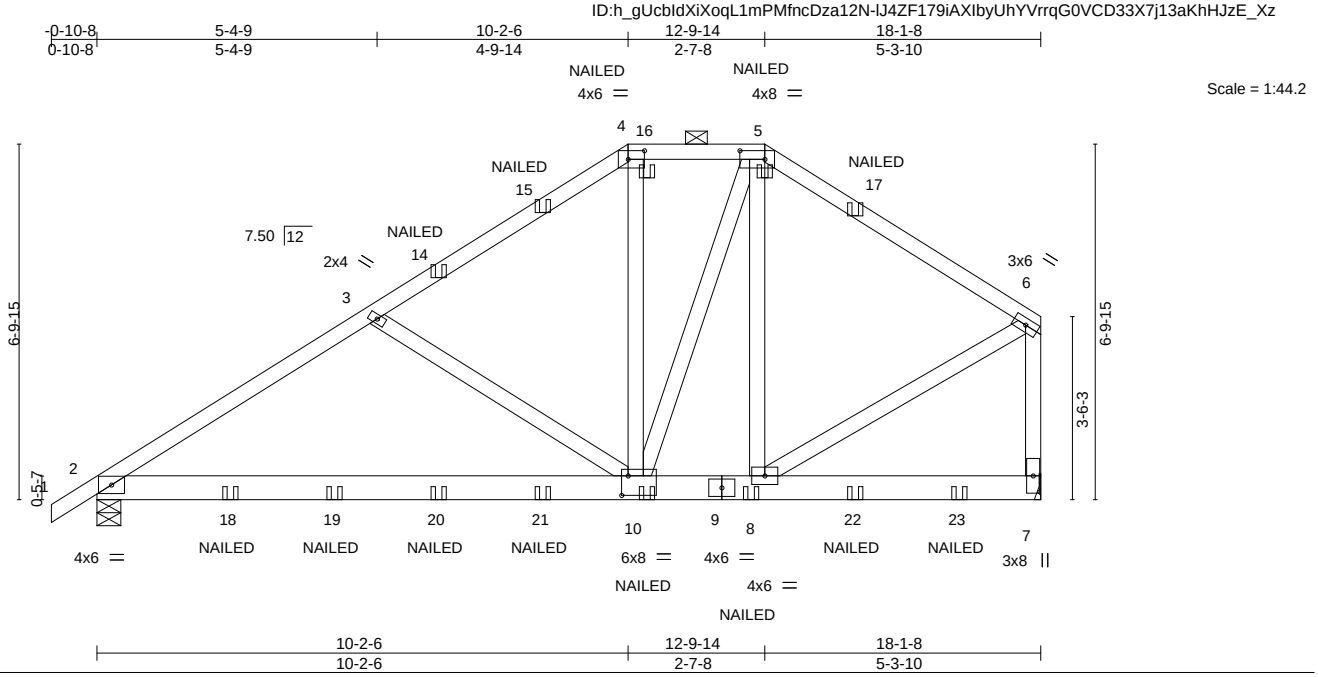


Plate Offsets (X,Y)-- [4:0-3-12,0-2-0], [5:0-5-12,0-2-0], [10:0-1-8,0-4-8]

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	0.86	Vert(LL)	0.26	10-13	>825	240	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC	0.63	Vert(CT)	-0.38	10-13	>562	240		
BCLL	0.0 *	Rep Stress Incr NO	WB	0.41	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-MS							Weight: 125 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP DSS *Except*
7-9: 2x6 SP No.2
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-9-7 oc purlins, except end verticals, and 2-0-0 oc purlins (5-3-15 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 8-11-13 oc bracing.

REACTIONS. (lb/size) 2=1490/0-5-8, 7=1490/Mechanical
Max Horz 2=223(LC 8)
Max Uplift 2=-597(LC 8), 7=-695(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1783/806, 3-4=-1479/717, 4-5=-1175/656, 5-6=-1140/598, 6-7=-1231/606
BOT CHORD 2-10=-809/1504, 8-10=-444/882
WEBS 3-10=-405/284, 4-10=-158/455, 5-10=-363/854, 5-8=-580/306, 6-8=-505/991

NOTES- (12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be User Defined crushing capacity of 565 psi.
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) 2=597, 7=695.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
12) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-5=-60, 5-6=-60, 7-11=-20

May 22,2019

Continued on page 2

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

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 5=-117(F) 10=-37(F) 8=-37(F) 14=-8(F) 16=-117(F) 18=-241(F) 19=-210(F) 20=-146(F) 21=-184(F) 22=-182(F) 23=-210(F)

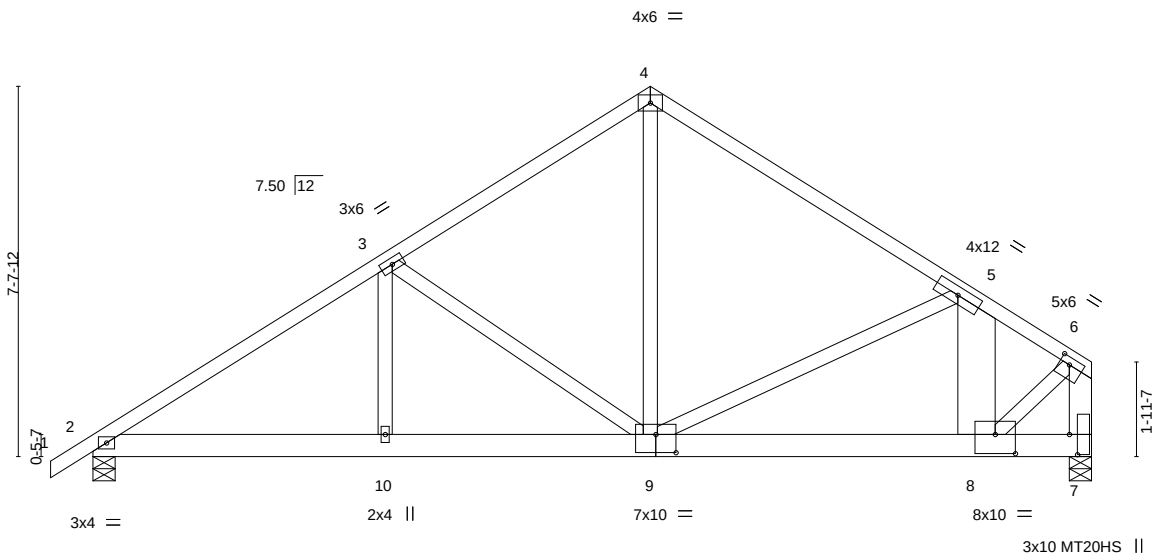
Job	Truss	Truss Type	Qty	Ply	H&H/Kent/
Master	A07	Common Girder	3	2	E13078431

Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:36:50 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-hhBJfj9PDnn0qFe3fvtJvh5xf0kb?xCKXtpoLCzE_Xx

-0-10-8 | 6-0-7 | 11-6-2 | 18-3-0 | 20-7-8
0-10-8 | 6-0-7 | 5-5-12 | 6-8-14 | 2-4-8

Scale: 1/4"=1'



6-0-7 | 11-6-2 | 18-3-0 | 20-7-8
6-0-7 | 5-5-12 | 6-8-14 | 2-4-8

Plate Offsets (X,Y)-- [6:0-2-8,0-1-12], [7:0-5-0,0-2-0], [8:0-5-0,0-4-12], [9:0-5-0,0-4-8]

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	0.48	Vert(LL)	-0.04	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC	0.69	Vert(CT)	-0.10	8-9	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr NO	WB	0.80	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.04	8-9	>999	240	Weight: 278 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2 *Except*
5-8: 2x10 SP DSS, 6-7: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=1673/0-5-8, 7=7648/0-5-8
Max Horz 2=170(LC 5)
Max Uplift 2=-75(LC 8), 7=-285(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2684/121, 3-4=-2301/148, 4-5=-2358/150, 5-6=-6223/243, 6-7=-7340/266
BOT CHORD 2-10=-141/2206, 9-10=-141/2206, 8-9=-208/5282
WEBS 3-9=-495/167, 4-9=-62/2007, 5-9=-3792/264, 5-8=-319/3512, 6-8=-270/6511

NOTES- (11)
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 - 3 rows staggered at 0-2-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x10 - 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=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be User Defined crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 7=285.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 7637 lb down and 303 lb up at 18-3-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

May 22,2019

Continued on page 2

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

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-4=-60, 4-6=-60, 7-11=-20

Concentrated Loads (lb)

Vert: 8=-7637(F)

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078432
Master	A08	Hip Girder	3	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:36:52 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-e4J44PAglP1k3ZoSnKwn?6BAaqKUTrqd_BluQ4zE_Xv

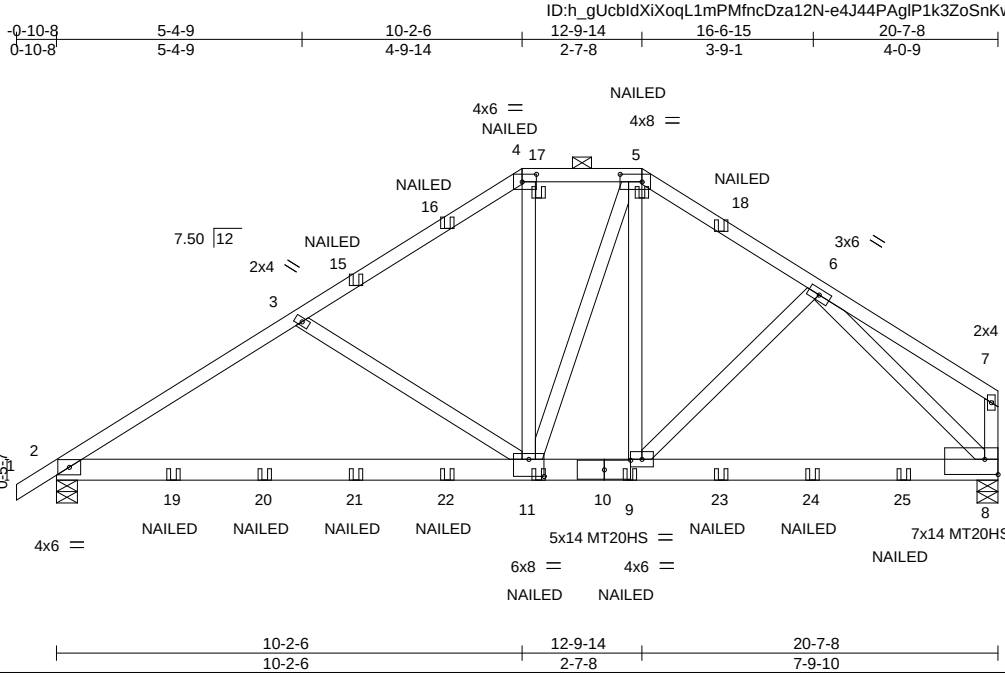


Plate Offsets (X,Y)-- [4:0-3-12,0-2-0], [5:0-5-12,0-2-0], [8:Edge,0-4-0], [10:0-6-15,0-2-8], [11:0-4-0,0-4-8]

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	0.90	Vert(LL)	0.27	11-14	>909	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.40	11-14	>620	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 139 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP DSS *Except*
8-10: 2x6 SP No.2
WEBS 2x4 SP No.2

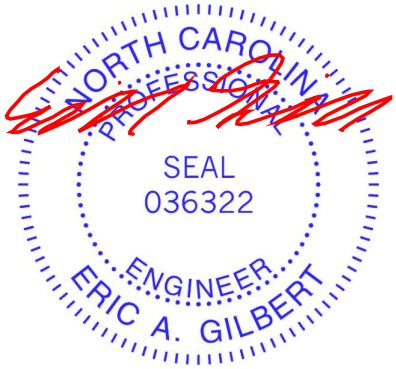
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-4-8 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-11 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 8-5-7 oc bracing.

REACTIONS. (lb/size) 2=1704/0-5-8, 8=1687/0-5-8
Max Horz 2=187(LC 5)
Max Uplift 2=-694(LC 8), 8=-718(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2177/986, 3-4=-1875/897, 4-5=-1515/812, 5-6=-1670/847, 6-7=-263/147
BOT CHORD 2-11=-922/1837, 9-11=-613/1358, 8-9=-545/1229
WEBS 3-11=-403/282, 4-11=-245/648, 5-11=-214/487, 6-9=-247/344, 6-8=-1537/707

NOTES- (12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be User Defined crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=694, 8=718.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
12) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-5=-60, 5-7=-60, 8-12=-20



May 22,2019

Continued on page 2

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

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 5=-117(B) 11=-37(B) 9=-37(B) 15=-8(B) 17=-117(B) 19=-241(B) 20=-210(B) 21=-146(B) 22=-184(B) 23=-182(B) 24=-210(B) 25=-210(B)

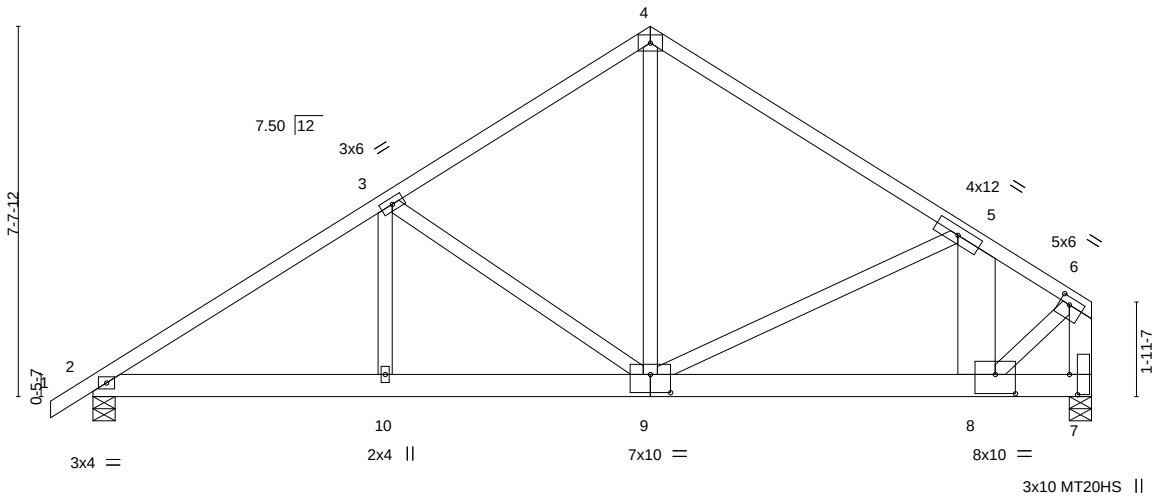
Job	Truss	Truss Type	Qty	Ply	H&H/Kent/
Master	A09	Common Girder	3	2	E13078433

Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:36:53 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-6GtSIkBIWi9bhjNeL2R0XJjS_ElTCI4mDr2SyXzE_Xu

-0-10-8	6-0-7	11-6-2	18-3-0	20-7-8
0-10-8	6-0-7	5-5-12	6-8-14	2-4-8

Scale: 1/4"=1'



6-0-7	11-6-2	18-3-0	20-7-8
6-0-7	5-5-12	6-8-14	2-4-8

Plate Offsets (X,Y)-- [6:0-2-8,0-1-12], [7:0-5-0,0-2-0], [8:0-5-0,0-4-12], [9:0-5-0,0-4-8]

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	0.47	Vert(LL)	-0.04	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC	0.68	Vert(CT)	-0.10	8-9	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr NO	WB	0.79	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.03	8-9	>999	240	Weight: 278 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2 *Except*
5-8: 2x10 SP DSS, 6-7: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=1662/0-5-8, 7=7554/0-5-8
Max Horz 2=194(LC 7)
Max Uplift 2=-62(LC 8), 7=-166(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2663/98, 3-4=-2287/120, 4-5=-2307/125, 5-6=-6148/142, 6-7=-7252/151
BOT CHORD 2-10=-93/2188, 9-10=-93/2188, 8-9=-135/5219
WEBS 3-9=-490/167, 4-9=-37/1972, 5-9=-3761/206, 5-8=-242/3465, 6-8=-172/6434

NOTES- (11)
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 - 3 rows staggered at 0-2-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x10 - 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=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be User Defined crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 7=166.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 7532 lb down and 169 lb up at 18-3-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

May 22,2019

Continued on page 2

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

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-4=-60, 4-6=-60, 7-11=-20

Concentrated Loads (lb)

Vert: 8=-7532(F)

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078434
Master	B01	GABLE	5	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:36:54 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-aSRqV4CwH0HSJtxrulyF4XGiFdDnxtZvSVn?UzzE_Xt

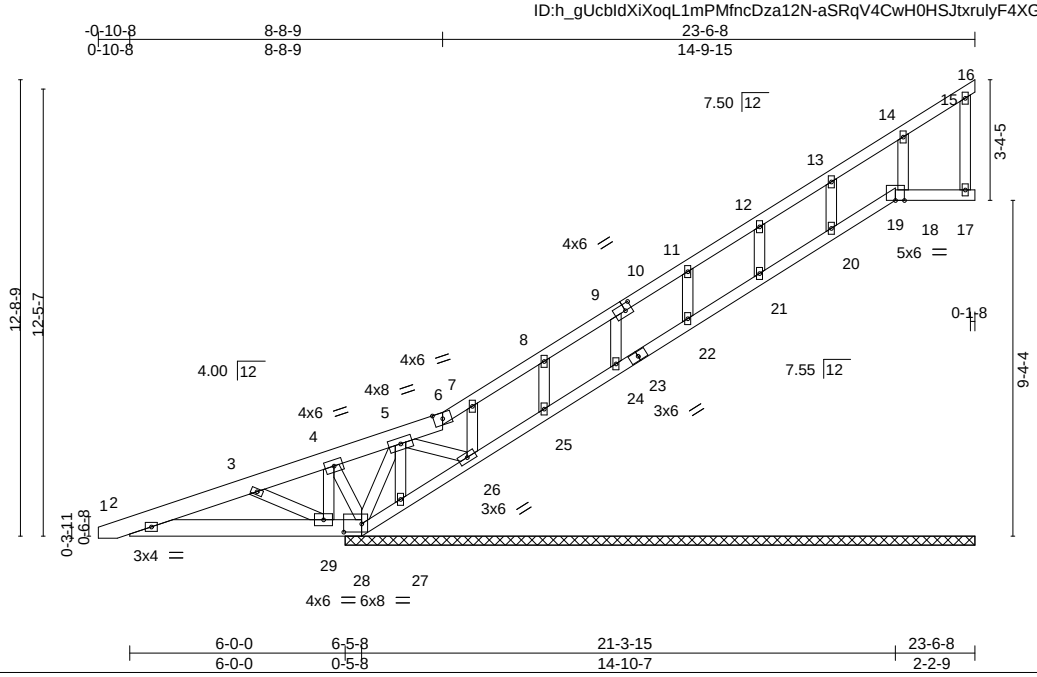


Plate Offsets (X,Y)-- [9:0-2-1,0-0-0], [10:0-2-4,0-2-4], [10:0-0-0,0-1-12], [18:0-1-12,0-0-0], [19:0-0-0,0-1-12], [28:0-6-0,0-2-12]

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	0.18	Vert(LL)	0.00	1-2	n/r	120	MT20	244/190
TCDL 10.0		Lumber DOL 1.15	BC	0.16	Vert(CT)	-0.00	1-2	n/r	120		
BCLL 0.0	*	Rep Stress Incr YES	WB	0.26	Horz(CT)	-0.01	16	n/a	n/a		
BCDL 10.0		Code IRC2015/TPI2014	Matrix-S							Weight: 131 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 1-6: 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 2-28: 2x6 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

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

REACTIONS. All bearings 17-6-8.
(lb) - Max Horz 28=552(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 16, 19, 17, 18, 20, 21, 22, 24, 25, 27 except 28=-609(LC 8), 26=-434(LC 1)
Max Grav All reactions 250 lb or less at joint(s) 16, 19, 17, 18, 20, 21, 22, 24, 25, 27 except 28=1246(LC 1), 26=322(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-504/510, 3-4=-655/747, 4-5=-785/895, 5-6=-460/354, 6-7=-456/363, 7-8=-428/343, 8-9=-358/285, 9-11=-294/235
BOT CHORD 2-29=-442/500, 28-29=-691/705, 27-28=-717/347, 26-27=-712/344
WEBS 4-29=-301/287, 5-28=-610/301, 3-29=-280/233, 4-28=-330/371, 5-26=-302/634

NOTES- (10)
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical 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 2x4 MT20 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 16, 19, 20, 21, 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 19, 17, 18, 20, 21, 22, 24, 25, 27 except (jt=lb) 28=609, 26=434.
9) Non Standard bearing condition. Review required.
10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078435
Master	B02	JACK-CLOSED	29	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:36:56 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-WrYbwmDApdXAYA5D0A_j9yLu4RoXPdxCvpG6ZszE_Xr

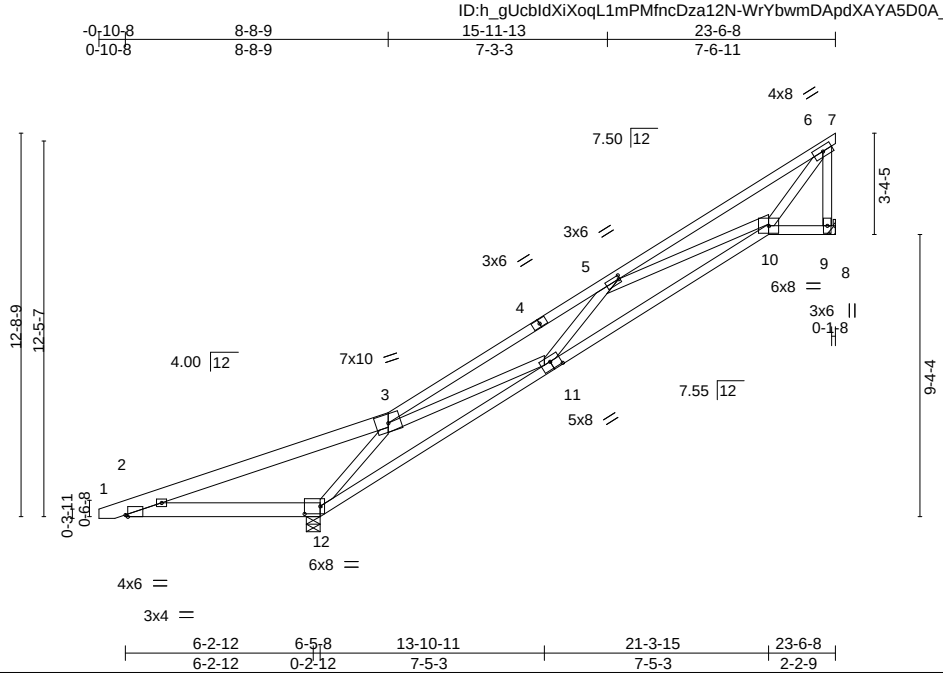


Plate Offsets (X,Y)-- [2:0-0-15,Edge], [5:0-0-8,0-1-8], [11:0-4-0,0-3-0], [12:0-6-4,0-3-0]

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	0.80	Vert(LL)	-0.09	11-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.21	10-11	>948	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.08	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.15	10-11	>999	240	Weight: 132 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
1-3: 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
2-12: 2x6 SP No.2
WEBS 2x4 SP No.3

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

REACTIONS. (lb/size) 12=1340/0-5-8, 9=569/Mechanical
Max Horz 12=551(LC 12)
Max Uplift 12=-234(LC 8), 9=-345(LC 12)
Max Grav 12=1340(LC 1), 9=698(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-889/986, 3-5=-1875/640, 5-6=-832/227, 6-9=-692/322
BOT CHORD 2-12=-859/918, 11-12=-780/948, 10-11=-1219/2245
WEBS 3-12=-1343/730, 3-11=-400/1239, 5-11=-418/444, 5-10=-1259/772, 6-10=-377/1043

NOTES- (7)
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=234, 9=345.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
7) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078436
Master	B03	JACK-CLOSED GIRDER	10	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:36:57 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-_16z76Eoaxf1AKgQauVyi9u00r5f84PM8T0f5IzE_Xq

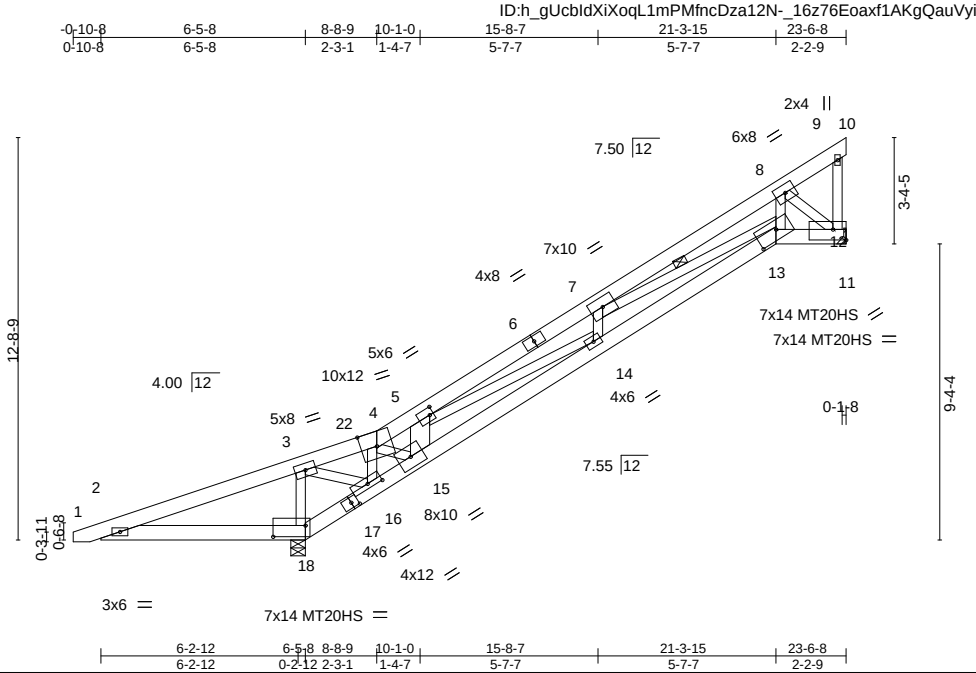


Plate Offsets (X,Y)-- [4:0-6-0,Edge], [5:0-1-8,0-2-12], [12:Edge,0-4-0], [13:0-8-0,0-3-12], [16:0-5-8,0-1-12], [17:0-2-9,0-2-0], [18:1-0-4,0-4-4]

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 0.98	Vert(LL) -0.20 14-15 >998 360	MT20	244/190
TCDL 10.0		Lumber DOL 1.15	BC 0.79	Vert(CT) -0.56 14-15 >363 240	MT20HS	187/143
BCLL 0.0	*	Rep Stress Incr NO	WB 0.83	Horz(CT) 0.20 12 n/a n/a		
BCDL 10.0		Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.23 14-15 >875 240	Weight: 168 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1 *Except*
1-4: 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
13-17: 2x6 SP DSS
WEBS 2x4 SP No.2 *Except*
5-15: 2x8 SP DSS

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-13

REACTIONS. (lb/size) 18=3329/0-5-8, 12=2476/Mechanical
Max Horz 18=379(LC 12)
Max Grav 18=3329(LC 1), 12=2579(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-724/742, 3-4=-2862/0, 4-5=-6693/0, 5-7=-8928/0, 7-8=-4354/0, 8-9=-350/0
BOT CHORD 2-18=-637/738, 16-18=-1063/294, 15-16=0/3805, 14-15=0/6956, 13-14=0/8586, 12-13=0/3124
WEBS 3-18=-2517/189, 4-15=-248/3393, 5-15=-1931/0, 5-14=0/1663, 7-14=-401/55, 7-13=-4029/0, 8-13=0/3333, 8-12=-4125/0, 4-16=-3535/0, 3-16=0/3312

NOTES- (9)
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are MT20 plates unless otherwise indicated.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1028 lb down and 320 lb up at 10-1-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
9) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

May 22,2019

Continued on page 2

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

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-22=-60, 4-22=-140(F=-80), 4-5=-140(F=-80), 5-9=-260(F=-200), 9-10=-220(F=-200), 18-19=-20, 13-18=-20, 11-13=-20

Concentrated Loads (lb)

Vert: 15=-1023(F)

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/
Master	B04	ROOF SPECIAL	24	1	E13078437
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:36:58 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-SEgLLSFQLFounUFc7b1BENRL8FYbtivVM7lDekzE_Xp

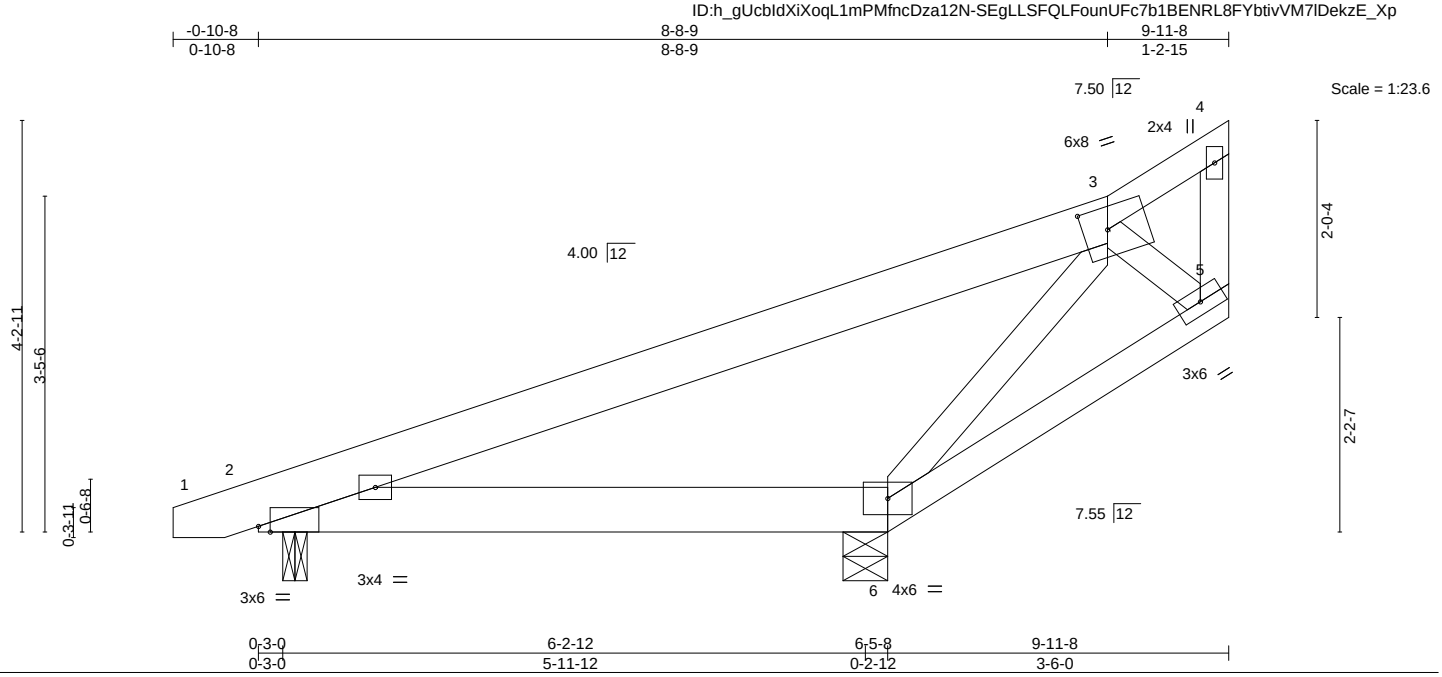


Plate Offsets (X,Y)-- [2:0-1-7,Edge], [3:0-3-0,0-2-12]

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	0.38	Vert(LL)	0.07	6-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.06	6-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 57 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
3-4: 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
5-6: 2x4 SP No.2
WEBS 2x4 SP No.3

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

REACTIONS. (lb/size) 6=595/0-5-8, 2=227/0-3-0
Max Horz 6=170(LC 12)
Max Uplift 6=-201(LC 12), 2=-137(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-275/342
BOT CHORD 2-6=-308/352
WEBS 3-6=-554/415

NOTES- (7)
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed; 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 2 User Defined crushing capacity of 565 psi.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=201, 2=137.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
7) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078438
Master	B05	JACK-CLOSED GIRDER	4	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:36:59 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-xQEjYoG36YwlPeqohIYQnazOgejtczcfbnVmAAzE_Xo

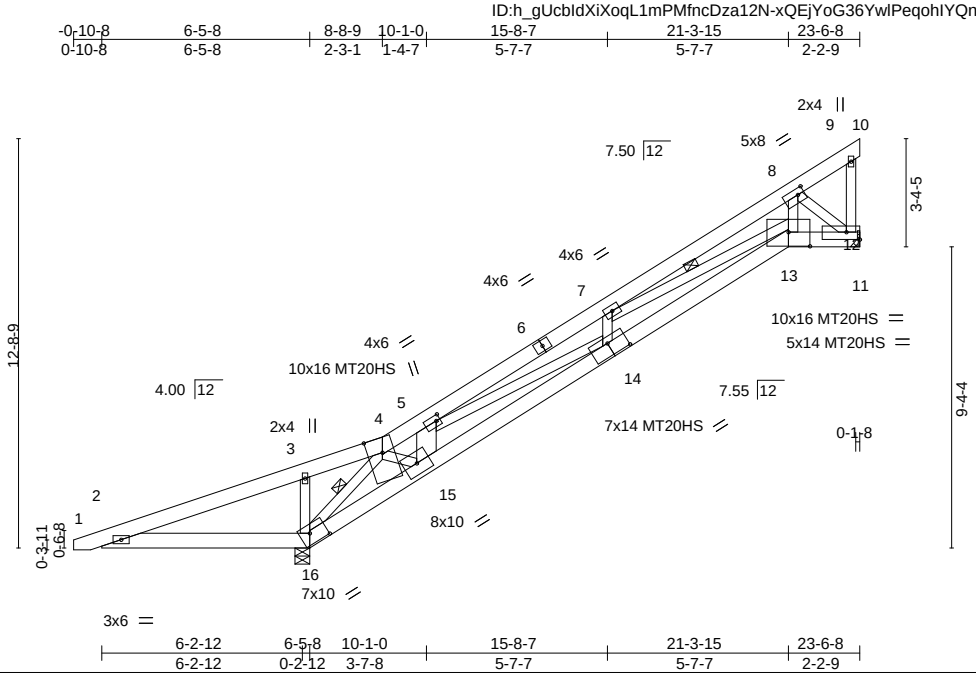


Plate Offsets (X,Y)-- [4:0-5-8,Edge], [5:0-1-8,0-2-0], [8:0-2-8,0-2-4], [12:Edge,0-2-12], [13:0-8-0,0-5-4], [14:0-7-0,0-4-12], [16:0-6-4,0-4-0]

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 0.78	Vert(LL) -0.16 14-15 >999 360	MT20 244/190
TCDL 10.0		Lumber DOL 1.15	BC 1.00	Vert(CT) -0.50 14-15 >405 240	MT20HS 187/143
BCLL 0.0	*	Rep Stress Incr NO	WB 0.91	Horz(CT) 0.21 12 n/a n/a	
BCDL 10.0		Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.17 14-15 >999 240	Weight: 168 lb FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
13-14,14-16: 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
5-15: 2x8 SP DSS

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-13, 4-16

REACTIONS. (lb/size) 16=3024/0-5-8, 12=2511/Mechanical
Max Horz 16=379(LC 12)
Max Grav 16=3024(LC 1), 12=2614(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-738/712, 3-4=-650/596, 4-5=-5602/0, 5-7=-6970/0, 7-8=-4051/0
BOT CHORD 2-16=-600/751, 15-16=0/3152, 14-15=0/5998, 13-14=0/6923, 12-13=0/2991
WEBS 3-16=-639/277, 4-15=0/2856, 5-15=-1267/0, 5-14=0/1038, 7-13=-2678/0, 8-13=-11/3893, 8-12=-3930/0, 4-16=-4538/0

NOTES- (9)
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are MT20 plates unless otherwise indicated.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1456 lb down and 191 lb up at 10-1-0, and 1095 lb down and 341 lb up at 21-3-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
9) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-5=-60, 5-9=-140(F=-80), 9-10=-100(F=-80), 16-17=-20, 13-16=-20, 11-13=-20

May 22,2019

Continued on page 2

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

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 13=-1090(F) 15=-1450(F)

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078439
Master	B06	GABLE	3	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:01 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-tpMUzUHJeAASey_Bpjaus?2shSZG4?xx35_tE3zE_Xm

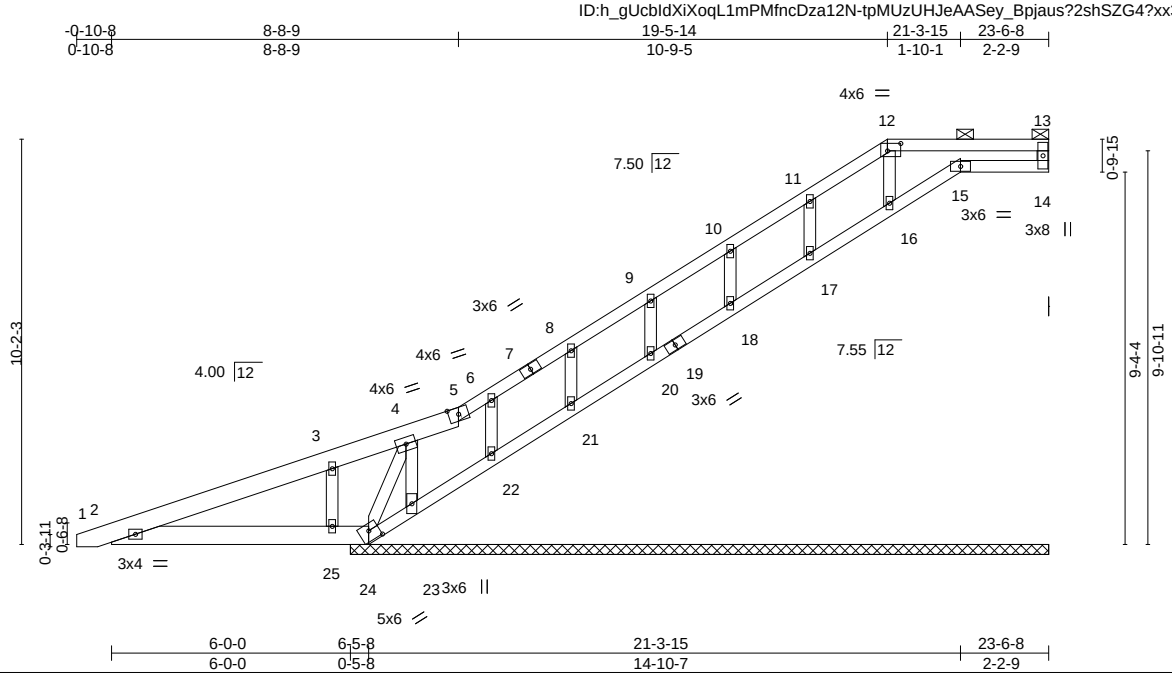


Plate Offsets (X,Y)-- [12:0-4-0,0-2-4], [24:0-3-0,0-3-0]

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	0.30	Vert(LL)	0.00	1-2	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.00	1-2	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	-0.01	14	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 116 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 1-5: 2x6 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 2-24: 2x6 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 8-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 12-13.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 17-6-8.
(lb) - Max Horz 24=440(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 15, 14, 16, 17, 18, 20, 21, 22 except 24=-943(LC 8), 23=-1163(LC 1)
Max Grav All reactions 250 lb or less at joint(s) 15, 14, 17, 18, 20, 21, 22 except 24=1985(LC 1), 16=316(LC 1), 23=566(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-768/824, 3-4=-700/789, 4-5=-324/239, 5-6=-306/241, 6-8=-329/246, 8-9=-253/183
BOT CHORD 2-25=-721/771, 24-25=-730/778
WEBS 12-16=-284/138, 4-23=-468/999, 4-24=-1547/781

NOTES- (13)
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical 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) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Bearing at joint(s) 15, 16, 17, 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 14, 16, 17, 18, 20, 21, 22 except (jt=lb) 24=943, 23=1163.
10) Non Standard bearing condition. Review required.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
13) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078440
Master	B07	JACK-CLOSED	3	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:02 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-L?wsBpIxPTIJG5ZNMR57ODb?Msr7pLc5HljQnVzE_Xl

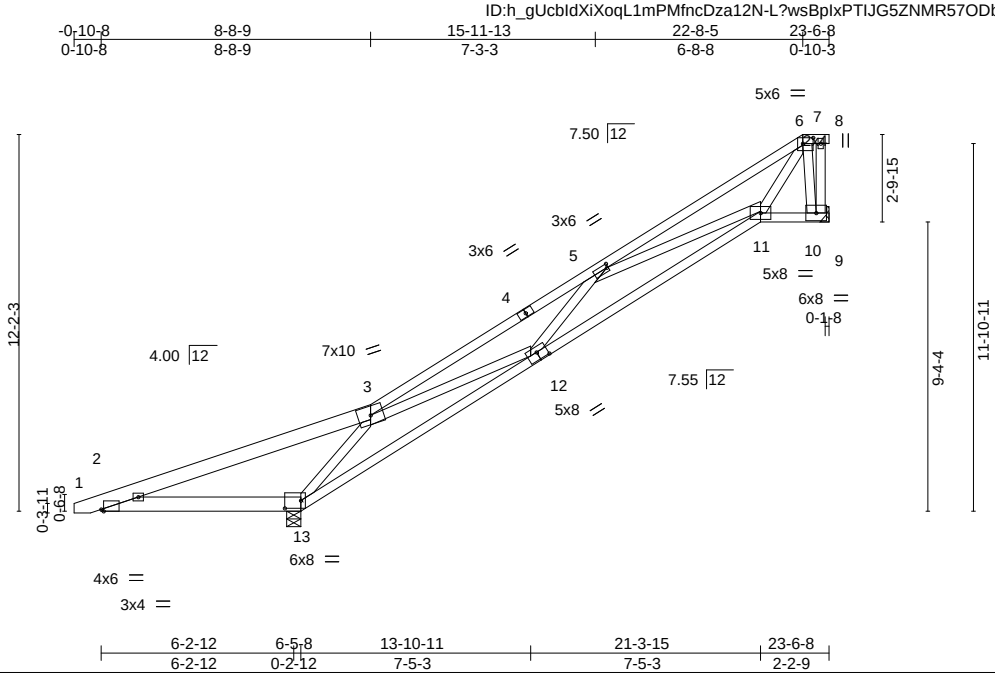


Plate Offsets (X,Y)-- [2:0-0-15,Edge], [5:0-0-8,0-1-8], [6:0-4-0,0-2-4], [12:0-4-0,0-3-0], [13:0-6-4,0-3-0]

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	0.43	Vert(LL)	-0.09	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.20	11-12	>992	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.14	11-12	>999	240	Weight: 133 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 1-3: 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 2-13: 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (lb/size) 13=1330/0-5-8, 10=579/Mechanical
Max Horz 13=529(LC 12)
Max Uplift 13=-237(LC 8), 10=-319(LC 12)
Max Grav 13=1330(LC 1), 10=679(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-887/985, 3-5=-1803/613, 5-6=-750/214
BOT CHORD 2-13=-857/917, 12-13=-753/929, 11-12=-1157/2139
WEBS 3-13=-1321/725, 3-12=-379/1193, 5-12=-393/432, 5-11=-1241/741, 6-11=-346/952, 6-10=-942/496

NOTES- (10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=237, 10=319.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078441
Master	C01	GABLE	5	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:03 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-pBUEO9JZAnQAuF8Zw8cMxQ8CjGGeYy2EWPT_JyzE_Xk

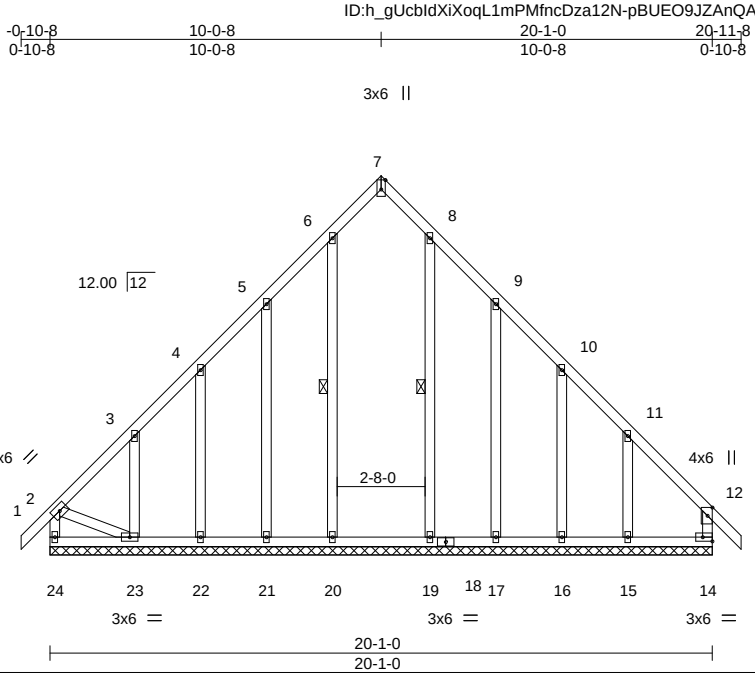


Plate Offsets (X,Y)-- [7:0-3-7,Edge], [12:0-3-0,0-1-12], [14:Edge,0-1-8]

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	0.26	Vert(LL)	-0.00	13	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.00	13	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.01	14	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 156 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except*
2-23: 2x4 SP No.3
OTHERS 2x4 SP No.3

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.
WEBS 1 Row at midpt 6-20, 8-19

REACTIONS. All bearings 20-1-0.
(lb) - Max Horz 24=352(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 14, 20, 16 except 24=-152(LC 10), 21=-174(LC 12), 22=-116(LC 12), 23=-294(LC 12), 17=-210(LC 13), 15=-365(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 21, 22, 19, 17, 16 except 24=364(LC 12), 14=338(LC 13), 20=287(LC 19), 23=273(LC 19), 15=274(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-24=-348/175, 2-3=-392/243, 11-12=-391/288, 12-14=-251/167
BOT CHORD 23-24=-326/334, 22-23=-251/318, 21-22=-251/318, 20-21=-251/318, 19-20=-251/318, 17-19=-251/318, 16-17=-251/318, 15-16=-251/318, 14-15=-251/318
WEBS 11-15=-293/290, 2-23=-269/374

NOTES- (12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) All bearings are assumed to be User Defined crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 20, 16 except (jt=lb) 24=152, 21=174, 22=116, 23=294, 17=210, 15=365.
12) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078442
Master	C02	ROOF TRUSS	13	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:05 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-lab_prKqhOgu7ZHy2Zfq0rDTN3sm0iMXzjy4NqzE_Xi

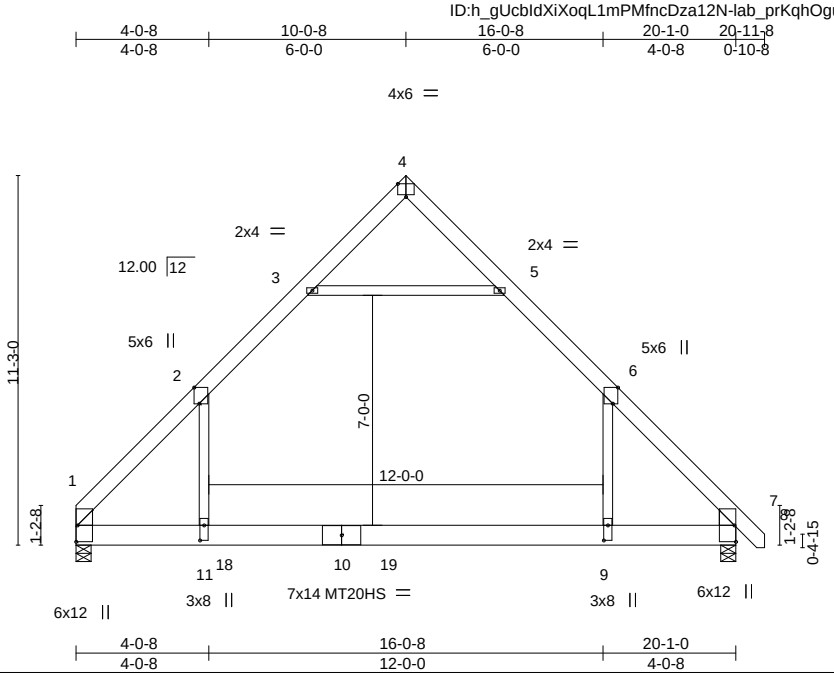


Plate Offsets (X,Y)-- [1:0-0-8,0-4-3], [1:0-0-4,0-0-4], [2:0-5-14,Edge], [4:0-3-0,Edge], [6:0-5-14,Edge], [7:0-0-4,0-0-4], [7:0-0-8,0-4-3], [9:0-5-8,0-1-8], [11:0-5-8,0-1-8]

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	0.64	Vert(LL)	-0.33	9-11	>725	360	MT20	244/190
TCDL 10.0		Lumber DOL 1.15	BC	0.58	Vert(CT)	-0.56	9-11	>427	240	MT20HS	187/143
BCLL 0.0	*	Rep Stress Incr YES	WB	0.83	Horz(CT)	0.03	1	n/a	n/a		
BCDL 10.0		Code IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.09	9-11	>999	240	Weight: 156 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP DSS
BOT CHORD 2x8 SP DSS
WEBS 2x4 SP No.2
WEDGE
Left: 2x6 SP No.2, Right: 2x6 SP No.2

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

REACTIONS. (lb/size) 1=1100/0-5-8, 7=1087/0-5-8
Max Horz 1=-300(LC 10)
Max Grav 1=1388(LC 21), 7=1360(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1910/0, 2-3=-1000/143, 3-4=-46/263, 4-5=-54/255, 5-6=-1008/131, 6-7=-1897/0
BOT CHORD 1-11=0/1083, 9-11=0/1086, 7-9=0/1082
WEBS 6-9=0/1172, 2-11=0/1202, 3-5=-1272/116

NOTES- (12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 200.0lb AC unit load placed on the bottom chord, 7-0-0 from left end, supported at two points, 5-0-0 apart.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Ceiling dead load (5.0 psf) on member(s). 2-3, 5-6, 3-5; Wall dead load (5.0psf) on member(s).6-9, 2-11
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 9-11
9) All bearings are assumed to be User Defined crushing capacity of 565 psi.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
11) Attic room checked for L/360 deflection.
12) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078443
Master	C03	ROOF TRUSS	48	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:06 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-Dm9N0BLSSiolljs8bGA3Z2me7TC?l9bgCNhewGzE_Xh

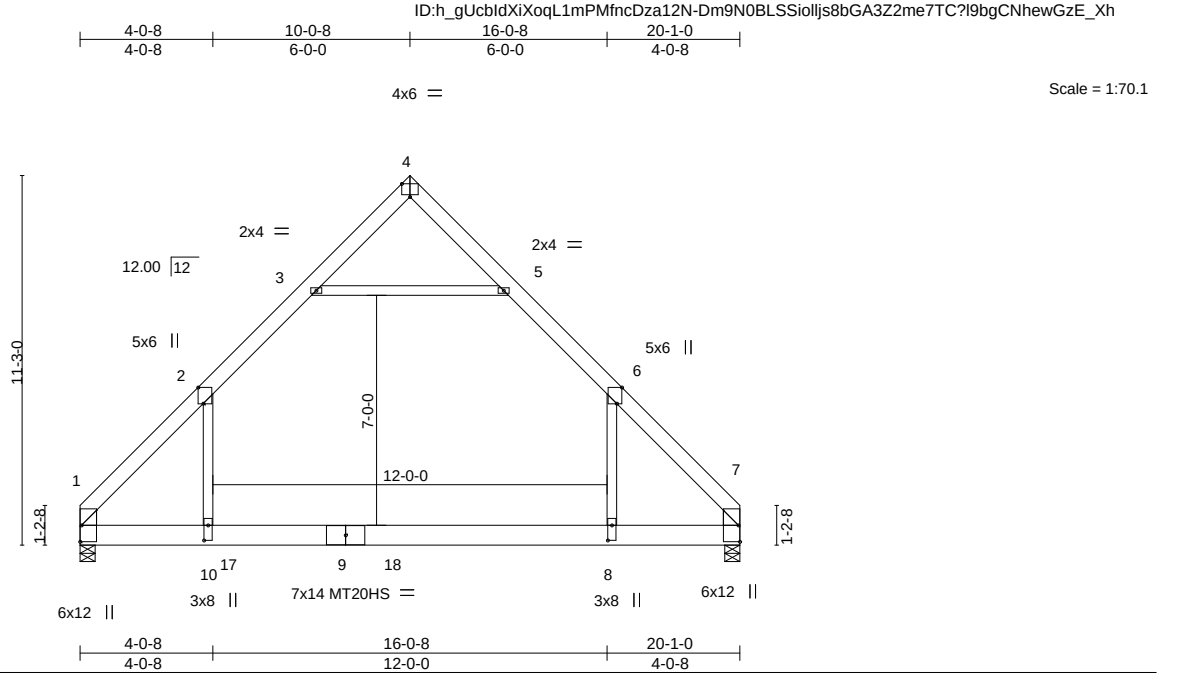


Plate Offsets (X,Y)-- [1:0-0-8,0-4-3], [1:0-0-4,0-0-4], [2:0-5-14,Edge], [4:0-3-0,Edge], [6:0-5-14,Edge], [7:0-0-4,0-0-4], [7:0-0-8,0-4-3], [8:0-5-8,0-1-8], [10:0-5-8,0-1-8]

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	0.64	Vert(LL)	-0.33	8-10	>725	360	MT20	244/190
TCDL 10.0		Lumber DOL 1.15	BC	0.58	Vert(CT)	-0.56	8-10	>427	240	MT20HS	187/143
BCLL 0.0	*	Rep Stress Incr YES	WB	0.83	Horz(CT)	0.03	1	n/a	n/a		
BCDL 10.0		Code IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.09	8-10	>999	240	Weight: 153 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP DSS
BOT CHORD 2x8 SP DSS
WEBS 2x4 SP No.2
WEDGE
Left: 2x6 SP No.2, Right: 2x6 SP No.2

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

REACTIONS. (lb/size) 1=1101/0-5-8, 7=1041/0-5-8
Max Horz 1=286(LC 9)
Max Grav 1=1389(LC 21), 7=1329(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1912/0, 2-3=-1001/143, 3-4=-45/263, 4-5=-53/255, 5-6=-1008/131, 6-7=-1898/0
BOT CHORD 1-10=0/1073, 8-10=0/1076, 7-8=0/1072
WEBS 6-8=0/1172, 2-10=0/1203, 3-5=-1274/116

NOTES- (12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 200.0lb AC unit load placed on the bottom chord, 7-0-0 from left end, supported at two points, 5-0-0 apart.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Ceiling dead load (5.0 psf) on member(s). 2-3, 5-6, 3-5; Wall dead load (5.0psf) on member(s).6-8, 2-10
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 8-10
9) All bearings are assumed to be User Defined crushing capacity of 565 psi.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
11) Attic room checked for L/360 deflection.
12) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078444
Master	C03A	ROOF TRUSS	16	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:07 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-izjlEXM4D0wcNtRL9_hI5GIm2tXKUc3qR1RBSjzE_Xg

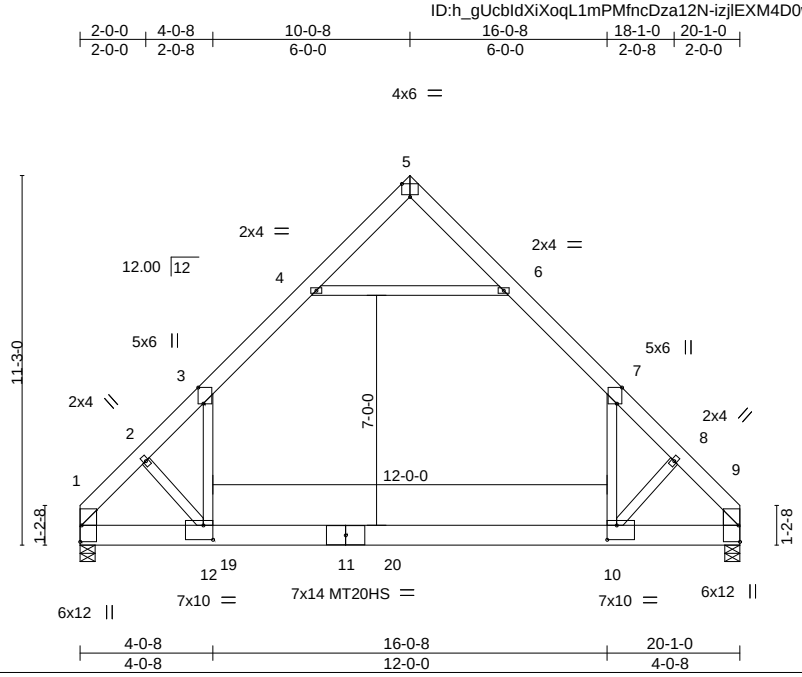


Plate Offsets (X,Y)-- [1:0-0-8,0-4-3], [1:0-0-4,0-0-4], [3:0-5-14,Edge], [5:0-3-0,Edge], [7:0-5-14,Edge], [9:0-0-4,0-0-4], [9:0-0-8,0-4-3], [10:0-3-8,0-5-4], [12:0-3-8,0-5-4]

LOADING (psf)		SPACING- 2-2-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.37	10-12	>654	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.62	10-12	>389	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.88	Horz(CT)	0.03	1	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.10	10-12	>999	240	Weight: 161 lb	FT = 20%

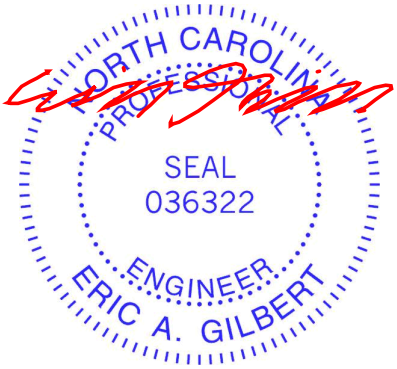
LUMBER-
TOP CHORD 2x6 SP DSS
BOT CHORD 2x8 SP DSS
WEBS 2x4 SP No.2 *Except*
2-12,8-10: 2x4 SP No.3
WEDGE
Left: 2x6 SP No.2, Right: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-1-14 oc bracing.

REACTIONS. (lb/size) 1=1182/0-5-8, 9=1122/0-5-8
Max Horz 1=309(LC 9)
Max Grav 1=1494(LC 21), 9=1434(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2100/0, 2-3=-2061/0, 3-4=-1071/157, 6-7=-1080/145, 7-8=-2026/0, 8-9=-2070/0
BOT CHORD 1-12=0/1440, 10-12=0/1147, 9-10=0/1258
WEBS 7-10=0/1381, 3-12=0/1442, 4-6=-1312/133, 2-12=-461/149, 8-10=-406/209

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 200.0lb AC unit load placed on the bottom chord, 7-0-0 from left end, supported at two points, 5-0-0 apart.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Ceiling dead load (5.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).7-10, 3-12
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 10-12
9) All bearings are assumed to be User Defined crushing capacity of 565 psi.
10) Attic room checked for L/360 deflection.
11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/
Master	C04	GABLE	3	1	E13078445
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:08 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-A9H7RtNi_J2T_00XjhCXeTr54H?KDEczghAl_9zE_Xf

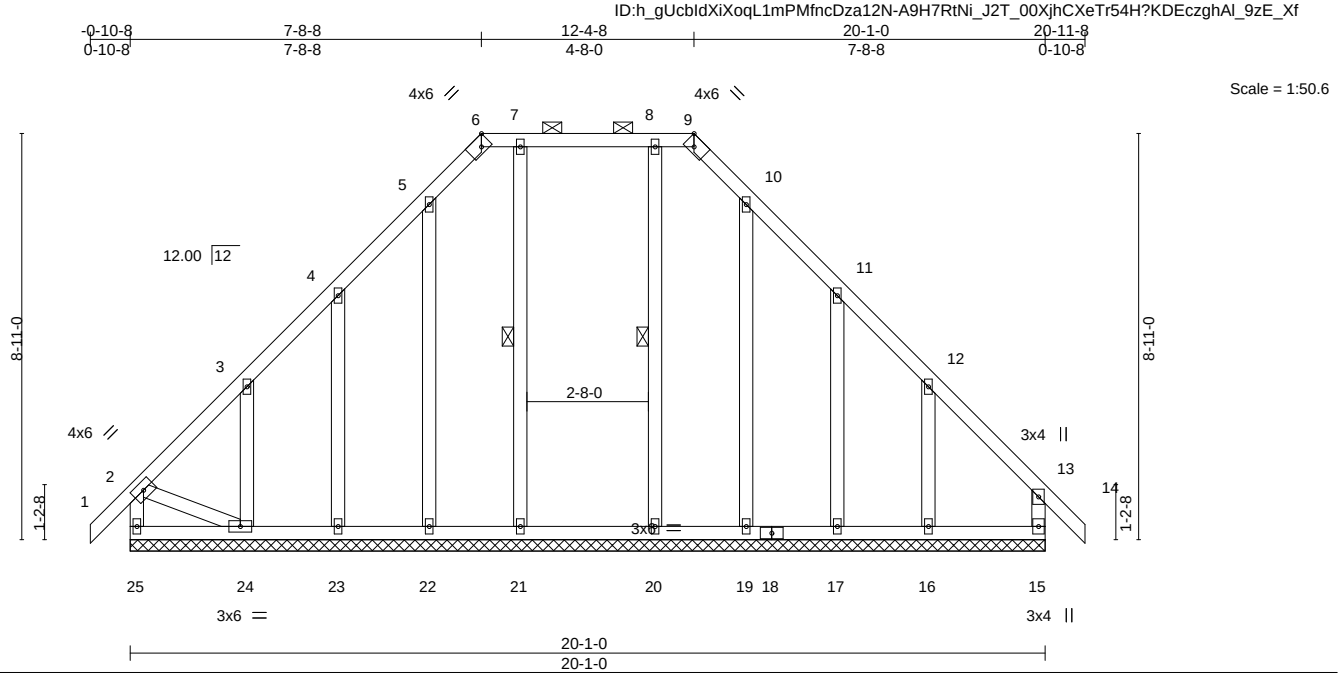


Plate Offsets (X,Y)-- [6:0-2-8,Edge], [9:0-2-8,Edge]

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	0.16	Vert(LL)	-0.00	14	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.00	14	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	15	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 151 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except*
2-24: 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-21, 8-20

REACTIONS. All bearings 20-1-0.
(lb) - Max Horz 25=287(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 15, 21, 22, 20, 19 except 25=-182(LC 8), 23=-147(LC 12), 24=-230(LC 12), 17=-126(LC 13), 16=-239(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 15, 22, 23, 19, 17, 16 except 25=298(LC 20), 21=278(LC 22), 24=277(LC 19), 20=269(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-25=-274/193, 4-5=-214/265, 5-6=-230/253, 9-10=-230/253
BOT CHORD 24-25=-263/271

NOTES- (14)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) All bearings are assumed to be User Defined crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 21, 22, 20, 19 except (jt=lb) 25=182, 23=147, 24=230, 17=126, 16=239.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078446
Master	C05	ROOF TRUSS	3	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:10 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-6XPtsYOyWxIBEKAvq6E?juwKe4b5hyJG7?fr32zE_Xd

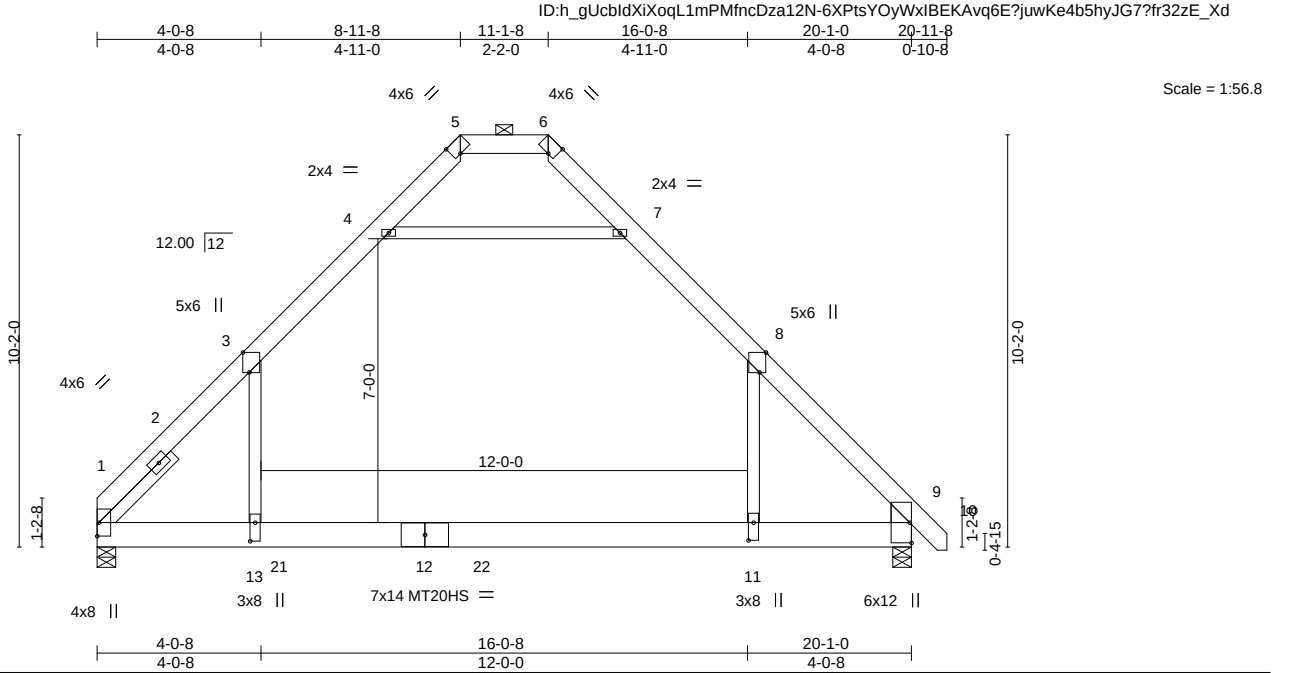


Plate Offsets (X,Y)-- [3:0-5-14,Edge], [5:0-2-2,Edge], [6:0-2-2,Edge], [8:0-5-14,Edge], [9:0-0-4,0-0-4], [9:0-0-8,0-4-3], [11:0-5-4,0-1-8], [13:0-5-8,0-1-8]

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	0.60	Vert(LL)	-0.32	11-13	>747	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.54	11-13	>443	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.04	1	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.09	11-13	>999	240	Weight: 156 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP DSS *Except* 5-6: 2x6 SP No.2
BOT CHORD 2x8 SP DSS
WEBS 2x4 SP No.2
WEDGE
Right: 2x6 SP No.2
SLIDER Left 2x4 SP No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (10-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (lb/size) 1=1095/0-5-8, 9=1074/0-5-8
Max Horz 1=-271(LC 8)
Max Grav 1=1369(LC 2), 9=1332(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1748/10, 3-4=-938/147, 4-5=-35/303, 5-6=0/458, 6-7=-40/298, 7-8=-942/135, 8-9=-1810/0
BOT CHORD 1-13=0/1029, 11-13=0/1033, 9-11=0/1029
WEBS 3-13=0/1203, 8-11=0/1143, 4-7=-1331/87

NOTES- (14)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 200.0lb AC unit load placed on the bottom chord, 7-0-0 from left end, supported at two points, 5-0-0 apart.
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-7; Wall dead load (5.0psf) on member(s).3-13, 8-11
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 11-13
10) All bearings are assumed to be User Defined crushing capacity of 565 psi.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.
14) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

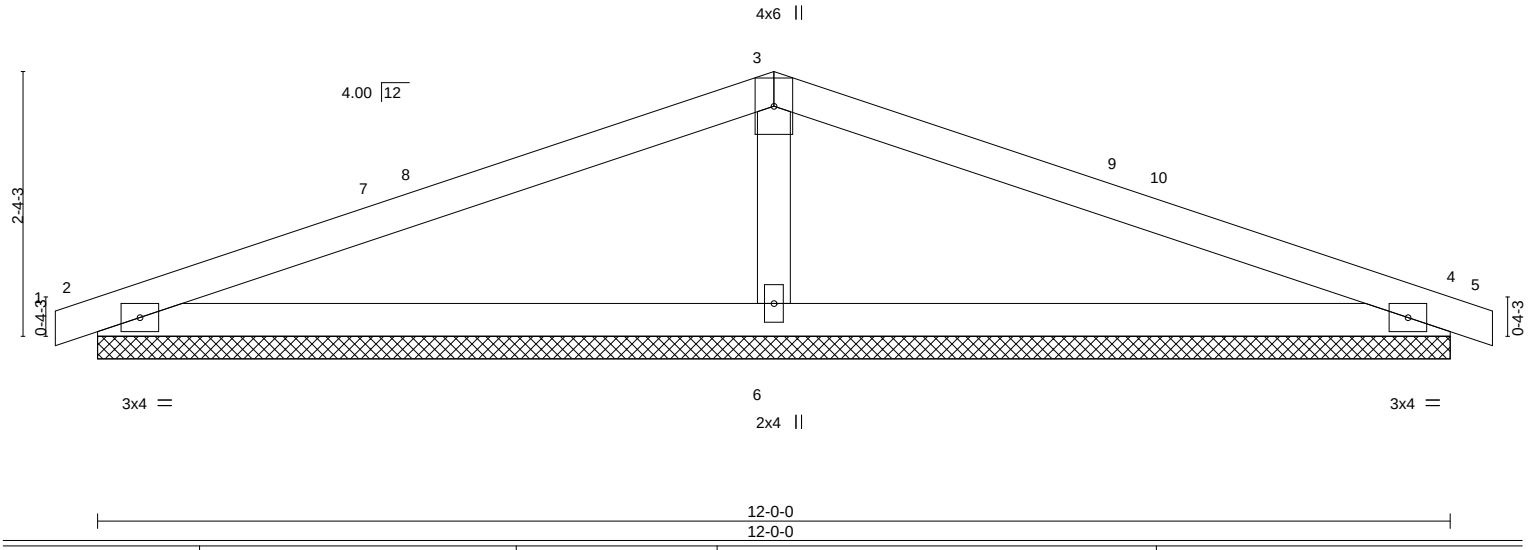
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/
Master	CP01	Common Supported Gable	8	1	E13078447
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:11 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-akyG4uPaHEQ2rUl6OqlEG6TXtU_mQcPQMfPPbUzE_Xc

0-4-8 6-0-0 12-0-0 12-4-8
0-4-8 6-0-0 6-0-0 0-4-8

Scale = 1:20.4



12-0-0
12-0-0

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	0.51	Vert(LL)	0.01	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	0.02	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 41 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

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. (lb/size) 2=228/12-0-0, 4=228/12-0-0, 6=549/12-0-0
Max Horz 2=-41(LC 13)
Max Uplift 2=-78(LC 8), 4=-83(LC 9), 6=-77(LC 8)
Max Grav 2=235(LC 23), 4=235(LC 24), 6=549(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-366/313

NOTES- (10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-4-8 to 2-7-8, Exterior(2) 2-7-8 to 6-0-0, Corner(3) 6-0-0 to 9-0-0, Exterior(2) 9-0-0 to 12-4-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be User Defined crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/
Master	CP02	Common	30	1	E13078448
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:11 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-akyG4uPaHEQ2rUl6OqlEG6TWVUzaQcBQMfPPbUzE_Xc

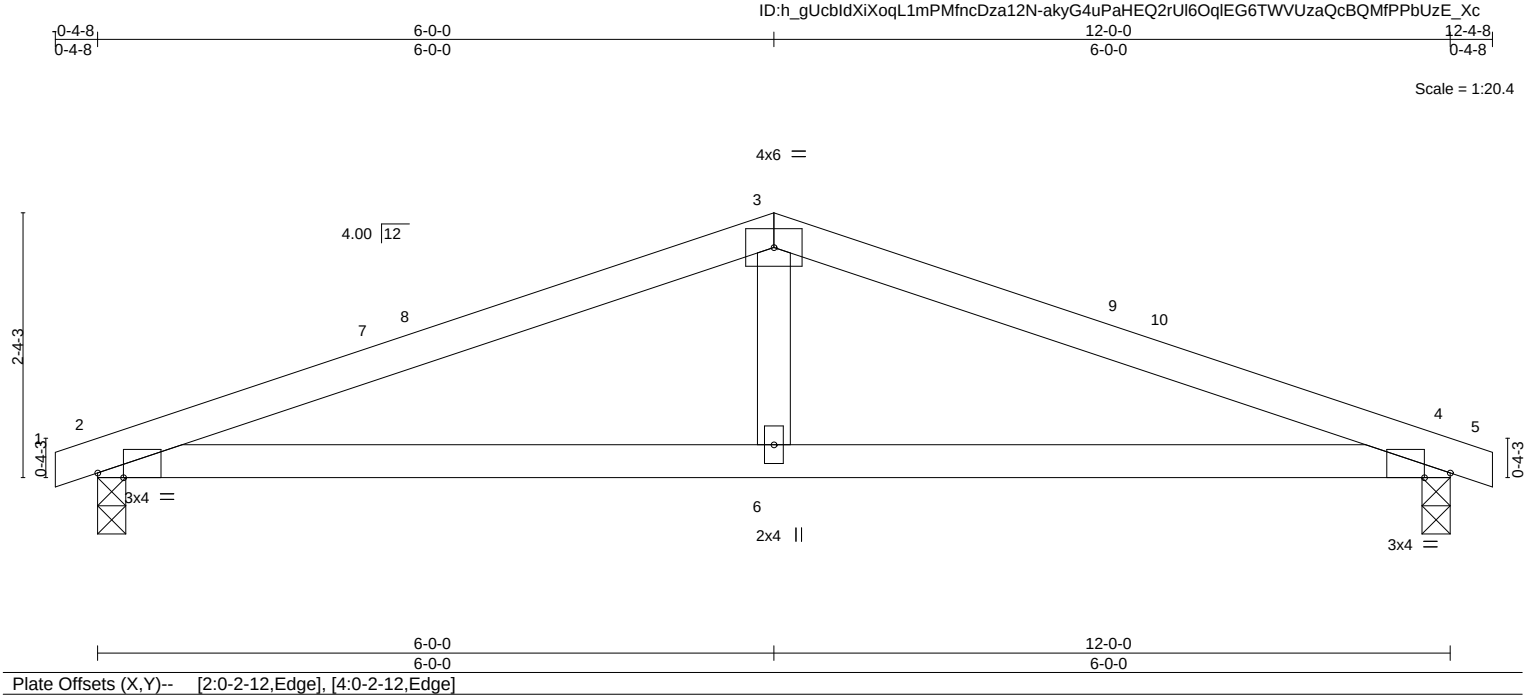


Plate Offsets (X,Y)-- [2:0-2-12,Edge], [4:0-2-12,Edge]

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	0.53	Vert(LL)	0.09	4-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.08	4-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 41 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-5-13 oc bracing.

REACTIONS. (lb/size) 2=500/0-3-0, 4=500/0-3-0
Max Horz 2=-41(LC 17)
Max Uplift 2=-245(LC 8), 4=-245(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-877/850, 3-4=-877/850
BOT CHORD 2-6=-740/776, 4-6=-740/776
WEBS 3-6=-335/283

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-4-8 to 2-7-8, Interior(1) 2-7-8 to 6-0-0, Exterior(2) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-4-8 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=245, 4=245.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078449
Master	D01	GABLE	2	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:14 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-_JeOiwRTa9pcixTh3yJxuk58ph3Kdy4s2cd3CpzE_XZ

-0-10-8 9-11-8 19-11-0 20-9-8
0-10-8 9-11-8 9-11-8 0-10-8

Scale = 1:42.6

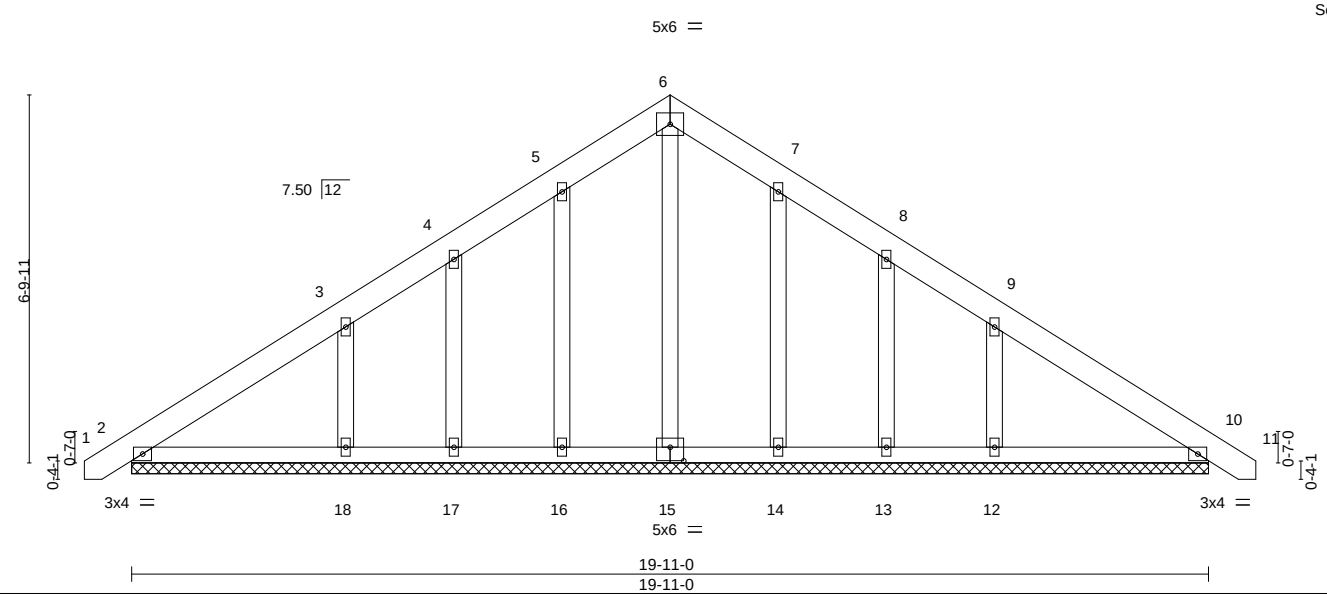


Plate Offsets (X,Y)-- [15:0-3-0,0-3-0]

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	0.08	Vert(LL)	0.00	11	n/r	120	MT20	244/190
TCDL 10.0		Lumber DOL 1.15	BC	0.10	Vert(CT)	0.00	11	n/r	120		
BCLL 0.0	*	Rep Stress Incr YES	WB	0.10	Horz(CT)	0.00	10	n/a	n/a		
BCDL 10.0		Code IRC2015/TPI2014	Matrix-S							Weight: 131 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

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 2=-190(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 16, 17, 14, 13 except 18=-151(LC 12), 12=-149(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 14, 13 except 18=339(LC 19), 12=337(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-18=-273/190, 9-12=-273/187

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-9 to 2-3-7, Exterior(2) 2-3-7 to 9-11-8, Corner(3) 9-11-8 to 12-11-8, Exterior(2) 12-11-8 to 20-7-9 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be User Defined crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 16, 17, 14, 13 except (jt=lb) 18=151, 12=149.
11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078450
Master	D02	COMMON	15	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:15 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-TVCmvGS5LTxTK52tdfqAQyeB?5C?MOz?HGNckFzE_XY

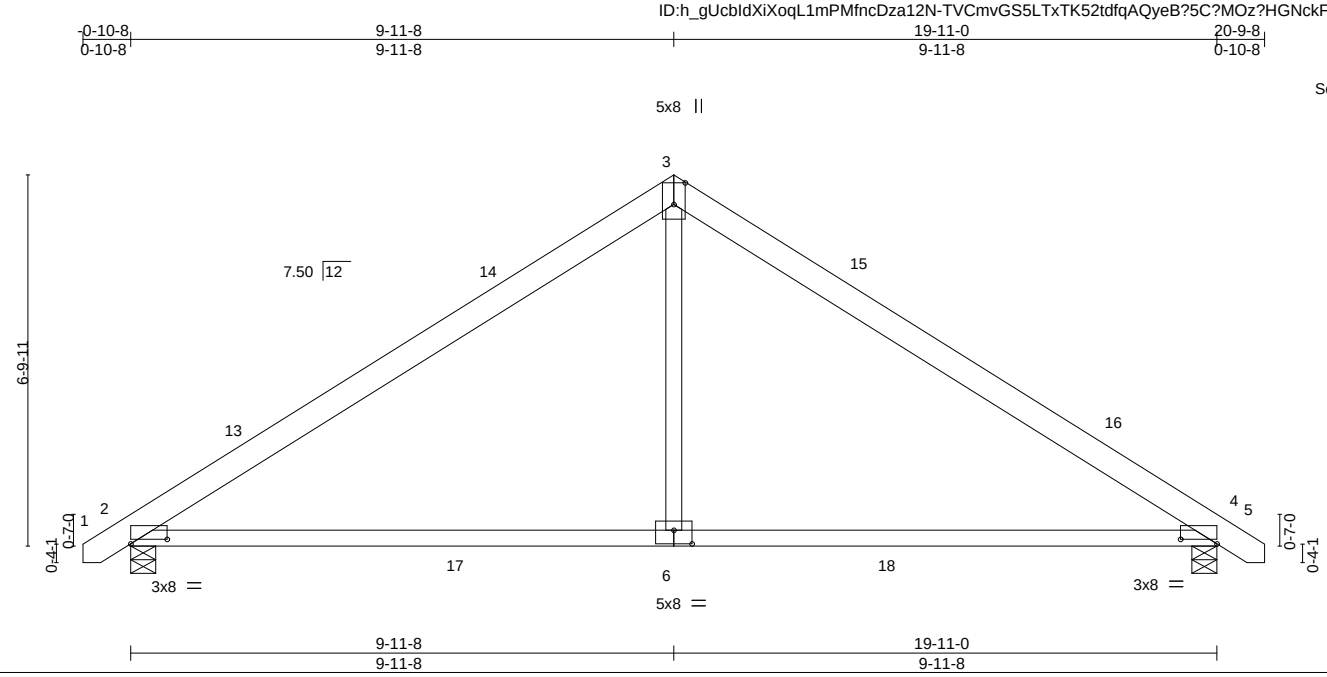


Plate Offsets (X,Y)-- [2:0-8-0,0-1-0], [3:0-4-12,0-2-8], [4:0-8-0,0-1-0], [6:0-4-0,0-3-0]

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	0.56	Vert(LL)	-0.13	6-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.29	6-12	>826	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.13	6-9	>999	240	Weight: 99 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

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

REACTIONS. (lb/size) 2=839/0-5-8, 4=839/0-5-8
Max Horz 2=190(LC 11)
Max Uplift 2=-155(LC 12), 4=-155(LC 13)
Max Grav 2=901(LC 19), 4=901(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1081/198, 3-4=-1080/198
BOT CHORD 2-6=-59/889, 4-6=-59/889
WEBS 3-6=0/487

NOTES- (8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-9 to 2-3-7, Interior(1) 2-3-7 to 9-11-8, Exterior(2) 9-11-8 to 12-11-8, Interior(1) 12-11-8 to 20-7-9 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) All bearings are assumed to be User Defined crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=155, 4=155.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

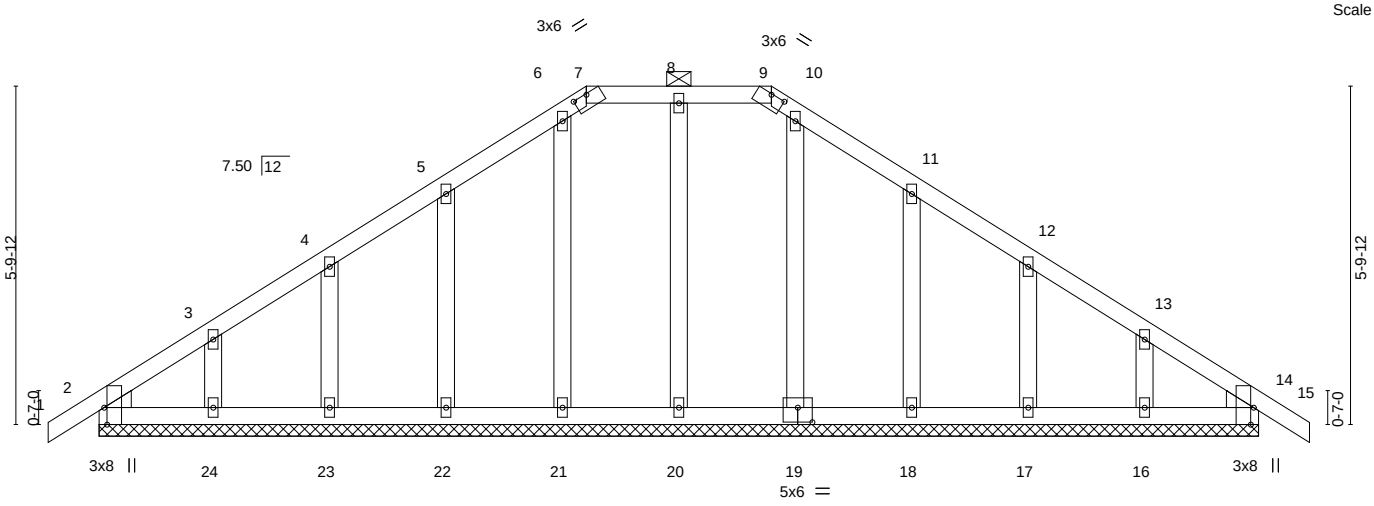
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078451
Master	D03	GABLE	1	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:16 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-xhm97cTj6m3KyFd3BNLPz9AUhVmx5s?9Vw6AGhzE_XX

0-10-8 8-4-7 11-6-9 19-11-0 20-9-8
0-10-8 8-4-7 3-2-2 8-4-7 0-10-8

Scale = 1:39.6



19-11-0
19-11-0

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [2:0-0-10,0-4-12], [2:0-0-5,0-0-8], [7:0-3-0,0-0-3], [9:0-3-0,0-0-3], [14:0-3-8,Edge], [14:0-0-10,0-4-12], [14:0-0-5,0-0-8], [19:0-3-0,0-3-0]

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	0.05	Vert(LL)	-0.00	14	n/r	120	MT20	244/190
TCDL 10.0		Lumber DOL 1.15	BC	0.03	Vert(CT)	-0.00	14	n/r	120		
BCLL 0.0	*	Rep Stress Incr YES	WB	0.07	Horz(CT)	0.00	14	n/a	n/a		
BCDL 10.0		Code IRC2015/TPI2014	Matrix-S							Weight: 114 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3
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, except 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 19-11-0.
(lb) - Max Horz 2=165(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 21, 22, 23, 24, 18, 17, 14, 16
Max Grav All reactions 250 lb or less at joint(s) 2, 20, 21, 22, 23, 24, 19, 18, 17, 14, 16

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

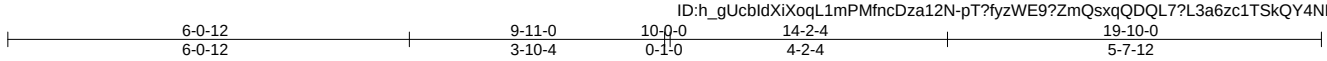
NOTES- (13)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be User Defined crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 21, 22, 23, 24, 18, 17, 14, 16.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

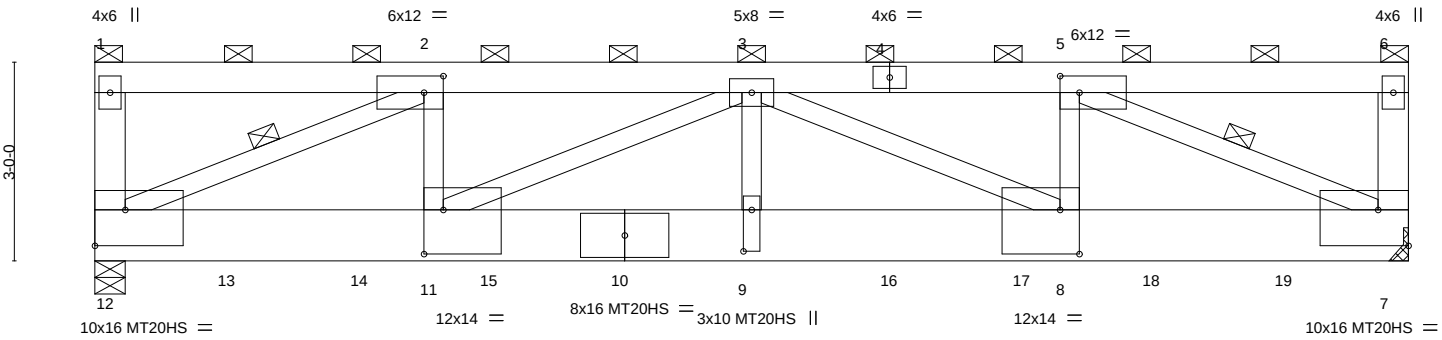
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/
Master	FG01	Flat Girder	2	2	E13078452
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:20 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-pT?fyzWE9?ZmQsxqQDQL7?L3a6zc1TSkQY4NPTzE_XT



Scale = 1:34.8



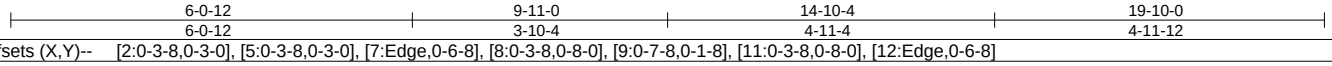


Plate Offsets (X,Y)-- [2:0-3-8,0-3-0], [5:0-3-8,0-3-0], [7:Edge,0-6-8], [8:0-3-8,0-8-0], [9:0-7-8,0-1-8], [11:0-3-8,0-8-0], [12:Edge,0-6-8]

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 0.51		Vert(LL)	-0.16	9	>999	360	MT20	244/190
TCDL 10.0		Lumber DOL 1.15	BC 0.69		Vert(CT)	-0.35	9	>671	240	MT20HS	187/143
BCLL 0.0	*	Rep Stress Incr NO	WB 0.94		Horz(CT)	0.06	7	n/a	n/a		
BCDL 10.0		Code IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.11	9	>999	240	Weight: 339 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x10 SP DSS
WEBS 2x4 SP No.2 *Except*
1-12,6-7: 2x6 SP No.2

BRACING-
TOP CHORD 2-0-0 oc purlins (4-0-6 max.): 1-6, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-12, 5-7

REACTIONS. (lb/size) 12=7424/0-5-8, 7=7587/Mechanical
Max Horz 12=-63(LC 6)
Max Uplift 12=-124(LC 4), 7=-124(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-12=-292/37, 1-2=-558/46, 2-3=-12312/0, 3-5=-12304/0, 5-6=-569/22, 6-7=-293/35
BOT CHORD 11-12=0/12312, 9-11=0/15643, 8-9=0/15643, 7-8=0/12304
WEBS 2-12=-13081/0, 2-11=0/5647, 3-11=-3719/0, 3-8=-3728/0, 5-8=0/5638, 5-7=-13060/0, 3-9=0/2920

NOTES- (13)
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 - 2 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=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be User Defined crushing capacity of 565 psi.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=124, 7=124.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 630 lb down and 365 lb up at 2-0-12, 698 lb down and 137 lb up at 2-0-12, 630 lb down and 365 lb up at 4-0-12, 698 lb down and 137 lb up at 4-0-12, 2491 lb down at 6-0-4, 698 lb down and 137 lb up at 6-0-12, 698 lb down and 137 lb up at 8-0-12, 698 lb down and 137 lb up at 10-0-12, 698 lb down and 137 lb up at 12-0-12, 698 lb down and 137 lb up at 14-0-12, 2491 lb down at 14-1-12, 630 lb down and 365 lb up at 16-0-4, 698 lb down and 137 lb up at 16-0-12, and 630 lb down and 365 lb up at 18-0-4, and 698 lb down and 137 lb up at 18-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Continued on page 2

May 22,2019

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

13) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

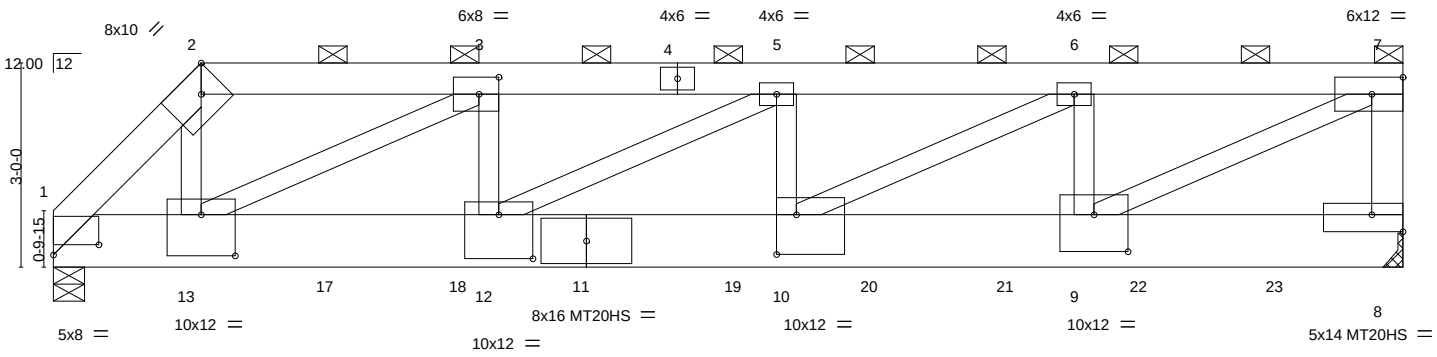
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-6=-60, 7-12=-20
   Concentrated Loads (lb)
   Vert: 10=-698(B) 9=-698(B) 13=-1247(F=-549, B=-698) 14=-1247(F=-549, B=-698) 15=-3189(F=-2491, B=-698) 16=-698(B) 17=-3189(F=-2491, B=-698) 18=-1247(F=-549, B=-698) 19=-1247(F=-549, B=-698)

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/
Master	FG02	Flat Girder	3	2	E13078453
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:22 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-lr7QNfYUhcpUgA4DXeSpCQQN4wgLVQm1usZUULzE_XR

2-2-1	6-4-13	10-9-5	15-1-12	19-10-0
2-2-1	4-2-12	4-4-8	4-4-8	4-8-4

Scale = 1:33.9



2-2-1	6-4-13	10-9-5	15-1-12	19-10-0
2-2-1	4-2-12	4-4-8	4-4-8	4-8-4

Plate Offsets (X,Y)-- [1:0-8-0,0-1-13], [2:0-3-14,Edge], [3:0-3-8,0-3-0], [8:Edge,0-3-0], [9:0-6-0,0-6-8], [10:0-3-8,0-7-0], [12:0-6-0,0-7-12], [13:0-6-0,0-7-4]

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 0.64	Vert(LL)	-0.15	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC 0.61	Vert(CT)	-0.33	10-12	>712	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB 0.76	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.12	10-12	>999	240	Weight: 337 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x10 SP DSS
WEBS 2x4 SP No.2 *Except*
7-8: 2x6 SP No.2, 3-13,5-12,6-10,7-9: 2x4 SP SS

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-5 oc purlins, except end verticals, and 2-0-0 oc purlins (3-4-14 max.): 2-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=6689/0-5-8, 8=7657/Mechanical
Max Horz 1=70(LC 23)
Max Uplift 1=-283(LC 5), 8=-283(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-9073/338, 2-3=-5957/239, 3-5=-14418/0, 5-6=-15571/0, 6-7=-11844/0, 7-8=-6378/0
BOT CHORD 1-13=-251/6334, 12-13=0/14418, 10-12=0/15571, 9-10=0/11844, 8-9=-33/437
WEBS 2-13=-195/6173, 3-13=-9638/0, 3-12=0/4518, 5-12=-1368/0, 5-10=0/355, 6-10=0/4246, 6-9=-2115/87, 7-9=0/12937

NOTES- (13)
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 - 2 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=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be User Defined crushing capacity of 565 psi.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=283, 8=283.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 610 lb down and 339 lb up at 2-0-12, 630 lb down and 365 lb up at 4-0-12, 2456 lb down at 6-0-4, 1470 lb down and 715 lb up at 6-0-12, 698 lb down and 137 lb up at 8-0-12, 698 lb down and 137 lb up at 10-0-12, 698 lb down and 137 lb up at 12-0-12, 698 lb down and 137 lb up at 14-0-12, 2456 lb down at 14-1-12, 630 lb down and 365 lb up at 16-0-4, 698 lb down and 137 lb up at 16-0-12, and 630 lb down and 365 lb up at 18-0-4, and 698 lb down and 137 lb up at 18-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

May 22,2019

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

13) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

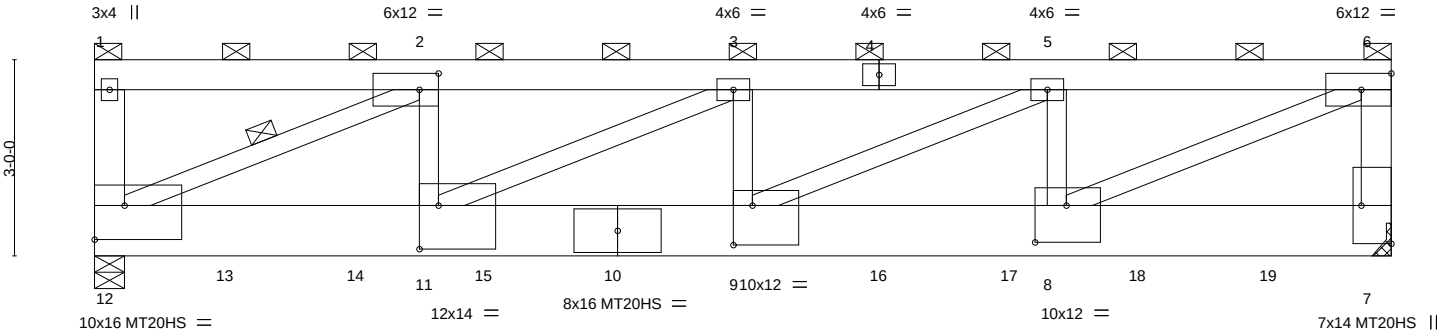
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-7=-60, 8-14=-20
   Concentrated Loads (lb)
   Vert: 11=-698(B) 13=-559(F) 17=-549(F) 18=-3927(F=-2456, B=-1470) 19=-698(B) 20=-698(B) 21=-3154(F=-2456, B=-698) 22=-1247(F=-549, B=-698) 23=-1247(F=-549, B=-698)

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/
Master	FG03	Flat Girder	3	2	E13078454
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:24 2019 Page 1
ID:h_gUcbldXiXoqL1mPMfncDza12N-iEFAoLZkDE3CvUEcf2UHlrViLjKyzKiKLA2bYEzE_XP

5-1-6	9-11-0	14-8-10	19-10-0
5-1-6	4-9-10	4-9-10	5-1-6

Scale = 1:35.2



5-1-6	9-11-0	14-8-10	19-10-0
5-1-6	4-9-10	4-9-10	5-1-6

Plate Offsets (X,Y)-- [2:0-3-8,0-3-0], [7:Edge,0-5-8], [8:0-5-12,0-6-12], [9:0-3-8,0-7-4], [11:0-3-8,0-8-0], [12:Edge,0-6-4]

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	0.65	Vert(LL)	-0.16	9	>999	360	MT20	244/190
TCDL 10.0		Lumber DOL 1.15	BC	0.66	Vert(CT)	-0.35	9	>672	240	MT20HS	187/143
BCLL 0.0	*	Rep Stress Incr NO	WB	0.73	Horz(CT)	0.04	7	n/a	n/a		
BCDL 10.0		Code IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.11	9	>999	240	Weight: 339 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x10 SP DSS
WEBS 2x4 SP SS *Except*
1-12,6-7: 2x6 SP No.2, 2-11,3-9,5-8: 2x4 SP No.2

BRACING-
TOP CHORD 2-0-0 oc purlins (3-4-11 max.): 1-6, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-12

REACTIONS. (lb/size) 12=7389/0-5-8, 7=7552/Mechanical
Max Horz 12=-63(LC 21)
Max Uplift 12=-148(LC 4), 7=-149(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-12=-266/38, 1-2=-471/52, 2-3=-12390/0, 3-5=-15389/0, 5-6=-12386/0, 6-7=-6089/0
BOT CHORD 11-12=0/12390, 9-11=0/15389, 8-9=0/12386, 7-8=-28/485
WEBS 2-12=-13264/0, 2-11=0/5681, 3-11=-3349/0, 3-9=0/1129, 5-9=0/3354, 5-8=-1611/0, 6-8=0/13244

NOTES- (13)
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 - 2 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=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be User Defined crushing capacity of 565 psi.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=148, 7=149.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 630 lb down and 365 lb up at 2-0-12, 698 lb down and 137 lb up at 2-0-12, 630 lb down and 365 lb up at 4-0-12, 698 lb down and 137 lb up at 4-0-12, 2456 lb down at 6-0-4, 698 lb down and 137 lb up at 6-0-12, 698 lb down and 137 lb up at 8-0-12, 698 lb down and 137 lb up at 10-0-12, 698 lb down and 137 lb up at 12-0-12, 698 lb down and 137 lb up at 14-0-12, 2456 lb down at 14-1-12, 630 lb down and 365 lb up at 16-0-4, 698 lb down and 137 lb up at 16-0-12, and 630 lb down and 365 lb up at 18-0-4, and 698 lb down and 137 lb up at 18-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

May 22,2019

Continued on page 2

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

13) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-6=-60, 7-12=-20
   Concentrated Loads (lb)
   Vert: 10=-698(B) 9=-698(B) 13=-1247(F=-549, B=-698) 14=-1247(F=-549, B=-698) 15=-3154(F=-2456, B=-698) 16=-698(B) 17=-3154(F=-2456, B=-698) 18=-1247(F=-549, B=-698) 19=-1247(F=-549, B=-698)

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078455
Master	J03	JACK-OPEN	12	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:25 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-AQpY0haM_XB3XepoDm0Wq32y37mxiyKTaqo85gzE_XO

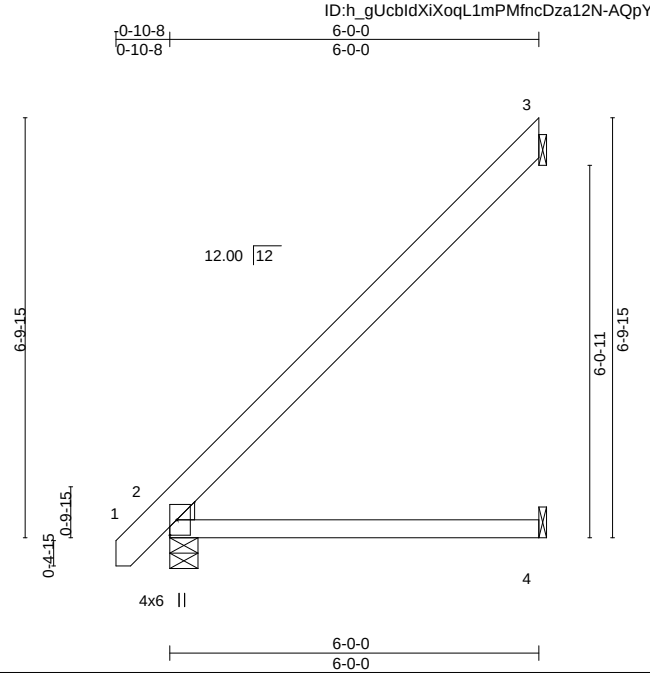


Plate Offsets (X,Y)-- [2:0-0-11,0-0-11], [2:0-1-5,0-3-11]

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	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.08	4-7	>858	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.06	4-7	>999	240	Weight: 33 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3

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

REACTIONS. (lb/size) 3=177/Mechanical, 2=286/0-5-8, 4=57/Mechanical
Max Horz 2=293(LC 12)
Max Uplift 3=-216(LC 12)
Max Grav 3=219(LC 19), 2=286(LC 1), 4=96(LC 3)

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

NOTES- (8)
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be User Defined crushing capacity of 425 psi.
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) except (jt=lb) 3=216.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078456
Master	J04	Half Hip	6	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:26 2019 Page 1
ID:h_gUcbldXiXoqL1mPMfncDza12N-ecMxD1b?lrJv8oO_mTXlNGb5JX2RQNKdoUXhd6zE_XN

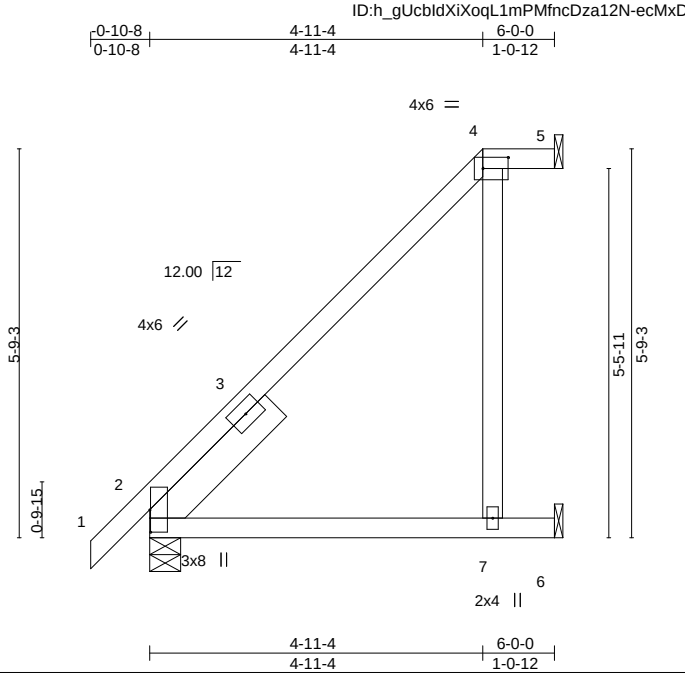


Plate Offsets (X,Y)-- [2:0-4-0,0-0-2], [4:0-4-8,0-2-0]

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	0.49	Vert(LL)	0.17	7-10	>428	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.15	7-10	>480	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.13	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 37 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (lb/size) 5=30/Mechanical, 2=294/0-5-8, 6=204/Mechanical
Max Horz 2=255(LC 12)
Max Uplift 5=-16(LC 8), 6=-146(LC 12)
Max Grav 5=30(LC 1), 2=294(LC 1), 6=224(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-351/154

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 5 User Defined crushing capacity of 425 psi, Joint 2 User Defined crushing capacity of 565 psi, Joint 6 User Defined crushing capacity of 425 psi.
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) 5 except (jt=lb) 6=146.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078457
Master	J05	Half Hip	6	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:27 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-6pwJQMbdW9RmmxzBKB2_vU7HjxKw9rVm18HF9ZzE_XM

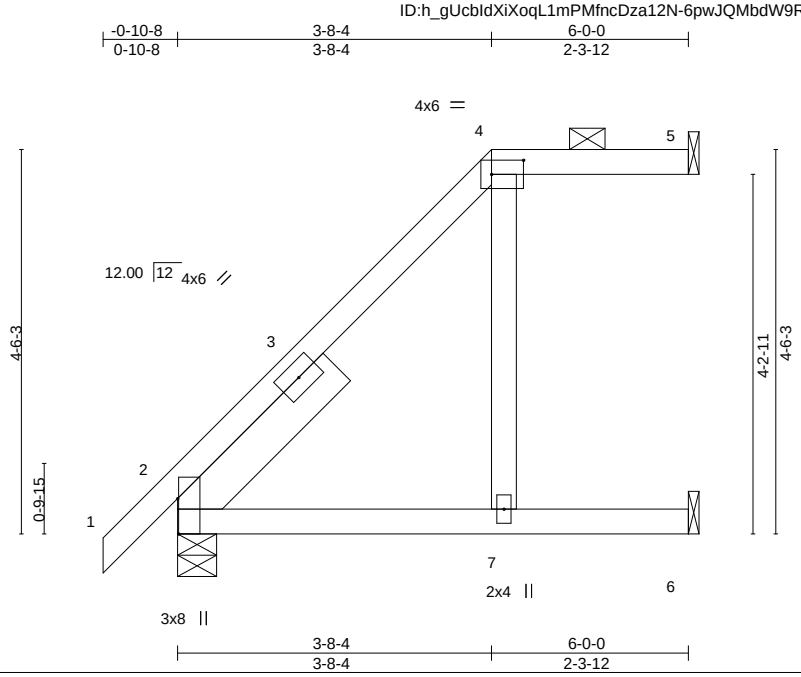


Plate Offsets (X,Y)-- [2:0-5-0,Edge], [4:0-4-8,0-2-0]

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	0.39	Vert(LL)	0.19	7-10	>379	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.20	7-10	>356	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.25	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 34 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (lb/size) 5=68/Mechanical, 2=294/0-5-8, 6=166/Mechanical
Max Horz 2=200(LC 12)
Max Uplift 5=-36(LC 8), 2=-11(LC 12), 6=-75(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-538/271

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 5 User Defined crushing capacity of 425 psi, Joint 2 User Defined crushing capacity of 565 psi, Joint 6 User Defined crushing capacity of 425 psi.
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) 5, 2, 6.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078458
Master	J06	Half Hip	6	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:27 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-6pwJQMbdW9RmmxzBKB2_vU7KGxT69swm18HF9ZzE_XM

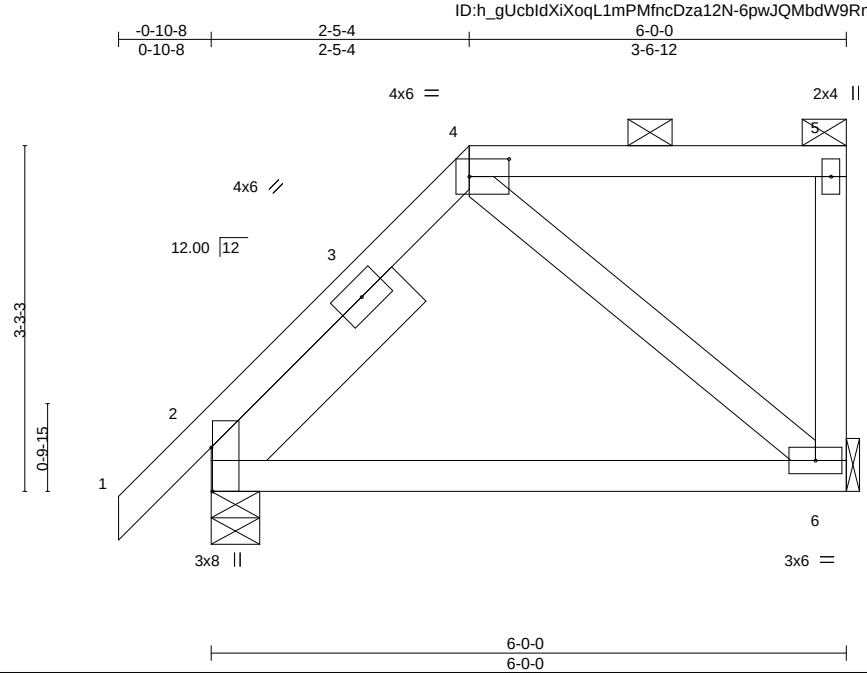


Plate Offsets (X,Y)-- [2:0-5-0,Edge], [4:0-4-8,0-2-0]

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	0.22	Vert(LL)	-0.03	6-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.06	6-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.01	6-9	>999	240	Weight: 38 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (lb/size) 2=291/0-5-8, 6=230/Mechanical
Max Horz 2=144(LC 12)
Max Uplift 2=-32(LC 12), 6=-68(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-409/73

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 2 User Defined crushing capacity of 565 psi, Joint 6 User Defined crushing capacity of 425 psi.
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) 2, 6.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/
Master	J07	Half Hip Girder	6	1	E13078459
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:28 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-a?UheicFHSZdO5YNuuZDShgRgLqouJ6wGo0oh?zE_XL

-0-10-8 1-2-4 6-0-0
0-10-8 1-2-4 4-9-12

Scale = 1:15.5

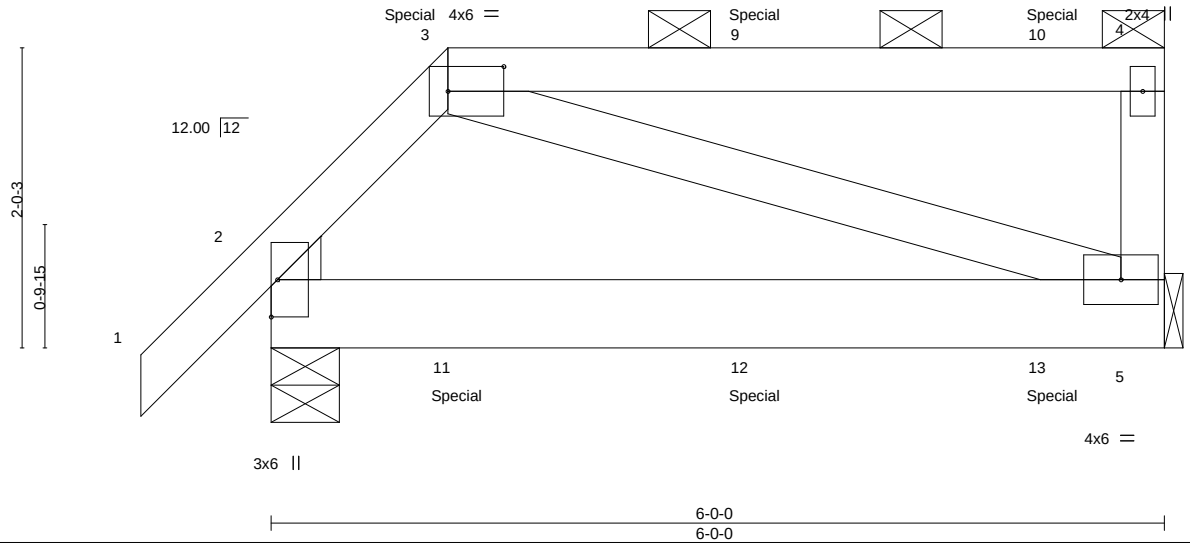


Plate Offsets (X,Y)-- [2:0-0-8,0-2-14], [2:0-0-4,0-0-4], [3:0-4-8,0-2-0]

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	0.50	Vert(LL)	-0.01	5-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02	5-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP		Wind(LL)	-0.00	5-8	>999	240	Weight: 35 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=306/0-5-8, 5=261/Mechanical
Max Horz 2=89(LC 8)
Max Uplift 2=-75(LC 8), 5=-89(LC 5)

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

NOTES- (11)
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: Joint 2 User Defined crushing capacity of 565 psi, Joint 5 User Defined crushing capacity of 425 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
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) 70 lb down and 51 lb up at 1-2-4, and 79 lb down and 48 lb up at 3-3-4, and 72 lb down and 51 lb up at 5-3-4 on top chord, and 18 lb down at 1-3-4, and 18 lb down at 3-3-4, and 21 lb down at 5-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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, 5-6=-20
Concentrated Loads (lb)
Vert: 3=-2(F) 9=-2(F) 10=-12(F) 11=-8(F) 12=-8(F) 13=-13(F)

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/
Master	J08	Jack-Open	18	1	E13078460
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:29 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-2B23r2dt2mhU?F7ZSc4S?vDi2kBQdmK3VSmMERzE_XK

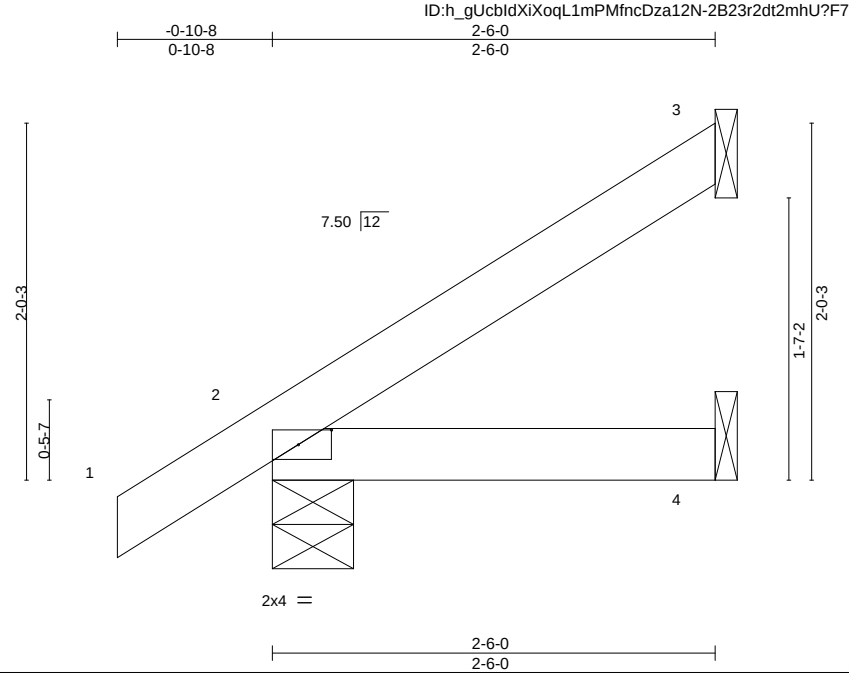


Plate Offsets (X,Y)-- [2:0-2-4,0-1-0]

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	0.08	Vert(LL)	-0.00	7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.00	4-7	>999	240		
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-MP		Wind(LL)	-0.00	4-7	>999	240	Weight: 10 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-6-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=60/Mechanical, 2=159/0-5-8, 4=28/Mechanical
Max Horz 2=88(LC 12)
Max Uplift 3=-47(LC 12), 2=-28(LC 12)
Max Grav 3=67(LC 19), 2=159(LC 1), 4=44(LC 3)

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

NOTES- (7)
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be User Defined crushing capacity of 425 psi.
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) 3, 2.
7) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078461
Master	J09	Half Hip	6	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:30 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-WOcR3OeVp4qLdPil?JbhX6lmg8QiMBSDj6VvmtzE_XJ

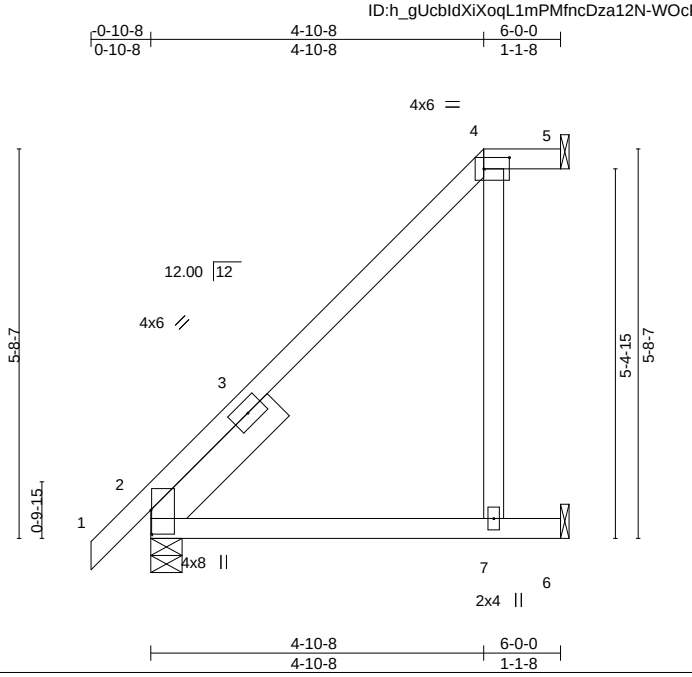


Plate Offsets (X,Y)-- [2:0-4-4,0-0-2], [4:0-4-8,0-2-0]

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	0.53	Vert(LL)	0.18	7-10	>391	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.16	7-10	>444	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.15	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP							Weight: 37 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 5=32/Mechanical, 2=294/0-5-8, 6=202/Mechanical
Max Horz 2=253(LC 12)
Max Uplift 5=-17(LC 8), 6=-142(LC 12)
Max Grav 5=32(LC 1), 2=294(LC 1), 6=221(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-327/147

NOTES- (10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 5 User Defined crushing capacity of 425 psi, Joint 2 User Defined crushing capacity of 565 psi, Joint 6 User Defined crushing capacity of 425 psi.
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) 5 except (jt=lb) 6=142.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078462
Master	J10	Half Hip	6	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:31 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-?aApGkf7aNyCFZHyZ16w4KI_IYpZ5fjMymFSIKzE_XI

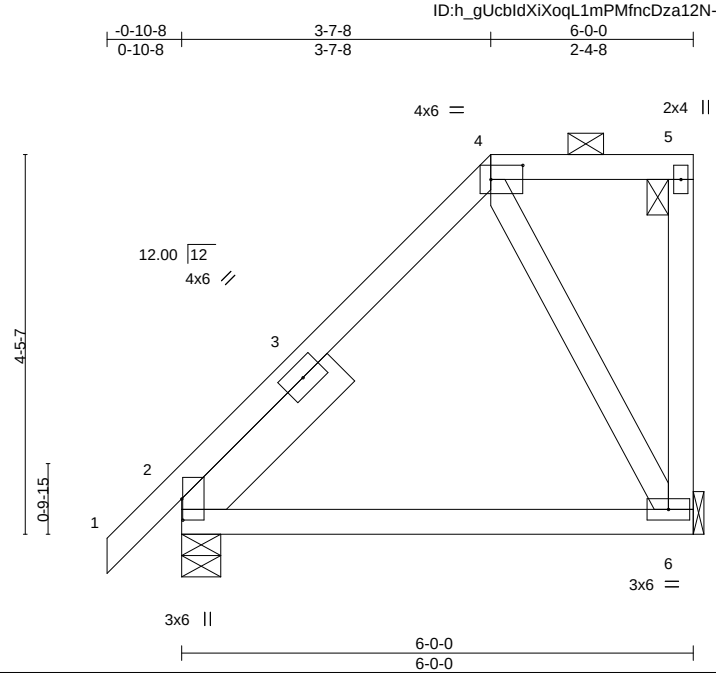


Plate Offsets (X,Y)-- [2:0-3-0,0-0-2], [4:0-4-8,0-2-0]

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	0.29	Vert(LL)	-0.03	6-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.07	6-9	>946	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.02	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.04	6-9	>999	240	Weight: 40 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (lb/size) 2=291/0-5-8, 6=230/Mechanical
Max Horz 2=197(LC 12)
Max Uplift 2=-11(LC 12), 6=-89(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-405/69

NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 2 User Defined crushing capacity of 565 psi, Joint 6 User Defined crushing capacity of 425 psi.
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) 2, 6.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/
					E13078463
Master	J11	Half Hip	3	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:32 2019 Page 1
ID:h_gUcbldXiXoqL1mPMfncDza12N-TmkCU4flKh43sjr87ke9cXrAsyAGq69VBQ_0qmzE_XH

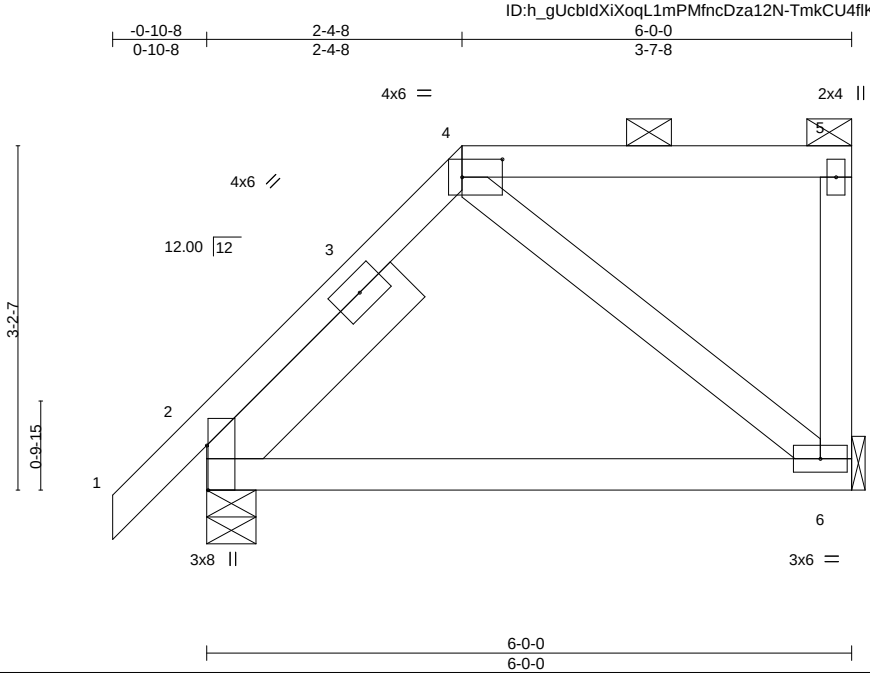


Plate Offsets (X,Y)-- [2:0-5-0,Edge], [4:0-4-8,0-2-0]

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	0.23	Vert(LL)	-0.03	6-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.06	6-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP		Wind(LL)	0.01	6-9	>999	240	Weight: 38 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=291/0-5-8, 6=230/Mechanical
Max Horz 2=141(LC 12)
Max Uplift 2=-33(LC 12), 6=-68(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-408/77

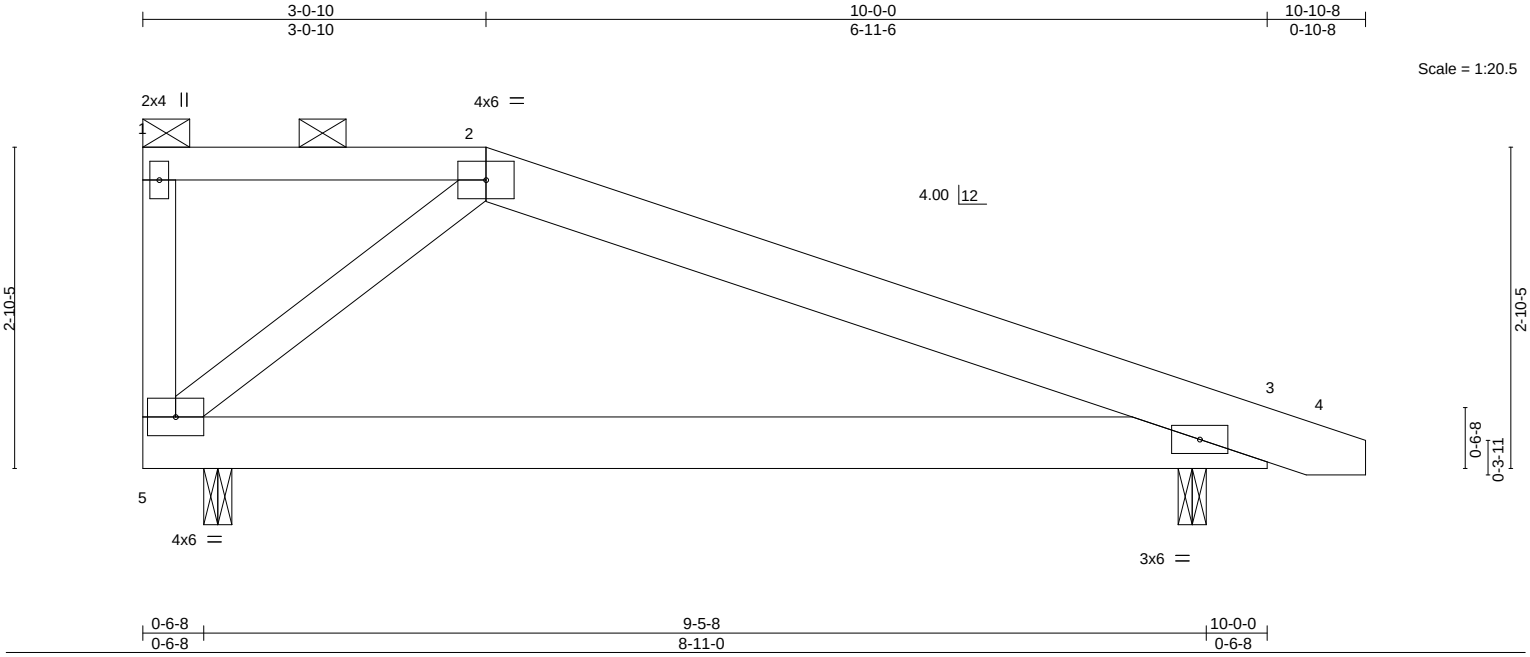
NOTES- (9)
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: Joint 2 User Defined crushing capacity of 565 psi, Joint 6 User Defined crushing capacity of 425 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/
Master	J12	ROOF SPECIAL	2	1	E13078464
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:32 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-TmkCU4flKh43sjr87ke9cXr63y9Tq5RVBQ_0qmzE_XH



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	0.48	Vert(LL)	-0.05	5-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.11	5-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.03	5-10	>999	240	Weight: 56 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 2-4: 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-2.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (lb/size) 5=368/0-3-0, 3=457/0-3-0
Max Horz 5=-119(LC 9)
Max Uplift 5=-107(LC 9), 3=-123(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-340/152
BOT CHORD 3-5=-39/286
WEBS 2-5=-326/251

NOTES- (8)
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=107, 3=123.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
8) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

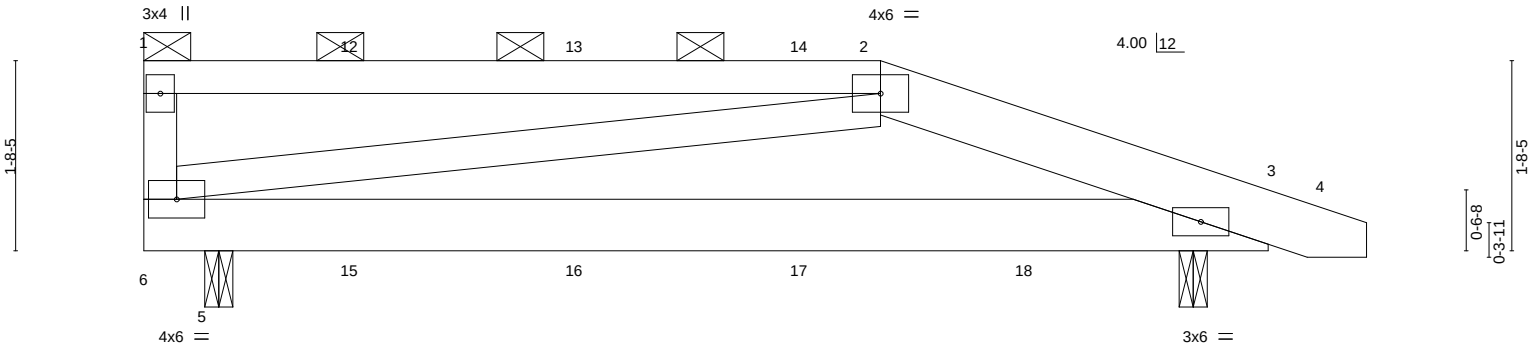
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/
Master	J13	ROOF SPECIAL GIRDER	2	1	E13078465
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:34 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-P9ryumh0sIKn60?XE9gdhywQjlrOIxxoekT7vfzE_XF

6-6-10 | 10-0-0 | 10-10-8
6-6-10 | 3-5-6 | 0-10-8

Scale = 1:20.5



0-6-8 | 9-5-8 | 10-0-0
0-6-8 | 8-11-0 | 0-6-8

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	0.59	Vert(LL)	-0.03	5-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	5-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.36	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.03	5-11	>999	240	Weight: 55 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 2-4: 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2

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

REACTIONS. (lb/size) 5=398/0-3-0, 3=453/0-3-0
Max Horz 5=-67(LC 21)
Max Uplift 5=-229(LC 4), 3=-248(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-607/317
BOT CHORD 5-6=-309/561, 3-5=-252/561
WEBS 2-6=-473/261

NOTES- (9)
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=229, 3=248.
6) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 40 lb down and 28 lb up at 0-1-12, 57 lb down and 22 lb up at 1-11-4, and 57 lb down and 22 lb up at 3-11-4, and 57 lb down and 22 lb up at 5-11-4 on top chord, and 8 lb down and 19 lb up at 0-1-12, 2 lb down and 19 lb up at 1-11-4, 2 lb down and 19 lb up at 3-11-4, and 2 lb down and 19 lb up at 5-11-4, and 20 lb down and 35 lb up at 7-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
9) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-4=-60, 6-7=-20
Concentrated Loads (lb)
Vert: 6=-2(F) 1=-1(F) 15=-1(F) 16=-1(F) 17=-1(F) 18=-20(F)

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078466
Master	J14	HALF HIP	2	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:35 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-tLPK66iedcSekAajosBsEATkI9FX1TpytODgR5zE_XE

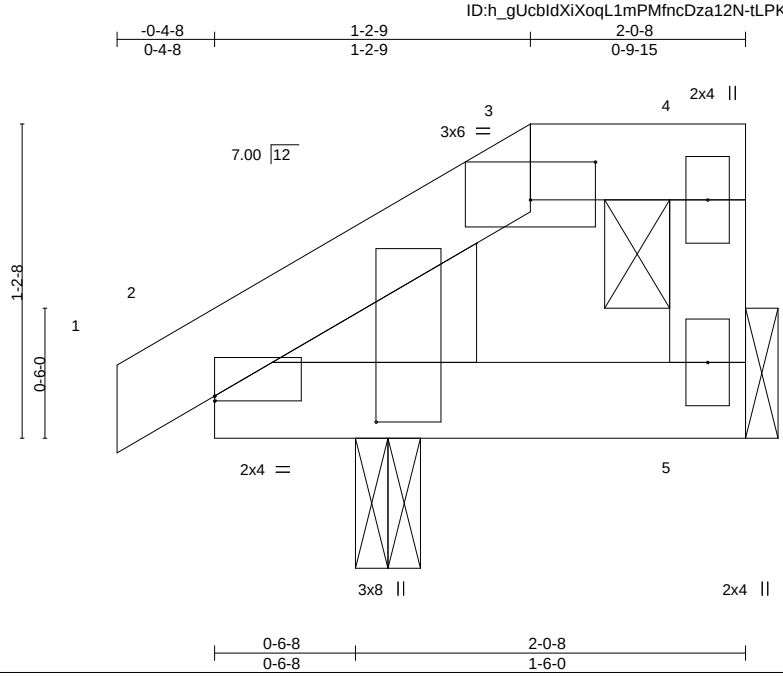


Plate Offsets (X,Y)-- [2:0-1-3,0-7-7], [2:0-0-0,0-0-4], [3:0-3-0,0-1-12]

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	0.03	Vert(LL)	-0.00	6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MR		Wind(LL)	0.00	10	>999	240	Weight: 10 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-0-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 5=33/Mechanical, 2=141/0-3-0
Max Horz 2=41(LC 12)
Max Uplift 5=-20(LC 8), 2=-25(LC 12)
Max Grav 5=39(LC 24), 2=141(LC 1)

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

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed; 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

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

Job	Truss	Truss Type	Qty	Ply	H&H/Kent/ E13078467
Master	J15	JACK-OPEN	8	1	Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, 8.240 s May 13 2019 MiTek Industries, Inc. Wed May 22 09:37:35 2019 Page 1
ID:h_gUcbIdXiXoqL1mPMfncDza12N-tLPK66iedcSekAajosBsEATkN9FR1TpytODgR5zE_XE

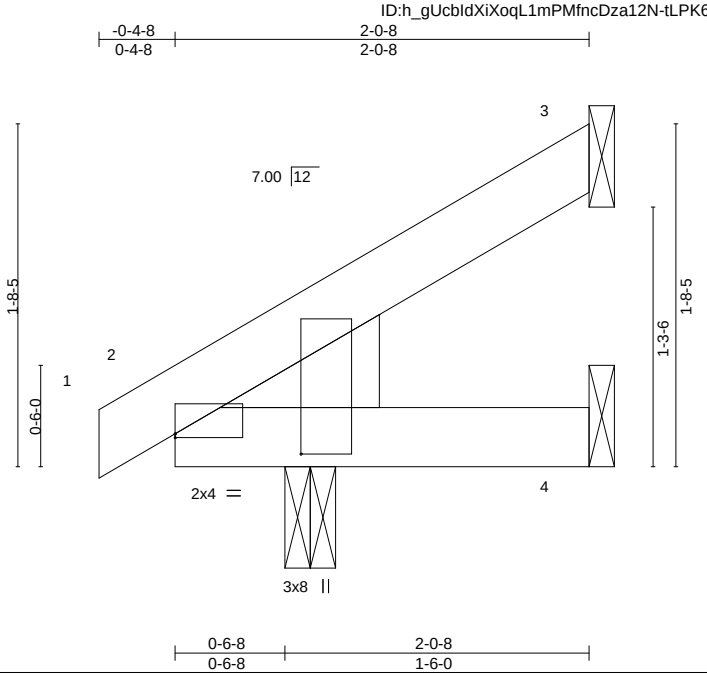


Plate Offsets (X,Y)-- [2:0-0-0,0-0-4], [2:0-1-3,0-7-7]

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	9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	9	>999	240		
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-MP							Weight: 9 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEDGE
Left: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-0-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=26/Mechanical, 4=11/Mechanical, 2=143/0-3-0
Max Horz 2=60(LC 12)
Max Uplift 3=-29(LC 12), 4=-12(LC 9), 2=-19(LC 9)
Max Grav 3=30(LC 19), 4=21(LC 3), 2=143(LC 1)

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

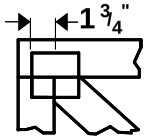
NOTES- (6)
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed; porch left exposed;C-C for members and forces & MWFRS for reactions 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4, 2.
6) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

May 22,2019

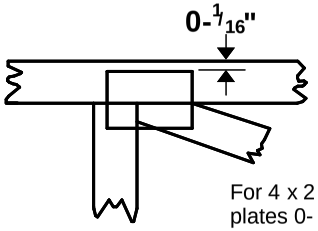
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

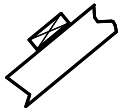
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

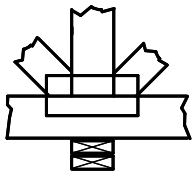
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

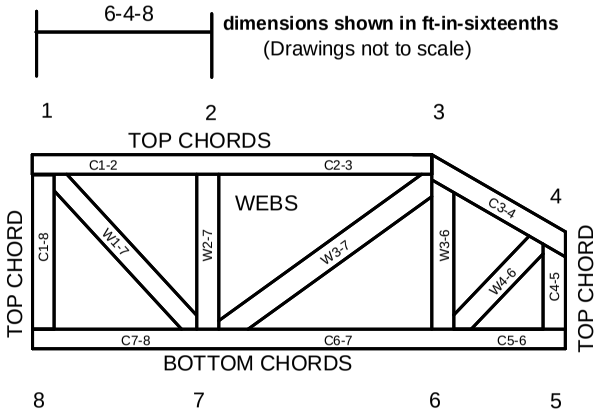


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

MiTek®

ENGINEERING BY TRENCO
A MiTek Affiliate

MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

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.