ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 20040001-A
Kristie-Kristie w/Bonus

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

Pages or sheets covered by this seal: E14247906 thru E14247921

My license renewal date for the state of North Carolina is December 31, 2020.

North Carolina COA: C-0844

April 1,2020

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	Kristie-Kristie w/Bonus	
20040001-A	BG2	Attic Girder	1	3	Job Reference (optional)	E14247906

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 23 2020 Print: 8.330 S Mar 23 2020 MiTek Industries, Inc. Wed Apr 01 07:13:42 Page: 1
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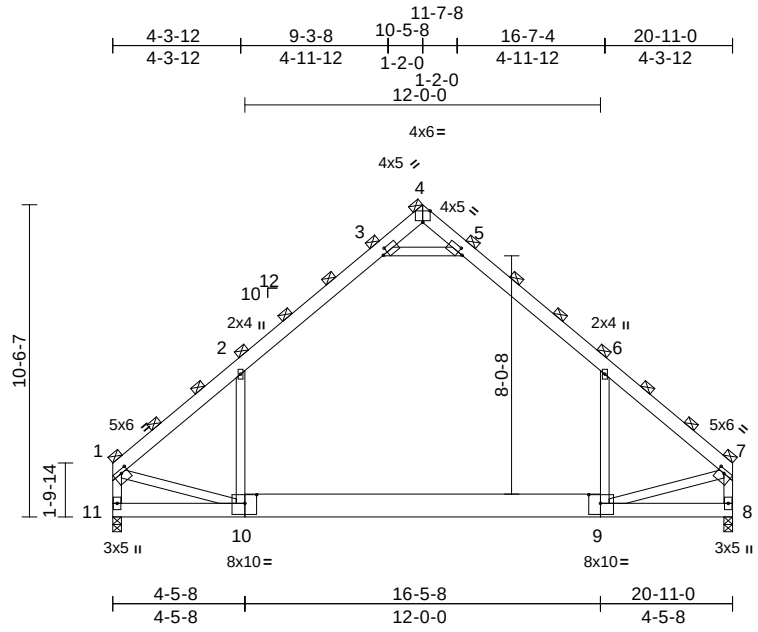

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Plate Offsets (X, Y): [1:0-2-12,0-1-8], [3:0-2-1,0-2-0], [4:0-3-0,Edge], [5:0-2-1,0-2-0], [7:0-2-12,0-1-8], [9:0-4-12,0-3-8], [10:0-4-12,0-3-8]

Loading	(psf)	Spacing	6-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.32	9-10	>774	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.46	9-10	>533	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.28	Horz(CT)	0.01	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.17	9-10	>843	360		
BCDL	10.0										Weight: 497 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP No.2 *Except* 10-9:2x10 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 3-5,11-1,8-7:2x4 SP No.2

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

REACTIONS (size) 8=0-3-8, 11=0-3-8
Max Horiz 11=632 (LC 6)
Max Grav 8=3862 (LC 22), 11=3862 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-3924/0, 2-3=-2754/75, 3-4=-11/2256, 4-5=-11/2256, 5-6=-2754/75, 6-7=-3923/0, 1-11=-3808/0, 7-8=-3809/0
BOT CHORD 10-11=-610/919, 9-10=0/2589, 8-9=-56/452
WEBS 6-9=-216/1553, 2-10=-216/1553, 3-5=-5242/11, 1-10=0/2317, 7-9=0/2324

NOTES
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
5) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
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, 2-10
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 9-10
9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11 and 8. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

April 1,2020

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Kristie-Kristie w/Bonus	E14247907
20040001-A	B	Attic	8	1	Job Reference (optional)	

Carter Components (Sanford), Sanford, NC - 27332,

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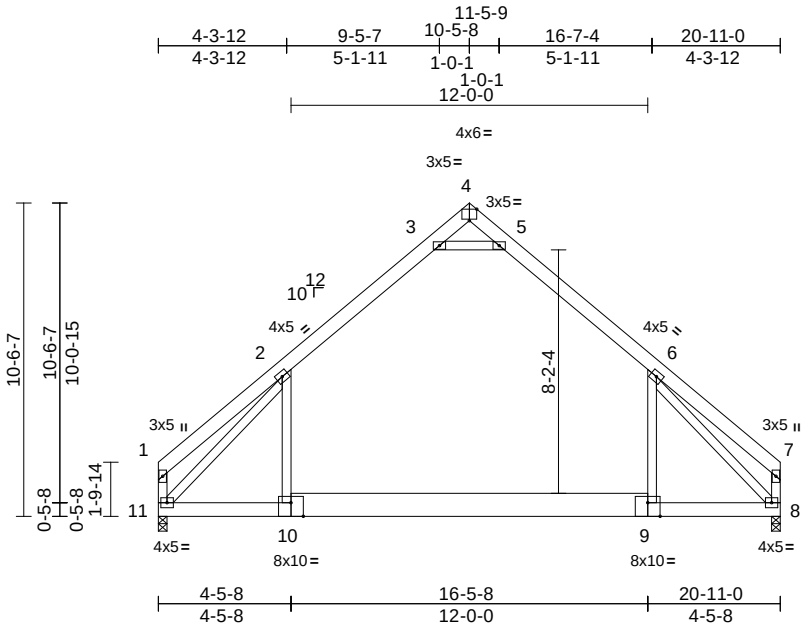

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Plate Offsets (X, Y): [4:0-3-0,Edge], [9:0-5-0,Edge], [10:0-5-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.35	9-10	>706	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.51	9-10	>484	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.01	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.18	9-10	>810	360		
BCDL	10.0										Weight: 170 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP No.2 *Except* 10-9:2x10 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 3-5,11-2,8-6:2x4 SP No.2

BRACING

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

REACTIONS (size) 8=0-3-8, 11=0-3-8
Max Horiz 11=211 (LC 10)
Max Grav 8=1289 (LC 26), 11=1289 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-517/144, 2-3=-921/152, 3-4=-110/866, 4-5=-110/866, 5-6=-920/152, 6-7=-517/144, 1-11=-581/128, 7-8=-581/128
BOT CHORD 10-11=0/814, 9-10=0/851, 8-9=0/802
WEBS 6-9=0/676, 2-10=0/676, 3-5=-1885/347, 2-11=-1022/0, 6-8=-1021/0

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 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=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) 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, 2-10
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 9-10
7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11 and 8. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

April 1,2020

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

Job	Truss	Truss Type	Qty	Ply	Kristie-Kristie w/Bonus	E14247908
20040001-A	PB	Piggyback	14	1	Job Reference (optional)	

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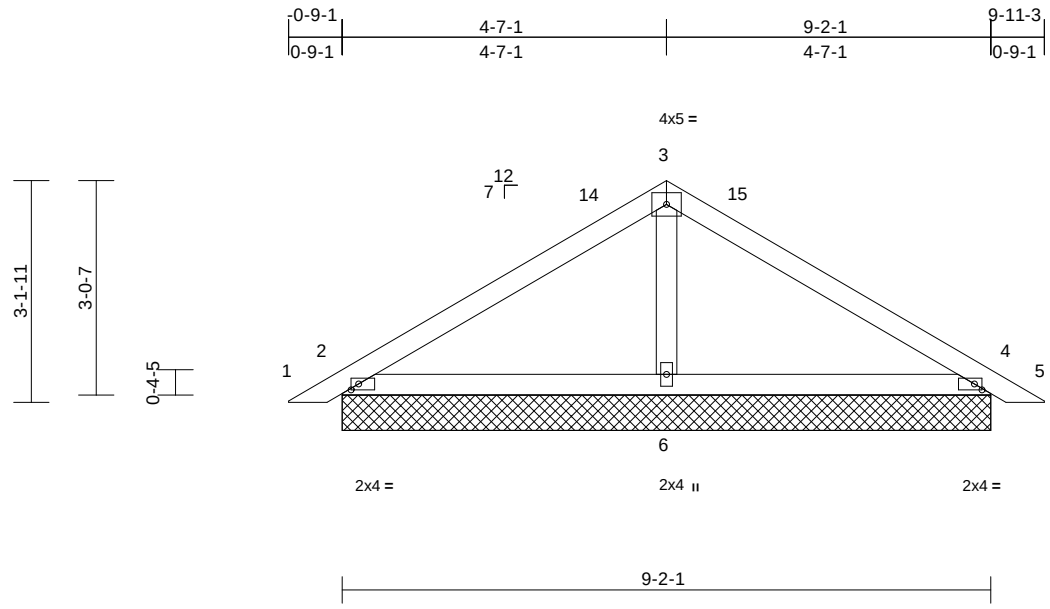

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Plate Offsets (X, Y): [2:0-1-5,0-1-0], [4:0-1-5,0-1-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 36 lb	FT = 20%

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

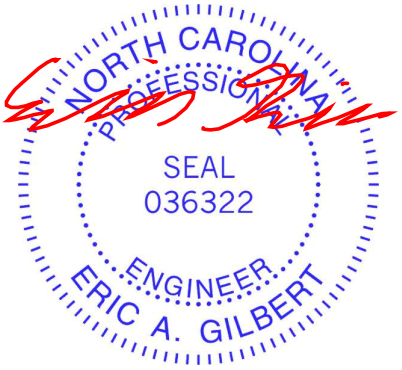
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=9-2-1, 4=9-2-1, 6=9-2-1, 7=9-2-1, 11=9-2-1
Max Horiz 2=-59 (LC 13), 7=-59 (LC 13)
Max Uplift 2=-9 (LC 15), 4=-15 (LC 16), 7=-9 (LC 15), 11=-15 (LC 16)
Max Grav 2=237 (LC 2), 4=237 (LC 2), 6=349 (LC 2), 7=237 (LC 2), 11=237 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/19, 2-14=-158/66, 3-14=-97/80, 3-15=-93/80, 4-15=-158/66, 4-5=0/19
BOT CHORD 2-6=-11/89, 4-6=0/89
WEBS 3-6=-184/44

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 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=1.33
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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 4-0-0 oc.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 4, and 6. This connection is for uplift only and does not consider lateral forces.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



April 1,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Kristie-Kristie w/Bonus	E14247909
20040001-A	PBE	Piggyback	1	1	Job Reference (optional)	

Carter Components (Sanford), Sanford, NC - 27332,

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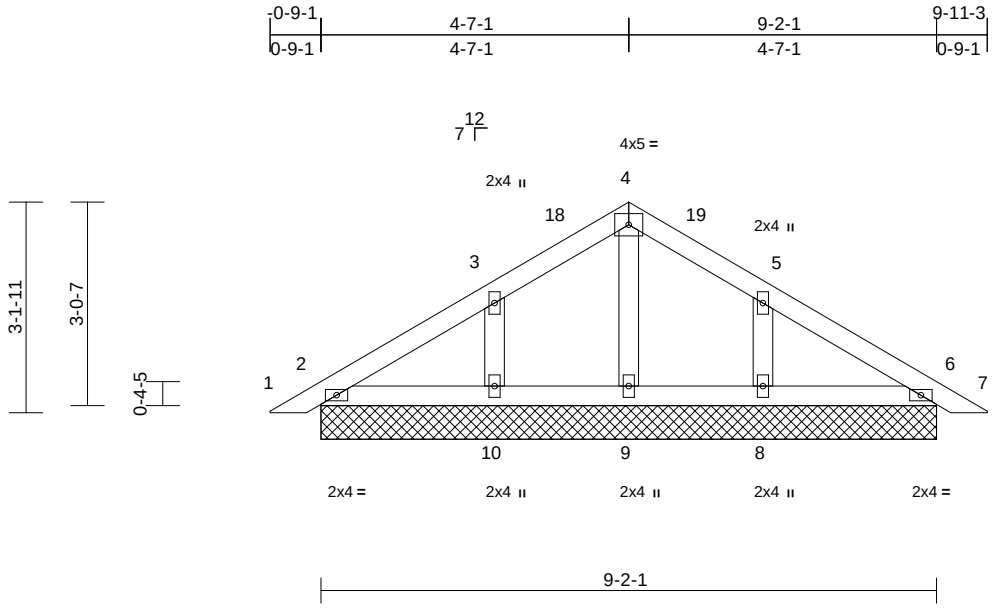

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Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 40 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 (size) 2=9-2-1, 6=9-2-1, 8=9-2-1, 9=9-2-1, 10=9-2-1, 11=9-2-1, 15=9-2-1
Max Horiz 2=-57 (LC 13), 11=-57 (LC 13)
Max Uplift 8=-29 (LC 16), 10=-29 (LC 15)
Max Grav 2=129 (LC 2), 6=129 (LC 2), 8=229 (LC 30), 9=97 (LC 2), 10=229 (LC 29), 11=129 (LC 2), 15=129 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/19, 2-3=-57/41, 3-18=-78/58, 4-18=-64/70, 4-19=-64/70, 5-19=-78/58, 5-6=-41/26, 6-7=0/19
BOT CHORD 2-10=-20/44, 9-10=-20/44, 8-9=-20/44, 6-8=-20/44
WEBS 4-9=-76/0, 3-10=-163/90, 5-8=-163/90

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 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=1.33
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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 9, 10, and 8. This connection is for uplift only and does not consider lateral forces.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

April 1,2020

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Kristie-Kristie w/Bonus	
20040001-A	VI	Valley	1	1	Job Reference (optional)	E14247910

Carter Components (Sanford), Sanford, NC - 27332,

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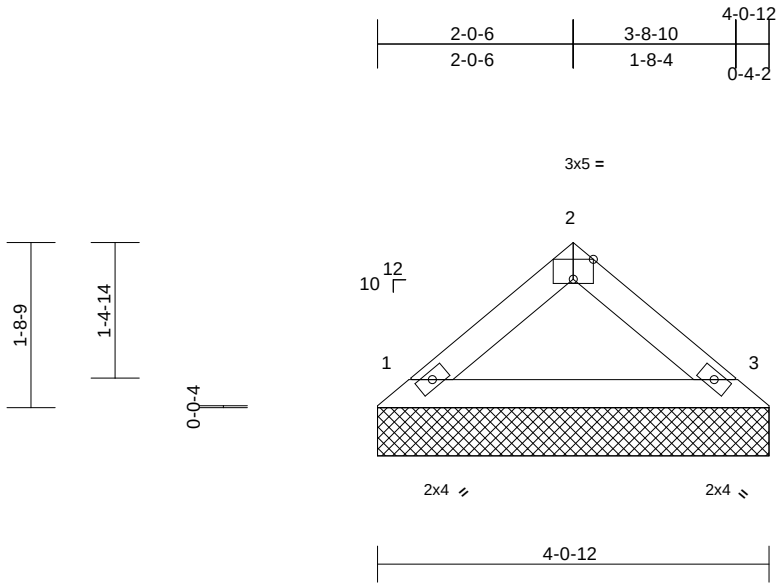

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Plate Offsets (X, Y): [2:0-2-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 13 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 4-1-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=4-0-12, 3=4-0-12
Max Horiz 1=-27 (LC 11)
Max Grav 1=142 (LC 2), 3=142 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-113/42, 2-3=-113/42
BOT CHORD 1-3=-1/66

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 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=1.33
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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 1,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Kristie-Kristie w/Bonus	
20040001-A	VG	Valley	1	1	Job Reference (optional)	E14247911

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 23 2020 Print: 8.330 S Mar 23 2020 MiTek Industries, Inc. Wed Apr 01 07:13:43 ID:F3VnScXd0yL_BfvaDM1hcNzVDaJ-oyIlWgk2T1gPuW7kS5K?vfmz8au3whWYAMbiZwzV9W6

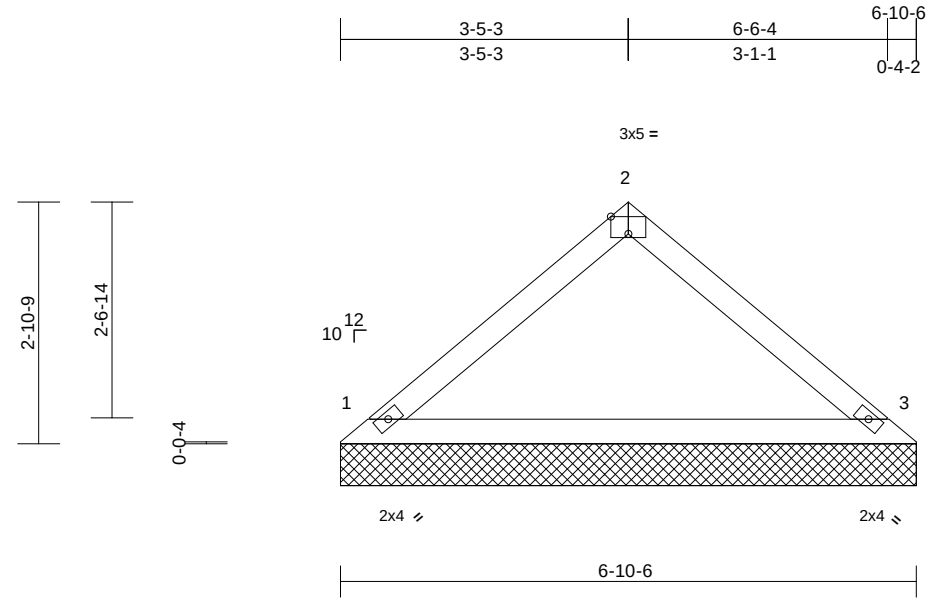

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Plate Offsets (X, Y): [2:0-2-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.35	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P								
BCDL	10.0										Weight: 22 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=6-10-6, 3=6-10-6
Max Horiz 1=50 (LC 12)
Max Grav 1=263 (LC 2), 3=263 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-209/74, 2-3=-209/74
BOT CHORD 1-3=-2/122

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 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=1.33
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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 1,2020

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

Job	Truss	Truss Type	Qty	Ply	Kristie-Kristie w/Bonus	
20040001-A	VD	Valley	1	1	Job Reference (optional)	E14247912

Carter Components (Sanford), Sanford, NC - 27332,

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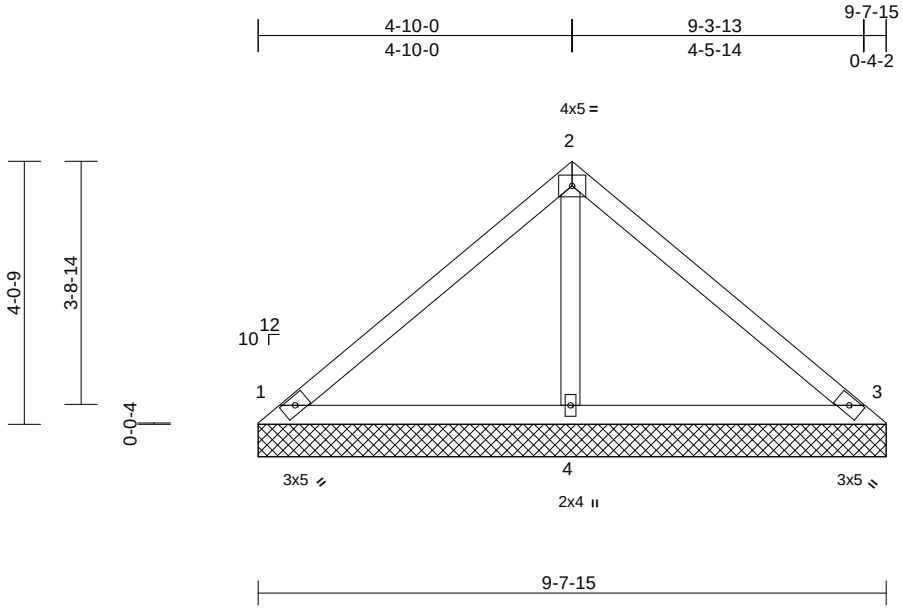

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0										Weight: 37 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 (size) 1=9-7-15, 3=9-7-15, 4=9-7-15
Max Horiz 1=-73 (LC 11)
Max Uplift 3=-2 (LC 14)
Max Grav 1=197 (LC 2), 3=199 (LC 2), 4=371 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-160/66, 2-3=-159/67
BOT CHORD 1-4=-9/62, 3-4=-9/64
WEBS 2-4=-213/45

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 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=1.33
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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 oc.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 3, and 4. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 1,2020

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

Job	Truss	Truss Type	Qty	Ply	Kristie-Kristie w/Bonus	
20040001-A	VE	Valley	1	1	Job Reference (optional)	E14247913

Carter Components (Sanford), Sanford, NC - 27332,

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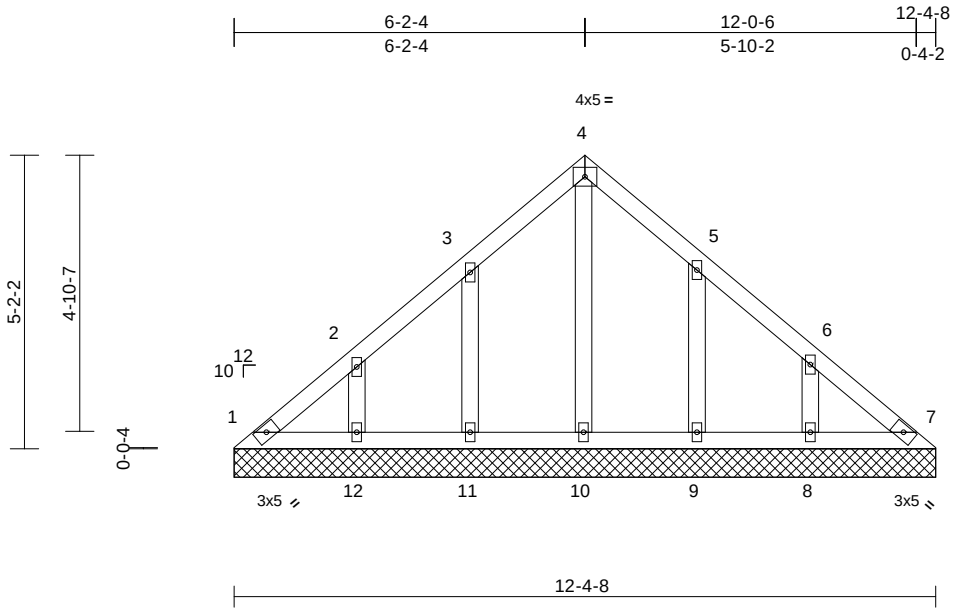

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0										Weight: 60 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 (size) 1=12-4-8, 7=12-4-8, 8=12-4-8, 9=12-4-8, 10=12-4-8, 11=12-4-8, 12=12-4-8
Max Horiz 1=-96 (LC 9)
Max Uplift 1=-10 (LC 9), 8=-39 (LC 14), 9=-36 (LC 14), 11=-38 (LC 13), 12=-38 (LC 13)
Max Grav 1=94 (LC 25), 7=82 (LC 24), 8=195 (LC 25), 9=187 (LC 25), 10=133 (LC 27), 11=191 (LC 24), 12=191 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-98/78, 2-3=-93/55, 3-4=-112/104, 4-5=-112/105, 5-6=-73/26, 6-7=-80/61
BOT CHORD 1-12=-55/82, 11-12=-55/82, 10-11=-55/82, 9-10=-55/82, 8-9=-55/82, 7-8=-55/82
WEBS 4-10=-92/13, 3-11=-165/101, 2-12=-158/97, 5-9=-161/99, 6-8=-161/99

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 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=1.33
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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
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 live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 7, 10, 11, 12, 9, and 8. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 1,2020

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

Job	Truss	Truss Type	Qty	Ply	Kristie-Kristie w/Bonus	
20040001-A	ADE	Monopitch Supported Gable	1	1	Job Reference (optional)	E14247914

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S Mar 23 2020 Print: 8.330 S Mar 23 2020 MiTek Industries, Inc. Wed Apr 01 07:13:39 Page: 1

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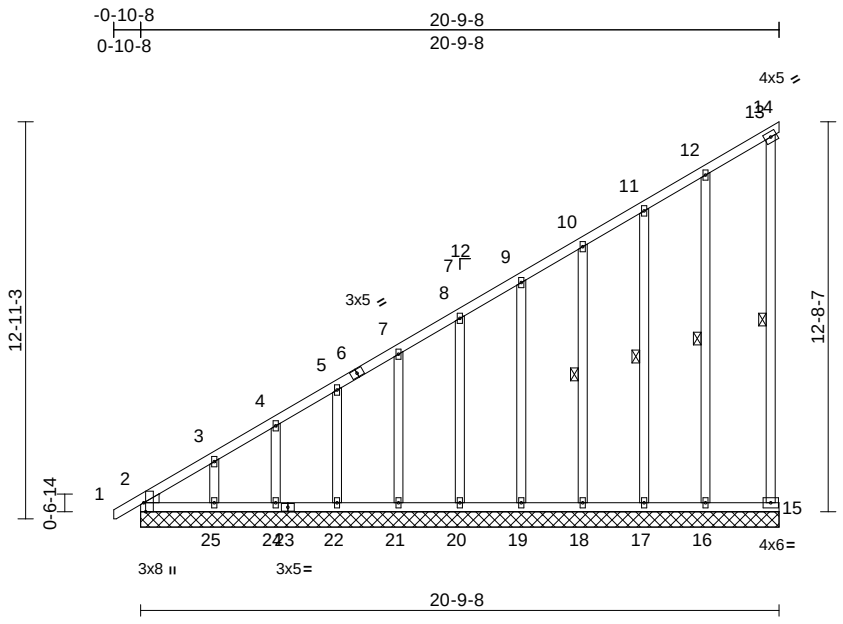

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Plate Offsets (X, Y): [2:0-3-8,Edge]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.01	14	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 169 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.1
OTHERS	2x4 SP No.2 *Except* 21-7,22-5,24-4,25-3:2x4 SP No.3
WEDGE	Left: 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 13-15, 10-18, 11-17, 12-16

REACTIONS (size) 2=20-9-8, 14=20-9-8, 15=20-9-8, 16=20-9-8, 17=20-9-8, 18=20-9-8, 19=20-9-8, 20=20-9-8, 21=20-9-8, 22=20-9-8, 24=20-9-8, 25=20-9-8, 26=20-9-8

Max Horiz 2=368 (LC 14), 26=368 (LC 14)

Max Uplift 2=-53 (LC 11), 14=-173 (LC 11), 15=-310 (LC 14), 16=-42 (LC 15), 17=-11 (LC 15), 18=-23 (LC 15), 19=-18 (LC 15), 20=-20 (LC 15), 21=-19 (LC 15), 22=-23 (LC 15), 24=-7 (LC 15), 25=-63 (LC 15), 26=-53 (LC 11)

Max Grav 2=227 (LC 30), 14=236 (LC 14), 15=278 (LC 11), 16=231 (LC 22), 17=165 (LC 22), 18=165 (LC 29), 19=165 (LC 29), 20=166 (LC 29), 21=164 (LC 29), 22=169 (LC 29), 24=152 (LC 2), 25=221 (LC 29), 26=227 (LC 30)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/32, 2-3=-617/569, 3-4=-549/503, 4-5=-507/471, 5-6=-458/409, 6-7=-451/430, 7-8=-411/390, 8-9=-363/351, 9-10=-315/311, 10-11=-266/270, 11-12=-228/242, 12-13=-154/158, 13-14=-176/160, 13-15=-322/259

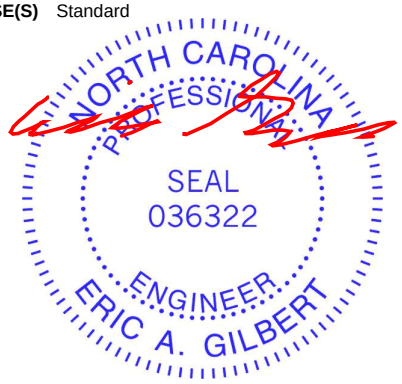
BOT CHORD 2-25=-286/283, 24-25=-176/194, 23-24=-176/194, 22-23=-176/194, 21-22=-176/194, 20-21=-176/194, 19-20=-176/194, 18-19=-176/194, 17-18=-176/194, 16-17=-176/194, 15-16=-176/194

WEBS 8-20=-127/68, 7-21=-126/67, 5-22=-128/71, 4-24=-120/63, 3-25=-175/112, 9-19=-126/68, 10-18=-127/71, 11-17=-149/97, 12-16=-224/149

NOTES

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 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=1.33
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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14, 15, 2, 20, 21, 22, 24, 25, 19, 18, 17, and 16. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



April 1,2020

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

Job	Truss	Truss Type	Qty	Ply	Kristie-Kristie w/Bonus	
20040001-A	BG	Common	1	2	Job Reference (optional)	E14247915

Carter Components (Sanford), Sanford, NC - 27332,

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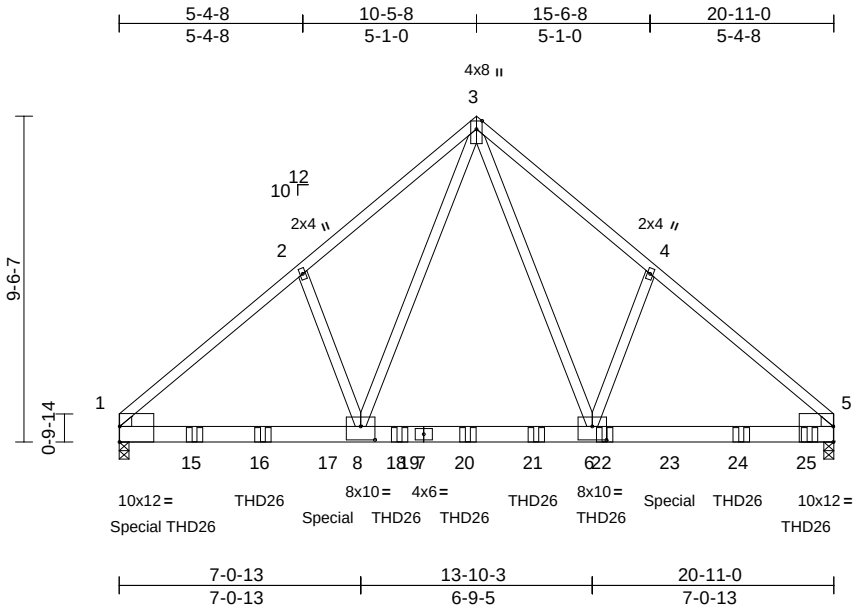

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Plate Offsets (X, Y): [1:0-0-1,Edge], [5:0-0-1,Edge], [6:0-5-0,0-4-12], [8:0-5-0,0-4-12]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.09	6-8	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.18	6-8	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.44	Horz(CT)	0.02	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 266 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP 2400F 2.0E
WEBS	2x4 SP No.2 *Except* 6-4,8-2:2x4 SP No.3
WEDGE	Left: 2x4 SP No.3 Right: 2x4 SP No.3

BRACING

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

REACTIONS (size) 1=0-3-8, 5=0-3-8
Max Horiz 1=167 (LC 29)
Max Uplift 1=-316 (LC 9), 5=-300 (LC 10)
Max Grav 1=5609 (LC 2), 5=5367 (LC 2)

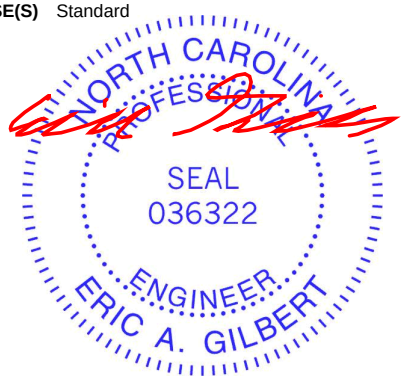
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-5587/344, 2-3=-5474/432, 3-4=-5514/435, 4-5=-5623/346
BOT CHORD	1-15=-266/4270, 15-16=-266/4270, 16-17=-266/4270, 8-17=-266/4270, 8-18=-132/2942, 18-19=-132/2942, 7-19=-132/2942, 7-20=-132/2942, 20-21=-132/2942, 6-21=-132/2942, 6-22=-210/4247, 22-23=-210/4247, 23-24=-210/4247, 24-25=-210/4247, 5-25=-210/4247
WEBS	3-6=-307/3609, 4-6=-304/136, 3-8=-301/3528, 2-8=-304/144

NOTES

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
5) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Use USP THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent spaced at 4-0-0 oc max. starting at 2-2-8 from the left end to 20-2-8 to connect truss(es) to back face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 851 lb down and 66 lb up at 0-0-0, and 843 lb down and 74 lb up at 6-2-8, and 843 lb down and 74 lb up at 16-2-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



April 1,2020

Continued on page 2

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

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 1-3=-52, 3-5=-52, 9-12=-19
   Concentrated Loads (lb)
   Vert: 9=-851 (B), 15=-843 (B), 16=-843 (B), 17=-843 (B), 18=-843 (B), 20=-843 (B), 21=-843 (B), 22=-843 (B), 23=-843 (B), 24=-843 (B), 25=-846 (B)

Job	Truss	Truss Type	Qty	Ply	Kristie-Kristie w/Bonus	E14247916
20040001-A	BE	Attic	1	1	Job Reference (optional)	

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 23 2020 Print: 8.330 S Mar 23 2020 MiTek Industries, Inc. Wed Apr 01 07:13:41 Page: 1
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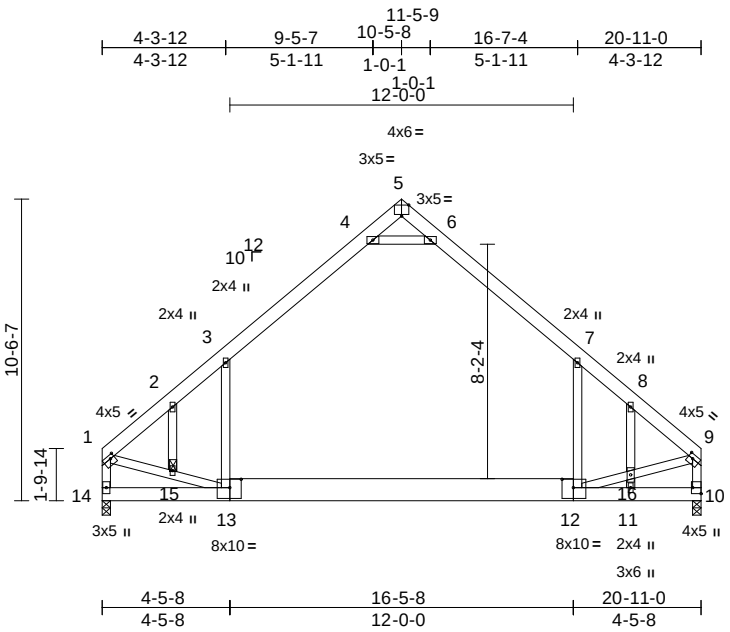

Scale = 1:80.5

Plate Offsets (X, Y): [1:0-1-12,0-1-8], [5:0-3-0,Edge], [9:0-2-0,0-1-12], [10:Edge,0-3-8], [12:0-4-12,0-3-8], [13:0-4-12,0-3-8]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.30	12-13	>834	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.43	12-13	>569	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.01	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH		Attic	-0.15	12-13	>937	360		
BCDL	10.0										Weight: 173 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP No.2 *Except* 13-12:2x10 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 4-6:2x4 SP No.2
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.
JOINTS 1 Brace at Jt(s): 15

REACTIONS (size) 10=0-3-8, 14=0-3-8
Max Horiz 14=204 (LC 10)
Max Grav 10=1247 (LC 26), 14=1247 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1244/0, 2-3=-1210/1, 3-4=-899/148, 4-5=-105/820, 5-6=-106/835, 6-7=-885/147, 7-8=-1364/13, 8-9=-1143/0, 1-14=-1232/0, 9-10=-1052/0
BOT CHORD 13-14=-195/286, 12-13=0/842, 11-12=-35/151, 10-11=-35/151
WEBS 7-12=-14/796, 3-13=-45/537, 4-6=-1830/334, 1-15=0/769, 13-15=0/742, 12-16=0/734, 9-16=0/745, 2-15=-104/21, 8-16=-481/57, 11-16=-449/41

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 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=1.33
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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 2-0-0 oc.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Ceiling dead load (5.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).7-12, 3-13
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 12-13
10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 10. This connection is for uplift only and does not consider lateral forces.
11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

April 1,2020

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

Job	Truss	Truss Type	Qty	Ply	Kristie-Kristie w/Bonus	E14247917
20040001-A	AD1	Jack-Closed	11	1	Job Reference (optional)	

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.33 S Mar 23 2020 Print: 8.330 S Mar 23 2020 MiTek Industries, Inc. Wed Apr 01 07:13:38 Page: 1
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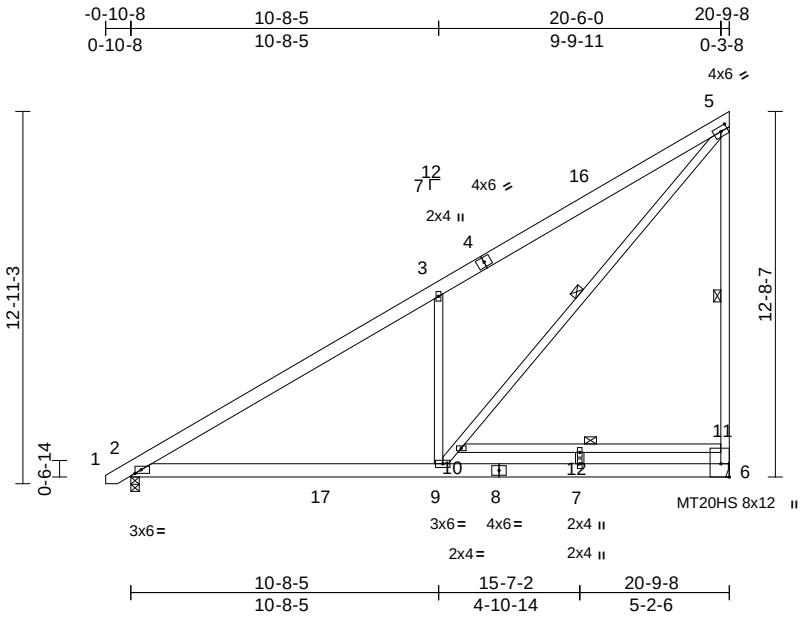

Scale = 1:80

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.11	9-15	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.24	9-15	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 170 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2 *Except* 5-6:2x4 SP No.1, 12-7:2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-8-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-6, 5-9, 10-11

REACTIONS (size) 2=0-3-8, 6= Mechanical
Max Horiz 2=376 (LC 14)
Max Uplift 6=-54 (LC 15)
Max Grav 2=909 (LC 29), 6=946 (LC 29)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-1146/173, 3-4=-1232/369, 4-16=-1132/399, 5-16=-1129/432, 6-11=-867/323, 5-11=-868/335
BOT CHORD 2-17=-359/1001, 9-17=-359/1001, 8-9=-43/111, 7-8=-43/111, 6-7=-43/111
WEBS 3-9=-794/428, 9-10=-430/1493, 5-10=-401/1511, 10-12=-175/133, 11-12=-175/133, 7-12=-13/28

NOTES
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 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=1.33
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
5) All plates are MT20 plates unless otherwise indicated.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 1,2020

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

Job	Truss	Truss Type	Qty	Ply	Kristie-Kristie w/Bonus	E14247918
20040001-A	AA	Piggyback Base	6	1	Job Reference (optional)	

Carter Components (Sanford), Sanford, NC - 27332,

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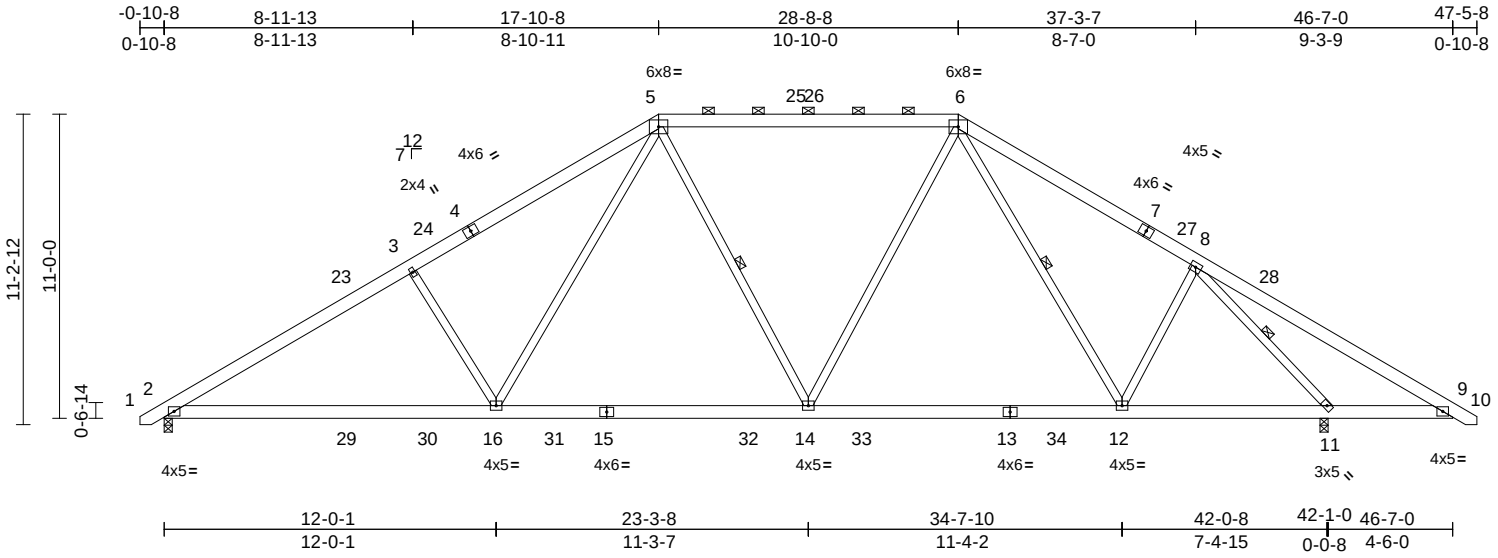

Scale = 1:83.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.19	12-14	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.33	12-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.08	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 332 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2 *Except* 5-6:2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-0-3 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 9-11.
WEBS 1 Row at midpt 5-14, 6-12, 8-11

REACTIONS (size) 2=0-3-8, 11=0-3-8
Max Horiz 2=-215 (LC 13)
Max Grav 2=1871 (LC 46), 11=2199 (LC 38)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-23=-3080/428, 3-23=-2919/459, 3-24=-2882/463, 4-24=-2841/464, 4-5=-2697/520, 5-25=-1816/399, 25-26=-1816/399, 6-26=-1816/399, 6-7=-1865/399, 7-27=-2014/344, 8-27=-2038/338, 8-28=-189/578, 9-28=-243/432, 9-10=0/27
BOT CHORD 2-29=-264/2764, 29-30=-264/2764, 16-30=-264/2764, 16-31=-59/1852, 15-31=-59/1852, 15-32=-59/1852, 14-32=-59/1852, 14-33=-20/1577, 13-33=-20/1577, 13-34=-20/1577, 12-34=-20/1577, 11-12=-69/1495, 9-11=-373/305
WEBS 5-16=-125/1147, 3-16=-696/283, 5-14=-196/164, 6-14=0/592, 6-12=-187/179, 8-12=-25/496, 8-11=-2643/526

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 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=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 1,2020

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

Job	Truss	Truss Type	Qty	Ply	Kristie-Kristie w/Bonus	E14247919
20040001-A	A	Piggyback Base	3	1	Job Reference (optional)	

Carter Components (Sanford), Sanford, NC - 27332,

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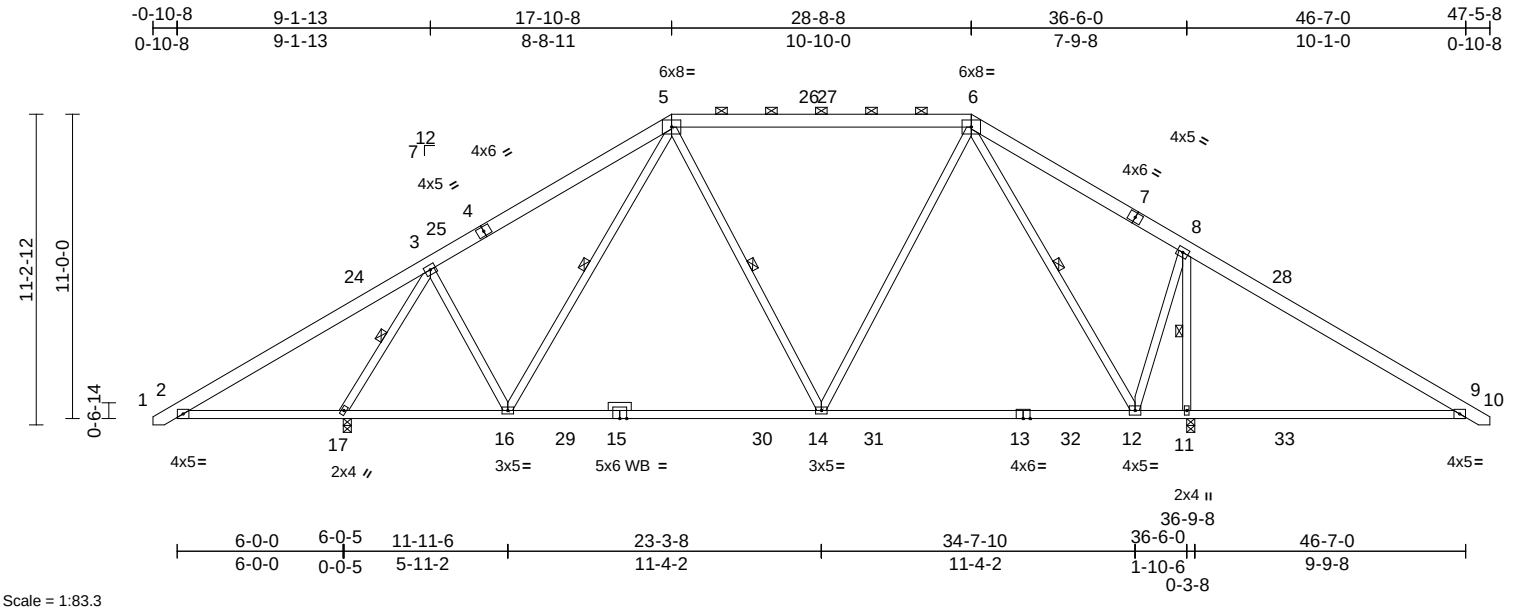

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.41	14-16	>888	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.65	14-16	>566	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.02	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 303 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2 *Except* 5-6:2x6 SP 2400F 2.0E
BOT CHORD	2x4 SP No.2 *Except* 15-13:2x4 SP 2400F 2.0E
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 4-1-1 oc bracing.
WEBS	1 Row at midpt 5-16, 5-14, 6-12, 3-17, 8-11

REACTIONS (size) 11=0-3-8, 17=0-3-8
Max Horiz 17=215 (LC 14)
Max Grav 11=2343 (LC 44), 17=1732 (LC 53)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/27, 2-24=-325/587, 3-24=-276/758, 3-25=-1028/103, 4-25=-999/110, 4-5=-844/165, 5-26=-765/133, 26-27=-765/133, 6-27=-765/133, 6-7=-136/436, 7-8=-150/212, 8-28=-366/917, 9-28=-420/721, 9-10=0/27
BOT CHORD	2-17=-507/365, 16-17=-135/714, 16-29=-58/822, 15-29=-58/822, 15-30=-58/822, 14-30=-58/822, 14-31=-15/599, 13-31=-15/599, 13-32=-15/599, 12-32=-15/599, 11-12=-623/448, 11-33=-623/448, 9-33=-623/448
WEBS	5-16=-230/131, 5-14=-172/174, 6-14=-16/634, 6-12=-1225/324, 3-16=-3/519, 3-17=-1860/412, 8-12=-24/1308, 8-11=-2129/427

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 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=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17. This connection is for uplift only and does not consider lateral forces.
9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 1,2020

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

Job	Truss	Truss Type	Qty	Ply	Kristie-Kristie w/Bonus	
20040001-A	AB	Piggyback Base	5	1	Job Reference (optional)	E14247920

Carter Components (Sanford), Sanford, NC - 27332,

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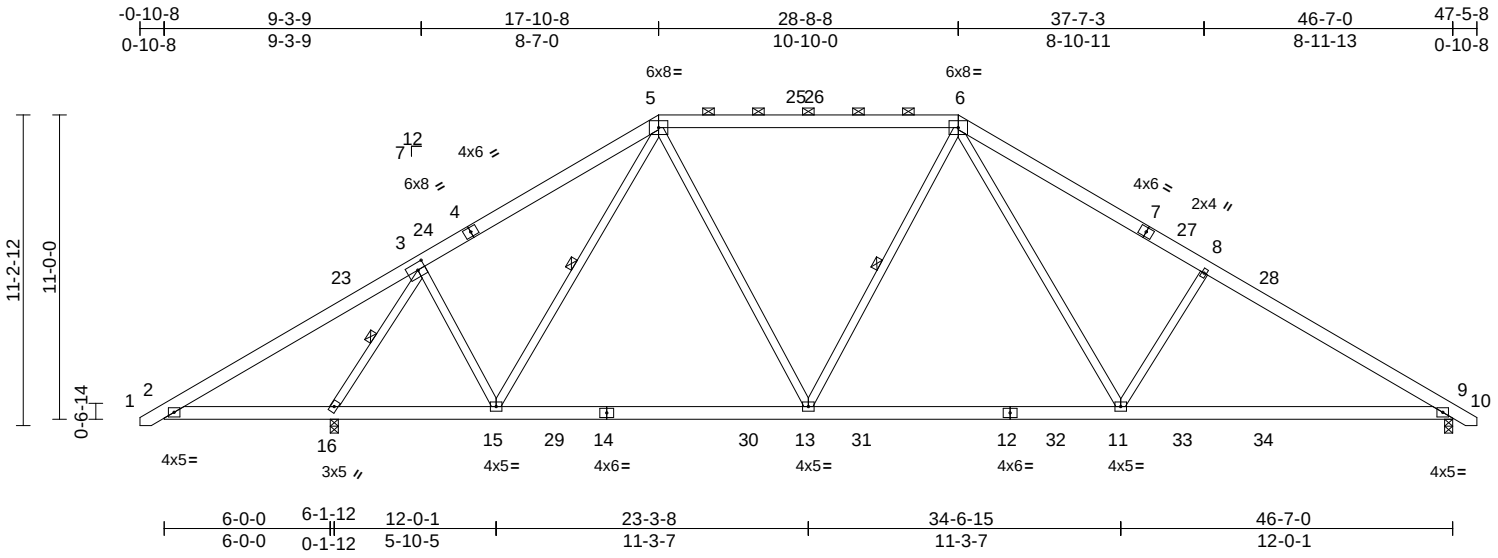

Scale = 1:83.3

Plate Offsets (X, Y): [3:0-3-6,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.17	11-13	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.29	13-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.07	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 330 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2 *Except* 5-6:2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-2-15 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-16.
WEBS 1 Row at midpt 3-16, 5-15, 6-13

REACTIONS (size) 9=0-3-8, 16=0-3-8
Max Horiz 16=-215 (LC 13)
Max Grav 9=1786 (LC 48), 16=2289 (LC 38)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/27, 2-23=-305/556, 3-23=-252/709, 3-24=-1545/221, 4-24=-1514/227, 4-5=-1363/283, 5-25=-1618/354, 25-26=-1618/354, 6-26=-1618/354, 6-7=-2533/480, 7-27=-2677/424, 8-27=-2718/423, 8-28=-2755/420, 9-28=-2916/388, 9-10=0/27
BOT CHORD 2-16=-481/353, 15-16=-86/1010, 15-29=0/1362, 14-29=0/1362, 14-30=0/1362, 13-30=0/1362, 13-31=-21/1659, 12-31=-21/1659, 12-32=-21/1659, 11-32=-21/1659, 11-33=-227/2462, 33-34=-227/2462, 9-34=-227/2462
WEBS 3-16=-2444/518, 3-15=0/772, 5-15=-486/124, 5-13=0/683, 6-13=-266/145, 6-11=-125/1150, 8-11=-697/283

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 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=1.33
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16 and 9. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 1,2020

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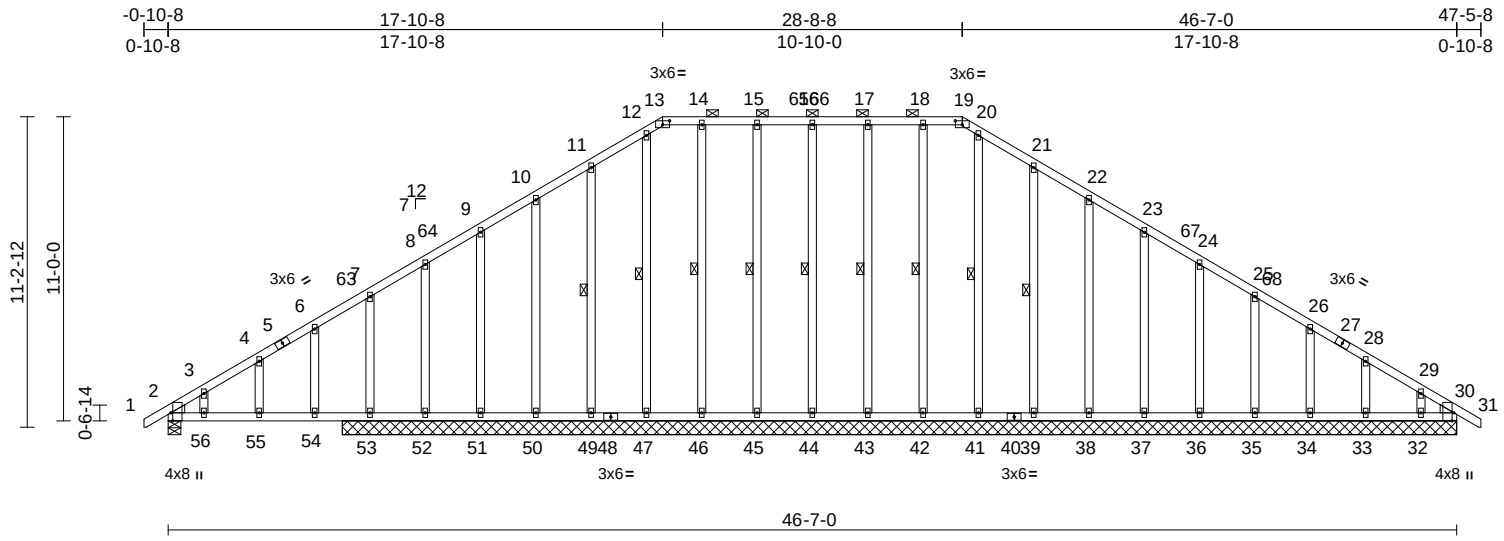
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Kristie-Kristie w/Bonus	
20040001-A	AE	Piggyback Base Supported Gable	1	1	Job Reference (optional)	E14247921

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.33 S Mar 23 2020 Print: 8.330 S Mar 23 2020 MiTek Industries, Inc. Wed Apr 01 07:13:39 Page: 1
ID:8TxkjCuFkU1Wfs_DuyrA6QzVDtC-vBWngJhYQpA_PvpzDFF3lpcFGyT8_qTyFkdUQ9zV9WA



Scale = 1:83.3

Plate Offsets (X, Y): [2:0-3-8,Edge], [13:0-3-0,0-1-12], [19:0-3-0,0-1-12], [30:0-3-8,Edge]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	0.09	55	>995	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.18	55	>491	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.02	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 375 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.2 *Except* 53-7,54-6,55-4,56-3,35-25,34-26,33-28,32-29 :2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 13-19.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 16-44, 15-45, 14-46, 12-47, 11-49, 17-43, 18-42, 20-41, 21-39

REACTIONS (size) 2=0-5-8, 30=40-3-8, 32=40-3-8, 33=40-3-8, 34=40-3-8, 35=40-3-8, 36=40-3-8, 37=40-3-8, 38=40-3-8, 39=40-3-8, 41=40-3-8, 42=40-3-8, 43=40-3-8, 44=40-3-8, 45=40-3-8, 46=40-3-8, 47=40-3-8, 49=40-3-8, 50=40-3-8, 51=40-3-8, 52=40-3-8, 53=40-3-8, 60=40-3-8
Max Horiz 2=-210 (LC 13)
Max Uplift 30=-17 (LC 12), 32=-46 (LC 16), 33=-17 (LC 16), 34=-20 (LC 16), 35=-19 (LC 16), 36=-20 (LC 16), 37=-20 (LC 16), 38=-18 (LC 16), 39=-31 (LC 16), 43=-8 (LC 11), 44=-5 (LC 12), 45=-9 (LC 11), 49=-31 (LC 15), 50=-16 (LC 15), 51=-32 (LC 15), 52=-152 (LC 29), 53=-99 (LC 15), 60=-17 (LC 12)
Max Grav 2=363 (LC 2), 30=205 (LC 29), 32=124 (LC 30), 33=172 (LC 30), 34=164 (LC 30), 35=187 (LC 38), 36=218 (LC 38), 37=213 (LC 38), 38=213 (LC 38), 39=226 (LC 38), 41=137 (LC 38), 42=190 (LC 37), 43=213 (LC 37), 44=207 (LC 37), 45=213 (LC 37), 46=190 (LC 37), 47=139 (LC 52), 49=230 (LC 38), 50=198 (LC 38), 51=275 (LC 38), 52=29 (LC 15), 53=696 (LC 29), 60=205 (LC 29)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/32, 2-3=-242/63, 3-4=-234/73, 4-5=-197/73, 5-6=-179/84, 6-63=-167/93, 7-63=-128/95, 7-8=-245/99, 8-64=-197/117, 9-64=-192/126, 9-10=-254/179, 10-11=-289/224, 11-12=-341/280, 12-13=-298/253, 13-14=-303/264, 14-15=-303/264, 15-65=-303/264, 16-65=-303/264, 16-66=-303/264, 17-66=-303/264, 17-18=-303/264, 18-19=-303/264, 19-20=-298/253, 20-21=-341/280, 21-22=-290/225, 22-23=-251/178, 23-67=-200/130, 24-67=-212/118, 24-25=-180/82, 25-68=-141/47, 26-68=-188/40, 26-27=-169/48, 27-28=-196/36, 28-29=-201/50, 29-30=-192/51, 30-31=0/32
BOT CHORD 2-56=-89/170, 55-56=-38/165, 54-55=-38/165, 53-54=-38/165, 52-53=-38/165, 51-52=-38/165, 50-51=-38/165, 49-50=-38/165, 48-49=-38/165, 47-48=-38/165, 46-47=-38/165, 45-46=-38/165, 44-45=-38/165, 43-44=-38/165, 42-43=-38/165, 41-42=-38/165, 40-41=-38/165, 39-40=-38/165, 38-39=-38/165, 37-38=-38/165, 36-37=-38/165, 35-36=-38/165, 34-35=-38/165, 33-34=-38/165, 32-33=-38/165, 30-32=-38/165

April 1,2020

Continued on page 2

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WEBS 16-44=-168/50, 15-45=-174/66, 14-46=-151/23, 12-47=-101/36, 11-49=-188/86, 10-50=-170/64, 9-51=-198/77, 8-52=-71/28, 7-53=-361/136, 6-54=-57/49, 4-55=-48/48, 3-56=-43/39, 17-43=-174/66, 18-42=-151/22, 20-41=-99/36, 21-39=-187/86, 22-38=-174/66, 23-37=-175/68, 24-36=-179/68, 25-35=-148/68, 26-34=-125/68, 28-33=-131/69, 29-32=-108/66

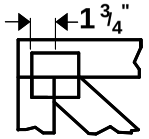
NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) 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=1.33
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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable studs spaced at 2-0-0 oc.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 30, 44, 45, 46, 47, 49, 50, 51, 52, 53, 43, 42, 41, 39, 38, 37, 36, 35, 34, 33, and 32. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

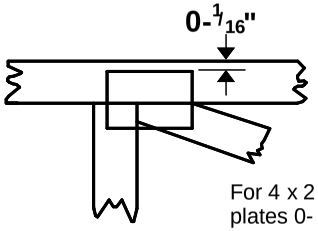
LOAD CASE(S) Standard

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.

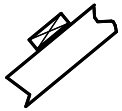
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

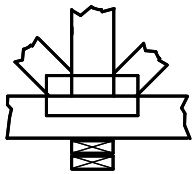
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

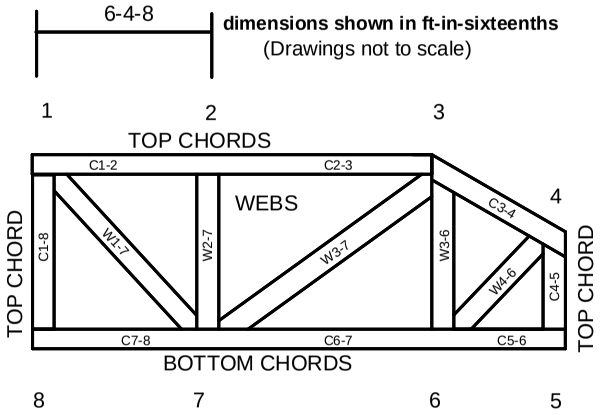


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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®

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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.