ENGINEERING BY TRENCO
A MiTek Affiliate

RE: RG14-A01 Special Bonus
RG14-A01 Special Bonus

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: WELLONS CONSTRUCTION
Lot/Block:
Address: Lot 1 Goose Creek, Holly Road
City: Dunn

Project Name: RG14-A01 Special Bonus
Model: RG14-A01 Stanton Special
Subdivision:
State: NC

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPI2014
Wind Code: ASCE 7-10
Roof Load: 40.0 psf

Design Program: MiTek 20/20 8.5
Wind Speed: 130 mph
Floor Load: N/A psf

This package includes 14 individual, dated Truss Design Drawings and 0 Additional Drawings.

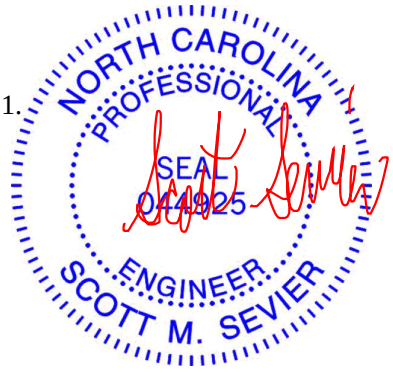
No.	Seal#	Truss Name	Date
1	I48329892	A	10/14/2021
2	I48329893	A1	10/14/2021
3	I48329894	A2	10/14/2021
4	I48329895	A3	10/14/2021
5	I48329896	A4	10/14/2021
6	I48329897	A4E	10/14/2021
7	I48329898	A5	10/14/2021
8	I48329899	A6	10/14/2021
9	I48329900	AE	10/14/2021
10	I48329901	B	10/14/2021
11	I48329902	B1	10/14/2021
12	I48329903	B1A	10/14/2021
13	I48329904	BE	10/14/2021
14	I48329905	PB2	10/14/2021

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.

Truss Design Engineer's Name: Sevier, Scott

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

North Carolina COA: C-0844



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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.

October 14, 2021

Sevier, Scott

Job	Truss	Truss Type	Qty	Ply	RG14-A01 Special Bonus
RG14-A01 Special Bonus	A	Piggyback Base	6	1	I48329892
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Wed Oct 13 08:36:06 2021 Page 1
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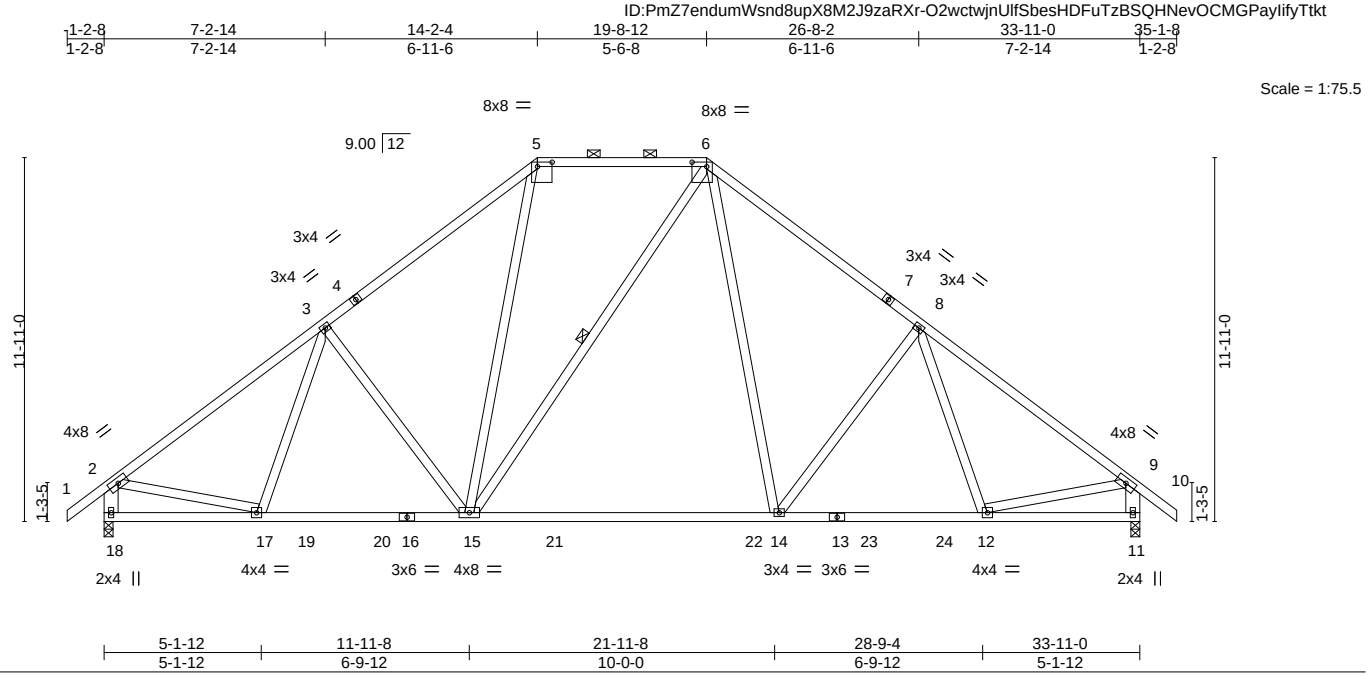

Plate Offsets (X,Y)-- [5:0-5-12,0-1-12], [6:0-5-12,0-1-12]

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	0.63	Vert(LL)	-0.35	14-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.57	14-15	>708	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.04	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 231 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except*
13-16: 2x4 SP No.1
WEBS 2x4 SP No.3 *Except*
6-15: 2x4 SP No.2 or 2x4 SPF No.2, 2-18,9-11: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-14 oc purlins, except end verticals, and 2-0-0 oc purlins (5-5-8 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-15

REACTIONS. (size) 18=0-3-8, 11=0-3-8
Max Horz 18=327(LC 11)
Max Uplift 18=-148(LC 12), 11=-148(LC 13)
Max Grav 18=1425(LC 1), 11=1427(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1579/302, 3-5=-1463/407, 5-6=-975/375, 6-8=-1482/407, 8-9=-1592/302, 2-18=-1375/307, 9-11=-1378/307
BOT CHORD 17-18=-335/433, 15-17=-163/1381, 14-15=0/1014, 12-14=-104/1229, 11-12=-111/272
WEBS 3-15=-380/276, 5-15=-83/567, 6-14=-114/651, 8-14=-380/275, 2-17=-6/1052, 9-12=-6/1061

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone 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=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18 and 11. This connection is for uplift only and does not consider lateral forces.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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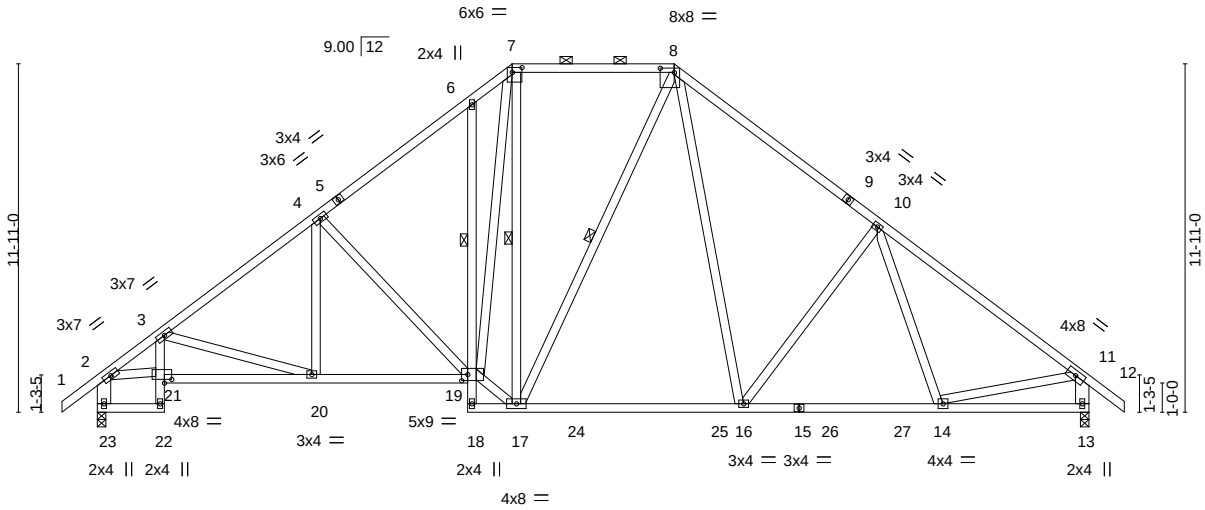
Job	Truss	Truss Type	Qty	Ply	RG14-A01 Special Bonus
RG14-A01 Special Bonus	A1	Piggyback Base	4	1	I48329893
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Wed Oct 13 08:36:08 2021 Page 1
ID:PmZ7endumWsnd8upX8M2J9zaRXr-LQ2NIck10NvAqy0fLfwx2cXmtBLbs3gZtuRPnXyTtkr

1-2-8	2-3-8	7-5-12	12-8-0	14-2-4	19-8-12	26-8-2	33-11-0	35-1-8
1-2-8	2-3-8	5-2-4	5-2-4	1-6-4	5-6-8	6-11-6	7-2-14	1-2-8

Scale = 1:78.8



2-3-8	7-5-12	12-8-0	14-2-4	21-11-8	28-9-4	33-11-0
2-3-8	5-2-4	5-2-4	1-6-4	7-9-4	6-9-12	5-1-12

Plate Offsets (X,Y)-- [7:0-4-0,0-2-0], [8:0-5-12,0-1-12], [19:0-2-8,0-2-8], [21:0-3-0,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.14	16-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.25	16-17	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.11	13	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 267 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except*
3-22,6-18: 2x4 SP No.3
WEBS 2x4 SP No.3 *Except*
8-17: 2x4 SP No.2 or 2x4 SPF No.2, 2-23,11-13: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-9 oc purlins, except end verticals, and 2-0-0 oc purlins (5-3-4 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
1 Row at midpt 6-19
WEBS 1 Row at midpt 7-17, 8-17

REACTIONS. (size) 23=0-3-8, 13=0-3-8
Max Horz 23=327(LC 11)
Max Uplift 23=-148(LC 12), 13=-148(LC 13)
Max Grav 23=1425(LC 1), 13=1425(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2069/346, 3-4=-1833/343, 4-6=-1481/382, 6-7=-1385/488, 7-8=-949/365, 8-10=-1409/410, 10-11=-1566/300, 2-23=-1379/269, 11-13=-1379/305
BOT CHORD 20-21=-393/1971, 19-20=-158/1515, 16-17=0/969, 14-16=-104/1190, 13-14=-113/269
WEBS 3-20=-474/244, 4-20=0/285, 4-19=-492/213, 17-19=-15/1172, 7-19=-294/1134, 7-17=-484/216, 8-16=-130/584, 10-16=-387/270, 2-21=-260/1688, 11-14=-2/1037

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone 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=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 23 and 13. This connection is for uplift only and does not consider lateral forces.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	RG14-A01 Special Bonus
RG14-A01 Special Bonus	A2	Piggyback Base	3	1	I48329894
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Wed Oct 13 08:36:09 2021 Page 1
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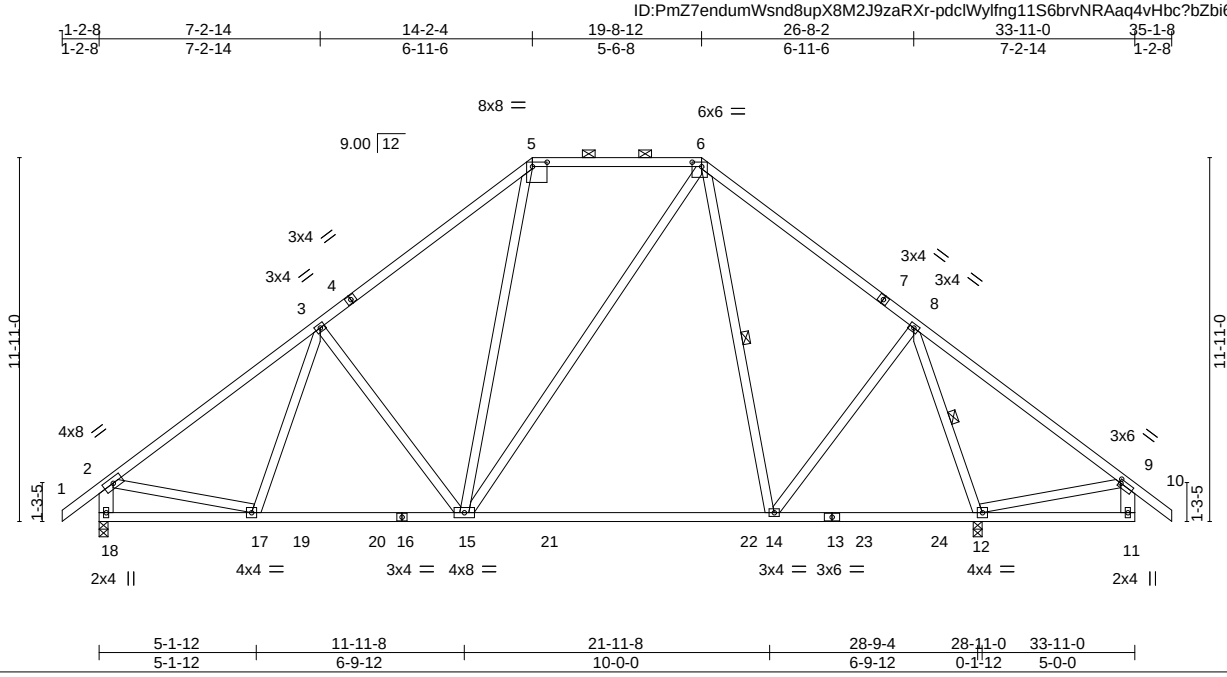

Plate Offsets (X,Y)-- [5:0-5-12,0-1-12], [6:0-3-12,0-1-12], [9:0-0-12,0-1-8]

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	0.71	Vert(LL)	-0.38	14-15	>891	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.61	14-15	>566	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.02	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 231 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
WEBS 2x4 SP No.3 *Except*
6-15: 2x4 SP No.2 or 2x4 SPF No.2, 2-18,9-11: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-5 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 14-15.
WEBS 1 Row at midpt 6-14, 8-12

REACTIONS. (size) 18=0-3-8, 12=0-3-8
Max Horz 18=327(LC 11)
Max Uplift 18=-139(LC 12), 12=-173(LC 13)
Max Grav 18=1187(LC 19), 12=1670(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1266/221, 3-5=-1102/321, 5-6=-749/316, 6-8=-810/248, 8-9=-219/506, 2-18=-1142/250
BOT CHORD 17-18=-335/431, 15-17=-159/1131, 14-15=-41/632, 12-14=0/262
WEBS 3-15=-407/277, 5-15=-42/350, 6-15=-124/377, 8-14=-32/592, 8-12=-1529/422, 2-17=0/801, 9-12=-489/409

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone 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=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18 and 12. This connection is for uplift only and does not consider lateral forces.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 14,2021

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Job	Truss	Truss Type	Qty	Ply	RG14-A01 Special Bonus
RG14-A01 Special Bonus	A3	Piggyback Base	1	1	I48329895
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Wed Oct 13 08:36:10 2021 Page 1
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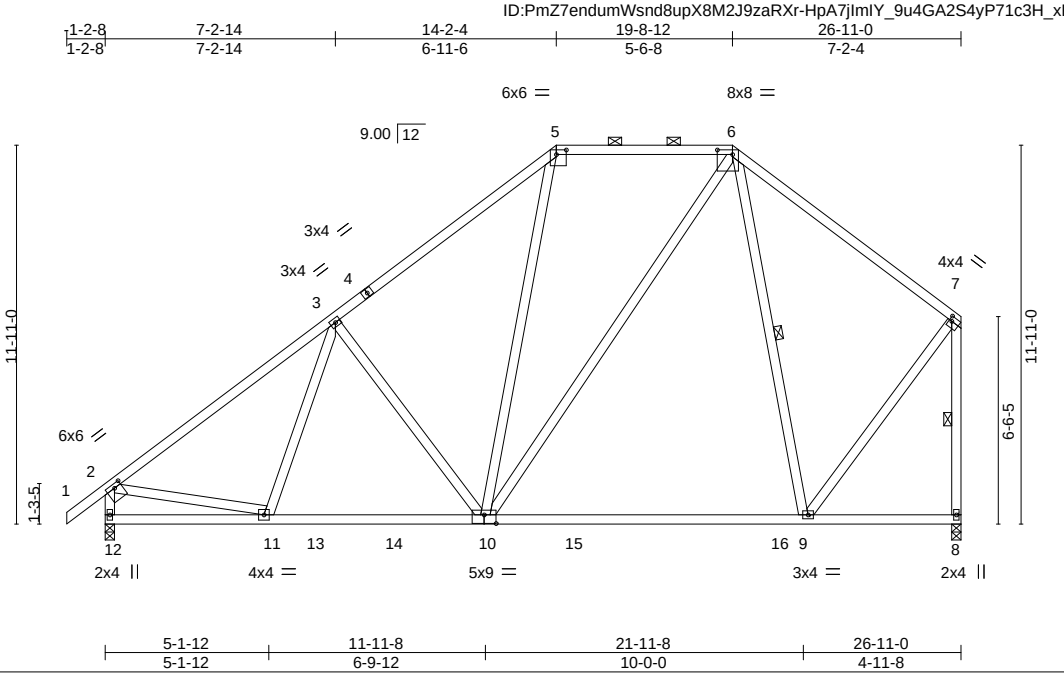

Plate Offsets (X,Y)-- [2:0-2-12,0-1-8], [5:0-3-12,0-1-12], [6:0-5-12,0-1-12], [7:0-1-0,0-1-12], [10:0-4-8,0-3-4]

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	0.82	Vert(LL)	-0.40	9-10	>807	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.62	9-10	>516	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 195 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2
WEBS 2x4 SP No.3 *Except*
6-10: 2x4 SP No.2 or 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 6-9, 7-8

REACTIONS. (size) 12=0-3-8, 8=0-3-8
Max Horz 12=384(LC 9)
Max Uplift 12=-130(LC 12), 8=-78(LC 12)
Max Grav 12=1148(LC 1), 8=1081(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1229/234, 3-5=-1046/336, 5-6=-711/325, 6-7=-674/261, 2-12=-1098/255, 7-8=-1097/218
BOT CHORD 11-12=-443/515, 10-11=-360/1074, 9-10=-153/538
WEBS 3-10=-427/281, 5-10=-45/336, 6-10=-135/433, 6-9=-357/182, 2-11=0/775, 7-9=-76/751

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone 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=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 8. This connection is for uplift only and does not consider lateral forces.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RG14-A01 Special Bonus
RG14-A01 Special Bonus	A4	ROOF TRUSS	6	1	I48329896
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Wed Oct 13 08:36:12 2021 Page 1
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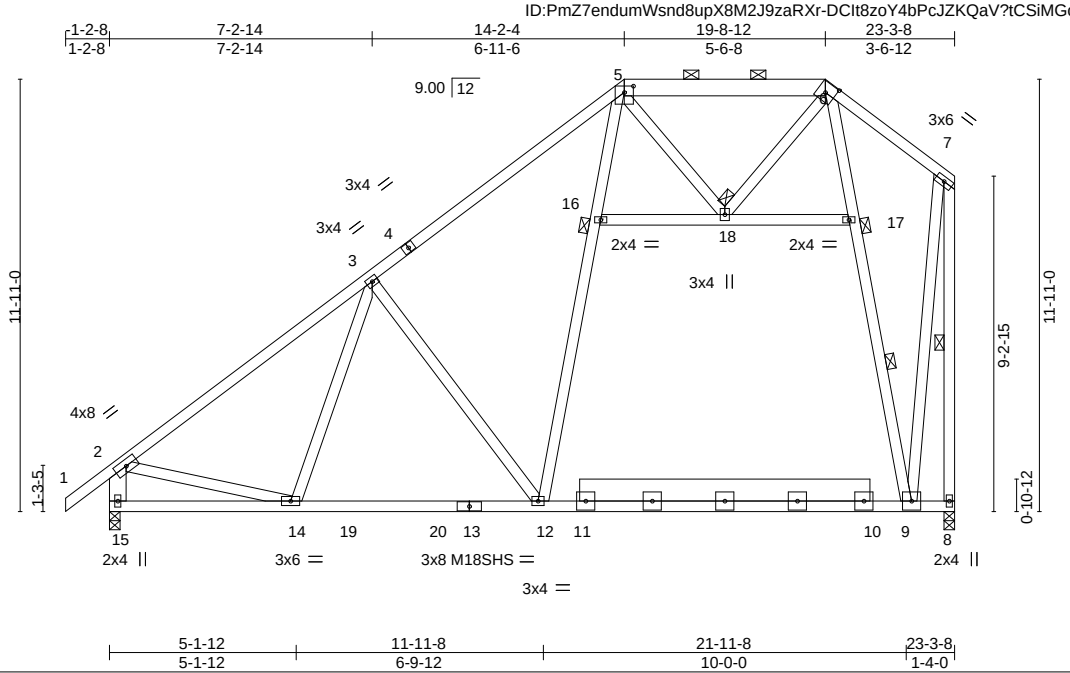

Plate Offsets (X,Y)-- [5:0-3-0,0-2-2], [6:0-3-4,0-3-4]

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)	0.52	12-14	>528	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.89	12-14	>311	180	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 222 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2 *Except* 5-6: 2x6 SP No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2 *Except* 10-11: 2x8 SP No.2, 8-13: 2x4 SP DSS
WEBS	2x4 SP No.3 *Except* 5-12,6-9: 2x4 SP DSS, 2-15: 2x6 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 9-17, 7-8
JOINTS	1 Brace at Jt(s): 16, 17, 18

REACTIONS. (size) 15=0-3-8, 8=0-3-8
Max Horz 15=369(LC 12)
Max Uplift 15=-82(LC 12), 8=-134(LC 12)
Max Grav 15=1028(LC 20), 8=999(LC 2)

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

TOP CHORD	2-3=-1099/136, 3-5=-797/198, 5-6=-371/190, 2-15=-1021/179, 7-8=-1578/337
BOT CHORD	14-15=-463/423, 12-14=-304/870, 9-12=-95/378
WEBS	3-12=-511/302, 12-16=-94/610, 5-16=-80/562, 6-17=-589/197, 9-17=-628/210, 2-14=0/711, 7-9=-275/1508, 6-18=-119/400, 5-18=-401/120

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) All plates are MT20 plates unless otherwise indicated.
5) All plates are 6x6 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15 and 8. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

October 14,2021

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

Job	Truss	Truss Type	Qty	Ply	RG14-A01 Special Bonus
RG14-A01 Special Bonus	A4E	Piggyback Base Supported Gable	1	1	I48329897

Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Wed Oct 13 08:36:13 2021 Page 1
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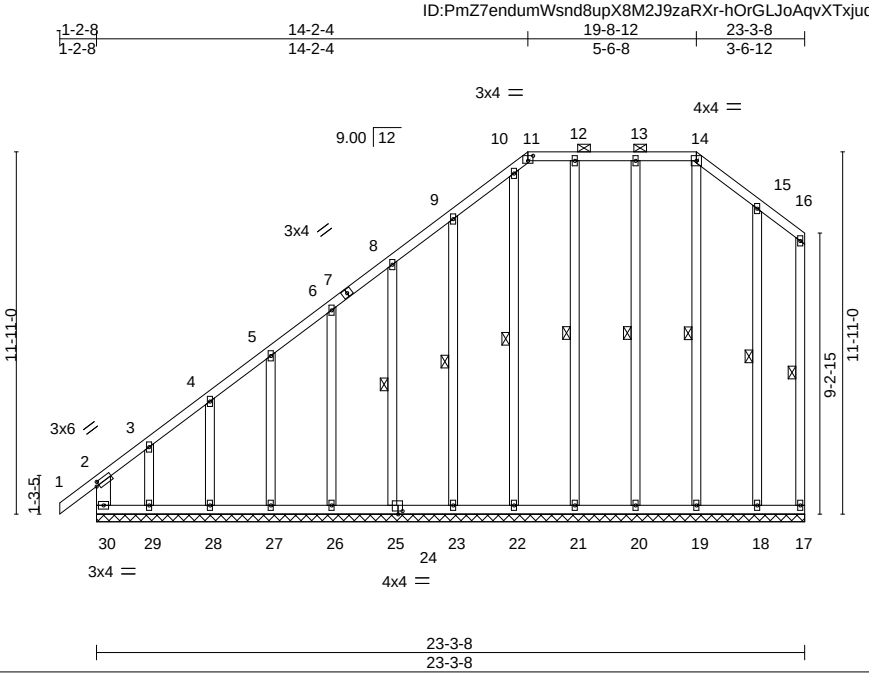

Plate Offsets (X,Y)-- [2:0-1-2,0-1-8], [11:0-2-0,0-2-0], [24:0-1-12,0-1-4]

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	0.33	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.01	1	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.00	17	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R							Weight: 227 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2
WEBS	2x6 SP No.2 *Except* 16-17: 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.): 11-14.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 16-17, 14-19, 13-20, 12-21, 10-22, 9-23, 8-25, 15-18

REACTIONS. All bearings 23-3-8.
(lb) - Max Horz 30=370(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 17, 20, 21, 22, 23, 25, 26, 27, 28, 18 except 30=-208(LC 10), 29=-431(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 17, 19, 20, 21, 22, 23, 25, 26, 27, 28, 18 except 30=519(LC 12), 29=297(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-30=-369/259, 2-3=-518/360, 3-4=-336/230, 4-5=-282/185
WEBS 3-29=-257/285

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; 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) 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.
11) N/A
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 14,2021

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

Job	Truss	Truss Type	Qty	Ply	RG14-A01 Special Bonus
RG14-A01 Special Bonus	A5	ROOF TRUSS	1	1	I48329898
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Wed Oct 13 08:36:15 2021 Page 1
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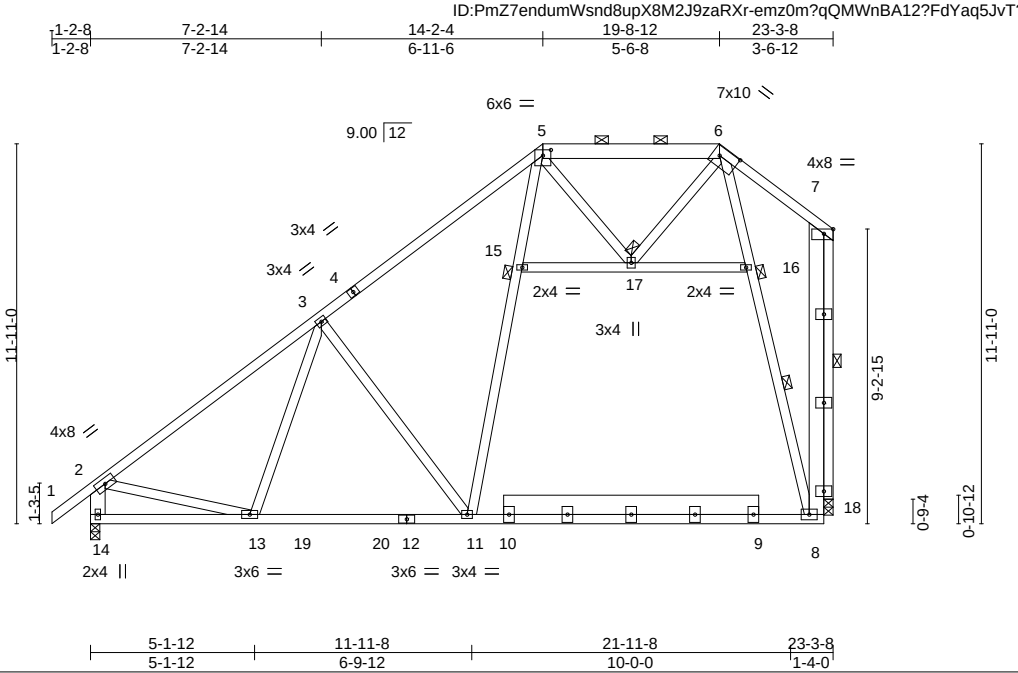

Plate Offsets (X,Y)-- [5:0-3-0,0-2-2], [6:0-7-4,0-3-4], [7:0-3-8,Edge]

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	0.85	Vert(LL)	0.48	11-13	>574	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.76	11-13	>363	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.84	Horz(CT)	-0.04	18	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 229 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2 *Except* 5-6: 2x6 SP No.2, 6-7: 2x4 SP No.1
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2 *Except* 9-10: 2x8 SP No.2
WEBS	2x4 SP No.3 *Except* 5-11,6-8: 2x4 SP DSS, 2-14,7-8: 2x6 SP No.2
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-4-14 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 8-7-3 oc bracing.
WEBS	1 Row at midpt 8-16, 7-18
JOINTS	1 Brace at Jt(s): 15, 16, 17

REACTIONS. (size) 14=0-3-8, 18=0-3-8
Max Horz 14=375(LC 12)
Max Uplift 14=-80(LC 12), 18=-137(LC 12)
Max Grav 14=1005(LC 1), 18=884(LC 1)

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

TOP CHORD	2-3=-1046/129, 3-5=-772/196, 5-6=-341/179, 2-14=-978/172, 7-8=-199/926
BOT CHORD	13-14=-471/436, 11-13=-308/799, 8-11=-103/373
WEBS	3-11=-503/298, 11-15=-106/559, 5-15=-92/516, 6-16=-766/243, 8-16=-831/263, 2-13=0/631, 16-17=-268/85, 6-17=-128/398, 5-17=-398/129, 7-18=-885/220

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone 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=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 4x6 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 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.
7) Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 18. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

October 14,2021

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

Job	Truss	Truss Type	Qty	Ply	RG14-A01 Special Bonus
RG14-A01 Special Bonus	A6	ROOF TRUSS	3	1	I48329899
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Wed Oct 13 08:36:17 2021 Page 1
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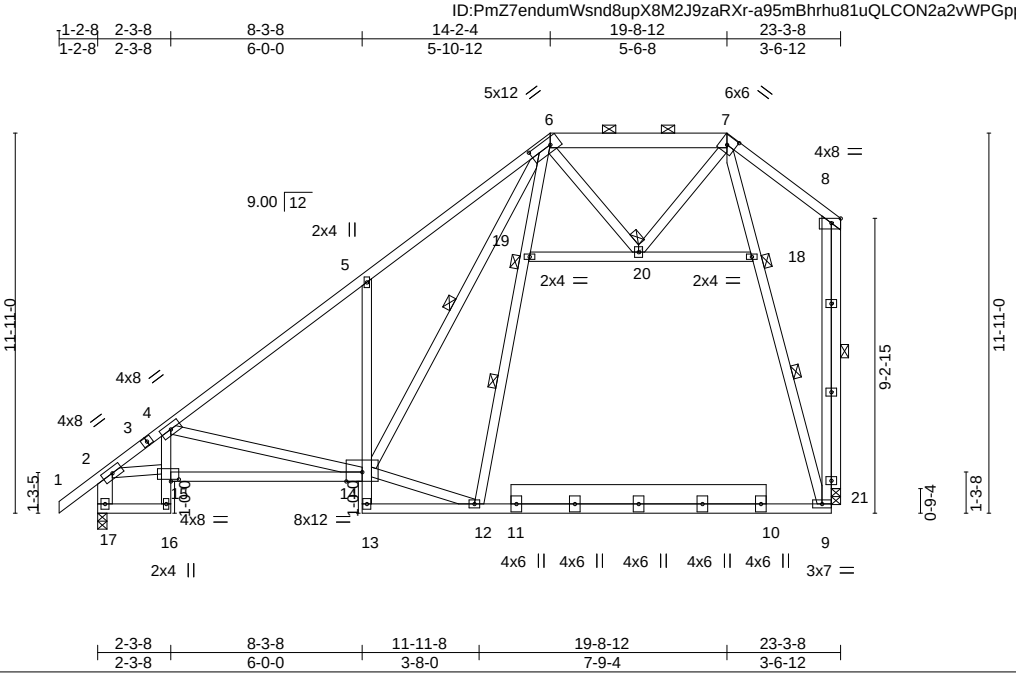

Plate Offsets (X,Y)-- [6:0-8-4,0-2-8], [7:0-3-4,0-3-4], [8:0-3-8,Edge], [15:0-3-0,0-0-12]

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	0.80	Vert(LL)	0.43	12	>644	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.67	12	>408	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.77	Horz(CT)	-0.04	21	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 240 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2 *Except* 6-7: 2x6 SP No.2, 7-8: 2x4 SP No.1
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2 *Except* 4-16,5-13: 2x4 SP No.3, 10-11: 2x8 SP No.2
WEBS	2x4 SP No.3 *Except* 6-12,7-9: 2x4 SP DSS, 2-17: 2x6 SP No.2
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-10-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 6-14, 12-19, 9-18, 8-21
JOINTS	1 Brace at Jt(s): 18, 19, 20

REACTIONS. (size) 17=0-3-8, 21=0-3-8
Max Horz 17=374(LC 12)
Max Uplift 17=-81(LC 12), 21=-136(LC 12)
Max Grav 17=1005(LC 1), 21=891(LC 1)

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

TOP CHORD	2-4=-1407/323, 4-5=-1113/192, 5-6=-1151/411, 6-7=-333/179, 2-17=-965/220, 8-9=-193/919
BOT CHORD	14-15=-695/1395, 5-14=-491/333, 9-12=-101/366
WEBS	4-14=-598/399, 12-14=-47/362, 6-14=-468/979, 2-15=-400/1112, 7-18=-759/240, 9-18=-824/259, 18-20=-253/81, 7-20=-124/372, 6-20=-373/125, 8-21=-891/220

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone 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=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 3x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 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) 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17 and 21. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

October 14,2021

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

Job	Truss	Truss Type	Qty	Ply	RG14-A01 Special Bonus
RG14-A01 Special Bonus	AE	Piggyback Base Supported Gable	1	1	I48329900
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Wed Oct 13 08:36:19 2021 Page 1
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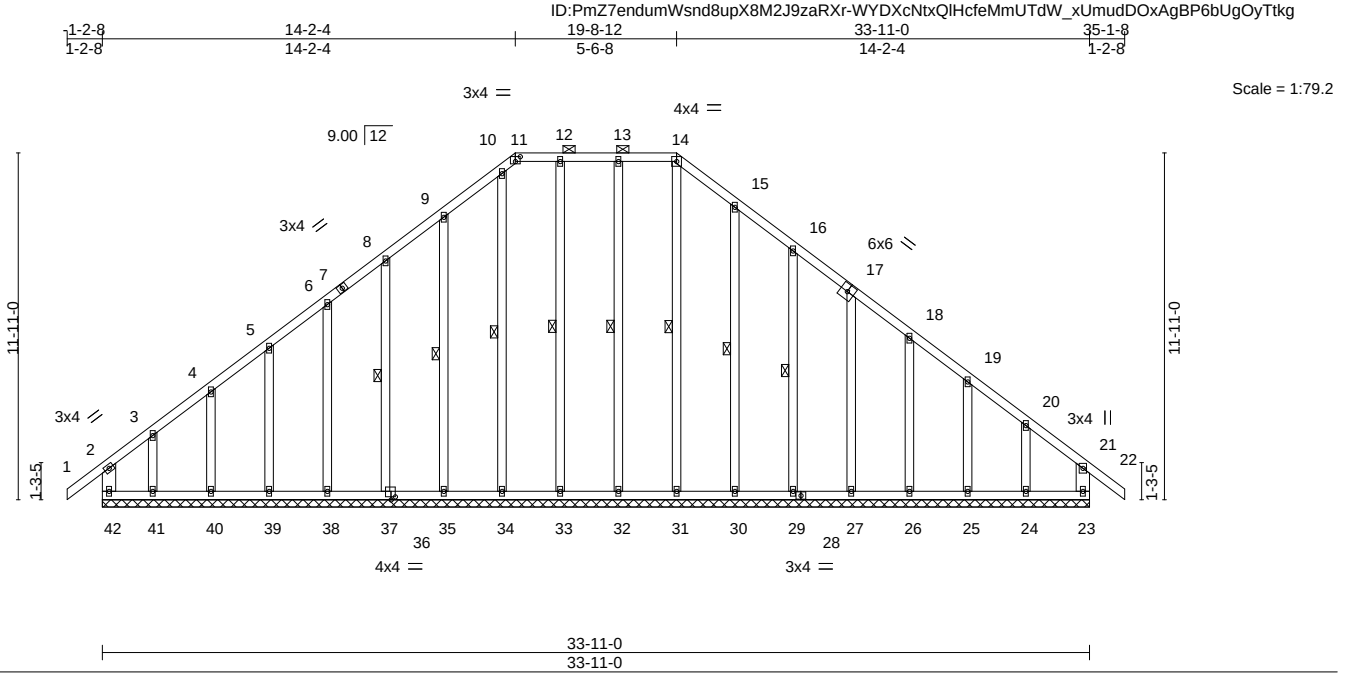

Plate Offsets (X,Y)-- [11:0-2-0,0-2-0], [36:0-1-12,0-1-4]

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	0.18	Vert(LL)	-0.01	22	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.01	22	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	23	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R							Weight: 294 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2
WEBS	2x6 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, and 2-0-0 oc purlins (10-0-0 max.): 11-14.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 14-31, 13-32, 12-33, 10-34, 9-35, 8-37, 15-30, 16-29

REACTIONS. All bearings 33-11-0.
(lb) - Max Horz 42=-327(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 32, 33, 35, 37, 38, 39, 40, 30, 29, 27, 26, 25 except 42=-229(LC 8), 23=-111(LC 9), 41=-219(LC 12), 24=-180(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 23, 31, 32, 33, 34, 35, 37, 38, 39, 40, 30, 29, 27, 26, 25, 24 except 42=308(LC 20), 41=286(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-256/253, 6-8=-197/253, 8-9=-253/303, 9-10=-323/385, 10-11=-257/303, 11-12=-273/334, 12-13=-273/334, 13-14=-273/334, 14-15=-325/388, 15-16=-269/323, 16-17=-210/252

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone 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=1.60
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.
11) N/A
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 14,2021

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

Job	Truss	Truss Type	Qty	Ply	RG14-A01 Special Bonus
RG14-A01 Special Bonus	B	ATTIC	6	1	I48329901
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Wed Oct 13 08:36:21 2021 Page 1
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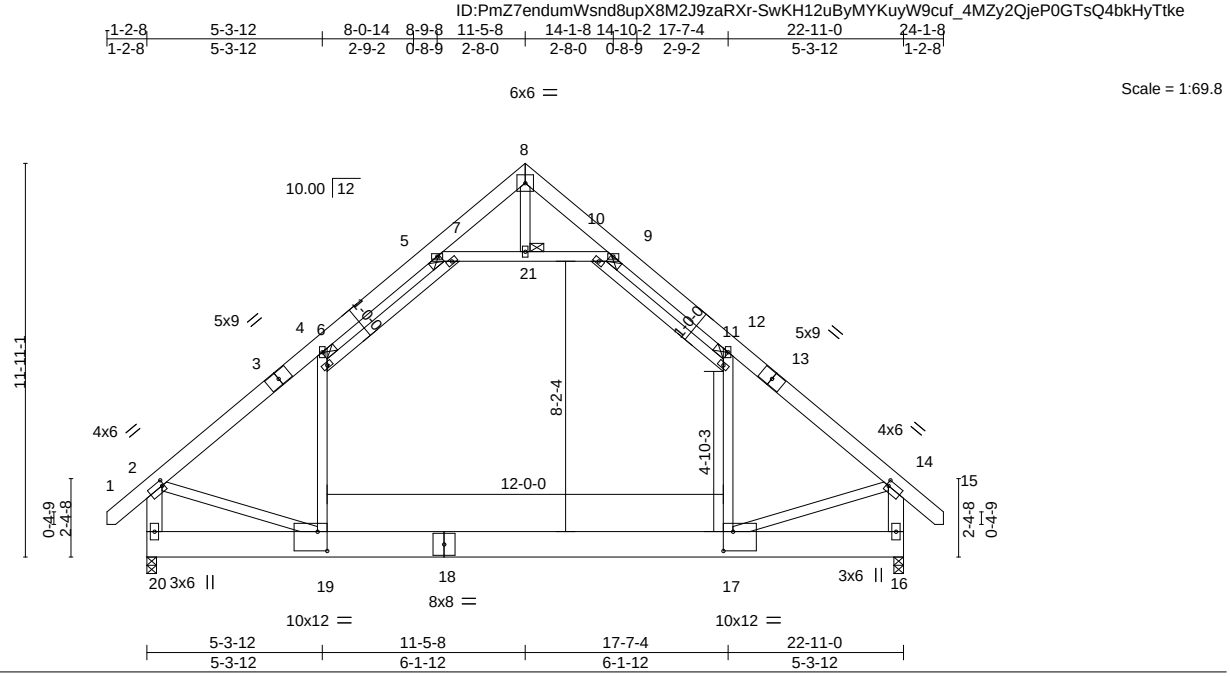

Plate Offsets (X,Y)-- [2:0-0-12,0-2-0], [14:0-0-12,0-2-0], [17:0-3-8,0-7-0], [19:0-3-8,0-7-0]

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) -0.28 17-19 >976 240	MT20 197/144
TCDL 10.0		Lumber DOL 1.15	BC 0.93	Vert(CT) -0.42 17-19 >635 180	
BCLL 0.0	*	Rep Stress Incr YES	WB 0.38	Horz(CT) 0.01 16 n/a n/a	
BCDL 10.0		Code IRC2015/TPI2014	Matrix-MS	Attic -0.16 17-19 901 360	Weight: 233 lb FT = 20%

LUMBER-
TOP CHORD 2x6 SP DSS *Except*
6-7,10-11: 2x4 SP No.2 or 2x4 SPF No.2, 1-3,13-15: 2x6 SP No.2
BOT CHORD 2x10 SP No.2
WEBS 2x4 SP No.2 or 2x4 SPF No.2 *Except*
8-21,2-19,14-17: 2x4 SP No.3, 2-20,14-16: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
JOINTS 1 Brace at Jt(s): 21, 6, 7, 10, 11

REACTIONS. (size) 20=0-3-8, 16=0-3-8
Max Horz 20=-326(LC 10)
Max Grav 20=1424(LC 20), 16=1424(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1512/7, 4-5=-1072/163, 9-12=-1071/163, 12-14=-1512/7, 2-20=-1508/57, 14-16=-1509/58
BOT CHORD 19-20=-291/461, 17-19=0/1040
WEBS 11-17=0/675, 11-12=-11/618, 6-19=0/675, 4-6=-11/618, 5-7=-1295/195, 7-21=-1180/190, 10-21=-1180/190, 9-10=-1295/195, 2-19=0/911, 14-17=0/914

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone 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=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
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) Ceiling dead load (5.0 psf) on member(s). 4-5, 9-12, 5-7, 7-21, 10-21, 9-10; Wall dead load (5.0psf) on member(s).11-17, 11-12, 6-19, 4-6
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 17-19
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Attic room checked for L/360 deflection.

October 14,2021

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

Job	Truss	Truss Type	Qty	Ply	RG14-A01 Special Bonus
RG14-A01 Special Bonus	B1	ATTIC	4	1	I48329902
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Wed Oct 13 08:36:22 2021 Page 1
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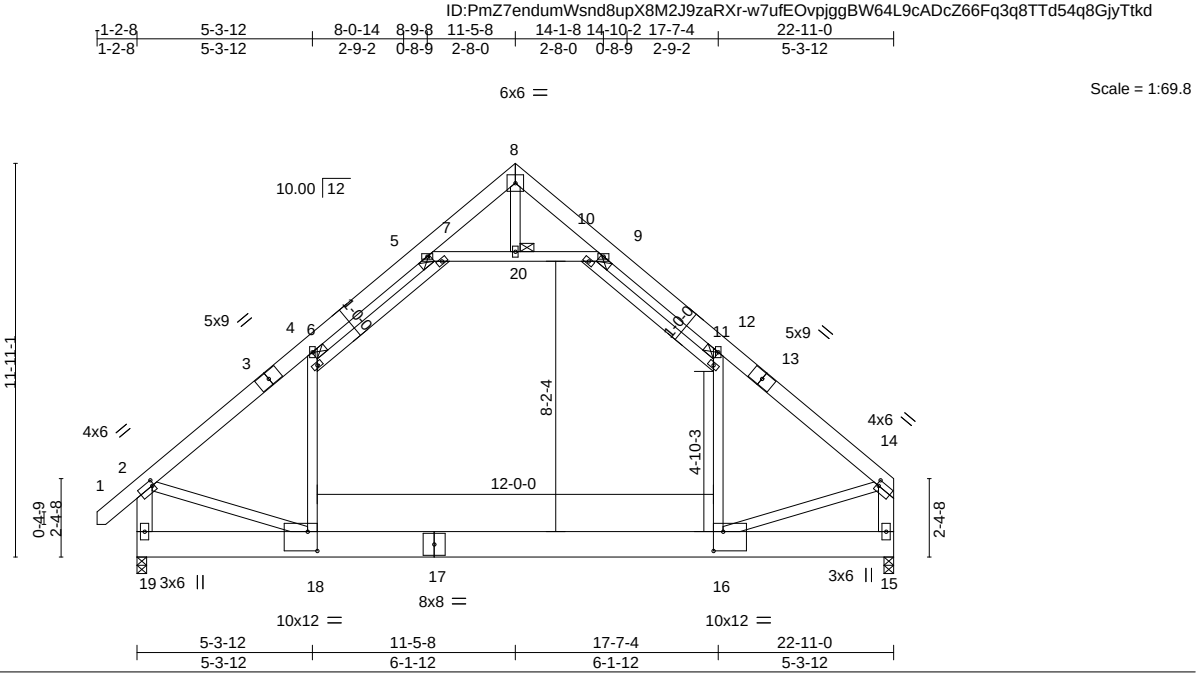

Plate Offsets (X,Y)-- [2:0-0-12,0-2-0], [14:0-0-12,0-2-0], [16:0-3-8,0-7-0], [18:0-3-8,0-7-0]

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	0.82	Vert(LL)	-0.28	16-18	>969	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.43	16-18	>629	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.01	15	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Attic	-0.16	16-18	897	360	Weight: 230 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP DSS *Except*
6-7,10-11: 2x4 SP No.2 or 2x4 SPF No.2, 1-3,13-14: 2x6 SP No.2
BOT CHORD 2x10 SP No.2
WEBS 2x4 SP No.2 or 2x4 SPF No.2 *Except*
8-20,2-18,14-16: 2x4 SP No.3, 2-19,14-15: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
JOINTS 1 Brace at Jt(s): 20, 6, 7, 10, 11

REACTIONS. (size) 19=0-3-8, 15=0-3-8
Max Horz 19=317(LC 9)
Max Grav 19=1426(LC 20), 15=1351(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1517/5, 4-5=-1074/163, 9-12=-1079/162, 12-14=-1500/0, 2-19=-1514/56, 14-15=-1454/2
BOT CHORD 18-19=-301/448, 16-18=0/1030
WEBS 11-16=-17/648, 11-12=-33/589, 6-18=0/680, 4-6=-8/622, 5-7=-1304/194, 7-20=-1190/188, 10-20=-1190/188, 9-10=-1308/193, 2-18=0/913, 14-16=0/962

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone 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=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
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) Ceiling dead load (5.0 psf) on member(s). 4-5, 9-12, 5-7, 7-20, 10-20, 9-10; Wall dead load (5.0psf) on member(s).11-16, 11-12, 6-18, 4-6
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 16-18
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Attic room checked for L/360 deflection.

October 14,2021

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

Job	Truss	Truss Type	Qty	Ply	RG14-A01 Special Bonus
RG14-A01 Special Bonus	B1A	ATTIC	1	1	I48329903

Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Wed Oct 13 08:36:24 2021 Page 1

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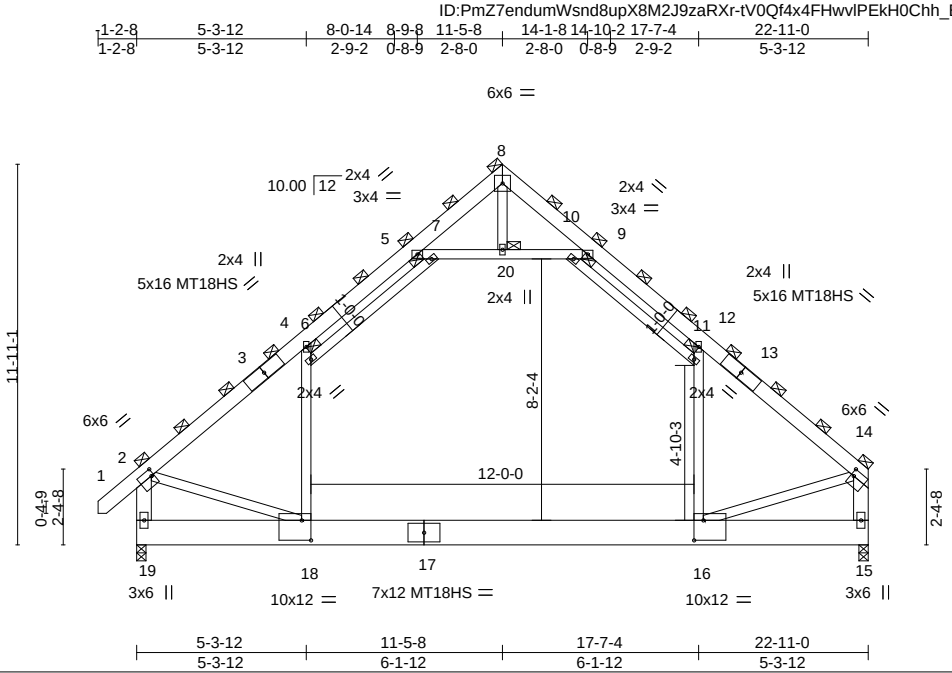

Plate Offsets (X,Y)-- [2:0-1-0,0-2-8], [14:0-1-0,0-2-8], [16:0-3-8,0-7-8], [18:0-3-8,0-7-8]

LOADING (psf)		SPACING- 3-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.36	16-18	>755	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.55	16-18	>486	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.54	Horz(CT)	0.01	15	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Attic	-0.20	16-18	745	360	Weight: 230 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP DSS *Except*
6-7,10-11: 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x10 SP DSS
WEBS 2x4 SP No.2 or 2x4 SPF No.2 *Except*
8-20,2-18,14-16: 2x4 SP No.3, 2-19,14-15: 2x6 SP No.2

BRACING-

TOP CHORD 2-0-0 oc purlins (4-5-2 max.), except end verticals
(Switched from sheeted: Spacing > 2-0-0).
BOT CHORD Rigid ceiling directly applied or 7-8-13 oc bracing.
JOINTS 1 Brace at Jt(s): 8, 20, 2, 14, 6, 7, 10, 11

REACTIONS. (size) 19=0-3-8, 15=0-3-8
Max Horz 19=476(LC 9)
Max Grav 19=2140(LC 20), 15=2026(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2247/12, 4-5=-1570/241, 5-8=-149/294, 8-9=-151/291, 9-12=-1575/240,
12-14=-2225/9, 2-19=-2239/84, 14-15=-2150/3
BOT CHORD 18-19=-438/669, 16-18=0/1522
WEBS 11-16=-44/953, 11-12=-54/873, 6-18=-14/993, 4-6=-21/913, 5-7=-1886/285,
7-20=-1734/278, 10-20=-1734/278, 9-10=-1889/284, 2-18=0/1331, 14-16=0/1395

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone 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=1.60
3) All plates are MT20 plates unless otherwise indicated.
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) Ceiling dead load (5.0 psf) on member(s). 4-5, 9-12, 5-7, 7-20, 10-20, 9-10; Wall dead load (5.0psf) on member(s).11-16, 11-12, 6-18, 4-6
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 16-18
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Attic room checked for L/360 deflection.

October 14,2021

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

Job	Truss	Truss Type	Qty	Ply	RG14-A01 Special Bonus
RG14-A01 Special Bonus	BE	GABLE	1	1	I48329904
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Wed Oct 13 08:36:25 2021 Page 1
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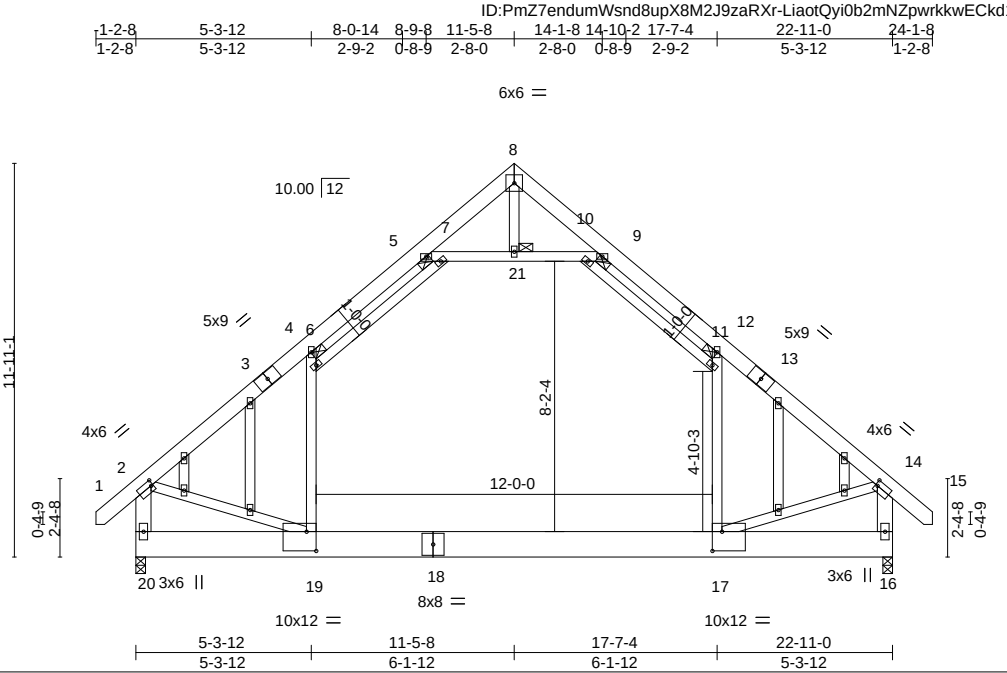

Plate Offsets (X,Y)-- [2:0-0-12,0-2-0], [14:0-0-12,0-2-0], [17:0-3-8,0-7-0], [19:0-3-8,0-7-0]

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)	-0.28	17-19	>976	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.42	17-19	>635	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.01	16	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Attic	-0.16	17-19	901	360	Weight: 246 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP DSS *Except*
6-7,10-11: 2x4 SP No.2 or 2x4 SPF No.2, 1-3,13-15: 2x6 SP No.2
BOT CHORD 2x10 SP No.2
WEBS 2x4 SP No.2 or 2x4 SPF No.2 *Except*
8-21,2-19,14-17: 2x4 SP No.3, 2-20,14-16: 2x6 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
JOINTS 1 Brace at Jt(s): 21, 6, 7, 10, 11

REACTIONS. (size) 20=0-3-8, 16=0-3-8
Max Horz 20=-326(LC 10)
Max Grav 20=1424(LC 20), 16=1424(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1512/7, 4-5=-1072/163, 9-12=-1071/163, 12-14=-1512/7, 2-20=-1508/57, 14-16=-1509/58
BOT CHORD 19-20=-291/461, 17-19=0/1040
WEBS 11-17=0/675, 11-12=-11/618, 6-19=0/675, 4-6=-11/618, 5-7=-1295/195, 7-21=-1180/190, 10-21=-1180/190, 9-10=-1295/195, 2-19=0/911, 14-17=0/914

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone 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=1.60
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 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) Ceiling dead load (5.0 psf) on member(s). 4-5, 9-12, 5-7, 7-21, 10-21, 9-10; Wall dead load (5.0psf) on member(s).11-17, 11-12, 6-19, 4-6
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 17-19
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.

October 14,2021

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	RG14-A01 Special Bonus
RG14-A01 Special Bonus	PB2	Piggyback	26	1	I48329905

Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.520 s Aug 27 2021 MiTek Industries, Inc. Wed Oct 13 08:36:26 2021 Page 1
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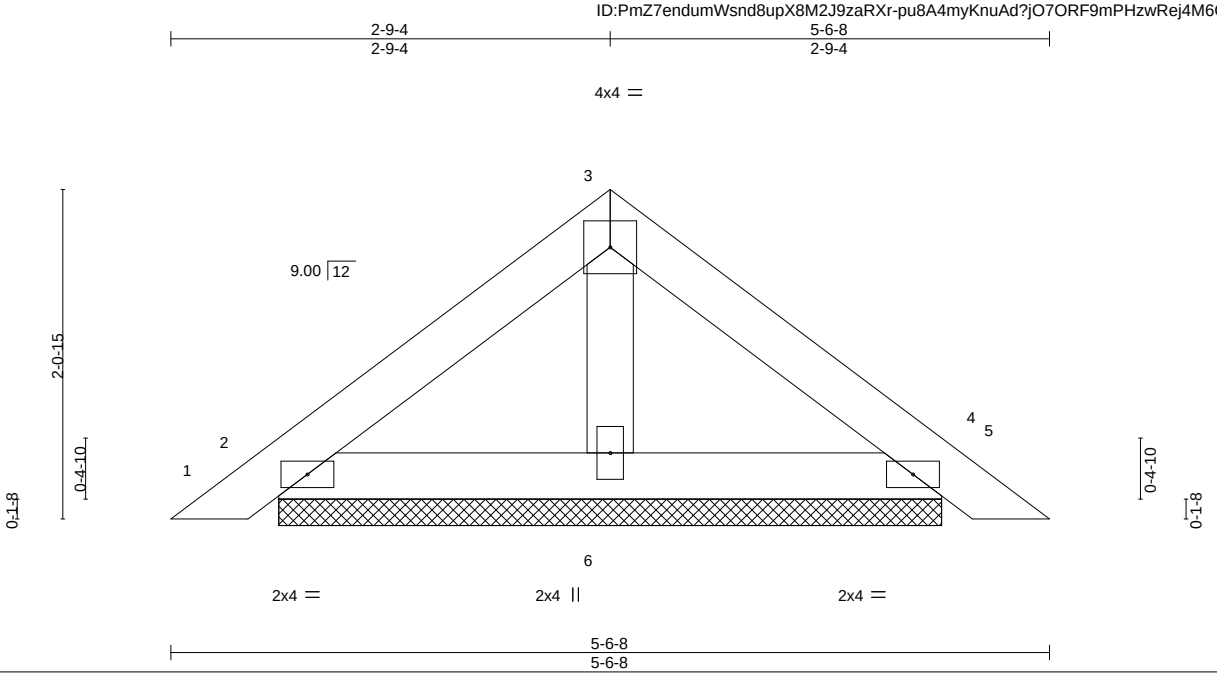

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	5	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	5	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-6-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=4-2-3, 4=4-2-3, 6=4-2-3
Max Horz 2=-47(LC 10)
Max Uplift 2=-31(LC 12), 4=-37(LC 13)
Max Grav 2=122(LC 1), 4=122(LC 1), 6=143(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone 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=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

October 14,2021

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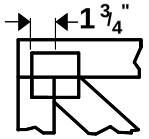
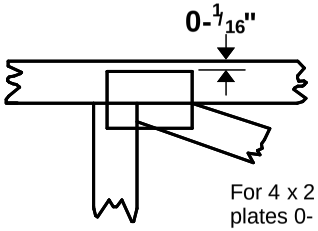
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

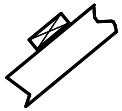
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

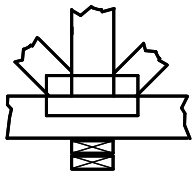
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

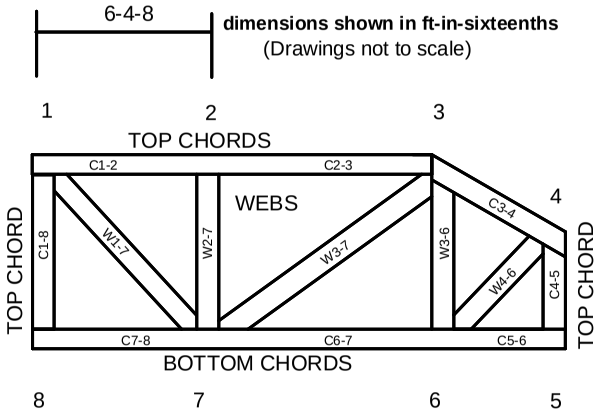


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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