Mark Morris, P.E.

#126, 1317-M, Summerville, SC 29483
843 209-5784, Fax (866)-213-4614

The truss drawing(s) listed below have been prepared by **Atlantic Building Components** under my direct supervision based on the parameters provided by the truss designers.

AST #: 28556
JOB: 21-5986-R01
JOB NAME: 49786-0222 WOODGROVE
Wind Code: 37
Wind Speed: Vult= 115mph
Exposure Category: B
Mean Roof Height (feet): 24
These truss designs comply with IRC 2015 as well as IRC 2018.
16 Truss Design(s)

Trusses:
M01, R01, R01B, R02, R02B, R03, R04, R05, R05B, R06, R07, VT01, VT02, VT03, VT04, VT05

9/20/2021
Mark Morris

Warning !—Verify design parameters and read notes before use.

This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 Guide to

Job	Truss	Truss Type	Qty	Ply	49786-0222 WOODGROVE | FUQUAY VARINA, NC
21-5986-R01	M01	Monopitch	10	1	Job Reference (optional) **# 28556**

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Sep 22 14:44:03 2021 Page 1
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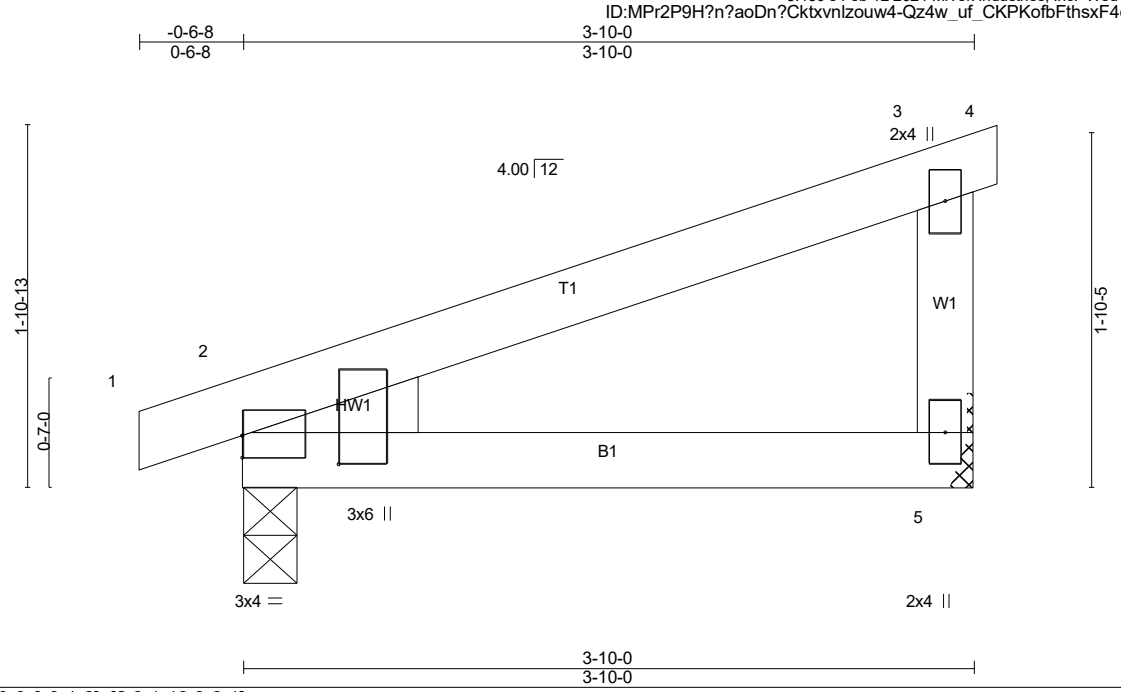


Plate Offsets (X,Y)-- [2:0-0-0,0-1-6], [2:0-1-13,0-6-1]

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	0.31	Vert(LL)	-0.01	2-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.02	2-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							Weight: 16 lb	FT = 20%
BCDL	10.0											

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

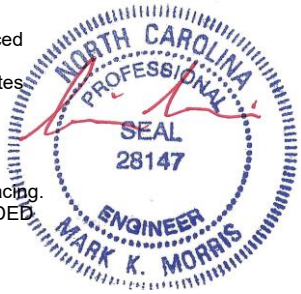
BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 5=155/Mechanical, 2=186/0-3-8 (min. 0-1-8)
Max Horz 2=37(LC 14)
Max Uplift 5=-20(LC 14), 2=-17(LC 10)
Max Grav 5=206(LC 21), 2=252(LC 21)

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

NOTES- (10-13)
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=9ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



LOAD CASE(S) Standard

9/20/2021

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Job	Truss	Truss Type	Qty	Ply	49786-0222 WOODGROVE | FUQUAY VARINA, NC
21-5986-R01	R01	GABLE	1	1	# 28556
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Sep 22 14:44:06 2021 Page 1
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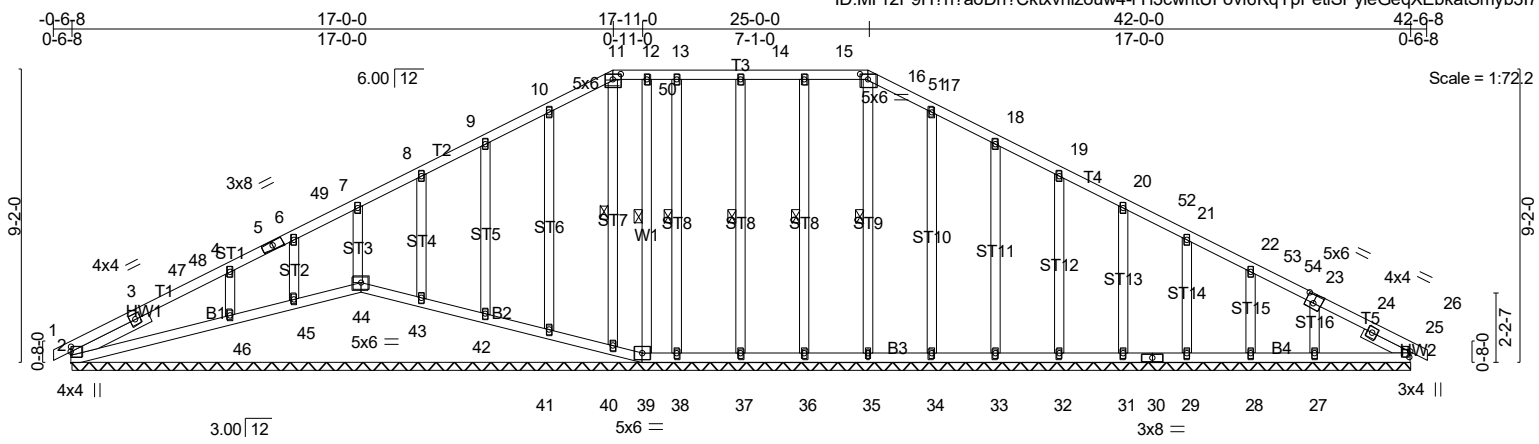

Plate Offsets (X,Y)-- [2:0-1-13,0-0-2], [11:0-3-0,0-2-0], [16:0-3-0,0-2-0], [23:0-3-0,0-3-0], [25:0-2-1,0-0-5]

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	0.29	Vert(LL)	0.00	25	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	0.00	26	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	25	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-SH							Weight: 298 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.3
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 - 2-9-3, Right 2x4 SP No.3 - 1-7-7

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.
WEBS	1 Row at midpt 14-37, 13-38, 11-40, 15-36, 16-35, 12-39

REACTIONS. All bearings 42-0-0.
(lb) - Max Horz 2=107(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 44, 39, 37, 38, 41, 42, 43, 45, 46, 36, 34, 33, 32, 31, 29, 28, 27
Max Grav All reactions 250 lb or less at joint(s) 2, 39, 38, 40, 42, 43, 45, 35, 28, 25, 27 except 44=290(LC 39), 37=303(LC 44), 41=257(LC 39), 46=450(LC 39), 36=300(LC 44), 34=302(LC 49), 33=291(LC 45), 32=291(LC 45), 31=297(LC 45), 29=253(LC 45)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-46=-341/168

NOTES- (16-19)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-6-8 to 3-7-14, Exterior(2N) 3-7-14 to 12-9-10, Corner(3R) 12-9-10 to 29-0-0, Exterior(2N) 29-0-0 to 38-4-2, Corner(3E) 38-4-2 to 42-6-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 20.0 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 requires continuous bottom chord bearing.
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 44, 39, 37, 38, 41, 42, 43, 45, 46, 36, 34, 33, 32, 31, 29, 28, 27.
14) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 44, 40, 41, 42, 43, 45, 46.
15) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

9/20/2021

Continued from page 1

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16) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
17) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
18) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
19) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

9/20/2021

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Job	Truss	Truss Type	Qty	Ply	49786-0222 WOODGROVE | FUQUAY VARINA, NC
21-5986-R01	R01B	Hip	1	1	# 28556
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Sep 22 14:44:09 2021 Page 1
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-0-6-8	4-8-6	9-1-4	13-6-2	17-11-0	19-0-0	23-0-0	27-6-0	34-7-4	42-0-0	42-6-8
0-6-8	4-8-6	4-4-14	4-4-14	4-4-14	1-1-0	4-0-0	4-6-0	7-1-4	7-4-12	0-6-8

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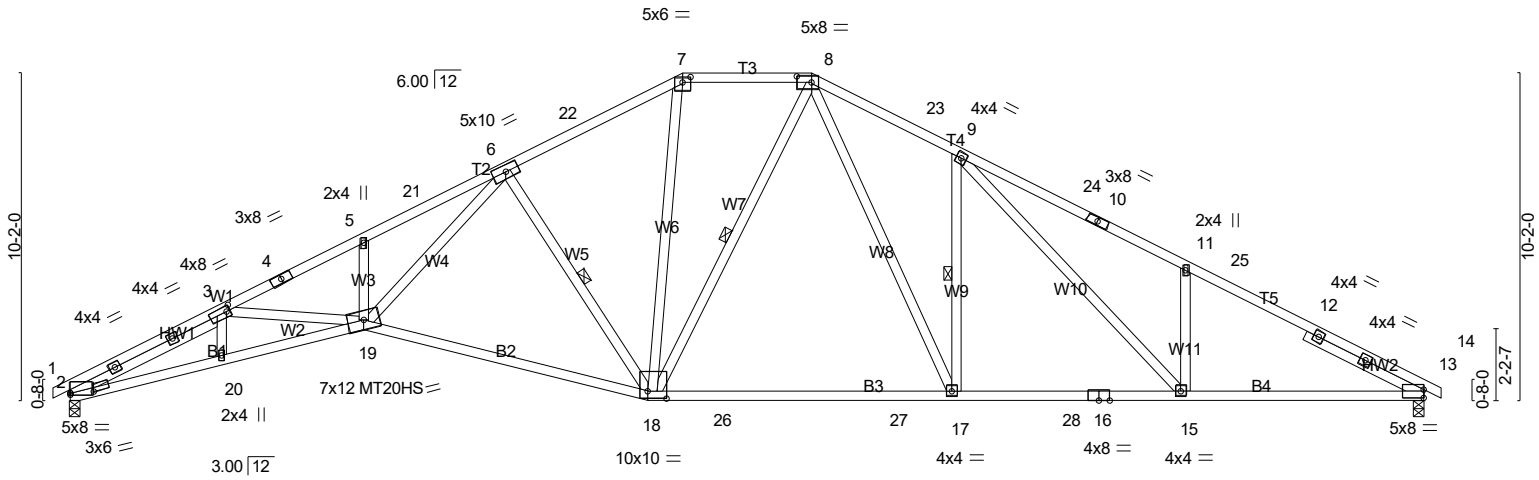

4-8-6	9-1-4	17-11-0	27-6-0	34-7-4	42-0-0
4-8-6	4-4-14	8-9-12	9-7-0	7-1-4	7-4-12

Plate Offsets (X,Y)-- [2:0-0-0,0-0-10], [2:0-8-10,0-1-8], [3:0-1-8,0-2-0], [7:0-3-0,0-2-0], [8:0-5-8,0-2-4], [13:0-0-0,0-3-1], [18:0-7-0,0-2-12]

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	0.90	Vert(LL)	-0.71	17-18	>711	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-1.10	17-18	>459	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.43	13	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 259 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.1 *Except*
T3: 2x4 SP No.2, T4,T5: 2x4 SP SS
BOT CHORD 2x4 SP No.1 *Except*
B1,B3: 2x4 SP SS
WEBS 2x4 SP No.3 *Except*
W4: 2x4 SP No.2
SLIDER Left 2x4 SP No.3 - 5-1-11, Right 2x4 SP No.3 - 4-0-14

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-8-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-18, 9-17, 8-18

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=1714/0-3-8 (min. 0-2-7), 13=1710/0-3-8 (min. 0-2-9)
Max Horz 2=121(LC 14)
Max Uplift2=-95(LC 14), 13=-94(LC 15)
Max Grav 2=2175(LC 39), 13=2176(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6570/426, 3-4=-6676/402, 4-5=-6620/413, 5-21=-6699/463, 6-21=-6519/475, 6-22=-2866/285, 7-22=-2727/299, 7-8=-2340/286, 8-23=-3294/368, 9-23=-3351/349, 9-24=-3806/391, 10-24=-3817/375, 10-11=-3965/371, 11-25=-3785/283, 12-25=-3874/268, 12-13=-3981/263
BOT CHORD 2-20=-366/5775, 19-20=-365/5790, 18-19=-144/3556, 18-26=-29/2318, 26-27=-29/2318, 17-27=-29/2318, 17-28=-81/2883, 16-28=-81/2883, 15-16=-81/2883, 13-15=-180/3414
WEBS 3-19=0/371, 5-19=-393/102, 6-19=-215/3720, 6-18=-1894/208, 7-18=-50/925, 8-17=-153/1444, 9-17=-1018/232, 9-15=-179/798, 11-15=-479/192, 8-18=-202/271

NOTES- (13-16)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-6-8 to 3-7-14, Exterior(2E) 3-7-14 to 38-4-2, Corner(3) 38-4-2 to 42-6-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13.

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Continued on page 2

Continued from page 1

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NOTES- (13-16)

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16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

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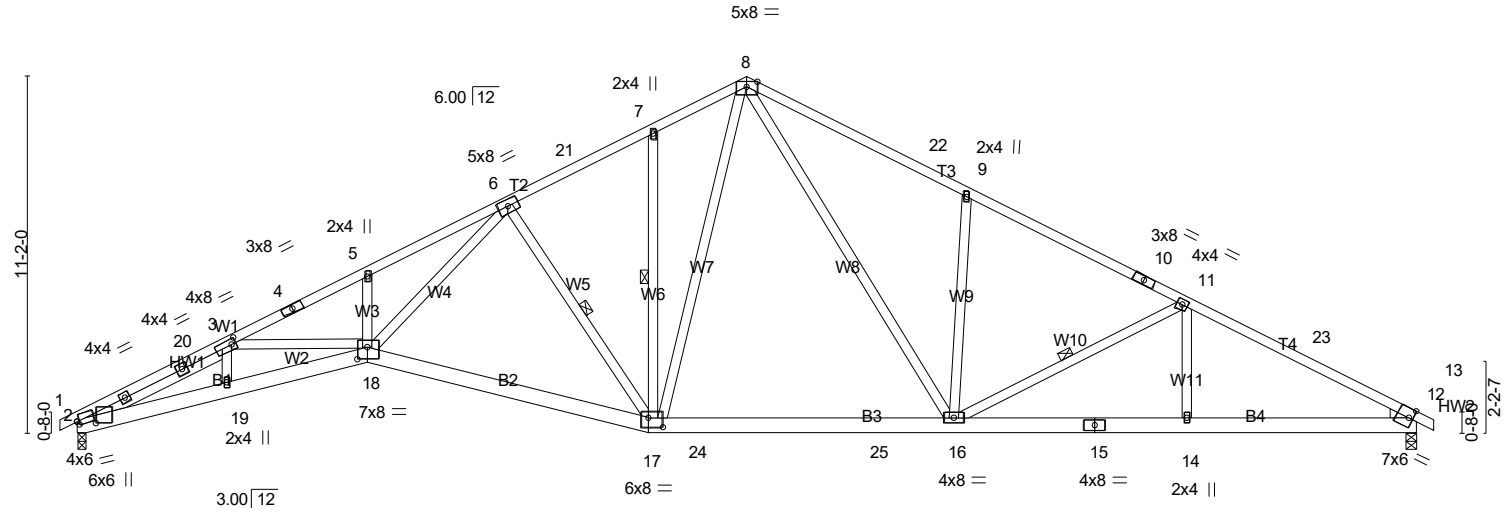
Job	Truss	Truss Type	Qty	Ply	49786-0222 WOODGROVE | FUQUAY VARINA, NC
21-5986-R01	R02	Roof Special	7	1	Job Reference (optional) **# 28556**

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Sep 22 14:44:10 2021 Page 1
ID:MPr2P9H?n?aoDn?CktxvnlzouW4-jJ?ZSHkNYTIL8kdcnfUa1YcyPMrraYaqWMY5bYyb3I3

-0-6-8	4-8-6	9-1-4	13-6-2	17-11-0	21-0-0	27-10-13	34-9-11	42-0-0	42-6-8
0-6-8	4-8-6	4-4-14	4-4-14	4-4-14	3-1-0	6-10-13	6-10-13	7-2-5	0-6-8

Scale = 1:72.3



4-8-6	9-1-4	17-11-0	27-6-0	34-9-11	42-0-0
4-8-6	4-4-14	8-9-12	9-7-0	7-3-11	7-2-5

Plate Offsets (X,Y)-- [2:0-0-11,0-1-5], [2:0-0-9,0-7-1], [3:0-1-12,0-2-0], [12:0-1-7,Edge], [17:0-5-8,0-3-8], [18:0-3-12,0-4-8]

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	0.83	Vert(LL)	-0.37	16-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.67	16-17	>749	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.30	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-SH								
BCDL	10.0										Weight: 287 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
T3: 2x4 SP SS
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
W4: 2x4 SP No.2
WEDGE
Right: 2x4 SP No.3
SLIDER Left 2x4 SP No.3 - 4-9-15

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 6-17, 7-17, 11-16

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=1710/0-3-8 (min. 0-1-15), 12=1710/0-3-8 (min. 0-2-0)
Max Horz 2=-131(LC 19)
Max Uplift2=-99(LC 14), 12=-99(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-20=-5080/726, 3-20=-4988/737, 3-4=-5068/681, 4-5=-5009/691, 5-6=-5058/765, 6-21=-2146/419, 7-21=-2088/430, 7-8=-2115/487, 8-22=-2397/540, 9-22=-2482/512, 9-10=-2357/428, 10-11=-2495/401, 11-23=-2958/470, 12-23=-3059/452
BOT CHORD 2-19=-594/4479, 18-19=-593/4499, 17-18=-246/2643, 17-24=-47/1617, 24-25=-47/1617, 16-25=-47/1617, 15-16=-316/2594, 14-15=-316/2594, 12-14=-316/2594
WEBS 6-18=-354/2859, 6-17=-1307/254, 7-17=-340/95, 8-17=-172/1060, 8-16=-214/1094, 9-16=-520/204, 11-16=-529/165, 11-14=0/291

NOTES- (11-14)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-6-8 to 3-7-14, Exterior(2N) 3-7-14 to 16-9-10, Corner(3R) 16-9-10 to 25-2-6, Exterior(2N) 25-2-6 to 38-4-2, Corner(3E) 38-4-2 to 42-6-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

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Continued on page 2

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11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

9/20/2021

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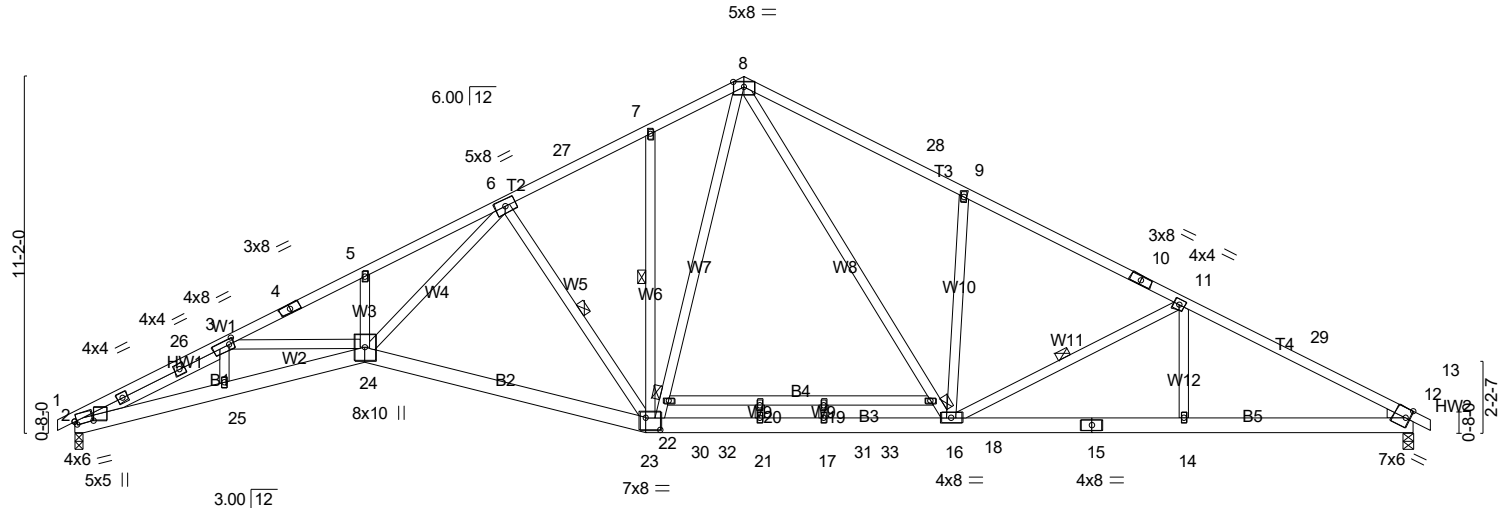
Job	Truss	Truss Type	Qty	Ply	49786-0222 WOODGROVE | FUQUAY VARINA, NC
21-5986-R01	R02B	Roof Special	1	1	Job Reference (optional) **# 28556**

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Sep 22 14:44:12 2021 Page 1
ID:MPr2P9H?n?aoDn?Cktxvnlzouw4-gh6Ktzmd45Y3N1n_v4W26zilJAWX2Oe6zg1BgQyb3I1

-0-6-8	4-8-6	9-1-4	13-6-2	17-11-0	21-0-0	27-10-13	34-9-11	42-0-0	42-6-8
0-6-8	4-8-6	4-4-14	4-4-14	4-4-14	3-1-0	6-10-13	6-10-13	7-2-5	0-6-8

Scale = 1:72.3



4-8-6	9-1-4	17-11-0	21-6-0	23-6-0	27-6-0	34-9-11	42-0-0
4-8-6	4-4-14	8-9-12	3-7-0	2-0-0	4-0-0	7-3-11	7-2-5

Plate Offsets (X,Y)-- [2:0-0-11,0-1-5], [2:0-0-5,0-7-1], [3:0-1-12,0-2-0], [12:0-1-7,Edge], [23:0-5-8,0-4-8]

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	0.87	Vert(LL)	-0.47	19-20	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.85	19-20	>587	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.31	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-SH							Weight: 301 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
T3: 2x4 SP SS
BOT CHORD 2x6 SP No.2 *Except*
B1: 2x6 SP No.1, B4: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W4,W7,W8: 2x4 SP No.2
WEDGE
Right: 2x4 SP No.3
SLIDER Left 2x4 SP No.3 - 4-9-15

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-0-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 6-23, 7-23, 11-16

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=1788/0-3-8 (min. 0-2-0), 12=1802/0-3-8 (min. 0-2-3)
Max Horz 2=-131(LC 19)
Max Uplift2=-60(LC 14), 12=-53(LC 15)
Max Grav 2=1790(LC 3), 12=1828(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-26=-5434/596, 3-26=-5358/607, 3-4=-5534/537, 4-5=-5484/547, 5-6=-5512/621, 6-27=-2536/332, 7-27=-2472/343, 7-8=-2483/399, 8-28=-2847/438, 9-28=-2931/410, 9-10=-2870/326, 10-11=-2946/299, 11-29=-3247/378, 12-29=-3331/360
BOT CHORD 2-25=-479/4801, 24-25=-478/4820, 23-24=-155/3006, 23-30=0/1737, 21-30=0/1737, 17-21=0/1737, 17-31=0/1737, 16-31=0/1737, 15-16=-235/2848, 14-15=-235/2848, 12-14=-235/2848
WEBS 3-24=0/299, 6-24=-295/2977, 6-23=-1362/234, 7-23=-308/93, 22-23=-158/1158, 8-22=-126/1219, 8-18=-163/1291, 16-18=-204/1307, 9-16=-517/204, 11-16=-501/178, 11-14=0/254

NOTES- (12-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-6-8 to 3-7-9, Exterior(2N) 3-7-9 to 16-9-15, Corner(3R) 16-9-15 to 25-2-1, Exterior(2N) 25-2-1 to 38-4-7, Corner(3E) 38-4-7 to 42-6-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 20.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

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Continued on page 2

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NOTES- (12-15)

9) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
14) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
15) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

9/20/2021

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Job	Truss	Truss Type	Qty	Ply	49786-0222 WOODGROVE | FUQUAY VARINA, NC
21-5986-R01	R03	Common	4	1	Job Reference (optional) **# 28556**

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Sep 22 14:44:13 2021 Page 1
ID:MPr2P9H?n?aoDn?Cktxvnlzouw4-8ugi4JnGrOgw?BMATn1HfBERQau2nwPGCKmlCsyb3I0

-0-6-8	7-2-5	14-1-3	21-0-0	27-10-13	34-9-11	41-8-8
0-6-8	7-2-5	6-10-13	6-10-13	6-10-13	6-10-13	6-10-13

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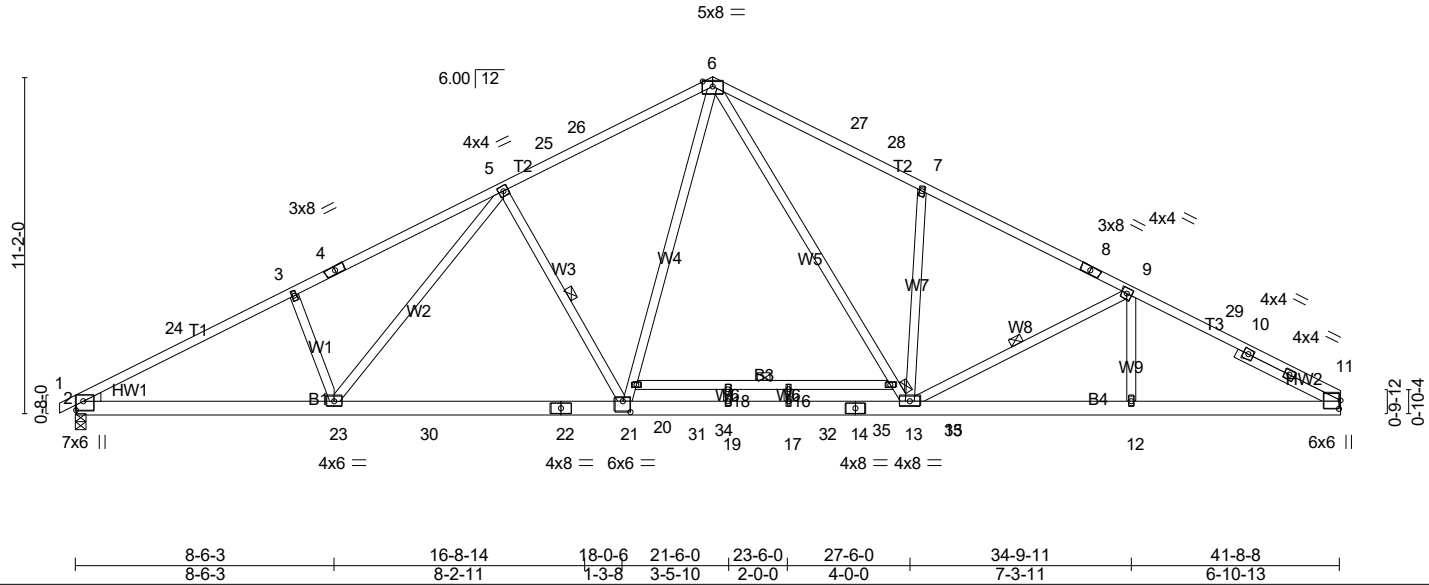

8-6-3	16-8-14	18-0-6	21-6-0	23-6-0	27-6-0	34-9-11	41-8-8
8-6-3	8-2-11	1-3-8	3-5-10	2-0-0	4-0-0	7-3-11	6-10-13

Plate Offsets (X,Y)-- [2:Edge,0-2-13], [11:0-3-5,0-0-9], [21:0-3-0,0-4-4]

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)	-0.31	17-19	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.54	17-19	>930	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.11	11	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 280 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP SS *Except*
T1,T3: 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
B3: 2x4 SP No.3, B2: 2x6 SP No.1
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3
SLIDER Right 2x4 SP No.3 - 3-9-8

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
6-0-0 oc bracing: 15-20
WEBS 1 Row at midpt 5-21, 9-13

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=1784/0-3-8 (min. 0-2-4), 11=1756/Mechanical
Max Horz 2=-131(LC 19)
Max Uplift 2=-60(LC 14), 11=-42(LC 15)
Max Grav 2=1925(LC 3), 11=1861(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-24=-3552/95, 3-24=-3468/112, 3-4=-3408/130, 4-5=-3332/158, 5-25=-2756/132, 25-26=-2695/141, 6-26=-2672/160, 6-27=-2962/195, 27-28=-2986/176, 7-28=-3048/167, 7-8=-2987/108, 8-9=-3035/81, 9-29=-3245/101, 10-29=-3264/86, 10-11=-3349/84
BOT CHORD 2-23=-138/3041, 23-30=-33/2660, 22-30=-33/2660, 21-22=-33/2660, 21-31=0/2076, 19-31=0/2076, 17-19=0/2076, 17-32=0/2076, 14-32=0/2076, 14-33=0/2076, 13-33=0/2076, 12-13=-18/2865, 11-12=-18/2865
WEBS 20-21=-53/1250, 6-20=-34/1325, 6-15=-128/1219, 13-15=-148/1154, 3-23=-273/155, 5-23=-86/578, 5-21=-717/207, 7-13=-552/184, 9-13=-412/135

NOTES- (12-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-6-8 to 3-7-9, Interior(1) 3-7-9 to 16-9-15, Exterior(2R) 16-9-15 to 25-2-1, Interior(1) 25-2-1 to 37-6-7, Exterior(2E) 37-6-7 to 41-8-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 20.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 11.

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

9/20/2021

Continued on page 2

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NOTES- (12-15)

11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
14) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
15) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

9/20/2021

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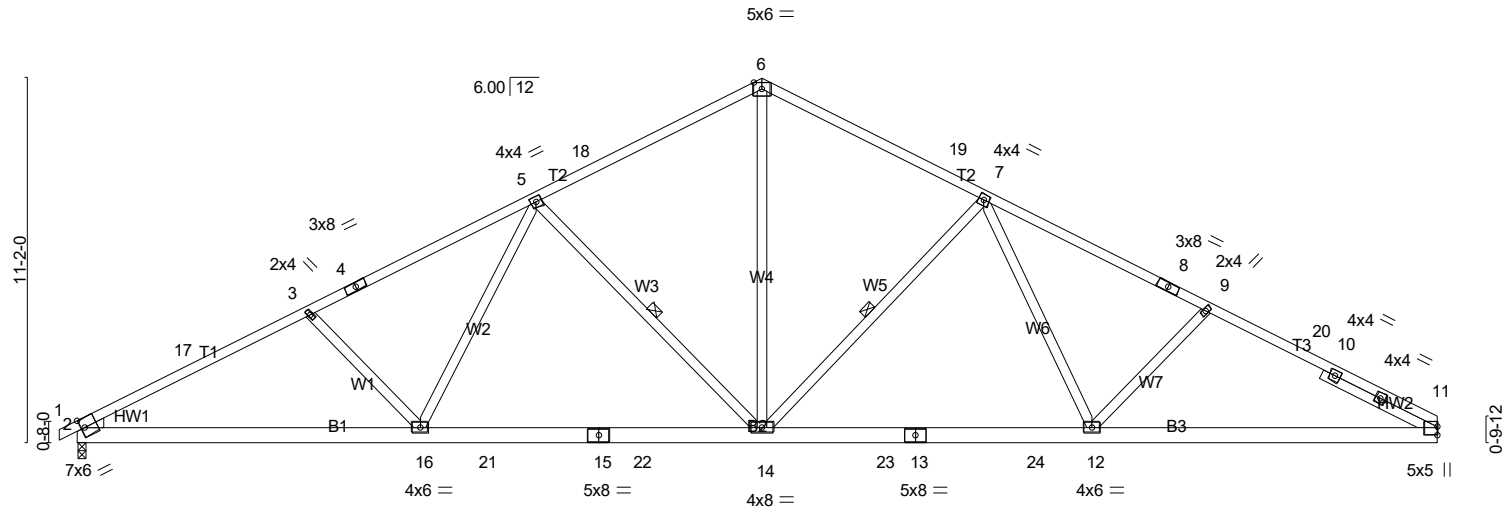
Job	Truss	Truss Type	Qty	Ply	49786-0222 WOODGROVE | FUQUAY VARINA, NC
21-5986-R01	R04	Common	4	1	# 28556
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Sep 22 14:44:14 2021 Page 1
ID:MPr2P9H?n?aoDn?Cktxvnlzouw4-c4E4IfnuciondLxN0VZWCOndD_ErWNFPR_WlkJyb3I?

-0-6-8 7-1-14 14-0-15 21-0-0 27-9-11 34-7-5 41-8-8
0-6-8 7-1-14 6-11-1 6-11-1 6-9-11 6-9-11 7-1-3

Scale = 1:70.6



10-6-6 21-0-0 31-1-7 41-8-8
10-6-6 10-5-10 10-1-7 10-7-1

Plate Offsets (X,Y)-- [2:0-1-7,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	0.85	Vert(LL)	-0.25	14-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.43	14-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.10	11	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 257 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.1 *Except* T1,T3: 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3
SLIDER Right 2x4 SP No.3 - 3-10-13

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-14, 7-14

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=1704/0-3-8 (min. 0-2-0), 11=1662/Mechanical
Max Horz 2=-131(LC 19)
Max Uplift2=-99(LC 14), 11=-89(LC 15)
Max Grav 2=1704(LC 1), 11=1664(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-17=-3069/466, 3-17=-2985/484, 3-4=-2850/441, 4-5=-2708/470, 5-18=-2032/377, 6-18=-1947/405, 6-19=-1947/406, 7-19=-2032/378, 7-8=-2697/467, 8-9=-2763/439, 9-20=-2878/486, 10-20=-2895/472, 10-11=-2982/466
BOT CHORD 2-16=-321/2619, 16-21=-182/2230, 15-21=-182/2230, 15-22=-182/2230, 14-22=-182/2230, 14-23=-180/2209, 13-23=-180/2209, 13-24=-180/2209, 12-24=-180/2209, 11-12=-318/2540
WEBS 3-16=-296/180, 5-16=-40/585, 5-14=-812/222, 6-14=-219/1435, 7-14=-801/222, 7-12=-39/513, 9-12=-285/180

NOTES- (11-14)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-6-8 to 3-7-9, Exterior(2N) 3-7-9 to 16-9-15, Corner(3R) 16-9-15 to 25-2-1, Exterior(2N) 25-2-1 to 37-6-7, Corner(3E) 37-6-7 to 41-8-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 20.0 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 11.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

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Continued on page 2

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11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

9/20/2021

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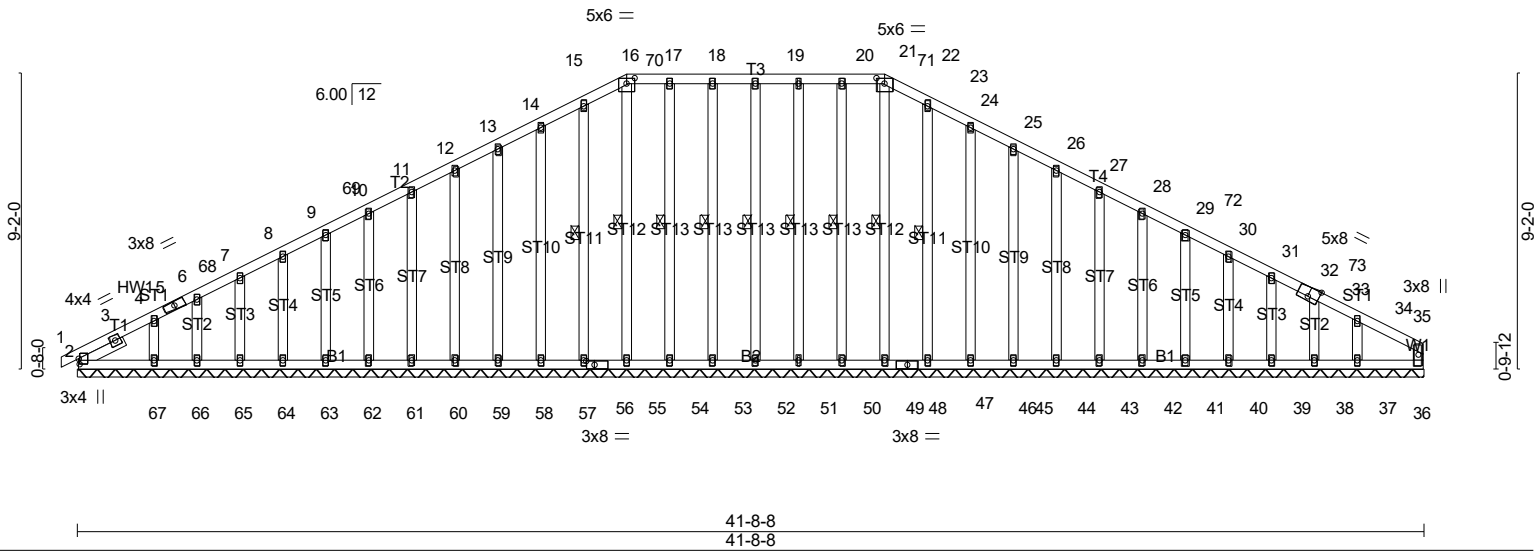
Job	Truss	Truss Type	Qty	Ply	49786-0222 WOODGROVE | FUQUAY VARINA, NC
21-5986-R01	R05	GABLE	1	1	# 28556
					Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Sep 22 14:44:19 2021 Page 1
ID:MPr2P9H?n?aoDn?CktxvnlzouW4-y21zLMr0REQ3j6pKp28hvRUg8_7CBlR8aGD3OWyb3Hw

-0-6-8 17-0-0 25-0-0 41-8-8
0-6-8 17-0-0 8-0-0 16-8-8

Scale = 1:71.5



41-8-8
41-8-8

Plate Offsets (X,Y)-- [2:0-2-1,0-0-5], [16:0-3-0,0-2-0], [22:0-3-0,0-2-0], [32:0-4-0,Edge], [56:0-3-0,0-1-8]

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	0.07	Vert(LL)	-0.00	1	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	0.00	1	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	36	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 375 lb	FT = 20%
BCDL	10.0											

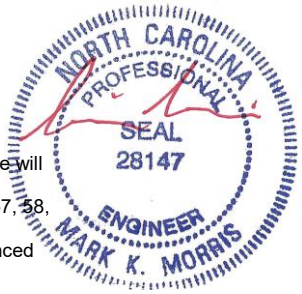
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.3
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 - 1-6-7

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 19-52, 18-53, 17-54, 16-55, 15-57, 20-51, 21-50, 22-49, 23-47

REACTIONS. All bearings 41-8-8.
(lb) - Max Horz 2=116(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 52, 53, 54, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 51, 50, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37
Max Grav All reactions 250 lb or less at joint(s) 36, 2, 52, 53, 54, 55, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 51, 50, 49, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37

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

NOTES- (15-18)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-6-8 to 3-8-0, Exterior(2N) 3-8-0 to 12-9-15, Corner(3R) 12-9-15 to 29-0-0, Exterior(2N) 29-0-0 to 37-4-11, Corner(3E) 37-4-11 to 41-6-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 20.0 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 requires continuous bottom chord bearing.
10) Gable studs spaced at 1-4-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 52, 53, 54, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 51, 50, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37.
14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Continued on page 2

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15) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
16) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
17) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
18) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

9/20/2021

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Job	Truss	Truss Type	Qty	Ply	49786-0222 WOODGROVE | FUQUAY VARINA, NC
21-5986-R01	R05B	Hip	1	1	Job Reference (optional) **# 28556**

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Sep 22 14:44:22 2021 Page 1
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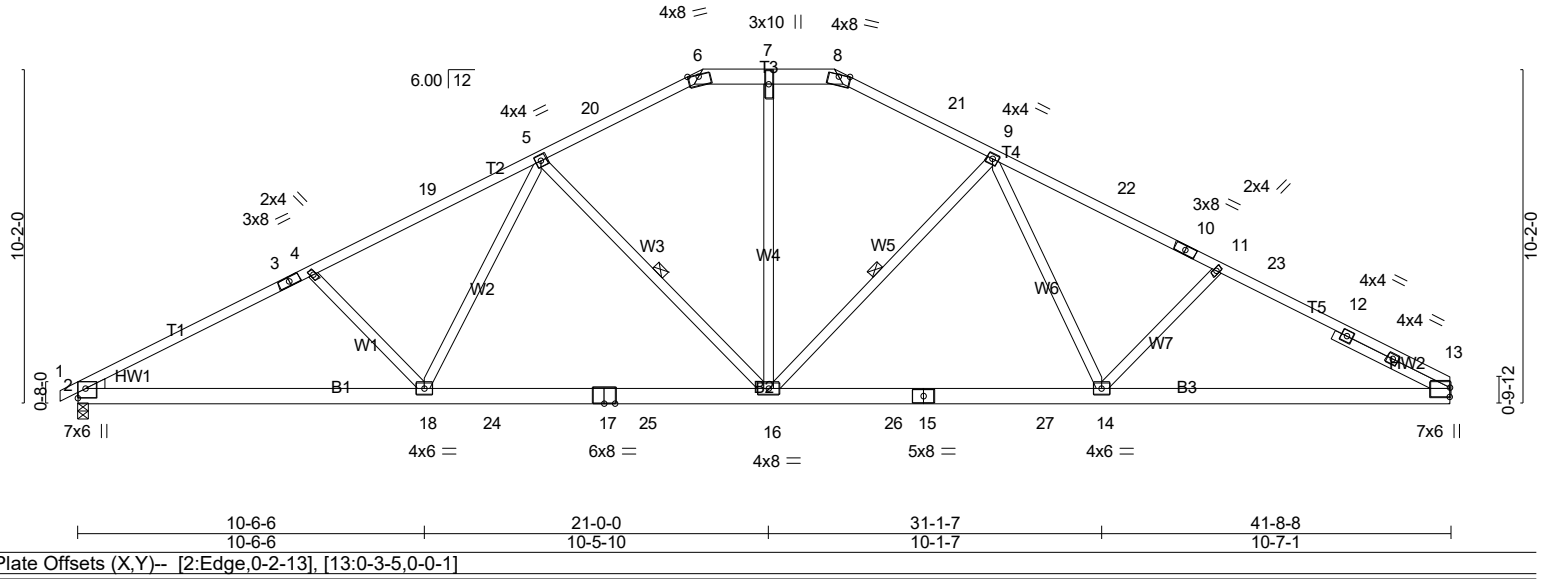
-0-6-8	7-1-14	14-0-15	19-0-0	21-0-0	23-0-0	27-9-11	34-7-5	41-8-8
0-6-8	7-1-14	6-11-1	4-11-1	2-0-0	2-0-0	4-9-11	6-9-11	7-1-3

Scale = 1:70.0



10-6-6	21-0-0	31-1-7	41-8-8
10-6-6	10-5-10	10-1-7	10-7-1

Plate Offsets (X,Y)-- [2:Edge,0-2-13], [13:0-3-5,0-0-1]

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) -0.36 16-18 >999 240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL 1.15	BC 0.90	Vert(CT) -0.55 16-18 >911 180		
TCDL	10.0	Rep Stress Incr YES	WB 0.69	Horz(CT) 0.13 13 n/a n/a		
BCLL	0.0 *	Code IRC2018/TPI2014	Matrix-SH		Weight: 259 lb	FT = 20%
BCDL	10.0					

LUMBER-
TOP CHORD 2x4 SP SS *Except*
T3: 2x6 SP DSS, T1: 2x4 SP No.1
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3
SLIDER Right 2x4 SP No.3 - 3-10-13

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-16, 9-16

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=1704/0-3-8 (min. 0-2-9), 13=1662/Mechanical
Max Horz 2=-120(LC 19)
Max Uplift2=-96(LC 14), 13=-85(LC 15)
Max Grav 2=2159(LC 39), 13=2127(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3949/299, 3-4=-3743/304, 4-19=-3626/280, 5-19=-3450/295, 5-20=-2550/254, 6-20=-2354/274, 6-7=-2175/263, 7-8=-2175/263, 8-21=-2357/274, 9-21=-2547/255, 9-22=-3382/291, 10-22=-3390/276, 10-11=-3539/263, 11-23=-3688/299, 12-23=-3772/295, 12-13=-3875/269
BOT CHORD 2-18=-202/3387, 18-24=-98/2837, 17-24=-98/2837, 17-25=-98/2837, 16-25=-98/2837, 16-26=-94/2811, 15-26=-94/2811, 15-27=-94/2811, 14-27=-94/2811, 13-14=-190/3319
WEBS 4-18=-424/165, 5-18=-19/656, 5-16=-964/171, 9-16=-939/169, 9-14=-18/587, 11-14=-424/160, 7-16=-100/1665

NOTES- (12-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-6-8 to 3-7-9, Exterior(2E) 3-7-9 to 37-6-7, Corner(3) 37-6-7 to 41-8-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 20.0 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

9/20/2021

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	49786-0222 WOODGROVE | FUQUAY VARINA, NC
21-5986-R01	R06	COMMON GIRDER	1	2	Job Reference (optional) **# 28556**

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Sep 22 14:44:24 2021 Page 1
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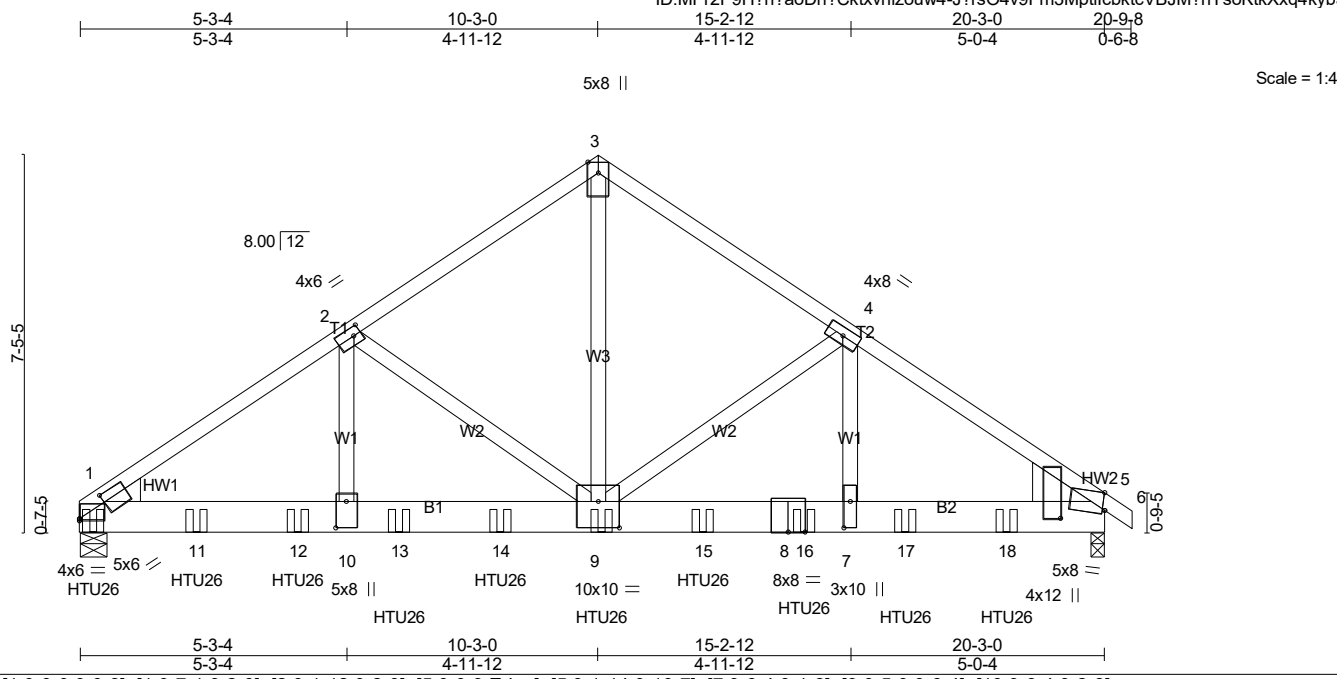


Plate Offsets (X,Y)-- [1:0-0-0,0-0-8], [1:0-7-1,0-2-0], [2:0-1-12,0-2-0], [5:0-0-9,Edge], [5:0-1-14,0-10-7], [7:0-6-4,0-1-8], [9:0-5-0,0-6-4], [10:0-6-4,0-2-8]

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	0.99	Vert(LL)	-0.13	9-10	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.26	9-10	>919	180		
TCDL	10.0	Rep Stress Incr	NO	WB	1.00	Horz(CT)	0.06	5	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 285 lb	FT = 20%
BCDL	10.0											

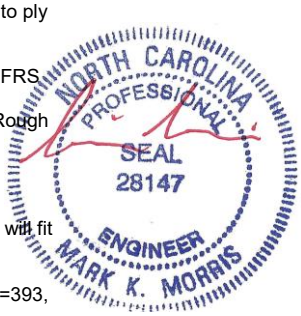
LUMBER-
TOP CHORD 2x4 SP No.1 *Except*
T2: 2x4 SP No.2
BOT CHORD 2x8 SP DSS
WEBS 2x4 SP No.3 *Except*
W3: 2x4 SP No.1
WEDGE
Left: 2x6 SP No.2 , Right: 2x10 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-7-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=10087/0-6-8 (min. 0-5-7), 5=8400/0-3-8 (req. 0-4-5)
Max Horz 1=-123(LC 34)
Max Uplift1=-393(LC 10), 5=-445(LC 11)
Max Grav 1=10731(LC 3), 5=8489(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-12609/513, 2-3=-8424/443, 3-4=-8425/444, 4-5=-11846/609
BOT CHORD 1-11=-436/10151, 11-12=-436/10151, 10-12=-436/10151, 10-13=-436/10151, 13-14=-436/10151, 9-14=-436/10151, 9-15=-436/9449, 8-15=-436/9449, 8-16=-436/9449, 7-16=-436/9449, 7-17=-436/9449, 17-18=-436/9449, 5-18=-436/9449
WEBS 3-9=-416/9012, 4-9=-3198/293, 4-7=-206/4035, 2-9=-3976/201, 2-10=-88/4846

NOTES- (15-18)
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 0-7-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=21ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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 20.0 psf on overhangs non-concurrent with other live loads.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
9) WARNING: Required bearing size at joint(s) 5 greater than input bearing size.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=393, 5=445.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Continued on page 2

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NOTES- (15-18)

12) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss) or equivalent spaced at 2-0-8 oc max. starting at 0-3-4 from the left end to 8-3-12 to connect truss(es) R03 (1 ply 2x6 SP) to back face of bottom chord.
13) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 10-3-12 from the left end to 18-3-12 to connect truss(es) R04 (1 ply 2x6 SP) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.
15) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
16) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
17) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
18) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-6=-60, 1-5=-20
   Concentrated Loads (lb)
   Vert: 1=-1737(B) 9=-1642(B) 11=-1728(B) 12=-1728(B) 13=-1728(B) 14=-1728(B) 15=-1642(B) 16=-1642(B) 17=-1642(B) 18=-1642(B)

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Job	Truss	Truss Type	Qty	Ply	49786-0222 WOODGROVE | FUQUAY VARINA, NC
21-5986-R01	R07	GABLE	1	1	Job Reference (optional) **# 28556**

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Sep 22 14:44:26 2021 Page 1
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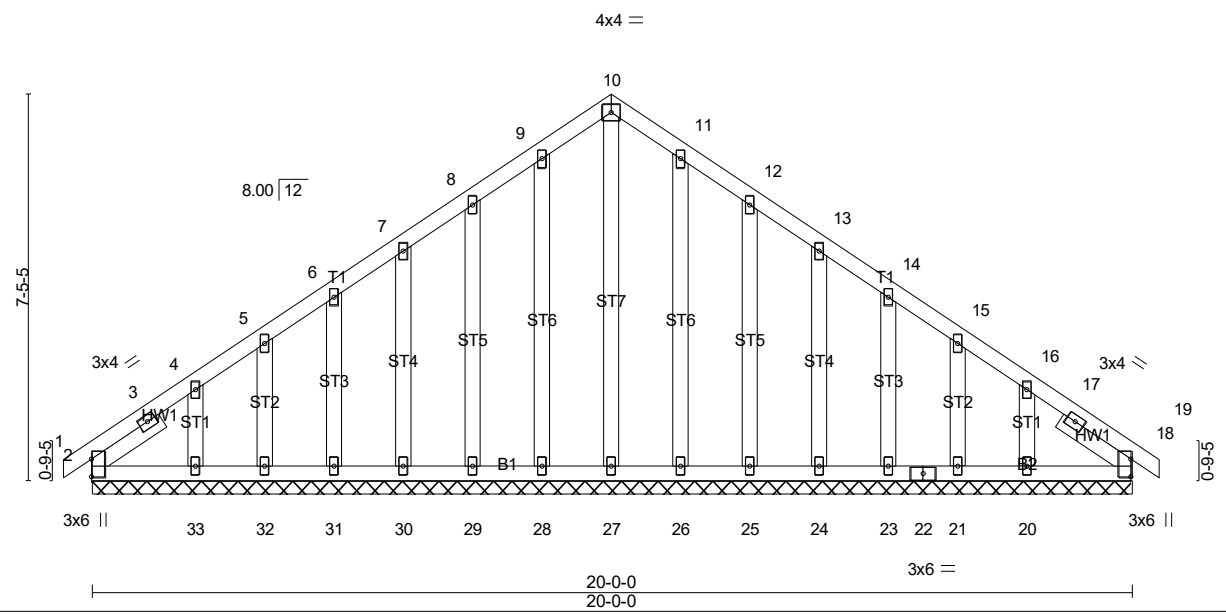
0-6-8 10-0-0 10-0-0 0-6-8

Scale = 1:44.3



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	0.05	Vert(LL)	0.00	18	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00	18	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	18	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 151 lb	FT = 20%
BCDL	10.0											

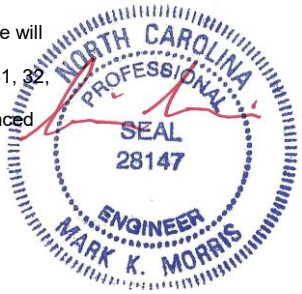
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.3
OTHERS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 - 1-7-8, Right 2x4 SP No.3 - 1-7-8

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

REACTIONS. All bearings 20-0-0.
(lb) - Max Horz 2=-125(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 2, 28, 29, 30, 31, 32, 33, 26, 25, 24, 23, 21, 20
Max Grav All reactions 250 lb or less at joint(s) 2, 27, 28, 29, 30, 31, 32, 33, 26, 25, 24, 23, 21, 20, 18

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

NOTES- (13-16)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=21ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-6-8 to 3-4-0, Exterior(2N) 3-4-0 to 6-0-0, Corner(3R) 6-0-0 to 14-0-0, Exterior(2N) 14-0-0 to 16-7-14, Corner(3E) 16-7-14 to 20-6-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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 20.0 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 1-4-0 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 28, 29, 30, 31, 32, 33, 26, 25, 24, 23, 21, 20.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	49786-0222 WOODGROVE | FUQUAY VARINA, NC
21-5986-R01	VT01	Valley	1	1	Job Reference (optional) **# 28556**

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Sep 22 14:44:27 2021 Page 1
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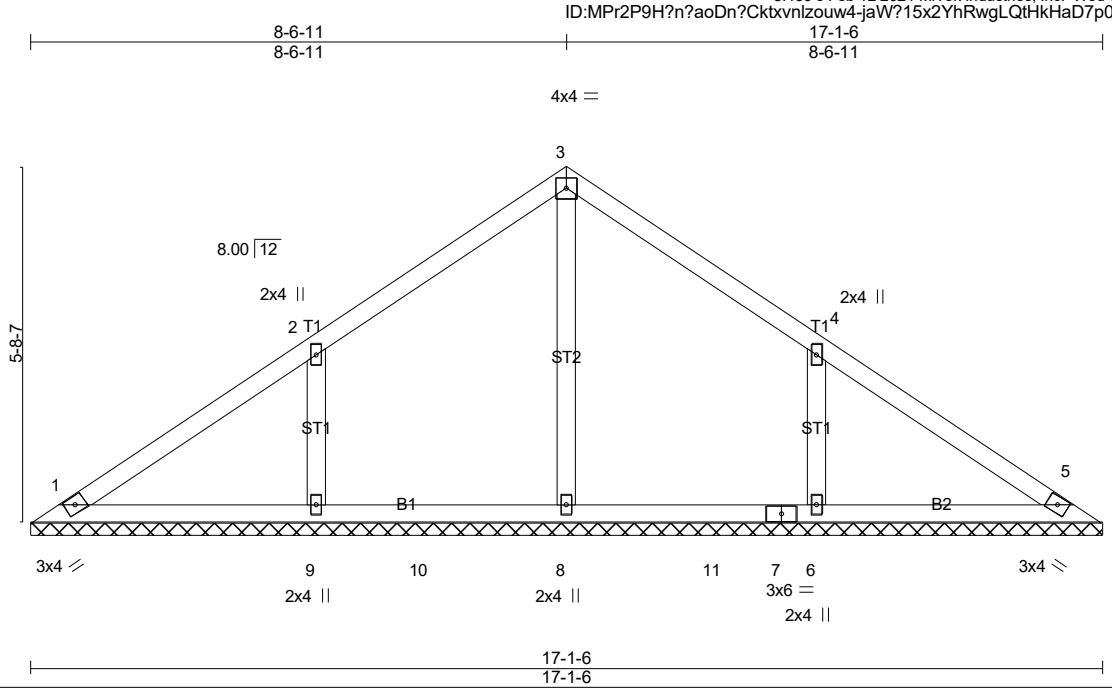


LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 69 lb	FT = 20%
BCDL	10.0											

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

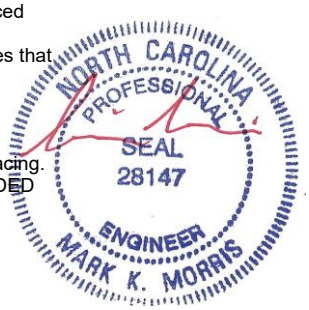
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 17-1-6.
(lb) - Max Horz 1=-95(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-100(LC 12), 6=-100(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=395(LC 19), 9=411(LC 19), 6=411(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-283/135, 4-6=-283/135

NOTES- (9-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=22ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 4-6-11, Exterior(2R) 4-6-11 to 12-6-11, Exterior(2E) 12-6-11 to 16-7-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=100, 6=100.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	49786-0222 WOODGROVE | FUQUAY VARINA, NC
21-5986-R01	VT02	Valley	1	1	Job Reference (optional) **# 28556**

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Sep 22 14:44:28 2021 Page 1
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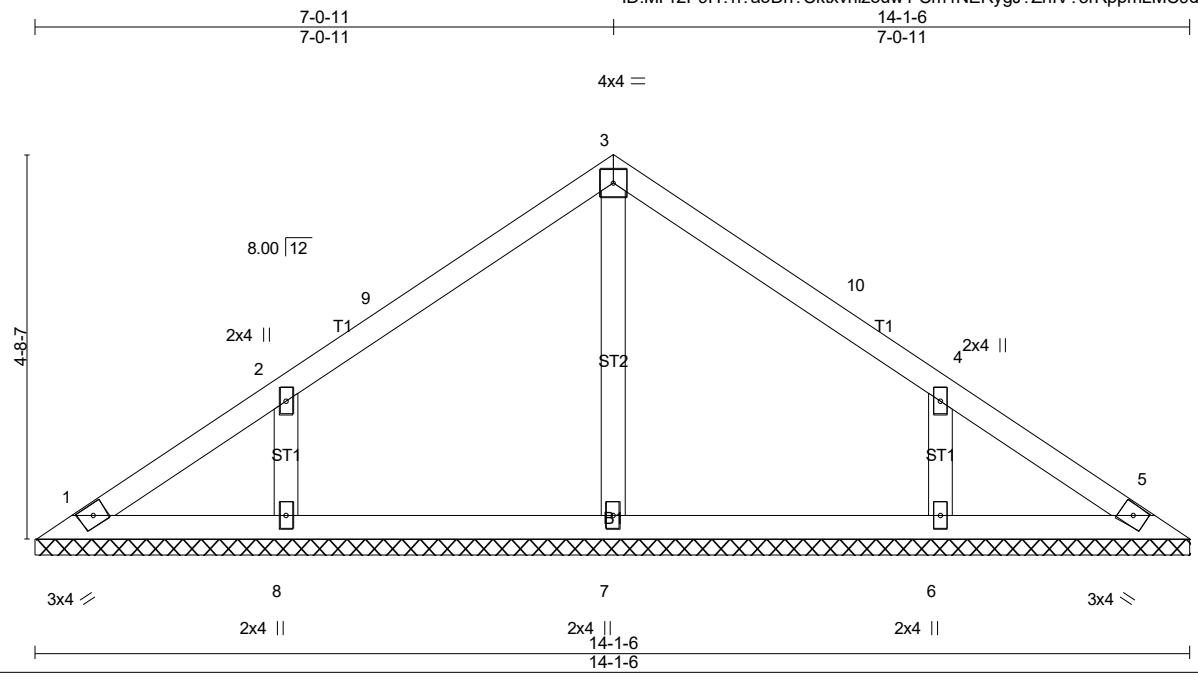


LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 55 lb	FT = 20%
BCDL	10.0											

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

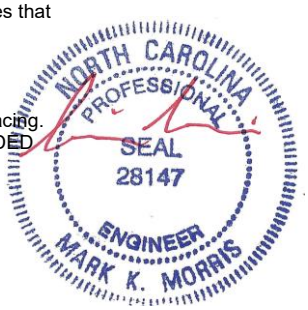
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 14-1-6.
(lb) - Max Horz 1=-78(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=264(LC 1), 8=315(LC 23), 6=315(LC 30)

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

NOTES- (9-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 4-4-6, Exterior(2R) 4-4-6 to 9-9-0, Exterior(2E) 9-9-0 to 13-7-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



9/20/2021

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Job	Truss	Truss Type	Qty	Ply	49786-0222 WOODGROVE | FUQUAY VARINA, NC
21-5986-R01	VT03	Valley	1	1	Job Reference (optional) **# 28556**

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Sep 22 14:44:29 2021 Page 1
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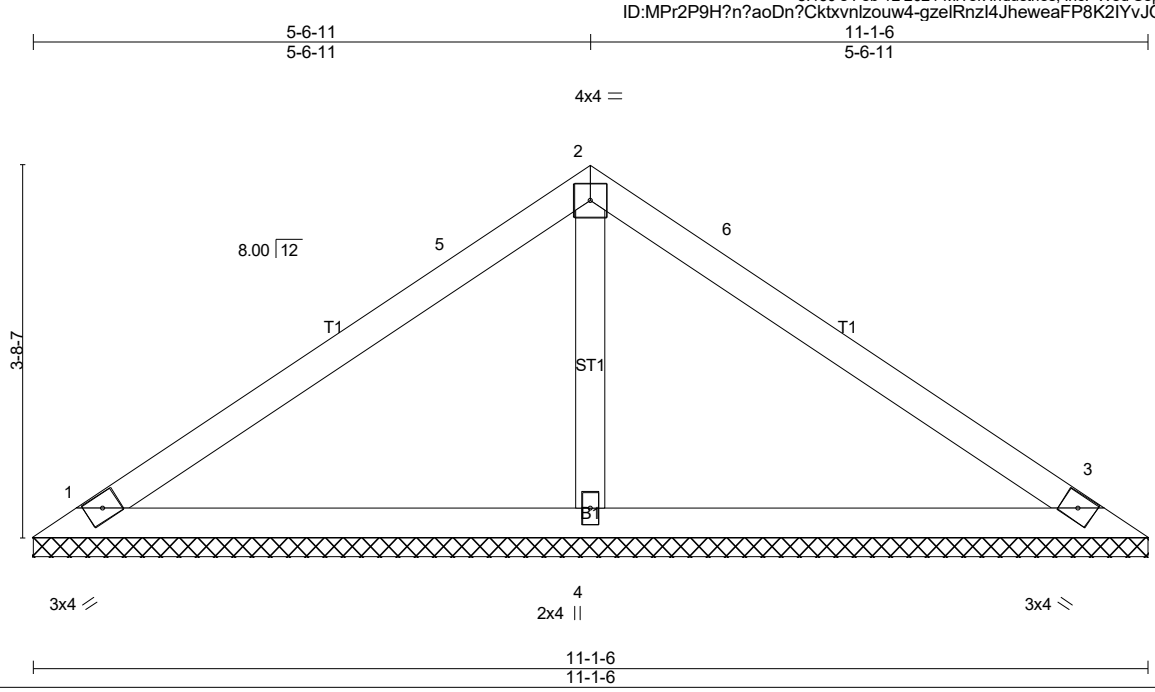


LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-SH							Weight: 39 lb	FT = 20%
BCDL	10.0											

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

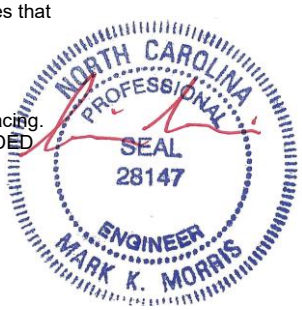
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=195/11-1-6 (min. 0-1-8), 3=195/11-1-6 (min. 0-1-8), 4=422/11-1-6 (min. 0-1-8)
Max Horz 1=-61(LC 8)
Max Uplift1=-18(LC 12), 3=-27(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-253/61

NOTES- (9-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 4-4-6, Exterior(2R) 4-4-6 to 6-9-0, Exterior(2E) 6-9-0 to 10-7-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



9/20/2021

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Job	Truss	Truss Type	Qty	Ply	49786-0222 WOODGROVE | FUQUAY VARINA, NC
21-5986-R01	VT04	Valley	1	1	Job Reference (optional) **# 28556**

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Sep 22 14:44:29 2021 Page 1
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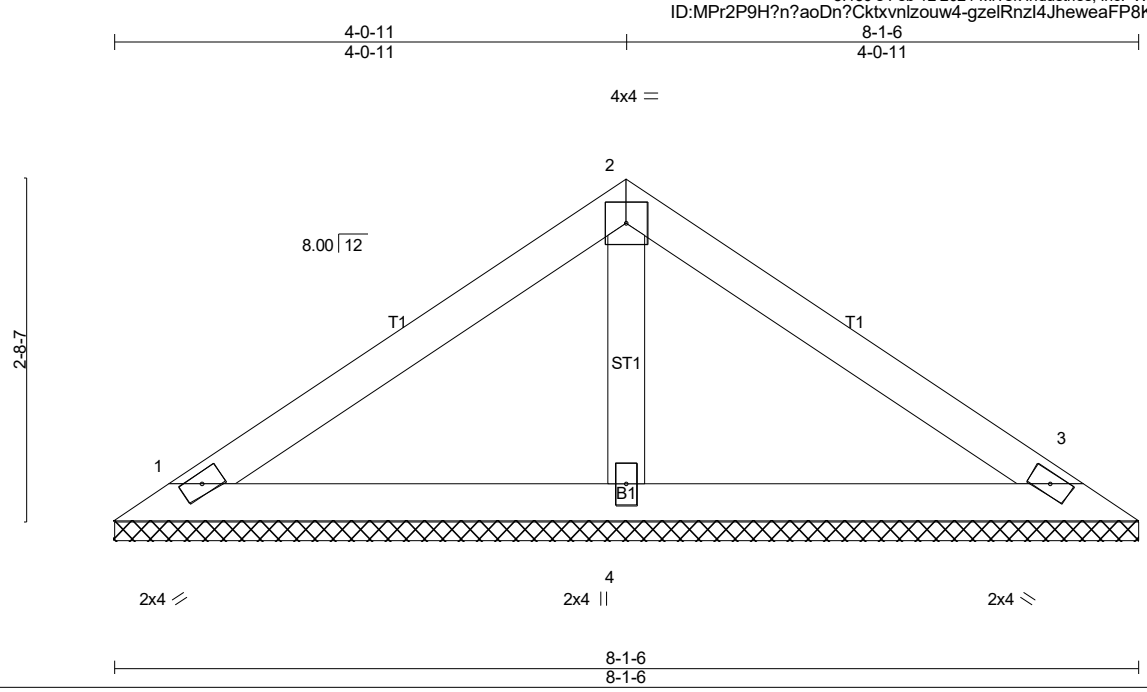

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							Weight: 28 lb	FT = 20%
BCDL	10.0											

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=154/8-1-6 (min. 0-1-8), 3=154/8-1-6 (min. 0-1-8), 4=264/8-1-6 (min. 0-1-8)
Max Horz 1=-43(LC 8)
Max Uplift1=-21(LC 12), 3=-27(LC 13)

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

NOTES- (9-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

9/20/2021

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Job	Truss	Truss Type	Qty	Ply	49786-0222 WOODGROVE | FUQUAY VARINA, NC
21-5986-R01	VT05	Valley	1	1	Job Reference (optional) **# 28556**

8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Sep 22 14:44:30 2021 Page 1
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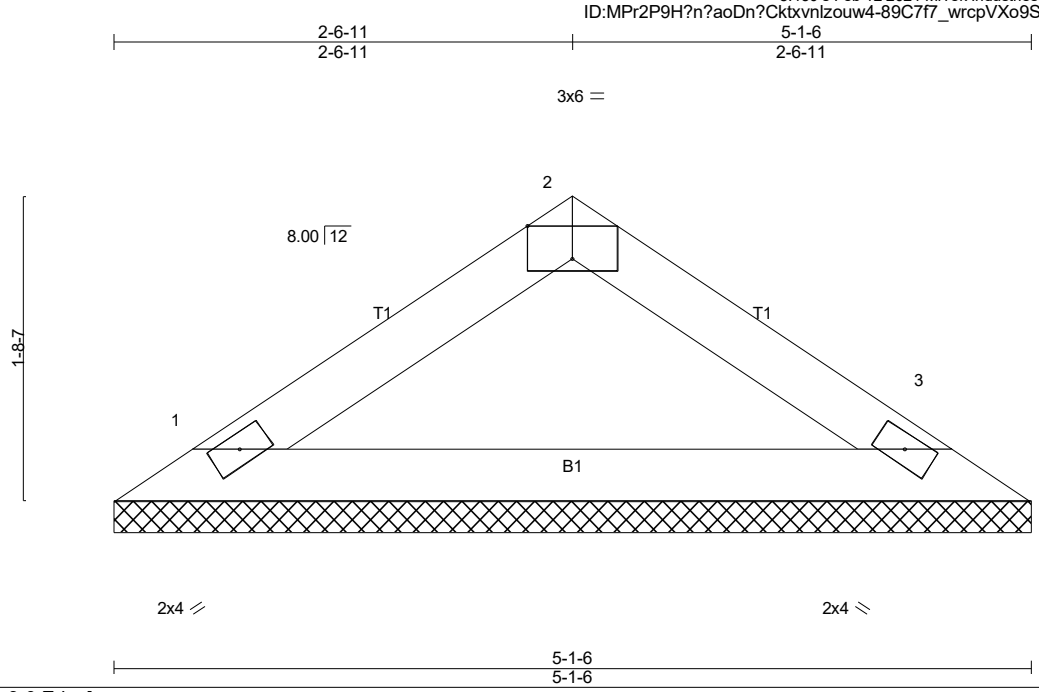

Plate Offsets (X,Y)-- [2:0-3-0,Edge]

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	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P							Weight: 15 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=166/5-1-6 (min. 0-1-8), 3=166/5-1-6 (min. 0-1-8)
Max Horz 1=25(LC 11)
Max Uplift1=-8(LC 12), 3=-8(LC 13)

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

NOTES- (9-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
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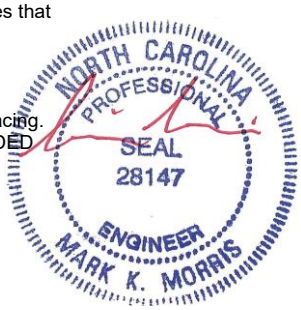

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