

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 33065-33065A
189 BIRCHWOOD GROVE - ROOF

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

Pages or sheets covered by this seal: I53543866 thru I53543882

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844



August 9, 2022

Gilbert, Eric

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job 33065-33065A	Truss A1	Truss Type Common	Qty 11	Ply 1	189 BIRCHWOOD GROVE - ROOF Job Reference (optional)	I53543866
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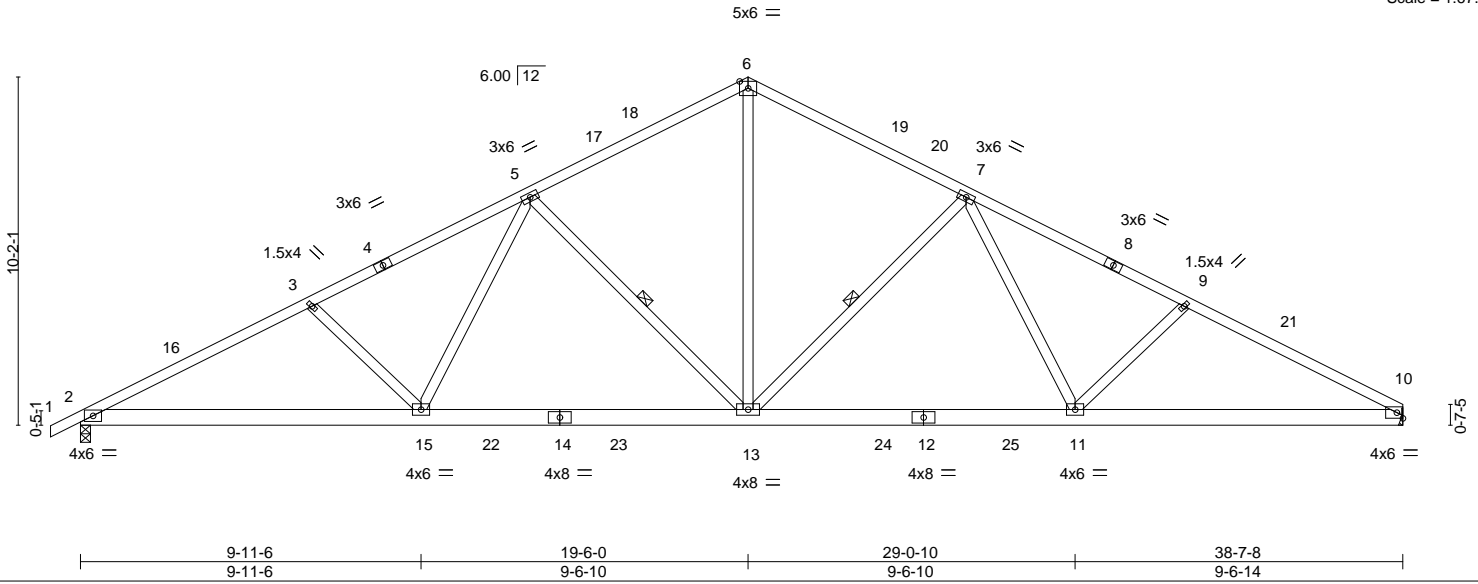
84 Components (Dunn), Dunn, NC - 28334,

8.610 s Jul 18 2022 MiTek Industries, Inc. Mon Aug 8 13:38:27 2022 Page 1

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Scale = 1:67.3



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.78	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.81	Vert(LL) -0.21 13-15 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.35	Vert(CT) -0.37 13-15 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.10 10 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 230 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt 7-13, 5-13
9-11,3-15: 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 10=Mechanical
 Max Horz 2=151(LC 16)
 Max Uplift 2=-103(LC 16), 10=-84(LC 17)
 Max Grav 2=1740(LC 3), 10=1688(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-3141/185, 3-5=-2907/166, 5-6=-2001/199, 6-7=-2001/201, 7-9=-2852/173, 9-10=-3049/181
 BOT CHORD 2-15=-233/2733, 13-15=-107/2241, 11-13=-12/2216, 10-11=-92/2641
 WEBS 6-13=-50/1429, 7-13=-724/191, 7-11=-5/630, 9-11=-302/178, 5-13=-757/193, 5-15=-6/682, 3-15=-347/176

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-11-14, Interior(1) 2-11-14 to 19-6-0, Exterior(2R) 19-6-0 to 23-4-6, Interior(1) 23-4-6 to 38-6-12 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
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
 - 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.



August 9, 2022

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

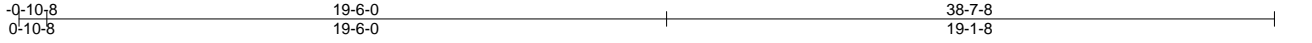
ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	189 BIRCHWOOD GROVE - ROOF	153543867
33065-33065A	A1E	Common Supported Gable	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

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5x6 =

Scale = 1:72.5

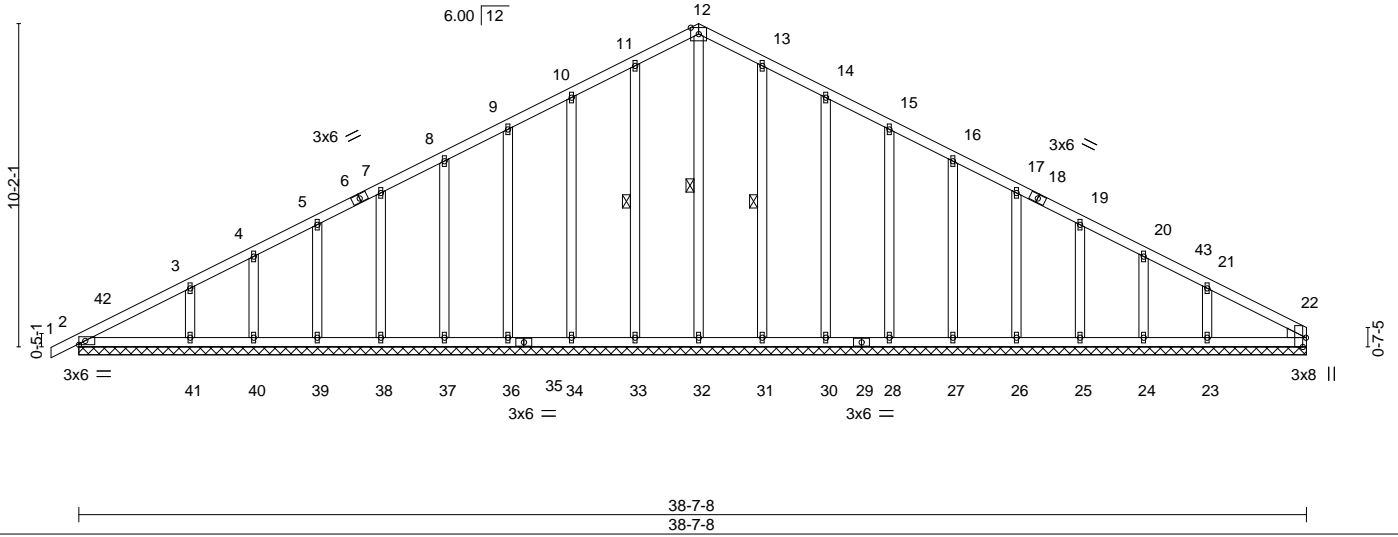


Plate Offsets (X,Y)-- [22:0-3-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.13	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.09	Vert(LL) -0.00 1 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.13	Vert(CT) 0.00 1 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 22 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 261 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3 *Except*
 12-32,11-33,10-34,9-36,13-31,14-30,15-28: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 12-32, 11-33, 13-31

WEDGE

Right: 2x4 SP No.3

REACTIONS.

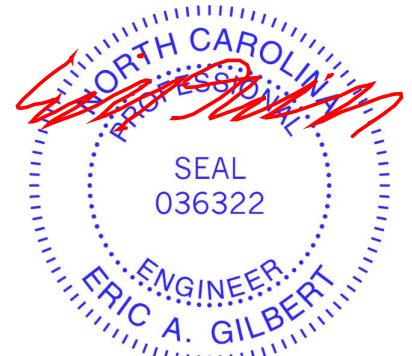
All bearings 38-7-8.
 (lb) - Max Horz 2=149(LC 16)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 33, 34, 36, 37, 38, 39, 40, 41, 31, 30, 28, 27, 26, 25, 24, 23
 Max Grav All reactions 250 lb or less at joint(s) 2, 32, 33, 34, 36, 37, 38, 39, 40, 31, 30, 28, 27, 26, 25, 24, 22 except 41=272(LC 36), 23=256(LC 37)

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

TOP CHORD 11-12=-118/263, 12-13=-118/263

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-11-14, Exterior(2N) 2-11-14 to 19-6-0, Corner(3R) 19-6-0 to 23-6-0, Exterior(2N) 23-6-0 to 38-7-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- n/a
- 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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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



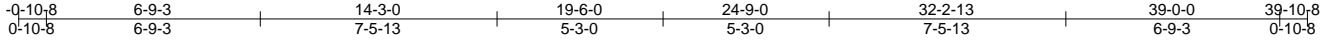
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	189 BIRCHWOOD GROVE - ROOF	I53543868
33065-33065A	A2	ROOF TRUSS	5	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

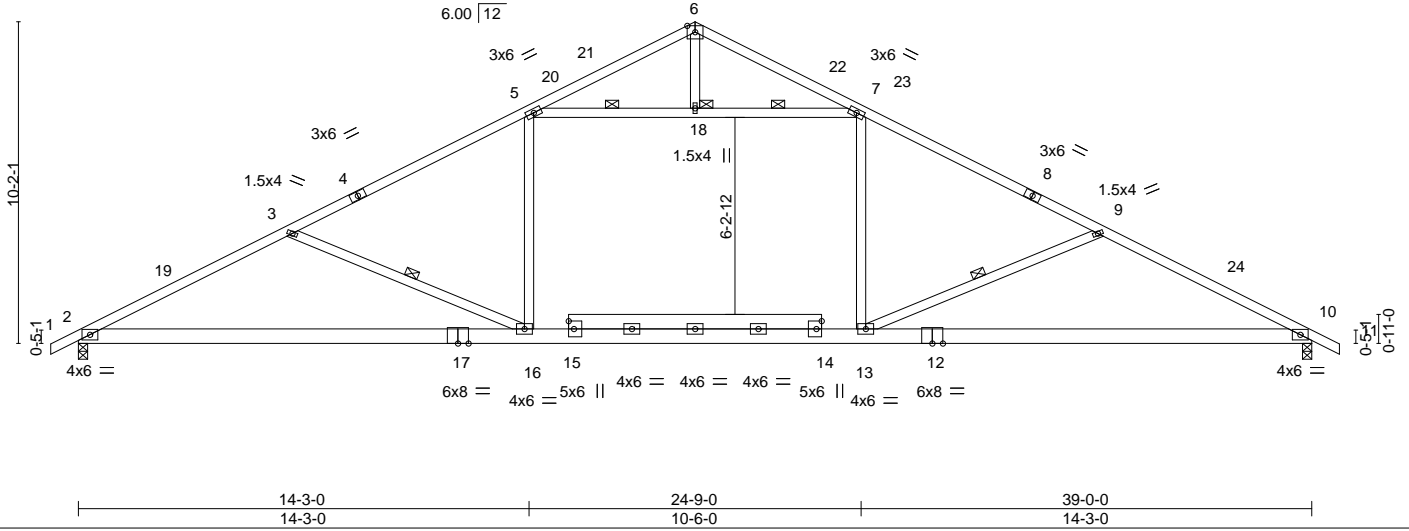
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5x6 =

Scale = 1:72.9



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.82	Vert(LL)	-0.82 2-16	>569	240	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.54	Vert(CT)	-1.08 2-16	>432	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.35	Horz(CT)	0.08 10	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Attic	-0.62 13-16	202	360		
BCDL 10.0	Code IRC2018/TPI2014						Weight: 241 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x6 SP DSS *Except*
 14-15: 2x6 SP No.2
 WEBS 2x4 SP No.2 *Except*
 6-18: 2x4 SP No.3

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 9-13, 3-16, 5-18, 7-18
 JOINTS 1 Brace at Jt(s): 18

REACTIONS.

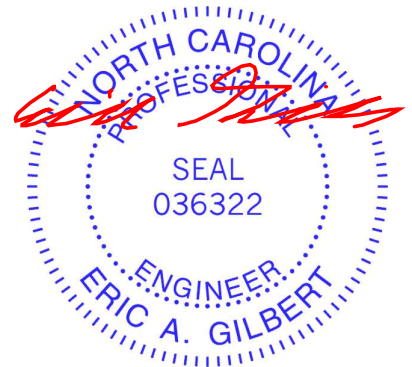
(size) 2=0-3-8, 10=0-3-8
 Max Horz 2=145(LC 20)
 Max Uplift 2=-72(LC 16), 10=-72(LC 17)
 Max Grav 2=1773(LC 3), 10=1773(LC 3)

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

TOP CHORD 2-3=-3295/151, 3-5=-2893/87, 5-6=-503/68, 6-7=-503/68, 7-9=-2893/87,
 9-10=-3295/151
 BOT CHORD 2-16=-186/2875, 13-16=0/2509, 10-13=-47/2875
 WEBS 7-13=0/765, 9-13=-569/272, 5-16=0/765, 3-16=-569/272, 5-18=-2160/101,
 7-18=-2160/101

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-0-5, Interior(1) 3-0-5 to 19-6-0, Exterior(2R) 19-6-0 to 23-4-13, Interior(1) 23-4-13 to 39-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Ceiling dead load (5.0 psf) on member(s). 5-18, 7-18
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-16
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
- 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.
- ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



August 9, 2022

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	189 BIRCHWOOD GROVE - ROOF	153543869
33065-33065A	A3	Common	2	1		

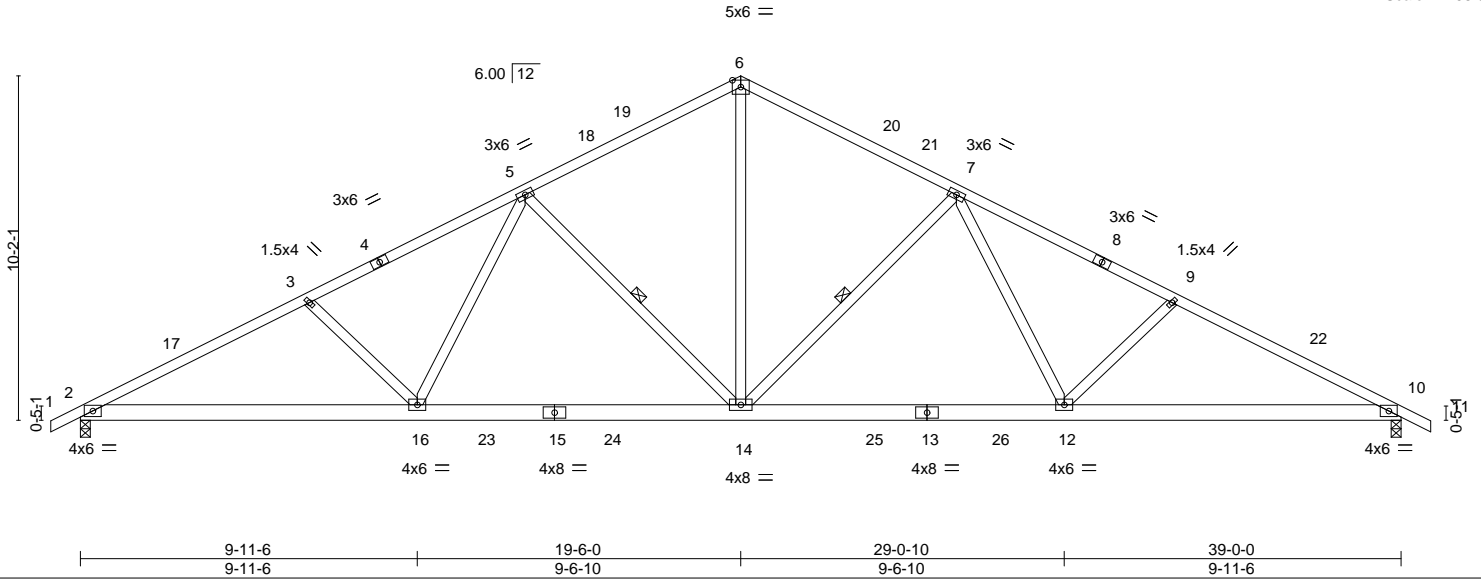
84 Components (Dunn), Dunn, NC - 28334,

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0-10-8 6-9-3 13-1-9 19-6-0 25-10-7 32-2-13 39-0-0 39-10-8
 0-10-8 6-9-3 6-4-7 6-4-7 6-4-7 6-4-7 6-4-7 6-9-3 0-10-8

Scale = 1:68.0



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.63	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.81	Vert(LL) -0.21 12-14 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.36	Vert(CT) -0.38 12-14 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.10 10 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 233 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-6-7 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt 7-14, 5-14
9-12,3-16: 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 10=0-3-8
 Max Horz 2=145(LC 16)
 Max Uplift 2=-103(LC 16), 10=-103(LC 17)
 Max Grav 2=1752(LC 3), 10=1752(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-3168/184, 3-5=-2934/166, 5-6=-2028/200, 6-7=-2028/200, 7-9=-2934/166, 9-10=-3168/185
 BOT CHORD 2-16=-227/2756, 14-16=-101/2264, 12-14=-5/2264, 10-12=-82/2756
 WEBS 6-14=-49/1452, 7-14=-757/193, 7-12=-6/682, 9-12=-347/177, 5-14=-757/193, 5-16=-6/682, 3-16=-347/176

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDD=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-0-5, Interior(1) 3-0-5 to 19-6-0, Exterior(2R) 19-6-0 to 23-4-13, Interior(1) 23-4-13 to 39-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
 - 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.



August 9, 2022

Job	Truss	Truss Type	Qty	Ply	189 BIRCHWOOD GROVE - ROOF	153543870
33065-33065A	A3E	Common Supported Gable	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

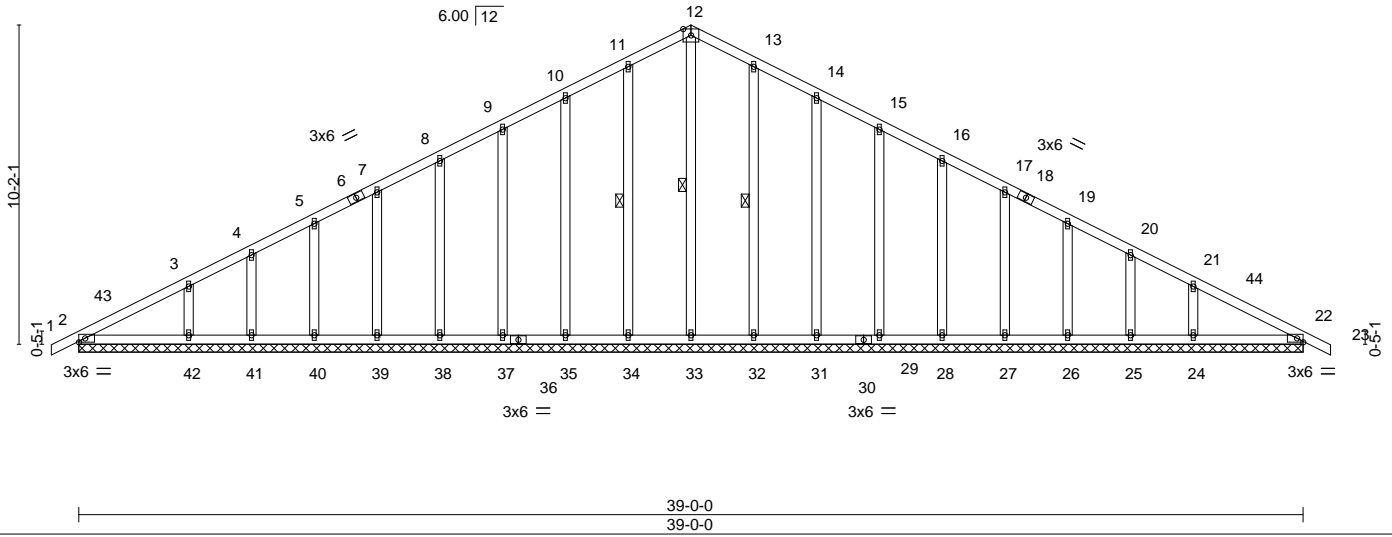
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ID:ytBjKryWUodVvgHGUH7JdBzXTGY-jqqDYzHCPGBnb6U0xrnR1z7fiaL6NGDjyHo6jypubG

-0-10-8 19-6-0 39-0-0 39-10-8
 0-10-8 19-6-0 19-6-0 0-10-8

5x6 =

Scale = 1:73.4



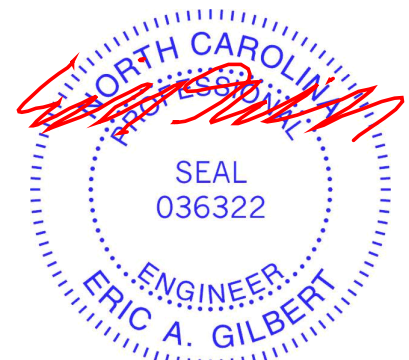
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.13	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.09	Vert(LL) 0.00 23 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.13	Vert(CT) 0.01 23 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 22 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 262 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 12-33, 11-34, 13-32
12-33,11-34,10-35,9-37,13-32,14-31,15-29: 2x4 SP No.2	

REACTIONS. All bearings 39-0-0.
 (lb) - Max Horz 2=145(LC 20)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 35, 37, 38, 39, 40, 41, 42, 32, 31, 29, 28, 27, 26, 25, 24
 Max Grav All reactions 250 lb or less at joint(s) 2, 33, 34, 35, 37, 38, 39, 40, 41, 32, 31, 29, 28, 27, 26, 25, 22 except 42=272(LC 36), 24=272(LC 37)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 11-12=-120/267, 12-13=-120/267

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-0-5, Exterior(2N) 3-0-5 to 19-6-0, Corner(3R) 19-6-0 to 23-6-0, Exterior(2N) 23-6-0 to 39-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - 7) All plates are 1.5x4 MT20 unless otherwise indicated.
 - 8) Gable requires continuous bottom chord bearing.
 - 9) Gable studs spaced at 2-0-0 oc.
 - 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 11) * 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.
 - 12) n/a
 - 13) 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.



August 9, 2022

Job	Truss	Truss Type	Qty	Ply	189 BIRCHWOOD GROVE - ROOF	153543871
33065-33065A	B1	Common	1	1		

84 Components (Dunn), Dunn, NC - 28334,

8.610 s Jul 18 2022 MiTek Industries, Inc. Mon Aug 8 13:38:39 2022 Page 1

ID:ytBjKryWUodVVgHGUH7JdBzXTGY-fDxzzfJTxuRUrPeO3Gpv6ODxSW2UZf8WAGmuBcypubE

0-10-8 5-9-2 11-1-8 16-5-14 22-3-0 23-1-8
0-10-8 5-9-2 5-4-6 5-4-6 5-9-2 0-10-8

Scale = 1:40.0

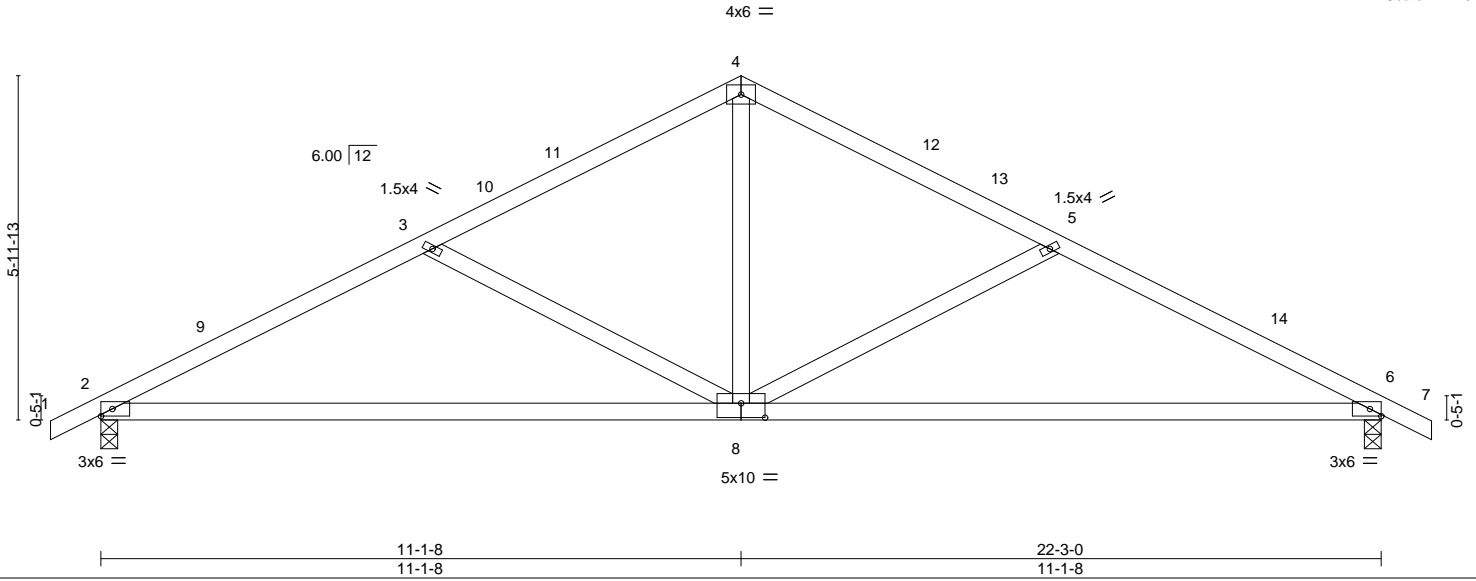


Plate Offsets (X,Y)-- [8:0-5-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.44	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.94	Vert(LL) -0.27 6-8 >976 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.30	Vert(CT) -0.56 6-8 >467 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.04 6 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 99 lb	FT = 20%

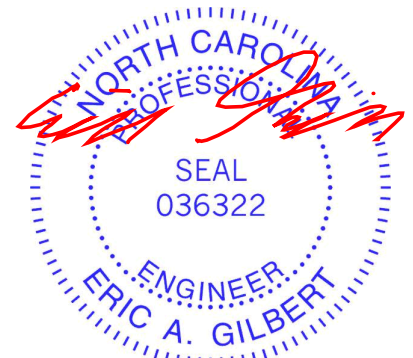
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=85(LC 16)
Max Uplift 2=-65(LC 16), 6=-65(LC 17)
Max Grav 2=940(LC 2), 6=940(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1452/192, 3-4=-1096/134, 4-5=-1096/134, 5-6=-1452/192
BOT CHORD 2-8=-126/1242, 6-8=-105/1242
WEBS 4-8=0/648, 5-8=-398/189, 3-8=-398/189

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-1-8, Exterior(2R) 11-1-8 to 14-1-8, Interior(1) 14-1-8 to 23-1-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
 - 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.



August 9, 2022

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



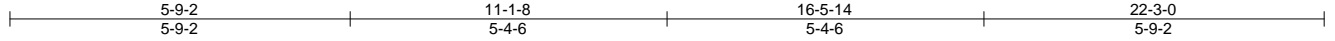
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	189 BIRCHWOOD GROVE - ROOF	153543872
33065-33065A	B2	Common	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

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ID:ytBjKryWUodVVgHGUH7JdBzXTGY-bc3kNLKjTVhC4jonAhrNBpIGiKjc19apeaF?FUypubC



4x6 =

Scale = 1:39.0

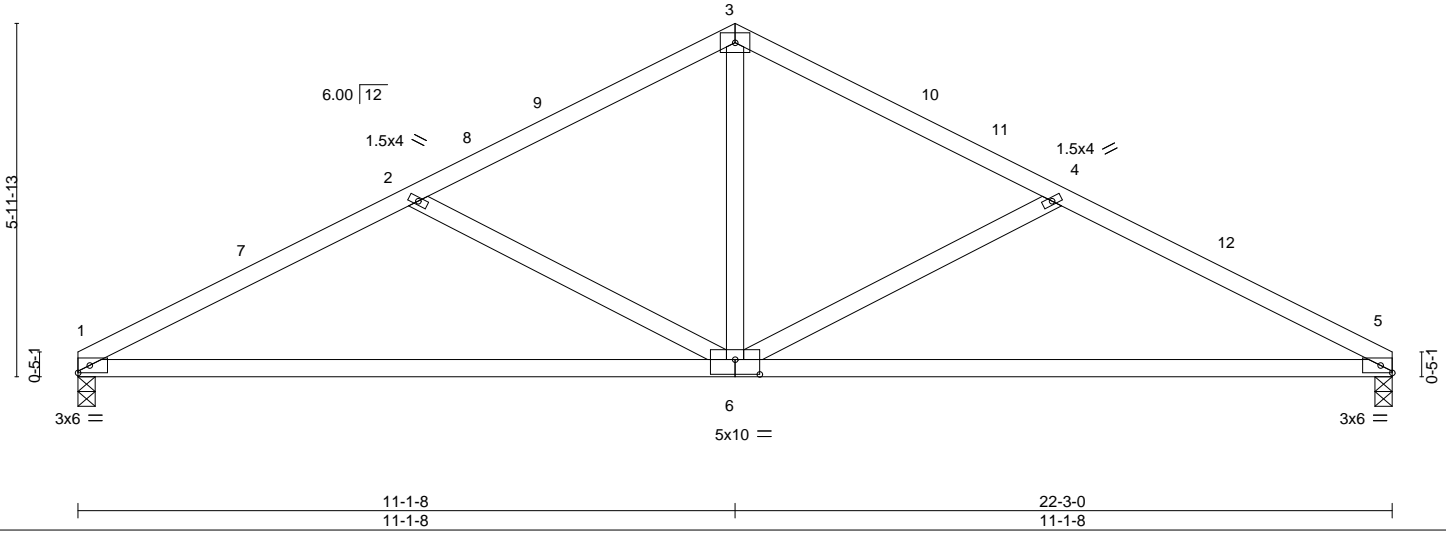


Plate Offsets (X,Y)-- [6:0-5-0-0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.46	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.96	Vert(LL) -0.28 5-6 >936 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.30	Vert(CT) -0.59 5-6 >449 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.04 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 96 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-1-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS.

(size) 1=0-3-8, 5=0-3-8
Max Horz 1=81(LC 16)
Max Uplift 1=-49(LC 16), 5=-49(LC 17)
Max Grav 1=878(LC 2), 5=878(LC 2)

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

TOP CHORD 1-2=-1463/202, 2-3=-1103/138, 3-4=-1103/138, 4-5=-1463/202
BOT CHORD 1-6=-136/1253, 5-6=-120/1253
WEBS 3-6=-5/650, 4-6=-403/195, 2-6=-403/194

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 11-1-8, Exterior(2R) 11-1-8 to 14-1-8, Interior(1) 14-1-8 to 22-1-4 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.
- 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.



August 9, 2022

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



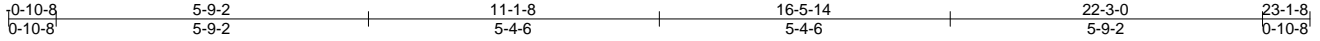
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	189 BIRCHWOOD GROVE - ROOF	153543873
33065-33065A	BE	Common Structural Gable	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

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4x6 =

Scale = 1:42.5

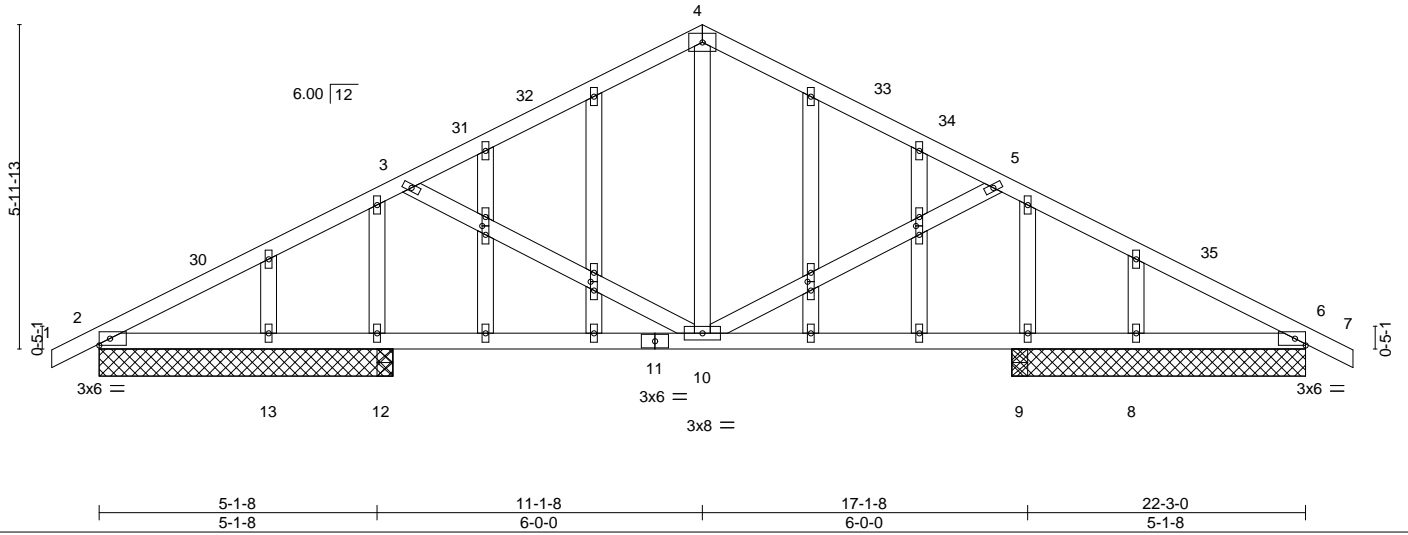


Plate Offsets (X,Y)-- [14:0-1-15,0-0-12], [17:0-1-15,0-0-12], [24:0-1-15,0-0-12], [27:0-1-15,0-0-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.39	Vert(LL) -0.05	10	>999	240	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.44	Vert(CT) -0.09	10	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.29	Horz(CT) 0.04	6	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 133 lb	FT = 20%

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

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

REACTIONS. All bearings 5-5-0.
 (lb) - Max Horz 2=-85(LC 17)
 Max Uplift All uplift 100 lb or less at joint(s) except 2=-125(LC 16), 6=-125(LC 17)
 Max Grav All reactions 250 lb or less at joint(s) 12, 12, 13, 9, 9, 8 except 2=765(LC 2), 6=765(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1285/282, 3-4=-913/217, 4-5=-913/217, 5-6=-1285/282
 BOT CHORD 2-13=-207/1076, 12-13=-207/1076, 10-12=-207/1076, 9-10=-187/1076, 8-9=-187/1076, 6-8=-187/1076
 WEBS 4-10=-76/445, 5-10=-390/198, 3-10=-390/197

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-1-8, Exterior(2R) 11-1-8 to 14-1-8, Interior(1) 14-1-8 to 23-1-8 zone; cantilever left and right exposed; end vertical left and right exposed; C/C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - All plates are 1.5x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - n/a
 - 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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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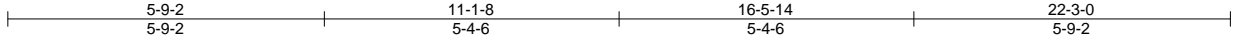
818 Soundside Road
 Edenton, NC 27932

Job 33065-33065A	Truss BG	Truss Type COMMON GIRDER	Qty 1	Ply 3	189 BIRCHWOOD GROVE - ROOF	153543874
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5x6 ||

Scale = 1:41.9

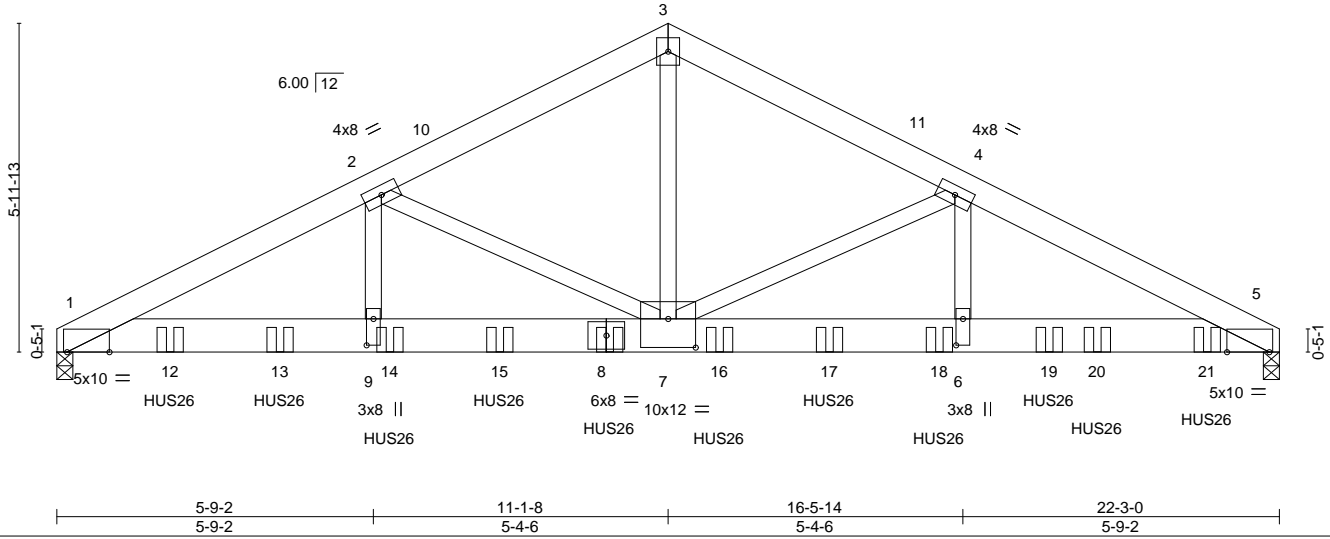


Plate Offsets (X,Y)-- [1:0-9-4,0-0-0], [5:0-9-4,0-0-0], [6:0-5-12,0-1-8], [7:0-6-0,0-6-4], [9:0-5-12,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.50	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.65	Vert(LL) -0.13 7-9 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.82	Vert(CT) -0.24 7-9 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.06 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 471 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.2
 BOT CHORD 2x8 SP DSS
 WEBS 2x4 SP No.3 *Except*
 3-7: 2x4 SP No.2

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

REACTIONS. (size) 1=(0-3-8 + TBE4 Simpson Strong-Tie) (req. 0-4-14), 5=(0-3-8 + TBE4 Simpson Strong-Tie) (req. 0-5-8)
 Max Horz 1=77(LC 41)
 Max Uplift 1=543(LC 12), 5=614(LC 13)
 Max Grav 1=9313(LC 3), 5=10550(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-16840/979, 2-3=-11720/711, 3-4=-11720/711, 4-5=-17662/1028
 BOT CHORD 1-9=-897/14984, 7-9=-897/14984, 6-7=-864/15726, 5-6=-864/15726
 WEBS 3-7=-542/10011, 4-7=-5908/441, 4-6=-232/5212, 2-7=-5074/391, 2-9=-191/4480

- NOTES-**
- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x8 - 4 rows staggered at 0-4-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - 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.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Bearing at joint(s) 1, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.
 - 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.
 - Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 20-11-4 to connect truss(es) to back face of bottom chord.



Continued on pages where hanger is in contact with lumber.

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	189 BIRCHWOOD GROVE - ROOF	I53543874
33065-33065A	BG	COMMON GIRDER	1	3	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

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LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-43, 3-5=-43, 1-5=-20

Concentrated Loads (lb)

Vert: 8=-1191(B) 12=-1191(B) 13=-1191(B) 14=-1191(B) 15=-1191(B) 16=-1191(B) 17=-1191(B) 18=-1191(B) 19=-1191(B) 20=-1191(B) 21=-1191(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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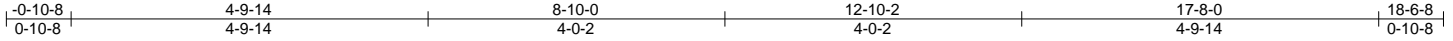
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	189 BIRCHWOOD GROVE - ROOF	153543875
33065-33065A	C1	COMMON	1	1		

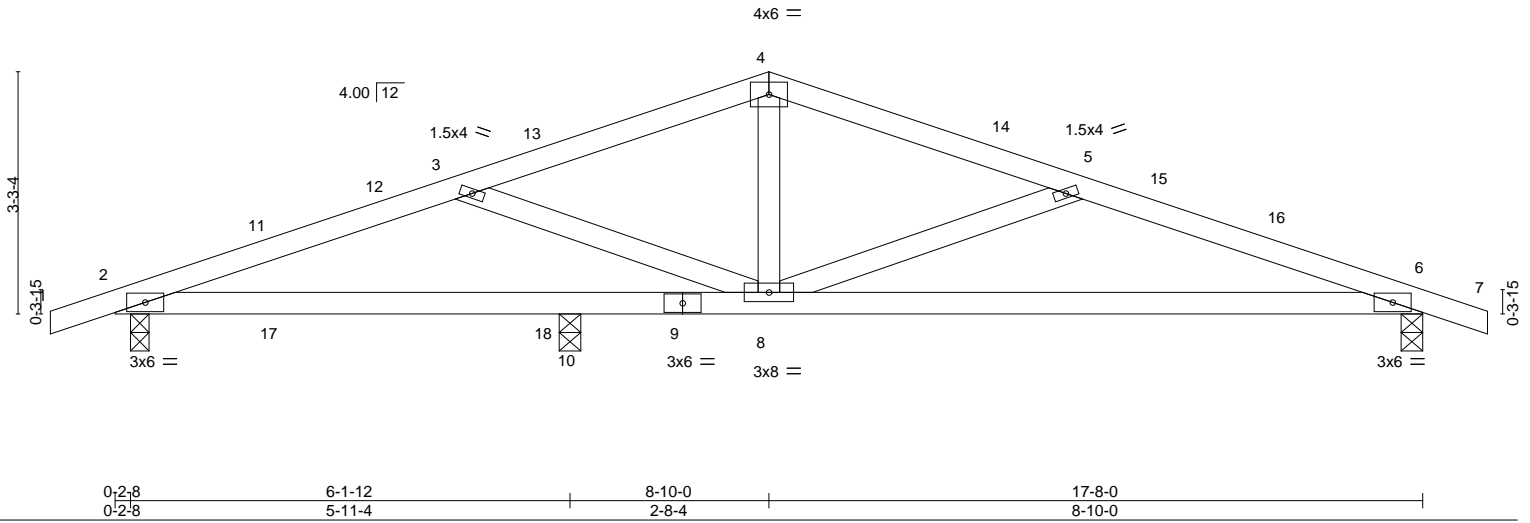
84 Components (Dunn), Dunn, NC - 28334,

8.610 s Jul 18 2022 MiTek Industries, Inc. Mon Aug 8 13:38:46 2022 Page 1

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Scale = 1:31.1



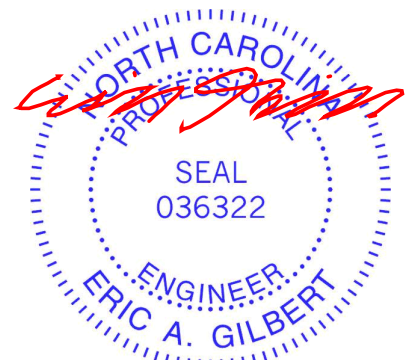
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.45	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.78	Vert(LL) -0.17 6-8 >799 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.18	Vert(CT) -0.38 6-8 >360 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.04 6 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 74 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-5-15 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. (size) 6=0-3-8, 2=0-3-0, 10=0-3-8
 Max Horz 2=46(LC 16)
 Max Uplift 6=88(LC 13), 2=-135(LC 12), 10=43(LC 12)
 Max Grav 6=708(LC 2), 2=663(LC 2), 10=170(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1380/252, 3-4=-990/107, 4-5=-992/108, 5-6=-1399/219
 BOT CHORD 2-10=-201/1262, 8-10=-201/1262, 6-8=-167/1296
 WEBS 3-8=-410/215, 4-8=0/368, 5-8=-439/178

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-10-0, Exterior(2R) 8-10-0 to 11-10-0, Interior(1) 11-10-0 to 18-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 2. This connection is for uplift only and does not consider lateral forces.
 - One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10. This connection is for uplift only and does not consider lateral forces.
 - 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.



August 9, 2022

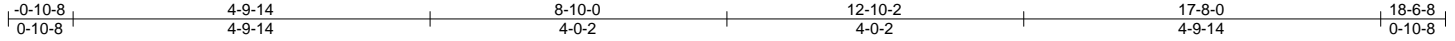
Job	Truss	Truss Type	Qty	Ply	189 BIRCHWOOD GROVE - ROOF	153543876
33065-33065A	CE	COMMON STRUCTURAL GA	1	1		

Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334,

8.610 s Jul 18 2022 MiTek Industries, Inc. Mon Aug 8 13:38:48 2022 Page 1

ID:ytBjKryWUodVVgHGUH7JdBzXTGY-uy_NrkQ6pfaDQoq74fT0_I4Ot8AKAM1rFARt?aypub5



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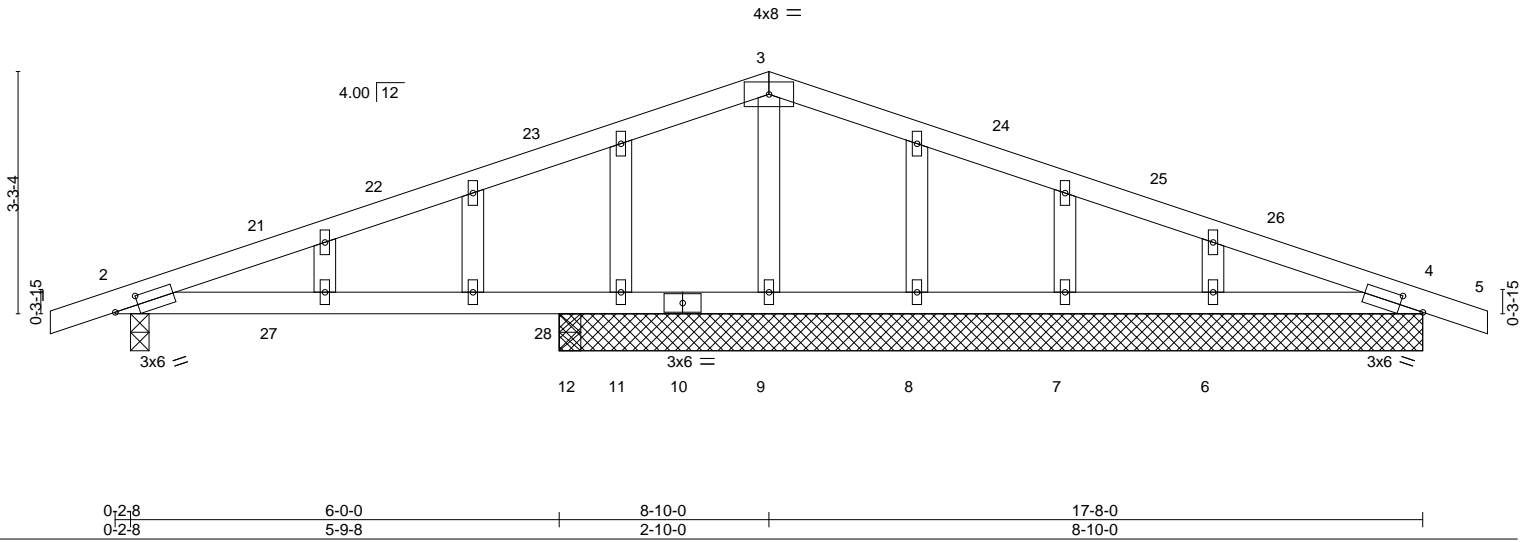


Plate Offsets (X,Y)-- [2:0-3-14,0-1-8], [4:0-3-14,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.78	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.77	Vert(LL) 0.09 2-12 >844 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.13	Vert(CT) -0.10 2-12 >725 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 73 lb	FT = 20%

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

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

REACTIONS. All bearings 11-8-0 except (jt=length) 2=0-3-0, 12=0-3-8.
 (lb) - Max Horz 2=46(LC 16)
 Max Uplift All uplift 100 lb or less at joint(s) 7, 6, 4 except 9=103(LC 12), 11=262(LC 36), 2=119(LC 12), 12=118(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 11, 8, 7, 4 except 9=561(LC 2), 6=259(LC 37), 2=334(LC 36), 12=445(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 3-9=507/182

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-10-0, Exterior(2R) 8-10-0 to 11-10-0, Interior(1) 11-10-0 to 18-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - All plates are 1.5x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - n/a
 - n/a
 - n/a
 - 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.



August 9, 2022

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818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	189 BIRCHWOOD GROVE - ROOF	153543877
33065-33065A	D2	Roof Special	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.610 s Jul 18 2022 MiTek Industries, Inc. Mon Aug 8 13:38:50 2022 Page 1

ID:ytBjKryWUodVVgHGUH7JdBzXTGY-rK67GQRMLGqxf5_WC4WU3jAkNyxheCQ8iUx_4Typub3



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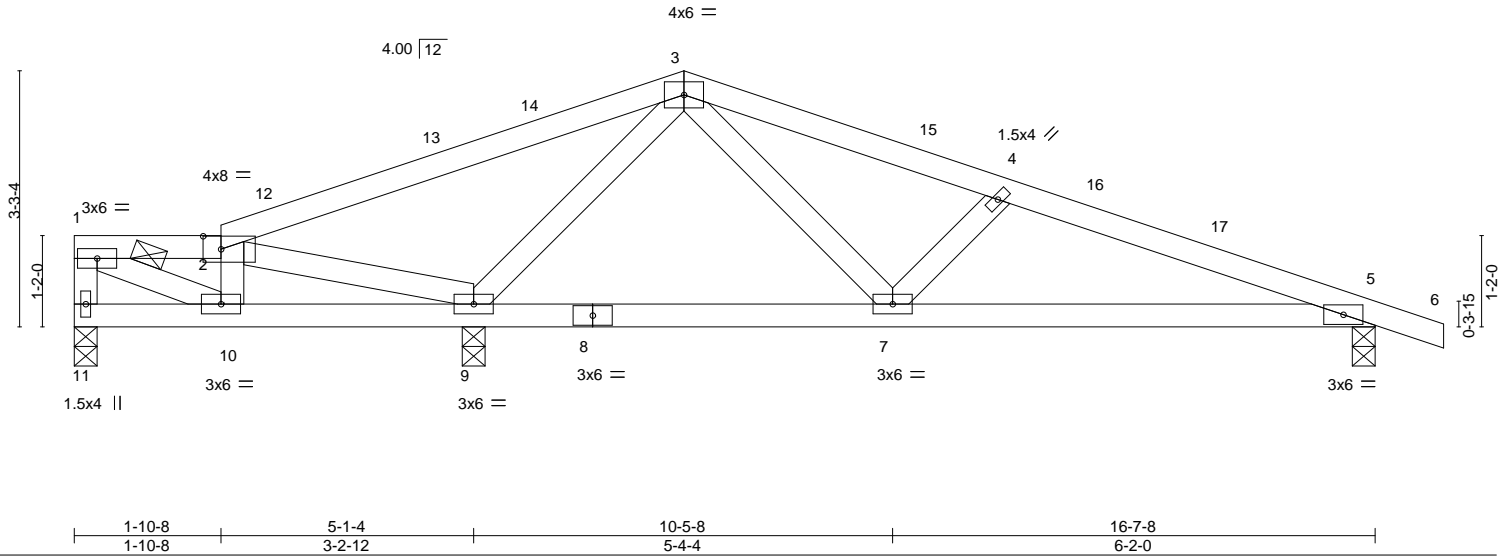


Plate Offsets (X,Y)-- [2:0-2-12,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.72	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	BC 0.39	Vert(LL) -0.04 5-7 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.33	Vert(CT) -0.08 5-7 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.01 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 76 lb	FT = 20%

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

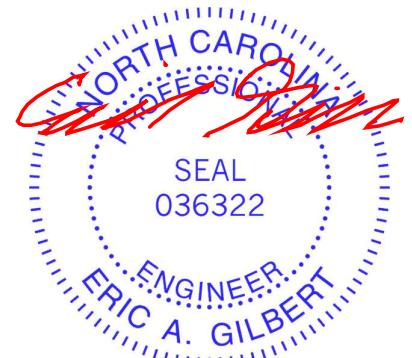
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-2.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 11=0-3-8, 9=0-3-8, 5=0-3-8
Max Horz 11=-52(LC 17)
Max Uplift 11=-46(LC 16), 9=-43(LC 12), 5=-76(LC 13)
Max Grav 11=561(LC 30), 9=1018(LC 2), 5=438(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-11=-516/120, 1-2=-483/130, 2-3=-90/596, 3-4=-457/91, 4-5=-658/127
BOT CHORD 9-10=-83/450, 5-7=-80/583
WEBS 1-10=-118/452, 2-9=-885/234, 3-9=-907/198, 3-7=-25/462, 4-7=-297/129

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 1-10-8, Interior(1) 1-10-8 to 7-9-8, Exterior(2R) 7-9-8 to 10-9-8, Interior(1) 10-9-8 to 17-6-0 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
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 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, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11, 9, and 5. This connection is for uplift only and does not consider lateral forces.
 - 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



August 9, 2022

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	189 BIRCHWOOD GROVE - ROOF	153543877
33065-33065A	D2	Roof Special	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.610 s Jul 18 2022 MiTek Industries, Inc. Mon Aug 8 13:38:50 2022 Page 2
 ID:ytBjKryWUodVVgHGuh7JdBzXTGY-rK67GQRMLGqxf5_WC4WU3jAkNyxheCQ8iUx_4Typub3

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-2=-363, 2-3=-43, 3-6=-43, 5-11=-20

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	189 BIRCHWOOD GROVE - ROOF	153543878
33065-33065A	D3	Roof Special	2	1		

84 Components (Dunn), Dunn, NC - 28334,

8.610 s Jul 18 2022 MiTek Industries, Inc. Mon Aug 8 13:38:52 2022 Page 1
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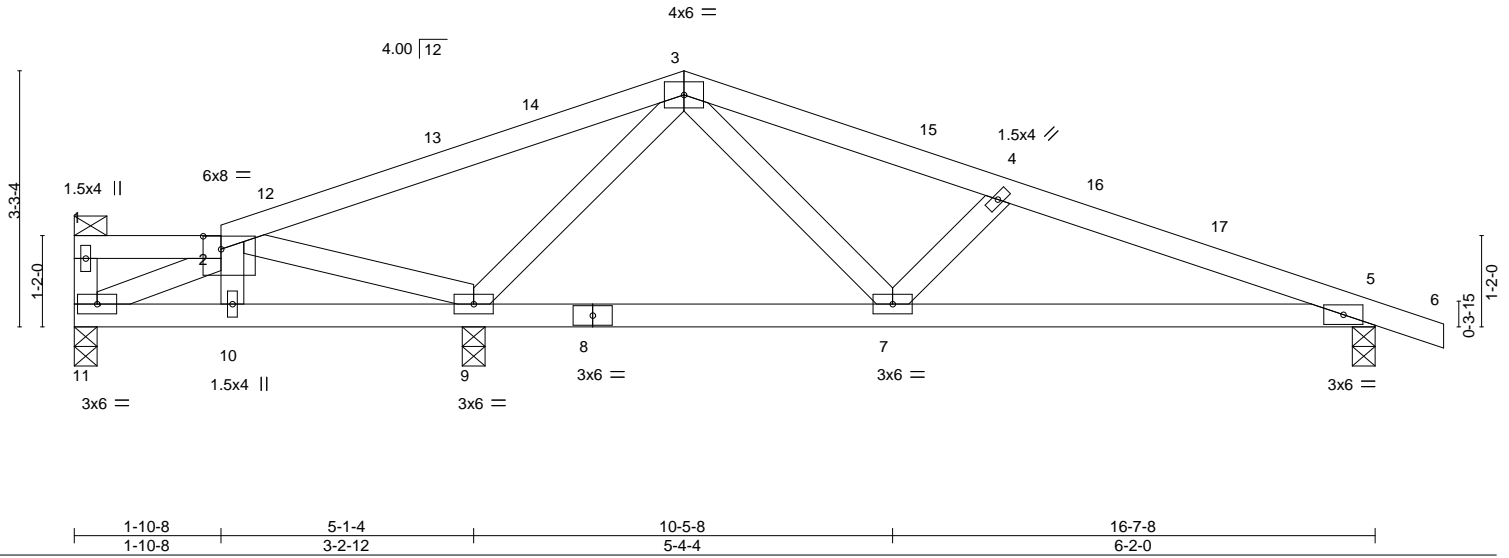


Plate Offsets (X,Y)-- [2:0-2-12,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.72	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	BC 0.39	Vert(LL) -0.04 5-7 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.32	Vert(CT) -0.08 5-7 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.01 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 76 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*
1-2: 2x4 SP No.3
BOT CHORD 2x4 SP No.2
WEBS 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.): 1-2.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 11=0-3-8, 9=0-3-8, 5=0-3-8
Max Horz 11=-52(LC 21)
Max Uplift 11=-22(LC 16), 9=-41(LC 12), 5=-77(LC 13)
Max Grav 11=354(LC 58), 9=1024(LC 2), 5=441(LC 2)

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

TOP CHORD 2-3=-78/573, 3-4=-465/96, 4-5=-666/132
BOT CHORD 10-11=-94/482, 9-10=-89/481, 5-7=-85/591
WEBS 2-11=-525/143, 2-9=-898/236, 3-9=-891/191, 3-7=-25/461, 4-7=-296/129

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 1-10-8, Interior(1) 1-10-8 to 7-9-8, Exterior(2R) 7-9-8 to 10-9-8, Interior(1) 10-9-8 to 17-6-0 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 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, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 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 1.00 times flat roof load of 11.6 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11, 9, and 5. This connection is for uplift only and does not consider lateral forces.
- 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s). The design/selection of such connection device(s) is the responsibility of others.



August 9, 2022

LOAD CASE(S) Standard

Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	189 BIRCHWOOD GROVE - ROOF	I53543878
33065-33065A	D3	Roof Special	2	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.610 s Jul 18 2022 MiTek Industries, Inc. Mon Aug 8 13:38:52 2022 Page 2
 ID:ytBjKryWUodVVgHGUH7JdBzXTGY-njEuh6Tdt4euP8uJVYy88F4olc867?R9oQ48Lypub1

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-83, 2-3=-43, 3-6=-43, 5-11=-20

Concentrated Loads (lb)

Vert: 2=-280

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818 Soundside Road
 Edenton, NC 27932

Job 33065-33065A	Truss V1	Truss Type GABLE	Qty 1	Ply 1	189 BIRCHWOOD GROVE - ROOF Job Reference (optional)	153543879
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84 Components (Dunn), Dunn, NC - 28334,

8.610 s Jul 18 2022 MiTek Industries, Inc. Mon Aug 8 13:38:53 2022 Page 1

ID:ytBjKryWUodVVgHGUH7JdBzXTGY-FvnGvSUFBCVWZj5tC3BhLoMh903rdDaOS9ehoypub0

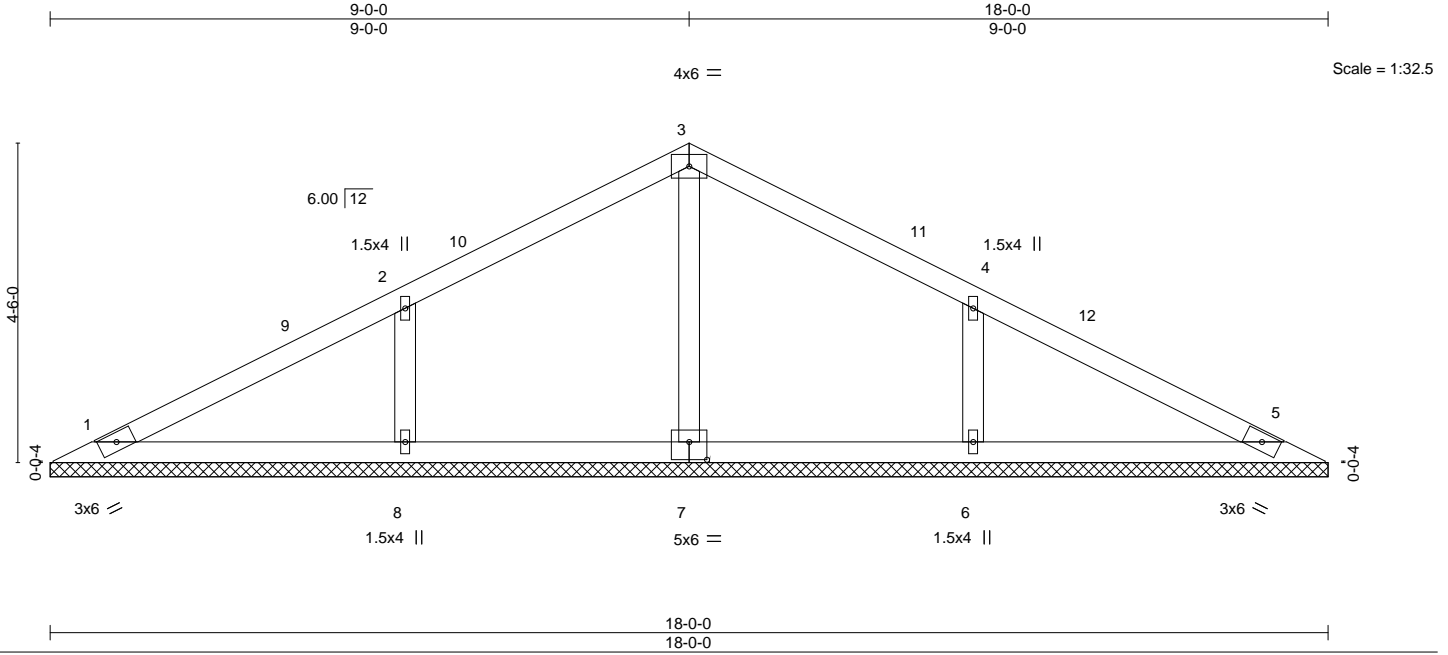


Plate Offsets (X,Y)-- [7:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.26	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.15	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 66 lb	FT = 20%

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

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

REACTIONS. All bearings 18-0-0.
 (lb) - Max Horz 1=60(LC 21)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=404(LC 35), 6=404(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-8=-299/153, 4-6=-299/153

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 9-0-0, Exterior(2R) 9-0-0 to 12-0-0, Interior(1) 12-0-0 to 17-4-7 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
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 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
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - n/a
 - n/a
 - 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.



August 9, 2022

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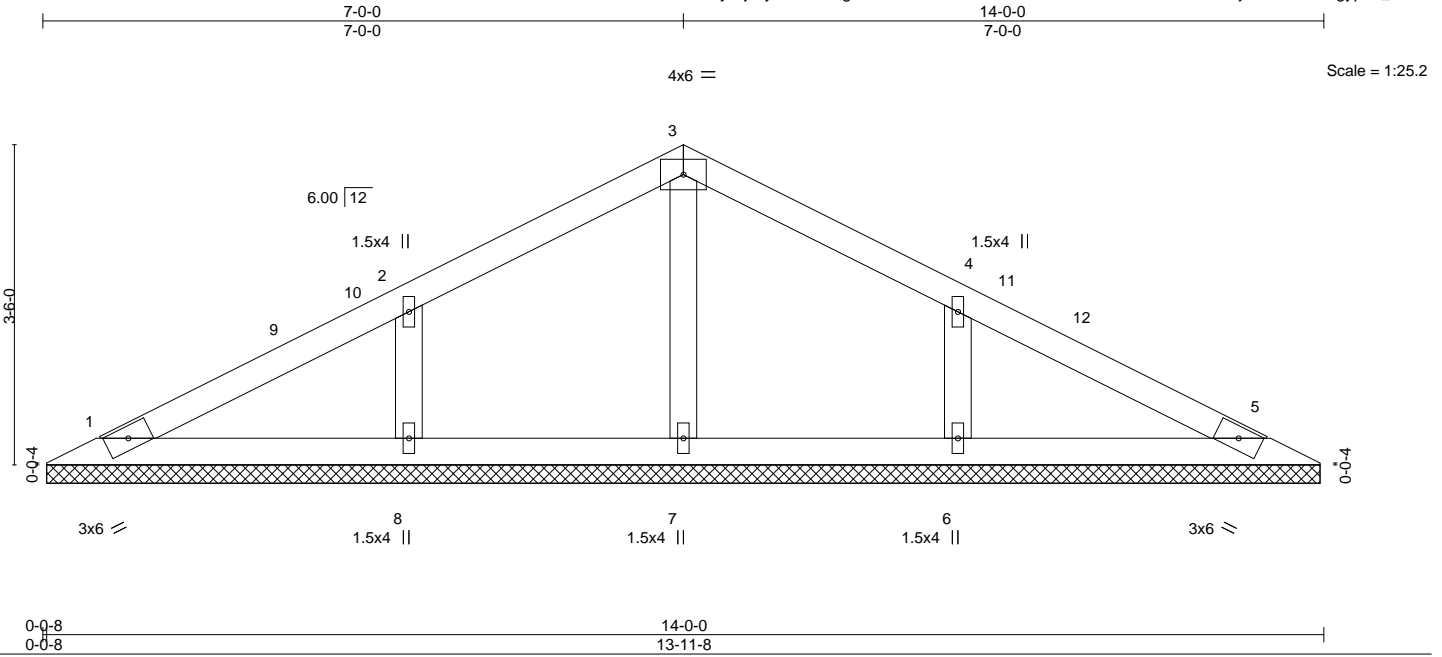


818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	189 BIRCHWOOD GROVE - ROOF	153543880
33065-33065A	V2	Valley	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.610 s Jul 18 2022 MiTek Industries, Inc. Mon Aug 8 13:38:55 2022 Page 1
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.16	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.09	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 51 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 13-11-0.
(lb) - Max Horz 1=45(LC 21)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 6=313(LC 23), 8=313(LC 22)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-0-0, Exterior(2R) 7-0-0 to 10-0-0, Interior(1) 10-0-0 to 13-4-7 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 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
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- n/a
- n/a
- 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.



August 9, 2022

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



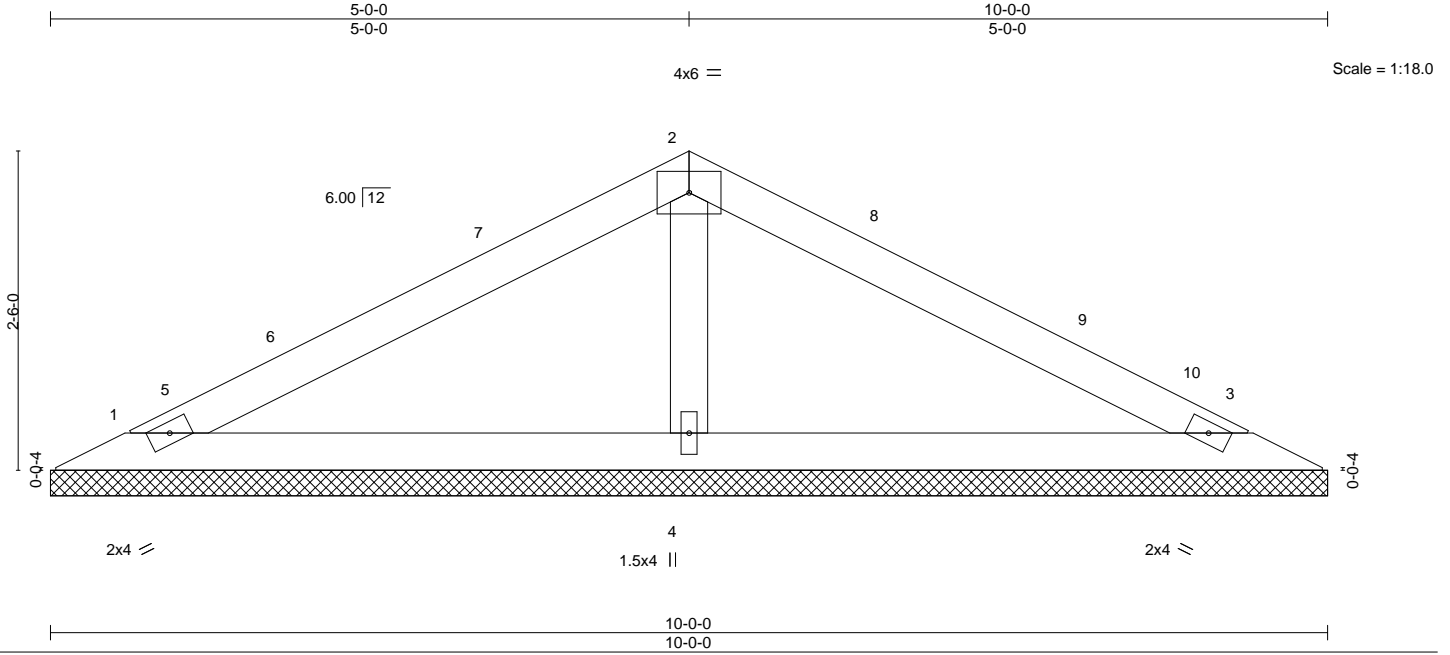
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	189 BIRCHWOOD GROVE - ROOF	153543881
33065-33065A	V3	GABLE	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

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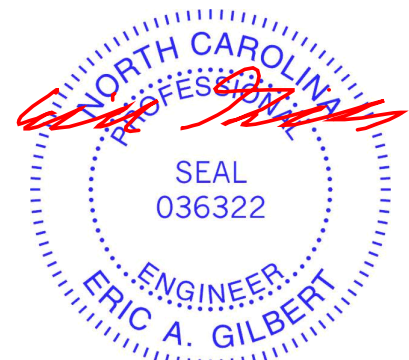
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.48	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.19	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 32 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.3	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

REACTIONS. (size) 1=10-0-0, 3=10-0-0, 4=10-0-0
 Max Horz 1=31(LC 20)
 Max Uplift 1=-21(LC 16), 3=-26(LC 17)
 Max Grav 1=161(LC 22), 3=161(LC 23), 4=382(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-4=-253/138

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-0-0, Exterior(2R) 5-0-0 to 8-0-0, Interior(1) 8-0-0 to 9-4-7 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 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) Gable requires continuous bottom chord bearing.
 - 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) n/a
 - 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.



August 9, 2022

Job	Truss	Truss Type	Qty	Ply	189 BIRCHWOOD GROVE - ROOF	153543882
33065-33065A	V4	Valley	1	1	Job Reference (optional)	

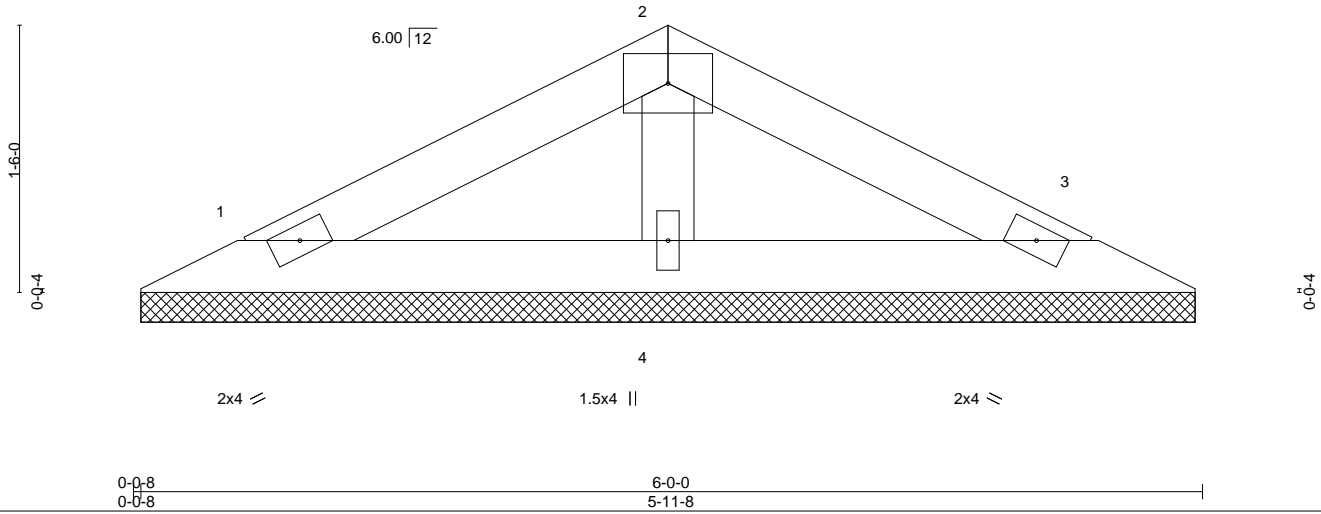
84 Components (Dunn), Dunn, NC - 28334,

8.610 s Jul 18 2022 MiTek Industries, Inc. Mon Aug 8 13:38:57 2022 Page 1
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4x6 =

Scale = 1:12.9



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.17	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 11.6/15.0	Plate Grip DOL 1.15	BC 0.10	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 18 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.3
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.

REACTIONS.

(size) 1=5-11-0, 3=5-11-0, 4=5-11-0
Max Horz 1=-17(LC 21)
Max Uplift 1=-15(LC 16), 3=-18(LC 17)
Max Grav 1=96(LC 2), 3=96(LC 2), 4=188(LC 2)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 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
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- n/a
- 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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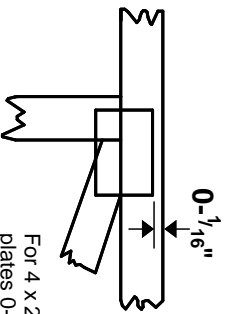
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

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

PLATE SIZE

4 X 4

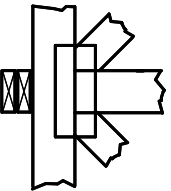
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



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

Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8
dimensions shown in ft-in-sixteenths
(Drawings not to scale)



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/TP1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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. Rewriting pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.