

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 35115-35115A
52 SERENITY - 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: I56288086 thru I56288123

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844



January 25, 2023

Gilbert, Eric

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

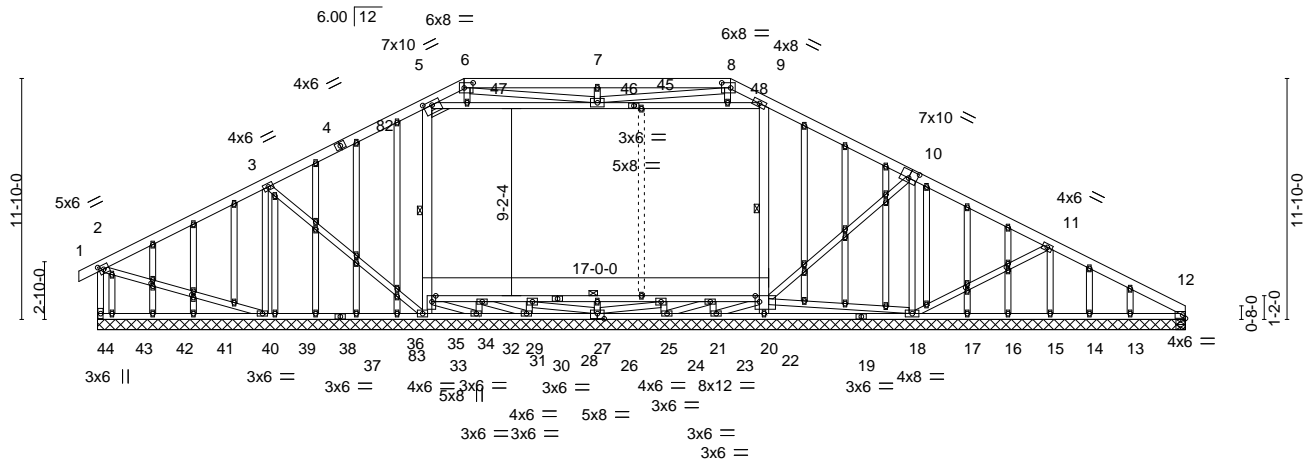
Job	Truss	Truss Type	Qty	Ply	52 SERENITY - ROOF	156288086
35115-35115A	A1E	ROOF TRUSS	1	1		

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

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:00 2023 Page 1



Scale = 1:113.1



NON-STRUCTURAL STUD(S) SHOWN DASHED FOR TRUSS HANDLING. TO BE REMOVED AFTER TRUSS IS INSTALLED.

Plate Offsets (X,Y)--	[2:0-2-11,0-2-8], [5:0-5-0,0-2-4], [6:0-5-4,0-3-0], [8:0-5-4,0-3-0], [10:0-5-0,0-4-8], [22:0-2-8,Edge], [27:0-4-0,0-3-0], [33:Edge,0-2-4], [58:0-1-10,0-1-0], [60:0-1-10,0-1-0], [75:0-1-15,0-1-0], [77:0-1-15,0-1-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.45	Vert(LL)	-0.05 18-20	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.36	Vert(CT)	-0.11 18-20	>822	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.46	Horz(CT)	0.01 12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 596 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-5-2 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 10-0-0 oc bracing: 22-33
WEBS 2x4 SP No.2 *Except* 5-34,9-20: 2x6 SP No.2 2-44,27-30,24-27,32-33,29-31,23-25,21-22: 2x4 SP No.3	WEBS 1 Row at midpt 5-33, 9-22
OTHERS 2x4 SP No.2	


REACTIONS. All bearings 53-5-0.
 (lb) - Max Horz 44=202(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 44, 34, 18, 12, 15, 39, 43 except 40=112(LC 10)
 Max Grav All reactions 250 lb or less at joint(s) 12, 12, 35, 36, 38, 39, 41, 42, 43, 17, 16, 14, 13 except 44=522(LC 22), 40=636(LC 22), 34=770(LC 1), 20=791(LC 23), 18=587(LC 1), 27=440(LC 16), 29=378(LC 16), 25=384(LC 16), 32=349(LC 16), 21=293(LC 16), 15=579(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=390/123, 3-5=497/205, 5-6=892/190, 6-7=2189/472, 7-8=2189/472, 8-9=915/205, 9-10=516/223, 10-11=404/146, 11-12=251/68, 2-44=475/170
 BOT CHORD 39-40=53/299, 38-39=53/299, 36-38=53/299, 35-36=53/299, 34-35=53/299, 32-34=11/261, 20-21=0/256
 WEBS 3-40=625/185, 33-34=790/60, 33-82=762/146, 5-82=584/131, 20-22=678/46, 9-22=722/116, 10-18=533/155, 26-27=386/0, 29-30=319/0, 24-25=315/0, 5-47=5/355, 46-47=3/371, 46-48=31/410, 9-48=36/408, 7-46=323/135, 31-32=298/0, 21-23=273/0, 6-46=332/1541, 8-46=307/1467, 11-15=538/176

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - 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.
 - Ceiling dead load (5.0 psf) on member(s). 5-47, 46-47, 46-48, 9-48; Wall dead load (5.0psf) on member(s).33-82, 5-82, 9-22
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 31-33, 30-31, 26-30, 24-26, 23-24, 22-23



Continued on page 2

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>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</p>	<p>ENGINEERING BY  TRENCO A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 35115-35115A	Truss A1E	Truss Type ROOF TRUSS	Qty 1	Ply 1	52 SERENITY - ROOF I56288086 Job Reference (optional)
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:01 2023 Page 2
ID:ED3wuaDFL2j3tboIojMjZyqmu4-Y4Z30vSym4m7mz3Yaw_99Dv_KFeBu1XLQZ0I0ezsOa0

NOTES-

- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 44, 34, 18, 12, 15, 39, 43 except (jt=lb) 40=112.
- 10) Attic room checked for L/360 deflection.

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

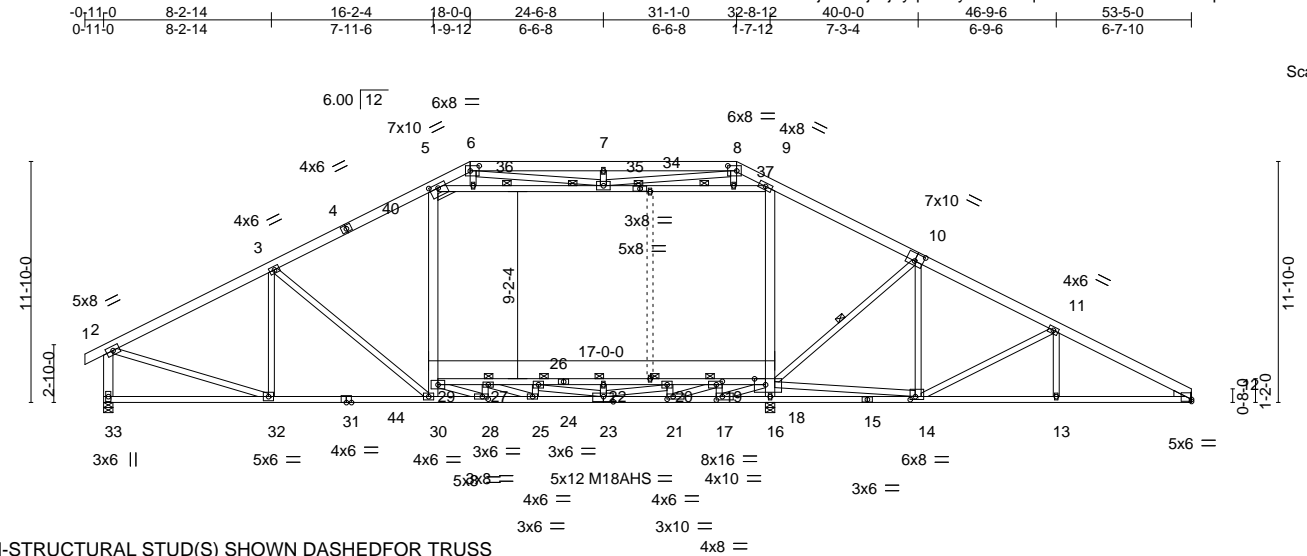
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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



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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	52 SERENITY - ROOF	I56288087
35115-35115A	A2	ROOF TRUSS	4	1		

84 Components (Dunn), Dunn, NC - 28334, 8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:04 2023 Page 1
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Scale = 1:113.1

NON-STRUCTURAL STUD(S) SHOWN DASHED FOR TRUSS HANDLING. TO BE REMOVED AFTER TRUSS IS INSTALLED.

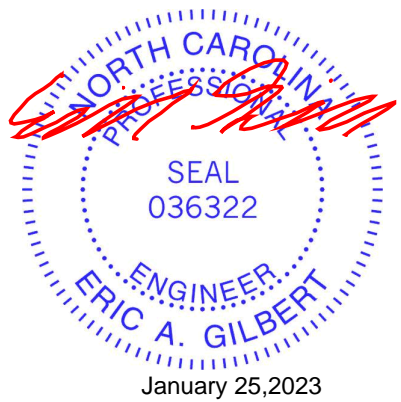
Plate Offsets (X, Y)--	[5:0-5-0,0-2-4], [6:0-5-4,0-3-0], [8:0-5-4,0-3-0], [10:0-5-0,0-4-8], [12:0-0-0,0-1-3], [14:0-3-0,0-1-12], [17:0-3-8,0-2-0], [18:0-6-8,Edge], [19:0-3-8,0-2-0], [21:0-3-8,0-1-8], [23:0-5-12,0-3-0], [28:0-3-8,0-1-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.58	Vert(LL)	-0.35	22-26	>999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.94	Vert(CT)	-0.66	25-28	>590	M18AHS	186/179
BCLL 0.0 *	Rep Stress Incr YES	WB 0.89	Horz(CT)	0.14	12	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Attic	-0.25	18-29	776		Weight: 469 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 BOT CHORD 2x4 SP No.2 *Except* 12-15,15-23: 2x4 SP No.1, 23-31: 2x4 SP DSS WEBS 2x4 SP No.2 *Except* 5-30,9-16,2-33: 2x6 SP No.2, 9-34,5-34,14-18: 2x4 SP No.1 5-40: 2x4 SP No.3 OTHERS 2x4 SP No.2 WEDGE Right: 2x4 SP No.3	TOP CHORD Structural wood sheathing directly applied or 3-2-9 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 30-32 3-11-3 oc bracing: 16-17 4-3-9 oc bracing: 14-16. 3-2-0 oc bracing: 18-29 WEBS 1 Row at midpt 10-18 3-3-0 oc bracing: 5-9
REACTIONS. (size) 33=0-5-8, 16=0-5-8, 12=Mechanical Max Horz 33=194(LC 11) Max Grav 33=2527(LC 24), 16=1382(LC 25), 12=1967(LC 2)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-3139/57, 3-5=-3316/45, 5-6=-1299/124, 6-7=-2215/456, 7-8=-2215/456, 8-9=-1574/158, 9-10=-3210/67, 10-11=-3310/160, 11-12=-3701/188, 2-33=-2456/129
BOT CHORD	30-32=0/2724, 28-30=0/2953, 25-28=0/4192, 23-25=0/5025, 21-23=0/3219, 17-21=0/965, 16-17=-1855/0, 14-16=-1661/0, 13-14=-94/3212, 12-13=-94/3212, 27-29=-1629/0, 26-27=-2625/0, 22-26=-2534/0, 20-22=-2534/0, 19-20=-820/669, 18-19=0/1938
WEBS	3-32=-584/71, 3-30=0/335, 29-40=0/844, 5-40=0/728, 16-18=-1101/74, 9-18=-12/862, 10-18=-445/287, 10-14=-275/102, 2-32=0/2733, 22-23=-381/0, 25-26=-280/3, 20-21=-755/0, 23-26=-296/40, 20-23=0/1774, 5-36=-1734/54, 35-36=-1707/56, 35-37=-1518/7, 9-37=-1615/1, 7-35=-313/136, 27-28=-639/0, 28-29=0/1699, 25-27=0/1057, 17-19=-1133/0, 19-21=0/2448, 17-18=0/2971, 8-37=0/489, 14-18=0/4288, 6-35=-433/1101, 8-35=-457/1058, 11-14=-464/170

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - 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.
 - Ceiling dead load (5.0 psf) on member(s). 5-36, 35-36, 35-37, 9-37; Wall dead load (5.0psf) on member(s).29-40, 5-40, 9-18



Job 35115-35115A	Truss A2	Truss Type ROOF TRUSS	Qty 4	Ply 1	52 SERENITY - ROOF Job Reference (optional)	I56288087
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:04 2023 Page 2
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- NOTES-**
- 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 27-29, 26-27, 22-26, 20-22, 19-20, 18-19
 - 10) Refer to girder(s) for truss to truss connections.
 - 11) Attic room checked for L/360 deflection.

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

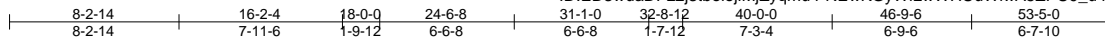
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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



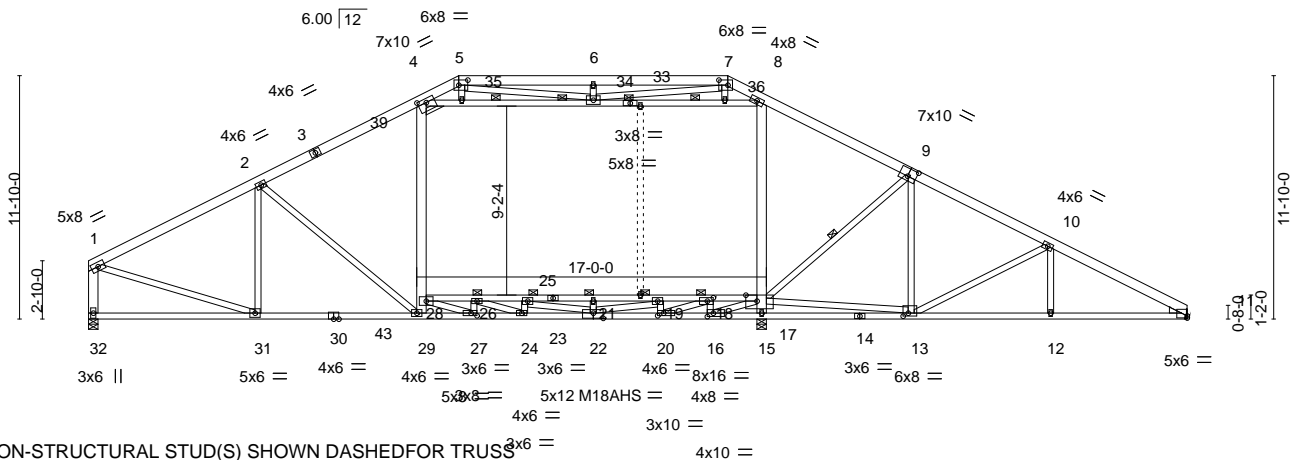
818 Soundside Road
Edenton, NC 27932

Job 35115-35115A	Truss A3	Truss Type ROOF TRUSS	Qty 3	Ply 1	52 SERENITY - ROOF	I56288088
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84 Components (Dunn), Dunn, NC - 28334, 8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:07 2023 Page 1



Scale = 1:112.0



NON-STRUCTURAL STUD(S) SHOWN DASHED FOR TRUSS HANDLING. TO BE REMOVED AFTER TRUSS IS INSTALLED.

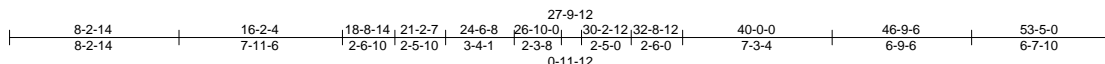


Plate Offsets (X, Y)--	[4:0-5-0,0-2-4], [5:0-5-4,0-3-0], [7:0-5-4,0-3-0], [9:0-5-0,0-4-8], [11:0-0-0,0-1-3], [13:0-3-0,0-1-12], [16:0-3-8,0-2-0], [17:0-6-8,Edge], [18:0-3-8,0-2-0], [20:0-3-8,0-1-8], [22:0-5-12,0-3-0], [27:0-3-8,0-1-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.58	Vert(LL)	-0.35 21-25	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.94	Vert(CT)	-0.66 24-27	>587	180	M18AHS	186/179
BCLL 0.0 *	Rep Stress Incr YES	WB 0.90	Horz(CT)	0.14 11	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Attic	-0.25 17-28	776	360		Weight: 467 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-2-8 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* 11-14,14-22: 2x4 SP No.1, 22-30: 2x4 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 29-31 3-11-2 oc bracing: 15-16 4-3-8 oc bracing: 13-15. 3-2-0 oc bracing: 17-28
WEBS 2x4 SP No.2 *Except* 4-29,8-15,1-32: 2x6 SP No.2, 8-33,4-33,13-17: 2x4 SP No.1	WEBS 1 Row at midpt 9-17 3-3-0 oc bracing: 4-8
OTHERS 2x4 SP No.2	
WEDGE Right: 2x4 SP No.3	

REACTIONS. (size) 32=0-5-8, 15=0-5-8, 11=Mechanical
Max Horz 32=202(LC 11)
Max Grav 32=2471(LC 24), 15=1376(LC 25), 11=1971(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3146/48, 2-4=-3327/39, 4-5=-1278/127, 5-6=-2198/461, 6-7=-2198/461, 7-8=-1571/157, 8-9=-3221/62, 9-10=-3319/155, 10-11=-3710/183, 1-32=-2401/76
BOT CHORD 29-31=0/2738, 27-29=0/2966, 24-27=0/4203, 22-24=0/5031, 20-22=0/3220, 16-20=0/963, 15-16=-1859/0, 13-15=-1663/0, 12-13=-90/3220, 11-12=-90/3220, 26-28=-1630/0, 25-26=-2623/0, 21-25=-2529/0, 19-21=-2529/0, 18-19=-813/678, 17-18=0/1951
WEBS 2-31=-597/81, 2-29=0/335, 28-39=0/843, 4-39=0/728, 15-17=-1095/76, 8-17=-7/869, 9-17=-444/287, 9-13=-277/101, 1-31=0/2778, 21-22=-381/0, 24-25=-279/4, 19-20=-755/0, 22-25=-300/40, 19-22=0/1777, 4-35=-1779/46, 34-35=-1752/48, 34-36=-1530/3, 8-36=-1628/0, 6-34=-314/136, 26-27=-638/0, 27-28=0/1697, 24-26=0/1054, 16-18=-1133/0, 18-20=0/2451, 16-17=0/2973, 7-36=0/492, 13-17=0/4299, 5-34=-431/1109, 7-34=-462/1042, 10-13=-463/170

- NOTES-
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - 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.
 - Ceiling dead load (5.0 psf) on member(s). 4-35, 34-35, 34-36, 8-36; Wall dead load (5.0psf) on member(s).28-39, 4-39, 8-17
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 26-28, 25-26, 21-25, 19-21,



Continued on Page 2

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>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</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job 35115-35115A	Truss A3	Truss Type ROOF TRUSS	Qty 3	Ply 1	52 SERENITY - ROOF Job Reference (optional)	I56288088
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:07 2023 Page 2
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NOTES-

- 10) Refer to girder(s) for truss to truss connections.
- 11) Attic room checked for L/360 deflection.

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 35115-35115A	Truss A4G	Truss Type ROOF TRUSS	Qty 1	Ply 3	52 SERENITY - ROOF	156288089
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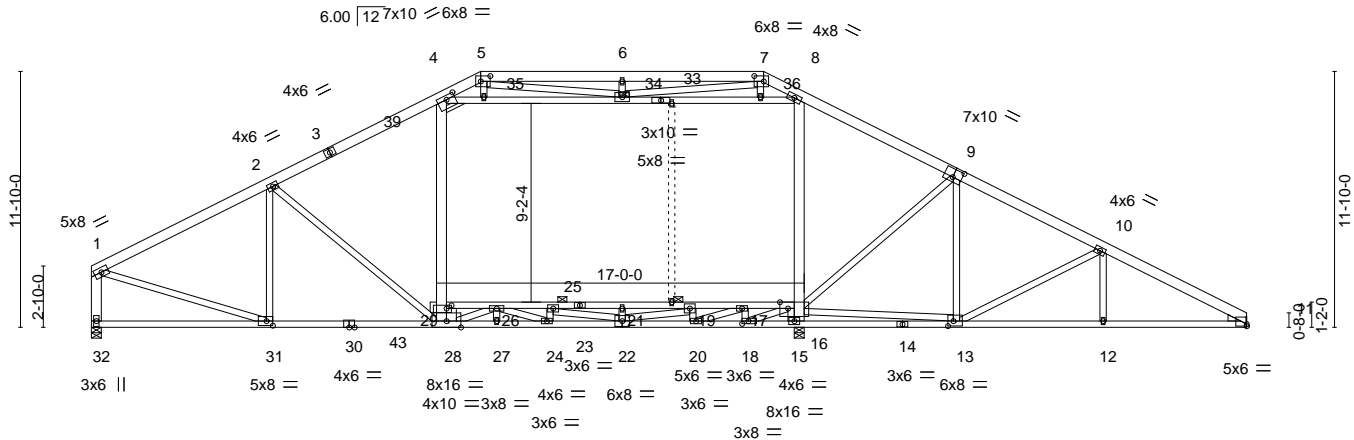
84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:12 2023 Page 1

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Scale = 1:106.5



NON-STRUCTURAL STUD(S) SHOWN DASHED FOR TRUSS HANDLING. TO BE REMOVED AFTER TRUSS IS INSTALLED.

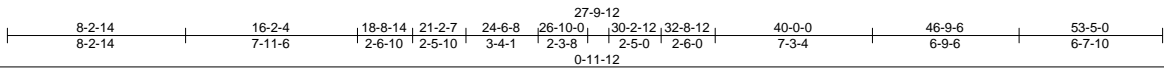


Plate Offsets (X, Y)--	[4:0-4-12,0-2-4], [5:0-5-4,0-3-0], [7:0-5-4,0-3-0], [9:0-5-0,0-4-8], [11:0-0-0,0-1-3], [13:0-3-0,0-2-12], [16:0-4-8,Edge], [18:0-3-8,0-1-8], [29:0-2-12,0-1-12], [31:0-3-8,0-2-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.78	Vert(LL)	-0.43 26-29	>911	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.99	Vert(CT)	-0.67 26-29	>574	180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.89	Horz(CT)	0.16 11	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Attic	-0.22 16-29	897	360		
							Weight: 1407 lb	FT = 20%

- LUMBER-**
- TOP CHORD 2x6 SP No.2
 - BOT CHORD 2x4 SP No.2 *Except* 11-14,22-30: 2x4 SP No.1
 - WEBS 2x4 SP No.3 *Except* 2-31,2-28,9-16,9-13,1-31,13-16,5-34,7-34,10-13: 2x4 SP No.2 4-28: 2x6 SP DSS, 8-15,1-32,28-29: 2x6 SP No.2 8-33,4-33: 2x4 SP DSS
 - OTHERS 2x4 SP No.2
 - WEDGE Right: 2x4 SP No.3

- BRACING-**
- TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 - BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 15-18,13-15. 6-0-0 oc bracing: 16-29
 - WEBS 1 Row at midpt 4-8

PLY-TO-PLY CONNECTION REQUIRES THAT AN APPROVED FACE MOUNT HANGER (SPECIFIED BY OTHERS) IS REQUIRED FOR LOADS REPORTED IN NOTES. FACE MOUNT HANGER SHALL BE ATTACHED WITH A MINIMUM OF 0.148"x 3" NAILS PER HANGER MANUFACTURER SPECIFICATIONS.

- REACTIONS.** (size) 32=0-5-8, 15=0-5-8, 11=Mechanical
 Max Horz 32=202(LC 9)
 Max Uplift 32=208(LC 8), 15=1951(LC 22), 11=94(LC 8)
 Max Grav 32=7270(LC 16), 15=542(LC 8), 11=5292(LC 2)

- FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
- TOP CHORD 1-2=-9704/298, 2-4=-11526/367, 4-5=-2637/198, 5-6=-2248/467, 6-7=-2248/467, 7-8=-3671/248, 8-9=-11120/401, 9-10=-10423/331, 10-11=-10499/248, 1-32=-7197/251
 - BOT CHORD 11-32=-96/271, 28-31=-272/8701, 27-28=0/11800, 24-27=0/11800, 22-24=0/11197, 20-22=0/5444, 18-20=0/2000, 15-18=-2104/0, 13-15=-1144/0, 12-13=-172/9196, 11-12=-172/9196, 26-29=-2165/178, 25-26=-1609/0, 21-25=-811/1288, 19-21=-811/1288, 17-19=-645/4801, 16-17=-255/8245
 - WEBS 2-31=-2423/158, 2-28=-90/2312, 28-29=-167/4309, 29-39=-135/4406, 4-39=-46/3814, 15-16=-446/2236, 8-16=-244/4345, 9-16=-96/976, 9-13=-1158/98, 1-31=-185/8867, 21-22=-445/0, 24-25=-94/276, 19-20=-1233/0, 22-25=-1968/169, 19-22=0/3986, 4-35=-7511/386, 34-35=-7442/388, 34-36=-6872/307, 8-36=-7237/317, 6-34=-308/129, 26-28=-464/774, 24-26=-689/417, 17-18=-1627/0, 17-20=0/3752, 16-18=0/4238, 5-35=0/552, 7-36=-43/1807, 13-16=0/10235, 5-34=-1315/127, 7-34=-1826/113, 10-13=-181/335

- NOTES-**
- 1) N/A
 - 2) 3-ply truss to be connected together as follows:
 Top chords connected with WS45 as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected with WS45 as follows: 2x4 - 1 row at 0-4-0 oc.
 Web connected with 12 Gauge (0.216"x3.5") screws as follows: 2x4 - 1 row at 0-9-0 oc, Except member 29-28 2x4 - 2 rows staggered at 0-6-0 oc, 2x6 - 3 rows staggered at 0-9-0 oc, Except member 29-28 2x6 - 3 rows staggered at 0-6-0 oc.
 - 3) 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.



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 35115-35115A	Truss A4G	Truss Type ROOF TRUSS	Qty 1	Ply 3	52 SERENITY - ROOF Job Reference (optional)	156288089
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:13 2023 Page 2
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NOTES-

- 4) Unbalanced roof live loads have been considered for this design.
- 5) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are 2x4 MT20 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) Ceiling dead load (5.0 psf) on member(s). 4-35, 34-35, 34-36, 8-36; Wall dead load (5.0psf) on member(s).29-39, 4-39, 8-16
- 11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 26-29, 25-26, 21-25, 19-21, 17-19, 16-17
- 12) Refer to girder(s) for truss to truss connections.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 32=208, 15=1951.
- 14) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
- 15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 5494 lb down and 367 lb up at 16-5-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 16) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-5=-60, 5-7=-60, 7-11=-60, 32-40=-20, 16-29=-30, 4-8=-10
 - Drag: 4-29=-10, 8-16=-10
 - Concentrated Loads (lb)
 - Vert: 28=-3291(F)

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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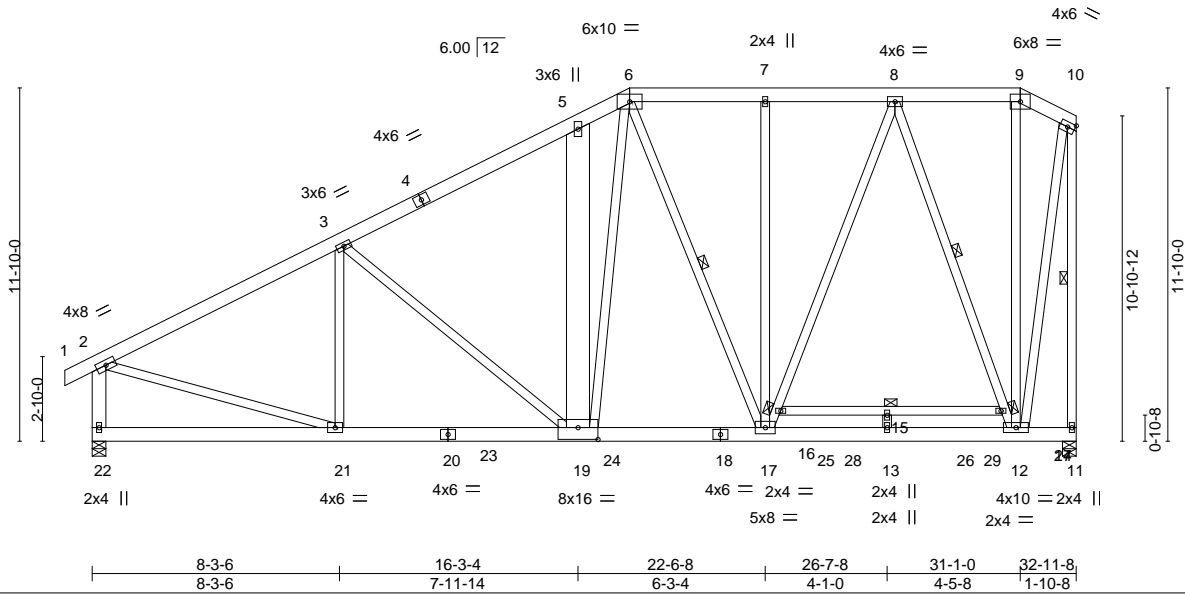
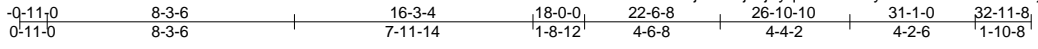


818 Soundside Road
Edenton, NC 27932

Job 35115-35115A	Truss A5G	Truss Type COMMON GIRDER	Qty 1	Ply 2	52 SERENITY - ROOF	156288090
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84 Components (Dunn), Dunn, NC - 28334, 8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:15 2023 Page 1

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Scale = 1:77.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.45	Vert(LL)	-0.08	19-21	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.17	19-21	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.72	Horz(CT)	0.03	11	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 772 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2 *Except* 14-16: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS 2x4 SP No.2 *Except* 5-19: 2x10 SP DSS, 2-22: 2x6 SP No.2, 8-12: 2x4 SP No.1	WEBS 6-0-0 oc bracing: 14-16 1 Row at midpt 6-17, 10-11, 8-14

REACTIONS. (size) 22=0-5-8, 11=0-5-8
 Max Horz 22=293(LC 8)
 Max Uplift 22=228(LC 8), 11=186(LC 5)
 Max Grav 22=3073(LC 1), 11=3047(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-3896/307, 3-5=-4160/377, 5-6=-4032/463, 6-7=-2345/200, 7-8=-2345/200,
 8-9=-494/31, 9-10=-587/33, 2-22=-2988/268, 10-11=-3040/133
 BOT CHORD 21-22=-320/158, 19-21=-470/3390, 17-19=-312/3092, 13-17=-113/1455, 12-13=-113/1455
 WEBS 3-21=-816/154, 3-19=-116/490, 6-19=-530/3440, 6-17=-2015/347, 2-21=-157/3380,
 16-17=-254/2487, 8-16=-229/2539, 8-14=-2851/293, 12-14=-2893/267, 10-12=-128/2756

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x10 - 2 rows staggered 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 7-10; Vult=120mph Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 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, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 22=228, 11=186.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3291 lb down and 367 lb up at 16-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



January 25, 2023

Continued on page 2

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ENGINEERING BY
TRENCO
 A MiTek Affiliate

818 Soundside Road
 Edenton, NC 27932

Job 35115-35115A	Truss A5G	Truss Type COMMON GIRDER	Qty 1	Ply 2	52 SERENITY - ROOF I56288090 Job Reference (optional)
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:16 2023 Page 2
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LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-6=-60, 6-9=-60, 9-10=-60, 11-22=-20, 14-16=-20
Concentrated Loads (lb)
Vert: 19=-3291(F)

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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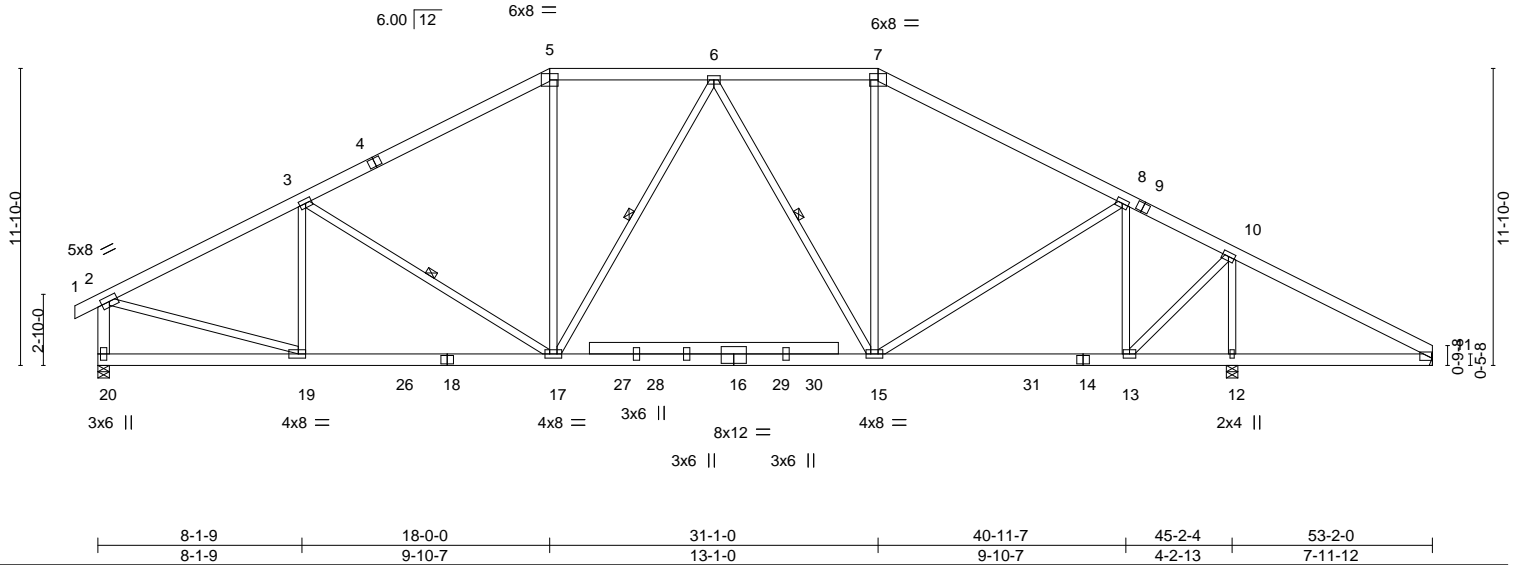
818 Soundside Road
Edenton, NC 27932

Job 35115-35115A	Truss A6	Truss Type Common	Qty 3	Ply 1	52 SERENITY - ROOF	156288091
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8.630 s Nov 21 2022 MiTek Industries, Inc. Wed Jan 25 11:31:31 2023 Page 1



Scale = 1:91.8



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.68	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.46	Vert(LL) -0.23 15-17 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.77	Vert(CT) -0.53 15-17 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.04 12 n/a n/a		
	Code IRC2015/TPI2014			Weight: 438 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-7-7 oc purlins, except end verticals.
BOT CHORD 2x6 SP DSS *Except* 21-22: 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 2-20: 2x6 SP No.2	WEBS 1 Row at midpt 3-17, 6-17, 6-15

REACTIONS. (size) 11=Mechanical, 12=0-5-8, 20=0-5-8
 Max Horz 20=-190(LC 11)
 Max Uplift 11=-69(LC 11)
 Max Grav 11=267(LC 22), 12=2336(LC 2), 20=1945(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2329/265, 3-5=-2271/248, 5-6=-1930/280, 6-7=-1737/269, 7-8=-2054/234,
 8-10=-1282/232, 2-20=-1855/272
 BOT CHORD 17-19=-77/2014, 15-17=0/1921, 13-15=-28/1111
 WEBS 3-19=-456/114, 3-17=-185/264, 5-17=0/591, 6-15=-544/125, 7-15=0/518, 8-15=0/803,
 8-13=-1138/101, 10-13=-71/1703, 10-12=-2095/236, 2-19=-116/1995

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 200.0lb AC unit load placed on the bottom chord, 24-6-8 from left end, supported at two points, 5-0-0 apart.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 4x6 MT20 unless otherwise indicated.
 - 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.
 - All bearings are assumed to be User Defined crushing capacity of 425 psi.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 11.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



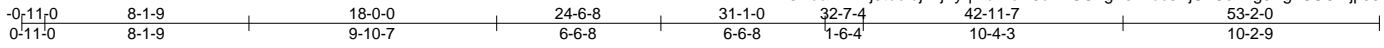
January 25, 2023

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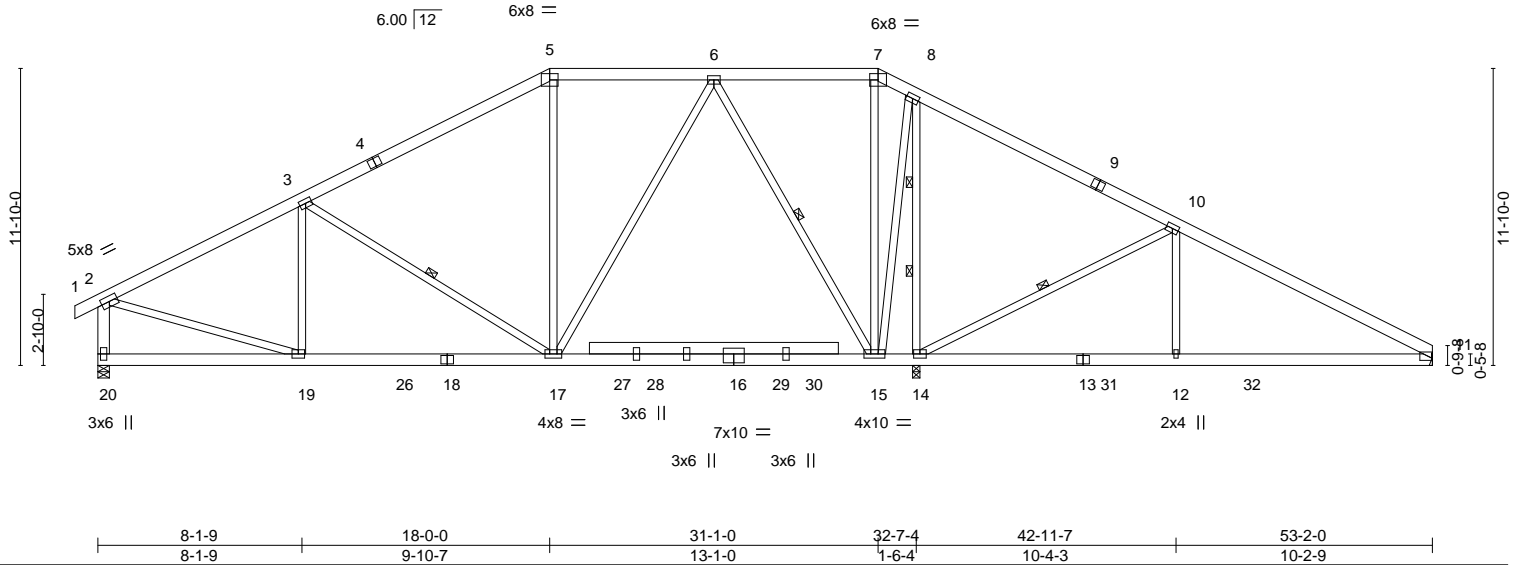
ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 35115-35115A	Truss A7	Truss Type Common	Qty 3	Ply 1	52 SERENITY - ROOF	156288092
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8.630 s Nov 21 2022 MiTek Industries, Inc. Wed Jan 25 11:32:50 2023 Page 1



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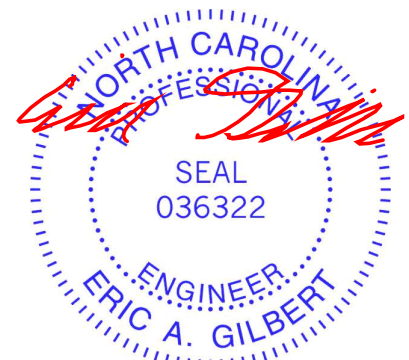
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.54	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.95	Vert(LL) -0.26 15-17 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.83	Vert(CT) -0.60 15-17 >652 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.03 11 n/a n/a		
	Code IRC2015/TPI2014				Weight: 453 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-3-7 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 2-20: 2x6 SP No.2	WEBS 1 Row at midpt 3-17, 6-15, 10-14 2 Rows at 1/3 pts 8-14

REACTIONS. (size) 20=0-5-8, 14=0-3-8 (req. 0-3-11), 11=Mechanical
 Max Horz 20=-190(LC 11)
 Max Uplift 20=-24(LC 10), 11=-39(LC 11)
 Max Grav 20=1418(LC 21), 14=2356(LC 2), 11=791(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1599/181, 3-5=-1326/145, 5-6=-1079/187, 6-7=-273/92, 7-8=-378/148,
 10-11=-1110/113, 2-20=-1333/212
 BOT CHORD 17-19=-48/1356, 15-17=0/812, 14-15=-57/262, 12-14=0/906, 11-12=0/906
 WEBS 3-19=-254/94, 3-17=-374/257, 6-17=-20/670, 6-15=-1094/178, 8-15=0/1440,
 8-14=-2022/0, 10-14=-1013/282, 10-12=0/429, 2-19=-41/1326

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 200.0lb AC unit load placed on the bottom chord, 24-6-8 from left end, supported at two points, 5-0-0 apart.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 4x6 MT20 unless otherwise indicated.
 - 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.
 - WARNING: Required bearing size at joint(s) 14 greater than input bearing size.
 - All bearings are assumed to be User Defined crushing capacity of 425 psi.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 20 and 39 lb uplift at joint 11.
 - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



January 25, 2023

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 35115-35115A	Truss A8	Truss Type Common	Qty 5	Ply 1	52 SERENITY - ROOF	156288093
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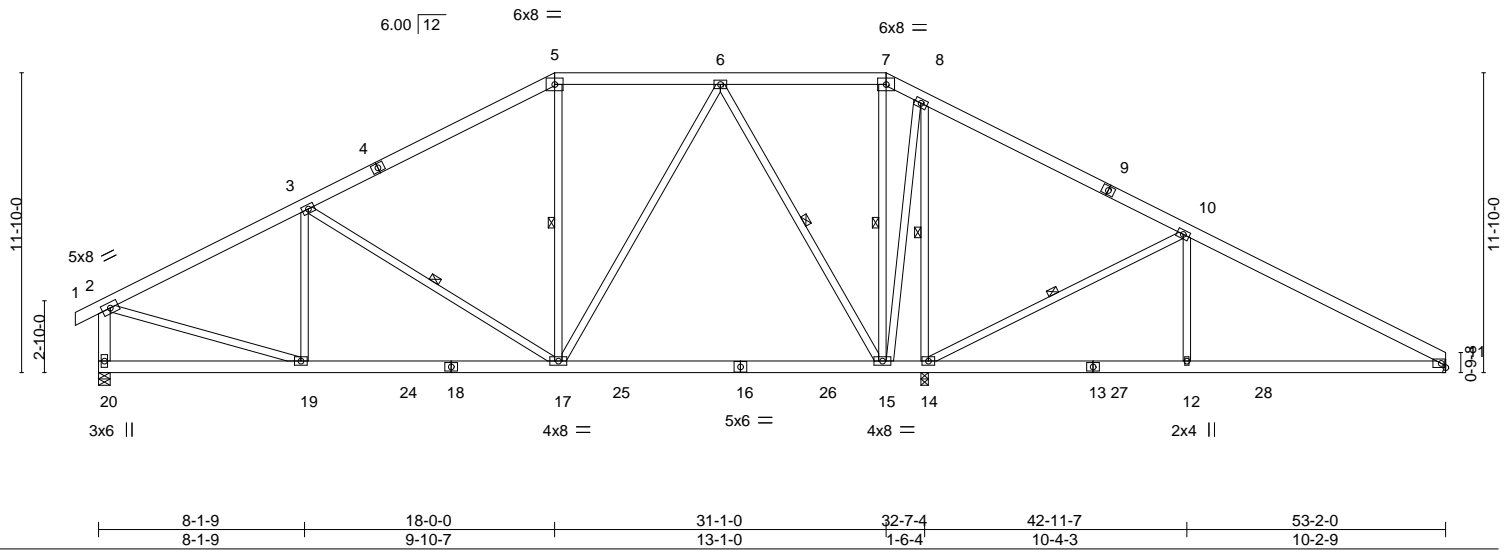
84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:23 2023 Page 1

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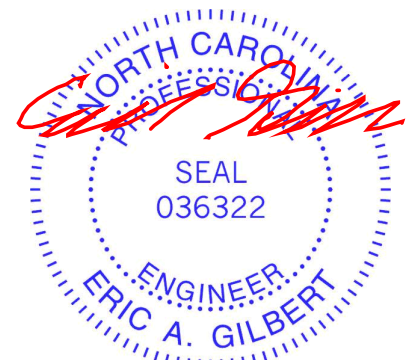


LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL. in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.55	Vert(LL) -0.27	15-17	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.71	Vert(CT) -0.44	15-17	>875		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.89	Horz(CT) 0.03	11	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS					
							Weight: 430 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-5-3 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS 2x4 SP No.2 *Except*	6-0-0 oc bracing: 14-15.
2-20: 2x6 SP No.2	WEBS 1 Row at midpt 3-17, 5-17, 6-15, 7-15, 8-14, 10-14
REACTIONS.	
(size) 20=0-5-8, 14=0-3-8 (req. 0-3-9), 11=Mechanical	
Max Horz 20=-190(LC 11)	
Max Uplift 20=-89(LC 10), 14=-43(LC 11), 11=-64(LC 11)	
Max Grav 20=1352(LC 21), 14=2255(LC 2), 11=766(LC 22)	

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1517/263, 3-5=-1205/275, 5-6=-970/304, 7-8=-282/251, 10-11=-1062/164, 2-20=-1275/270
BOT CHORD 17-19=-121/1289, 15-17=-42/717, 12-14=-34/864, 11-12=-34/864
WEBS 3-17=-426/205, 6-17=-49/643, 6-15=-1063/209, 8-15=0/1217, 8-14=-1771/236, 10-14=-1017/278, 10-12=0/431, 2-19=-1111/1261

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are 4x6 MT20 unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 7) WARNING: Required bearing size at joint(s) 14 greater than input bearing size.
 - 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) 20, 14, 11.



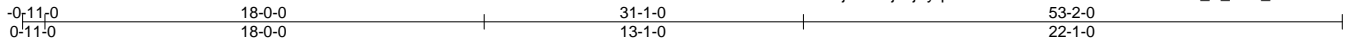
January 25, 2023

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>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</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job 35115-35115A	Truss A9E	Truss Type GABLE	Qty 1	Ply 1	52 SERENITY - ROOF Job Reference (optional)	I56288094
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:27 2023 Page 1
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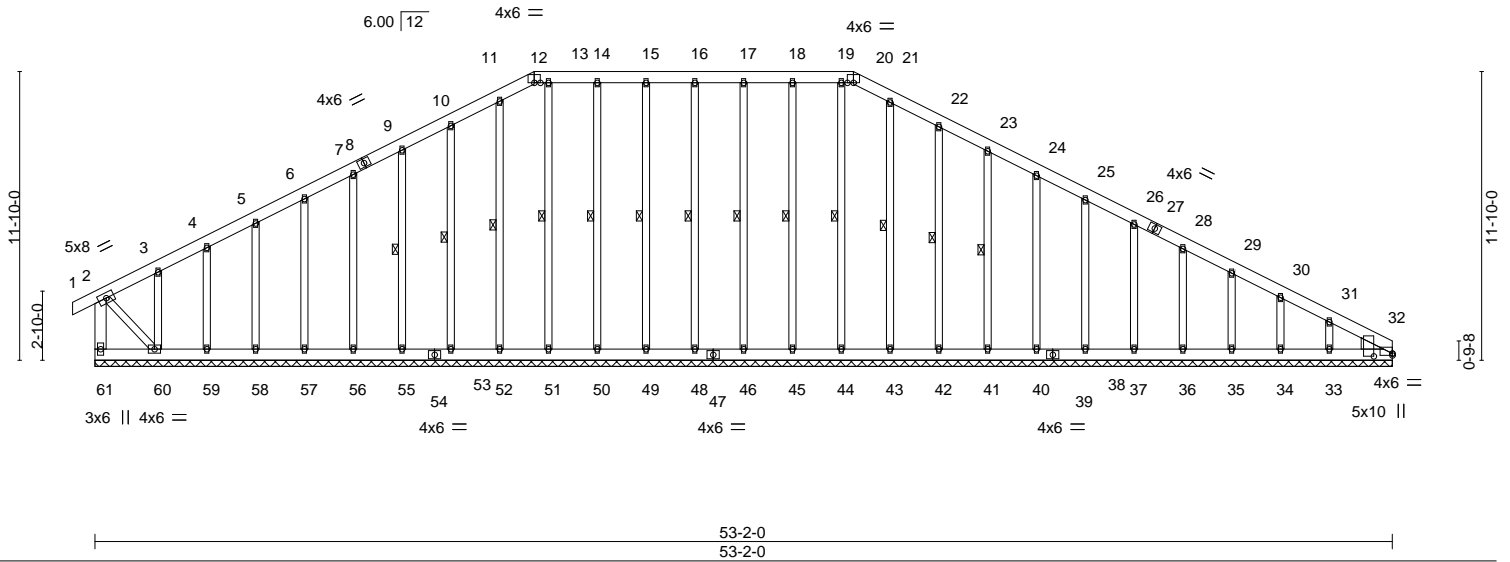


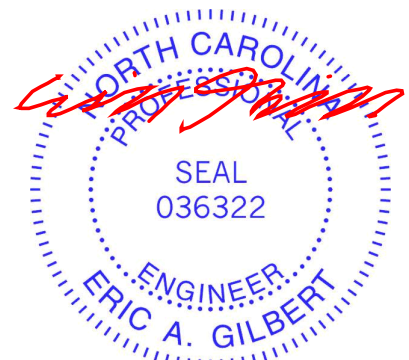
Plate Offsets (X,Y)--	[32:0-0-0,0-0-15], [32:0-1-6,0-9-2]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) -0.00 1 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00 1 n/r 90		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.12	Horz(CT) 0.01 32 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S			
				Weight: 552 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.2 *Except* 2-60: 2x4 SP No.3	WEBS 1 Row at midpt 17-46, 16-48, 15-49, 14-50, 13-51, 11-52, 10-53, 9-55, 18-45, 19-44, 21-43, 22-42, 23-41
OTHERS 2x4 SP No.2 *Except* 5-58,4-59,3-60,26-37,28-36,29-35,30-34,31-33: 2x4 SP No.3	
WEDGE Right: 2x6 SP No.2	

REACTIONS. All bearings 53-2-0.
(lb) - Max Horz 61=200(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 61, 46, 48, 49, 50, 52, 53, 55, 56, 57, 58, 59, 45, 42, 41, 40, 38, 37, 36, 35, 34, 33 except 60=190(LC 10)
Max Grav All reactions 250 lb or less at joint(s) 46, 48, 49, 50, 51, 52, 53, 55, 56, 57, 58, 59, 60, 45, 44, 43, 42, 41, 40, 38, 37, 36, 35, 34, 32, 33 except 61=250(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 11-12=106/266, 12-13=95/260, 13-14=95/260, 14-15=95/260, 15-16=95/260, 16-17=95/260, 17-18=95/260, 18-19=95/260, 19-20=95/260, 20-21=106/267

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;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.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 61, 46, 48, 49, 50, 52, 53, 55, 56, 57, 58, 59, 45, 42, 41, 40, 38, 37, 36, 35, 34, 33 except (jt=lb) 60=190.



January 25, 2023

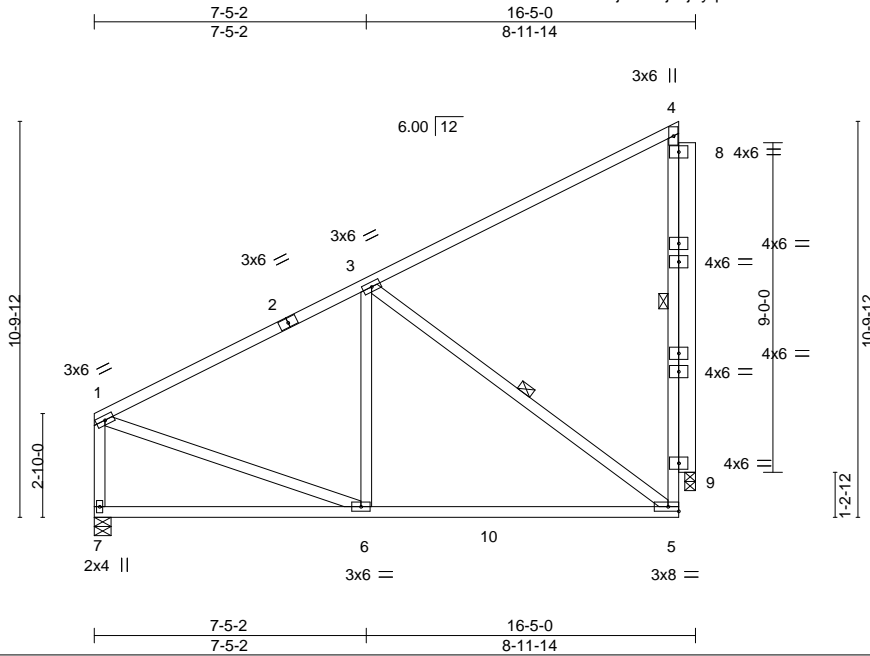
<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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</p>	 <p>818 Soundside Road Edenton, NC 27932</p>
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Job 35115-35115A	Truss B1	Truss Type MONOPICH	Qty 5	Ply 1	52 SERENITY - ROOF Job Reference (optional)	156288095
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:29 2023 Page 1

ID:ED3wuaDFL2j3tboIojMjZyqmu4-kTFeuUnWAHl97HCwDoUjI73f1y8PSI4Tsw0E_0zsOza



Scale = 1:62.9

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL. in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.92	Vert(LL) -0.12	5-6	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.64	Vert(CT) -0.23	5-6	>801		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.29	Horz(CT) -0.01	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS				Weight: 125 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 4-5, 3-5

REACTIONS. (size) 7=0-5-8, 9=0-3-8
 Max Horz 7=258(LC 10)
 Max Uplift 9=177(LC 10)
 Max Grav 7=627(LC 1), 9=627(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-3=-612/0, 5-9=-101/432, 1-7=-566/15
 BOT CHORD 6-7=-301/134, 5-6=-198/478
 WEBS 3-5=-575/242, 1-6=0/465

NOTES-

- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 4) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=177.



January 25, 2023

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 35115-35115A	Truss B2	Truss Type MONOPIITCH	Qty 4	Ply 1	52 SERENITY - ROOF	156288096
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84 Components (Dunn),

Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:30 2023 Page 1

ID:ED3wuaDFL2j3tboIojMjZyqmu4-Cfp05po8x?Q0lQn7mW?yqKcwbLODBBZc4aXnWSzsOZZ



Scale: 3/16"=1'

Plate Offsets (X,Y)--	[2:0-3-9,0-0-1], [8:0-2-12,0-1-8]
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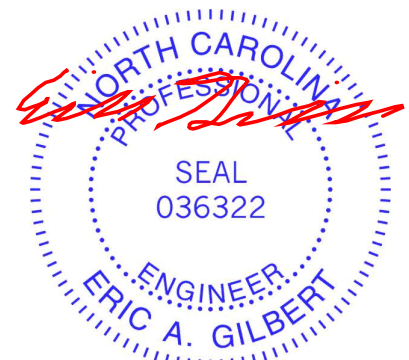
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.55	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.98	Vert(LL) -0.39 8-10 >624 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.34	Vert(CT) -0.60 8-10 >410 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.03 8 n/a n/a		
	Code IRC2015/TPI2014			Weight: 140 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-10-6 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 7-8, 6-8
OTHERS 2x6 SP No.2	
SLIDER Left 2x4 SP No.3 1-6-0	

REACTIONS. (size) 2=0-5-8, 8=0-5-8
 Max Horz 2=347(LC 10)
 Max Uplift 2=-18(LC 10), 8=-177(LC 10)
 Max Grav 2=875(LC 1), 8=808(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-1202/38, 4-6=-943/18
 BOT CHORD 2-10=-322/1018, 8-10=-166/528
 WEBS 4-10=-379/211, 6-10=-34/613, 6-8=-763/248

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 8=177.



January 25, 2023

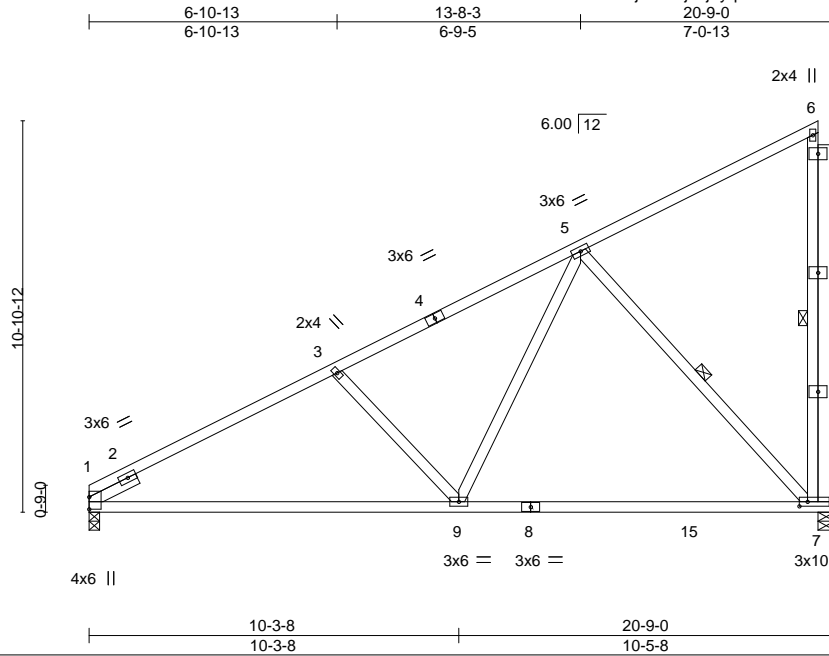
<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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</p>	<p>ENGINEERING BY</p> <p>TRENCO</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 35115-35115A	Truss B2A	Truss Type MONOPIITCH	Qty 1	Ply 1	52 SERENITY - ROOF	156288097
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:32 2023 Page 1

ID:ED3wuaDFL2j3tboIojMjZyqmu4-82xnWVqOTcgk_kwVux1QwHhGz945f57vYu0ubLzsOZx



Scale: 3/16"=1'

Plate Offsets (X,Y)--	[7:0-2-12,0-1-8]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.55	Vert(LL) -0.40 7-9 >616 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.96	Vert(CT) -0.61 7-9 >401 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.33	Horz(CT) 0.02 7 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS			
				Weight: 138 lb	FT = 20%

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

REACTIONS. (size) 1=0-3-8, 7=0-5-8
 Max Horz 1=332(LC 10)
 Max Uplift 1=-1(LC 10), 7=-177(LC 10)
 Max Grav 1=812(LC 1), 7=803(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-3=-1114/40, 3-5=-927/19
 BOT CHORD 1-9=-324/995, 7-9=-167/523
 WEBS 3-9=-364/212, 5-9=-35/598, 5-7=-755/248

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 7=177.

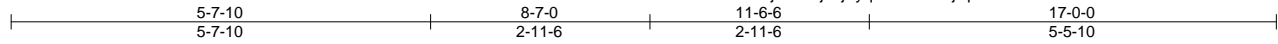


Job 35115-35115A	Truss C1	Truss Type QUEENPOST	Qty 5	Ply 1	52 SERENITY - ROOF	156288098
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:33 2023 Page 1

ID:ED3wuaDFL2j3tboIojMjZyqmu4-cEU9jrQ0EwobcuVhSeZfSzEU0ZUfOZs2nYmR7nzsOZW



4x6 =

Scale = 1:31.0

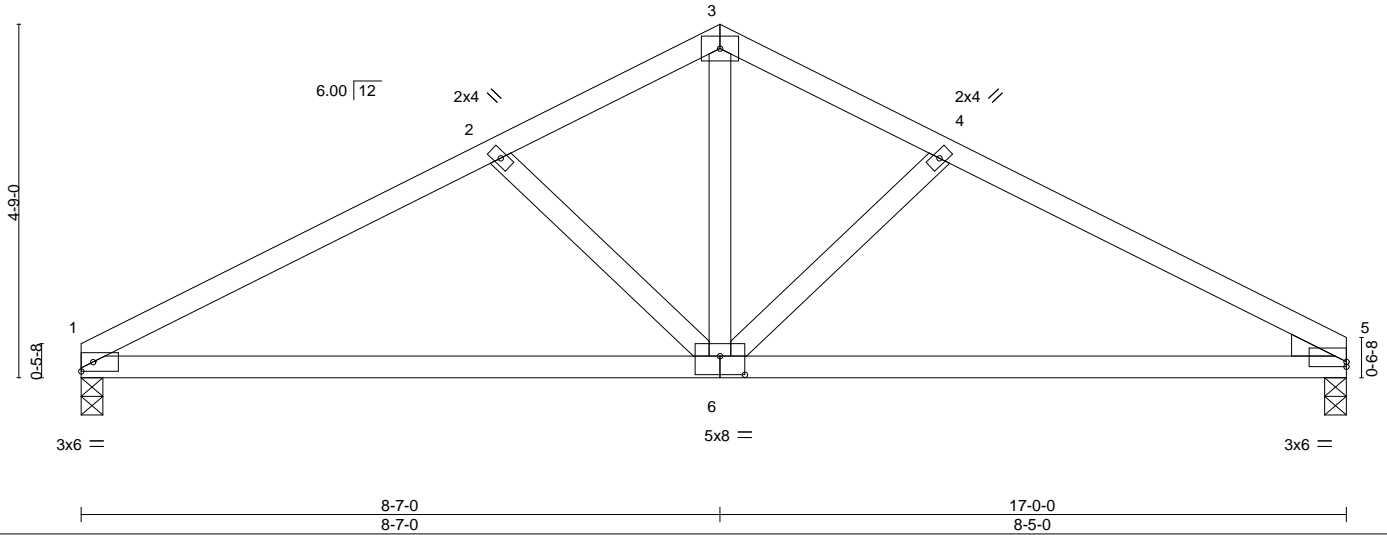


Plate Offsets (X, Y)--	[5:0-0-0,0-0-13], [6:0-4-0,0-3-0]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.34	Vert(LL) -0.09 6-9 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.68	Vert(CT) -0.20 6-9 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.24	Horz(CT) 0.02 5 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS		Weight: 73 lb	FT = 20%

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

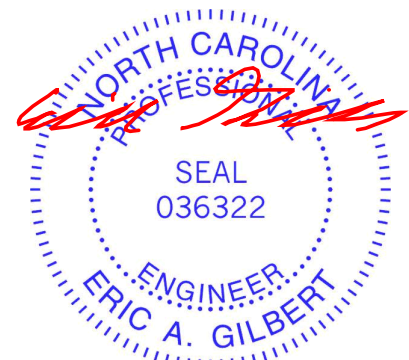
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-1-10 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 5=0-3-8
 Max Horz 1=63(LC 10)
 Max Uplift 1=-38(LC 10), 5=-37(LC 11)
 Max Grav 1=680(LC 1), 5=680(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-1063/207, 2-3=-824/174, 3-4=-821/173, 4-5=-1051/205
 BOT CHORD 1-6=-121/896, 5-6=-118/878
 WEBS 2-6=-301/146, 3-6=-99/575, 4-6=-280/142

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.



January 25, 2023

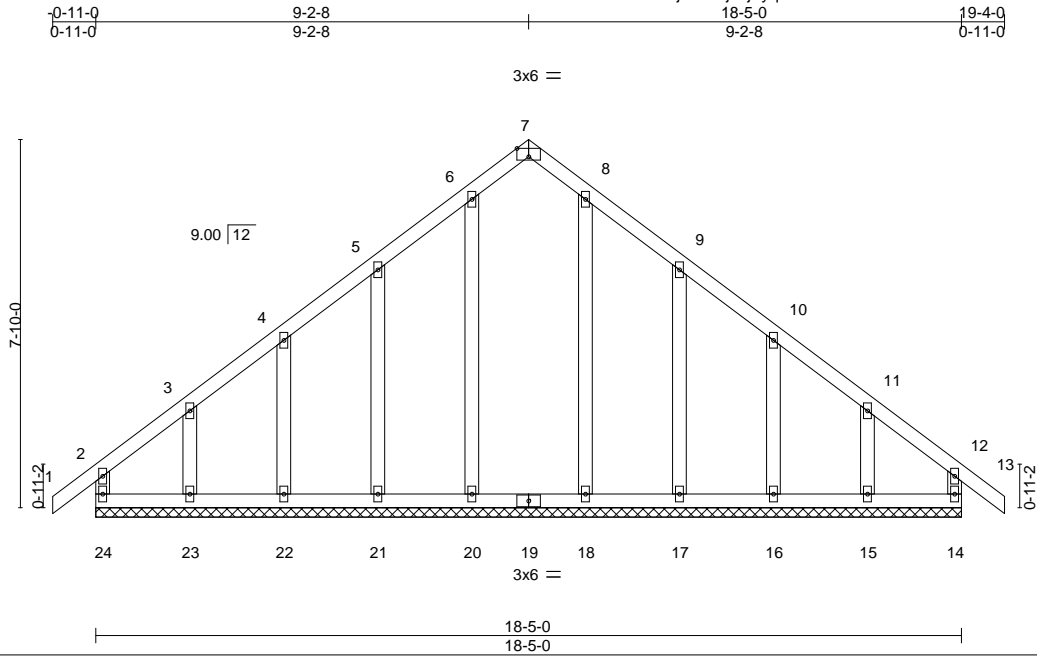
<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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</p>	<p>ENGINEERING BY TRENCO A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 35115-35115A	Truss D1E	Truss Type GABLE	Qty 1	Ply 1	52 SERENITY - ROOF	156288099
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:35 2023 Page 1

ID:ED3wuaDFL2j3tboLjMjZyqmu4-Ydcv8XsHIX2JrCf4Z3b7XOJuHmJGsVZLEsFYBgzsOZU



Scale = 1:49.0

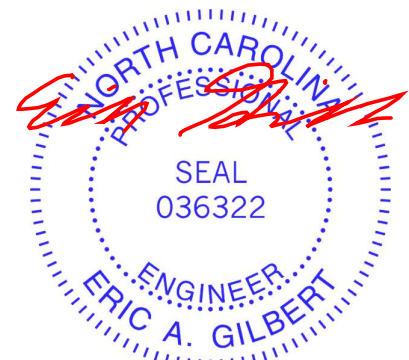
Plate Offsets (X,Y)--	[7:0-3-0,Edge]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	-0.00	13	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	-0.00	13	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.00	14	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R						
								Weight: 116 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	
OTHERS 2x4 SP No.3 *Except*	
6-20,8-18: 2x4 SP No.2	

REACTIONS. All bearings 18-5-0.
 (lb) - Max Horz 24=160(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 24, 14, 21, 22, 17, 16 except 23=133(LC 10), 15=128(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15

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 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 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, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 14, 21, 22, 17, 16 except (jt=lb) 23=133, 15=128.



January 25, 2023

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>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</p>	<p>ENGINEERING BY</p> <p>TRENCO</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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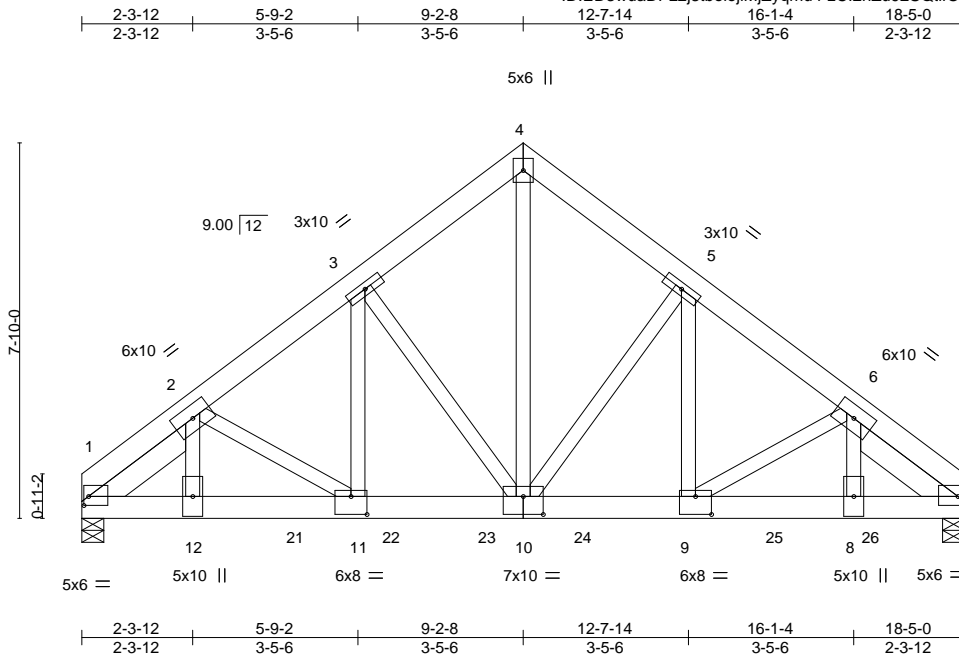
Job 35115-35115A	Truss D2G	Truss Type COMMON GIRDER	Qty 1	Ply 3	52 SERENITY - ROOF	156288100
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84 Components (Dunn),

Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:38 2023 Page 1

ID:ED3wuaDFL2j3tboIojMjZyqmu4-zCl2nZu92SQtifOFEB8q90xLlaFm3iFowqTCo?zsOZR



Scale: 1/4"=1'

Plate Offsets (X,Y)-- [1:0-1-3,0-2-4], [7:0-1-3,0-2-4], [9:0-4-0,0-4-8], [10:0-5-0,0-4-8], [11:0-4-0,0-4-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	-0.07 11-12	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.43	Vert(CT)	-0.14 11-12	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.74	Horz(CT)	0.04 7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS					Weight: 495 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP DSS
 WEBS 2x4 SP No.3 *Except*
 4-10: 2x4 SP No.2
 SLIDER Left 2x6 SP No.2 2-6-7, Right 2x6 SP No.2 2-6-7

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.

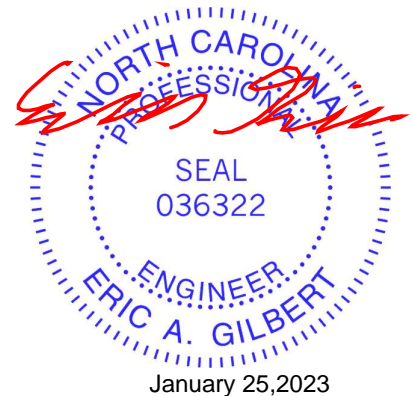
PLY-TO-PLY CONNECTION REQUIRES THAT AN APPROVED FACE MOUNT HANGER (SPECIFIED BY OTHERS) IS REQUIRED FOR LOADS REPORTED IN NOTES. FACE MOUNT HANGER SHALL BE ATTACHED WITH A MINIMUM OF 0.148"x 3" NAILS PER HANGER MANUFACTURER SPECIFICATIONS.

REACTIONS. (size) 1=0-5-8 (req. 0-5-13), 7=0-5-8
 Max Horz 1=142(LC 26)
 Max Grav 1=11155(LC 2), 7=9015(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-8323/0, 2-3=-10722/0, 3-4=-7868/0, 4-5=-7859/0, 5-6=-10112/0, 6-7=-6658/0
 BOT CHORD 1-12=0/10004, 11-12=0/9879, 10-11=0/8625, 9-10=0/8102, 8-9=0/8045, 7-8=0/8100
 WEBS 4-10=0/9043, 5-9=0/3055/0, 5-9=0/3664, 6-8=0/1891, 3-10=-3943/0, 3-11=0/4687, 2-11=-1513/501, 2-12=-44/4300

NOTES-

- 1) N/A
- 2) 3-ply truss to be connected together as follows:
 Top chords connected with 10d (0.131"x3") nails as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected with 10d (0.131"x3") nails as follows: 2x6 - 3 rows staggered at 0-4-0 oc.
 Web connected with 12 Gauge (0.216"x3.5") screws as follows: 2x4 - 1 row at 0-9-0 oc, Except member 6-8 2x4 - 2 rows staggered at 0-6-0 oc, member 2-12 2x4 - 2 rows staggered at 0-6-0 oc.
- 3) 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.
- 4) Unbalanced roof live loads have been considered for this design.
- 5) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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) WARNING: Required bearing size at joint(s) 1 greater than input bearing size.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 5272 lb down and 114 lb up at 2-3-12, 1951 lb down at 4-5-4, 1951 lb down at 6-5-4, 1951 lb down at 8-5-4, 1947 lb down at 10-5-4, 1947 lb down at 12-5-4, and 1947 lb down at 14-5-4, and 1947 lb down at 16-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



responsibility of others.

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/TPI 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 35115-35115A	Truss D2G	Truss Type COMMON GIRDER	Qty 1	Ply 3	52 SERENITY - ROOF I56288100 Job Reference (optional)
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:38 2023 Page 2
ID:ED3wuaDFL2j3tboIojiMjZyqmu4-zC12nZu92SQtifOfEB8q90xLlaFm3iFowqTCo?zsOZR

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 13-17=-20

Concentrated Loads (lb)

Vert: 9=-1871(B) 12=-3915(B) 21=-1875(B) 22=-1875(B) 23=-1875(B) 24=-1871(B) 25=-1871(B) 26=-1871(B)

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

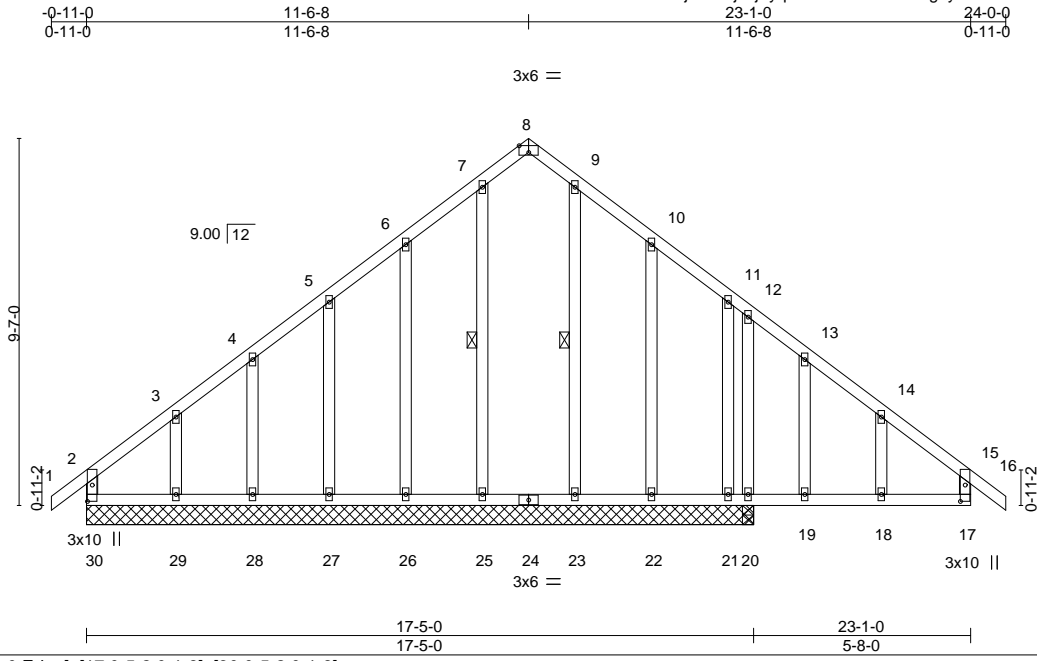


818 Soundside Road
Edenton, NC 27932

Job 35115-35115A	Truss E1E	Truss Type GABLE	Qty 1	Ply 1	52 SERENITY - ROOF	156288101
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:40 2023 Page 1
ID:ED3wuaDFL2j3tboIojiMjZyqmu4-vaQoBEwPa3gbyzY2McBIER0eaNuyXIU4O8yJttsOZP



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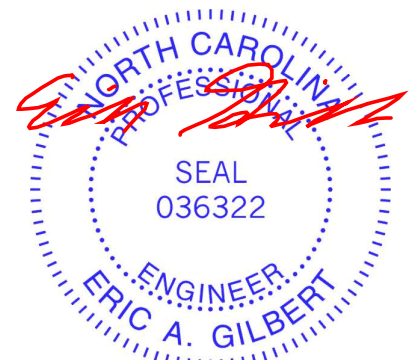
Plate Offsets (X, Y)--	[8:0-3-0,Edge], [17:0-5-2,0-1-8], [30:0-5-2,0-1-8]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.45	Vert(LL) 0.00 29-30 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.64	Vert(CT) -0.00 29-30 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.18	Horz(CT) -0.01 20 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R			
				Weight: 166 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 12-20: 2x4 SP No.3	WEBS 1 Row at midpt 7-25, 9-23
OTHERS 2x4 SP No.3 *Except* 7-25,6-26,9-23,10-22: 2x4 SP No.2	

REACTIONS. All bearings 17-5-0.
(lb) - Max Horz 30=197(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 26, 27, 28 except 30=225(LC 22),
29=136(LC 10), 22=108(LC 11), 21=723(LC 1), 20=330(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 30, 26, 27, 28, 22, 21 except
25=455(LC 17), 29=344(LC 17), 23=422(LC 1), 20=1183(LC 1), 20=1183(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-227/452, 3-4=-134/378, 4-5=-100/378, 5-6=-64/344, 6-7=-28/397, 9-10=-25/384,
10-11=-19/322, 12-13=-127/387, 13-14=-170/383, 14-15=-196/336
WEBS 7-25=-377/17, 9-23=-384/6, 12-20=-369/263

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 6) Gable studs spaced at 2-0-0 oc.
 - 7) This truss has been designed for a 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, with BCDL = 10.0psf.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26, 27, 28 except (jt=lb) 30=225, 29=136, 22=108, 21=723, 20=330.



January 25, 2023

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>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</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job 35115-35115A	Truss E2E	Truss Type Common	Qty 1	Ply 1	52 SERENITY - ROOF	156288102
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84 Components (Dunn),

Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:41 2023 Page 1

ID:ED3wuaDFL2j3tboIojMjZyqmu4-NnzAPax1LNoSZ77EwJiXnfZnlNUG6IEcoisPJzsOZO

-0-11-0	5-10-12	11-6-8	17-2-4	23-1-0	24-0-0
0-11-0	5-10-12	5-7-12	5-7-12	5-10-12	0-11-0

4x6 =

Scale = 1:56.7

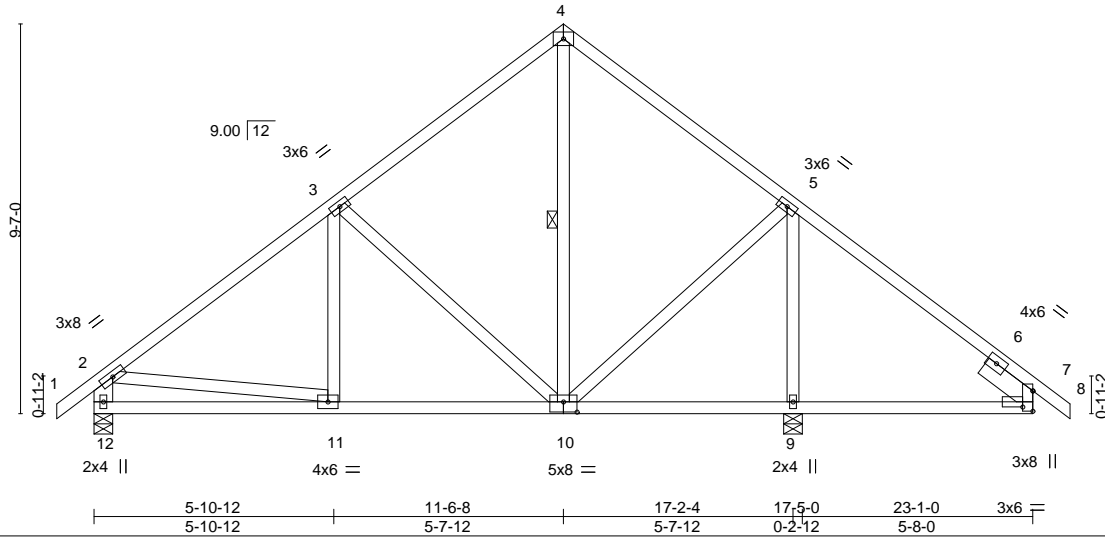


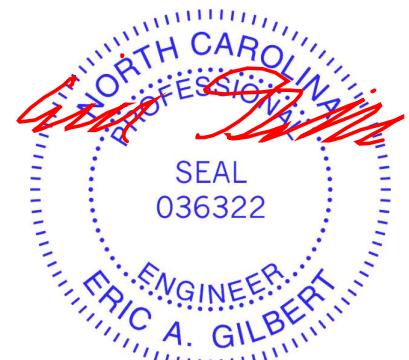
Plate Offsets (X,Y)--	[7:0-3-0,0-4-12], [10:0-4-0,0-3-0]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.61	Vert(LL) -0.03 9-10 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.43	Vert(CT) -0.05 11-12 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.56	Horz(CT) 0.01 9 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS		Weight: 143 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt 4-10
SLIDER 5-9,3-11,2-11: 2x4 SP No.3, 2-12: 2x6 SP No.2 Right 2x6 SP No.2 1-6-0	

REACTIONS.	(size) 12=0-5-8, 9=0-5-8
	Max Horz 12=198(LC 9)
	Max Uplift 12=50(LC 10), 9=68(LC 11)
	Max Grav 12=664(LC 21), 9=1305(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-668/61, 3-4=-341/110, 4-5=-334/133, 5-7=-208/470, 2-12=-612/82
BOT CHORD	11-12=-188/326, 10-11=-74/526, 9-10=-273/239, 7-9=-273/239
WEBS	5-10=-44/580, 5-9=-1123/321, 3-10=-400/156, 2-11=0/282

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 9.



January 25, 2023

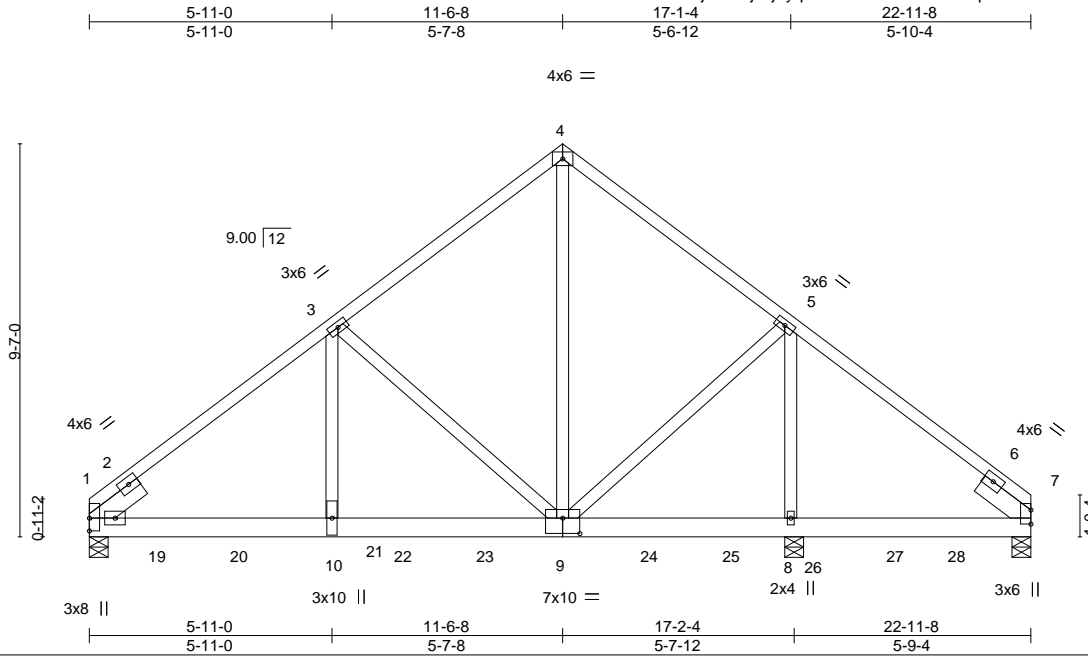
<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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</p>	<p>ENGINEERING BY</p> <p>TRENCO</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 35115-35115A	Truss E3G	Truss Type Common Girder	Qty 1	Ply 2	52 SERENITY - ROOF	156288103
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:44 2023 Page 1

ID:ED3wuaDFL2j3tboIojMjZyqmu4-nMfJ1czweIA1QarpbSFEPHBN0?D_TVagJlwW0ezsOZL



Scale = 1:56.2

Plate Offsets (X,Y)--	[9:0-5-0,0-4-8]	4x6 =							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15		TC 0.27	Vert(LL) -0.05	9-10	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.76	Vert(CT) -0.11	9-10	>999	180		
BCLL 0.0 *	Rep Stress Incr NO		WB 0.43	Horz(CT) 0.02	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TP12014		Matrix-MS						
								Weight: 304 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 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2	
SLIDER Left 2x6 SP No.2 1-6-0, Right 2x6 SP No.2 1-6-0	

REACTIONS. (size) 1=0-5-8, 7=0-5-8, 8=0-5-8
 Max Horz 1=182(LC 5)
 Max Uplift 1=-331(LC 8), 7=-178(LC 9), 8=-365(LC 8)
 Max Grav 1=3588(LC 1), 7=302(LC 20), 8=4743(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-3=-4039/409, 3-4=-2140/312, 4-5=-2145/300, 5-7=-168/281
 BOT CHORD 1-10=-359/3163, 9-10=-359/3163
 WEBS 3-10=-179/2176, 3-9=-2059/343, 4-9=-267/2132, 5-9=-135/2279, 5-8=-3126/195

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 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 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=331, 7=178, 8=365.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 746 lb down and 84 lb up at 1-7-4, 746 lb down and 84 lb up at 3-7-4, 746 lb down and 84 lb up at 5-7-4, 746 lb down and 84 lb up at 7-7-4, 746 lb down and 84 lb up at 9-7-4, 771 lb down and 59 lb up at 11-7-4, 771 lb down and 59 lb up at 13-7-4, 771 lb down and 59 lb up at 15-7-4, 247 lb down and 89 lb up at 17-7-4, and 247 lb down and 89 lb up at 19-7-4, and 247 lb down and 89 lb up at 21-1-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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



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Continued on page 2

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ENGINEERING BY
TRENCO
 A MiTek Affiliate

818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	52 SERENITY - ROOF	I56288103
35115-35115A	E3G	Common Girder	1	2	Job Reference (optional)	

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

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:44 2023 Page 2
 ID:ED3wuaDFL2j3tboIojMjZyqmu4-nMfJ1czweIA1QarpbSFEPHBNO?D_TVagJlwW0ezsOZL

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 11-15=-20

Concentrated Loads (lb)

Vert: 9=-771(B) 19=-746(B) 20=-746(B) 21=-746(B) 22=-746(B) 23=-746(B) 24=-771(B) 25=-771(B) 26=-247(B) 27=-247(B) 28=-247(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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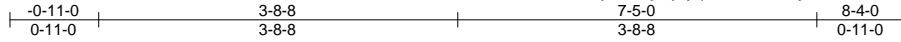
Job 35115-35115A	Truss E4E	Truss Type Common Supported Gable	Qty 1	Ply 1	52 SERENITY - ROOF Job Reference (optional)	156288104
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84 Components (Dunn),

Dunn, NC - 28334,

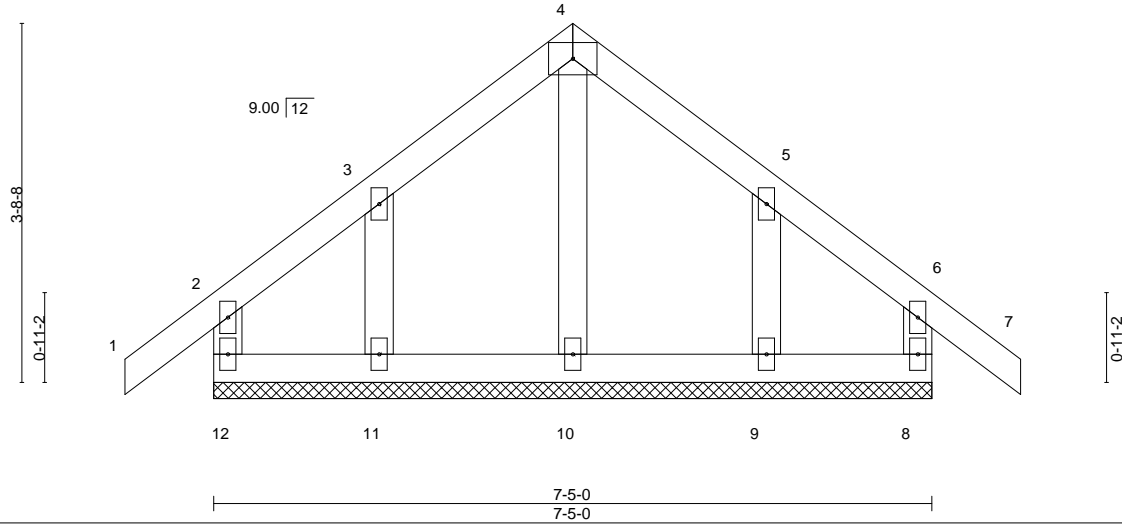
8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:45 2023 Page 1

ID:ED3wuaDFL2j3tboIojMjZyqmu4-GYDhFy_YPcJu2kQ?99mTxVjb5OkfC2_pXPg4Y5zsOZK



4x6 =

Scale: 1/2"=1'



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	-0.00	7	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	7	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R					Weight: 40 lb	FT = 20%

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

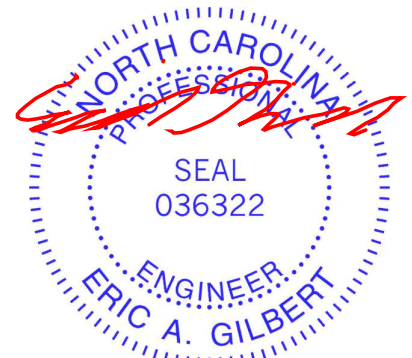
BRACING-
TOP CHORD Structural wood sheathing directly applied or 7-5-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 7-5-0.
(lb) - Max Horz 12=73(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 12, 8, 11, 9
Max Grav All reactions 250 lb or less at joint(s) 12, 8, 10, 11, 9

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 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8, 11, 9.



January 25, 2023

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

Job 35115-35115A	Truss M1	Truss Type Monopitch	Qty 9	Ply 1	52 SERENITY - ROOF	156288105
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:46 2023 Page 1

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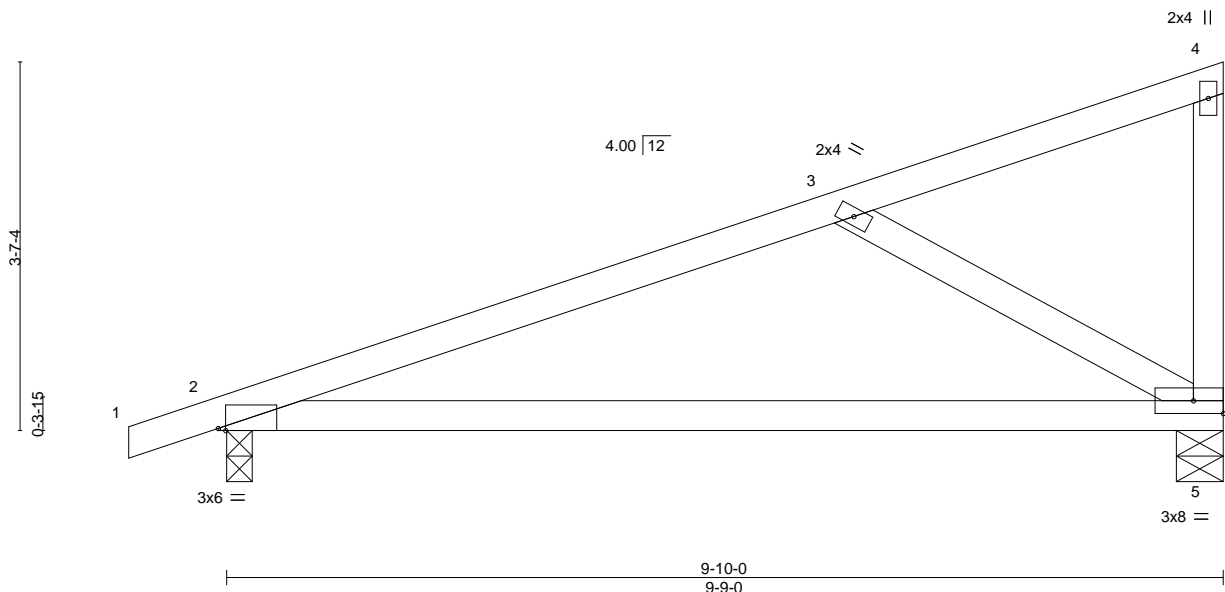


Plate Offsets (X,Y)--	[2:0-0-14,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.68	Vert(LL)	-0.21	5-8	>544	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.74	Vert(CT)	-0.46	5-8	>254		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.18	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 42 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
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) 5=0-5-8, 2=0-3-0
 Max Horz 2=119(LC 6)
 Max Uplift 5=-61(LC 10), 2=-55(LC 6)
 Max Grav 5=385(LC 1), 2=442(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-506/111
 BOT CHORD 2-5=-184/463
 WEBS 3-5=-497/219

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.



Job 35115-35115A	Truss M1E	Truss Type Monopitch Supported Gable	Qty 2	Ply 1	52 SERENITY - ROOF	156288106
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:48 2023 Page 1

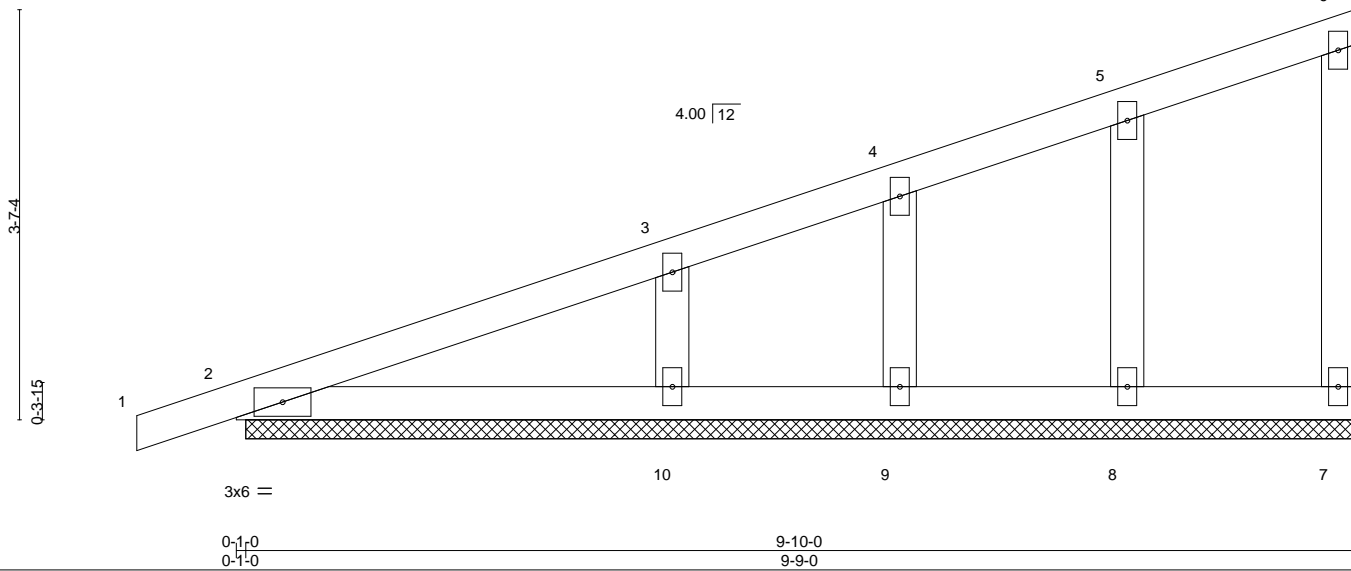
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Job Reference (optional)

-0-10-8
0-10-8

9-10-0
9-10-0

Scale = 1:20.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	0.00	1	n/r	90		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 44 lb	FT = 20%

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

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

REACTIONS. All bearings 9-9-0.
 (lb) - Max Horz 2=119(LC 6)
 Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 8, 9, 10
 Max Grav All reactions 250 lb or less at joint(s) 7, 2, 8, 9 except 10=300(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2, 8, 9, 10.
- 8) Non Standard bearing condition. Review required.



January 25, 2023

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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



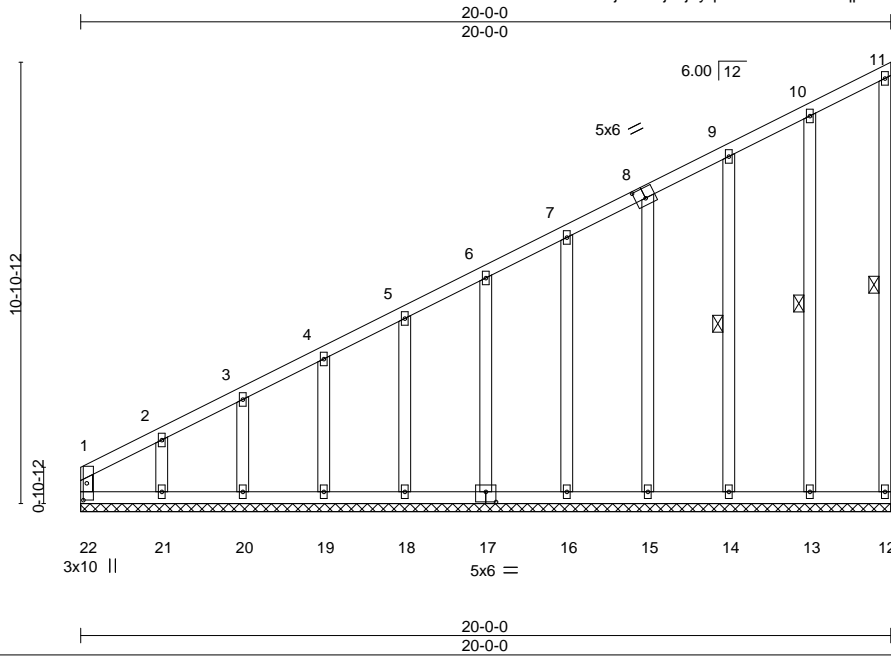
818 Soundside Road
 Edenton, NC 27932

Job 35115-35115A	Truss M3E	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	52 SERENITY - ROOF	156288107
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:49 2023 Page 1

ID:ED3wuaDFL2j3tboIojMjZyqmu4-8JSC4J13SqKXlkmN?rP6LuD703n8rePS1eHhszszOZG



Scale = 1:56.9

Plate Offsets (X,Y)--	[8:0-3-0,0-3-0], [17:0-3-0,0-3-0], [22:0-5-0,0-1-0]
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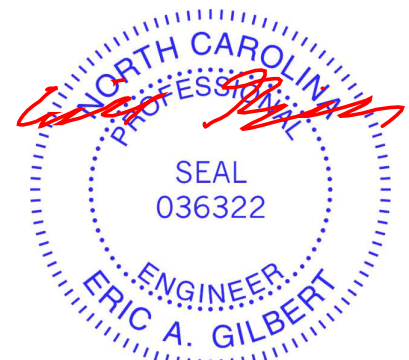
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.33	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.21	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.12	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.00 12 n/a n/a		
	Code IRC2015/TPI2014			Weight: 151 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 11-12: 2x4 SP No.2	WEBS 1 Row at midpt 11-12, 10-13, 9-14
OTHERS 2x4 SP No.3 *Except* 10-13,9-14,8-15,7-16: 2x4 SP No.2	

REACTIONS. All bearings 20-0-0.
 (lb) - Max Horz 22=324(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 12, 13, 14, 15, 16, 17, 18, 19 except 21=-214(LC 10)
 Max Grav All reactions 250 lb or less at joint(s) 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 except 22=293(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-421/154, 2-3=-338/123, 3-4=-307/113, 4-5=-264/98

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) All plates are 2x4 MT20 unless otherwise indicated.
 - 4) Gable requires continuous bottom chord bearing.
 - 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 6) Gable studs spaced at 2-0-0 oc.
 - 7) This truss has been designed for a 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 13, 14, 15, 16, 17, 18, 19 except (jt=lb) 21=214.



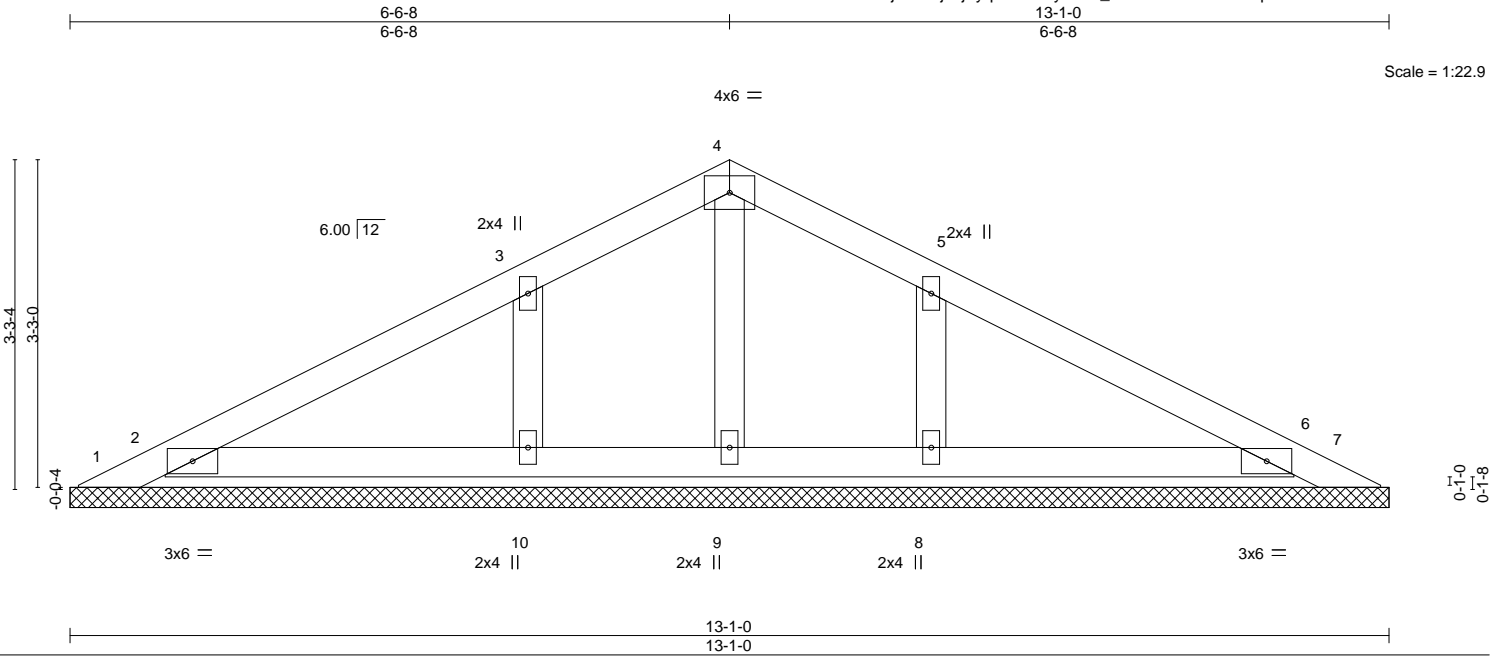
January 25, 2023

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>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</p>	<p>ENGINEERING BY</p> <p>TRENCO</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 35115-35115A	Truss PB1E	Truss Type GABLE	Qty 2	Ply 1	52 SERENITY - ROOF	156288108
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:51 2023 Page 1
ID:ED3wuaDFL2j3tboIojMjZyqmu4-4iayV?2J_S31mft9VQtBmzcQpmAcmPwL7OmkzsOZE



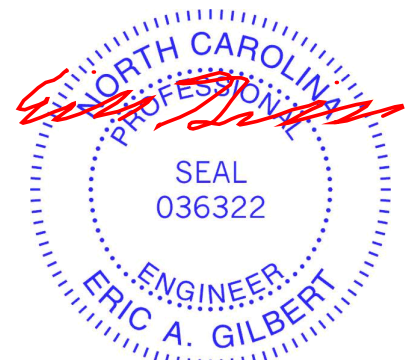
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 47 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	

REACTIONS. All bearings 13-1-0.
 (lb) - Max Horz 1=44(LC 14)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 2, 6, 10, 8
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 9 except 2=289(LC 1), 6=289(LC 1), 10=263(LC 21), 8=263(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 7-10; Vult=120mph 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(2) zone; cantilever 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.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 2, 6, 10, 8.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

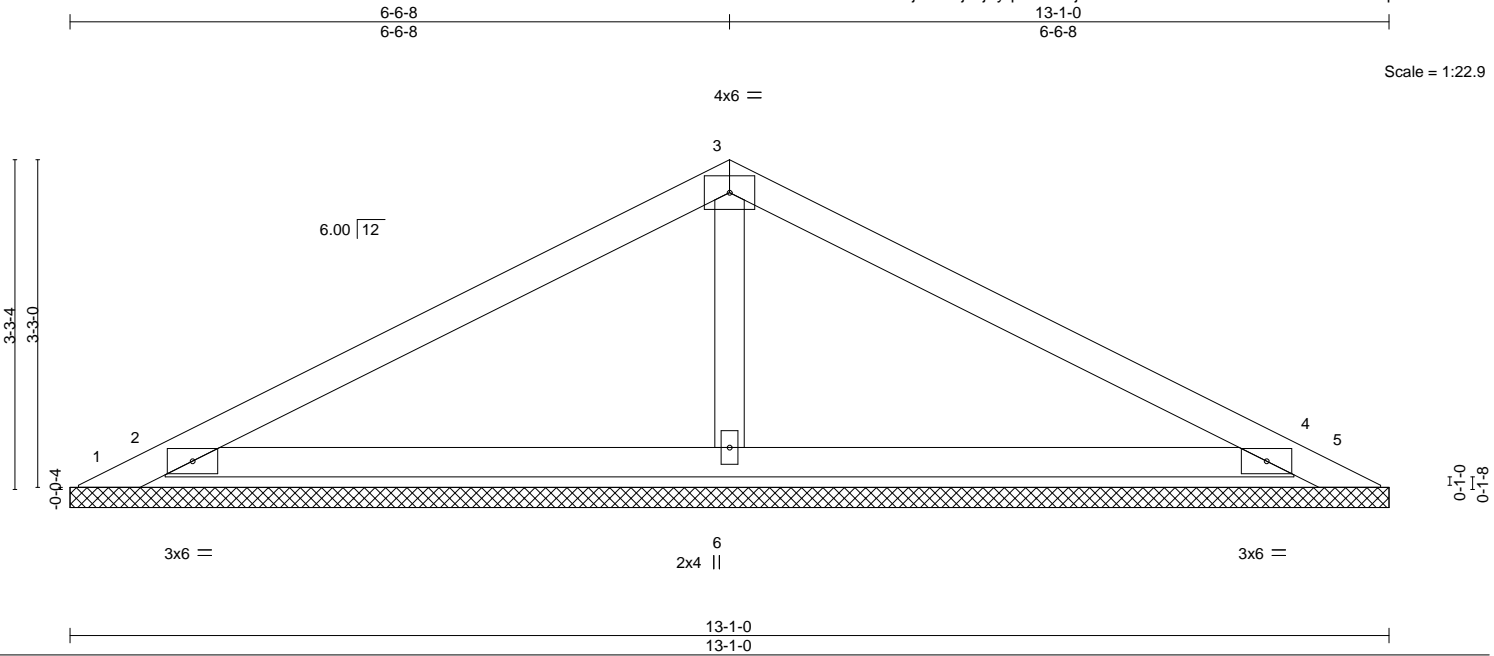


January 25, 2023

Job 35115-35115A	Truss PB2	Truss Type GABLE	Qty 18	Ply 1	52 SERENITY - ROOF	156288109
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:53 2023 Page 1
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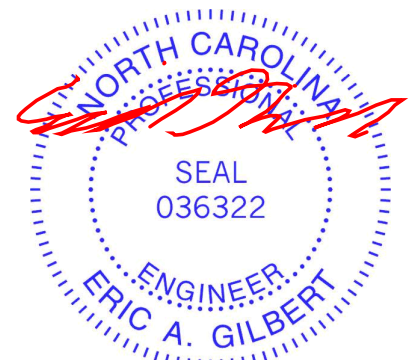
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.45	Vert(LL)	n/a	-	n/a	999	MT20 244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	n/a	-	n/a	999	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	5	n/a	n/a	
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 42 lb FT = 20%

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

REACTIONS. All bearings 13-1-0.
 (lb) - Max Horz 1=44(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) except 1=338(LC 21), 5=338(LC 22), 2=193(LC 10), 4=182(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 2=630(LC 21), 4=630(LC 22), 6=408(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 3-6=-275/103

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) Gable requires continuous bottom chord bearing.
 - 5) Gable studs spaced at 4'-0" oc.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit between the bottom chord and any other members.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 338 lb uplift at joint 1, 338 lb uplift at joint 5, 193 lb uplift at joint 2 and 182 lb uplift at joint 4.
 - 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

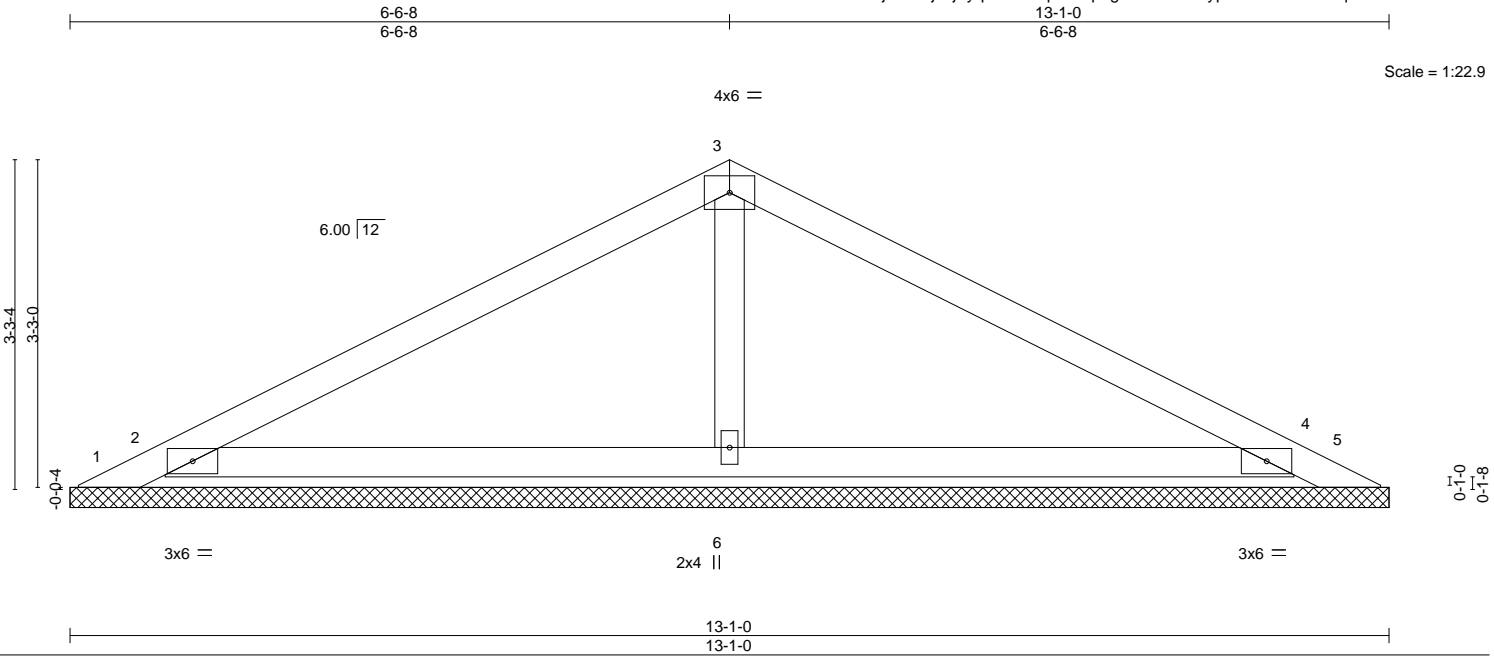


January 25, 2023

Job 35115-35115A	Truss PB3	Truss Type GABLE	Qty 2	Ply 2	52 SERENITY - ROOF	156288110
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:55 2023 Page 1
ID:ED3wuaDFL2j3tboIojMjZyqmu4-zTqTLN5p2gZTFGBwkGypLc8HIQ7KXZZIqz5cvWzsOZA



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 84 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	

REACTIONS. All bearings 13-1-0.
 (lb) - Max Horz 1=44(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) except 1=338(LC 21), 5=338(LC 22), 2=193(LC 10), 4=182(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 2=630(LC 21), 4=630(LC 22), 6=408(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 3-6=-275/103

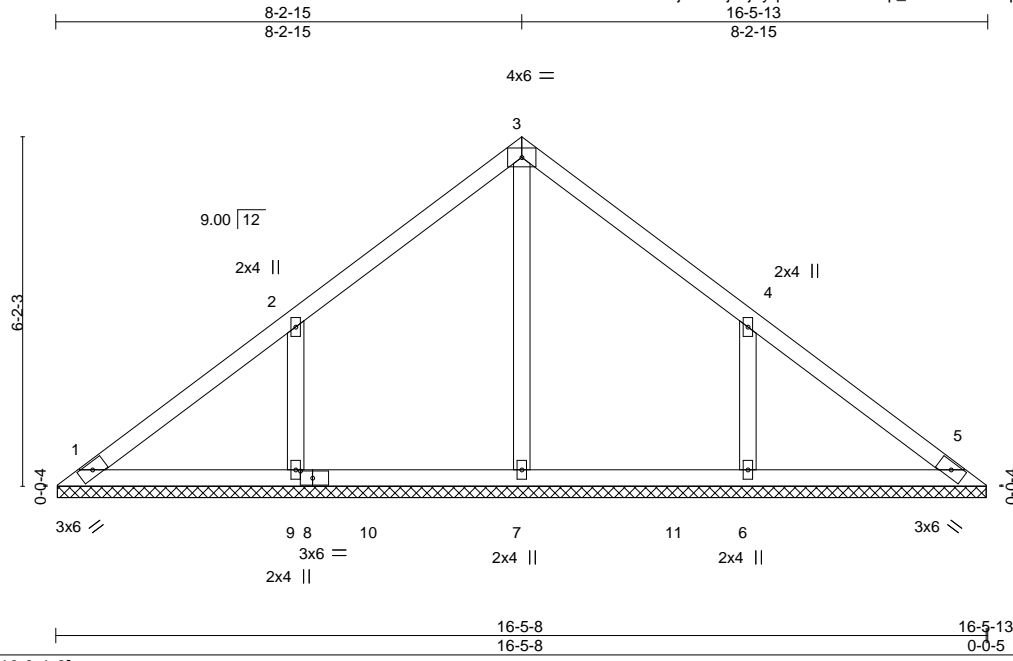
- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (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 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;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.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 4-0-0 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 338 lb uplift at joint 1, 338 lb uplift at joint 5, 193 lb uplift at joint 2 and 182 lb uplift at joint 4.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Job 35115-35115A	Truss V1	Truss Type Valley	Qty 1	Ply 1	52 SERENITY - ROOF	I56288111
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:56 2023 Page 1
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Scale = 1:40.8

Plate Offsets (X,Y)--	[8:0-2-10,0-1-8]
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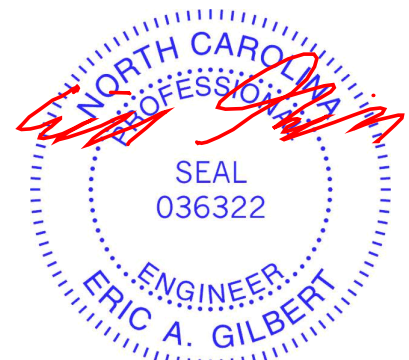
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.16	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2015/TPI2014			Weight: 70 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	

REACTIONS. All bearings 16-5-3.
 (lb) - Max Horz 1=123(LC 7)
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-132(LC 10), 6=-132(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=347(LC 17), 9=410(LC 17), 6=410(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-9=-292/178, 4-6=-292/178

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=132, 6=132.



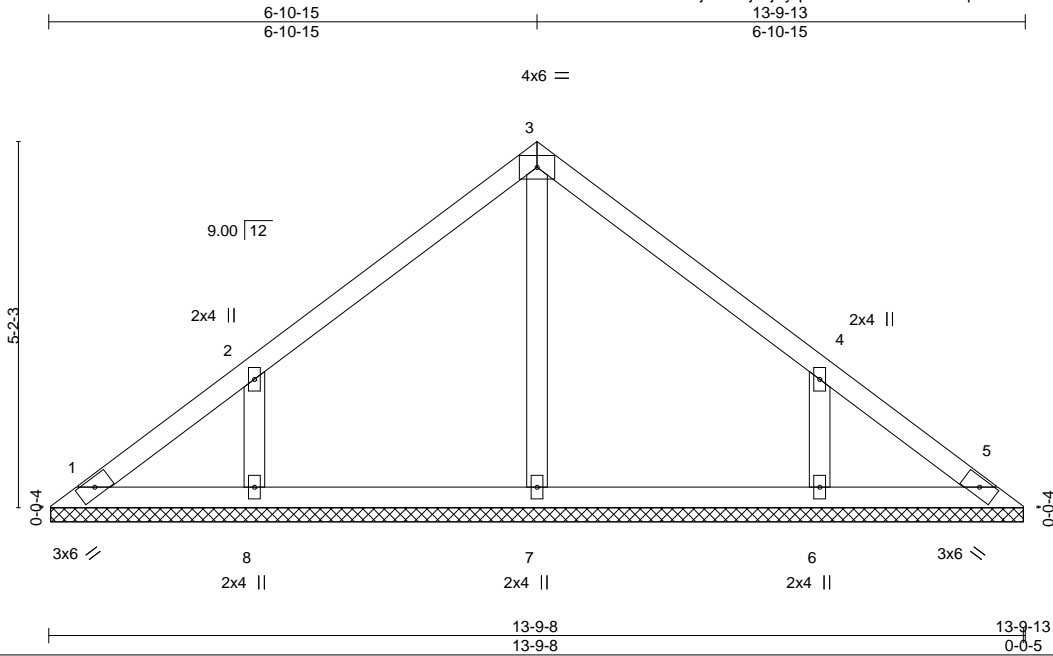
January 25, 2023

<p>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</p>	<p>ENGINEERING BY TRENCO A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 35115-35115A	Truss V2	Truss Type Valley	Qty 1	Ply 1	52 SERENITY - ROOF	156288112
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:04 2023 Page 1
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Scale = 1:32.6

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.18	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 56 lb	FT = 20%
	Code IRC2015/TPI2014							

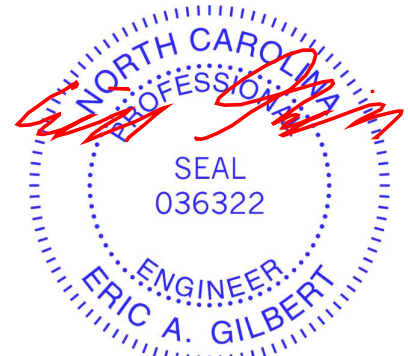
LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3

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 13-9-3.
 (lb) - Max Horz 1=-102(LC 6)
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-114(LC 10), 6=-114(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=253(LC 1), 8=324(LC 17), 6=324(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-8=-252/155, 4-6=-251/155

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=114, 6=114.



January 25, 2023

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 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



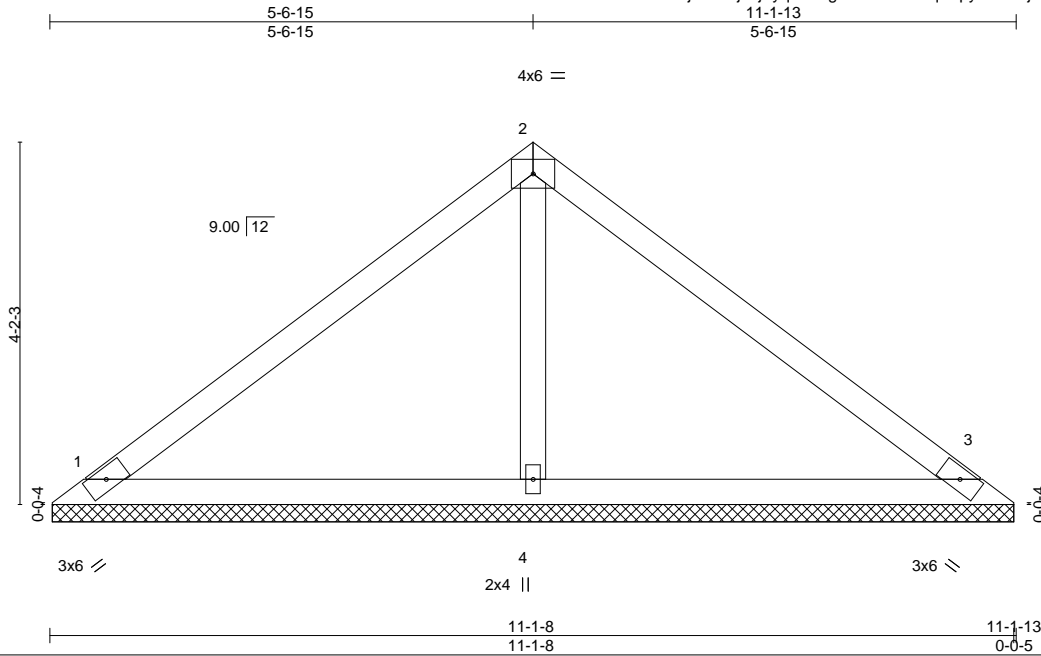
818 Soundside Road
 Edenton, NC 27932

Job 35115-35115A	Truss V3	Truss Type Valley	Qty 1	Ply 1	52 SERENITY - ROOF Job Reference (optional)	156288113
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:18:05 2023 Page 1

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Scale = 1:26.6

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.38	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.27	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 41 lb	FT = 20%
	Code IRC2015/TPI2014							

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

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

REACTIONS. (size) 1=11-1-3, 3=11-1-3, 4=11-1-3
 Max Horz 1=81(LC 6)
 Max Uplift 1=23(LC 10), 3=33(LC 11)
 Max Grav 1=210(LC 1), 3=210(LC 1), 4=402(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



January 25, 2023

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 35115-35115A	Truss V4	Truss Type Valley	Qty 1	Ply 1	52 SERENITY - ROOF	I56288114
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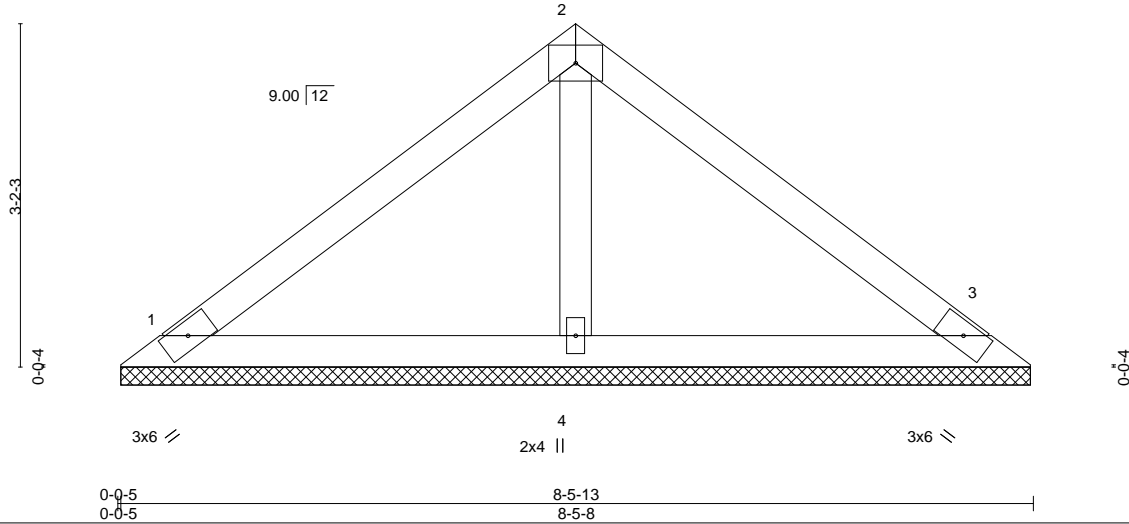
84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:18:06 2023 Page 1
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4x6 =

Scale = 1:21.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P						Weight: 31 lb	FT = 20%

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

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

REACTIONS. (size) 1=8-5-3, 3=8-5-3, 4=8-5-3
Max Horz 1=60(LC 7)
Max Uplift 1=24(LC 10), 3=32(LC 11)
Max Grav 1=170(LC 1), 3=170(LC 1), 4=270(LC 1)

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 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



January 25, 2023

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 35115-35115A	Truss V5	Truss Type Valley	Qty 1	Ply 1	52 SERENITY - ROOF Job Reference (optional)	156288115
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84 Components (Dunn), Dunn, NC - 28334,

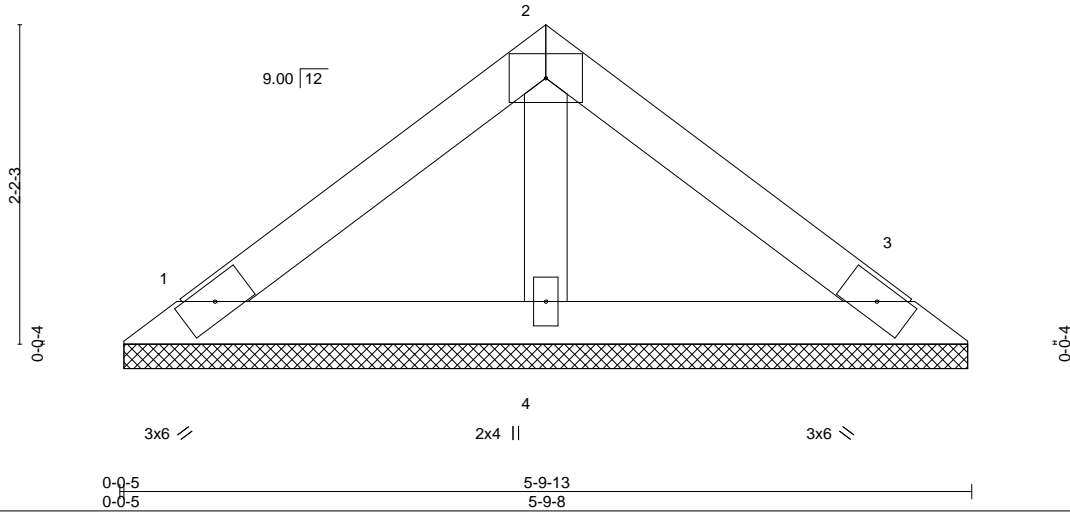
8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:18:07 2023 Page 1

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4x6 =

Scale = 1:15.7



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.11	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.06	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 20 lb	FT = 20%
	Code IRC2015/TPI2014							

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 5-9-13 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-9-3, 3=5-9-3, 4=5-9-3
 Max Horz 1=-39(LC 6)
 Max Uplift 1=-16(LC 10), 3=-21(LC 11)
 Max Grav 1=110(LC 1), 3=110(LC 1), 4=175(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



January 25, 2023

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 35115-35115A	Truss V6	Truss Type Valley	Qty 1	Ply 1	52 SERENITY - ROOF Job Reference (optional)	156288116
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:18:08 2023 Page 1

ID:ED3wuaDFL2j3tboIojMjZyqmu4-4z6O3pGz_gCdJGhQ?UhsNLAYCgbX4SDCqUkorFzsOYZ

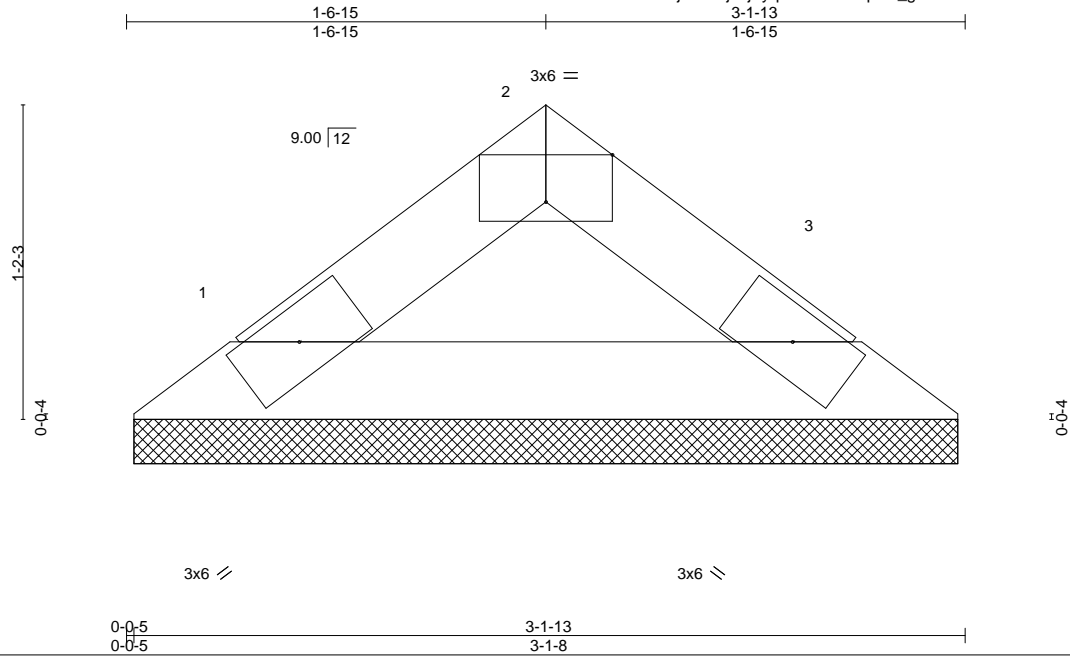


Plate Offsets (X,Y)-- [2:0-3-0,Edge]							
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.02	Vert(LL) n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT) n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P				Weight: 9 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 3-1-13 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-1-3, 3=3-1-3
 Max Horz 1=18(LC 6)
 Max Uplift 1=4(LC 10), 3=4(LC 11)
 Max Grav 1=91(LC 1), 3=91(LC 1)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

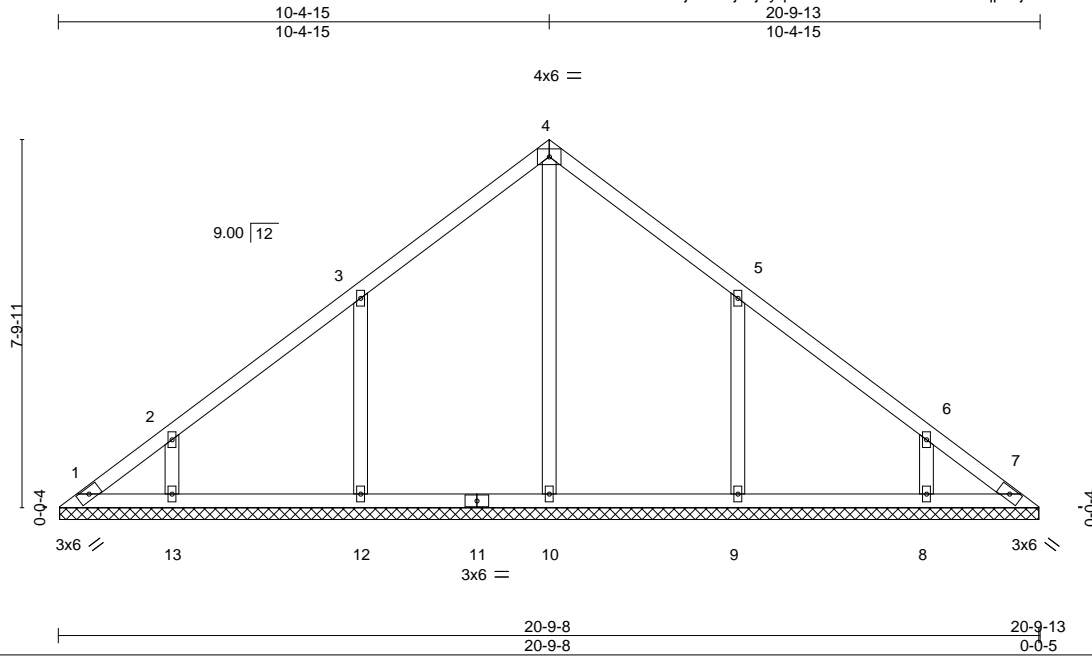


Job 35115-35115A	Truss V8	Truss Type Valley	Qty 1	Ply 1	52 SERENITY - ROOF	156288117
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:10 2023 Page 1

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Scale = 1:48.9

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.20	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 95 lb	FT = 20%
	Code IRC2015/TPI2014							

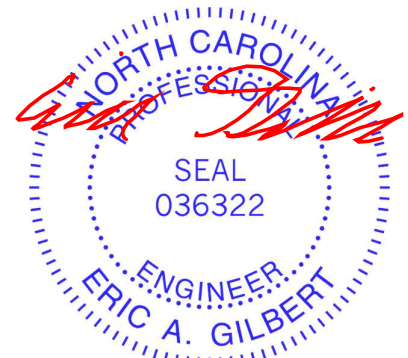
LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3 *Except*
 4-10: 2x4 SP No.2

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. All bearings 20-9-3.
 (lb) - Max Horz 1=-158(LC 6)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 13, 8 except 12=-125(LC 10), 9=-125(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=386(LC 20), 12=424(LC 17), 13=270(LC 17),
 9=423(LC 18), 8=270(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 3-12=-283/175, 5-9=-282/174

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) All plates are 2x4 MT20 unless otherwise indicated.
 - 4) 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 13, 8 except (jt=lb) 12=125, 9=125.



January 25, 2023

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

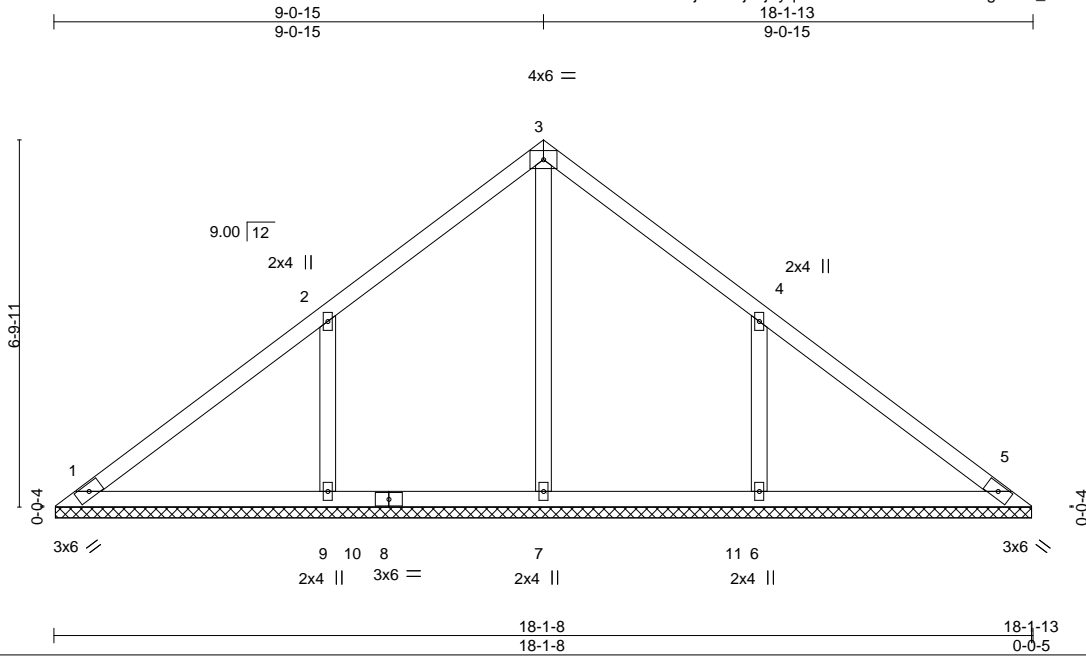


818 Soundside Road
 Edenton, NC 27932

Job 35115-35115A	Truss V9	Truss Type Valley	Qty 1	Ply 1	52 SERENITY - ROOF	156288118
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:18:11 2023 Page 1
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Scale = 1:42.7

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.27	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.17	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 78 lb	FT = 20%
	Code IRC2015/TPI2014							

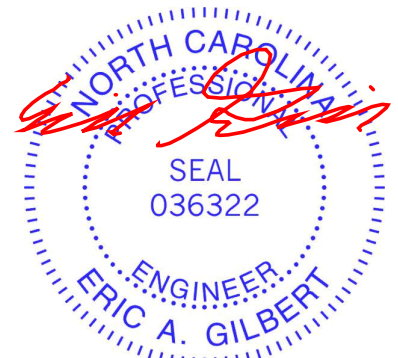
LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3 *Except*
 3-7: 2x4 SP No.2

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. All bearings 18-1-3.
 (lb) - Max Horz 1=137(LC 6)
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=148(LC 10), 6=147(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=354(LC 20), 9=480(LC 17), 6=480(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-9=327/198, 4-6=327/198

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=148, 6=147.



January 25, 2023

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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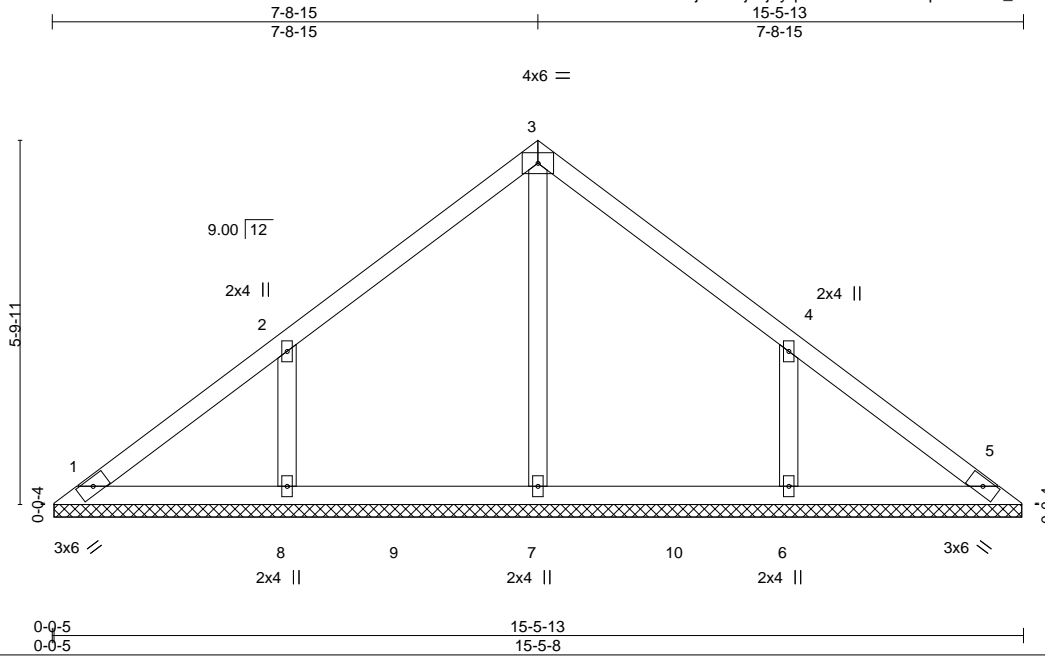


818 Soundside Road
 Edenton, NC 27932

Job 35115-35115A	Truss V10	Truss Type Valley	Qty 1	Ply 1	52 SERENITY - ROOF	156288119
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:57 2023 Page 1
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Scale = 1:36.7

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.19	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.15	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.10	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 65 lb	FT = 20%
	Code IRC2015/TPI2014							

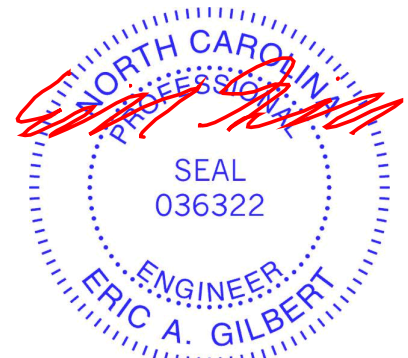
LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3

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 15-5-3.
 (lb) - Max Horz 1=115(LC 7)
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=124(LC 10), 6=124(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=341(LC 17), 8=374(LC 17), 6=374(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-274/168, 4-6=-274/168

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=124, 6=124.



January 25, 2023

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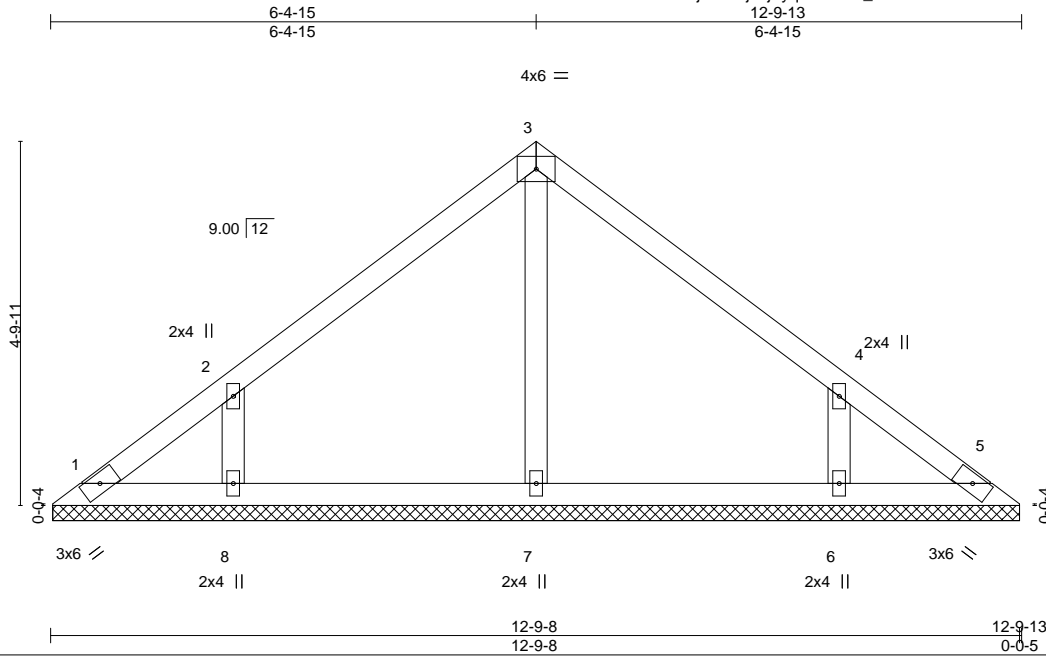


818 Soundside Road
 Edenton, NC 27932

Job 35115-35115A	Truss V11	Truss Type Valley	Qty 1	Ply 1	52 SERENITY - ROOF Job Reference (optional)	I56288120
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:17:59 2023 Page 1
ID:ED3wuaDFL2j3tboIojMjZyqmu4-rE3_Bk9K6v3vkuVhz50IWSJz32VSTMwtb3p2HzsOZ6



Scale = 1:30.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						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 12-9-3.
 (lb) - Max Horz 1=94(LC 6)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=110(LC 10), 6=110(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=255(LC 1), 8=310(LC 17), 6=310(LC 18)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=110, 6=110.



January 25, 2023

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



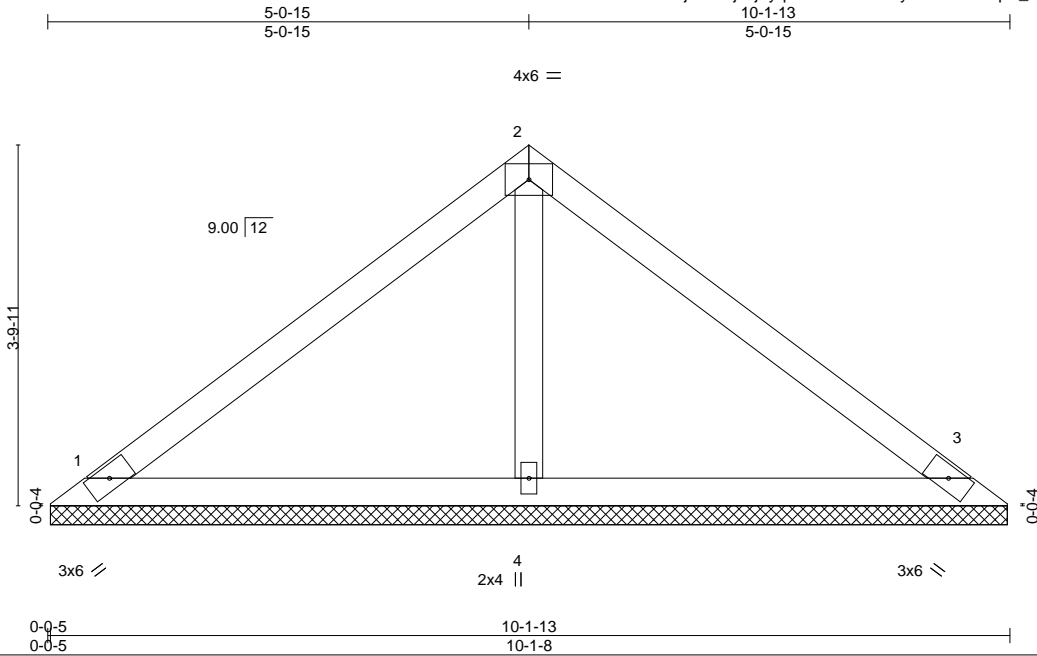
818 Soundside Road
 Edenton, NC 27932

Job 35115-35115A	Truss V12	Truss Type Valley	Qty 1	Ply 1	52 SERENITY - ROOF Job Reference (optional)	156288121
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:00 2023 Page 1

ID:ED3wuaDFL2j3tboolojiMjZyqmu4-JRdMO49ytDBmL13uXpY_2fr6IRpCCpF1_FoNajzsOZ5



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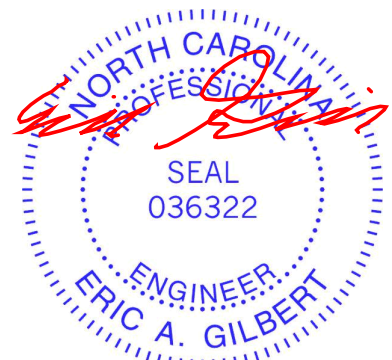
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.31	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.22	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 37 lb	FT = 20%
	Code IRC2015/TPI2014							

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

REACTIONS. (size) 1=10-1-3, 3=10-1-3, 4=10-1-3
 Max Horz 1=73(LC 7)
 Max Uplift 1=20(LC 10), 3=30(LC 11)
 Max Grav 1=190(LC 1), 3=190(LC 1), 4=363(LC 1)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit between the bottom chord and any other members.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



January 25, 2023

Job 35115-35115A	Truss V13	Truss Type Valley	Qty 1	Ply 1	52 SERENITY - ROOF	156288122
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84 Components (Dunn), Dunn, NC - 28334,

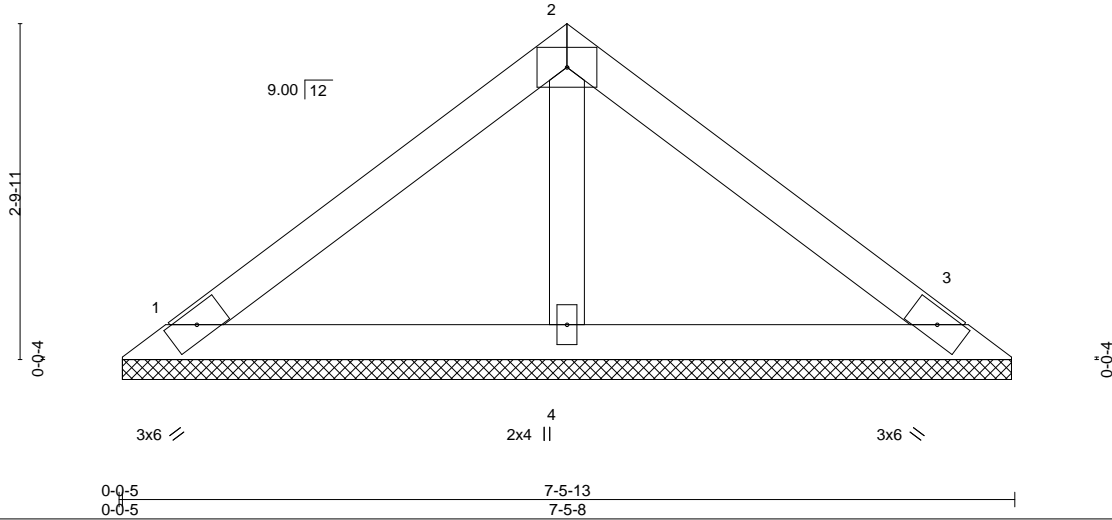
8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:18:01 2023 Page 1

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4x6 =

Scale = 1:19.3



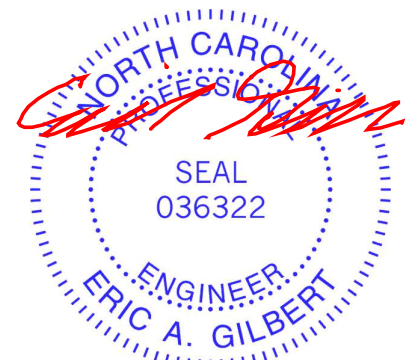
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.21	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 27 lb	FT = 20%
	Code IRC2015/TPI2014							

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	

REACTIONS. (size) 1=7-5-3, 3=7-5-3, 4=7-5-3
 Max Horz 1=-52(LC 6)
 Max Uplift 1=-21(LC 10), 3=-28(LC 11)
 Max Grav 1=147(LC 1), 3=147(LC 1), 4=234(LC 1)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



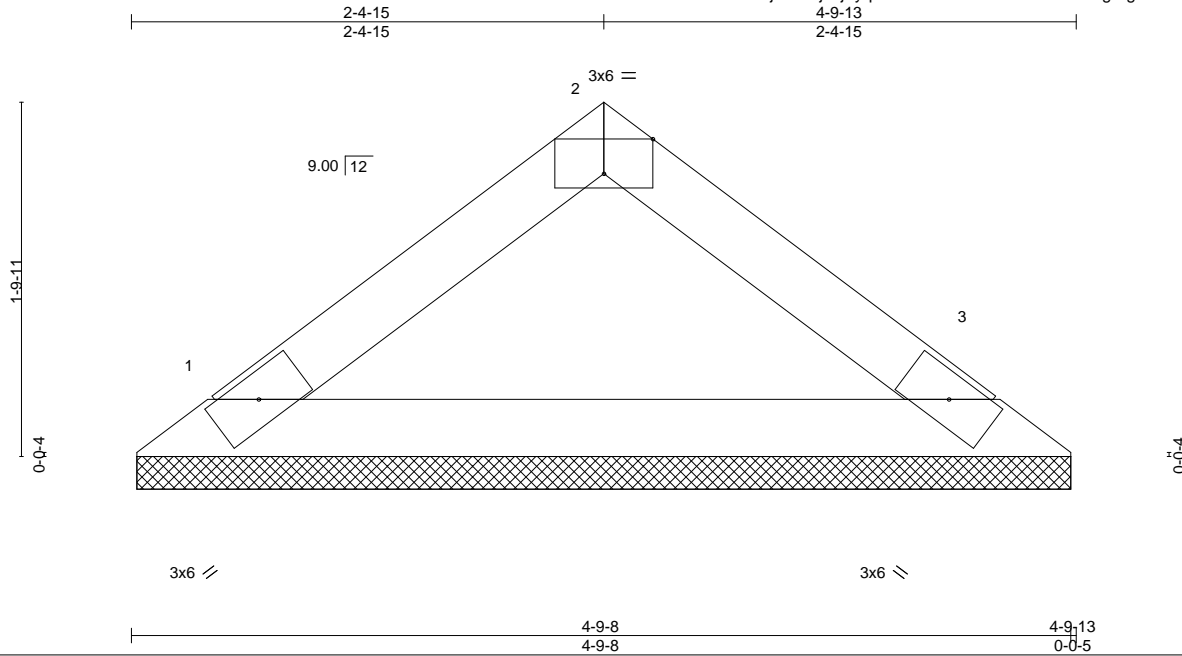
January 25, 2023

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>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</p>	<p>ENGINEERING BY</p> <p>TRENCO</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job 35115-35115A	Truss V14	Truss Type Valley	Qty 1	Ply 1	52 SERENITY - ROOF	I56288123
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84 Components (Dunn), Dunn, NC - 28334,

8.630 s Nov 19 2022 MiTek Industries, Inc. Mon Jan 23 18:18:03 2023 Page 1
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Scale = 1:11.8

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 15 lb	FT = 20%

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

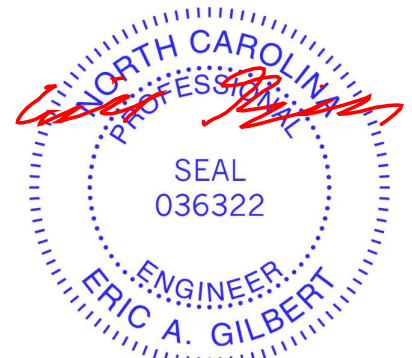
BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-9-3, 3=4-9-3
Max Horz 1=31(LC 6)
Max Uplift 1=7(LC 10), 3=7(LC 11)
Max Grav 1=158(LC 1), 3=158(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



January 25, 2023

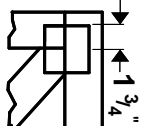
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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



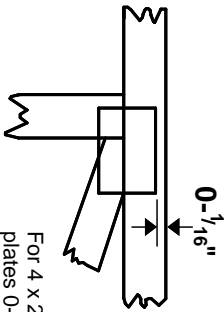
818 Soundside Road
Edenton, NC 27932

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

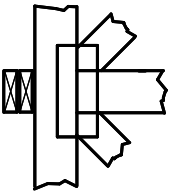
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



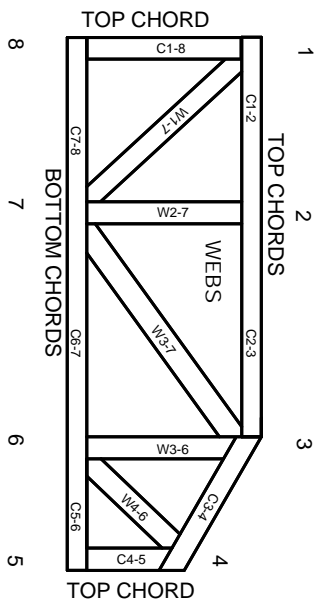
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI 1: 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/TPI 1 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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Rewriting pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.