

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: P03440-15869  
164 Blueberry - Southeastern

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: I68180359 thru I68180394

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844



September 13, 2024

Gilbert, Eric

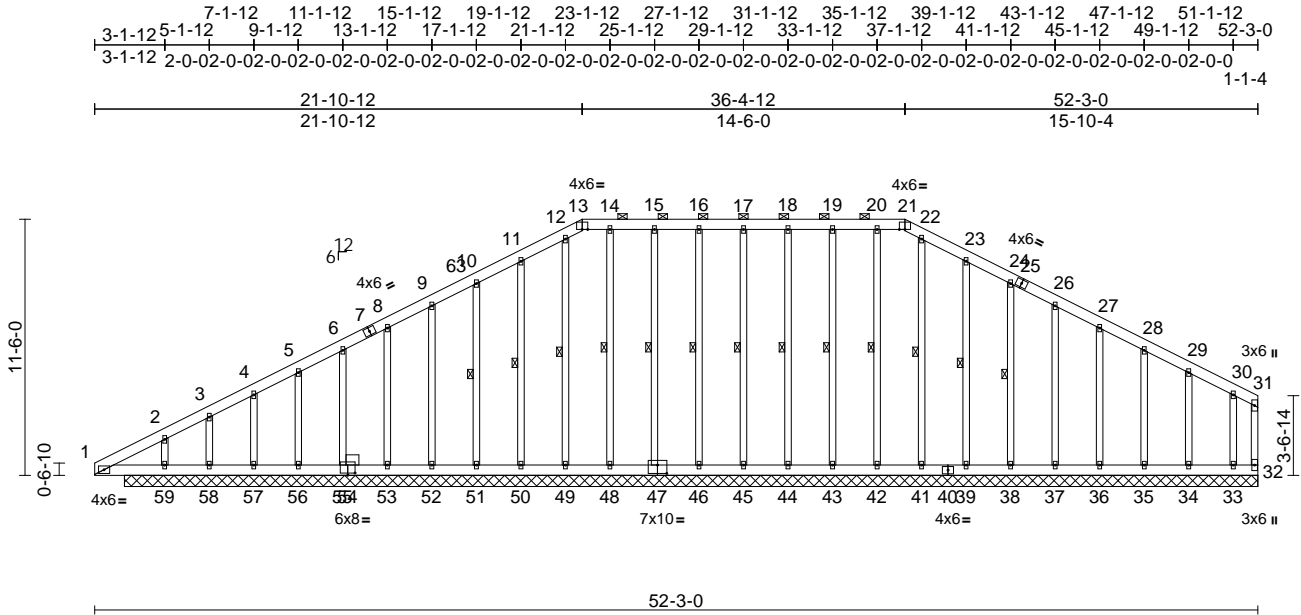
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), 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 P03440-15869	Truss A05E	Truss Type Piggyback Base Supported Gable	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180359
---------------------	---------------	--	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:49  
ID:ETr\_Pcz0qyW5?RJAGpx?BAyk1a6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:89  
Plate Offsets (X, Y): [47:0-5-0,0-4-8], [54:0-4-0,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	32	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS								
											Weight: 536 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.2 \*Except\*  
35-28,34-29,33-30,55-6,56-5,57-4,58-3,59-2:  
2x4 SP No.3, 54-54:2x6 SP No.2

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 13-21.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 17-45, 18-44, 19-43, 20-42, 22-41, 23-39, 24-38, 16-46, 15-47, 14-48, 12-49, 11-50, 10-51

**REACTIONS** (size)  
32=50-11-0, 33=50-11-0,  
34=50-11-0, 35=50-11-0,  
36=50-11-0, 37=50-11-0,  
38=50-11-0, 39=50-11-0,  
41=50-11-0, 42=50-11-0,  
43=50-11-0, 44=50-11-0,  
45=50-11-0, 46=50-11-0,  
47=50-11-0, 48=50-11-0,  
49=50-11-0, 50=50-11-0,  
51=50-11-0, 52=50-11-0,  
53=50-11-0, 55=50-11-0,  
56=50-11-0, 57=50-11-0,  
58=50-11-0, 59=50-11-0  
Max Horiz 59=251 (LC 12)

**FORCES**  
(lb) - Maximum Compression/Maximum Tension  
Max Uplift 32=53 (LC 16), 33=94 (LC 13),  
34=63 (LC 13), 35=60 (LC 13),  
36=61 (LC 13), 37=60 (LC 13),  
38=64 (LC 13), 39=67 (LC 13),  
42=13 (LC 9), 43=46 (LC 8),  
44=43 (LC 8), 45=41 (LC 9),  
46=45 (LC 8), 47=47 (LC 9),  
48=14 (LC 9), 50=66 (LC 12),  
51=63 (LC 12), 52=60 (LC 12),  
53=62 (LC 12), 55=58 (LC 12),  
56=70 (LC 12), 57=41 (LC 13),  
58=260 (LC 16), 59=142 (LC 13)  
Max Grav 32=43 (LC 13), 33=170 (LC 1),  
34=167 (LC 24), 35=159 (LC 1),  
36=161 (LC 24), 37=160 (LC 1),  
38=160 (LC 24), 39=160 (LC 24),  
41=164 (LC 1), 42=163 (LC 1),  
43=162 (LC 23), 44=160 (LC 23),  
45=160 (LC 24), 46=160 (LC 1),  
47=160 (LC 24), 48=168 (LC 23),  
49=173 (LC 22), 50=160 (LC 1),  
51=160 (LC 1), 52=160 (LC 23),  
53=160 (LC 23), 55=162 (LC 1),  
56=148 (LC 23), 57=220 (LC 1),  
58=77 (LC 13), 59=544 (LC 1)

**TOP CHORD** 1-2=220/132, 2-3=216/137, 3-4=136/146,  
4-5=110/162, 5-6=78/186, 6-8=59/211,  
8-9=67/258, 9-10=83/305, 10-11=100/355,  
11-12=118/405, 12-13=116/385,  
13-14=109/394, 14-15=109/394,  
15-16=109/393, 16-17=109/393,  
17-18=109/393, 18-19=109/393,  
19-20=109/393, 20-21=109/393,  
21-22=116/386, 22-23=117/406,  
23-24=99/356, 24-26=82/306,  
26-27=66/259, 27-28=49/212,  
28-29=33/151, 29-30=18/72, 30-31=19/46,  
31-32=15/28  
**BOT CHORD** 1-59=92/241, 58-59=16/13, 57-58=16/13,  
56-57=16/13, 55-56=16/13, 53-55=16/13,  
52-53=16/13, 51-52=16/13, 50-51=16/13,  
49-50=16/13, 48-49=16/13, 46-48=17/13,  
45-46=17/13, 44-45=17/13, 43-44=17/13,  
42-43=17/13, 41-42=17/13, 39-41=17/13,  
38-39=17/13, 37-38=17/13, 36-37=17/13,  
35-36=17/13, 34-35=17/13, 33-34=17/13,  
32-33=17/13



September 13, 2024

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	164 Blueberry - Southeastern	I68180359
P03440-15869	A05E	Piggyback Base Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:49  
ID:ETr\_Pcz0qyW5?RJAGpx?BAyk1a6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?

Page: 2

WEBS 17-45=-120/55, 18-44=-120/59,  
19-43=-122/62, 20-42=-123/25,  
22-41=-124/0, 23-39=-120/156,  
24-38=-120/131, 26-37=-120/84,  
27-36=-121/82, 28-35=-119/112,  
29-34=-128/154, 30-33=-110/119,  
16-46=-123/60, 15-47=-120/61,  
14-48=-126/26, 12-49=-133/8,  
11-50=-119/156, 10-51=-120/131,  
9-52=-120/84, 8-53=-121/83, 6-55=-119/82,  
5-56=-119/83, 4-57=-139/84, 3-58=-35/154,  
2-59=-292/208

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) 0-0-0 to 5-1-12, Exterior (2) 5-1-12 to 21-10-12, Corner (3) 21-10-12 to 27-1-12, Exterior (2) 27-1-12 to 36-4-12, Corner (3) 36-4-12 to 41-7-7, Exterior (2) 41-7-7 to 52-1-4 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) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 (||) MT20 unless otherwise indicated.
- 7) Gable studs spaced at 2-0-0 oc.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) All bearings are assumed to be SP No.2 .
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 32, 41 lb uplift at joint 45, 43 lb uplift at joint 44, 46 lb uplift at joint 43, 13 lb uplift at joint 42, 67 lb uplift at joint 39, 64 lb uplift at joint 38, 60 lb uplift at joint 37, 61 lb uplift at joint 36, 60 lb uplift at joint 35, 63 lb uplift at joint 34, 94 lb uplift at joint 33, 45 lb uplift at joint 46, 47 lb uplift at joint 47, 14 lb uplift at joint 48, 66 lb uplift at joint 50, 63 lb uplift at joint 51, 60 lb uplift at joint 52, 62 lb uplift at joint 53, 58 lb uplift at joint 55, 70 lb uplift at joint 56, 41 lb uplift at joint 57, 260 lb uplift at joint 58 and 142 lb uplift at joint 59.
- 12) Non Standard bearing condition. Review required.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))



818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss A05M	Truss Type Piggyback Base	Qty 6	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180360
---------------------	---------------	------------------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:50  
ID:WlwPryQ3izkOtlPj7EPnVwyk2Td-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRcDoi7J4zJC?

Page: 1

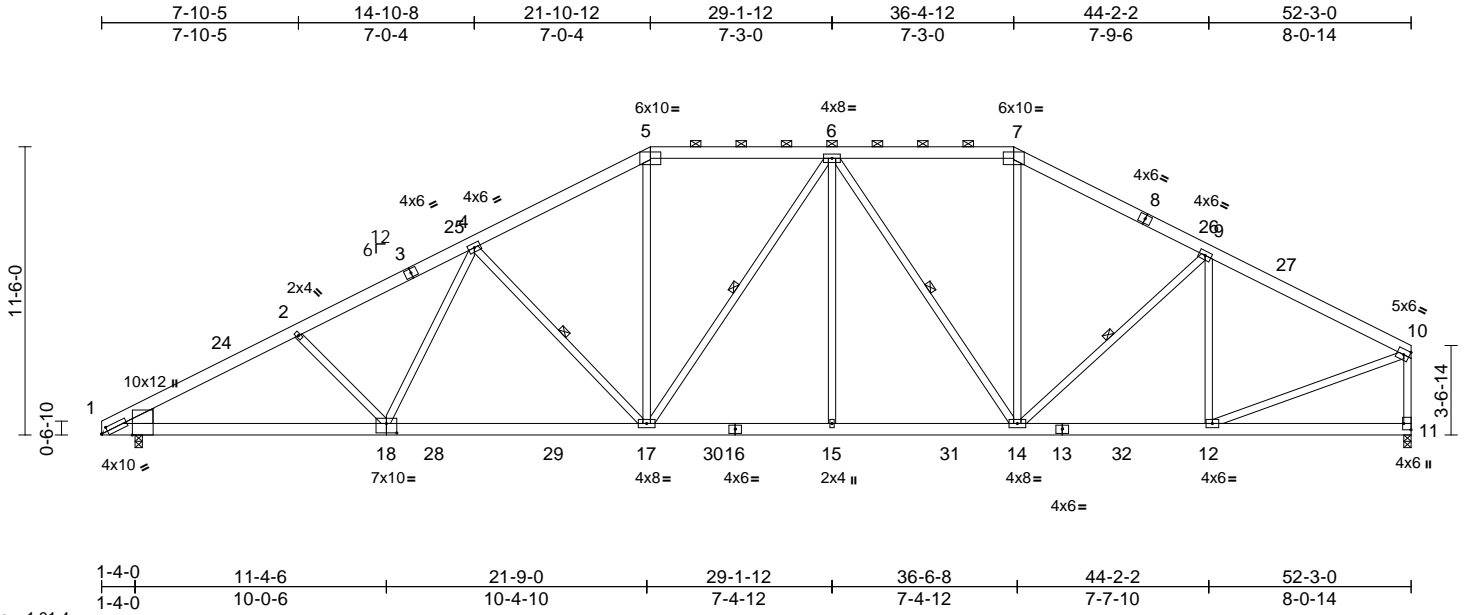


Plate Offsets (X, Y): [1:0-3-2,0-2-0], [1:0-0-8,Edge], [11:Edge,0-3-8], [18:0-5-0,0-4-8]

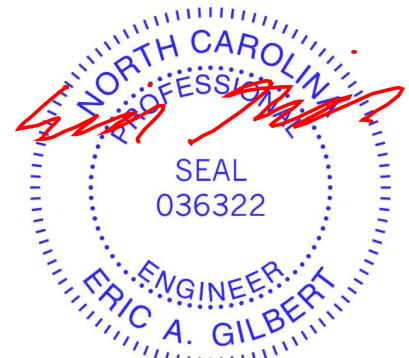
Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.28	17-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.52	17-18	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.11	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 419 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2 \*Except\* 1-18:2x6 SP DSS  
WEBS 2x4 SP No.2 \*Except\* 18-2,11-10:2x4 SP No.3  
WEDGE Left: 2x8 SP DSS  
**BRACING**  
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-6-10 max.): 5-7.  
BOT CHORD Rigid ceiling directly applied or 9-5-5 oc bracing.  
WEBS 1 Row at midpt 4-17, 6-17, 6-14, 9-14  
**REACTIONS** (size) 1=0-3-8, 11=0-3-8  
Max Horiz 1=251 (LC 12)  
Max Uplift 1=-380 (LC 12), 11=-306 (LC 13)  
Max Grav 1=2139 (LC 1), 11=2055 (LC 2)  
**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-3403/724, 2-4=-3251/738, 4-5=-2781/725, 5-6=-2390/698, 6-7=-2104/633, 7-9=-2463/654, 9-10=-2353/541, 10-11=-1984/481  
BOT CHORD 1-17=-665/2901, 15-17=-435/2480, 14-15=-435/2480, 12-14=-410/2037, 11-12=-17/45  
WEBS 2-18=-129/183, 4-18=-59/326, 4-17=-622/313, 5-17=-156/898, 6-17=-329/158, 6-15=0/374, 6-14=-772/192, 7-14=-136/724, 9-14=-88/251, 9-12=-611/216, 10-12=-432/2150

**NOTES**  
1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-0 to 5-2-11, Interior (1) 5-2-11 to 21-10-12, Exterior (2) 21-10-12 to 29-1-12, Interior (1) 29-1-12 to 36-4-12, Exterior (2) 36-4-12 to 43-9-7, Interior (1) 43-9-7 to 52-1-4 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) All bearings are assumed to be SP No.2 .
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 306 lb uplift at joint 11 and 380 lb uplift at joint 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road  
Edenton, NC 27932

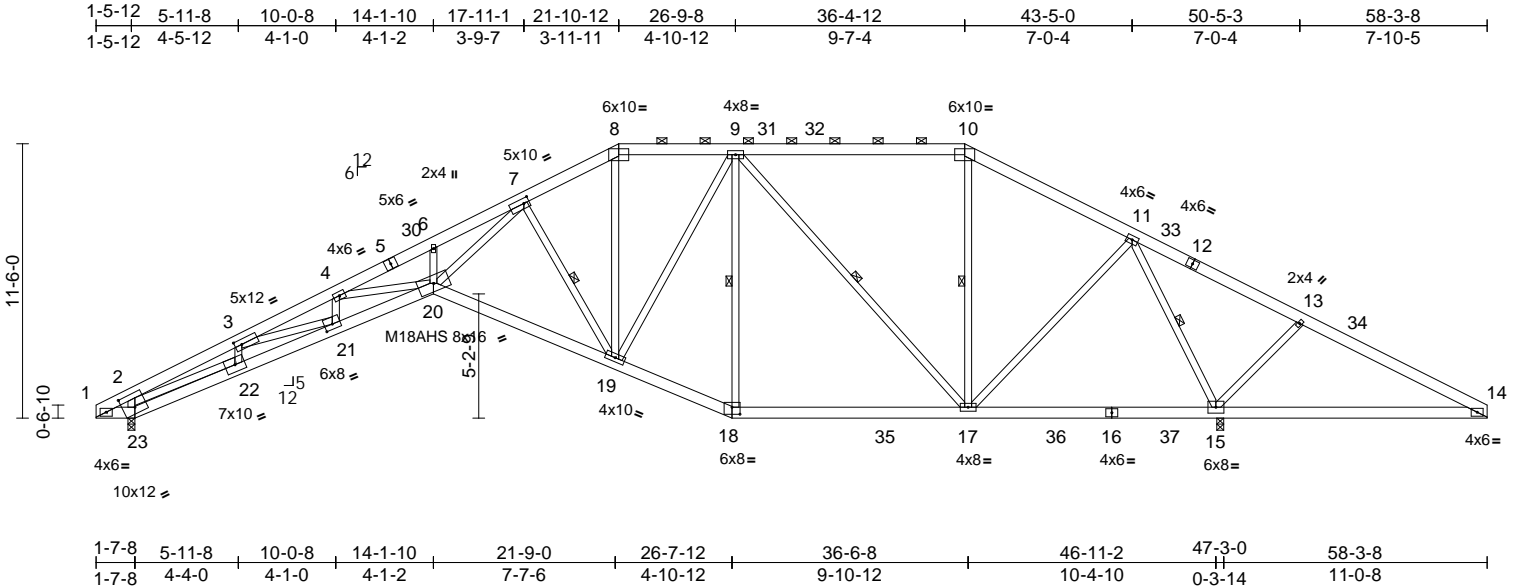
Job	Truss	Truss Type	Qty	Ply	164 Blueberry - Southeastern	168180361
P03440-15869	AS01	Piggyback Base	1	1	Job Reference (optional)	

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:51

Page: 1

ID:somqgnsF1BTwVYRYWZJybGyk1cr-RfC?PsB70Hq3NSgPqL8w3uTXbGkWrCDoi7J4zJC?f



Scale = 1:96.7

Plate Offsets (X, Y): [3:0-3-8,0-2-8], [7:0-2-12,0-2-8], [18:0-4-0,0-3-8], [21:0-4-0,0-2-8], [23:0-6-0,0-6-14]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.64	20	>855	240	MT20 244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-1.27	20	>429	180	M18AHS 186/179
BCLL	0.0*	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.82	15	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 447 lb FT = 20%

**LUMBER**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2 \*Except\* 23-20,20-18:2x6 SP DSS  
WEBS 2x4 SP No.2 \*Except\* 23-2,15-13,6-20,4-20,3-22,21-3,4-21:2x4 SP No.3, 7-20:2x4 SP DSS, 22-2:2x4 SP No.1

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 1-11-6 oc purlins, except 2-0-0 oc purlins (4-7-10 max.): 8-10.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 9-18, 9-17, 10-17, 11-15, 7-19

**REACTIONS** (size) 15=0-3-8, 23=0-3-8  
Max Horiz 23=183 (LC 17)  
Max Uplift 15=486 (LC 13), 23=358 (LC 12)  
Max Grav 15=2833 (LC 1), 23=1838 (LC 23)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-921/219, 2-3=-5615/1236, 3-4=-8067/1688, 4-6=-8448/1615, 6-7=-8362/1684, 7-8=-2363/525, 8-9=-2031/494, 9-10=-1057/291, 10-11=-1245/268, 11-13=-560/1049, 13-14=-509/716  
BOT CHORD 1-23=-211/914, 22-23=-255/437, 21-22=-1278/5237, 20-21=-1653/7751, 19-20=-548/3439, 18-19=-242/1789, 17-18=-220/1634, 15-17=0/382, 14-15=-526/501

**WEBS** 2-23=-1559/420, 8-19=-170/889, 9-19=-176/829, 9-18=-561/127, 9-17=-948/338, 10-17=-62/230, 11-17=-345/1201, 11-15=-2449/755, 13-15=-489/293, 7-20=-1252/6133, 7-19=-2341/566, 6-20=-31/104, 4-20=-34/413, 3-22=-891/236, 2-22=-978/4673, 3-21=-365/2410, 4-21=-515/103

**NOTES**  
1) Unbalanced roof live loads have been considered for this design.  
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-0 to 5-11-8, Interior (1) 5-11-8 to 21-10-12, Exterior (2) 21-10-12 to 30-1-11, Interior (1) 30-1-11 to 36-4-12, Exterior (2) 36-4-12 to 44-7-11, Interior (1) 44-7-11 to 58-3-8 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) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.  
4) Provide adequate drainage to prevent water ponding.  
5) All plates are MT20 plates unless otherwise indicated.  
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.  
8) All bearings are assumed to be SP No.2 .  
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 358 lb uplift at joint 23 and 486 lb uplift at joint 15.

10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss AS02	Truss Type Piggyback Base	Qty 2	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180362
---------------------	---------------	------------------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:51  
ID:RDCa8cQ2ue3fnjQ9sNN7Tiyk1su-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRcD0i7J4zJC?F

Page: 1

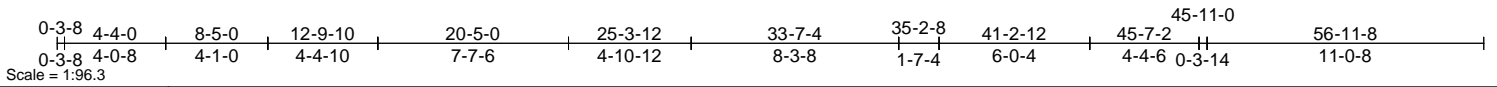
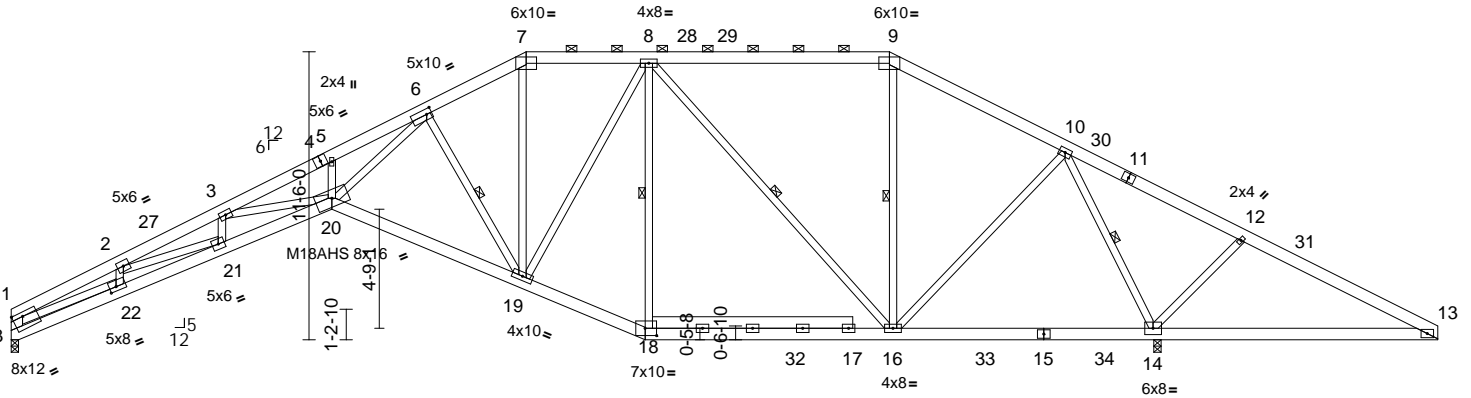
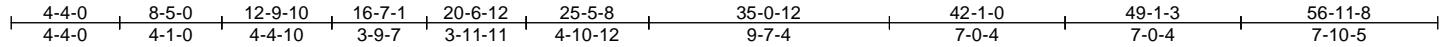


Plate Offsets (X, Y): [6:0-2-8,0-2-8], [18:0-5-8,0-3-8], [22:0-3-4,0-2-0], [23:0-5-0,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.64	20	>852	240	MT20 244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-1.27	19-20	>428	180	M18AHS 186/179
BCLL	0.0*	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.82	14	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 460 lb FT = 20%

**LUMBER**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2 \*Except\* 23-20:2x6 SP DSS  
 WEBS 2x4 SP No.2 \*Except\*  
 14-12,3-20,5-20,22-2,21-3:2x4 SP No.3,  
 23-1:2x6 SP No.2, 22-1:2x4 SP No.1,  
 6-20:2x4 SP DSS

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 1-10-3 oc purlins, except end verticals, and 2-0-0 oc purlins (4-7-6 max.): 7-9.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 8-18, 8-16, 9-16, 10-14, 6-19

**REACTIONS** (size) 14=0-3-8, 23=0-3-8  
 Max Horiz 23=200 (LC 13)  
 Max Uplift 14=486 (LC 13), 23=325 (LC 12)  
 Max Grav 14=2838 (LC 1), 23=1709 (LC 24)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-5644/1242, 2-3=-8084/1693, 3-5=-8567/1635, 5-6=-8484/1708, 6-7=-2377/529, 7-8=-2045/498, 8-9=-1042/292, 9-10=-1228/269, 10-12=-559/1046, 12-13=-508/713, 1-23=-1804/427  
 BOT CHORD 22-23=-318/742, 21-22=-1259/5161, 20-21=-1665/7765, 19-20=-553/3470, 18-19=-244/1807, 16-18=-226/1676, 14-16=0/380, 13-14=-525/500

**WEBS** 7-19=-171/892, 8-19=-167/762, 8-18=-454/110, 8-16=-1009/342, 9-16=-64/222, 10-16=-344/1198, 10-14=-2444/754, 12-14=-488/291, 1-22=-928/4362, 6-20=-1275/6246, 6-19=-2368/571, 3-20=-33/502, 5-20=-53/112, 2-22=-879/235, 2-21=-393/2484, 3-21=-537/116

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-2-12 to 5-11-2, Interior (1) 5-11-2 to 20-6-12, Exterior (2) 20-6-12 to 28-7-7, Interior (1) 28-7-7 to 35-0-12, Exterior (2) 35-0-12 to 43-1-7, Interior (1) 43-1-7 to 56-11-8 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - All bearings are assumed to be SP No.2 .
  - Bearing at joint(s) 23 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 325 lb uplift at joint 23 and 486 lb uplift at joint 14.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.
- LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

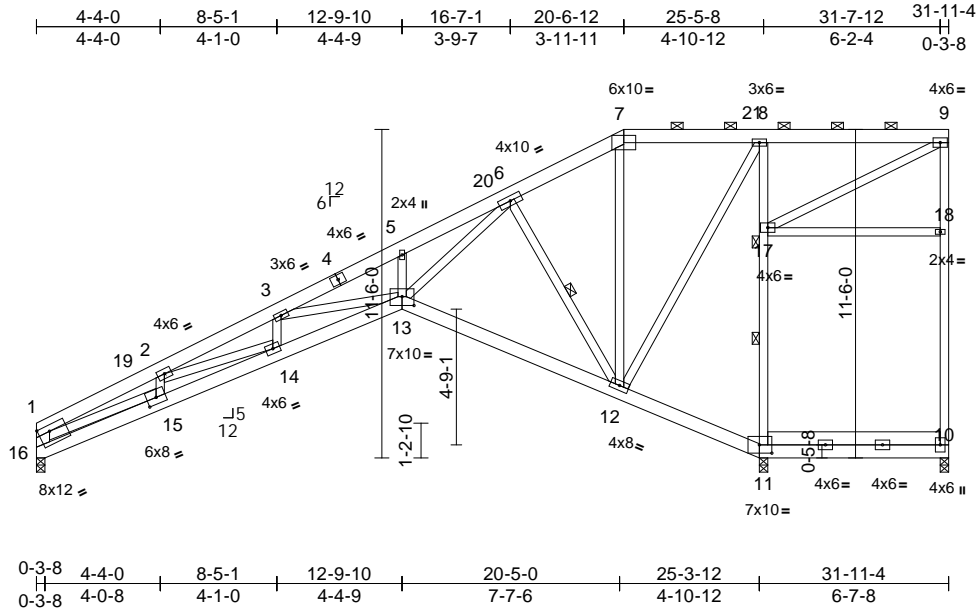


Job P03440-15869	Truss AS03	Truss Type Piggyback Base	Qty 7	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180363
---------------------	---------------	------------------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:51  
ID:PIZ2aaT3BHcbFR3dsYspD9yk2Lq-RfC?PsB70Hq3NSgPqnL8w3uITxBGKWrCdoi7J4zJc7f

Page: 1



Scale = 1:79.4

Plate Offsets (X, Y): [11:0-5-4-0-3-8], [13:0-5-0-0-3-12], [15:0-4-0-0-2-12], [16:0-4-12-0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	0.26	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.45	13-14	>668	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.40	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Attic	-0.02	10-11	>999	360	Weight: 296 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.2 \*Except\* 16-1:2x6 SP No.2,  
15-1,3-13,5-13,15-2,14-2,14-3:2x4 SP No.3

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 3-5-14 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.  
BOT CHORD Rigid ceiling directly applied or 5-9-10 oc bracing.  
WEBS 1 Row at midpt 11-17, 6-12  
JOINTS 1 Brace at Jt(s): 17

**REACTIONS** (size) 10=0-3-8, 11=0-3-8, 16=0-3-8  
Max Horiz 16=394 (LC 12)  
Max Uplift 10=-14 (LC 8), 11=-152 (LC 12),  
16=-150 (LC 12)  
Max Grav 10=390 (LC 27), 11=1654 (LC 2),  
16=976 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-3010/965, 2-3=-3858/1262,  
3-5=-3424/1099, 5-6=-3375/1173,  
6-7=-504/115, 7-8=-389/127, 8-9=-203/197,  
10-18=-156/50, 9-18=-125/69,  
1-16=-1030/345  
BOT CHORD 15-16=-746/733, 14-15=-1361/2744,  
13-14=-1635/3706, 12-13=-593/1077,  
11-12=-90/78, 10-11=-88/73  
WEBS 7-12=-1/134, 8-12=-389/843,  
11-17=-1403/592, 8-17=-1199/501,  
1-15=-718/2252, 3-13=-404/230,  
5-13=-150/114, 6-13=-1215/2886,  
6-12=-1225/556, 2-15=-423/187,  
2-14=-267/917, 3-14=-137/81,  
17-18=-202/198, 9-17=-243/236

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=3.0psf; h=25ft; Cat II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-2-12 to 3-5-1, Interior (1) 3-5-1 to 20-6-12, Exterior (2) 20-6-12 to 25-0-15, Interior (1) 25-0-15 to 31-9-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 17-18; Wall dead load (10.0psf) on member(s). 11-17
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 10-11
- All bearings are assumed to be SP No.2 .
- Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 10, 150 lb uplift at joint 16 and 152 lb uplift at joint 11.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



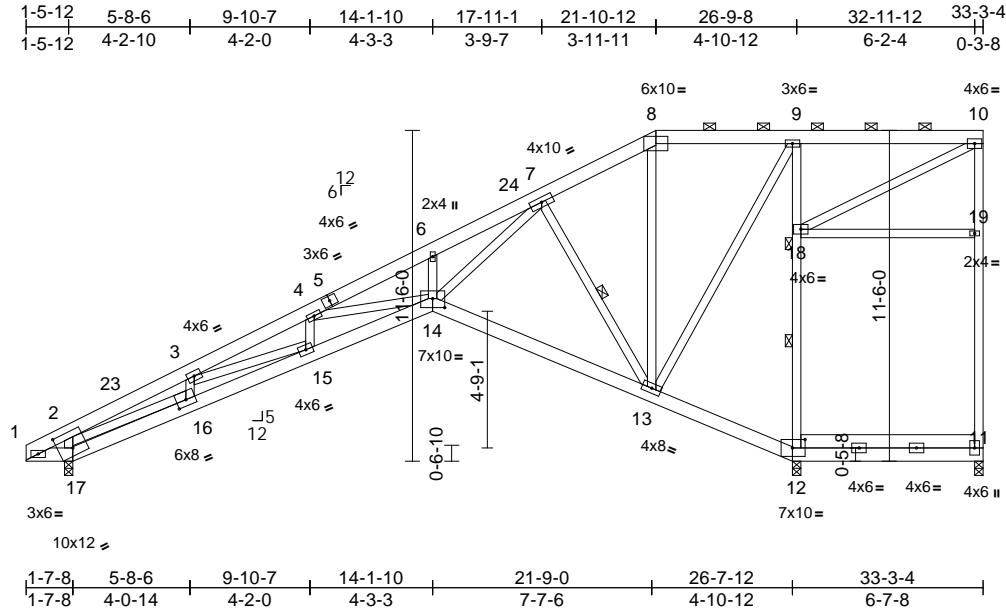
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss AS04	Truss Type Piggyback Base	Qty 3	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180364
---------------------	---------------	------------------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:51  
ID:RsYueiMsikE2vxEJ3IXjyyk2Pr-RfC?PsB70Hq3NSgPqnL8w3uITxBGKwCDoi7J4zJC?f

Page: 1



Scale = 1:79.4

Plate Offsets (X, Y): [12:0-5-4-0-3-8], [14:0-5-0-0-3-12], [16:0-4-0-0-2-8], [17:0-6-0-0-6-14]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	0.26	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.45	14-15	>668	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.40	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Attic	-0.02	11-12	>999	360	Weight: 302 lb	FT = 20%

**LUMBER**

TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.2 \*Except\*  
 17-2,16-2,3-16,3-15,4-15,4-14,6-14:2x4 SP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 3-5-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-10.  
 BOT CHORD Rigid ceiling directly applied or 5-10-2 oc bracing.  
 WEBS 1 Row at midpt 12-18, 7-13  
 JOINTS 1 Brace at Jt(s): 18

**REACTIONS** (size) 11=0-3-8, 12=0-3-8, 17=0-3-8  
 Max Horiz 17=424 (LC 12)  
 Max Uplift 11=14 (LC 8), 12=-151 (LC 12), 17=-183 (LC 12)  
 Max Grav 11=390 (LC 27), 12=1648 (LC 2), 17=1108 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-497/154, 2-3=-2872/940, 3-4=-3788/1252, 4-6=-3373/1091, 6-7=-3323/1163, 7-8=-501/114, 8-9=-385/126, 9-10=-202/196, 11-19=-156/50, 10-19=-125/69  
 BOT CHORD 1-17=-149/529, 16-17=-642/558, 15-16=-1313/2596, 14-15=-1614/3639, 13-14=-591/1066, 12-13=-89/77, 11-12=-87/72  
 WEBS 2-17=-984/359, 8-13=0/133, 9-13=-387/836, 12-18=-1396/590, 9-18=-1192/500, 2-16=-751/2357, 3-16=-416/184, 3-15=-294/995, 4-15=-149/85, 4-14=-388/229, 6-14=-141/109, 7-14=-1200/2836, 7-13=-1211/554, 18-19=-201/196, 10-18=-241/235

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-0 to 3-3-15, Interior (1) 3-3-15 to 21-10-12, Exterior (2) 21-10-12 to 26-9-8, Interior (1) 26-9-8 to 33-1-8 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
  - 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (5.0 psf) on member(s). 18-19; Wall dead load (10.0psf) on member(s).12-18
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 11-12
  - All bearings are assumed to be SP No.2 .
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 11, 183 lb uplift at joint 17 and 151 lb uplift at joint 12.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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

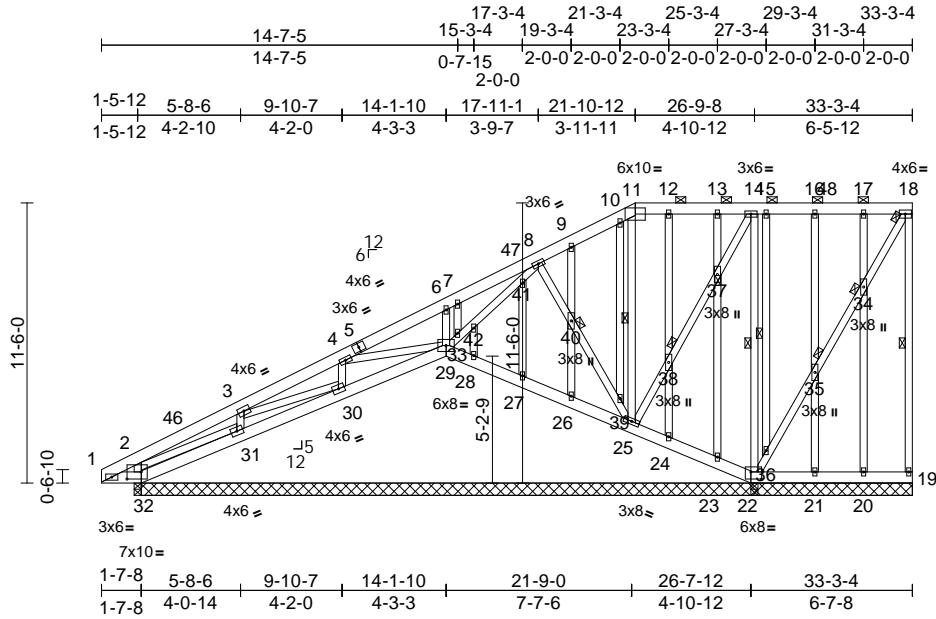


Job P03440-15869	Truss AS04E	Truss Type Piggyback Base	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180365
---------------------	----------------	------------------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:52  
ID:RsYueiMsikE2vxEJ3JjyK2Pr-RfC?PsB70Hq3NSgPqnL8w3uITxBGKwCdoi7J4zJC?f

Page: 1



Scale = 1:80.4

Plate Offsets (X, Y): [22:0-5-4,0-3-8], [32:0-7-0,0-3-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.00	31-32	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	29-30	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	19	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS								Weight: 392 lb FT = 20%

**LUMBER**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
18-19,25-11,25-14,22-14,8-25,18-22:2x4 SP No.2  
OTHERS 2x4 SP No.3 \*Except\*  
20-34,35-16,36-15,23-37,38-12,39-10:2x4 SP No.2

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 11-18.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:  
10-0-0 oc bracing: 21-22,20-21,19-20.  
WEBS 1 Row at midpt 18-19, 11-25, 14-22, 15-36  
JOINTS 1 Brace at Jt(s): 18, 34, 35, 37, 38, 40

**REACTIONS** (size)  
19=31-7-12, 20=31-7-12, 21=31-7-12, 22=0-3-8, 23=31-7-12, 24=31-7-12, 25=31-7-12, 26=31-7-12, 27=31-7-12, 28=31-7-12, 29=31-7-12, 30=31-7-12, 31=31-7-12, 32=0-3-8  
32=424 (LC 12)  
Max Horiz 19=24 (LC 9), 20=41 (LC 9), 21=46 (LC 9), 22=29 (LC 8), 23=34 (LC 9), 24=35 (LC 8), 25=88 (LC 12), 26=59 (LC 12), 28=10 (LC 12), 29=176 (LC 12), 30=113 (LC 12), 31=146 (LC 12)

Max Grav 19=65 (LC 24), 20=157 (LC 24), 21=188 (LC 1), 22=129 (LC 1), 23=130 (LC 24), 24=137 (LC 1), 25=285 (LC 1), 26=162 (LC 1), 27=89 (LC 3), 28=51 (LC 3), 29=324 (LC 1), 30=338 (LC 1), 31=341 (LC 1), 32=289 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-83/27, 2-3=-135/60, 3-4=-137/71, 4-6=-132/87, 6-7=-64/25, 7-8=-51/75, 8-9=-75/41, 9-10=-36/46, 10-11=-15/54, 11-12=-6/26, 12-13=-6/26, 13-14=-6/26, 14-15=-2/6, 15-16=-2/6, 16-17=-2/6, 17-18=-2/6, 18-19=-49/32  
BOT CHORD 1-32=-11/72, 31-32=-395/143, 30-31=-247/88, 29-30=-170/64, 28-29=-59/36, 27-28=-62/36, 26-27=-62/37, 25-26=-62/39, 24-25=-11/13, 23-24=-16/15, 22-23=-11/11, 21-22=0/0, 20-21=0/0, 19-20=0/0  
WEBS 2-32=-224/117, 11-25=-104/50, 25-38=-49/15, 37-38=-50/15, 14-37=-49/15, 14-22=-79/41, 2-31=-13/105, 3-31=-250/136, 3-30=-8/63, 4-30=-252/120, 4-29=-27/68, 6-29=-196/123, 29-33=-88/0, 33-42=-59/1, 41-42=-65/0, 8-41=-79/0, 8-40=-99/99, 39-40=-82/87, 25-39=-114/104, 22-36=-13/1, 35-36=-14/7, 34-35=-12/4, 18-34=-13/5, 7-33=-59/32, 17-34=-121/55, 20-34=-118/54, 16-35=-128/57, 21-35=-136/61, 15-36=-18/11, 13-37=-96/46, 23-37=-95/46, 12-38=-103/46, 24-38=-104/46, 10-39=-35/22, 9-40=-97/72, 26-40=-116/86, 27-41=-23/0, 28-42=-24/15

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-0 to 3-3-15, Interior (1) 3-3-15 to 21-10-12, Exterior (2) 21-10-12 to 26-9-8, Interior (1) 26-9-8 to 33-1-8 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.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

**NOTES**  
1) Unbalanced roof live loads have been considered for this design.



September 13, 2024

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss AS04E	Truss Type Piggyback Base	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	I68180365
---------------------	----------------	------------------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:52  
ID:RsYueiMsiKE2vxvEJ3IXJyyk2Pr-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 2

- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Bearings are assumed to be: Joint 32 SP No.2 , Joint 22 SP No.2 , Joint 28 SP No.2 .
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 19, 176 lb uplift at joint 29, 29 lb uplift at joint 22, 88 lb uplift at joint 25, 146 lb uplift at joint 31, 113 lb uplift at joint 30, 41 lb uplift at joint 20, 46 lb uplift at joint 21, 34 lb uplift at joint 23, 35 lb uplift at joint 24, 59 lb uplift at joint 26 and 10 lb uplift at joint 28.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))



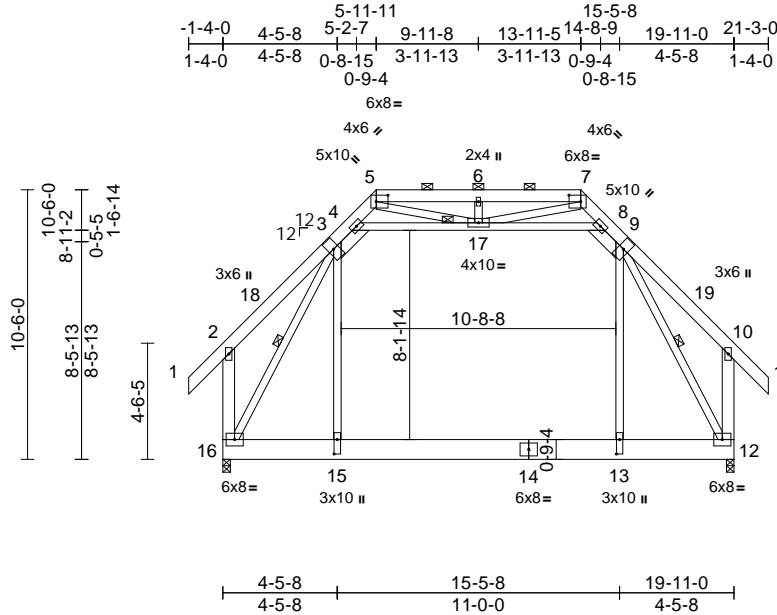
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss AT1	Truss Type Attic	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	I68180366
---------------------	--------------	---------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:52  
ID:FpT6Fh?Lo3D1hVJWIAZw85yk1Yn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoiJ74zJC?

Page: 1



Scale = 1:76.5

Plate Offsets (X, Y): [5:0-5-8,0-3-0], [7:0-5-8,0-3-0], [13:0-6-12,0-1-8], [15:0-6-12,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.08	13-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.12	13-15	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Attic	-0.06	13-15	>999	360	Weight: 246 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x10 SP DSS  
WEBS 2x4 SP No.1 \*Except\* 16-2,12-10:2x6 SP No.2, 16-3,12-9:2x4 SP No.2, 6-17,17-7,5-17:2x4 SP No.3

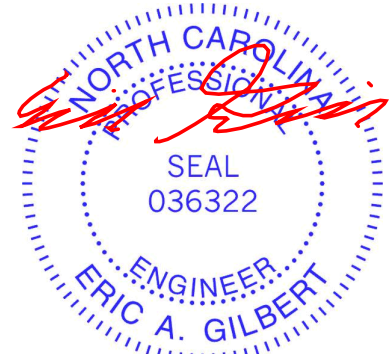
**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 3-16, 9-12  
JOINTS 1 Brace at Jt(s): 17

**REACTIONS**  
(size) 12=0-3-8, 16=0-3-8  
Max Horiz 16=329 (LC 10)  
Max Grav 12=1365 (LC 2), 16=1365 (LC 2)

**FORCES**  
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/66, 2-3=324/259, 3-4=686/138, 4-5=440/159, 5-6=740/221, 6-7=740/221, 7-8=440/159, 8-9=686/138, 9-10=324/258, 10-11=0/66, 2-16=405/236, 10-12=-404/235  
BOT CHORD 15-16=-25/706, 13-15=-25/706, 12-13=-25/706  
WEBS 3-15=-79/808, 9-13=-78/808, 4-17=-552/107, 8-17=-551/107, 3-16=-1436/20, 9-12=-1435/19, 6-17=-215/110, 7-17=-172/495, 5-17=-172/495

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-4-0 to 1-8-0, Interior (1) 1-8-0 to 5-11-11, Exterior (2) 5-11-11 to 9-11-8, Interior (1) 9-11-8 to 13-11-5, Exterior (2) 13-11-5 to 18-2-4, Interior (1) 18-2-4 to 21-3-0 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
  - 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (5.0 psf) on member(s). 3-4, 8-9, 4-17, 8-17; Wall dead load (10.0psf) on member(s).3-15, 9-13
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 13-15
  - All bearings are assumed to be SP No.2 .
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.
- LOAD CASE(S)** Standard

**NOTES**  
1) Unbalanced roof live loads have been considered for this design.



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



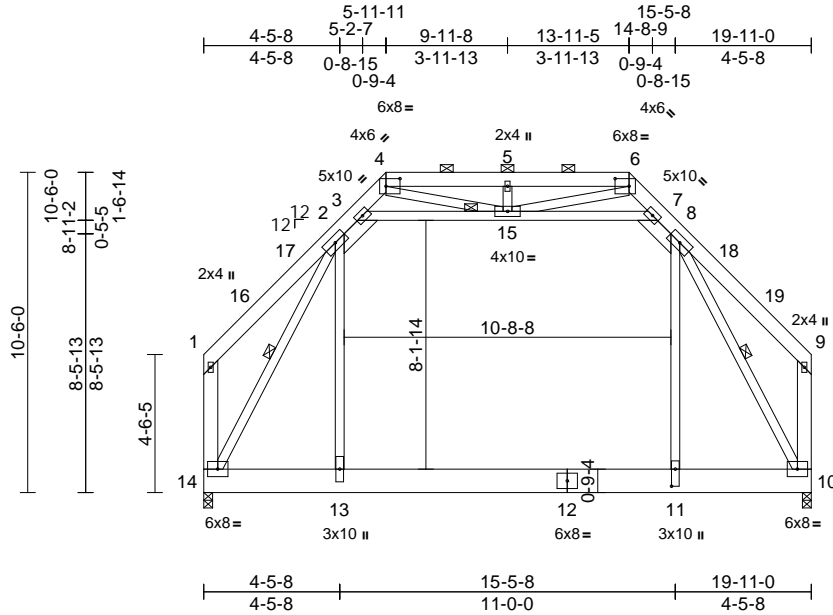
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss AT1A	Truss Type Attic	Qty 8	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	I68180367
---------------------	---------------	---------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:52  
ID:FpT6Fh?Lo3D1hVJWIAZw85yk1Yn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoiJ4zJC?f

Page: 1



Scale = 1:64.8

Plate Offsets (X, Y): [4:0-5-8,0-3-0], [6:0-5-8,0-3-0], [11:0-6-12,10-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.08	11-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.13	11-13	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Attic	-0.06	11-13	>999	360	Weight: 238 lb	FT = 20%

**LUMBER**

TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x10 SP DSS  
 WEBS 2x4 SP No.1 \*Except\* 14-1,10-9:2x6 SP No.2, 14-2,10-8:2x4 SP No.2, 5-15,15-6,4-15:2x4 SP No.3

**BRACING**

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

**REACTIONS** (size) 10=0-3-8, 14=0-3-8  
 Max Horiz 14=291 (LC 8)  
 Max Grav 10=1287 (LC 2), 14=1287 (LC 2)

**FORCES**

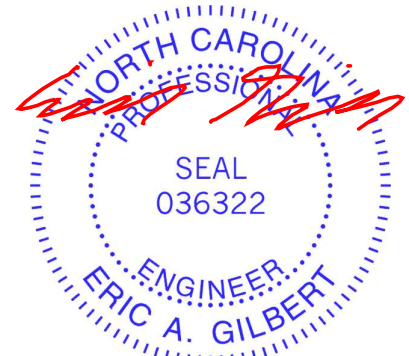
(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=256/202, 2-3=693/129, 3-4=433/158, 4-5=727/222, 5-6=727/222, 6-7=433/158, 7-8=693/129, 8-9=256/202, 1-14=274/170, 9-10=273/170  
 BOT CHORD 13-14=33/697, 11-13=33/697, 10-11=33/697  
 WEBS 2-13=76/808, 8-11=76/808, 3-15=578/98, 7-15=577/97, 2-14=1425/24, 8-10=1424/23, 5-15=216/110, 6-15=169/495, 4-15=169/495

**NOTES**

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-2-12 to 3-2-12, Interior (1) 3-2-12 to 5-11-11, Exterior (2) 5-11-11 to 9-11-8, Interior (1) 9-11-8 to 13-11-5, Exterior (2) 13-11-5 to 18-2-4, Interior (1) 18-2-4 to 19-8-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Ceiling dead load (5.0 psf) on member(s). 2-3, 7-8, 3-15, 7-15; Wall dead load (10.0psf) on member(s).2-13, 8-11
- 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 11-13
- 9) All bearings are assumed to be SP No.2 .
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



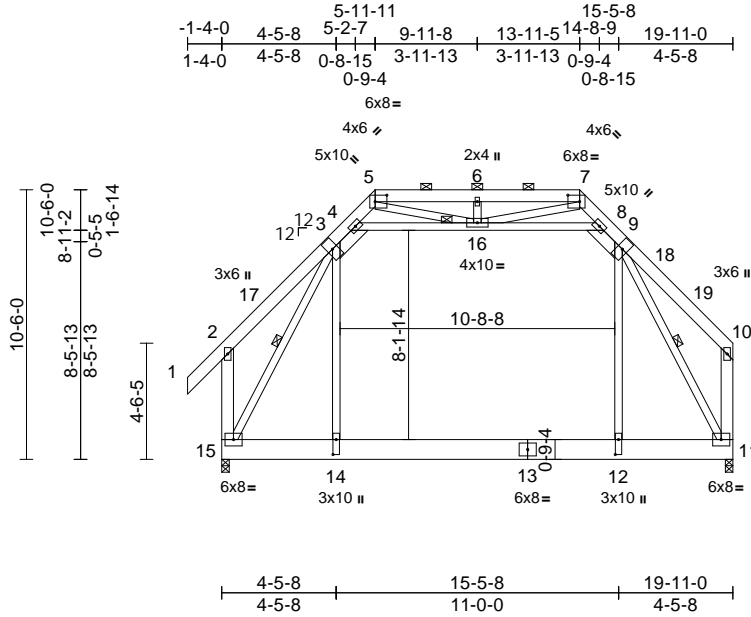
818 Soundside Road  
 Edenton, NC 27932

Job P03440-15869	Truss AT1B	Truss Type Attic	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	I68180368
---------------------	---------------	---------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:53  
ID:FpT6Fh?Lo3D1hVJWIAZw85yk1Yn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoiJ74zJC?f

Page: 1



Scale = 1:76.5

Plate Offsets (X, Y): [5:0-5-8,0-3-0], [7:0-5-8,0-3-0], [12:0-7-0,0-1-8], [14:0-7-0,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.08	12-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.13	12-14	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Attic	-0.06	12-14	>999	360	Weight: 242 lb	FT = 20%

**LUMBER**

TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x10 SP DSS  
 WEBS 2x4 SP No.1 \*Except\* 15-2,11-10:2x6 SP No.2, 15-3,11-9:2x4 SP No.2, 6-16,16-7,5-16:2x4 SP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 3-15, 9-11  
 JOINTS 1 Brace at Jt(s): 16

**REACTIONS**

(size) 11=0-3-8, 15=0-3-8  
 Max Horiz 15=316 (LC 9)  
 Max Grav 11=1283 (LC 2), 15=1368 (LC 2)

**FORCES**

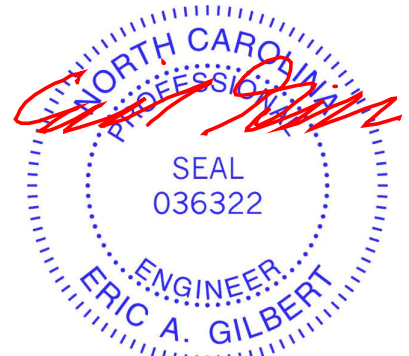
(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/66, 2-3=323/260, 3-4=689/132, 4-5=438/161, 5-6=736/223, 6-7=736/223, 7-8=435/156, 8-9=690/135, 9-10=257/201, 2-15=403/237, 10-11=275/168  
 BOT CHORD 14-15=37/694, 12-14=37/694, 11-12=37/694  
 WEBS 3-14=72/813, 9-12=83/804, 4-16=562/94, 8-16=567/107, 3-15=1444/10, 9-11=1416/33, 6-16=216/110, 7-16=173/498, 5-16=168/492

**NOTES**

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-4-0 to 1-8-0, Interior (1) 1-8-0 to 5-11-11, Exterior (2) 5-11-11 to 9-11-8, Interior (1) 9-11-8 to 13-11-5, Exterior (2) 13-11-5 to 18-2-4, Interior (1) 18-2-4 to 19-8-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Ceiling dead load (5.0 psf) on member(s). 3-4, 8-9, 4-16, 8-16; Wall dead load (10.0psf) on member(s).3-14, 9-12
- 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 12-14
- 9) All bearings are assumed to be SP No.2 .
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



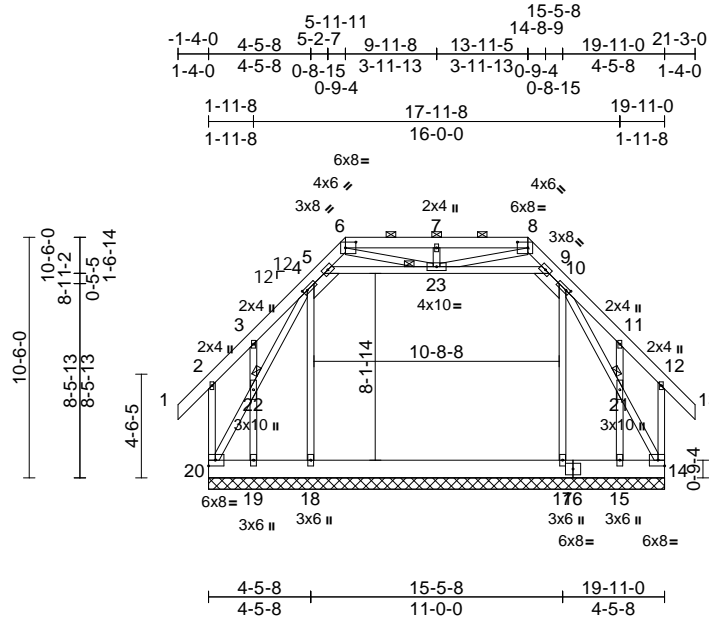
818 Soundside Road  
 Edenton, NC 27932

Job P03440-15869	Truss AT1E	Truss Type Attic Supported Gable	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180369
---------------------	---------------	-------------------------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:53  
ID: \_AqkSQ\_aQ9lMvYHrovO9ETyk1WE-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwRcDoiJ4zJC?f

Page: 1



Scale = 1:76.5

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS								
											Weight: 255 lb	FT = 20%

LUMBER	
TOP CHORD	2x6 SP No.2
BOT CHORD	2x10 SP DSS
WEBS	2x4 SP No.3 *Except* 4-20,10-14:2x4 SP No.2, 4-18,10-17,5-9:2x4 SP No.1
OTHERS	2x4 SP No.3

WEBS	
20-22	=316/274, 4-22=-319/274,
4-18	=261/185, 10-17=-246/167,
10-21	=302/252, 14-21=-300/252,
5-23	=66/222, 9-23=-53/223,
11-21	=198/132, 15-21=-201/132,
3-22	=198/132, 19-22=-201/132,
7-23	=230/102, 8-23=-185/392,
6-23	=186/392

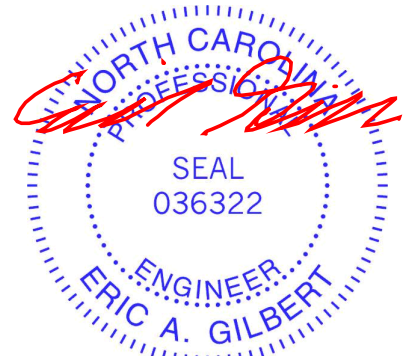
- Ceiling dead load (5.0 psf) on member(s). 4-5, 9-10, 5-23, 9-23; Wall dead load (10.0psf) on member (s).4-18, 10-17, 19-22
  - All bearings are assumed to be SP No.2 .
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 214 lb uplift at joint 20, 196 lb uplift at joint 14, 115 lb uplift at joint 18, 97 lb uplift at joint 17, 284 lb uplift at joint 15 and 284 lb uplift at joint 19.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.
- LOAD CASE(S)** Standard

BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 21, 22, 23

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-4-0 to 1-11-5, Interior (1) 1-11-5 to 5-11-11, Exterior (2) 5-11-11 to 9-11-8, Interior (1) 9-11-8 to 13-11-5, Exterior (2) 13-11-5 to 17-11-11, Interior (1) 17-11-11 to 21-3-0 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

REACTIONS	(size)	
Max Horiz	20=-315 (LC 10)	
Max Uplift	14=-196 (LC 9), 15=-284 (LC 18), 17=-97 (LC 8), 18=-115 (LC 9), 19=-284 (LC 18), 20=-214 (LC 8)	
Max Grav	14=428 (LC 20), 15=50 (LC 9), 17=769 (LC 21), 18=784 (LC 20), 19=50 (LC 8), 20=443 (LC 21)	
FORCES	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	2-20=-265/202, 1-2=0/63, 2-3=-205/202, 3-4=-271/291, 4-5=-285/229, 5-6=-421/163, 6-7=-666/283, 7-8=-666/283, 8-9=-421/161, 9-10=-285/225, 10-11=-272/292, 11-12=-206/202, 12-13=0/63, 12-14=-266/202	
BOT CHORD	19-20=-175/156, 18-19=-175/156, 17-18=-175/156, 15-17=-175/156, 14-15=-175/156	



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



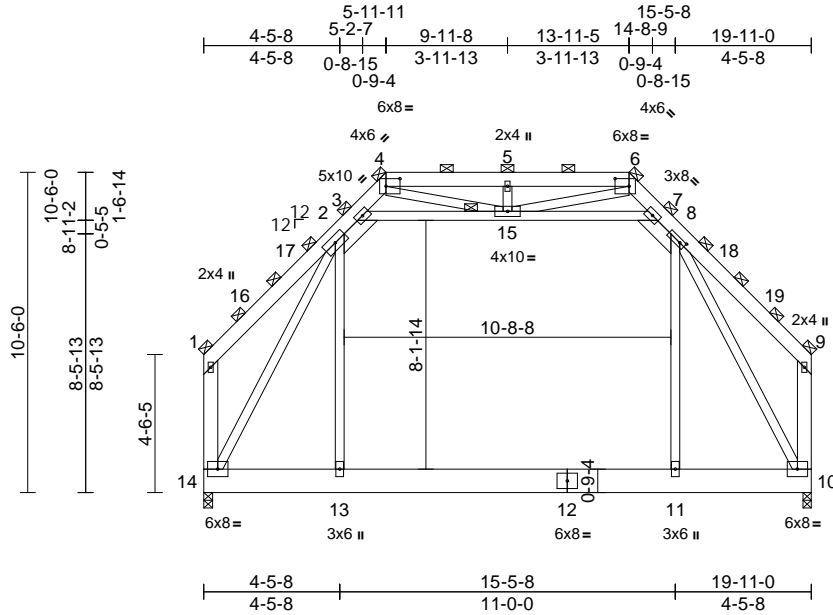
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss AT2	Truss Type Attic	Qty 1	Ply 2	164 Blueberry - Southeastern Job Reference (optional)	I68180370
---------------------	--------------	---------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:53  
ID:trfEGTTkSxFS?SAUVE5?jPyk1UJ-RfC?PsB70Hq3NSgPqnl8w3ulTXbGKWrCdoi7J4zJCf

Page: 1



Scale = 1:64.8

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

Loading	(psf)	Spacing	3-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.06	11-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.09	11-13	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.60	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Attic	-0.05	11-13	>999	360	Weight: 475 lb	FT = 20%

**LUMBER**

- TOP CHORD 2x6 SP No.2
- BOT CHORD 2x10 SP DSS
- WEBS 2x4 SP No.1 \*Except\* 14-1,10-9:2x6 SP No.2, 14-2,10-8:2x4 SP No.2, 5-15,15-6,4-15:2x4 SP No.3

**BRACING**

- TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals (Switched from sheeted: Spacing > 2-0-0).
- BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
- JOINTS 1 Brace at Jt(s): 1, 4, 6, 9, 15

**REACTIONS**

- (size) 10=0-3-4, 14=0-3-8
- Max Horiz 14=-436 (LC 10)
- Max Grav 10=1930 (LC 2), 14=1930 (LC 2)

**FORCES**

- (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=-384/303, 2-3=-1039/194, 3-4=-650/237, 4-5=-1090/332, 5-6=-1090/332, 6-7=-650/236, 7-8=-1039/193, 8-9=-384/303, 1-14=-411/255, 9-10=-410/255
- BOT CHORD 13-14=-49/1046, 11-13=-49/1046, 10-11=-49/1046
- WEBS 2-13=-115/1213, 8-11=-114/1213, 3-15=-867/147, 7-15=-865/145, 2-14=-2137/37, 8-10=-2136/35, 5-15=-325/165, 6-15=-253/743, 4-15=-253/743

**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.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.  
Web 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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-2-12 to 3-2-12, Interior (1) 3-2-12 to 5-11-11, Exterior (2) 5-11-11 to 9-11-8, Interior (1) 9-11-8 to 13-11-5, Exterior (2) 13-11-5 to 18-2-4, Interior (1) 18-2-4 to 19-8-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 2-3, 7-8, 3-15, 7-15; Wall dead load (10.0psf) on member(s).2-13, 8-11
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 11-13
- All bearings are assumed to be SP No.2 .
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



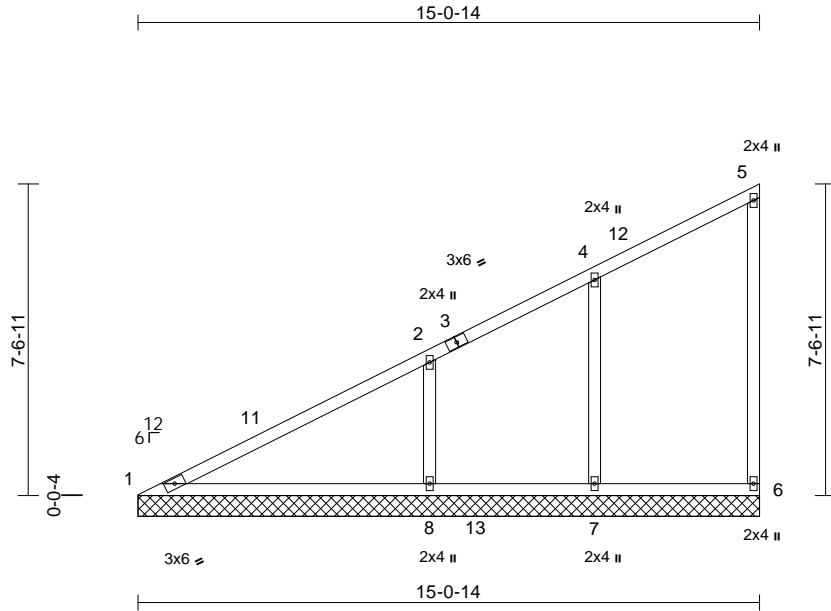
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss AV1	Truss Type Valley	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180371
---------------------	--------------	----------------------	----------	----------	--	-----------

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

Run: 8.81 E Jul 25 2024 Print: 8.810 E Jul 25 2024 MiTek Industries, Inc. Thu Sep 12 13:51:12  
ID: TG45eSQs90tu8?Svq6YI6nyk1UM-w0daZylcdn7vcKMK7mtoZRHWEGgA3xYqxnYCYoM7U

Page: 1



Scale = 1:55.9

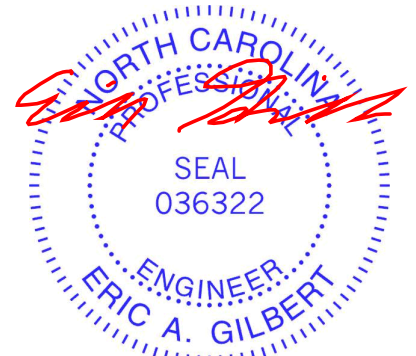
Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 69 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 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS (lb/size)	
	1=233/15-0-14, 6=145/15-0-14, 7=244/15-0-14, 8=572/15-0-14
Max Horiz	1=283 (LC 12)
Max Uplift	6=-54 (LC 12), 7=-97 (LC 12), 8=-205 (LC 12)
Max Grav	1=233 (LC 1), 6=173 (LC 2), 7=348 (LC 2), 8=572 (LC 1)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-11=-406/95, 2-11=-238/131, 2-3=-129/21, 3-4=-125/53, 4-12=-70/2, 5-12=-40/35, 5-6=-104/74
BOT CHORD	1-8=-162/361, 8-13=-2/4, 7-13=-2/4, 6-7=-2/4
WEBS	4-7=-204/133, 2-8=-381/207

- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 6, 97 lb uplift at joint 7 and 205 lb uplift at joint 8.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

- NOTES**
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 14-11-10 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.



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))



818 Soundside Road  
Edenton, NC 27932

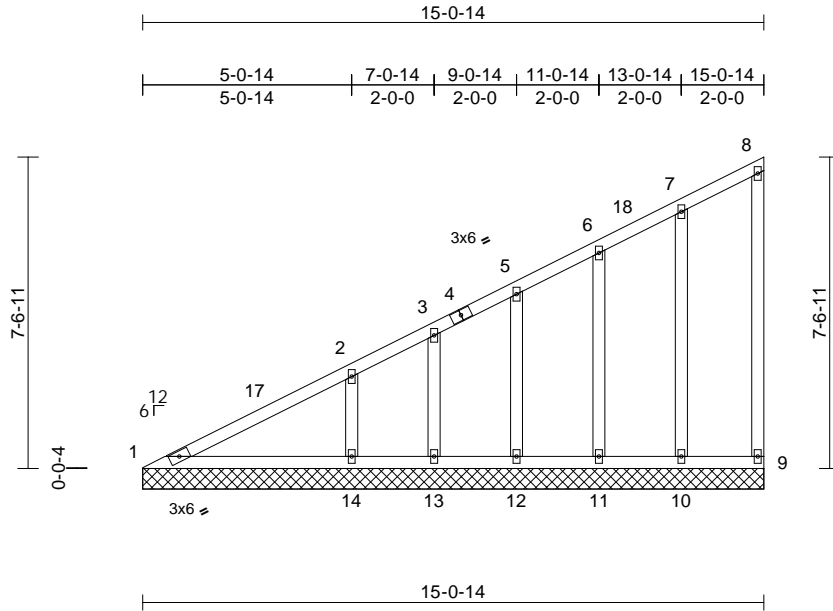


Job P03440-15869	Truss AV1E	Truss Type Valley	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180372
---------------------	---------------	----------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:53  
ID:xSeUsoRUwK?km815Op3Xe\_yk1UL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:55.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 87 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 \*Except\* 10-7:2x4 SP No.2

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

**REACTIONS** (size)  
1=15-0-14, 9=15-0-14, 10=15-0-14,  
11=15-0-14, 12=15-0-14,  
13=15-0-14, 14=15-0-14  
Max Horiz 1=283 (LC 12)  
Max Uplift 9=-24 (LC 12), 10=-63 (LC 12),  
11=-59 (LC 12), 12=-70 (LC 12),  
13=-23 (LC 12), 14=-141 (LC 12)  
Max Grav 1=165 (LC 1), 9=59 (LC 1), 10=172 (LC 1),  
11=151 (LC 1), 12=193 (LC 1),  
13=29 (LC 1), 14=426 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-299/132, 2-3=-186/68, 3-5=-155/72,  
5-6=-111/50, 6-7=-75/34, 7-8=-33/15,  
8-9=-45/34  
BOT CHORD 1-14=-125/238, 13-14=0/0, 12-13=0/0,  
11-12=0/0, 10-11=0/0, 9-10=0/0  
WEBS 7-10=-127/90, 6-11=-116/71, 5-12=-136/79,  
3-13=-50/45, 2-14=-271/137

**NOTES**  
1) Wind: ASCE 7-10; Vult=130mph (3-second gust)  
Vasd=103mph; TC DL=6.0psf; BC DL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 14-11-10 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.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 9, 63 lb uplift at joint 10, 59 lb uplift at joint 11, 70 lb uplift at joint 12, 23 lb uplift at joint 13 and 141 lb uplift at joint 14.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

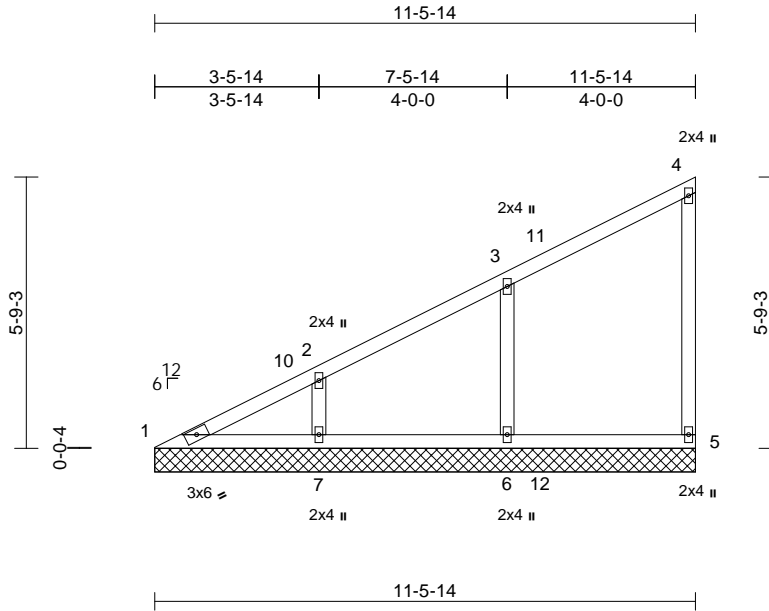
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss AV2	Truss Type Valley	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180373
---------------------	--------------	----------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:54  
ID:xSeUsoRUwK?km815Op3Xe\_yk1UL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:48.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 49 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.

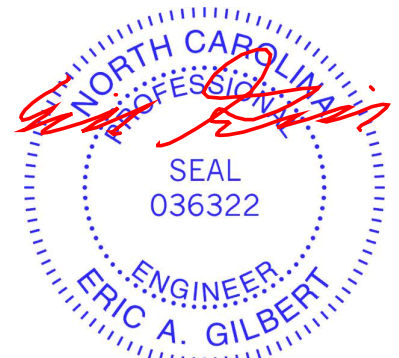
- REACTIONS** (size)
- 1=11-5-14, 5=11-5-14, 6=11-5-14, 7=11-5-14
  - Max Horiz 1=214 (LC 12)
  - Max Uplift 5=-48 (LC 12), 6=-132 (LC 12), 7=-111 (LC 12)
  - Max Grav 1=116 (LC 21), 5=163 (LC 2), 6=348 (LC 2), 7=328 (LC 1)

- FORCES** (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=-205/106, 2-3=-142/71, 3-4=-73/38, 4-5=-94/78
  - BOT CHORD 1-7=-98/139, 6-7=-3/6, 5-6=-3/6
  - WEBS 3-6=-260/160, 2-7=-229/126

- NOTES**
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 11-4-10 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.
  - Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.

- 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'-06-00 tall by 2'-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 5, 132 lb uplift at joint 6 and 111 lb uplift at joint 7.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



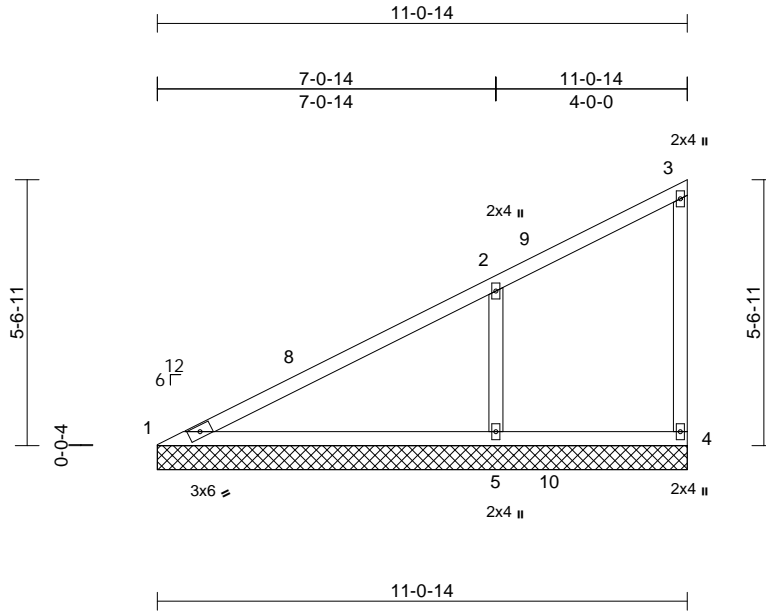
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss AV2A	Truss Type Valley	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180374
---------------------	---------------	----------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:54  
ID: xSeUsoRUwK?km815Op3Xe\_yk1UL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:48.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 46 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 6-0-0 oc bracing.

#### REACTIONS

(size)	1=11-0-14, 4=11-0-14, 5=11-0-14
Max Horiz	1=206 (LC 12)
Max Uplift	4=-23 (LC 12), 5=-216 (LC 12)
Max Grav	1=228 (LC 1), 4=98 (LC 2), 5=593 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-396/110, 2-3=-78/18, 3-4=-56/69
BOT CHORD	1-5=-172/352, 4-5=-4/2
WEBS	2-5=-399/220

#### NOTES

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust)  
Vasd=103mph; TC DL=6.0psf; BC DL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 10-11-10 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) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) All bearings are assumed to be SP No.2 .
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 4 and 216 lb uplift at joint 5.

#### LOAD CASE(S)

Standard



September 13, 2024

#### WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))



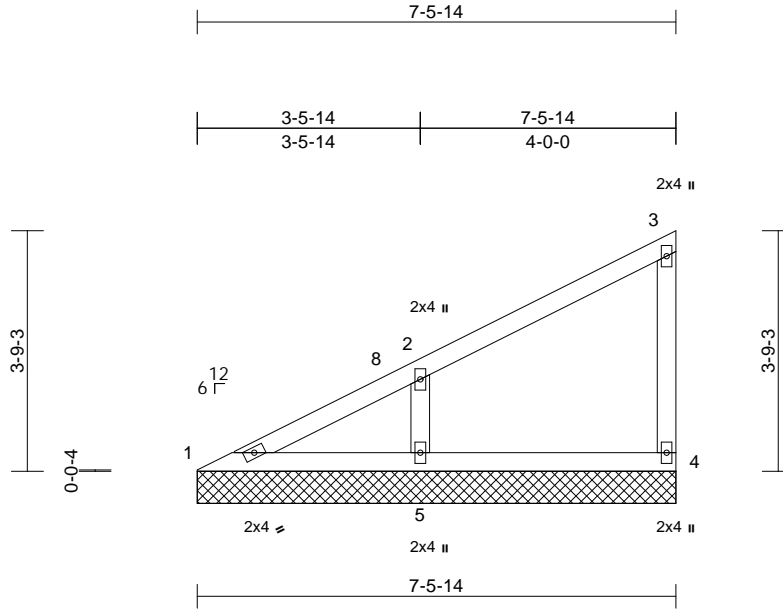
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss AV3	Truss Type Valley	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180375
---------------------	--------------	----------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:54  
ID:xSeUsoRUwK?km815Op3Xe\_yk1UL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:33.6

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 29 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** (size) 1=7-5-14, 4=7-5-14, 5=7-5-14
- Max Horiz 1=136 (LC 12)
  - Max Uplift 4=-46 (LC 12), 5=-131 (LC 12)
  - Max Grav 1=101 (LC 1), 4=120 (LC 1), 5=367 (LC 1)

- FORCES** (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=-163/82, 2-3=-70/30, 3-4=-91/88
  - BOT CHORD 1-5=-101/122, 4-5=0/0
  - WEBS 2-5=-263/203

- NOTES**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust)  
Vasd=103mph; TC DL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 7-4-10 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) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) Gable studs spaced at 4-0-0 oc.

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - 8) All bearings are assumed to be SP No.2 .
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 4 and 131 lb uplift at joint 5.
- LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



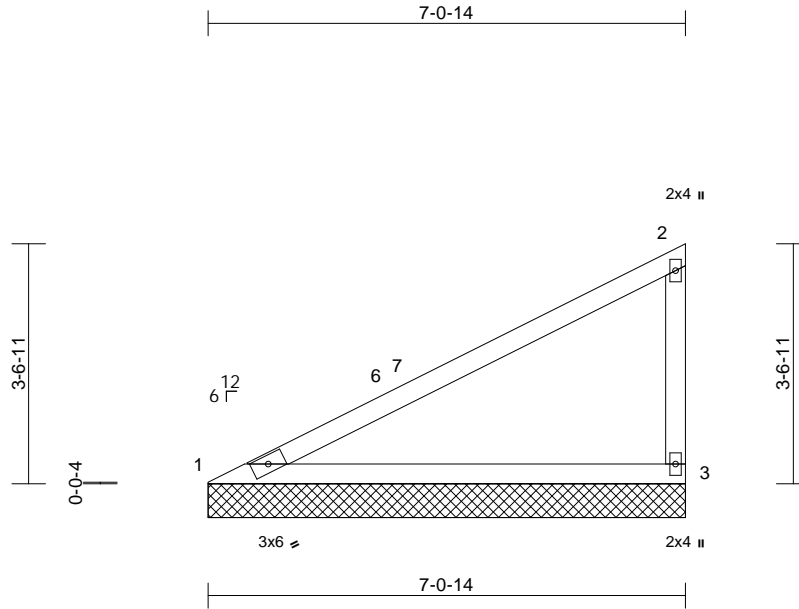
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss AV3A	Truss Type Valley	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180376
---------------------	---------------	----------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:54  
ID:xSeUsoRUwK?km815Op3Xe\_yk1UL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:32.8

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.02	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 26 lb	FT = 20%

**LUMBER**

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

**BRACING**

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

**REACTIONS**

(size) 1=7-0-14, 3=7-0-14  
Max Horiz 1=128 (LC 12)  
Max Uplift 1=-41 (LC 12), 3=-102 (LC 12)  
Max Grav 1=277 (LC 1), 3=277 (LC 1)

**FORCES**

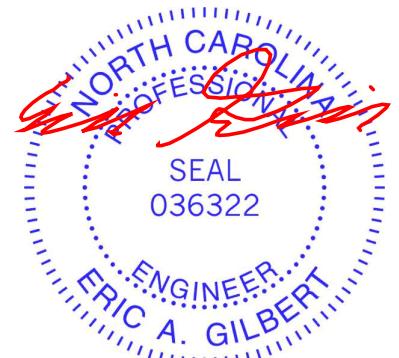
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-499/111, 2-3=-179/145  
BOT CHORD 1-3=-225/441

**NOTES**

- Wind: ASCE 7-10; Vult=130mph (3-second gust)  
Vasd=103mph; TC DL=6.0psf; BC DL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 6-11-10 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.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 3 and 41 lb uplift at joint 1.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



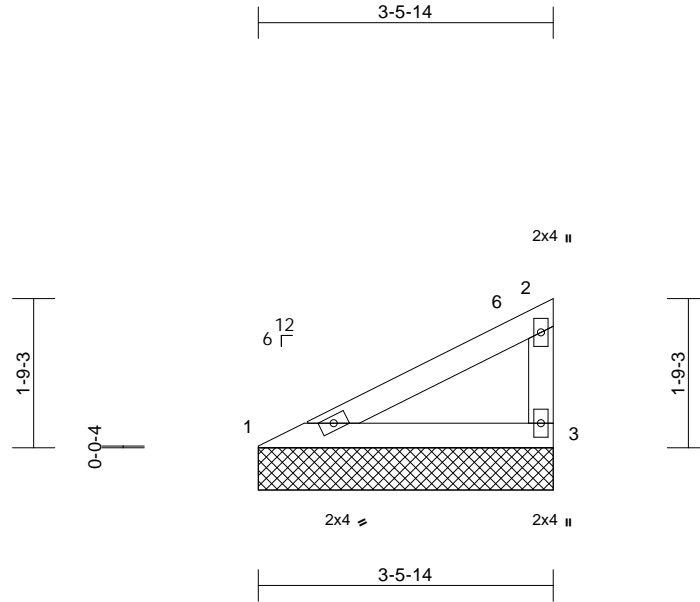
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss AV4	Truss Type Valley	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180377
---------------------	--------------	----------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:54  
ID:PeBs37S6he7bOlcHxWamBCyk1UK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:26

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 12 lb	FT = 20%

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-5-14 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS

(size) 1=3-5-14, 3=3-5-14  
Max Horiz 1=59 (LC 12)  
Max Uplift 1=-21 (LC 12), 3=-48 (LC 12)  
Max Grav 1=134 (LC 1), 3=134 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-209/62, 2-3=-82/70  
BOT CHORD 1-3=-128/181

#### NOTES

- Wind: ASCE 7-10; Vult=130mph (3-second gust)  
Vasd=103mph; TC DL=6.0psf; BC DL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 3-4-10 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.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 3 and 21 lb uplift at joint 1.

LOAD CASE(S) Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

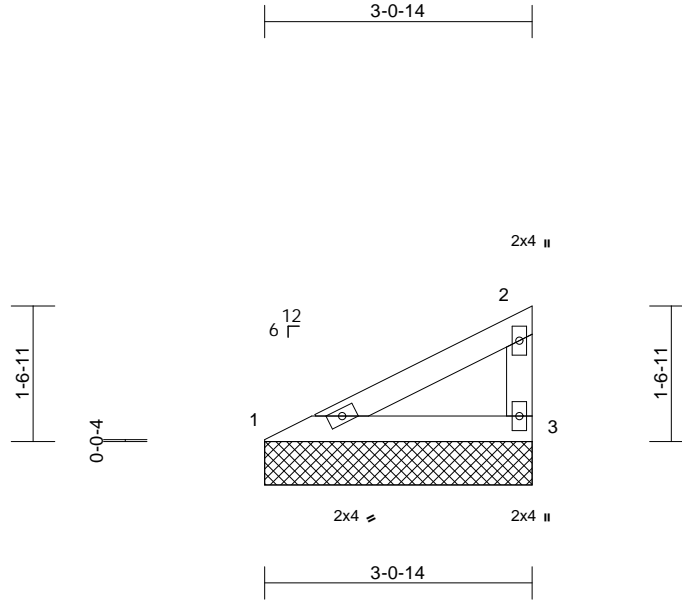
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss AV4A	Truss Type Valley	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180378
---------------------	---------------	----------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:54  
ID:PeBs37S6he7bOlcHxWamBCyk1UK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:25.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 10 lb	FT = 20%

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 3-0-14 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS**

(size) 1=3-0-14, 3=3-0-14  
Max Horiz 1=51 (LC 12)  
Max Uplift 1=-19 (LC 12), 3=-42 (LC 12)  
Max Grav 1=117 (LC 1), 3=117 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

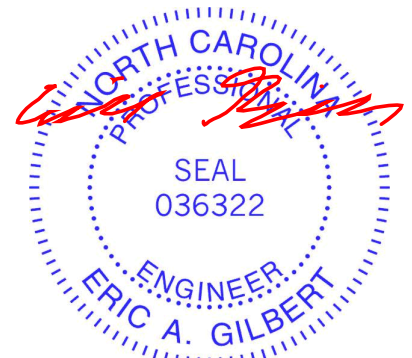
TOP CHORD 1-2=-175/49, 2-3=-70/59  
BOT CHORD 1-3=-106/151

**NOTES**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust)  
Vasd=103mph; TC DL=6.0psf; BC DL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 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) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) All bearings are assumed to be SP No.2 .
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 3 and 19 lb uplift at joint 1.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



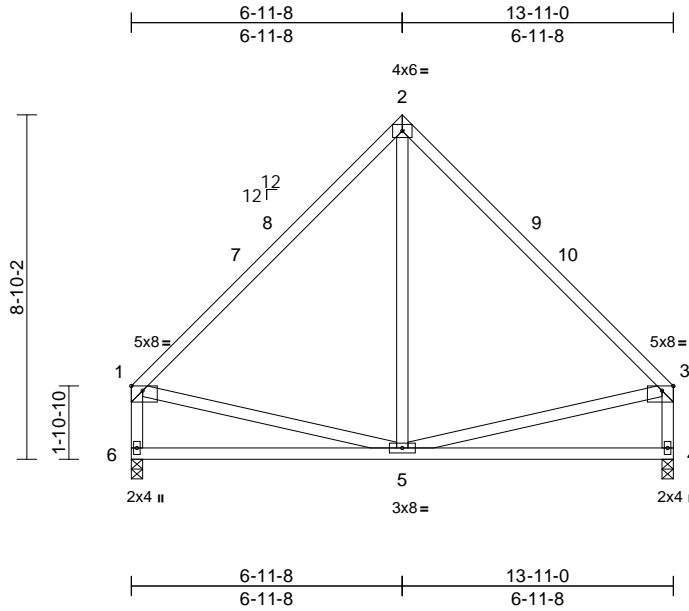
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss B01	Truss Type Common	Qty 3	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	I68180379
---------------------	--------------	----------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:54  
ID:FznXshABFG0SQ7SaGL73x8yk1S6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWwCDoi7J4zJC?f

Page: 1



Scale = 1:56.8  
Plate Offsets (X, Y): [1:Edge,0-1-7], [3:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.04	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.09	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 87 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.2 \*Except\* 6-1,4-3:2x4 SP No.3

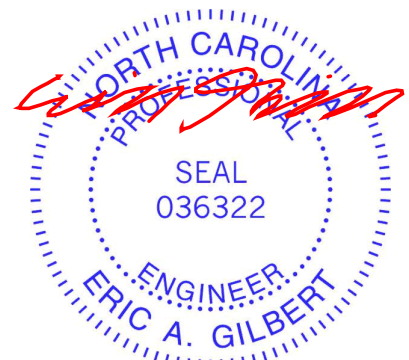
**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 5-6-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 4=0-3-8, 6=0-3-8  
Max Horiz 6=-229 (LC 8)  
Max Uplift 4=-94 (LC 12), 6=-94 (LC 13)  
Max Grav 4=545 (LC 1), 6=545 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-493/155, 2-3=-493/155, 1-6=-485/142, 3-4=-485/142  
BOT CHORD 5-6=-257/298, 4-5=-100/150  
WEBS 2-5=-4/249, 1-5=-87/236, 3-5=-89/237

- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - 6) All bearings are assumed to be SP No.2 .
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 94 lb uplift at joint 6 and 94 lb uplift at joint 4.
- LOAD CASE(S)** Standard

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 6-11-8, Exterior (2) 6-11-8 to 9-11-8, Interior (1) 9-11-8 to 13-9-4 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



September 13,2024

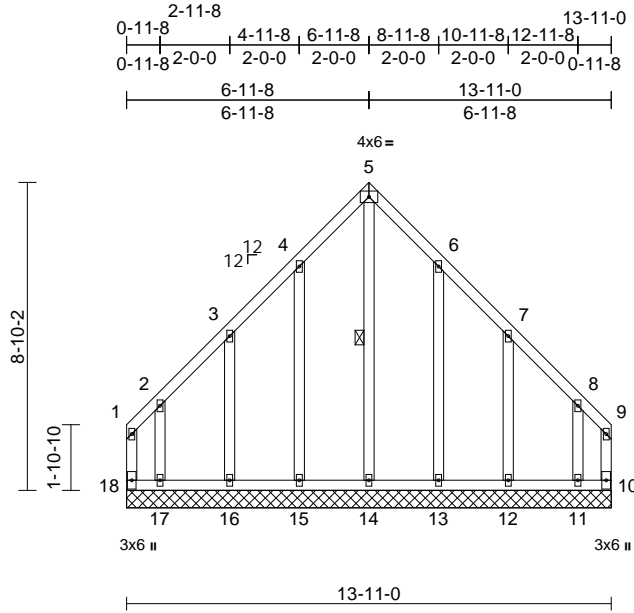


Job P03440-15869	Truss B01E	Truss Type Common Supported Gable	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180380
---------------------	---------------	--------------------------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:54  
ID:cC6sUCR\_31nK3VbpYZXDqnyk1Rm-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:55.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	10	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MR							
										Weight: 106 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 *Except* 14-5,15-4,13-6:2x4 SP No.2

WEBS	
5-14	=356/233, 4-15=-157/125,
3-16	=174/138, 2-17=-193/169,
6-13	=157/125, 7-12=-174/138,
8-11	=189/168

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 311 lb uplift at joint 18, 294 lb uplift at joint 10, 115 lb uplift at joint 15, 118 lb uplift at joint 16, 304 lb uplift at joint 17, 115 lb uplift at joint 13, 118 lb uplift at joint 12 and 292 lb uplift at joint 11.

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

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) 0-1-12 to 2-11-8, Exterior (2) 2-11-8 to 6-11-8, Corner (3) 6-11-8 to 9-11-8, Exterior (2) 9-11-8 to 13-9-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .

**LOAD CASE(S)** Standard

REACTIONS	(size)	
	10=13-11-0, 11=13-11-0,	
	12=13-11-0, 13=13-11-0,	
	14=13-11-0, 15=13-11-0,	
	16=13-11-0, 17=13-11-0,	
	18=13-11-0	

Max Horiz	18=229 (LC 8)	
Max Uplift	10=294 (LC 11), 11=292 (LC 8),	
	12=118 (LC 13), 13=115 (LC 13),	
	15=115 (LC 12), 16=118 (LC 12),	
	17=304 (LC 9), 18=311 (LC 10)	
Max Grav	10=319 (LC 8), 11=351 (LC 11),	
	12=175 (LC 20), 13=192 (LC 20),	
	14=295 (LC 13), 15=192 (LC 19),	
	16=174 (LC 19), 17=363 (LC 10),	
	18=335 (LC 9)	

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-18=-197/179, 1-2=-205/193, 2-3=-116/126,
	3-4=-169/203, 4-5=-252/301, 5-6=-252/301,
	6-7=-169/203, 7-8=-109/124, 8-9=-195/182,
	9-10=-187/169
BOT CHORD	17-18=-120/119, 16-17=-120/119,
	15-16=-120/119, 14-15=-120/119,
	13-14=-120/119, 12-13=-120/119,
	11-12=-120/119, 10-11=-120/119



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



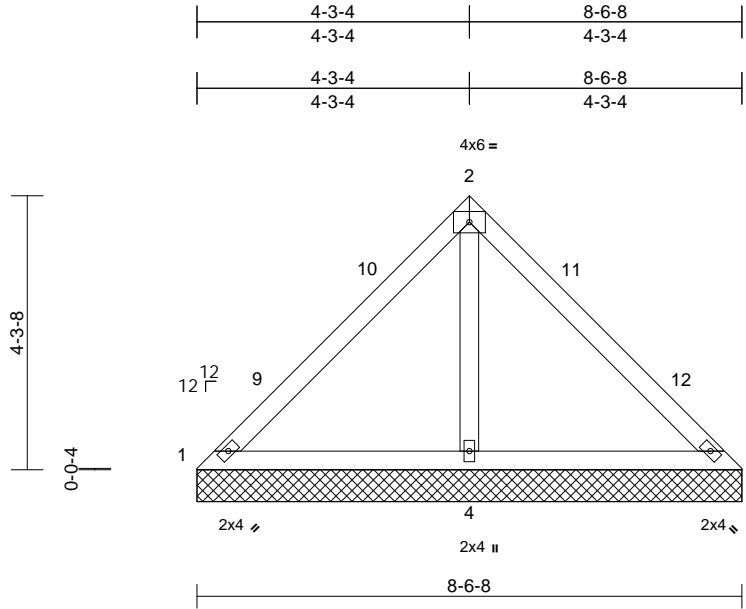
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss BV1	Truss Type Valley	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180381
---------------------	--------------	----------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:55  
ID:nJG0ozatTPAmBUwinDon6yk1Rb-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:25.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 35 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 8-6-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS**

(size) 1=8-6-8, 3=8-6-8, 4=8-6-8  
Max Horiz 1=-101 (LC 8)  
Max Uplift 1=-22 (LC 24), 3=-22 (LC 23), 4=-203 (LC 12)  
Max Grav 1=63 (LC 23), 3=63 (LC 24), 4=628 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-130/247, 2-3=-129/241  
BOT CHORD 1-4=-234/176, 3-4=-234/176  
WEBS 2-4=-472/234

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 4-3-8, Exterior (2) 4-3-8 to 7-3-8, Interior (1) 7-3-8 to 8-6-12 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.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.

- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 1, 22 lb uplift at joint 3 and 203 lb uplift at joint 4.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



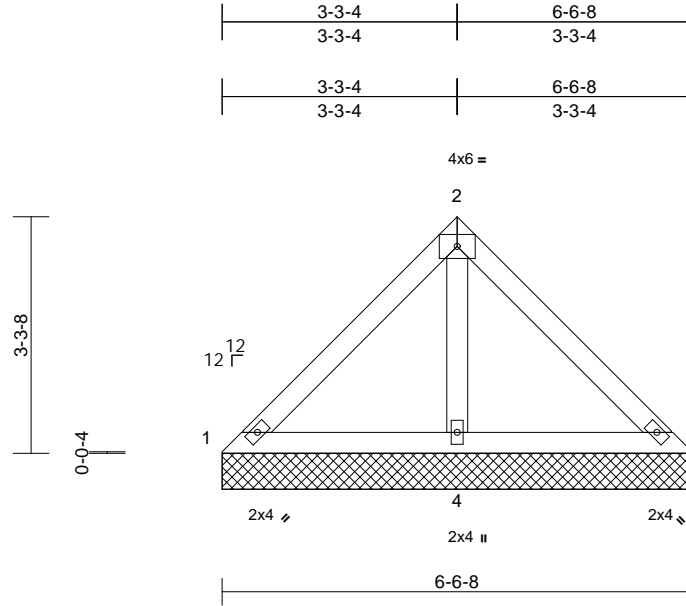
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss BV2	Truss Type Valley	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180382
---------------------	--------------	----------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:55  
ID:8H4vrgd0lxo3\_zMuUKpzU9yk1RW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?

Page: 1



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 26 lb	FT = 20%

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

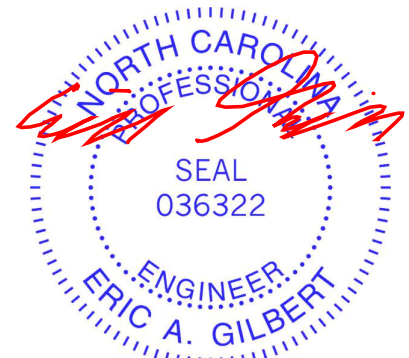
**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-6-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 1=6-6-8, 3=6-6-8, 4=6-6-8  
Max Horiz 1=76 (LC 9)  
Max Uplift 4=-124 (LC 12)  
Max Grav 1=68 (LC 23), 3=68 (LC 24), 4=427 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-68/152, 2-3=-67/144  
BOT CHORD 1-4=-144/120, 3-4=-144/120  
WEBS 2-4=-290/143

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 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.
  - Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
  - 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - All bearings are assumed to be SP No.2 .
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 124 lb uplift at joint 4.
- LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



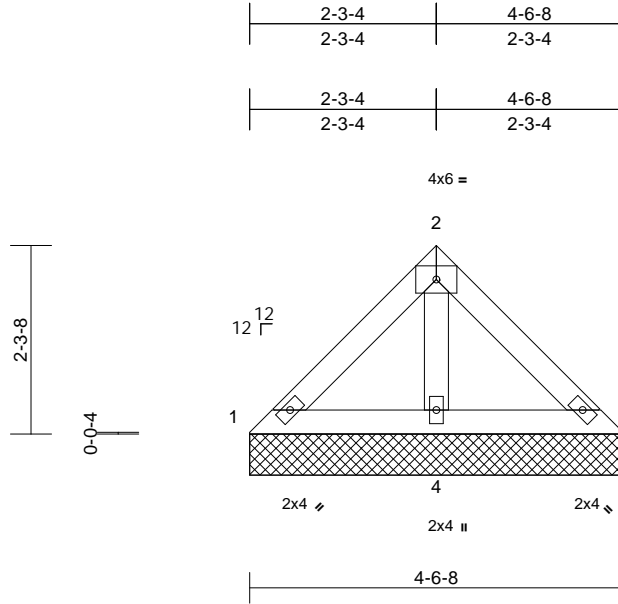
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss BV3	Truss Type Valley	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180383
---------------------	--------------	----------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:55  
ID:N?6JklkfAixnZLYcWjT4L3yk1RN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:18.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 17 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 4-6-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS**

(size) 1=4-6-8, 3=4-6-8, 4=4-6-8  
Max Horiz 1=-52 (LC 8)  
Max Uplift 1=-3 (LC 13), 3=-6 (LC 13), 4=-66 (LC 12)  
Max Grav 1=61 (LC 23), 3=61 (LC 24), 4=261 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-51/78, 2-3=-51/70  
BOT CHORD 1-4=-75/68, 3-4=-75/68  
WEBS 2-4=-155/62

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 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.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 1, 6 lb uplift at joint 3 and 66 lb uplift at joint 4.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



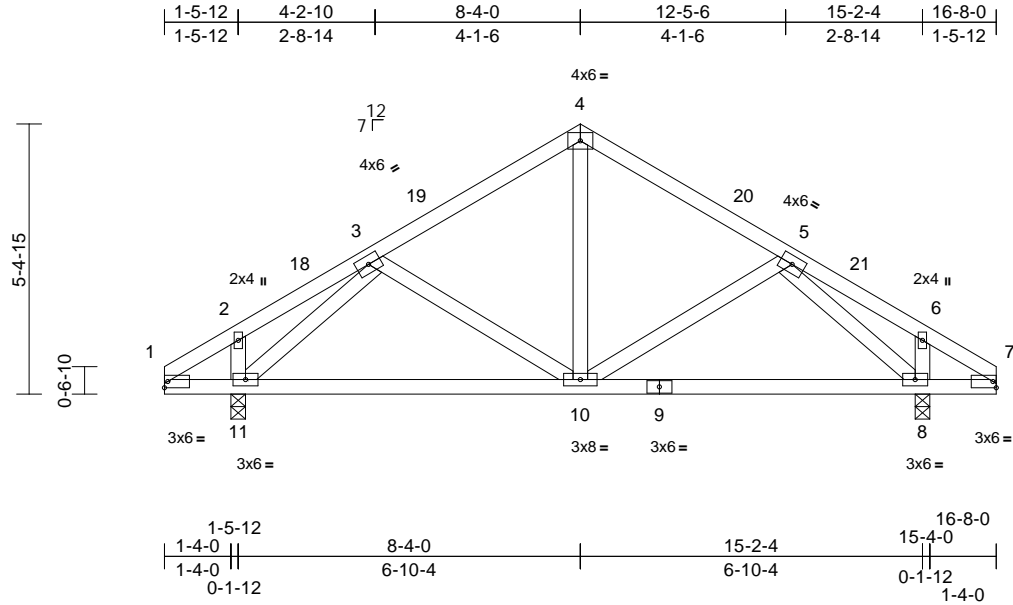
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss C01	Truss Type Common	Qty 6	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180384
---------------------	--------------	----------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:55  
ID:R92PSi7keXzFOG?mOR2bepk1QtRfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f

Page: 1



Scale = 1:45.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.03	8-10	>999	240	MT20 244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.07	8-10	>999	180	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	8	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 88 lb FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3

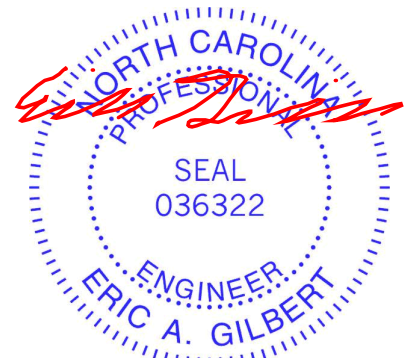
**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 8=0-3-8, 11=0-3-8  
Max Horiz 11=120 (LC 9)  
Max Uplift 8=-129 (LC 13), 11=-129 (LC 12)  
Max Grav 8=667 (LC 1), 11=667 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-87/45, 2-3=-78/48, 3-4=-503/132, 4-5=-503/132, 5-6=-78/48, 6-7=-87/45  
BOT CHORD 1-11=0/73, 10-11=-127/464, 8-10=-51/423, 7-8=0/73  
WEBS 4-10=-38/268, 2-11=-109/93, 3-11=-587/158, 3-10=-97/121, 5-10=-98/122, 5-8=-587/158, 6-8=-109/93

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 8-4-0, Exterior (2) 8-4-0 to 11-4-0, Interior (1) 11-4-0 to 16-8-0 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
  - Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
  - 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - All bearings are assumed to be SP No.2 .
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 129 lb uplift at joint 11 and 129 lb uplift at joint 8.
- LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



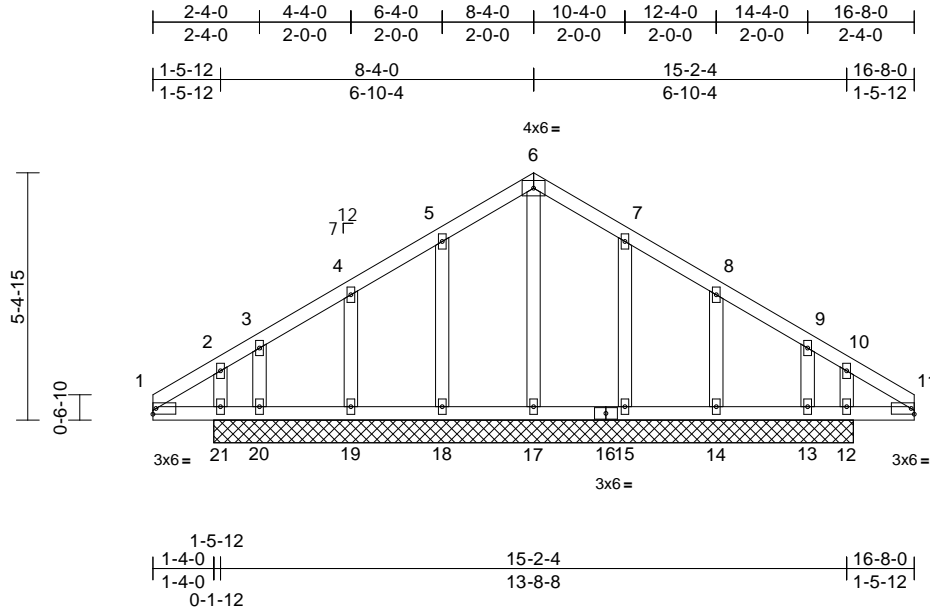
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss C01E	Truss Type Common Supported Gable	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180385
---------------------	---------------	--------------------------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:55  
ID:5YteE25wo72u?Z684EULugyk1Pd-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoiJ4zJC?f

Page: 1



Scale = 1:44.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 86 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 10-0-0 oc purlins.
- BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS**

- (size) 12=14-0-0, 13=14-0-0, 14=14-0-0, 15=14-0-0, 17=14-0-0, 18=14-0-0, 19=14-0-0, 20=14-0-0, 21=14-0-0
- Max Horiz 21=120 (LC 9)
- Max Uplift 12=89 (LC 9), 13=103 (LC 13), 14=67 (LC 13), 15=69 (LC 13), 18=70 (LC 12), 19=66 (LC 12), 20=112 (LC 9), 21=105 (LC 8)
- Max Grav 12=196 (LC 19), 13=153 (LC 11), 14=170 (LC 20), 15=177 (LC 20), 17=201 (LC 22), 18=177 (LC 19), 19=169 (LC 19), 20=165 (LC 10), 21=208 (LC 20)

**FORCES**

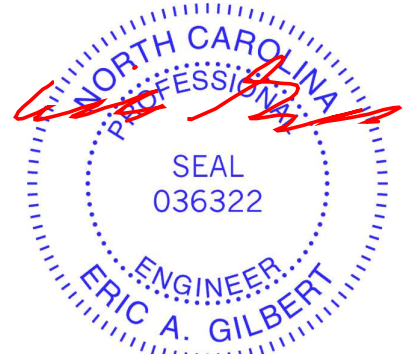
- (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=-66/105, 2-3=-77/106, 3-4=-38/106, 4-5=-58/117, 5-6=-100/134, 6-7=-100/128, 7-8=-58/113, 8-9=-29/102, 9-10=-66/97, 10-11=-58/99
- BOT CHORD 1-21=-83/71, 20-21=-78/63, 19-20=-78/63, 18-19=-78/63, 17-18=-78/63, 15-17=-78/63, 14-15=-78/63, 13-14=-78/63, 12-13=-78/63, 11-12=-78/63
- WEBS 6-17=-160/0, 5-18=-137/81, 4-19=-129/82, 3-20=-113/87, 7-15=-137/81, 8-14=-130/82, 9-13=-109/83, 2-21=-101/60, 10-12=-98/60

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) 0-0-0 to 3-0-0, Exterior (2) 3-0-0 to 8-4-0, Corner (3) 8-4-0 to 11-4-0, Exterior (2) 11-4-0 to 16-8-0 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) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 5) All plates are 2x4 (||) MT20 unless otherwise indicated.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) All bearings are assumed to be SP No.2 .
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 70 lb uplift at joint 18, 66 lb uplift at joint 19, 112 lb uplift at joint 20, 69 lb uplift at joint 15, 67 lb uplift at joint 14, 103 lb uplift at joint 13, 105 lb uplift at joint 21 and 89 lb uplift at joint 12.
- 11) Non Standard bearing condition. Review required.

LOAD CASE(S) Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbccomponents.com)



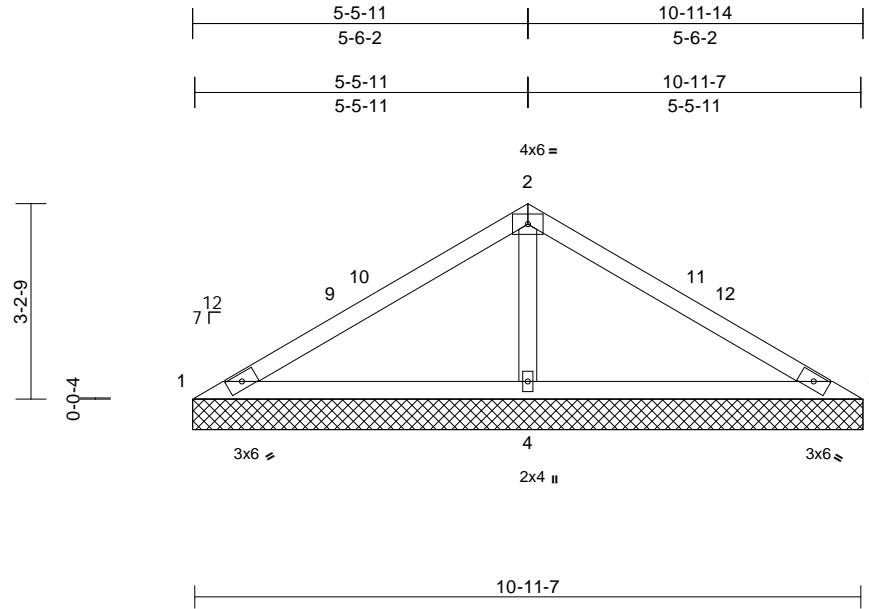
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss CV1	Truss Type Valley	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180386
---------------------	--------------	----------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:55  
ID:s5MgwnBxwa3lynjgYwdDCMyk1PV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:33.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 37 lb	FT = 20%

**LUMBER**

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

**BRACING**

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

**REACTIONS**

(size) 1=11-0-5, 3=11-0-5, 4=11-0-5  
Max Horiz 1=-75 (LC 8)  
Max Uplift 1=-40 (LC 24), 3=-40 (LC 23), 4=-167 (LC 12)  
Max Grav 1=70 (LC 23), 3=70 (LC 24), 4=841 (LC 1)

**FORCES**

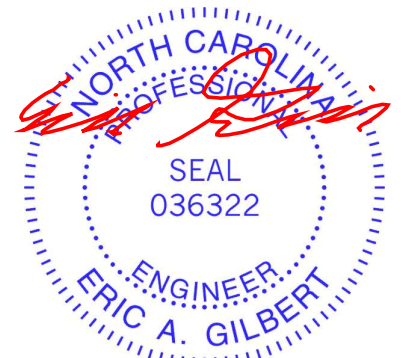
(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-120/434, 2-3=-120/434  
BOT CHORD 1-4=-346/153, 3-4=-346/153  
WEBS 2-4=-656/214

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 5-6-2, Exterior (2) 5-6-2 to 8-6-2, Interior (1) 8-6-2 to 11-0-5 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.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.

- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - All bearings are assumed to be SP No.2 .
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 1, 40 lb uplift at joint 3 and 167 lb uplift at joint 4.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.
- LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



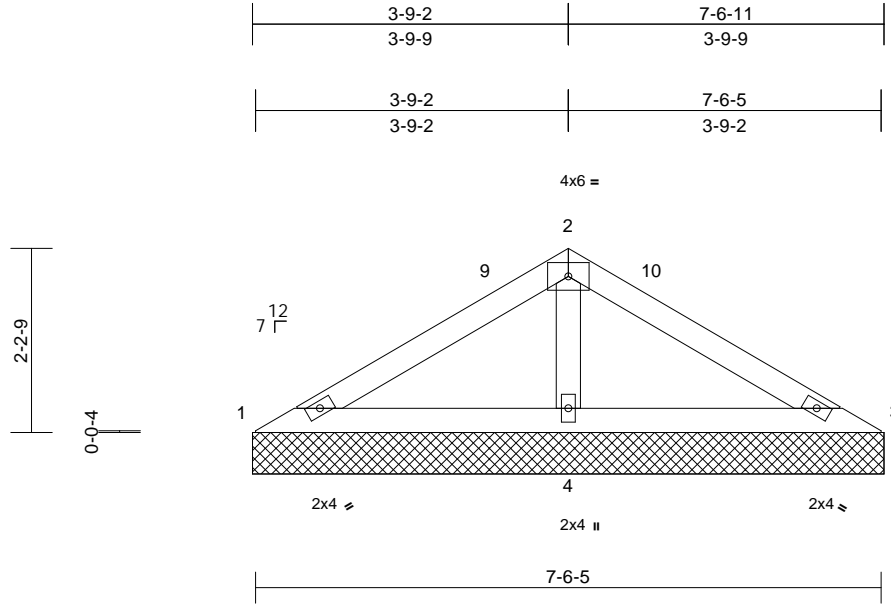
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss CV2	Truss Type Valley	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180387
---------------------	--------------	----------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:55  
ID:ddribXly113dw0KD0bm5X2yk1PN-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:18

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 25 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 7-6-5 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS**

(size) 1=7-7-2, 3=7-7-2, 4=7-7-2  
Max Horiz 1=-51 (LC 10)  
Max Uplift 1=-9 (LC 12), 3=-17 (LC 13), 4=-98 (LC 12)  
Max Grav 1=72 (LC 23), 3=72 (LC 24), 4=516 (LC 1)

**FORCES**

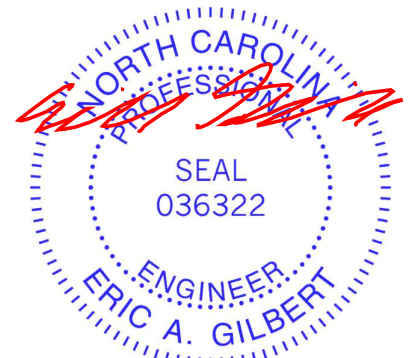
(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-71/236, 2-3=-71/236  
BOT CHORD 1-4=-203/106, 3-4=-203/106  
WEBS 2-4=-364/128

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 3-9-9, Exterior (2) 3-9-9 to 6-6-3, Interior (1) 6-6-3 to 7-7-2 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.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - All bearings are assumed to be SP No.2 .
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 1, 17 lb uplift at joint 3 and 98 lb uplift at joint 4.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.
- LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road  
Edenton, NC 27932

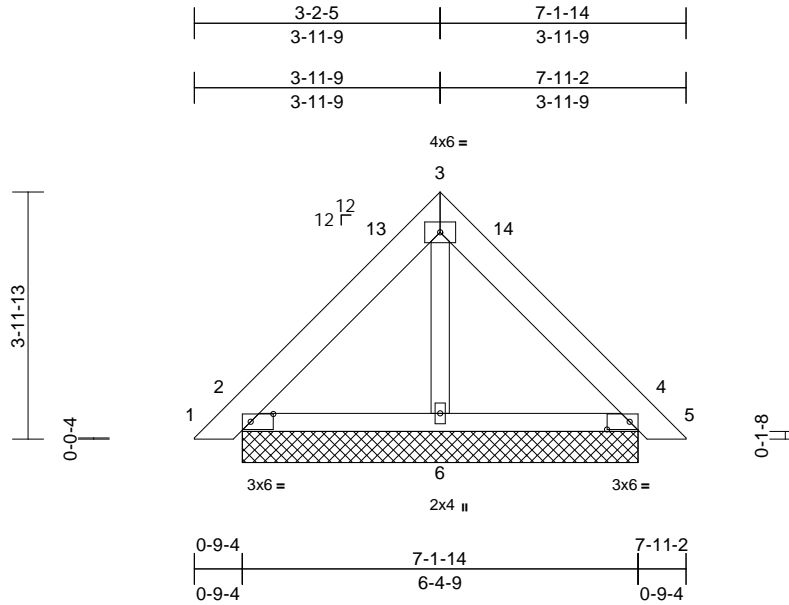


Job P03440-15869	Truss PB1	Truss Type Piggyback	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180388
---------------------	--------------	-------------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:55  
ID:SvaBEI2Up2LA9mdRm3Sceoyk2bs-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC7f

Page: 1



Scale = 1:26.5

Plate Offsets (X, Y): [2:0-4-6,0-1-8], [4:0-4-6,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 40 lb	FT = 20%

**LUMBER**

TOP CHORD 2x6 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3

**BRACING**

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

**REACTIONS**

(size) 2=6-4-9, 4=6-4-9, 6=6-4-9, 7=6-4-9, 10=6-4-9  
Max Horiz 2=90 (LC 11), 7=90 (LC 11)  
Max Uplift 2=-69 (LC 13), 4=-74 (LC 13), 7=-69 (LC 13), 10=-74 (LC 13)  
Max Grav 2=223 (LC 1), 4=223 (LC 1), 6=132 (LC 3), 7=223 (LC 1), 10=223 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

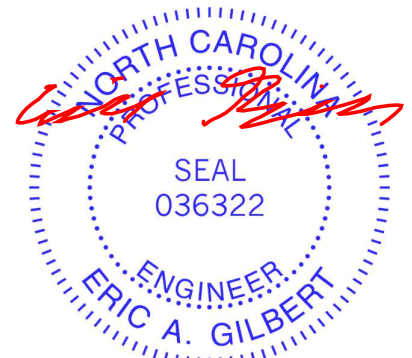
TOP CHORD 1-2=0/19, 2-3=-159/108, 3-4=-154/110, 4-5=0/19  
BOT CHORD 2-6=-60/90, 4-6=-31/90  
WEBS 3-6=-61/40

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-4-0 to 3-4-0, Interior (1) 3-4-0 to 3-11-13, Exterior (2) 3-11-13 to 7-2-2, Interior (1) 7-2-2 to 7-7-10 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) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 5) Gable requires continuous bottom chord bearing.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) All bearings are assumed to be SP No.2 .
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 2, 74 lb uplift at joint 4, 69 lb uplift at joint 2 and 74 lb uplift at joint 4.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



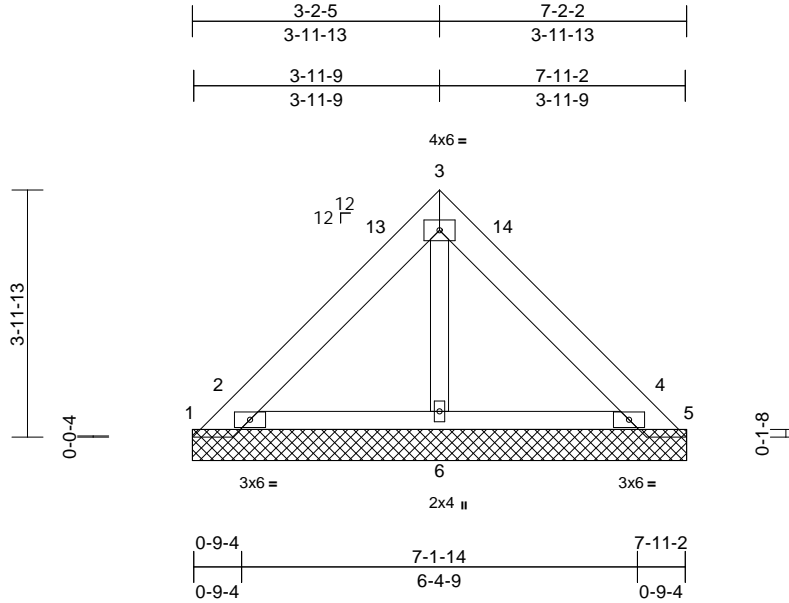
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss PB2	Truss Type Piggyback	Qty 10	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180389
---------------------	--------------	-------------------------	-----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:56  
ID:KPHGWJL2i05m7xVqj9c2yk2c3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:26.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 40 lb	FT = 20%

**LUMBER**

TOP CHORD 2x6 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 6-0-0 oc bracing.

**REACTIONS**

(size) 1=7-11-10, 2=7-11-10, 4=7-11-10, 5=7-11-10, 6=7-11-10, 7=7-11-10  
Max Horiz 1=90 (LC 8)  
Max Uplift 1=220 (LC 19), 2=232 (LC 12), 5=20 (LC 13), 6=42 (LC 13), 7=232 (LC 12)  
Max Grav 1=187 (LC 12), 2=397 (LC 19), 5=137 (LC 1), 6=277 (LC 1), 7=397 (LC 19)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

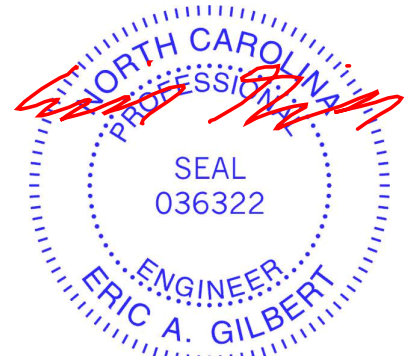
TOP CHORD 1-2=-175/229, 2-3=-116/115, 3-4=-86/80, 4-5=-94/32  
BOT CHORD 2-6=-70/91, 4-6=-70/91  
WEBS 3-6=-180/53

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-4-0 to 3-4-0, Interior (1) 3-4-0 to 3-11-13, Exterior (2) 3-11-13 to 7-2-2, Interior (1) 7-2-2 to 7-7-10 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.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 232 lb uplift at joint 2, 220 lb uplift at joint 1, 20 lb uplift at joint 5, 42 lb uplift at joint 6 and 232 lb uplift at joint 2.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



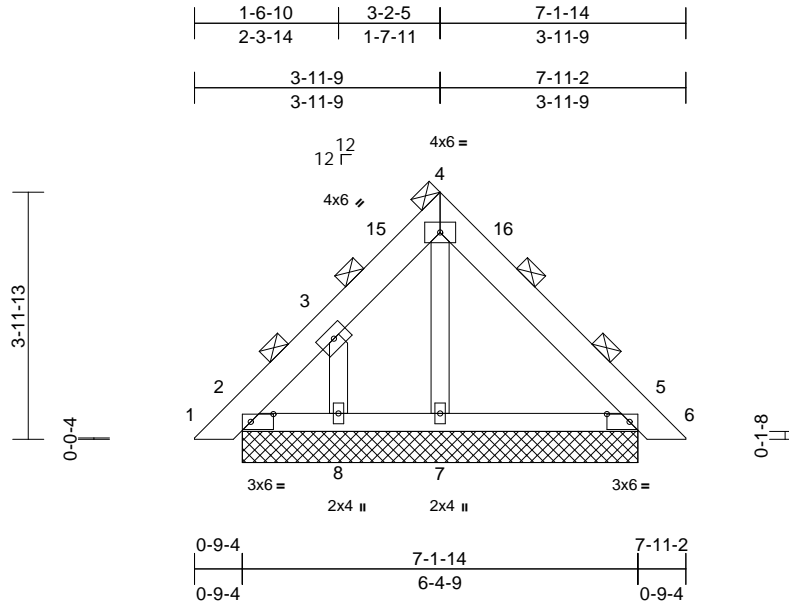
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss PB3	Truss Type Piggyback	Qty 1	Ply 2	164 Blueberry - Southeastern Job Reference (optional)	168180390
---------------------	--------------	-------------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:56  
ID:g6Zk?CipiMCjfwDdoJVL7WYk2cF-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWRcDoi7J4zJC?f

Page: 1



Scale = 1:26.5

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

Loading	(psf)	Spacing	3-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 84 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3

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

**REACTIONS** (size) 2=6-4-9, 5=6-4-9, 7=6-4-9, 8=6-4-9, 9=6-4-9, 12=6-4-9  
Max Horiz 2=135 (LC 11), 9=135 (LC 11)  
Max Uplift 2=-65 (LC 13), 5=-97 (LC 13), 8=-161 (LC 12), 9=-65 (LC 13), 12=-97 (LC 13)  
Max Grav 2=231 (LC 20), 5=298 (LC 1), 7=176 (LC 3), 8=215 (LC 19), 9=231 (LC 20), 12=298 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/29, 2-3=-198/100, 3-4=-200/158, 4-5=-170/112, 5-6=0/29  
BOT CHORD 2-8=-66/109, 7-8=-9/100, 5-7=-29/100  
WEBS 4-7=-90/40, 3-8=-219/171

- NOTES**
- 2-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: 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=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-4-0 to 3-4-0, Interior (1) 3-4-0 to 3-11-13, Exterior (2) 3-11-13 to 7-2-2, Interior (1) 7-2-2 to 7-7-10 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.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 65 lb uplift at joint 2, 97 lb uplift at joint 5, 161 lb uplift at joint 8, 65 lb uplift at joint 2 and 97 lb uplift at joint 5.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbccomponents.com)

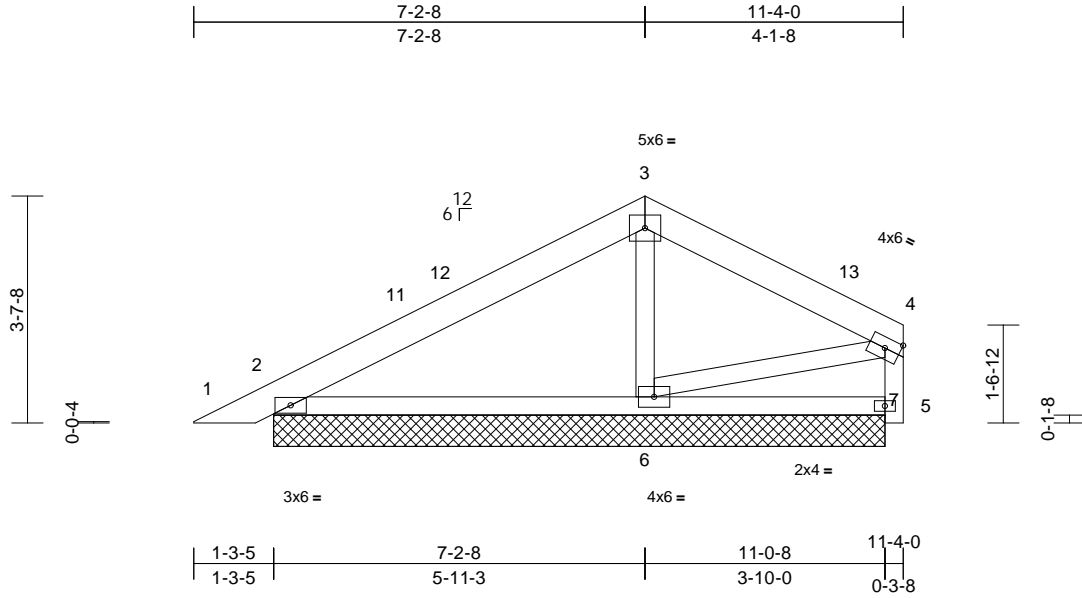


Job P03440-15869	Truss PB4	Truss Type Piggyback	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180391
---------------------	--------------	-------------------------	----------	----------	--	-----------

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

Run: 8.81 E Jul 25 2024 Print: 8.810 E Jul 25 2024 MiTek Industries, Inc. Thu Sep 12 13:51:38  
ID:sgg1ALTN6llzOOyCy\_byigyk2cc-dDlnEB4YG4XLUwWCxs798vCDJy4uAUW1dpUfKyeM73

Page: 1



Scale = 1:36.8

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 56 lb	FT = 20%

**LUMBER**

TOP CHORD 2x6 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3

**BRACING**

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

**REACTIONS** (lb/size) 2=326/9-9-3, 5=217/9-9-3, 6=296/9-9-3, 7=0/9-9-3, 8=326/9-9-3  
Max Horiz 2=84 (LC 12), 8=84 (LC 12)  
Max Uplift 2=-88 (LC 12), 5=-54 (LC 13), 6=-23 (LC 12), 8=-88 (LC 13)

**FORCES**

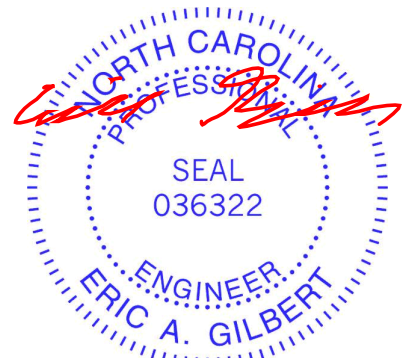
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/21, 2-11=-192/71, 11-12=-148/74, 3-12=-143/91, 3-13=-111/94, 4-13=-191/78, 5-7=0/0, 4-5=-193/87  
BOT CHORD 2-6=-61/132, 5-6=-12/32  
WEBS 3-6=-201/84, 4-6=-53/121

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-6-6 to 3-6-6, Interior (1) 3-6-6 to 7-3-0, Exterior (2) 7-3-0 to 10-3-0, Interior (1) 10-3-0 to 11-2-12 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
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 88 lb uplift at joint 2, 54 lb uplift at joint 5, 23 lb uplift at joint 6 and 88 lb uplift at joint 2.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



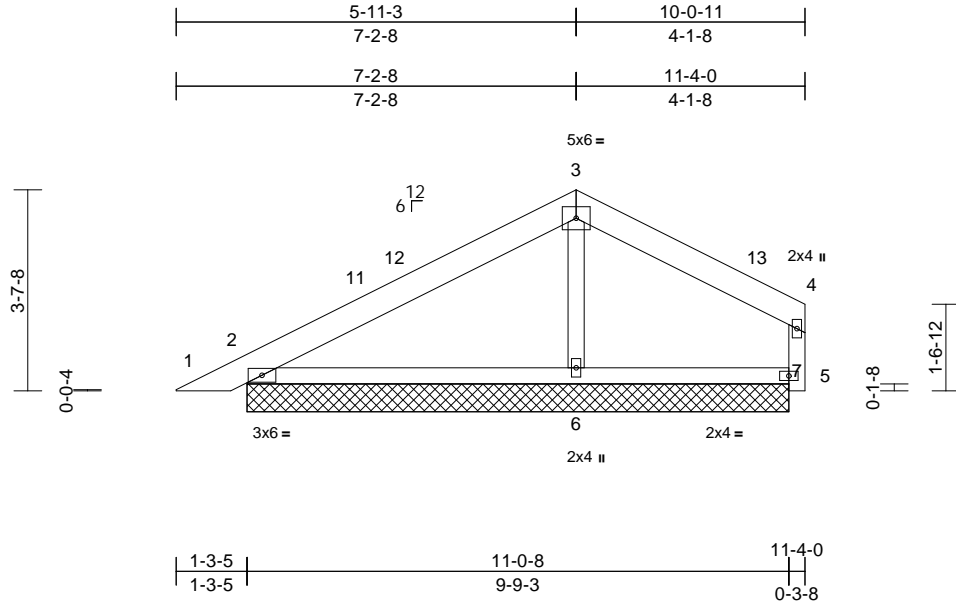
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss PB5	Truss Type Piggyback	Qty 10	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180392
---------------------	--------------	-------------------------	-----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:56  
ID:Kbi\_ptHLtNHFUwk80dIC2lyk2cs-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCdoi7J4zJC?f

Page: 1



Scale = 1:36.7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 50 lb	FT = 20%

**LUMBER**

- TOP CHORD 2x6 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**

- (size) 2=9-9-3, 5=9-9-3, 6=9-9-3, 7=9-9-3, 8=9-9-3
- Max Horiz 2=84 (LC 12), 8=84 (LC 12)
- Max Uplift 2=-64 (LC 12), 5=-62 (LC 13), 6=-81 (LC 12), 8=-64 (LC 12)
- Max Grav 2=277 (LC 1), 5=159 (LC 24), 6=420 (LC 1), 8=277 (LC 1)

**FORCES**

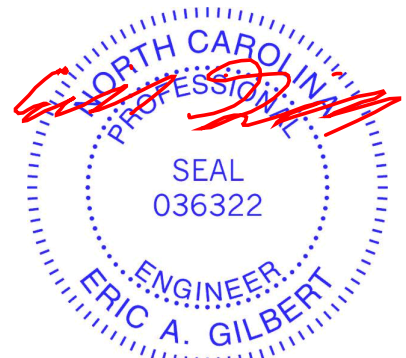
- (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=0/21, 2-3=-94/79, 3-4=-91/67, 5-7=0/0, 4-5=-130/75
- BOT CHORD 2-6=-47/49, 5-6=-14/37
- WEBS 3-6=-295/125

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-6-6 to 3-6-6, Interior (1) 3-6-6 to 7-3-0, Exterior (2) 7-3-0 to 10-3-0, Interior (1) 10-3-0 to 11-2-12 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.

- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 2, 62 lb uplift at joint 5, 81 lb uplift at joint 6 and 64 lb uplift at joint 2.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



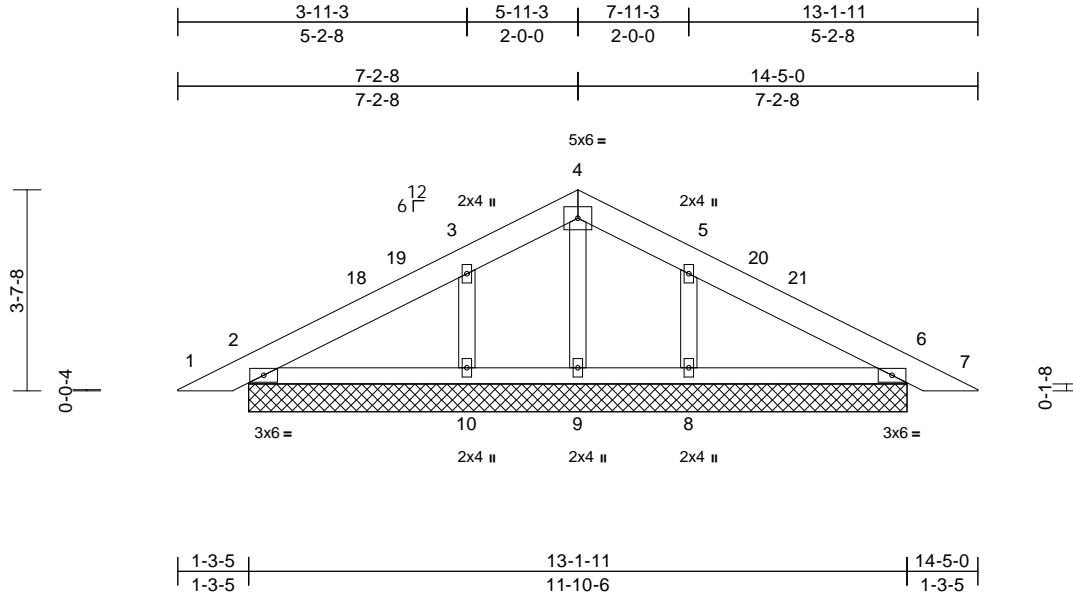
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss PB6	Truss Type Piggyback	Qty 1	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180393
---------------------	--------------	-------------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:56  
ID:g0S1jyw9jTdmVTOzP1HONByk2dJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?F

Page: 1



Scale = 1:36.7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 65 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3

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

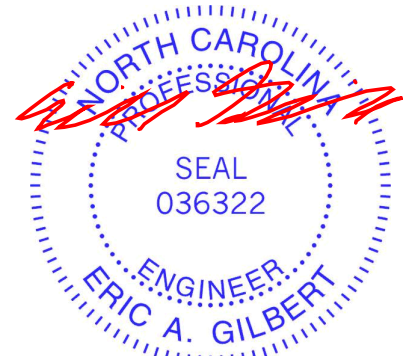
**REACTIONS** (size) 2=11-10-6, 6=11-10-6, 8=11-10-6, 9=11-10-6, 10=11-10-6, 11=11-10-6, 15=11-10-6  
Max Horiz 2=56 (LC 16), 11=56 (LC 16)  
Max Uplift 2=-41 (LC 12), 6=-54 (LC 13), 8=-116 (LC 13), 10=-119 (LC 12), 11=-41 (LC 12), 15=-54 (LC 13)  
Max Grav 2=204 (LC 1), 6=204 (LC 1), 8=311 (LC 24), 9=70 (LC 13), 10=311 (LC 23), 11=204 (LC 1), 15=204 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/21, 2-3=-70/62, 3-4=-89/100, 4-5=-89/105, 5-6=-67/50, 6-7=0/21  
BOT CHORD 2-10=-19/55, 9-10=0/55, 8-9=0/55, 6-8=-3/55  
WEBS 4-9=-57/38, 3-10=-232/128, 5-8=-232/127

**NOTES**  
1) Unbalanced roof live loads have been considered for this design.  
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-6-6 to 3-6-6, Interior (1) 3-6-6 to 7-3-0, Exterior (2) 7-3-0 to 10-3-0, Interior (1) 10-3-0 to 13-11-10 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.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 2, 54 lb uplift at joint 6, 119 lb uplift at joint 10, 116 lb uplift at joint 8, 41 lb uplift at joint 2 and 54 lb uplift at joint 6.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



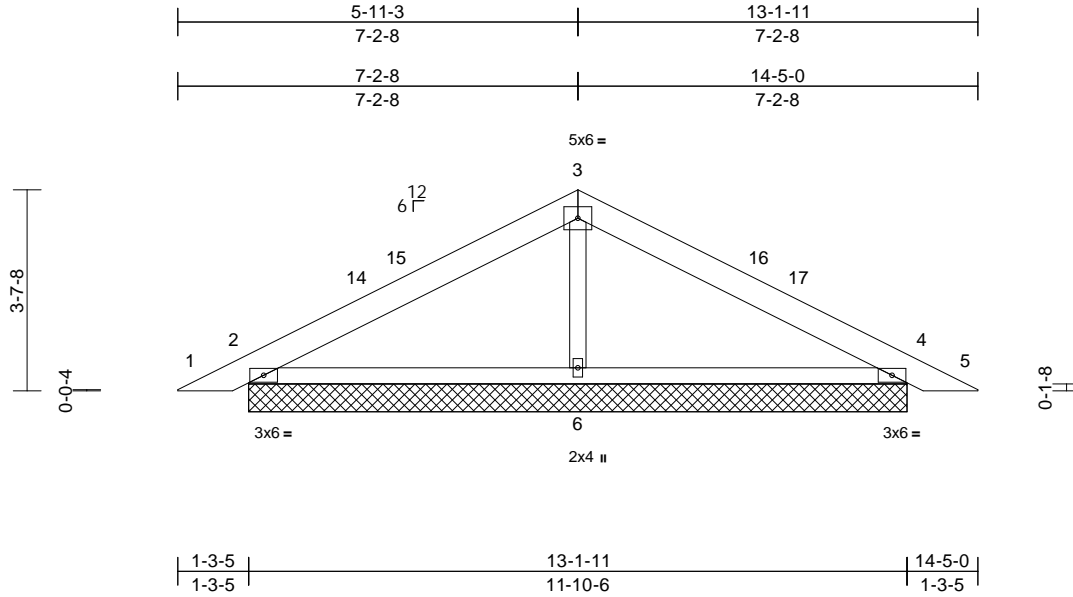
818 Soundside Road  
Edenton, NC 27932

Job P03440-15869	Truss PB7	Truss Type Piggyback	Qty 9	Ply 1	164 Blueberry - Southeastern Job Reference (optional)	168180394
---------------------	--------------	-------------------------	----------	----------	--	-----------

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

Run: 8.82 S Aug 30 2024 Print: 8.820 S Aug 30 2024 MiTek Industries, Inc. Thu Sep 12 11:29:56  
ID:glwb98jUjFUmysDIJyUPBbyk2da-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:36.7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 59 lb	FT = 20%

**LUMBER**

TOP CHORD 2x6 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3

**BRACING**

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

**REACTIONS**

(size) 2=11-10-6, 4=11-10-6, 6=11-10-6, 7=11-10-6, 11=11-10-6  
Max Horiz 2=56 (LC 12), 7=56 (LC 12)  
Max Uplift 2=-95 (LC 12), 4=-108 (LC 13), 6=-25 (LC 12), 7=-95 (LC 12), 11=-108 (LC 13)  
Max Grav 2=344 (LC 1), 4=344 (LC 1), 6=355 (LC 1), 7=344 (LC 1), 11=344 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

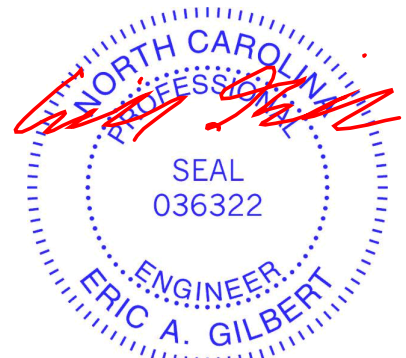
TOP CHORD 1-2=0/21, 2-3=-249/131, 3-4=-249/137, 4-5=0/21  
BOT CHORD 2-6=-51/184, 4-6=-35/184  
WEBS 3-6=-205/53

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-6-6 to 3-6-6, Interior (1) 3-6-6 to 7-3-0, Exterior (2) 7-3-0 to 10-3-0, Interior (1) 10-3-0 to 13-11-10 zone; cantilever left and right exposed ;C-C 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.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 95 lb uplift at joint 2, 108 lb uplift at joint 4, 25 lb uplift at joint 6, 95 lb uplift at joint 2 and 108 lb uplift at joint 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard



September 13, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

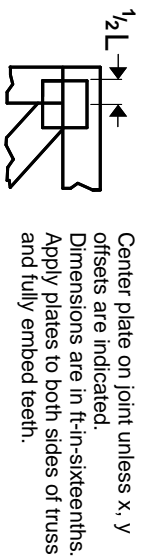
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



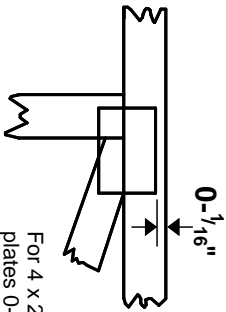
818 Soundside Road  
Edenton, NC 27932

# Symbols

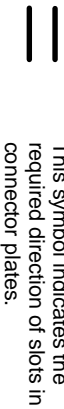
## PLATE LOCATION AND ORIENTATION



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 software or upon request.

## PLATE SIZE

4 X 4

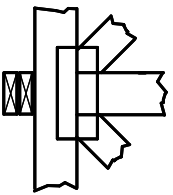
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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/letter where bearings occur. Min size shown is for crushing only.

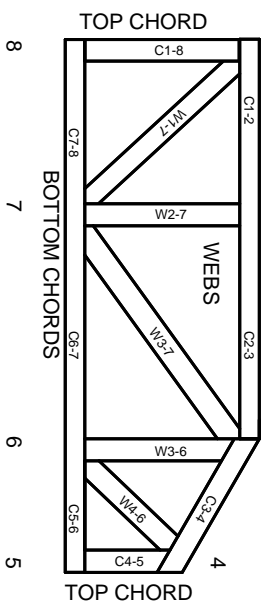
## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-22: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



1 TOP CHORDS  
2 Joint ID  
3 typ.



**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-1988, ESR-2362, ESR-2685, ESR-3282  
ESR-4722, ESL-1388

# Design General Notes

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

Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on Lumber values established by others.

© 2023 MITek® All Rights Reserved

**MITek**

ENGINEERING BY  
**TRENGO**  
A MITek Affiliate

MITek Engineering Reference Sheet: MIL-7473 rev. 1/2/2023

# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability/bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.