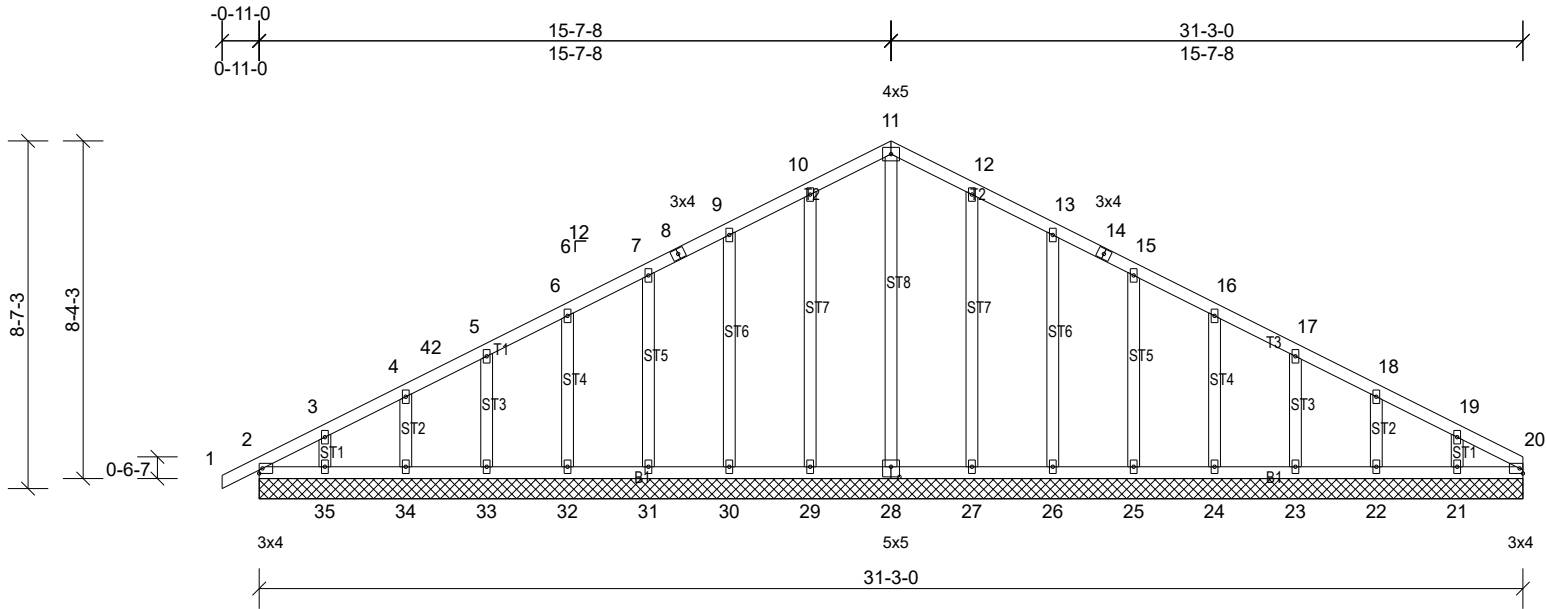


Job Q2400457	Truss A01	Truss Type Common Supported Gable	Qty 2	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Scale = 1:57  
Plate Offsets (X, Y): [28:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.00	20	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 191 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.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** All bearings 31-3-0.  
(lb) - Max Horiz 2=161 (LC 11), 36=161 (LC 11)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
2, 22, 23, 24, 25, 26, 27, 29, 30,  
31, 32, 33, 34, 35, 36  
Max Grav All reactions 250 (lb) or less at joint  
(s) 2, 21, 22, 23, 24, 25, 26, 27, 28,  
29, 30, 31, 32, 33, 34, 35, 36

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.  
TOP CHORD 10-11=-95/270, 11-12=-95/270

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft;  
B=64ft; L=55ft; eave=2ft; Ke=1.00; Cat. II; Exp B;  
Enclosed; MWFRS (directional) and C-C Corner(3E)  
-0-11-0 to 4-6-10, Exterior(2N) 4-6-10 to 15-7-8, Corner  
(3R) 15-7-8 to 21-1-2, Exterior(2N) 21-1-2 to 31-3-0  
zone; cantilever left and right exposed; end vertical left  
and right exposed; C-C for members and forces &  
MWFRS for reactions shown; Lumber DOL=1.60 plate  
grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss  
only. For studs exposed to wind (normal to the face),  
see Standard Industry Gable End Details as applicable,  
or consult qualified building designer as per ANSI/TPI 1.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable 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) Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 100 lb uplift at joint  
(s) 2, 29, 30, 31, 32, 33, 34, 35, 27, 26, 25, 24, 23, 22, 2.
- 10) This truss is designed in accordance with the 2018  
International Residential Code sections R502.11.1 and  
R802.10.2 and referenced standard ANSI/TPI 1.
- 11) This truss design requires that a minimum of 7/16"  
structural wood sheathing be applied directly to the top  
chord and 1/2" gypsum sheetrock be applied directly to  
the bottom chord.

**LOAD CASE(S)** Standard

Job Q2400457	Truss A02	Truss Type Common	Qty 12	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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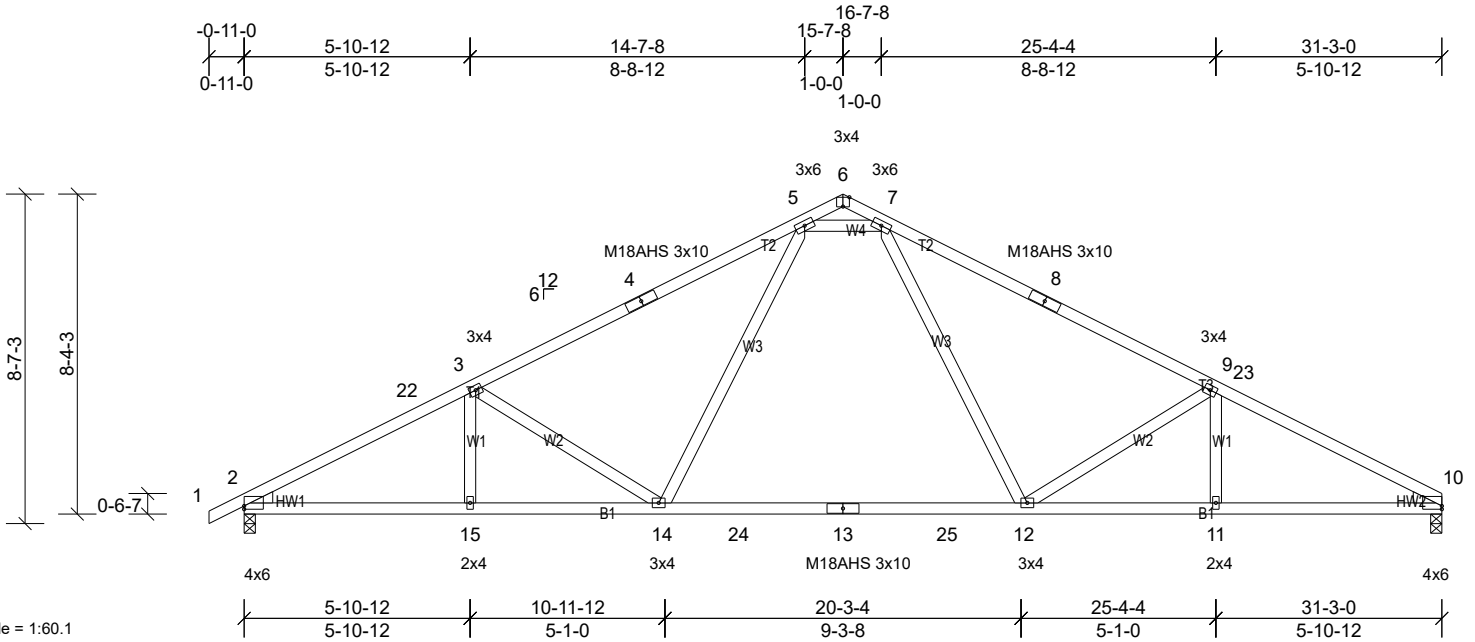


Plate Offsets (X, Y): [2:Edge,0-1-0], [6:0-2-0,Edge], [10:Edge,0-1-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.97	Vert(LL)	-0.34	12-14	>999	240	M18AHS	186/179
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.58	12-14	>650	180	MT20	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS								
										Weight: 155 lb	FT = 20%	

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.3  
WEDGE Left: 2x4 SP No.3  
Right: 2x4 SP No.3

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (lb/size) 2=1306/0-3-8, (min. 0-1-12),  
10=1249/0-3-8, (min. 0-1-11)  
Max Horiz 2=161 (LC 11)  
Max Uplift 2=-47 (LC 12), 10=-21 (LC 12)  
Max Grav 2=1474 (LC 17), 10=1423 (LC 18)

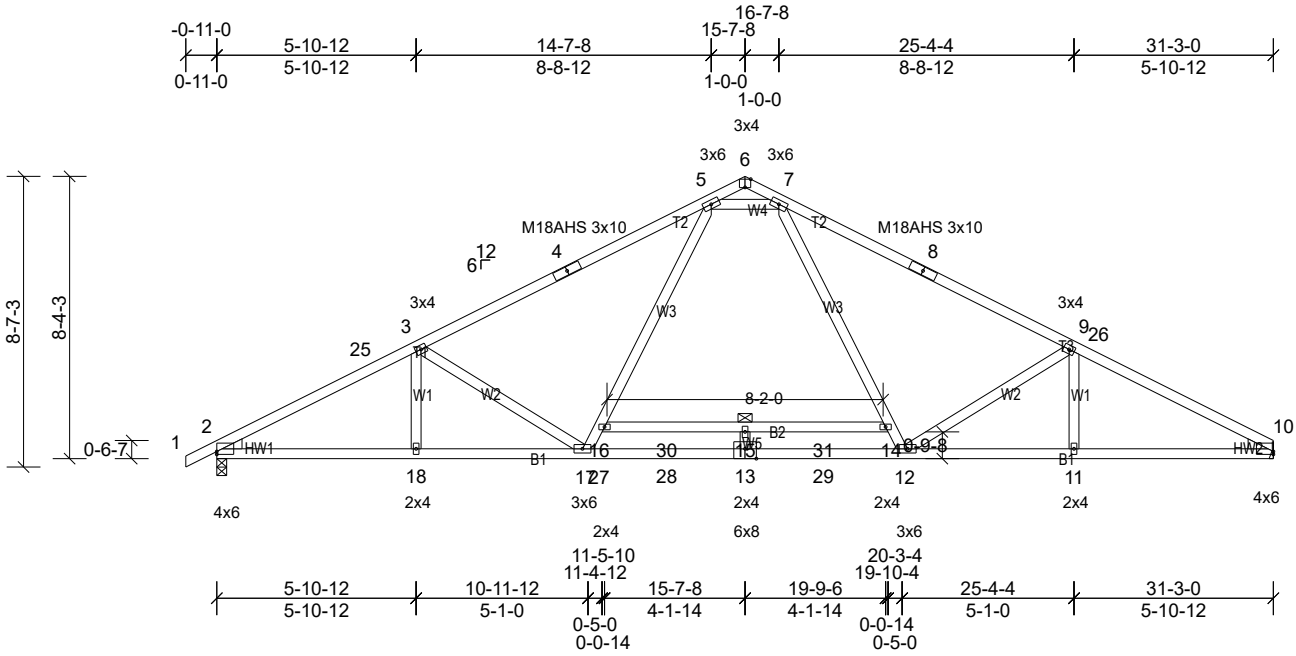
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-22=-2522/166, 3-22=-2407/177,  
3-4=-2077/166, 4-5=-1977/191,  
5-6=-304/684, 6-7=-306/685, 7-8=-1979/198,  
8-9=-2079/172, 9-23=-2401/189,  
10-23=-2529/187  
BOT CHORD 2-15=-122/2307, 14-15=-122/2307,  
14-24=-24/1525, 13-24=-24/1525,  
13-25=-24/1525, 12-25=-24/1525,  
11-12=-110/2199, 10-11=-110/2199  
WEBS 7-12=0/722, 5-14=0/719, 5-7=-2105/566,  
3-14=-558/132, 9-12=-565/134

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf; h=18ft;  
B=64ft; L=55ft; eave=6ft; Ke=1.00; Cat. II; Exp B;  
Enclosed; MWFRS (directional) and C-C Exterior(2E)  
-0-11-0 to 4-6-10, Interior (1) 4-6-10 to 15-7-8, Exterior (2R) 15-7-8 to 21-1-2, Interior (1) 21-1-2 to 31-3-0 zone;  
cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are MT20 plates 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 2 and 21 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

Job Q2400457	Truss A03	Truss Type Common	Qty 4	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Scale = 1:68.1

Plate Offsets (X, Y): [2:Edge,0-1-0], [6:0-2-0,Edge], [10:Edge,0-1-0], [13:0-4-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	Vert(LL)	-0.41	15	>918	240	M18AHS	186/179
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.70	15	>538	180	MT20	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							
											Weight: 168 lb FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.1 \*Except\* T3:2x4 SP No.2  
BOT CHORD 2x4 SP DSS \*Except\* B2:2x4 SP No.2  
WEBS 2x4 SP No.3  
WEDGE Left: 2x4 SP No.3  
Right: 2x4 SP No.3

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied. Except:  
6-0-0 oc bracing: 14-16

**REACTIONS** (lb/size) 2=1392/0-3-8, (min. 0-1-11),  
10=1336/ Mechanical, (min. 0-1-8)  
Max Horiz 2=161 (LC 11)  
Max Grav 2=1654 (LC 17), 10=1603 (LC 18)

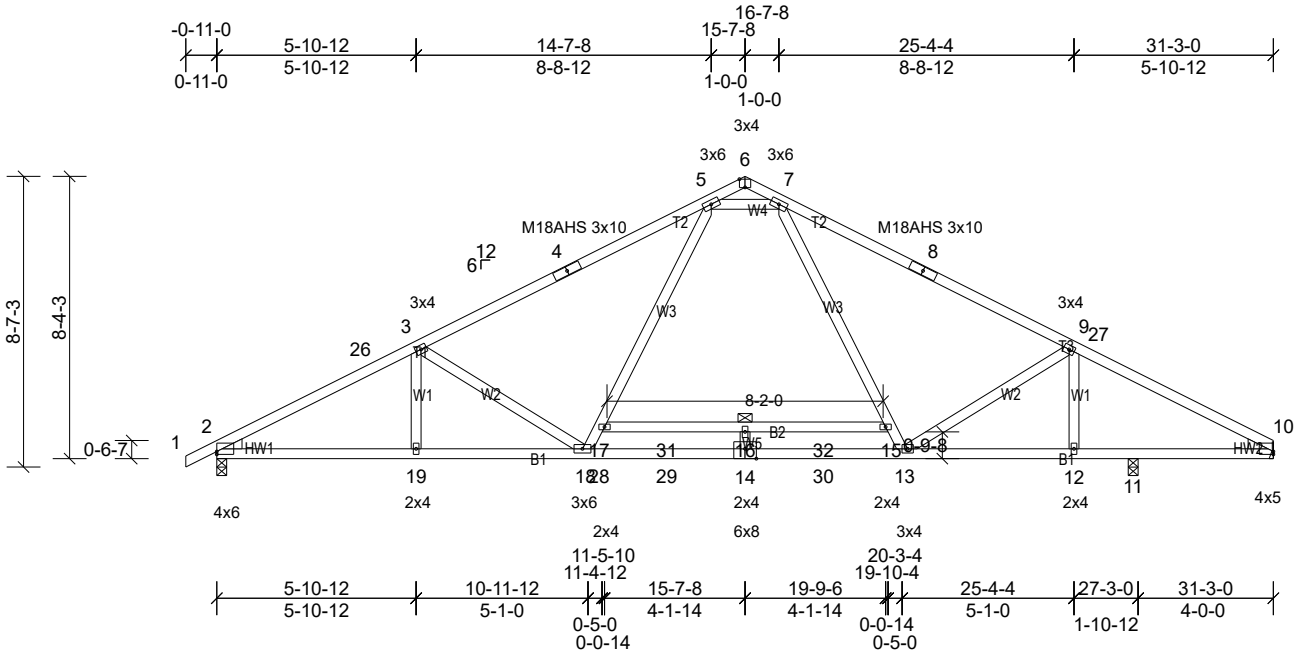
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.  
TOP CHORD 2-25=-2881/63, 3-25=-2765/73,  
3-4=-2481/50, 4-5=-2381/76, 5-6=-306/670,  
6-7=-310/671, 7-8=-2383/82, 8-9=-2483/56,  
9-26=-2757/86, 10-26=-2885/83  
BOT CHORD 2-18=-58/2626, 17-18=-30/2626,  
17-27=0/1831, 27-28=0/1831, 13-28=0/1831,  
13-29=0/1831, 12-29=0/1831,  
11-12=-18/2516, 10-11=-18/2516  
WEBS 16-17=0/789, 5-16=0/917, 5-7=-2361/491,  
7-14=0/919, 12-14=0/790, 3-17=-534/147,  
9-12=-538/148

**NOTES**  
1) Unbalanced roof live loads have been considered for this design.  
2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf; h=18ft;  
B=64ft; L=55ft; eave=6ft; Ke=1.00; Cat. II; Exp B;  
Enclosed; MWFRS (directional) and C-C Exterior(2E)  
-0-11-0 to 4-6-10, Interior (1) 4-6-10 to 15-7-8, Exterior (2R) 15-7-8 to 21-1-2, Interior (1) 21-1-2 to 31-3-0 zone;  
cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
3) All plates are MT20 plates unless otherwise indicated.  
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.  
6) Refer to girder(s) for truss to truss connections.  
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.  
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

Job Q2400457	Truss A04	Truss Type Common	Qty 3	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Scale = 1:68.1

Plate Offsets (X, Y): [2:Edge,0-1-0], [6:0-2-0,Edge], [10:Edge,0-1-0], [14:0-4-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	Vert(LL)	-0.39	16	>833	240	M18AHS	186/179
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.66	14-18	>494	180	MT20	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							
											Weight: 168 lb FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.1 \*Except\* T3:2x4 SP No.2  
BOT CHORD 2x4 SP DSS \*Except\* B2:2x4 SP No.2  
WEBS 2x4 SP No.3  
WEDGE Left: 2x4 SP No.3  
Right: 2x4 SP No.3

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied. Except:  
6-0-0 oc bracing: 15-17

**REACTIONS** (lb/size) 2=1336/0-3-8, (min. 0-1-10),  
10=969/ Mechanical, (min. 0-1-8),  
11=423/0-3-8, (min. 0-1-8)  
Max Horiz 2=161 (LC 11)  
Max Uplift 10=-5 (LC 12)  
Max Grav 2=1588 (LC 17), 10=1084 (LC 17),  
11=605 (LC 18)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.  
TOP CHORD 2-26=-2751/73, 3-26=-2635/80,  
3-4=-2334/53, 4-5=-2232/78, 5-6=-303/704,  
6-7=-310/660, 7-8=-2086/101, 8-9=-2206/76,  
9-27=-1948/137, 10-27=-2077/135  
BOT CHORD 2-19=-60/2512, 18-19=-39/2512,  
18-28=0/1698, 28-29=0/1698, 14-29=0/1698,  
14-30=0/1698, 13-30=0/1698,  
12-13=-65/1796, 11-12=-65/1796,  
10-11=-65/1796  
WEBS 9-12=-463/35, 7-15=0/677, 13-15=0/550,  
17-18=0/790, 5-17=0/916, 3-18=-545/145,  
5-7=-2235/498, 9-13=-115/251

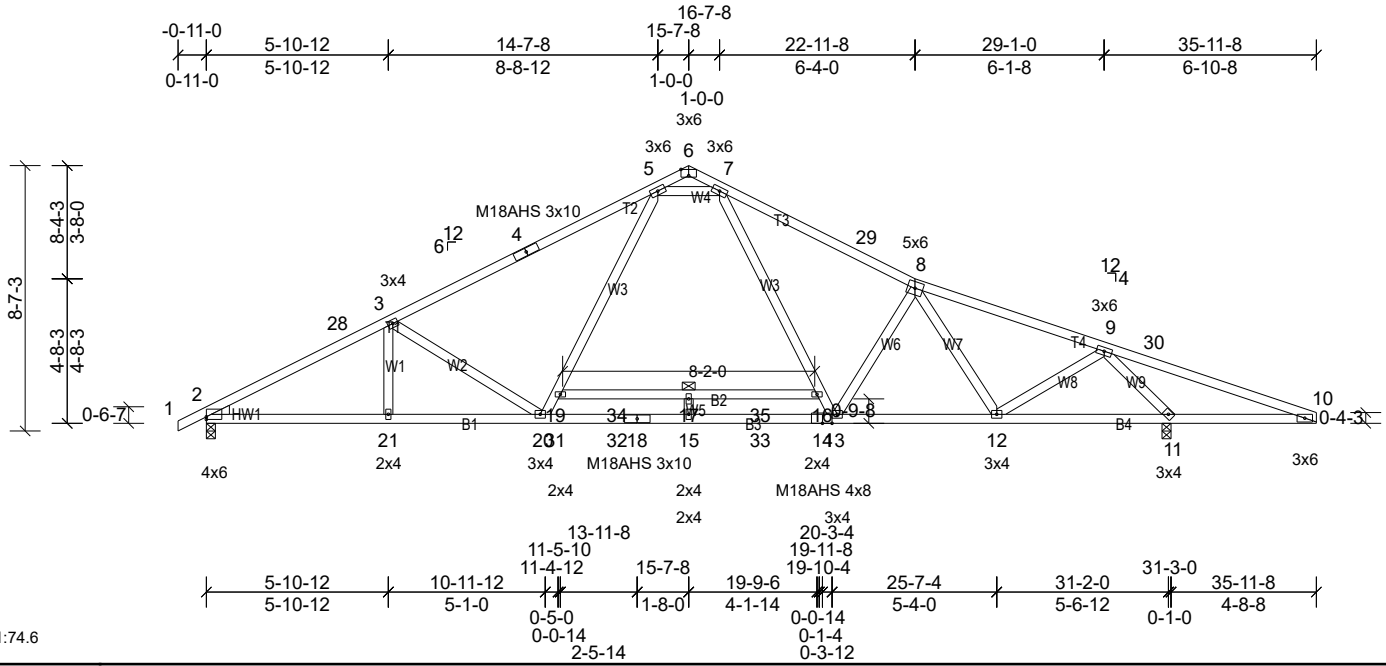
**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft;  
B=64ft; L=55ft; eave=6ft; Ke=1.00; Cat. II; Exp B;  
Enclosed; MWFRS (directional) and C-C Exterior(2E)  
-0-11-0 to 4-6-10, Interior (1) 4-6-10 to 15-7-8, Exterior  
(2R) 15-7-8 to 21-1-2, Interior (1) 21-1-2 to 31-3-0 zone;  
cantilever left and right exposed; end vertical left and  
right exposed; C-C for members and forces & MWFRS  
for reactions shown; Lumber DOL=1.60 plate grip  
DOL=1.60

- All plates are MT20 plates 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

Job Q2400457	Truss A05	Truss Type Roof Special	Qty 1	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Scale = 1:74.6

Plate Offsets (X, Y): [2:Edge,0-1-0], [6:0-3-0,Edge], [14:0-3-12,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	Vert(LL)	-0.45	17	>841	240	M18AHS	186/179
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.75	17-19	>500	180	MT20	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.09	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							
Weight: 193 lb FT = 20%											

**LUMBER**  
TOP CHORD 2x4 SP No.1 \*Except\* T3,T4:2x4 SP No.2  
BOT CHORD 2x4 SP No.1 \*Except\* B2:2x4 SP No.2  
WEBS 2x4 SP No.3  
WEDGE Left: 2x4 SP No.3

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied. Except:  
6-0-0 oc bracing: 16-19

**REACTIONS** (lb/size) 2=1367/0-3-8, (min. 0-1-15),  
11=1737/0-3-8, (min. 0-2-5)  
Max Horiz 2=-156 (LC 10)  
Max Grav 2=1631 (LC 17), 11=1986 (LC 19)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-28=-2843/173, 3-28=-2728/180,  
3-4=-2424/131, 4-5=-2321/155,  
5-6=-301/490, 6-7=-278/471,  
7-29=-2303/152, 8-29=-2370/128,  
8-9=-2107/76, 9-30=-254/604,  
10-30=-272/538  
BOT CHORD 2-21=-115/2592, 20-21=-115/2592,  
20-31=0/1772, 31-32=0/1772, 18-32=0/1772,  
15-18=0/1772, 15-33=0/1772, 14-33=0/1772,  
13-14=0/1772, 12-13=0/2191, 11-12=0/1159,  
10-11=-510/288  
WEBS 3-20=-547/202, 5-7=-2150/542,  
8-13=-350/116, 19-20=0/788, 5-19=0/925,  
7-16=0/911, 13-16=0/774, 9-11=-2343/342,  
9-12=0/957, 8-12=-530/72

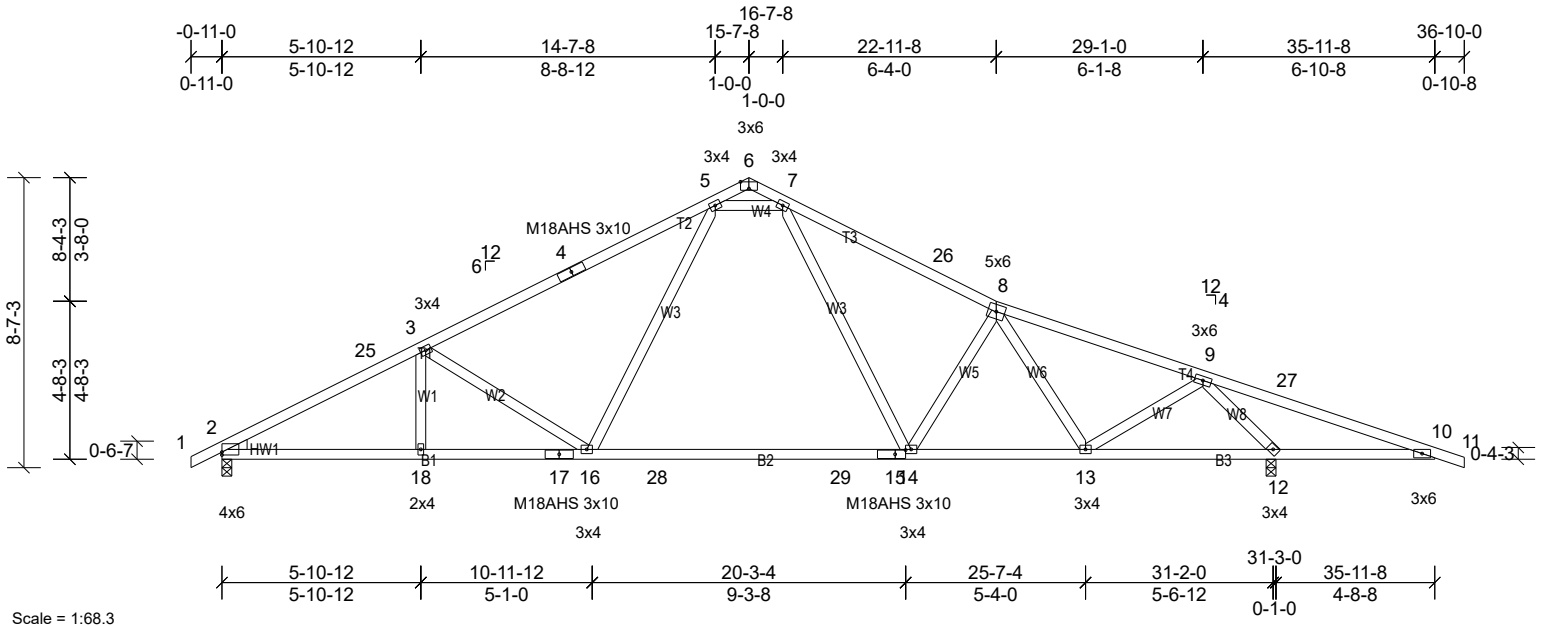
**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf; h=18ft;  
B=64ft; L=55ft; eave=6ft; Ke=1.00; Cat. II; Exp B;  
Enclosed; MWFRS (directional) and C-C Exterior(2E)  
-0-11-0 to 4-6-10, Interior (1) 4-6-10 to 15-7-8, Exterior (2R) 15-7-8 to 21-1-2, Interior (1) 21-1-2 to 35-11-8 zone;  
cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.

- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

Job Q2400457	Truss A06	Truss Type Roof Special	Qty 1	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Scale = 1:68.3  
Plate Offsets (X, Y): [2:Edge,0-1-0], [6:0-3-0,Edge], [15:0-3-12,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	1.00	Vert(LL)	-0.36	14-16	>999	240	M18AHS	186/179
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.61	14-16	>617	180	MT20	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.08	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS								Weight: 181 lb FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\* B3:2x4 SP No.1  
WEBS 2x4 SP No.3  
WEDGE Left: 2x4 SP No.3

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (lb/size) 2=1272/0-3-8, (min. 0-1-11), 12=1712/0-3-8, (min. 0-2-3)  
Max Horiz 2=-159 (LC 10)  
Max Uplift 2=-42 (LC 12), 12=-56 (LC 12)  
Max Grav 2=1445 (LC 17), 12=1854 (LC 19)

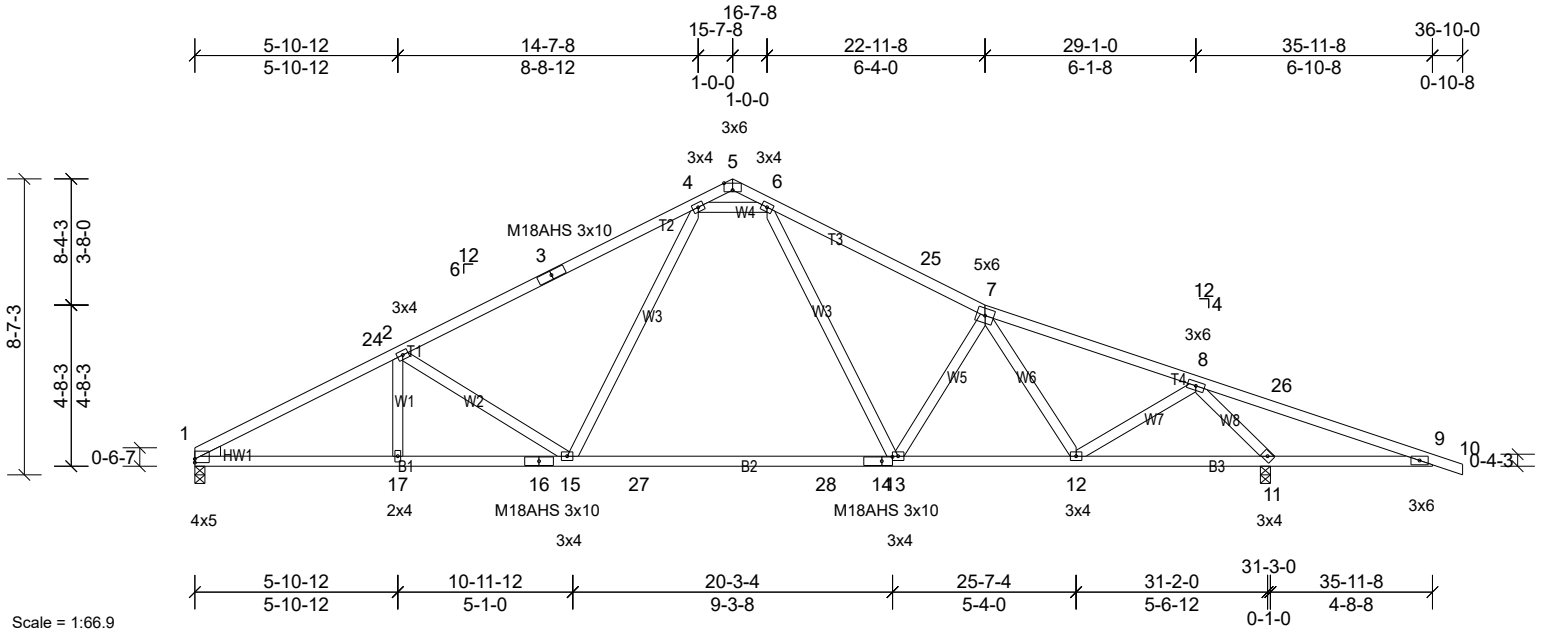
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-25=-2470/273, 3-25=-2354/280, 3-4=-2010/242, 4-5=-1906/266, 5-6=-311/519, 6-7=-277/493, 7-26=-1875/258, 8-26=-1941/234, 8-9=-1748/147, 9-27=-380/779, 10-27=-399/713  
BOT CHORD 2-18=-180/2264, 17-18=-180/2264, 16-17=-180/2264, 16-28=-22/1459, 28-29=-22/1459, 15-29=-22/1459, 14-15=-22/1459, 13-14=-72/1810, 12-13=0/907, 10-12=-676/425  
WEBS 5-7=-1910/616, 5-16=-1/725, 7-14=0/694, 9-12=-2176/472, 9-13=-71/850, 8-13=-437/131, 3-16=-573/190, 8-14=-333/103

- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 2 and 56 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft; B=64ft; L=55ft; eave=6ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-6-10, Interior (1) 4-6-10 to 15-7-8, Exterior (2R) 15-7-8 to 21-1-2, Interior (1) 21-1-2 to 36-10-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are MT20 plates unless otherwise indicated.

Job Q2400457	Truss A07	Truss Type Roof Special	Qty 4	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Scale = 1:66.9

Plate Offsets (X, Y): [1:Edge,0-1-4], [5:0-3-0,Edge], [14:0-3-12,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.99	Vert(LL)	-0.36	13-15	>999	240	M18AHS	186/179
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.61	13-15	>617	180	MT20	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.08	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS								Weight: 180 lb FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\* B3:2x4 SP No.1  
WEBS 2x4 SP No.3  
WEDGE Left: 2x4 SP No.3

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (lb/size) 1=1217/0-3-8, (min. 0-1-10), 11=1713/0-3-8, (min. 0-2-3)  
Max Horiz 1=-157 (LC 10)  
Max Uplift 1=-18 (LC 12), 11=-56 (LC 12)  
Max Grav 1=1394 (LC 17), 11=1854 (LC 19)

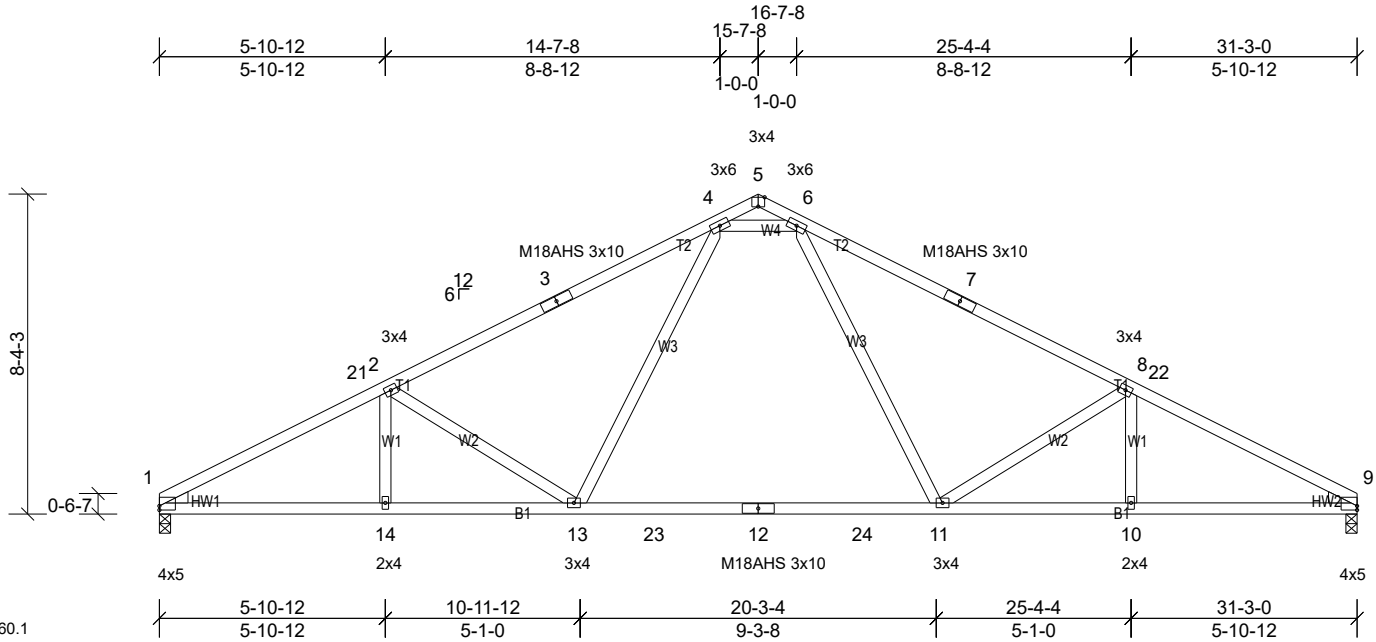
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-24=-2477/288, 2-24=-2349/290, 2-3=-2013/247, 3-4=-1909/270, 4-5=-310/518, 5-6=-276/491, 6-25=-1876/260, 7-25=-1943/237, 7-8=-1749/149, 8-26=-380/779, 9-26=-399/713  
BOT CHORD 1-17=-182/2271, 16-17=-182/2271, 15-16=-182/2271, 15-27=-24/1460, 27-28=-24/1460, 14-28=-24/1460, 13-14=-24/1460, 12-13=-74/1811, 11-12=0/908, 9-11=-676/425  
WEBS 4-6=-1909/616, 4-15=-1/728, 6-13=0/694, 8-12=-72/851, 7-12=-437/132, 7-13=-332/103, 8-11=-2177/473, 2-15=-579/192

- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 1 and 56 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft; B=64ft; L=55ft; eave=6ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 5-5-10, Interior (1) 5-5-10 to 15-7-8, Exterior(2R) 15-7-8 to 21-1-2, Interior (1) 21-1-2 to 36-10-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are MT20 plates unless otherwise indicated.

Job Q2400457	Truss A08	Truss Type Common	Qty 3	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Scale = 1:60.1

Plate Offsets (X, Y): [1:Edge,0-1-4], [5:0-2-0,Edge], [9:Edge,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	Vert(LL)	-0.34	11-13	>999	240	M18AHS 186/179
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.58	11-13	>650	180	MT20 244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.09	9	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS						Weight: 153 lb FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.3  
WEDGE Left: 2x4 SP No.3  
Right: 2x4 SP No.3

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (lb/size) 1=1250/0-3-8, (min. 0-1-11),  
9=1250/0-3-8, (min. 0-1-11)  
Max Horiz 1=154 (LC 11)  
Max Uplift 1=-22 (LC 12), 9=-22 (LC 12)  
Max Grav 1=1423 (LC 17), 9=1423 (LC 18)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-21=-2530/187, 2-21=-2401/190,  
2-3=-2080/172, 3-4=-1980/198,  
4-5=-304/683, 5-6=-304/683, 6-7=-1980/198,  
7-8=-2080/172, 8-22=-2402/190,  
9-22=-2530/187  
BOT CHORD 1-14=-123/2315, 13-14=-123/2315,  
13-23=-24/1526, 12-23=-24/1526,  
12-24=-24/1526, 11-24=-24/1526,  
10-11=-111/2200, 9-10=-111/2200  
WEBS 6-11=0/722, 4-13=0/722, 2-13=-565/133,  
4-6=-2105/566, 8-11=-565/134

**NOTES**  
1) Unbalanced roof live loads have been considered for this design.  
2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf; h=18ft;  
B=64ft; L=55ft; eave=6ft; Ke=1.00; Cat. II; Exp B;  
Enclosed; MWFRS (directional) and C-C Exterior(2E)  
0-0-0 to 5-5-10, Interior (1) 5-5-10 to 15-7-8, Exterior(2R)  
15-7-8 to 21-1-2, Interior (1) 21-1-2 to 31-3-0 zone;  
cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
3) All plates are MT20 plates unless otherwise indicated.  
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 1 and 22 lb uplift at joint 9.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- LOAD CASE(S)** Standard



Job Q2400457	Truss B01	Truss Type Common Supported Gable	Qty 1	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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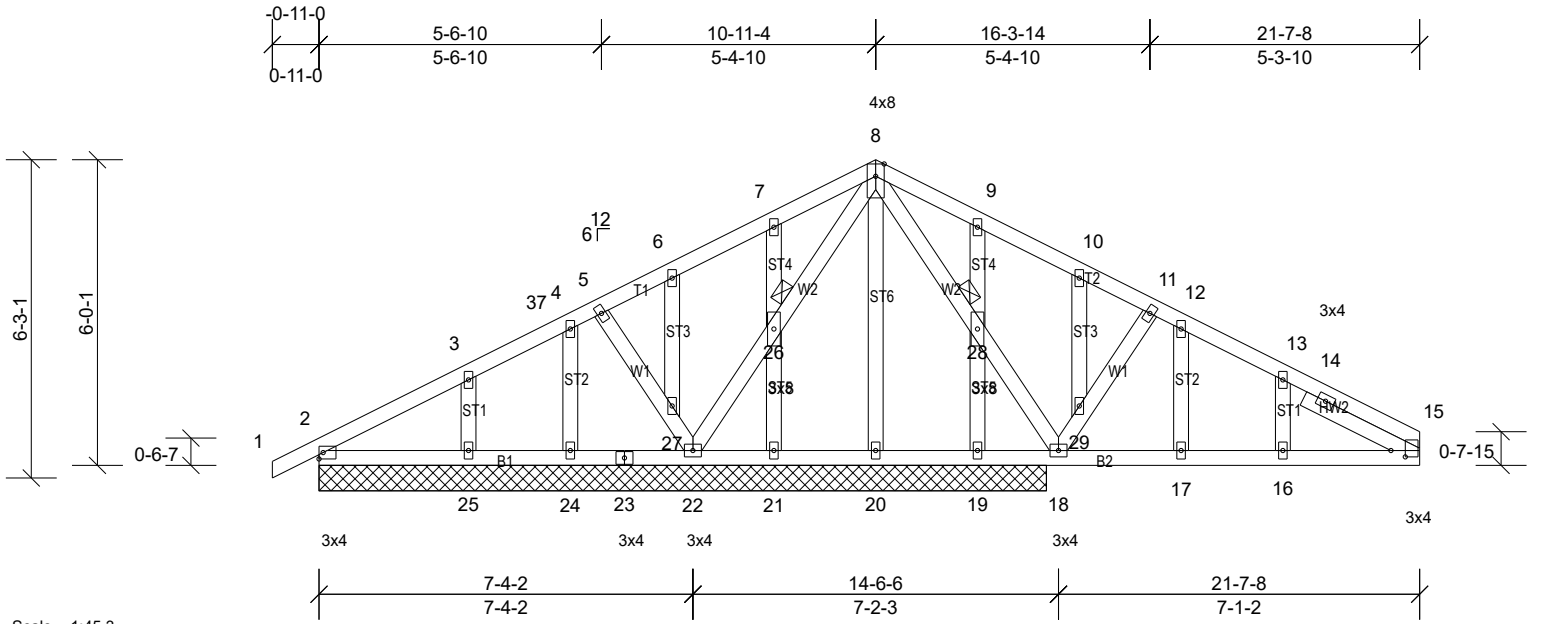


Plate Offsets (X, Y): [15:0-1-8,0-3-6]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.49	Vert(LL)	n/a	-	n/a	999	MT20 244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.54	Horz(CT)	-0.01	19	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 143 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  
SLIDER Right 2x4 SP No.2 -- 2-6-0

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.  
JOINTS 1 Brace at Jt(s): 26, 28

**REACTIONS** All bearings 14-3-8.  
(lb) - Max Horiz 2=112 (LC 11), 34=112 (LC 11)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
19, 20, 21, 22, 25 except 2=152 (LC 24), 24=140 (LC 24), 34=152 (LC 24)  
Max Grav All reactions 250 (lb) or less at joint (s) 2, 21, 22, 24, 34 except 19=490 (LC 24), 20=894 (LC 1), 25=300 (LC 1)

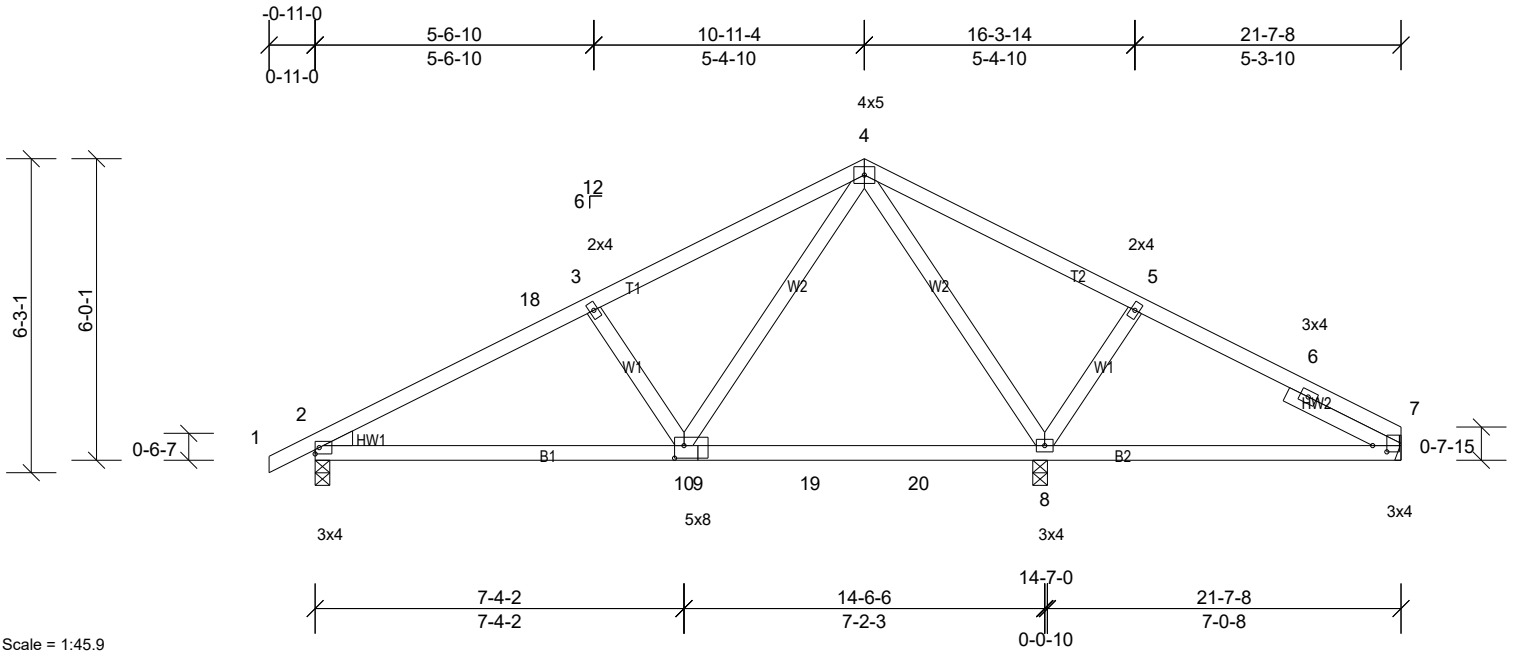
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-216/431, 3-37=-160/398, 4-37=-151/401, 4-5=-182/482, 5-6=-196/534, 6-7=-175/571, 7-8=-125/540, 8-9=-146/589, 9-10=-203/655, 10-11=-184/553, 11-12=-167/476, 12-13=-120/356, 13-14=-153/359  
BOT CHORD 2-25=-365/200, 24-25=-365/200, 23-24=-365/200, 22-23=-365/200, 21-22=-634/348, 20-21=-634/348, 19-20=-649/354, 18-19=-649/354, 17-18=-286/158, 16-17=-286/158, 15-16=-286/158  
WEBS 18-29=-393/212, 11-29=-488/262, 22-26=-155/314, 8-26=-155/313, 22-27=-279/151, 8-20=-918/343, 9-28=-265/123, 19-28=-317/146

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft; B=64ft; L=55ft; eave=6ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-6-10, Interior (1) 4-6-10 to 10-10-2, Exterior (2R) 10-10-2 to 16-4-14, Interior (1) 16-4-14 to 21-7-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 22, 20, 21, 25, 19 except (jt=lb) 2=151, 24=140, 2=151.
- 9) Non Standard bearing condition. Review required.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

Job Q2400457	Truss B02	Truss Type Common	Qty 1	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Scale = 1:45.9

Plate Offsets (X, Y): [7:0-1-8,0-3-6], [9:0-2-4,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	Vert(LL)	0.06	8-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.11	10-17	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							
											Weight: 104 lb FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
WEDGE Left: 2x4 SP No.3  
SLIDER Right 2x4 SP No.2 -- 2-6-0

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

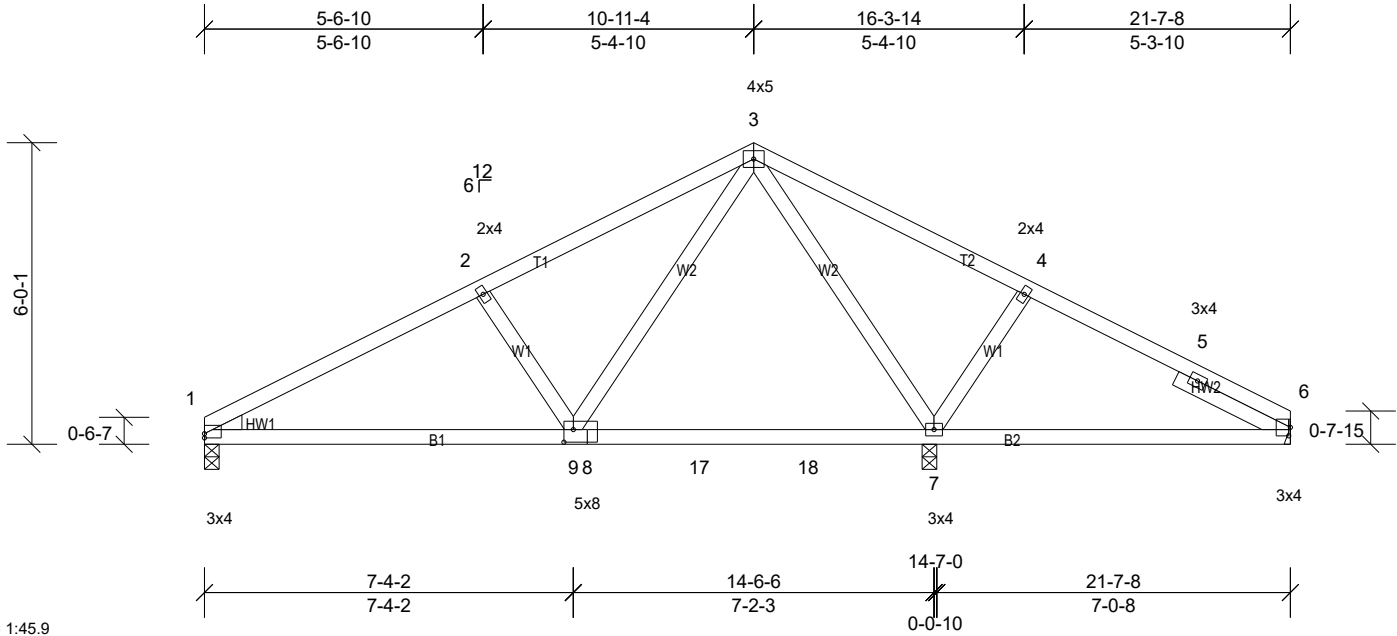
**REACTIONS** (lb/size) 2=626/0-3-8, (min. 0-1-8), 7=260/  
Mechanical, (min. 0-1-8),  
8=898/0-3-8, (min. 0-1-8)  
Max Horiz 2=113 (LC 11)  
Max Uplift 2=-44 (LC 12), 7=-88 (LC 12),  
8=-52 (LC 12)  
Max Grav 2=691 (LC 17), 7=299 (LC 26),  
8=978 (LC 2)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.  
TOP CHORD 2-18=-897/134, 3-18=-790/160,  
3-4=-745/173, 6-7=-444/291  
BOT CHORD 2-10=-101/826, 9-10=0/302, 9-19=0/302,  
19-20=0/302, 8-20=0/302  
WEBS 4-8=-640/5, 5-8=-335/179, 4-10=-35/658,  
3-10=-324/156

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft;  
B=64ft; L=55ft; eave=6ft; Ke=1.00; Cat. II; Exp B;  
Enclosed; MWFRS (directional) and C-C Exterior(2E)  
-0-11-0 to 4-6-10, Interior (1) 4-6-10 to 10-11-4, Exterior  
(2R) 10-11-4 to 16-4-14, Interior (1) 16-4-14 to 21-7-8  
zone; cantilever left and right exposed; end vertical left  
and right exposed; porch right exposed; C-C for members  
and forces & MWFRS for reactions shown; Lumber  
DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom  
chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf  
on the bottom chord in all areas where a rectangle  
3-06-00 tall by 2-00-00 wide will fit between the bottom  
chord and any other members, with BCDL = 10.0psf.

- Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 88 lb uplift at joint  
7, 44 lb uplift at joint 2 and 52 lb uplift at joint 8.
  - This truss is designed in accordance with the 2018  
International Residential Code sections R502.11.1 and  
R802.10.2 and referenced standard ANSI/TPI 1.
  - This truss design requires that a minimum of 7/16"  
structural wood sheathing be applied directly to the top  
chord and 1/2" gypsum sheetrock be applied directly to  
the bottom chord.
- LOAD CASE(S)** Standard

Job Q2400457	Truss B03	Truss Type Common	Qty 1	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Scale = 1:45.9

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	Vert(LL)	0.06	7-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.11	9-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							
										Weight: 102 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
WEDGE Left: 2x4 SP No.3  
SLIDER Right 2x4 SP No.2 -- 2-6-0

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (lb/size) 1=571/0-3-8, (min. 0-1-8), 6=264/  
Mechanical, (min. 0-1-8),  
7=895/0-3-8, (min. 0-1-8)  
Max Horiz 1=-107 (LC 10)  
Max Uplift 1=-20 (LC 12), 6=-90 (LC 12),  
7=-50 (LC 12)  
Max Grav 1=641 (LC 17), 6=300 (LC 26),  
7=975 (LC 2)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.  
TOP CHORD 1-2=-905/162, 2-3=-754/175, 5-6=-445/292  
BOT CHORD 1-9=-103/835, 8-9=0/306, 8-17=0/306,  
17-18=0/306, 7-18=0/306  
WEBS 3-7=-637/4, 4-7=-335/179, 3-9=-36/663,  
2-9=-327/157

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft;  
B=64ft; L=55ft; eave=6ft; Ke=1.00; Cat. II; Exp B;  
Enclosed; MWFRS (directional) and C-C Exterior(2E)  
0-0-0 to 5-5-10, Interior (1) 5-5-10 to 10-11-4, Exterior  
(2R) 10-11-4 to 16-4-14, Interior (1) 16-4-14 to 21-7-8  
zone; cantilever left and right exposed; end vertical left  
and right exposed; porch right exposed; C-C for members  
and forces & MWFRS for reactions shown; Lumber  
DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom  
chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf  
on the bottom chord in all areas where a rectangle  
3-06-00 tall by 2-00-00 wide will fit between the bottom  
chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.

- Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 20 lb uplift at joint  
1, 90 lb uplift at joint 6 and 50 lb uplift at joint 7.
- This truss is designed in accordance with the 2018  
International Residential Code sections R502.11.1 and  
R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16"  
structural wood sheathing be applied directly to the top  
chord and 1/2" gypsum sheetrock be applied directly to  
the bottom chord.

**LOAD CASE(S)** Standard

Job Q2400457	Truss B04	Truss Type Common Girder	Qty 1	Ply 3	Baker 2024-SAN-008 Job Reference (optional)
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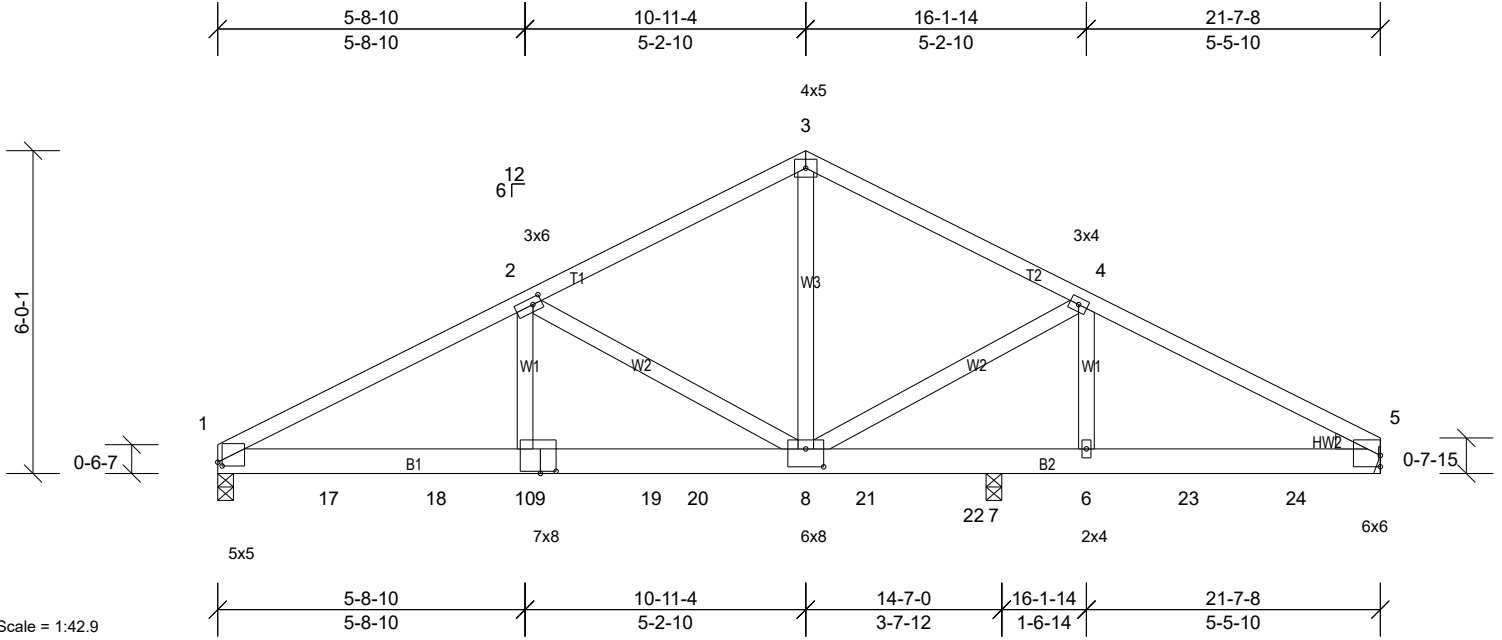


Plate Offsets (X, Y): [1:0-1-0,0-0-14], [2:0-2-0,0-1-8], [5:Edge,0-2-8], [8:0-4-0,0-4-0], [9:0-3-8,0-0-8]										
Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.44	Vert(LL)	-0.12	8-10	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.23	8-10	>757	180
BCLL	0.0*	Rep Stress Incr	NO	WB	0.67	Horz(CT)	0.03	7	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS						
Weight: 361 lb FT = 20%										

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP No.1 \*Except\* B2:2x6 SP DSS  
WEBS 2x4 SP No.3  
WEDGE Right: 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 (lb/size)**  
1=5669/0-3-8, (min. 0-2-8),  
5=3389/ Mechanical, (min. 0-1-8),  
7=5697/0-3-8, (min. 0-2-3)  
Max Horiz 1=-107 (LC 6)  
Max Grav 1=6402 (LC 13), 5=3763 (LC 14),  
7=6559 (LC 13)

**FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.**  
TOP CHORD 1-2=-11189/0, 2-3=-5921/0, 3-4=-5941/0,  
4-5=-4544/0  
BOT CHORD 1-17=0/10026, 17-18=0/10026,  
10-18=0/10026, 9-10=0/10026,  
9-19=0/10026, 19-20=0/10026,  
8-20=0/10026, 8-21=0/4035, 21-22=0/4035,  
7-22=0/4035, 6-7=0/4035, 6-23=0/4035,  
23-24=0/4035, 5-24=0/4035  
WEBS 3-8=0/4995, 4-8=0/1480, 4-6=-1664/0,  
2-8=-5471/34, 2-10=0/4777

**NOTES**  
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-4-0 oc.  
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.  
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.  
3) Unbalanced roof live loads have been considered for this design.

4) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft;  
B=64ft; L=55ft; eave=6ft; Ke=1.00; Cat. II; Exp B;  
Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60  
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) Refer to girder(s) for truss to truss connections.  
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.  
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1403 lb down and 33 lb up at 2-0-12, 1403 lb down and 33 lb up at 4-0-12, 1403 lb down and 33 lb up at 6-0-12, 1403 lb down and 33 lb up at 8-0-12, 1583 lb down at 8-11-4, 1583 lb down at 11-2-4, 1583 lb down at 12-0-12, 1583 lb down at 14-0-12, 1064 lb down and 17 lb up at 16-0-12, and 1064 lb down and 17 lb up at 18-0-12, and 1064 lb down and 17 lb up at 20-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 1-3=-60, 3-5=-60, 11-14=-20  
Concentrated Loads (lb)  
Vert: 9=-1229 (B), 6=-949 (B), 8=-1316 (B), 17=-1229 (B), 18=-1229 (B), 19=-1229 (B), 20=-1316 (B), 21=-1316 (B), 22=-1316 (B), 23=-949 (B), 24=-949 (B)

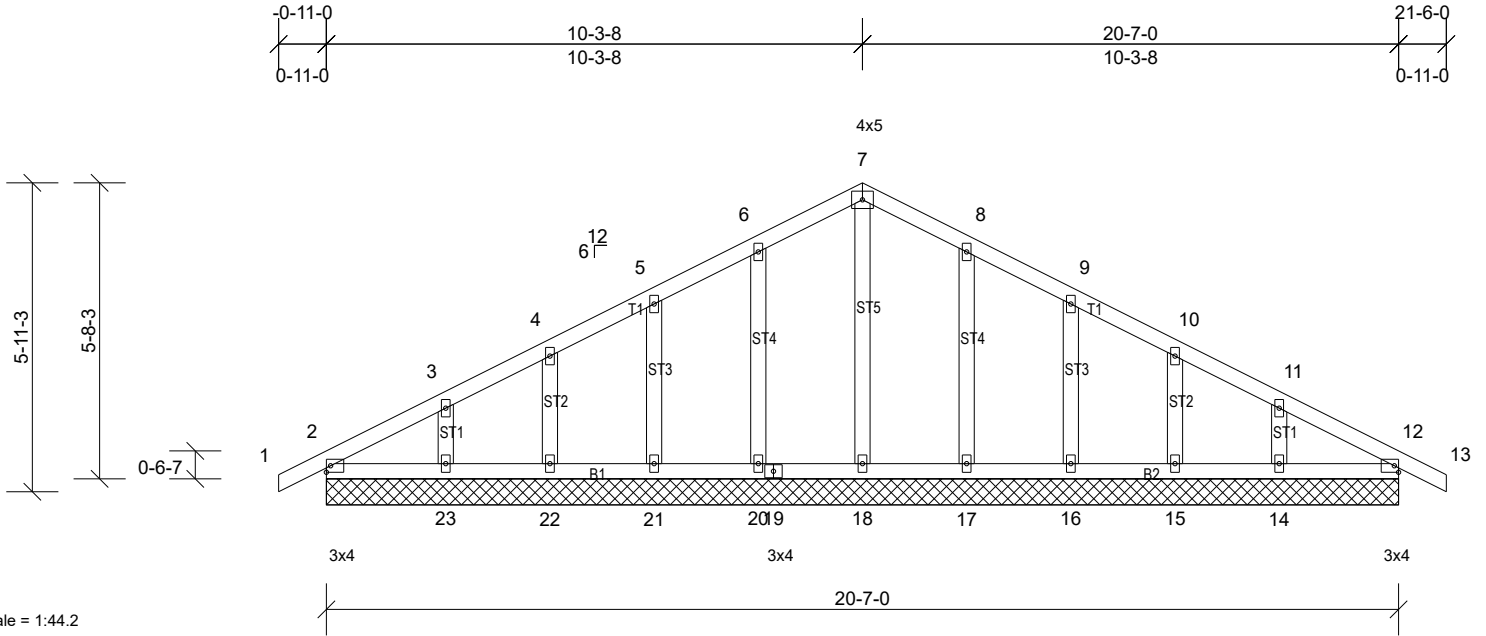
Job Q2400457	Truss C01	Truss Type Common Supported Gable	Qty 1	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Carolina Structural Systems, Star, NC 27356, Jeremy Phillips

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Scale = 1:44.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20 244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.16	Horz(CT)	-0.01	14	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 107 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.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** All bearings 20-7-0.  
(lb) - Max Horiz 2=111 (LC 11), 24=111 (LC 11)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
2, 14, 15, 16, 17, 20, 21, 22, 23, 24  
Max Grav All reactions 250 (lb) or less at joint  
(s) 2, 15, 16, 17, 20, 21, 22, 23, 24  
except 14=293 (LC 1), 18=319 (LC  
1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.  
**WEBS** 7-18=-277/0

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft; B=64ft; L=55ft; eave=2ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 4-3-8, Exterior(2N) 4-3-8 to 10-3-8, Corner (3R) 10-3-8 to 15-9-2, Exterior(2N) 15-9-2 to 21-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 2, 20, 21, 22, 23, 17, 16, 15, 14, 2.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 24.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

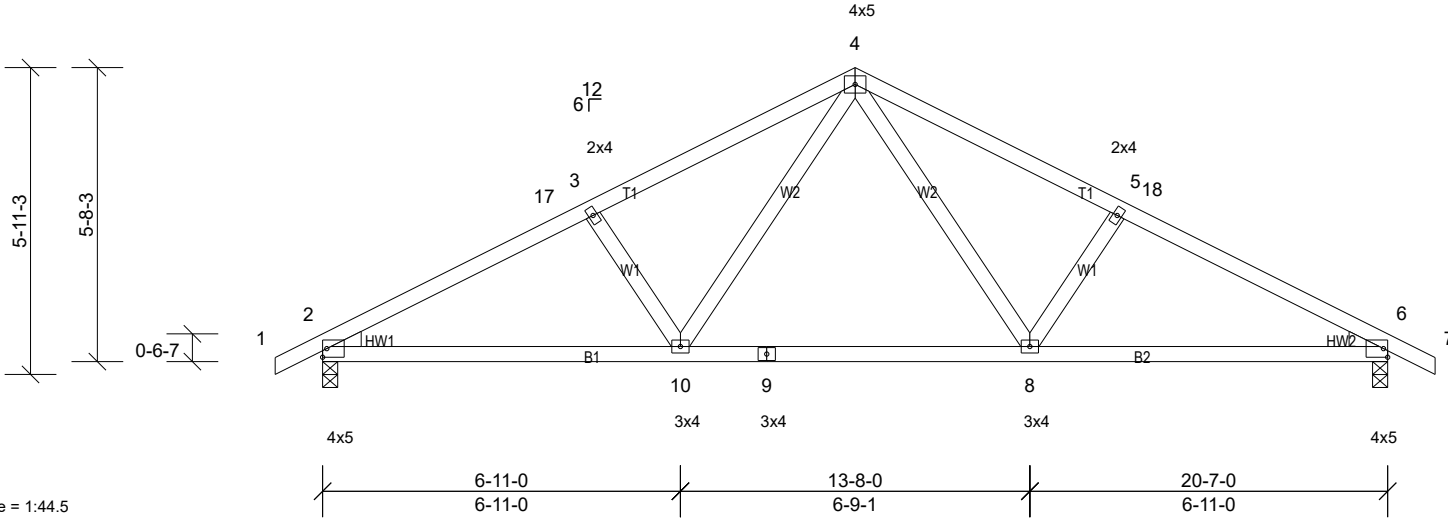
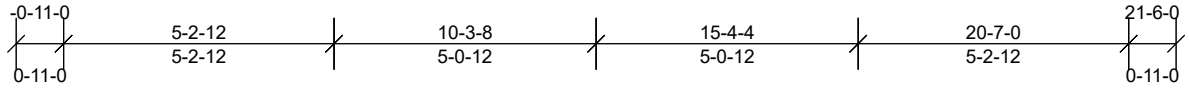
Job Q2400457	Truss C02	Truss Type Common	Qty 7	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Carolina Structural Systems, Star, NC 27356, Jeremy Phillips

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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.30	Vert(LL)	-0.06	8-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.13	8-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 97 lb	FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (lb/size) 2=878/0-3-8, (min. 0-1-8),  
6=878/0-3-8, (min. 0-1-8)  
Max Horiz 2=111 (LC 11)  
Max Uplift 2=-39 (LC 12), 6=-39 (LC 12)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-17=-1366/185, 3-17=-1245/210,  
3-4=-1206/222, 4-5=-1206/220,  
5-18=-1232/207, 6-18=-1366/205  
BOT CHORD 2-10=-119/1158, 9-10=-14/794, 8-9=-14/794,  
6-8=-119/1158  
WEBS 4-8=-49/438, 5-8=-282/148, 4-10=-51/438,  
3-10=-282/150

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft;  
B=64ft; L=55ft; eave=6ft; Ke=1.00; Cat. II; Exp B;  
Enclosed; MWFRS (directional) and C-C Exterior(2E)  
-0-11-0 to 4-6-10, Interior (1) 4-6-10 to 10-3-8, Exterior (2R) 10-3-8 to 15-9-2, Interior (1) 15-9-2 to 21-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 2 and 39 lb uplift at joint 6.

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

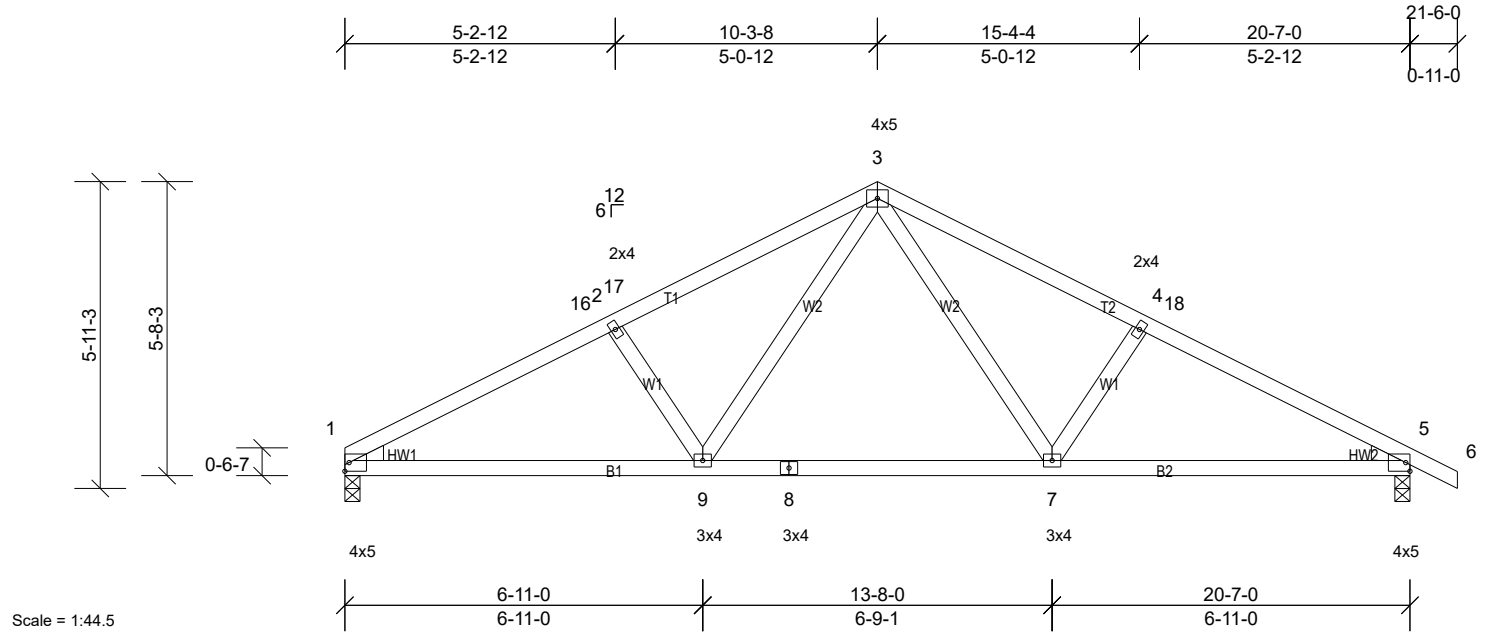
Job Q2400457	Truss C03	Truss Type Common	Qty 2	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Carolina Structural Systems, Star, NC 27356, Jeremy Phillips

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Scale = 1:44.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.30	Vert(LL)	-0.06	7-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.13	7-9	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 96 lb	FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (lb/size) 1=822/0-3-8, (min. 0-1-8),  
5=880/0-3-8, (min. 0-1-8)  
Max Horiz 1=-108 (LC 10)  
Max Uplift 1=-14 (LC 12), 5=-39 (LC 12)

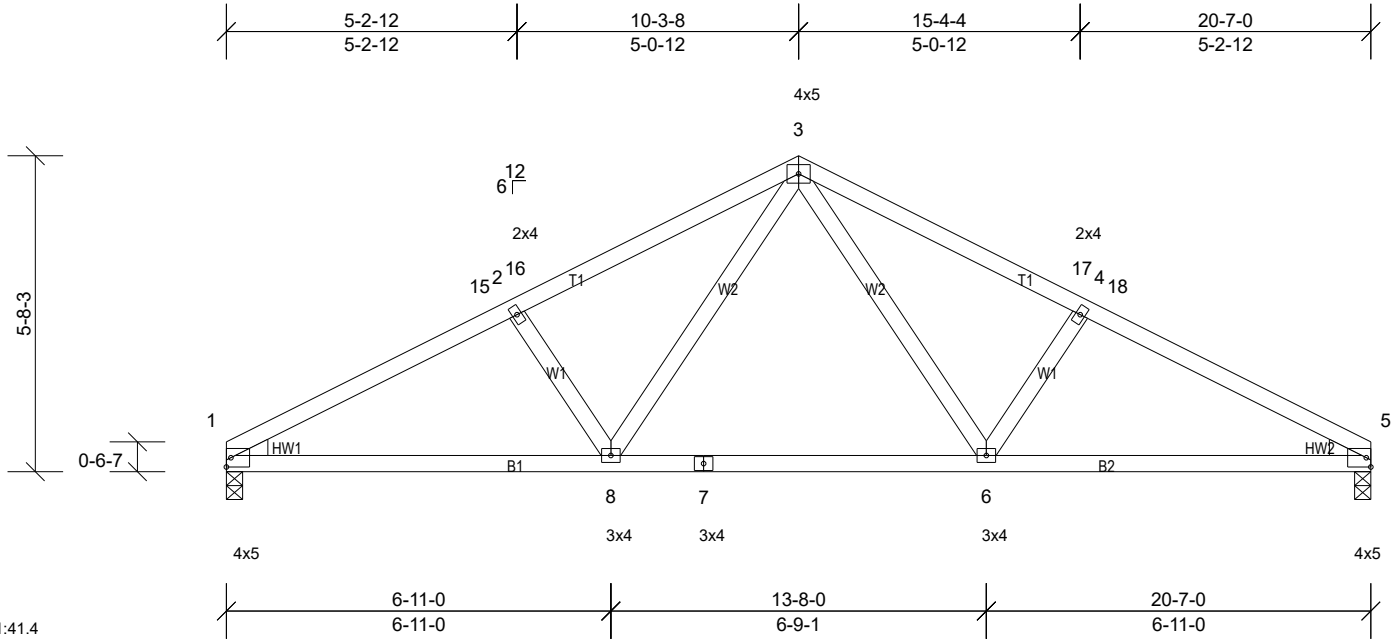
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.  
TOP CHORD 1-16=-1373/211, 2-16=-1239/212,  
2-17=-1213/199, 3-17=-1204/226,  
3-4=-1208/223, 4-18=-1234/210,  
5-18=-1368/209  
BOT CHORD 1-9=-118/1166, 8-9=-17/796, 7-8=-17/796,  
5-7=-122/1160  
WEBS 3-7=-49/438, 4-7=-282/148, 3-9=-51/444,  
2-9=-286/149

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft;  
B=64ft; L=55ft; eave=6ft; Ke=1.00; Cat. II; Exp B;  
Enclosed; MWFRS (directional) and C-C Exterior(2E)  
0-0-0 to 5-5-10, Interior (1) 5-5-10 to 10-3-8, Exterior(2R)  
10-3-8 to 15-9-2, Interior (1) 15-9-2 to 21-6-0 zone;  
cantilever left and right exposed ; end vertical left and  
right exposed;C-C for members and forces & MWFRS  
for reactions shown; Lumber DOL=1.60 plate grip  
DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom  
chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf  
on the bottom chord in all areas where a rectangle  
3-06-00 tall by 2-00-00 wide will fit between the bottom  
chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 14 lb uplift at joint  
1 and 39 lb uplift at joint 5.

- 6) This truss is designed in accordance with the 2018  
International Residential Code sections R502.11.1 and  
R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16"  
structural wood sheathing be applied directly to the top  
chord and 1/2" gypsum sheetrock be applied directly to  
the bottom chord.

**LOAD CASE(S)** Standard

Job Q2400457	Truss C04	Truss Type Common	Qty 1	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.27	Vert(LL)	-0.05	6-8	>999	240	MT20 244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.12	6-8	>999	180	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.03	5	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 94 lb FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (lb/size) 1=823/0-3-8, (min. 0-1-8),  
5=823/0-3-8, (min. 0-1-8)  
Max Horiz 1=-102 (LC 10)  
Max Uplift 1=-14 (LC 12), 5=-14 (LC 12)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.  
TOP CHORD 1-15=-1375/211, 2-15=-1242/213,  
2-16=-1215/199, 3-16=-1206/227,  
3-17=-1206/227, 4-17=-1215/199,  
4-18=-1242/213, 5-18=-1375/211  
BOT CHORD 1-8=-145/1168, 7-8=-38/798, 6-7=-38/798,  
5-6=-136/1168  
WEBS 3-6=-50/444, 4-6=-286/149, 3-8=-50/444,  
2-8=-286/149

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft;  
B=64ft; L=55ft; eave=6ft; Ke=1.00; Cat. II; Exp B;  
Enclosed; MWFRS (directional) and C-C Exterior(2E)  
0-0-0 to 5-5-10, Interior (1) 5-5-10 to 10-3-8, Exterior(2R)  
10-3-8 to 15-9-2, Interior (1) 15-9-2 to 20-7-0 zone;  
cantilever left and right exposed ; end vertical left and  
right exposed;C-C for members and forces & MWFRS  
for reactions shown; Lumber DOL=1.60 plate grip  
DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom  
chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf  
on the bottom chord in all areas where a rectangle  
3-06-00 tall by 2-00-00 wide will fit between the bottom  
chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 14 lb uplift at joint  
1 and 14 lb uplift at joint 5.

- 6) This truss is designed in accordance with the 2018  
International Residential Code sections R502.11.1 and  
R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) This truss design requires that a minimum of 7/16"  
structural wood sheathing be applied directly to the top  
chord and 1/2" gypsum sheetrock be applied directly to  
the bottom chord.
- LOAD CASE(S)** Standard



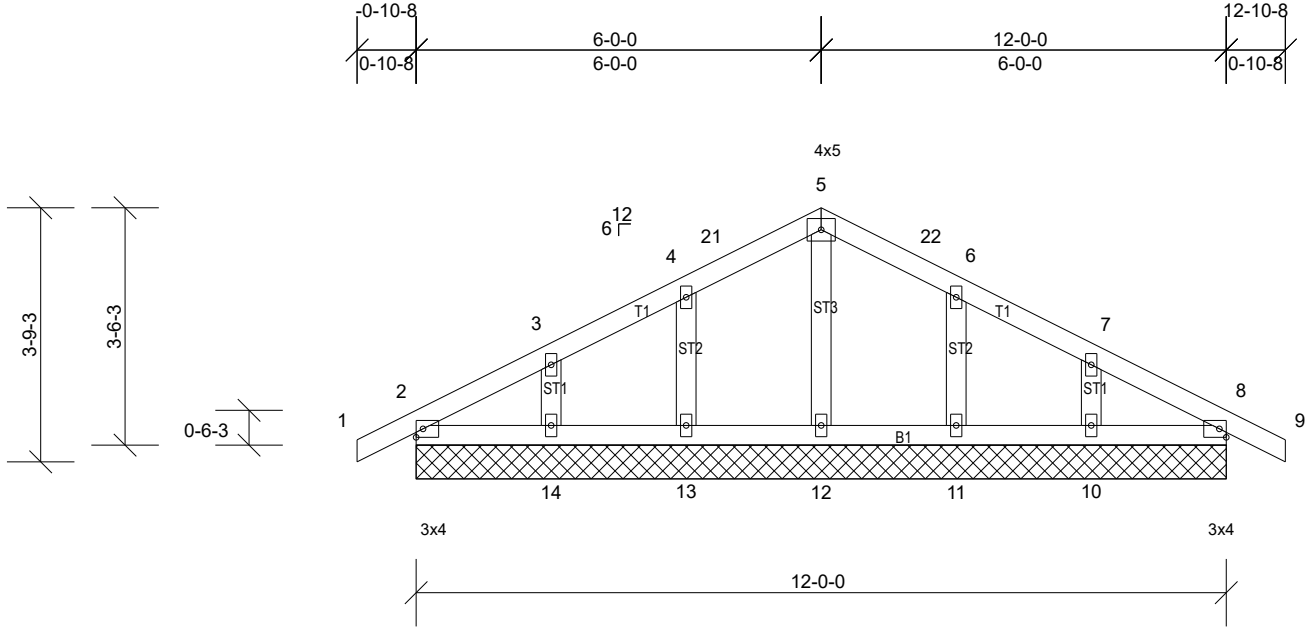
Job Q2400457	Truss D01	Truss Type Common Supported Gable	Qty 1	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Carolina Structural Systems, Star, NC 27356, Jeremy Phillips

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Scale = 1:34.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 54 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.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** All bearings 12-0-0.  
(lb) - Max Horiz 2=68 (LC 11), 15=68 (LC 11)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
2, 10, 11, 13, 14, 15  
Max Grav All reactions 250 (lb) or less at joint  
(s) 2, 10, 11, 13, 14, 15 except  
12=326 (LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.  
WEBS 5-12=-277/67

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft;  
B=64ft; L=55ft; eave=2ft; Ke=1.00; Cat. II; Exp B;  
Enclosed; MWFRS (directional) and C-C Corner(3E)  
-0-10-8 to 4-7-2, Exterior(2N) 4-7-2 to 6-0-0, Corner(3R)  
6-0-0 to 11-5-10, Exterior(2N) 11-5-10 to 12-10-8 zone;  
cantilever left and right exposed ; end vertical left and  
right exposed;C-C for members and forces & MWFRS  
for reactions shown; Lumber DOL=1.60 plate grip  
DOL=1.60
  - Truss designed for wind loads in the plane of the truss  
only. For studs exposed to wind (normal to the face),  
see Standard Industry Gable End Details as applicable,  
or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - 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.

- Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 100 lb uplift at joint  
(s) 2, 13, 14, 11, 10, 2.
- Beveled plate or shim required to provide full bearing  
surface with truss chord at joint(s) 2, 15.
- This truss is designed in accordance with the 2018  
International Residential Code sections R502.11.1 and  
R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16"  
structural wood sheathing be applied directly to the top  
chord and 1/2" gypsum sheetrock be applied directly to  
the bottom chord.

**LOAD CASE(S)** Standard

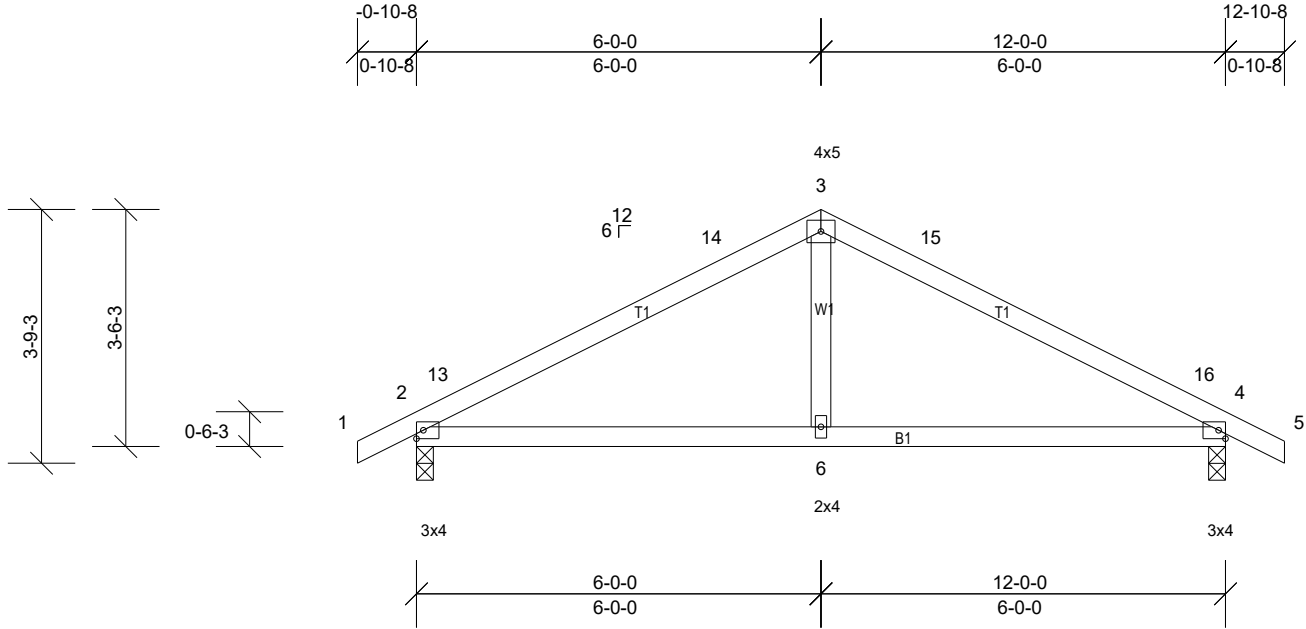
Job Q2400457	Truss D02	Truss Type Common	Qty 5	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Carolina Structural Systems, Star, NC 27356, Jeremy Phillips

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Scale = 1:34.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.37	Vert(LL)	0.04	6-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.06	6-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 45 lb	FT = 20%

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

7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

**LOAD CASE(S)** Standard

**REACTIONS** (lb/size) 2=533/0-3-0, (min. 0-1-8),  
4=532/0-3-0, (min. 0-1-8)  
Max Horiz 2=68 (LC 11)  
Max Uplift 2=-141 (LC 12), 4=-141 (LC 12)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-13=-650/349, 13-14=-641/364,  
3-14=-533/380, 3-15=-533/380,  
15-16=-641/364, 4-16=-650/349  
BOT CHORD 2-6=-234/514, 4-6=-234/514  
WEBS 3-6=-106/261

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft; B=64ft; L=55ft; eave=6ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 4-7-2, Interior (1) 4-7-2 to 6-0-0, Exterior(2R) 6-0-0 to 11-5-10, Interior (1) 11-5-10 to 12-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 141 lb uplift at joint 2 and 141 lb uplift at joint 4.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

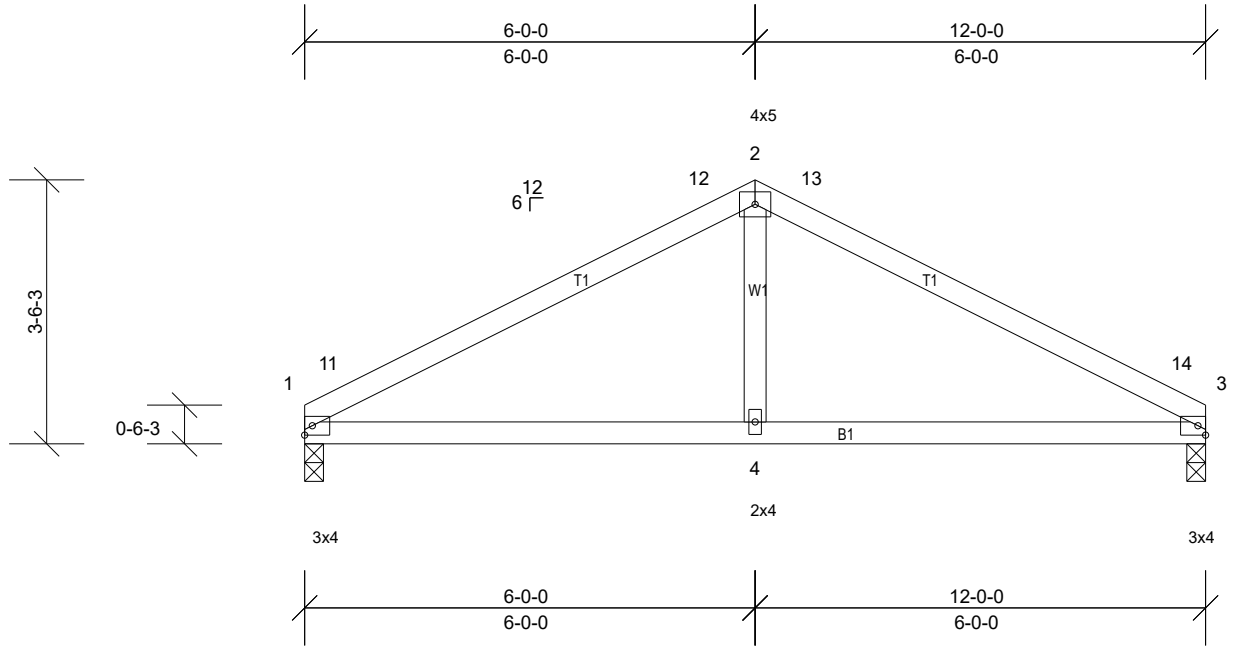
Job Q2400457	Truss D03	Truss Type Common	Qty 1	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Carolina Structural Systems, Star, NC 27356, Jeremy Phillips

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Scale = 1:30.7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.37	Vert(LL)	0.04	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.06	4-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.01	1	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 43 lb	FT = 20%

**LUMBER**

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

7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

**BRACING**

TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (lb/size) 1=480/0-3-0, (min. 0-1-8),  
 3=480/0-3-0, (min. 0-1-8)  
 Max Horiz 1=-59 (LC 10)  
 Max Uplift 1=-118 (LC 12), 3=-118 (LC 12)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-11=-661/358, 11-12=-652/387,  
 2-12=-505/389, 2-13=-505/389,  
 13-14=-652/387, 3-14=-660/358  
 BOT CHORD 1-4=-269/524, 3-4=-269/524  
 WEBS 2-4=-109/263

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft; B=64ft; L=55ft; eave=6ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 5-5-10, Interior (1) 5-5-10 to 6-0-0, Exterior(2R) 6-0-0 to 11-5-10, Interior (1) 11-5-10 to 12-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 1 and 118 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

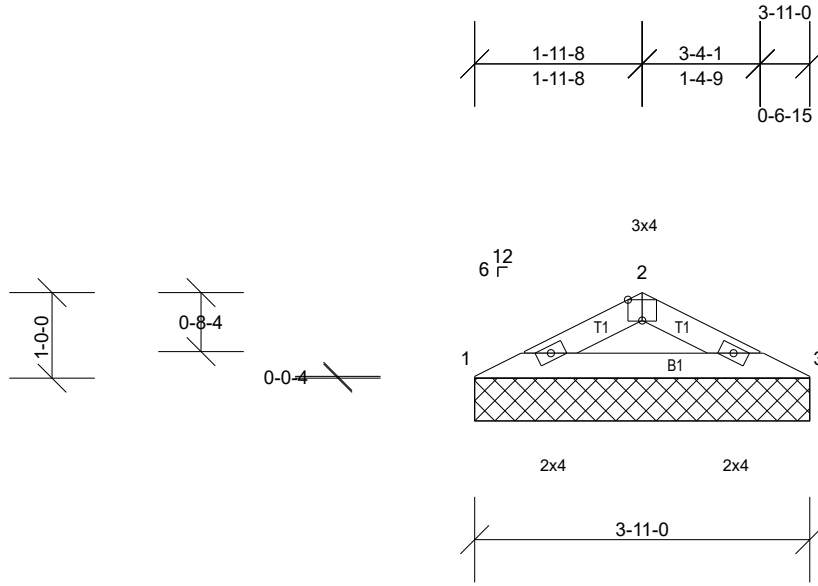
Job Q2400457	Truss V01	Truss Type Valley	Qty 3	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Carolina Structural Systems, Star, NC 27356, Jeremy Phillips

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Scale = 1:26.9

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	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	IRC2018/TPI2014	Matrix-MP							Weight: 10 lb	FT = 20%

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 3-11-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 1=157/3-11-0, (min. 0-1-8),  
3=157/3-11-0, (min. 0-1-8)  
Max Horiz 1=17 (LC 11)  
Max Uplift 1=-3 (LC 12), 3=-3 (LC 12)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.  
TOP CHORD 1-2=-271/142

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft;  
B=64ft; L=55ft; eave=6ft; Ke=1.00; Cat. II; Exp B;  
Enclosed; MWFRS (directional) and C-C Exterior(2E)  
zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 1 and 3 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

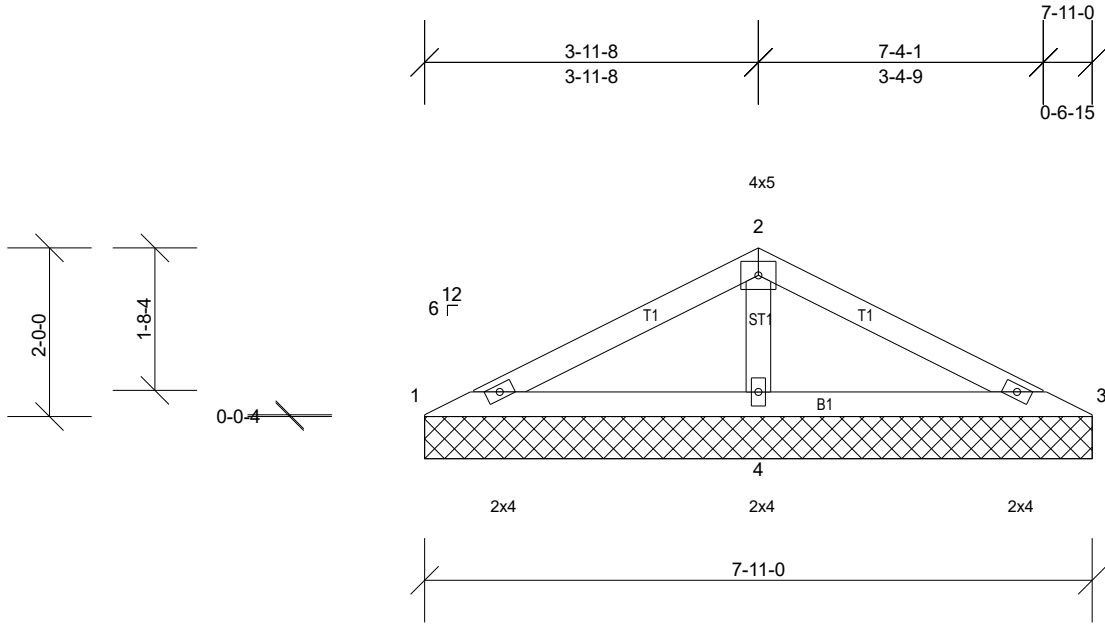
Job Q2400457	Truss V02	Truss Type Valley	Qty 3	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Carolina Structural Systems, Star, NC 27356, Jeremy Phillips

Run: 8.72 S Feb 1 2024 Print: 8.720 S Feb 1 2024 MiTek Industries, Inc. Fri Mar 08 08:34:17

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Scale = 1:27.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	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	IRC2018/TPI2014	Matrix-AS							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.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (lb/size) 1=55/7-11-0, (min. 0-1-8),  
 3=55/7-11-0, (min. 0-1-8),  
 4=523/7-11-0, (min. 0-1-8)  
 Max Horiz 1=-36 (LC 10)  
 Max Uplift 4=-14 (LC 12)  
 Max Grav 1=81 (LC 23), 3=81 (LC 24), 4=523 (LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-138/252, 2-3=-138/252  
 WEBS 2-4=-364/264

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft; B=64ft; L=55ft; eave=2ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 4.

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- LOAD CASE(S)** Standard

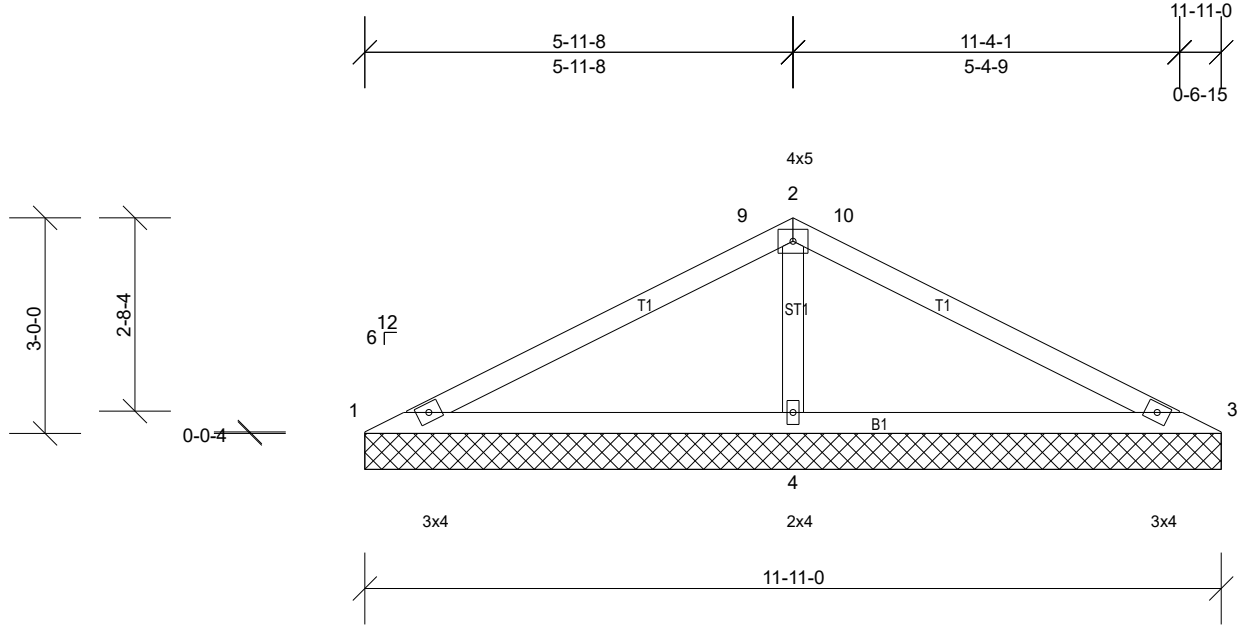
Job Q2400457	Truss V03	Truss Type Valley	Qty 2	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Carolina Structural Systems, Star, NC 27356, Jeremy Phillips

Run: 8.72 S Feb 1 2024 Print: 8.720 S Feb 1 2024 MiTek Industries, Inc. Fri Mar 08 08:34:17

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Scale = 1:32.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS						Weight: 39 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.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (lb/size)  
1=42/11-11-0, (min. 0-1-8),  
3=42/11-11-0, (min. 0-1-8),  
4=870/11-11-0, (min. 0-1-8)  
Max Horiz 1=-56 (LC 10)  
Max Uplift 1=-29 (LC 24), 3=-29 (LC 23),  
4=-27 (LC 12)  
Max Grav 1=91 (LC 23), 3=91 (LC 24), 4=870 (LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-9=-169/379, 2-9=-146/455, 2-10=-143/455,  
3-10=-166/379  
BOT CHORD 1-4=-339/222, 3-4=-339/222  
WEBS 2-4=-681/352

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft; B=64ft; L=55ft; eave=2ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-0-8 to 5-6-2, Exterior(2N) 5-6-2 to 6-0-0, Corner(3R) 6-0-0 to 11-5-10, Exterior(2N) 11-5-10 to 11-11-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 1, 29 lb uplift at joint 3 and 27 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

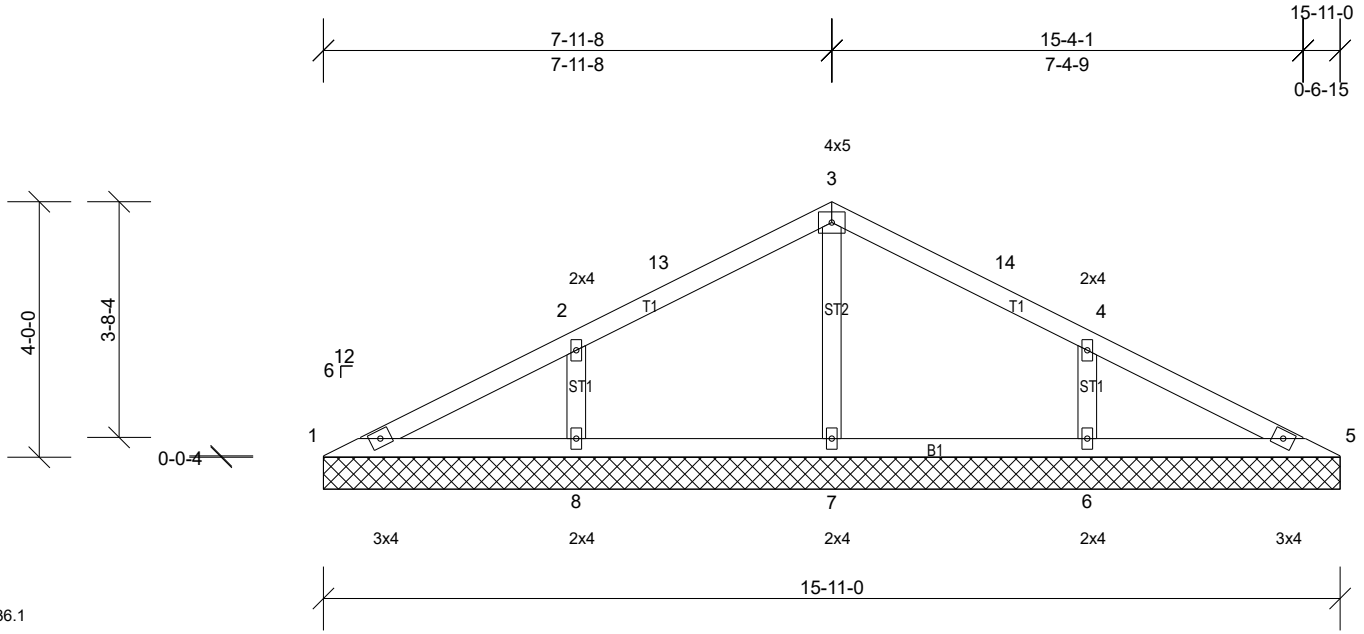
Job Q2400457	Truss V04	Truss Type Valley	Qty 2	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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Carolina Structural Systems, Star, NC 27356, Jeremy Phillips

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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.21	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	0.09	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 58 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.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS** All bearings 15-11-0.  
 (lb) - Max Horiz 1=-76 (LC 10)  
 Max Uplift All uplift 100 (lb) or less at joint(s)  
 6, 8  
 Max Grav All reactions 250 (lb) or less at joint  
 (s) 1, 5 except 6=370 (LC 24),  
 7=357 (LC 1), 8=370 (LC 23)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250  
 (lb) or less except when shown.  
**WEBS** 3-7=-288/74, 2-8=-265/207, 4-6=-265/207

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft; B=64ft; L=55ft; eave=2ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-0-8 to 5-6-2, Exterior(2N) 5-6-2 to 8-0-0, Corner(3R) 8-0-0 to 13-5-10, Exterior(2N) 13-5-10 to 15-11-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 8, 6.

- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- LOAD CASE(S)** Standard

Job Q2400457	Truss V05	Truss Type Valley	Qty 2	Ply 1	Baker 2024-SAN-008 Job Reference (optional)
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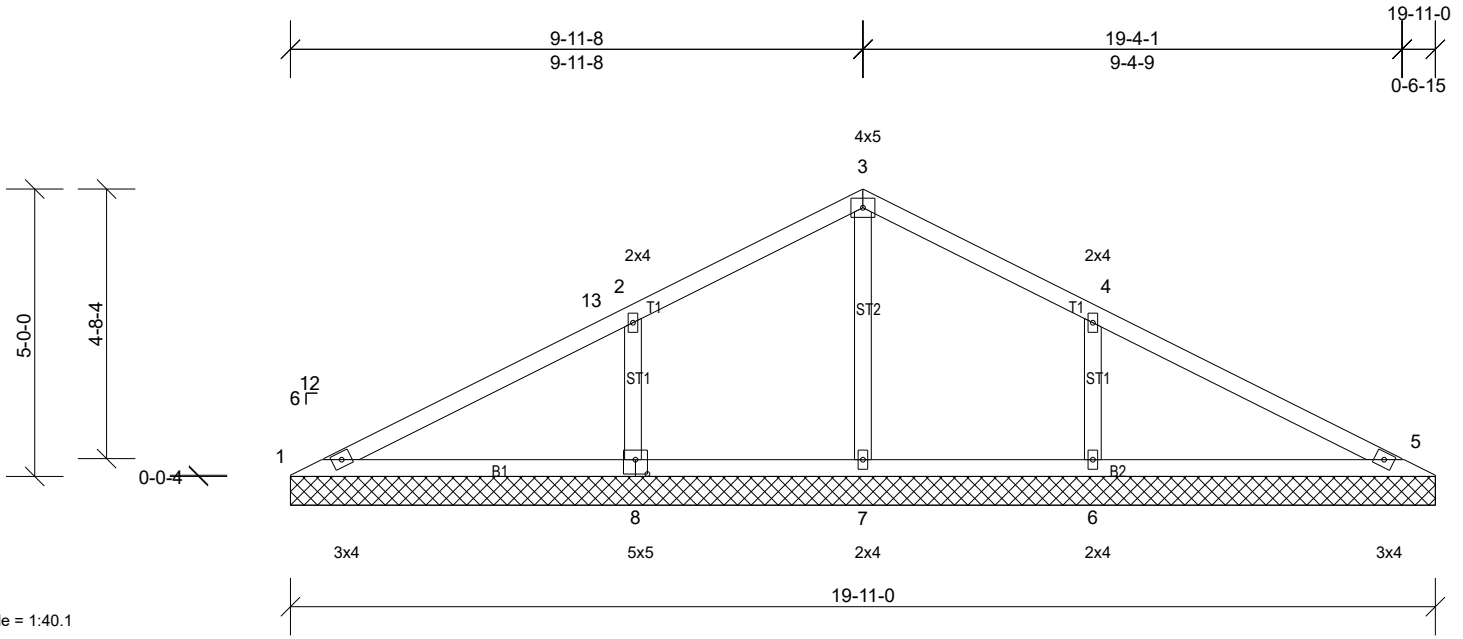


Plate Offsets (X, Y): [8:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS						Weight: 75 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.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** All bearings 19-11-0.  
(lb) - Max Horiz 1=-94 (LC 10)  
Max Uplift All uplift 100 (lb) or less at joint(s) 6, 8  
Max Grav All reactions 250 (lb) or less at joint (s) 1, 5 except 6=469 (LC 18), 7=346 (LC 1), 8=493 (LC 23)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-13=-85/258  
WEBS 3-7=-310/54, 2-8=-342/230, 4-6=-330/237

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=18ft; B=64ft; L=55ft; eave=2ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-0-8 to 5-6-2, Exterior(2N) 5-6-2 to 10-0-0, Corner(3R) 10-0-0 to 15-5-10, Exterior(2N) 15-5-10 to 19-4-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 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.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 8, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard