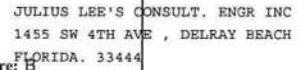




*By julius lee at 4:01 pm, Sep 10, 2008*

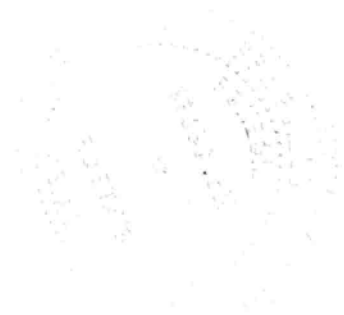


**Builders FirstSource**  
2525 E. Duval St.  
Lake City, FL 32055

Exposure:  $E$ 

License #: CGC038861  
License #: 34869

[illegible]



Job <b>L286784</b>	Truss <b>T01G</b>	Truss Type <b>GABLE</b>	Qty <b>2</b>	Ply <b>1</b>	<b>HOUSECRAFT - TYRE RES.</b> <b>L286784001</b> Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Sep 10 13:41:23 2008 Page 1		

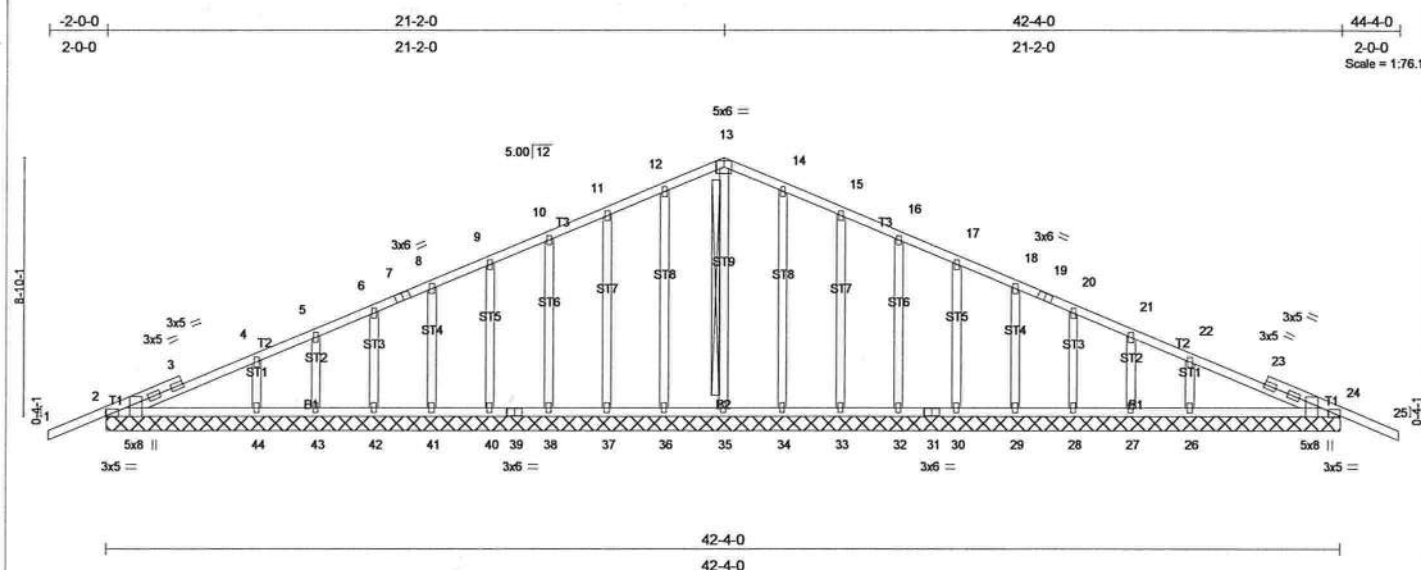


Plate Offsets (X,Y): [2:0-3-8,Edge], [2:0-2-13,Edge], [24:0-3-8,Edge], [24:0-2-13,Edge]					
<b>LOADING</b> (psf)	<b>SPACING</b>	<b>CSI</b>	<b>DEFL</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plates Increase 1.25	TC 0.49	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.13	Vert(LL) -0.02 25 n/r 120		
BCLL 10.0	Rep Stress Incr NO	WB 0.25	Vert(TL) -0.02 25 n/r 90		
BCDL 5.0	Code FBC2004/TP12002	(Matrix)	Horz(TL) 0.01 24 n/a n/a		
Weight: 264 lb					

**LUMBER**  
TOP CHORD 2 X 4 SYP No.2  
BOT CHORD 2 X 4 SYP No.2  
OTHERS 2 X 4 SYP 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.  
WEBS T-Brace: 2 X 4 SYP No.3 - 13-35  
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c. with 4in minimum end distance.  
Brace must cover 90% of web length.

**REACTIONS** (lb/size) 2=534/42-4-0, 35=285/42-4-0, 36=252/42-4-0, 37=247/42-4-0, 38=248/42-4-0, 40=249/42-4-0, 41=241/42-4-0, 42=279/42-4-0, 43=120/42-4-0, 44=541/42-4-0, 34=252/42-4-0, 33=247/42-4-0, 32=248/42-4-0, 30=249/42-4-0, 29=241/42-4-0, 28=279/42-4-0, 27=120/42-4-0, 26=541/42-4-0, 24=534/42-4-0

Max Horz 2=-151(load case 7)  
Max Uplift 2=292(load case 6), 36=-130(load case 6), 37=-143(load case 6), 38=-138(load case 6), 40=-139(load case 6), 41=-137(load case 6), 42=-150(load case 6), 43=-91(load case 6), 44=-255(load case 6), 34=-126(load case 7), 33=-144(load case 7), 32=-138(load case 7), 30=-140(load case 7), 29=-136(load case 7), 28=-151(load case 7), 27=-88(load case 7), 26=-262(load case 7), 24=-314(load case 7)

Max Grav 2=537(load case 10), 35=285(load case 1), 36=255(load case 10), 37=247(load case 1), 38=248(load case 1), 40=250(load case 10), 41=241(load case 1), 42=279(load case 10), 43=120(load case 1), 44=542(load case 10), 34=255(load case 11), 33=247(load case 1), 32=248(load case 1), 30=250(load case 11), 29=241(load case 1), 28=279(load case 11), 27=120(load case 1), 26=542(load case 11), 24=537(load case 11)

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

**TOP CHORD** 1-2=-19/85, 2-3=-159/52, 3-4=-191/161, 4-5=-102/78, 5-6=-80/106, 6-7=-19/121, 7-8=-34/106, 8-9=0/149, 9-10=0/178, 10-11=0/218, 11-12=0/266, 12-13=0/306, 13-14=0/306, 14-15=0/266, 15-16=0/218, 16-17=0/172, 17-18=0/126, 18-19=0/97, 19-20=0/81, 20-21=-12/106, 21-22=-33/67, 22-23=-124/161, 23-24=-92/52, 24-25=-19/85

**BOT CHORD** 2-44=-50/201, 43-44=-50/201, 42-43=-50/201, 41-42=-50/201, 40-41=-50/201, 39-40=-50/201, 38-39=-50/201, 37-38=-50/201, 36-37=-50/201, 35-36=-50/201, 34-35=-50/201, 33-34=-50/201, 32-33=-50/201, 31-32=-50/201, 30-31=-50/201, 29-30=-50/201, 28-29=-50/201, 27-28=-50/201, 26-27=-50/201, 24-26=-50/201

**WEBS** 13-35=-265/0, 12-36=-235/154, 11-37=-227/177, 10-38=-228/170, 9-40=-229/172, 8-41=-223/168, 6-42=-252/185, 5-43=-126/113, 4-44=-473/315, 14-34=-235/154, 15-33=-227/177, 16-32=-228/170, 17-30=-229/172, 18-29=-223/168, 20-28=-252/185, 21-27=-126/113, 22-26=-473/315

**JOINT STRESS INDEX**  
2 = 0.57, 2 = 0.21, 3 = 0.00, 3 = 0.59, 3 = 0.59, 4 = 0.34, 5 = 0.34, 6 = 0.34, 7 = 0.15, 8 = 0.34, 9 = 0.34, 10 = 0.34, 11 = 0.34, 12 = 0.34, 13 = 0.18, 14 = 0.34, 15 = 0.34, 16 = 0.34, 17 = 0.34, 18 = 0.34, 19 = 0.15, 20 = 0.34, 21 = 0.34, 22 = 0.34, 23 = 0.00, 23 = 0.59, 23 = 0.59, 24 = 0.57, 24 = 0.21, 26 = 0.34, 27 = 0.34, 28 = 0.34, 29 = 0.34, 30 = 0.34, 31 = 0.15, 32 = 0.34, 33 = 0.34, 34 = 0.34, 35 = 0.34, 36 = 0.34, 37 = 0.34, 38 = 0.34, 39 = 0.15, 40 = 0.34, 41 = 0.34, 42 = 0.34, 43 = 0.34 and 44 = 0.34

**NOTES** (11)  
1) Unbalanced roof live loads have been considered for this design.  
2) Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.  
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see MiTek "Standard Gable End Detail"  
4) \*This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
5) All plates are 2x4 MT20 unless otherwise indicated.  
6) Gable requires continuous bottom chord bearing.  
7) Gable studs spaced at 2-0-0 oc.  
8) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi  
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 292 lb uplift at joint 2, 130 lb uplift at joint 36, 143 lb uplift at joint 37, 138 lb uplift at joint 38, 139 lb uplift at joint 40, 137 lb uplift at joint 41, 150 lb uplift at joint 42, 91 lb uplift at joint 43, 255 lb uplift at joint 44, 126 lb uplift at joint 34, 144 lb uplift at joint 33, 138 lb uplift at joint 32, 140 lb uplift at joint 30, 136 lb uplift at joint 29, 151 lb uplift at joint 28, 88 lb uplift at joint 27, 262 lb uplift at joint 26 and 314 lb uplift at joint 24.  
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).  
11) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard  
1) Regular: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert. 1-13=-114(F=60), 13-25=-114(F=60), 2-24=-10

Job L286784	Truss T02	Truss Type COMMON	Qty 9	Ply 1	HOUSECRAFT - TYRE RES. L286784002 Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Sep 10 13:41:25 2008 Page 1		

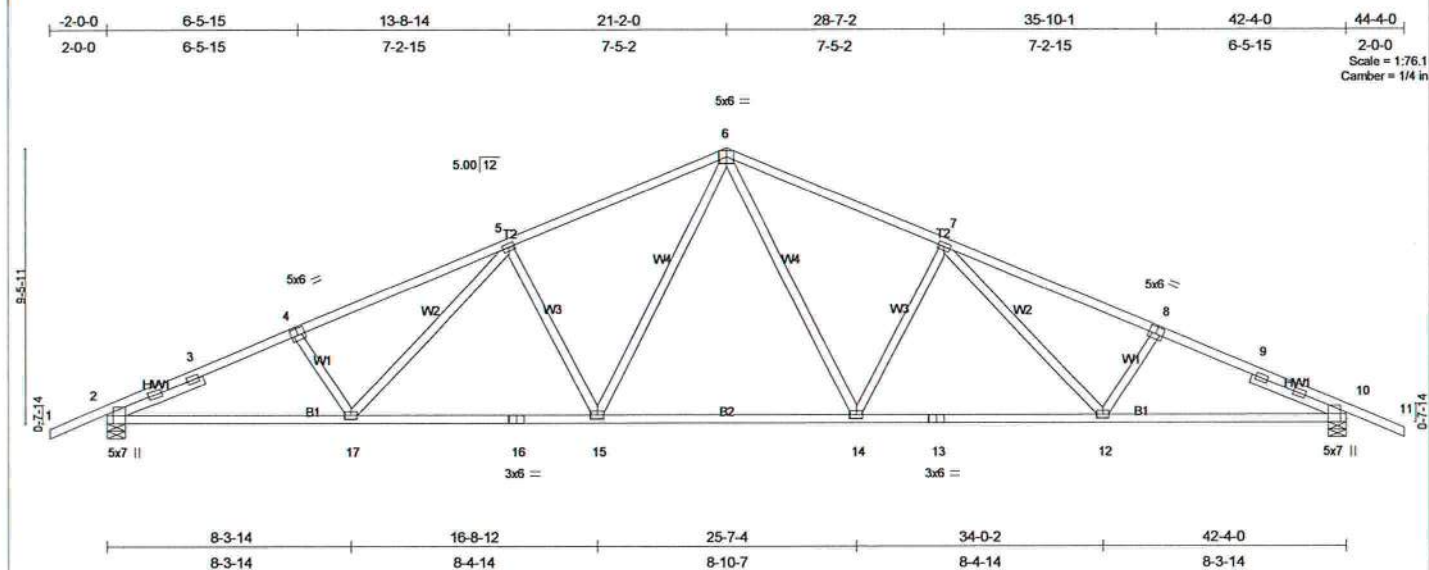


Plate Offsets (X,Y): [2:0-4-1,Edge], [4:0-3-0,0-3-0], [8:0-3-0,0-3-0], [10:0-4-1,Edge]					
LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc) l/defl L/d
TCLL 20.0	Plates Increase	1.25	TC 0.53	Vert(LL)	0.27 15-17 >999 360
TCDL 7.0	Lumber Increase	1.25	BC 0.63	Vert(TL)	-0.45 14-15 >999 240
BCLL 10.0	Rep Stress Incr	YES	WB 0.74	Horz(TL)	0.15 10 n/a n/a
BCDL 5.0	Code FBC2004/TPI2002		(Matrix)		
			PLATES		GRIP
			MT20		244/190
			Weight: 230 lb		

LUMBER	BRACING
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 3-2-5 oc purlins.
BOT CHORD 2 X 4 SYP No.2	BOT CHORD Rigid ceiling directly applied or 5-7-4 oc bracing.
WEBS 2 X 4 SYP No.3	
SLIDER Left 2 X 4 SYP No.3 3-5-9, Right 2 X 4 SYP No.3 3-5-9	

REACTIONS (lb/size) 2=1463/0-7-8, 10=1463/0-7-8
Max Horz 2=126(load case 6)
Max Uplift 2=387(load case 6), 10=387(load case 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-2740/1528, 3-4=-2671/1539, 4-5=-2569/1525, 5-6=-2087/1346, 6-7=-2086/1346, 7-8=-2569/1525, 8-9=-2671/1539, 9-10=-2740/1528, 10-11=0/25
BOT CHORD 2-17=-1259/2422, 16-17=-1004/2092, 15-16=-1004/2092, 14-15=-630/1574, 13-14=-1004/2092, 12-13=-1004/2092, 10-12=-1259/2422
WEBS 4-17=-234/241, 5-17=-193/361, 5-15=-567/454, 6-15=-398/666, 6-14=-398/666, 7-14=-567/454, 7-12=-193/361, 8-12=-234/241

JOINT STRESS INDEX
2 = 0.94, 2 = 0.61, 2 = 0.61, 3 = 0.00, 4 = 0.49, 5 = 0.47, 6 = 0.70, 7 = 0.47, 8 = 0.49, 9 = 0.00, 10 = 0.94, 10 = 0.61, 10 = 0.61, 12 = 0.43, 13 = 0.74, 14 = 0.56, 15 = 0.56, 16 = 0.74 and 17 = 0.43

- NOTES (7)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed, MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
  - 3) \*This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) All plates are 3x5 MT20 unless otherwise indicated.
  - 5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 387 lb uplift at joint 2 and 387 lb uplift at joint 10.
  - 7) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard

Job: L286784 Truss: T04 Truss Type: SPECIAL Qty: 3 Ply: 1 HOUSECRAFT - TYRE RES. L286784004  
Job Reference (optional)  
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Scale = 1/77.1  
Camber = 9/16 in

Plate Offsets (X,Y): [2:0-2-1,0-0-4], [5:0-2-8,0-3-4], [9:0-2-8,0-3-4], [12:0-2-1,0-0-4], [15:0-3-0,0-3-4], [17:0-3-0,0-3-4]

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.99	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.94	Vert(LL) 0.69 16 >736 360		
BCLL 10.0	Lumber Increase 1.25	WB 0.62	Vert(TL) -1.10 16-17 >462 240		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.67 12 n/a n/a		
	Code FBC2004/TPI2002				
				Weight: 218 lb	

LUMBER  
TOP CHORD 2 X 4 SYP No.2  
BOT CHORD 2 X 4 SYP No.2  
WEBS 2 X 4 SYP No.3  
SLIDER Left 2 X 4 SYP No.3 2-8-9, Right 2 X 4 SYP No.3 2-8-9

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

REACTIONS (lb/size) 2=1462/0-7-8, 12=1462/0-7-8  
Max Horz 2=-123(load case 7)  
Max Uplift 2=-388(load case 6), 12=-388(load case 7)

FORCES (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/20, 2-3=-3924/2124, 3-4=-3853/2127, 4-5=-3874/2142, 5-6=-3774/2088, 6-7=-2971/1631, 7-8=-2971/1631, 8-9=-3774/2088, 9-10=-3874/2142, 10-11=-3853/2127, 11-12=-3924/2124, 12-13=0/20  
BOT CHORD 2-18=-1805/3485, 17-18=-1901/3792, 16-17=-1519/3319, 15-16=-1519/3319, 14-15=-1901/3792, 12-14=-1805/3485  
WEBS 4-18=0/222, 5-18=-215/127, 5-17=-381/325, 6-17=-229/423, 6-16=-693/503, 7-16=-1012/1936, 8-16=-693/503, 8-15=-229/422, 9-15=-381/325, 9-14=-215/127, 10-14=0/222

JOINT STRESS INDEX  
2 = 1.00, 2 = 0.86, 2 = 0.74, 3 = 0.00, 4 = 0.34, 5 = 0.75, 6 = 0.47, 7 = 0.68, 8 = 0.47, 9 = 0.74, 10 = 0.34, 11 = 0.00, 12 = 1.00, 12 = 0.86, 12 = 0.74, 14 = 0.43, 15 = 0.82, 16 = 0.95, 17 = 0.82 and 18 = 0.43

NOTES (7)  
1) Unbalanced roof live loads have been considered for this design.  
2) Wind: ASCE 7-02, 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.  
3) \*This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi  
5) Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.  
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 388 lb uplift at joint 2 and 388 lb uplift at joint 12.  
7) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard

Job <b>L286784</b>	Truss <b>T03</b>	Truss Type <b>SPECIAL</b>	Qty <b>5</b>	Ply <b>1</b>	<b>HOUSECRAFT - TYRE RES.</b> <b>L286784003</b> Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6,300 s Apr 19 2006 MiTek Industries, Inc. Wed Sep 10 13:41:27 2008 Page 1		

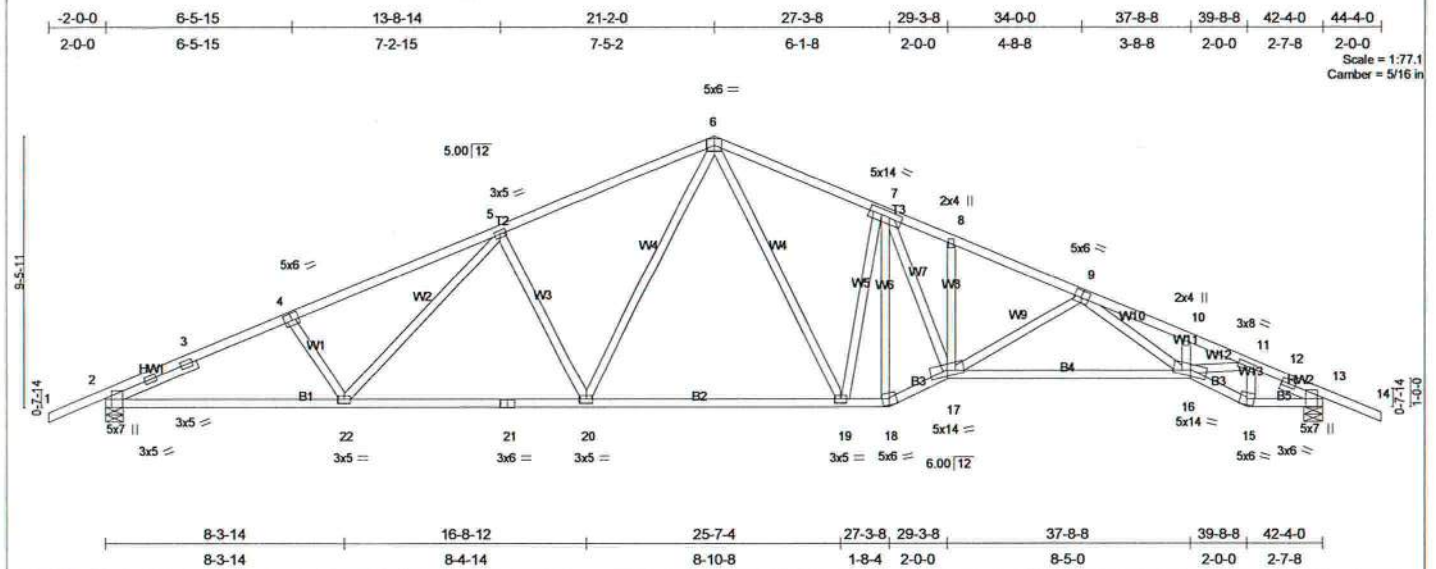


Plate Offsets (X,Y): [2-0-4-1,Edge], [4-0-3-0,0-3-0], [9-0-3-0,0-3-0], [13-0-4-1,Edge]					
<b>LOADING</b> (psf)	<b>SPACING</b>	<b>CSI</b>	<b>DEFL</b>	<b>in (loc)</b>	<b>I/defl</b>
TCCL 20.0	Plates Increase 1.25	TC 0.52	Vert(LL) 0.39	16-17	>999
TCDL 7.0	Lumber Increase 1.25	BC 0.69	Vert(TL) -0.65	16-17	>781
BCCL 10.0	Rep Stress Incr YES	WB 0.78	Horz(TL) 0.26	13	n/a
BCDL 5.0	Code FBC2004/TPI2002	(Matrix)			n/a
					<b>PLATES</b> MT20
					<b>GRIP</b> 244/190
					Weight: 257 lb

<b>LUMBER</b>	<b>BRACING</b>
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 2-8-2 oc purlins.
BOT CHORD 2 X 4 SYP No.2	BOT CHORD Rigid ceiling directly applied or 4-10-13 oc bracing.
WEBS 2 X 4 SYP No.3	
SLIDER Left 2 X 4 SYP No.3 3-5-9, Right 2 X 4 SYP No.3 1-6-6	

<b>REACTIONS</b> (lb/size) 2=1463/0-7-8, 13=1463/0-7-8	
Max Horz 2=-126(load case 7)	
Max Uplift 2=-387(load case 6), 13=-387(load case 7)	
<b>FORCES</b> (lb) - Maximum Compression/Maximum Tension	
TOP CHORD 1-2=0/25, 2-3=-2739/1528, 3-4=-2670/1538, 4-5=-2568/1524, 5-6=-2088/1347, 6-7=-2070/1361, 7-8=-2785/1690, 8-9=-2828/1629, 9-10=-4499/2477, 10-11=-4498/2411, 11-12=-2421/1335, 12-13=-2467/1344, 13-14=0/25	
BOT CHORD 2-22=-1258/2421, 21-22=-1005/2093, 20-21=-1005/2093, 19-20=-628/1571, 18-19=-913/1981, 17-18=-987/2166, 16-17=-1624/3182, 15-16=-1112/2224, 13-15=-1067/2114	
WEBS 4-22=-234/240, 5-22=-191/361, 5-20=-565/457, 6-20=-403/669, 6-19=-418/696, 7-19=-578/469, 7-18=-885/350, 7-17=-815/1601, 8-17=-134/139, 9-17=-731/487, 9-16=-601/1225, 10-16=-135/140, 11-16=-1096/2160, 11-15=-971/496	

<b>JOINT STRESS INDEX</b>
2 = 0.94, 2 = 0.61, 2 = 0.61, 3 = 0.00, 4 = 0.49, 5 = 0.47, 6 = 0.65, 7 = 0.70, 8 = 0.34, 9 = 0.61, 10 = 0.34, 11 = 0.91, 12 = 0.00, 13 = 0.93, 13 = 0.91, 15 = 0.57, 16 = 0.81, 17 = 0.90, 18 = 0.54, 19 = 0.59, 20 = 0.56, 21 = 0.73 and 22 = 0.43

<b>NOTES</b> (6)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=14ft, TCCL=4.2psf, BCDL=3.0psf, Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 387 lb uplift at joint 2 and 387 lb uplift at joint 13.
6) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

<b>LOAD CASE(S)</b> Standard
------------------------------

Job <b>L286784</b>	Truss <b>T05</b>	Truss Type <b>SPECIAL</b>	Qty <b>12</b>	Ply <b>1</b>	<b>HOUSECRAFT - TYRE RES.</b> <b>L286784005</b> Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Sep 10 13:41:31 2008 Page 1		

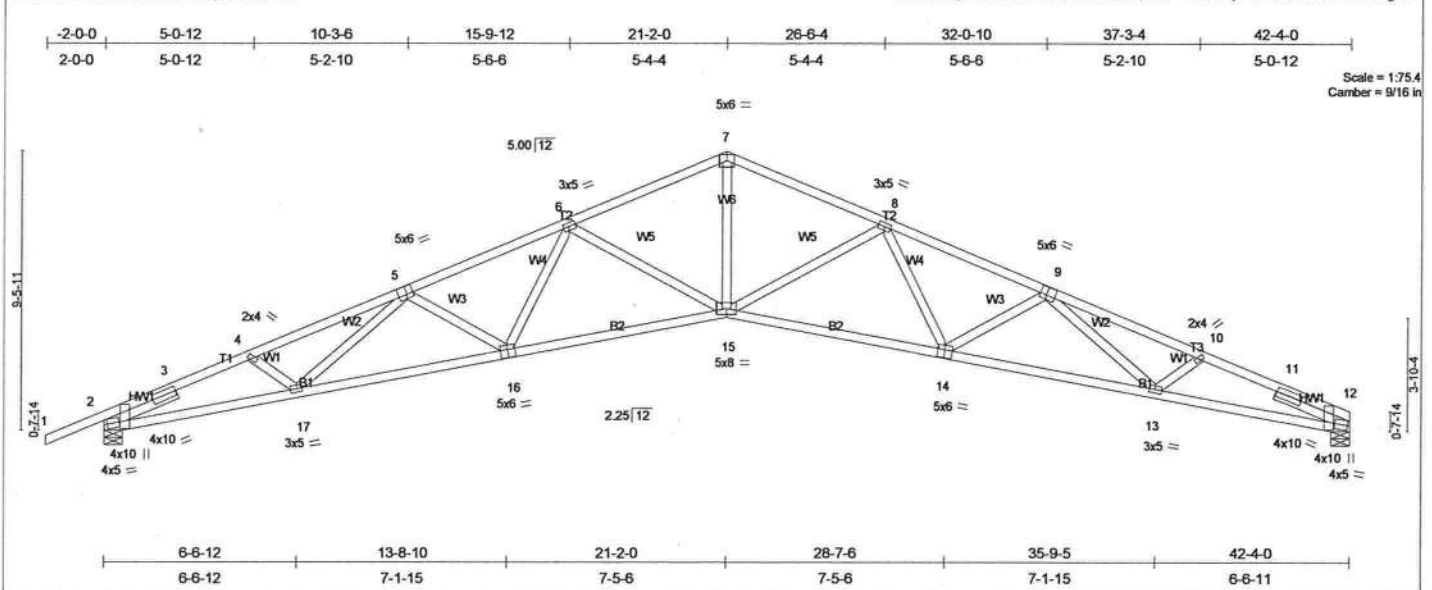


Plate Offsets (X,Y): [2:0-0-13,0-3-14], [2:0-6-7,Edge], [5:0-2-8,0-3-4], [9:0-2-8,0-3-4], [12:0-0-13,0-3-14], [12:0-6-7,Edge], [14:0-3-0,0-3-4], [16:0-3-0,0-3-4]					
<b>LOADING</b> (psf)	<b>SPACING</b>	<b>CSI</b>	<b>DEFL</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plates Increase 1.25	TC 1.00	in (loc) l/defl l/d	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.95	Vert(LL) 0.70 15 >722 360		
BCLL 10.0	Rep Stress Incr YES	WB 0.62	Vert(TL) -1.10 14-15 >461 240		
BCDL 5.0	Code FBC2004/TPI2002	(Matrix)	Horz(TL) 0.67 12 n/a n/a		
Weight: 215 lb					

<b>LUMBER</b>	<b>BRACING</b>
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2 X 4 SYP No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2 X 4 SYP No.3	
SLIDER Left 2 X 4 SYP No.3 2-8-10, Right 2 X 4 SYP No.3 2-8-10	

<b>REACTIONS</b> (lb/size) 2=1465/0-7-8, 12=1349/0-7-8
Max Horz 2=129(load case 6)
Max Uplift 2=388(load case 6), 12=299(load case 7)

<b>FORCES</b> (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=3930/2152, 3-4=3858/2156, 4-5=3880/2173, 5-6=3784/2127, 6-7=2982/1671, 7-8=2982/1671, 8-9=3795/2142, 9-10=3931/2244, 10-11=3919/2241, 11-12=3987/2233
BOT CHORD 2-17=1862/3489, 16-17=1966/3800, 15-16=1586/3328, 14-15=1596/3336, 13-14=1995/3821, 12-13=1950/3552
WEBS 4-17=0/223, 5-17=218/134, 5-16=381/323, 6-16=227/422, 6-15=693/501, 7-15=1043/1945, 8-15=701/513, 8-14=239/430, 9-14=392/340, 9-13=183/84, 10-13=0/218

<b>JOINT STRESS INDEX</b>
2 = 1.00, 2 = 0.87, 2 = 0.86, 3 = 0.00, 4 = 0.34, 5 = 0.75, 6 = 0.47, 7 = 0.68, 8 = 0.47, 9 = 0.75, 10 = 0.34, 11 = 0.00, 12 = 1.00, 12 = 0.87, 12 = 0.86, 13 = 0.43, 14 = 0.83, 15 = 0.96, 16 = 0.83 and 17 = 0.43

- NOTES** (7)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
  - \*This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
  - Bearing at joint(s) 2, 12 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 388 lb uplift at joint 2 and 299 lb uplift at joint 12.
  - Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard

Job L286784	Truss T06	Truss Type MONO TRUSS	Qty 11	Ply 1	HOUSECRAFT - TYRE RES. L286784006 Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Sep 10 13:41:31 2008 Page 1		

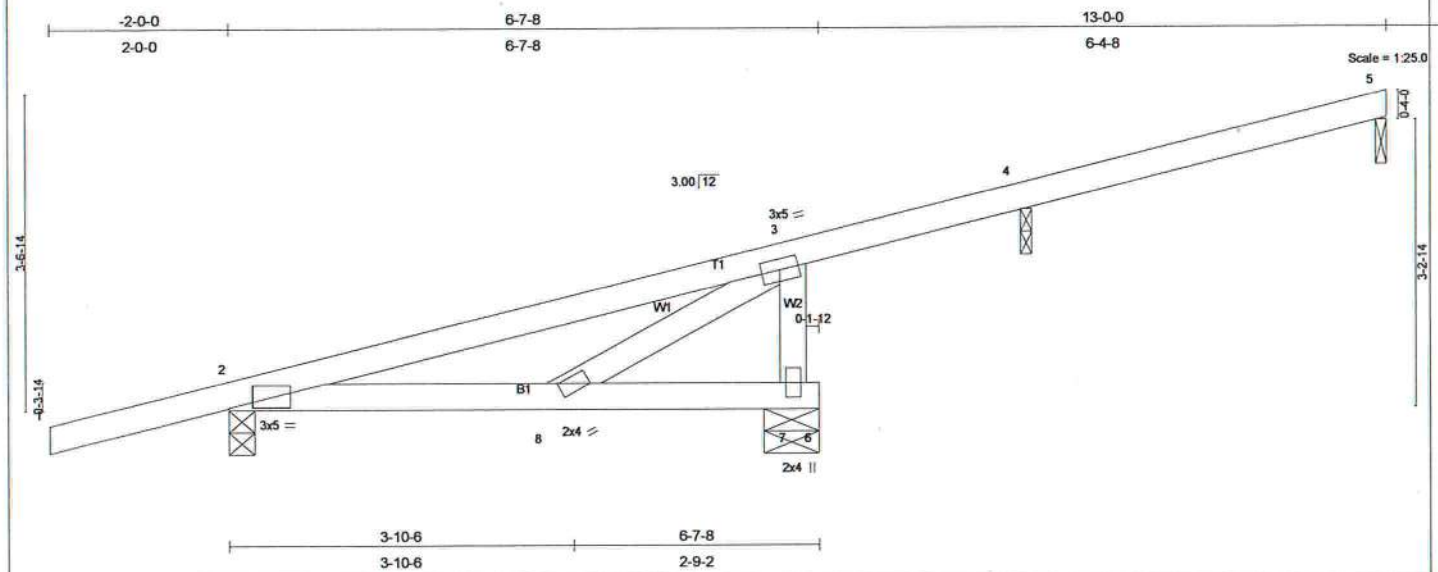


Plate Offsets (X,Y): [2-0-1-12, 0-1-8]					
LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc) l/defl L/d
TCLL 20.0	Plates Increase	1.25	TC 0.27	Vert(LL) 0.02	2-8 >999 360
TCDL 7.0	Lumber Increase	1.25	BC 0.09	Vert(TL) -0.01	2-8 >999 240
BCLL 10.0	Rep Stress Incr	YES	WB 0.11	Horz(TL) -0.00	5 n/a n/a
BCDL 5.0	Code FBC2004/TPI2002		(Matrix)		
			PLATES GRIP		
			MT20 244/190		
			Weight: 39 lb		

LUMBER	BRACING
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2 X 4 SYP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2 X 4 SYP No.3	

REACTIONS (lb/size)	5=108/0-1-8, 2=309/0-3-8, 7=334/0-7-8, 4=120/0-1-8
Max Horz	2=129(load case 4)
Max Uplift	5=51(load case 4), 2=210(load case 4), 7=186(load case 4), 4=63(load case 4)

FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/25, 2-3=-203/205, 3-4=-78/0, 4-5=-37/21
BOT CHORD	2-8=-354/186, 7-8=0/0, 6-7=0/0
WEBS	3-7=-320/451, 3-8=-411/216

JOINT STRESS INDEX	
2 = 0.17, 3 = 0.23, 7 = 0.26 and 8 = 0.21	

- NOTES (7)
- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; porch left exposed; Lumber DOL=1.60 plate grip
  - 2) \*This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
  - 4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5, 4.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 5, 210 lb uplift at joint 2, 186 lb uplift at joint 7 and 63 lb uplift at joint 4.
  - 6) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 5, 4.
  - 7) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S)	Standard
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[illegible]

Job <b>L286784</b>	Truss <b>T06G</b>	Truss Type <b>MONO TRUSS</b>	Qty <b>2</b>	Ply <b>1</b>	<b>HOUSECRAFT - TYRE RES.</b> <b>L286784007</b> Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Sep 10 13:41:32 2008 Page 1		

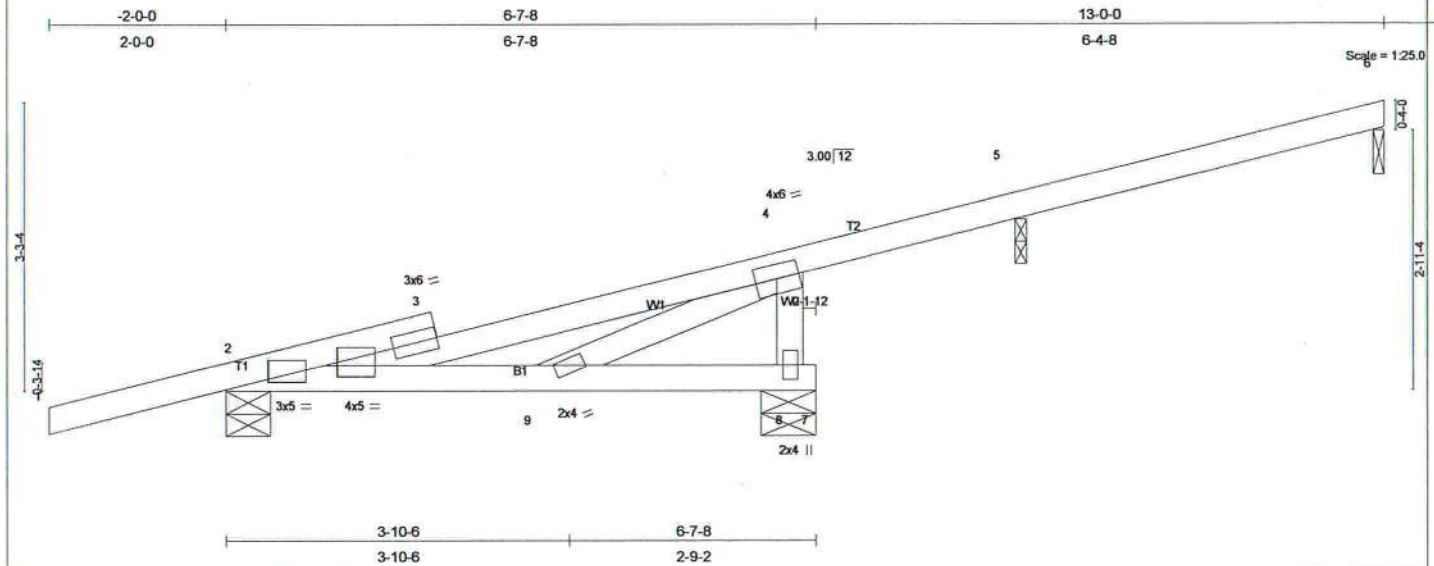


Plate Offsets (X,Y): [2-0-5-12,0-1-0], [2-1-3-0,0-1-12]					
<b>LOADING</b> (psf)	<b>SPACING</b>	<b>CSI</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.76	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.13	Vert(LL) 0.05 2-9 >999 360		
BCLL 10.0	Lumber Increase 1.25	WB 0.24	Vert(TL) -0.03 9 >999 240		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL) 0.02 5 n/a n/a		
	Code FBC2004/TPI2002			Weight: 41 lb	

<b>LUMBER</b>	<b>BRACING</b>
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2 X 4 SYP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2 X 4 SYP No.3	

**REACTIONS** (lb/size) 2=633/0-6-0, 6=228/0-1-8, 8=640/0-7-8, 5=265/0-1-8  
Max Horz 2=167(load case 4)  
Max Uplift 2=568(load case 4), 6=-188(load case 4), 8=-534(load case 4), 5=-224(load case 4)

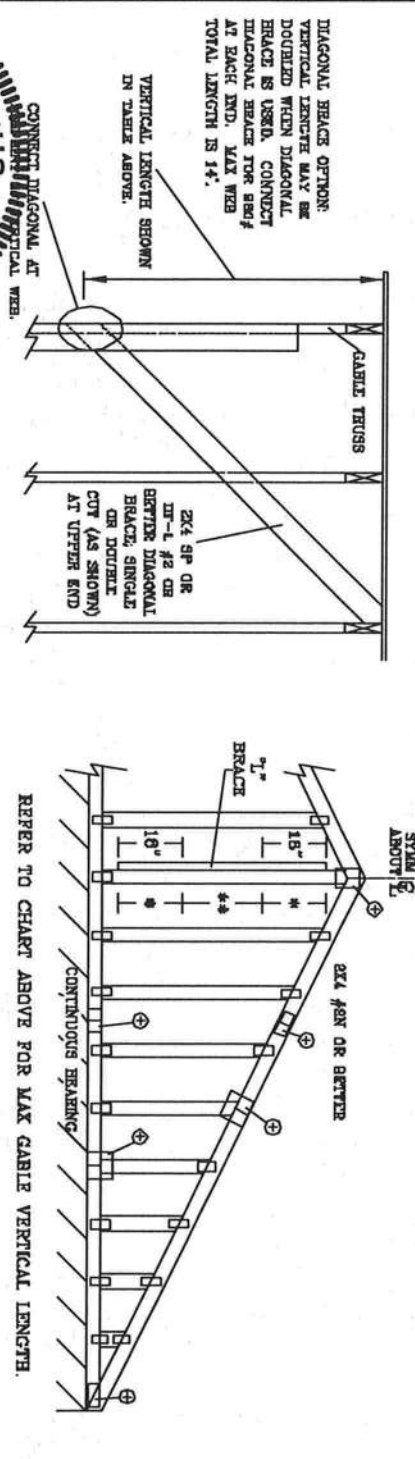
**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-46/53, 2-3=-226/240, 3-4=-203/202, 4-5=-76/2, 5-6=-72/44  
BOT CHORD 2-9=-356/197, 8-9=0/0, 7-8=0/0  
WEBS 4-8=-613/972, 4-9=-392/218

**JOINT STRESS INDEX**  
2 = 0.78, 2 = 0.92, 3 = 0.00, 3 = 0.86, 4 = 0.30, 8 = 0.56 and 9 = 0.18

**NOTES** (8)  
1) Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.  
2) \*This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi  
4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6, 5.  
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 568 lb uplift at joint 2, 188 lb uplift at joint 6, 534 lb uplift at joint 8 and 224 lb uplift at joint 5.  
6) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6, 5.  
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).  
8) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard  
1) Regular: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-6=-114(F=-60), 2-7=-10

MAX GABLE VERTICAL LENGTH															
CABLE VERTICAL SPACING	2X4 SPECIES	BRACE GRADE	NO BRACES	(1) 1X4 "L" BRACE *		(1) 2X4 "L" BRACE *		(2) 2X4 "L" BRACE **		(1) 2X6 "L" BRACE *		(2) 2X6 "L" BRACE *		(2) 2X8 "L" BRACE **	
				GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B
24" O.C.	SPF	#1 / #2	3' 2"	5' 6"	6' 8"	6' 8"	6' 9"	7' 10"	8' 0"	10' 3"	10' 7"	12' 3"	12' 7"		
			#3	3' 1"	4' 5"	4' 5"	6' 10"	5' 10"	7' 10"	7' 10"	9' 1"	9' 1"	12' 3"	12' 3"	
			STUD	3' 1"	4' 6"	4' 5"	5' 10"	6' 10"	7' 10"	7' 10"	9' 1"	9' 1"	12' 3"	12' 3"	
	HF	STANDARD	2' 11"	3' 6"	3' 9"	6' 0"	5' 0"	6' 9"	7' 10"	7' 10"	9' 1"	12' 3"	12' 3"		
			#1	3' 6"	5' 8"	5' 11"	6' 8"	7' 0"	7' 10"	8' 5"	10' 3"	11' 1"	12' 3"	13' 2"	
			#2	3' 6"	5' 6"	5' 11"	6' 6"	7' 0"	7' 10"	8' 5"	10' 3"	11' 1"	12' 3"	13' 2"	
	SP	#3	3' 3"	4' 6"	4' 6"	6' 0"	6' 0"	7' 10"	8' 1"	9' 4"	8' 4"	12' 3"	12' 6"		
			STUD	3' 3"	4' 8"	4' 6"	5' 11"	5' 11"	7' 10"	8' 0"	9' 3"	8' 0"	12' 3"	12' 6"	
			STANDARD	3' 0"	3' 10"	3' 10"	6' 1"	5' 1"	6' 11"	6' 11"	8' 0"	9' 3"	8' 0"	10' 10"	
	DFL	#1 / #2	3' 6"	6' 4"	6' 8"	7' 6"	7' 6"	8' 11"	8' 11"	9' 2"	11' 9"	12' 1"	14' 0"		
			#3	3' 7"	5' 5"	5' 5"	7' 2"	7' 2"	8' 11"	8' 11"	11' 2"	11' 2"	14' 0"	14' 0"	
			STUD	3' 7"	5' 6"	6' 5"	7' 2"	7' 2"	8' 11"	8' 11"	11' 2"	11' 2"	14' 0"	14' 0"	
16" O.C.	SPF	#1 / #2	3' 6"	6' 4"	6' 8"	6' 8"	7' 6"	7' 6"	8' 11"	8' 11"	9' 7"	8' 7"	12' 11"		
			#3	3' 7"	5' 5"	5' 5"	7' 2"	7' 2"	8' 11"	8' 11"	11' 2"	11' 2"	14' 0"	14' 0"	
			STUD	3' 7"	5' 6"	6' 5"	7' 2"	7' 2"	8' 11"	8' 11"	11' 2"	11' 2"	14' 0"	14' 0"	
	HF	STANDARD	3' 7"	4' 6"	4' 8"	6' 2"	6' 2"	8' 3"	8' 3"	9' 7"	9' 7"	12' 11"	12' 11"		
			#1	4' 0"	6' 4"	6' 10"	7' 6"	8' 1"	8' 11"	8' 7"	11' 9"	12' 8"	14' 0"	14' 0"	
			#2	3' 11"	6' 4"	6' 10"	7' 6"	8' 1"	8' 11"	8' 7"	11' 9"	12' 8"	14' 0"	14' 0"	
	SP	#3	3' 6"	5' 7"	6' 7"	7' 4"	7' 4"	8' 11"	8' 11"	9' 6"	11' 5"	11' 6"	14' 0"	14' 0"	
			STUD	3' 6"	5' 7"	6' 7"	7' 4"	7' 4"	8' 11"	8' 11"	9' 6"	11' 5"	11' 6"	14' 0"	14' 0"
			STANDARD	3' 8"	4' 9"	4' 9"	7' 3"	7' 3"	8' 11"	8' 5"	11' 4"	11' 4"	14' 0"	14' 0"	
	DFL	STANDARD	3' 8"	4' 9"	4' 9"	6' 3"	6' 3"	8' 5"	8' 5"	9' 9"	9' 9"	13' 3"	13' 3"		
			#1 / #2	4' 0"	6' 11"	7' 2"	6' 3"	6' 3"	8' 10"	10' 1"	12' 11"	13' 4"	14' 0"	14' 0"	
			#3	3' 11"	6' 3"	6' 3"	6' 3"	6' 3"	8' 10"	9' 10"	12' 11"	12' 11"	14' 0"	14' 0"	
12" O.C.	SPF	#3	3' 11"	6' 3"	6' 3"	6' 3"	6' 3"	8' 10"	9' 10"	12' 11"	12' 11"	14' 0"	14' 0"		
			STUD	3' 11"	6' 3"	6' 3"	6' 3"	6' 3"	8' 10"	9' 10"	12' 11"	12' 11"	14' 0"	14' 0"	
			STANDARD	3' 11"	6' 3"	6' 3"	6' 3"	6' 3"	8' 10"	9' 10"	12' 11"	12' 11"	14' 0"	14' 0"	
	HF	#1	4' 5"	6' 11"	7' 6"	8' 3"	8' 11"	9' 10"	10' 7"	12' 11"	13' 11"	14' 0"	14' 0"		
			#2	4' 4"	6' 11"	7' 6"	8' 3"	8' 11"	9' 10"	10' 7"	12' 11"	13' 11"	14' 0"	14' 0"	
			STUD	4' 2"	6' 4"	6' 5"	8' 3"	8' 6"	9' 10"	10' 4"	12' 11"	13' 3"	14' 0"	14' 0"	
	SP	#3	4' 2"	6' 4"	6' 5"	8' 3"	8' 6"	9' 10"	10' 4"	12' 11"	13' 3"	14' 0"	14' 0"		
			STUD	4' 2"	6' 4"	6' 5"	8' 3"	8' 6"	9' 10"	10' 4"	12' 11"	13' 3"	14' 0"	14' 0"	
			STANDARD	4' 0"	5' 6"	5' 6"	7' 3"	7' 3"	8' 9"	9' 9"	11' 4"	11' 4"	14' 0"	14' 0"	



BRACING GROUP SPECIES AND GRADES:	
GROUP A:	
SPF	#1 / #2
STUD	#3
STANDARD	STUD
GROUP B:	
SPF	#1 / #2
STUD	#3
STANDARD	STUD

**CABLE TRUSS DETAIL NOTES:**

LIVE LOAD DEFLECTION CRITERIA IS L/240.

PROVIDE UPLIFT CONNECTIONS FOR 150 PSF OVER CONTINUOUS BEARING (6 PSF VC DEAD LOAD).

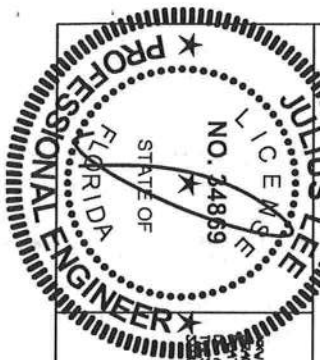
CABLE END SUPPORTS LOAD FROM 4' 0" OUTLOOKERS WITH 2' 0" OVERHANG, OR 12" PLYWOOD OVERHANG.

ATTACH EACH "L" BRACE WITH 10d NAILS.

\* FOR (1) "L" BRACE, SPACE NAILS AT 8" O.C. IN 16" END ZONES AND 4" O.C. BETWEEN ZONES.

\*\* FOR (2) "L" BRACES, SPACE NAILS AT 8" O.C. IN 16" END ZONES AND 6" O.C. BETWEEN ZONES.

"L" BRACING MUST BE A MINIMUM OF 60% OF WEB MEMBER LENGTH.



REVIEWED

By Julius Lee at 12:00 pm, Jun 11, 2008

Julius Lee's Cons. Engineers P.A.

1456 SW 4th Avenue  
Orlando, FL 32801-4611

REF: ASCE 7-02-GAB13030

DATE: 11/26/03

DWG: LATE STD GAB1 30' x 17'

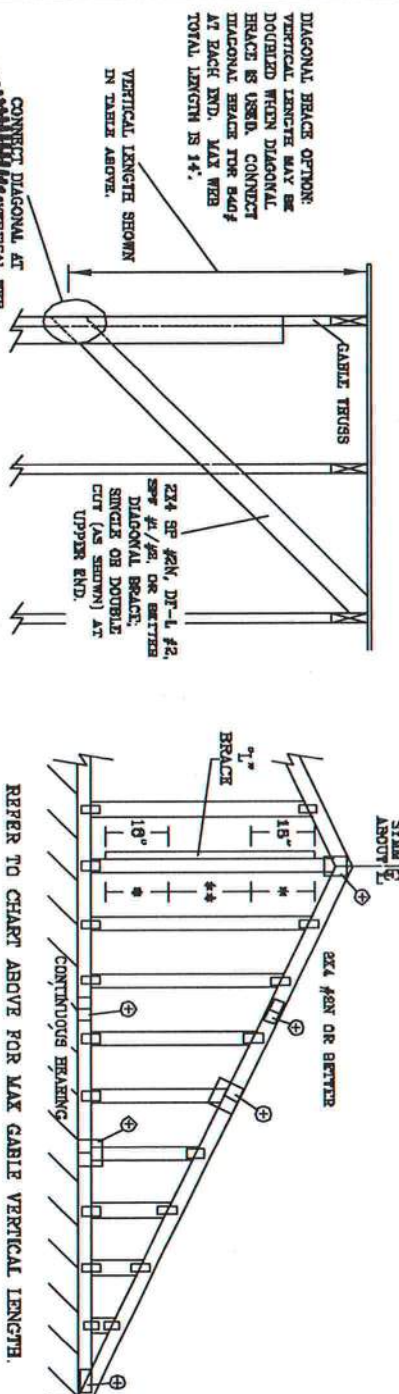
ENG:

MAX. TOT. LD. 60 PSF

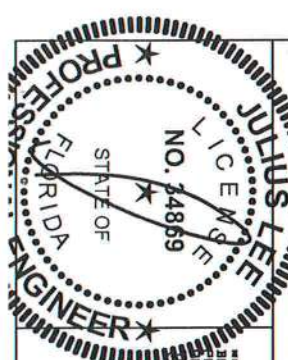
MAX. SPACING 24.0"

ASCE 7-02: 130 MPH WIND SPEED, 15' MEAN HEIGHT, ENCLOSED, I = 1.00, EXPOSURE C

MAX GABLE VERTICAL LENGTH		2x4 CABLE VERTICAL SPECIES		BRACE		NO BRACES		(1) 1x4 "L" BRACE *		(1) 2x4 "L" BRACE *		(2) 2x4 "L" BRACE **		(1) 2x6 "L" BRACE *		(2) 2x8 "L" BRACE *	
SPACING	GRADE	SPF	HF	SP	DFL	SPF	HF	SP	DFL	SPF	HF	SP	DFL	SPF	HF	SP	DFL
12" O.C.	#1 / #2	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD
		4' 3"	4' 3"	4' 3"	4' 3"	4' 3"	4' 3"	4' 3"	4' 3"	4' 3"	4' 3"	4' 3"	4' 3"	4' 3"	4' 3"	4' 3"	4' 3"
		4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"
		4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"	4' 11"
16" O.C.	#1 / #2	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD
		3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"
		4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"
		4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"
24" O.C.	#1 / #2	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD	STUD
		3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"	3' 3"
		4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"	4' 2"
		4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"	4' 10"



CABLE TRUSS DETAIL NOTES:	
LIVE LOAD DEFLECTION CRITERIA IS L/240.	
PROVIDE UPLIFT CONNECTIONS FOR 136 PSF OVER CONTINUOUS BEARING (6 PSF TO DEAD LOAD).	
CABLE END SUPPORTS LOAD FROM 4' 0" OUTLOOKERS WITH 8' 0" OVERHANG, OR 12" PLYWOOD OVERHANG.	
ATTACH EACH "L" BRACE WITH 10d NAILS.	
* FOR (1) "L" BRACE: SPACE NAILS AT 8" O.C. BY 16" END ZONES AND 4" O.C. BETWEEN ZONES.	
** FOR (2) "L" BRACES: SPACE NAILS AT 8" O.C. BY 16" END ZONES AND 4" O.C. BETWEEN ZONES.	
"L" BRACING MUST BE A MINIMUM OF 80% OF WEB MEMBER LENGTH.	

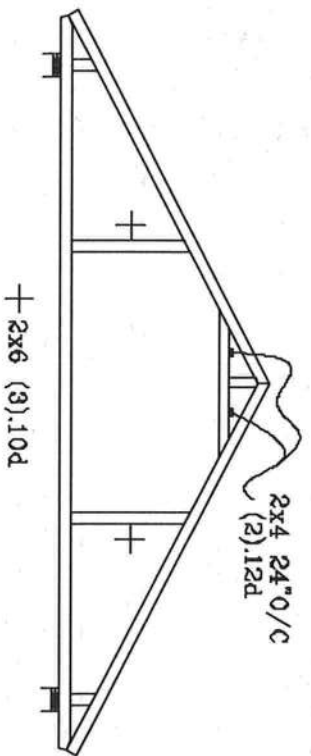


**REVIEWED**  
By Julius Lee at 12:00 pm, Jun 11, 2008

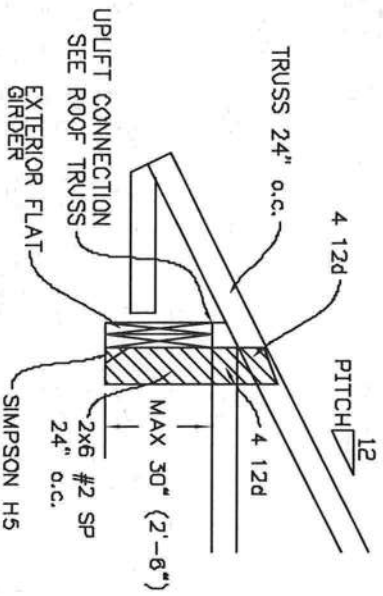
**JULIUS LEE'S**  
CONS. ENGINEERS P.A.  
1455 SW 4th Avenue  
DELRAY BEACH, FL 33444-8161

MAX. TOT. LD. 60 PSF	MAX. SPACING 24.0"
REF ASCE 7-02 (2005)	DATE 11/26/09
DRWG NOTE STD CABLE 15 E INT	ENG

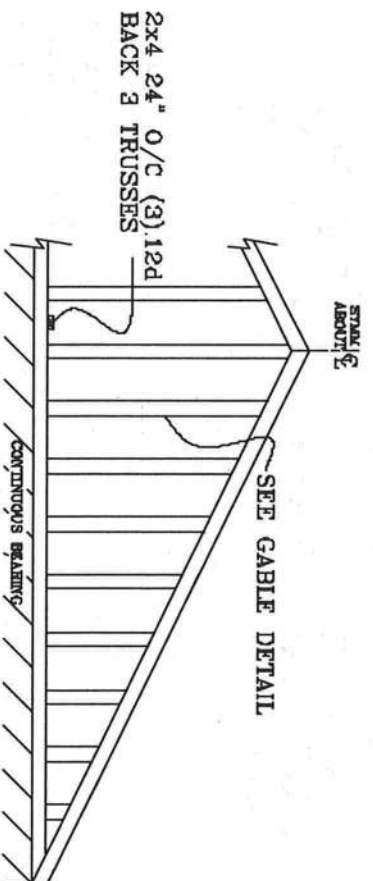
## TYPICAL ATTIC TRUSS BRACING



## TYPICAL ALTERNATE BRACING DETAIL FOR EXTERIOR FLAT GIRDER TRUSS

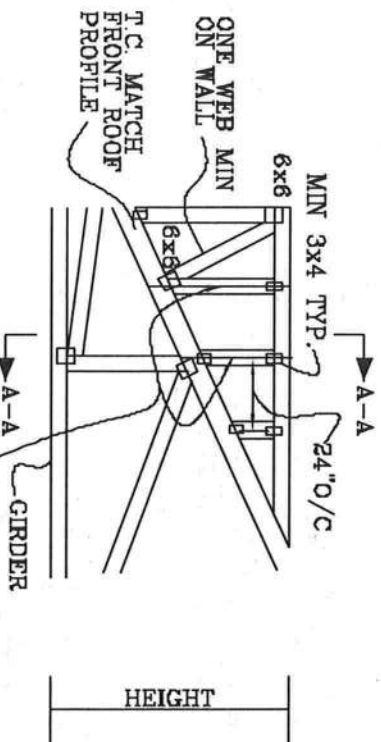


## CABLE END TRUSS DETAIL



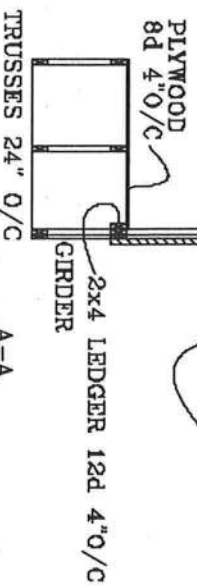
MINIMUM BC BRACING ON GABLE TRUSS. OTHER PERMANENT BRACING DESIGNS BY ARCHITECT OR EOR

## TYPICAL WALL GIRDER VERTICAL WEB BRACING DETAIL



SEE ROOF TRUSSES FOR UPLIFT  
ROOF 24" o/c

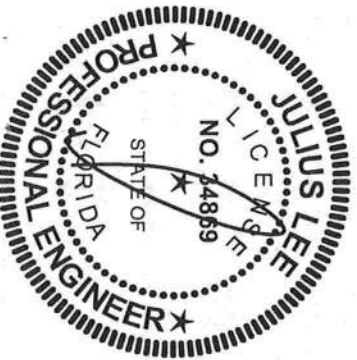
SEE CABLE END DETAIL FOR T-BRACE BEHIND EACH VERTICAL



A-A

No. 34869  
STATE OF FLORIDA

REVIEWED  
By Julius Lee at 11:59 am, Jun 11, 2008



JULIUS LEE'S  
CONS. ENGINEERS P.A.  
1456 SW 43rd AVENUE  
DIKEWAY BEACH, FL 33444-2161

# PIGGYBACK DETAIL

TOP CHORD 2X4 #2 OR BETTER  
BOT CHORD 2X4 #2 OR BETTER  
WEBS 2X4 #3 OR BETTER

REFER TO SEALED DESIGN FOR DASHED PLATES.

SPACE PIGGYBACK VERTICALS AT 4' OC MAX.

TOP AND BOTTOM CHORD SPLICES MUST BE STAGGERED SO THAT ONE SPLICE IS NOT DIRECTLY OVER ANOTHER.

PIGGYBACK BOTTOM CHORD MAY BE OMITTED. ATTACH VERTICAL WEBS TO TRUSS TOP CHORD WITH 1.5X3 PLATE.

ATTACH PURLINS TO TOP OF FLAT TOP CHORD. IF PIGGYBACK IS SOLID LUMBER OR THE BOTTOM CHORD IS OMITTED, PURLINS MAY BE APPLIED BENEATH THE TOP CHORD OF SUPPORTING TRUSS.

REFER TO ENGINEER'S SEALED DESIGN FOR REQUIRED PURLIN SPACING.

THIS DETAIL IS APPLICABLE FOR THE FOLLOWING WIND CONDITIONS:

110 MPH WIND, 30' MEAN HGT, ASCE 7-02, CLOSED BLDG.

LOCATED ANYWHERE IN ROOF, 1 MI FROM COAST

CAT 1, EXP C, WIND TC DL=5 PSF, WIND BC DL=5 PSF

110 MPH WIND, 30' MEAN HGT, PEG

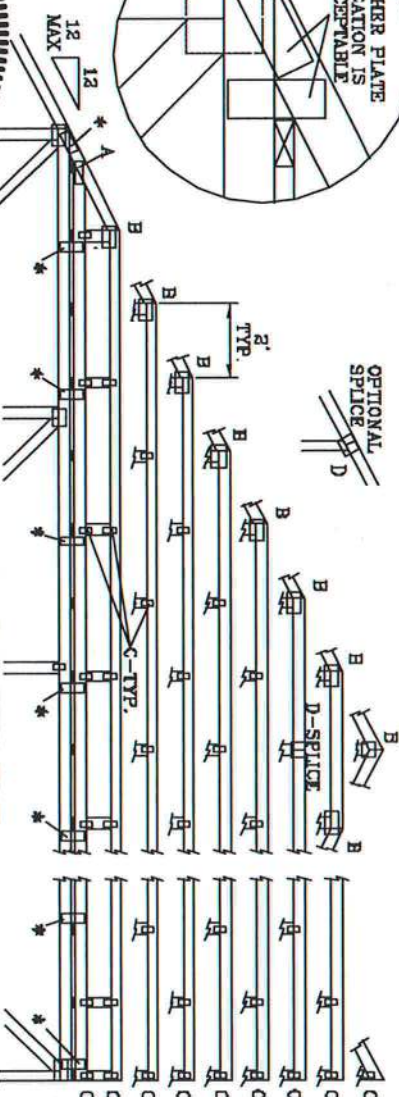
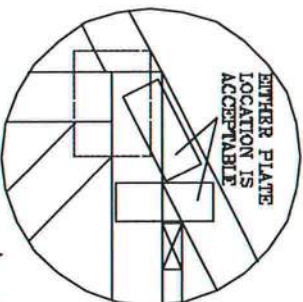
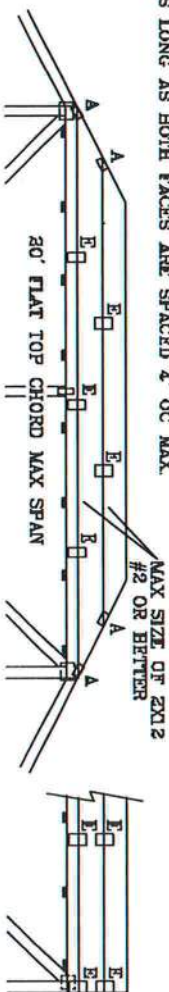
ENCLOSED BLDG, LOCATED ANYWHERE IN ROOF

WIND TC DL=5 PSF, WIND BC DL=5 PSF

FRONT FACE (E\*) PLATES MAY BE OFFSET FROM BACK FACE

PLATES AS LONG AS BOTH FACES ARE SPACED 4' OC MAX.

130 MPH WIND, 30' MEAN HGT, ASCE 7-02, CLOSED BLDG, LOCATED ANYWHERE IN ROOF, CAT 1, EXP. C, WIND TC DL=6 PSF, WIND BC DL=6 PSF

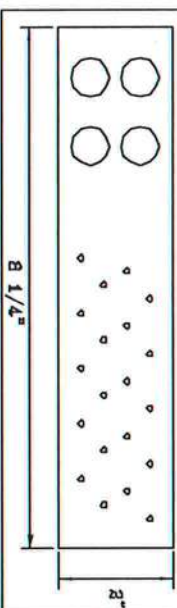


JOINT TYPE	SPANS UP TO		
	30'	34'	62'
A	2X4	2.5X4	3X6
B	4X6	6X6	6X6
C	1.5X3	1.5X4	1.5X4
D	5X4	6X6	6X6
E	4X6 OR 3X6 TRUSS AT 4' OC, ROTATED VERTICALLY		

ATTACH TRUSS PLATES WITH (B) 0.120" X 1.375" NAILS OR EQUAL, PER FACE PER PLY. (4) NAILS IN EACH MEMBER TO BE CONNECTED. REFER TO DRAWING 160 TL FOR TRUSS INFORMATION.

WEB LENGTH	REQUIRED BRACING
0' TO 7'9"	NO BRACING
7'9" TO 10'	1X4 "T" BRACE, SAME GRADE, SPECIES AS WEB MEMBER, OR BETTER, AND 80% LENGTH OF WEB MEMBER. ATTACH WITH 6d NAILS AT 4' OC.
10' TO 14'	2X4 "T" BRACE, SAME GRADE, SPECIES AS WEB MEMBER, OR BETTER, AND 80% LENGTH OF WEB MEMBER. ATTACH WITH 16d NAILS AT 4' OC.

\* PIGGYBACK SPECIAL PLATE  
ATTACH TEETH TO THE PIGGYBACK AT THE TIME OF FABRICATION. ATTACH TO SUPPORTING TRUSS WITH (4) 0.120" X 1.375" NAILS PER FACE PER PLY. APPLY PIGGYBACK SPECIAL PLATE TO EACH TRUSS FACE AND SPACE 4' OC OR LESS.



THIS DRAWING REPLACES DRAWINGS 634.016 634.017 & 847.045

OVERSIGHT: TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO ACI 308-1 BUILDING COMPONENT SAFETY INFORMATION, PUBLISHED BY THE TRUSS ASSOCIATION, 3800 DUNSTON DR., SUITE 200, MADISON, WI 53791 AND VITA CYCLO TRUSS MANUAL, 6300 ENTERPRISE LN, MADISON, WI 53792 FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.



REVIEWED

By Julius Lee at 11:59 am, Jun 11, 2008

JULIUS LEE'S  
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1400 SW 4th AVENUE  
DEERBAY BEACH, FL 33444-2161

No. 34869  
STATE OF FLORIDA

MAX LOADING		REF	PIGGYBACK
55 PSF AT	DATE 09/12/07		
1.33 DUR. FAC.	DRWG/MIKEK STD PIGGY		
60 PSF AT	-ENG JL		
1.25 DUR. FAC.			
47 PSF AT			
1.15 DUR. FAC.			
SPACING 24.0"			

TOE-NAIL DETAIL

TOE-NAILS TO BE DRIVEN AT AN ANGLE OF APPROXIMATELY THIRTY DEGREES WITH THE PIECE AND STARTED APPROXIMATELY ONE-THIRD THE LENGTH OF THE NAIL FROM THE END OF THE MEMBER.

PER ANSI/AF&PA NDS-2001 SECTION 12.4.1 - EDGE DISTANCE, END DISTANCE, SPACING, "EDGE DISTANCES, END DISTANCES AND SPACINGS FOR NAILS AND SPIKES SHALL BE SUFFICIENT TO PREVENT SPLITTING OF THE WOOD."

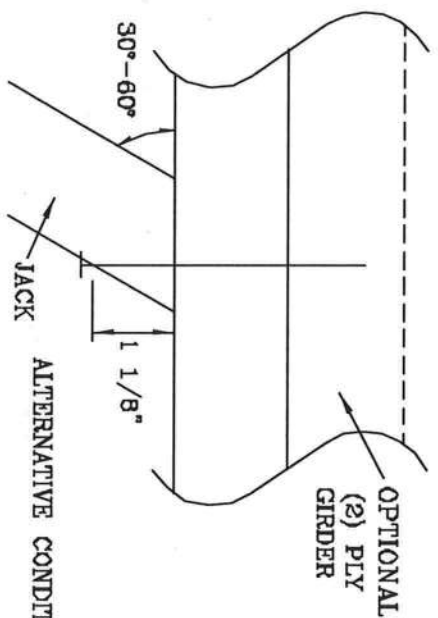
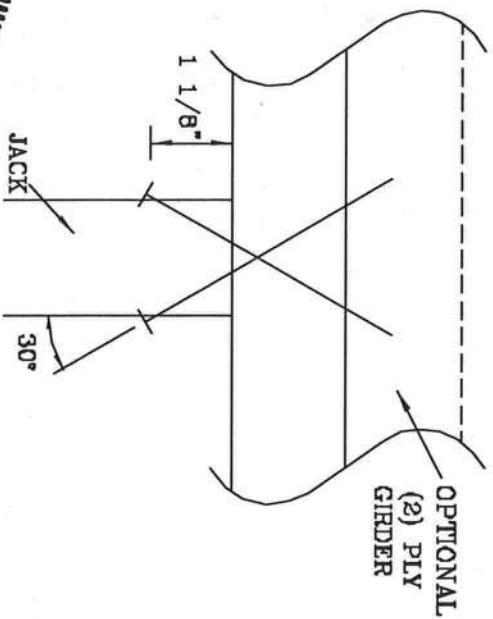
THE NUMBER OF TOE-NAILS TO BE USED IN A SPECIFIC APPLICATION IS DEPENDENT UPON PROPERTIES FOR THE CHORD SIZE, LUMBER SPECIES, AND NAIL TYPE. PROPER CONSTRUCTION PRACTICES AS WELL AS GOOD JUDGEMENT SHOULD DETERMINE THE NUMBER OF NAILS TO BE USED.

THIS DETAIL DISPLAYS A TOE-NAILED CONNECTION FOR JACK FRAMING INTO A SINGLE OR DOUBLE PLY SUPPORTING GIRDER.

MAXIMUM VERTICAL RESISTANCE OF 16d (0.162"x3.5") COMMON TOE-NAILS

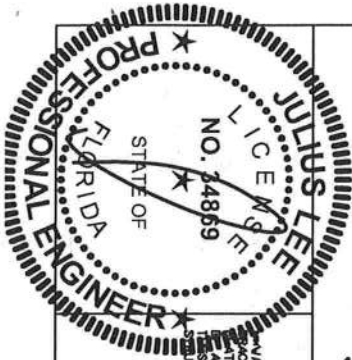
NUMBER OF TOE-NAILS	SOUTHERN PINE		DOUGLAS FIR-LARCH		HEM-FIR		SPRUCE PINE FIR	
	1 PLY	2 PILES	1 PLY	2 PILES	1 PLY	2 PILES	1 PLY	2 PILES
2	187#	256#	181#	234#	156#	203#	154#	189#
3	296#	383#	271#	351#	234#	304#	230#	298#
4	394#	511#	361#	468#	312#	406#	307#	397#
5	493#	638#	452#	585#	390#	507#	384#	496#

ALL VALUES MAY BE MULTIPLIED BY APPROPRIATE DURATION OF LOAD FACTOR.



ALTERNATIVE CONDITION

THIS DRAWING REPLACES DRAWING 784040



WARNING: TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCST 1-03 CHAIRING COMPONENT SAFETY INFORMATION, PUBLISHED BY THE TRUSS LUMBER INSTITUTE, 368 BIRMINGHAM RD., SUITE 200, NATION, VA 20719 AND VITA (VIRGINIA TRUSS ASSOCIATION) 15800 ENTERPRISE LN., WILSON, VA 20719 FOR SAFETY PRACTICES PRIOR TO PERFORMING TRUSS CONSTRUCTION. TRUSS MANUFACTURERS AND ERECTORS SHALL HAVE A PROPERLY ATTACHED FIBER OPTIC IDENTIFICATION TAGS AND ERECTED CHORD SHALL HAVE A PROPERLY ATTACHED FIBER OPTIC IDENTIFICATION TAGS.

REVIEWED  
By Julius Lee at 11:59 am, Jun 11, 2008

JULIUS LEE'S  
CONS. ENGINEERS P.A.  
1400 ST 4TH AVENUE  
DELRAY BEACH, FL 33444-2161

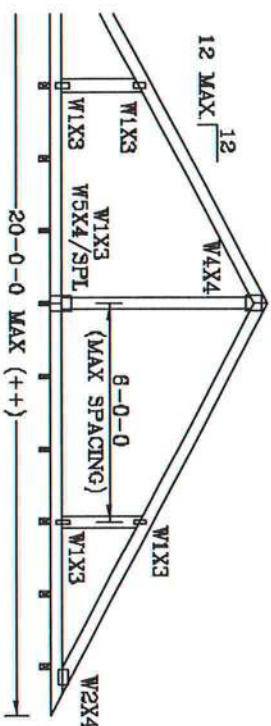
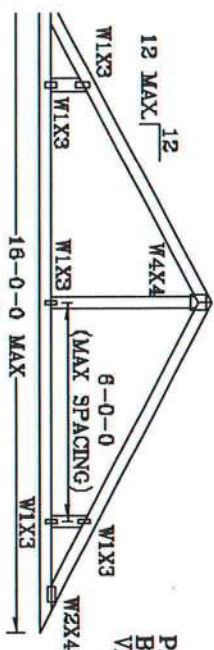
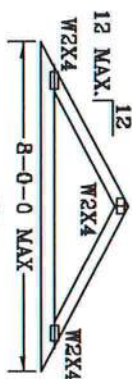
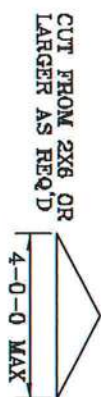
No. 34869  
STATE OF FLORIDA

TC LL	PSF	REF	TOE-NAIL
TC DL	PSF	DATE	09/12/07
BC DL	PSF	DRWG	CNTONALL103
BC LL	PSF	-ENG	JL
TOT. LD.	PSF		
DUR. FAC.	1.00		
SPACING			

# VALLEY TRUSS DETAIL

TOP CHORD 2X4 SP #2 OR SPF #1/#2 OR BETTER.  
BOT CHORD 2X3(\*) OR 2X4 SP #2N OR SPF #1/#2 OR BETTER.  
WEBS 2X4 SP #3 OR BETTER.

- \* 2X3 MAY BE RIPPED FROM A 2X6 (PITCHED OR SQUARE).
- \*\* ATTACH EACH VALLEY TO EVERY SUPPORTING TRUSS WITH:  
(2) 16d BOX (0.135" X 3.5") NAILS TOE-NAILED FOR  
FBC 2004 110 MPH, ASCE 7-02 110 MPH WIND OR (3) 16d FOR  
ASCE 7-02 130 MPH WIND. 15' MEAN HEIGHT, ENCLOSED  
BUILDING, EXP. C, RESIDENTIAL, WIND TC DL=6 PSF.

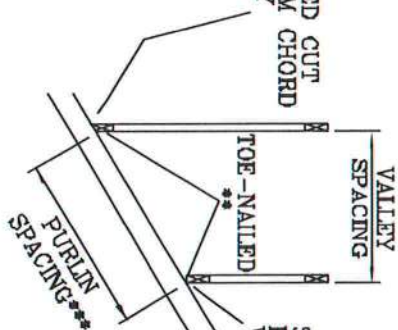


UNLESS SPECIFIED ON ENGINEER'S SEALED DESIGN, APPLY 1X4 "I"-BRACE, 80% LENGTH OF WEB, VALLEY WEB, SAME SPECIES AND GRADE OR BETTER, ATTACHED WITH 8d BOX (0.113" X 2.5") NAILS AT 6" OC, OR CONTINUOUS LATERAL BRACING, EQUALLY SPACED, FOR VERTICAL VALLEY WEBS GREATER THAN 7'9".

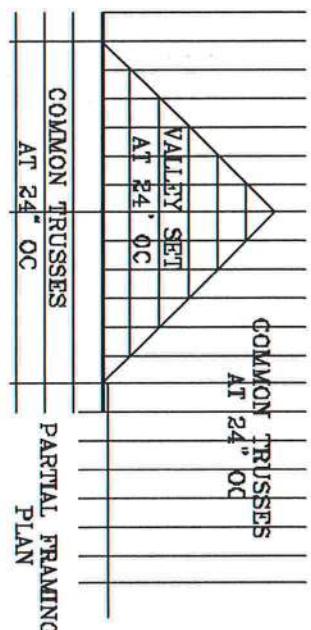
MAXIMUM VALLEY VERTICAL HEIGHT MAY NOT EXCEED 12'0".

TOP CHORD OF TRUSS BENEATH VALLEY SET MUST BE BRACED WITH:  
PROPERLY ATTACHED, RATED SHEATHING APPLIED PRIOR TO VALLEY TRUSS  
INSTALLATION  
OR  
PURLINS AT 24" OC OR AS OTHERWISE SPECIFIED ON ENGINEERS' SEALED DESIGN  
OR  
BY VALLEY TRUSSES USED IN LIEU OF PURLIN SPACING AS SPECIFIED ON  
ENGINEERS' SEALED DESIGN.

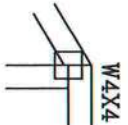
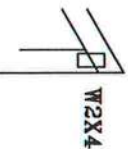
- \*\*\* NOTE THAT THE PURLIN SPACING FOR BRACING THE TOP CHORD OF THE TRUSS BENEATH THE VALLEY IS MEASURED ALONG THE SLOPE OF THE TOP CHORD.
- ++ LARGER SPANS MAY BE BUILT AS LONG AS THE VERTICAL HEIGHT DOES NOT EXCEED 12'0".
- BOTTOM CHORD MAY BE SQUARE OR PITCHED CUT AS SHOWN.



SQUARE CUT  
BOTTOM CHORD  
VALLEY



OPTIONAL STUB  
END DETAIL

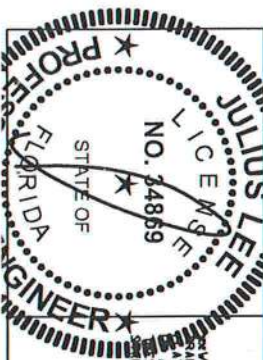


PARTIAL FRAMING  
PLAN

THIS DRAWING REPLACES DRAWING A105

JULIUS LEE'S  
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1455 SE 4th AVENUE  
DEALAT BEACH, FL 33444-8861

TC IL	20	20	PSF	REF	VALLEY DETAIL
TC DL	7	15	PSF	DATE	11/26/03
BC DL	5	5	PSF	DRWG	VALTRUSS1103
BC IL	0	0	PSF	-ENG	JL
TOT. LD.	32	40	PSF		
DURFAC	1.25	1.25			
SPACING	24"				



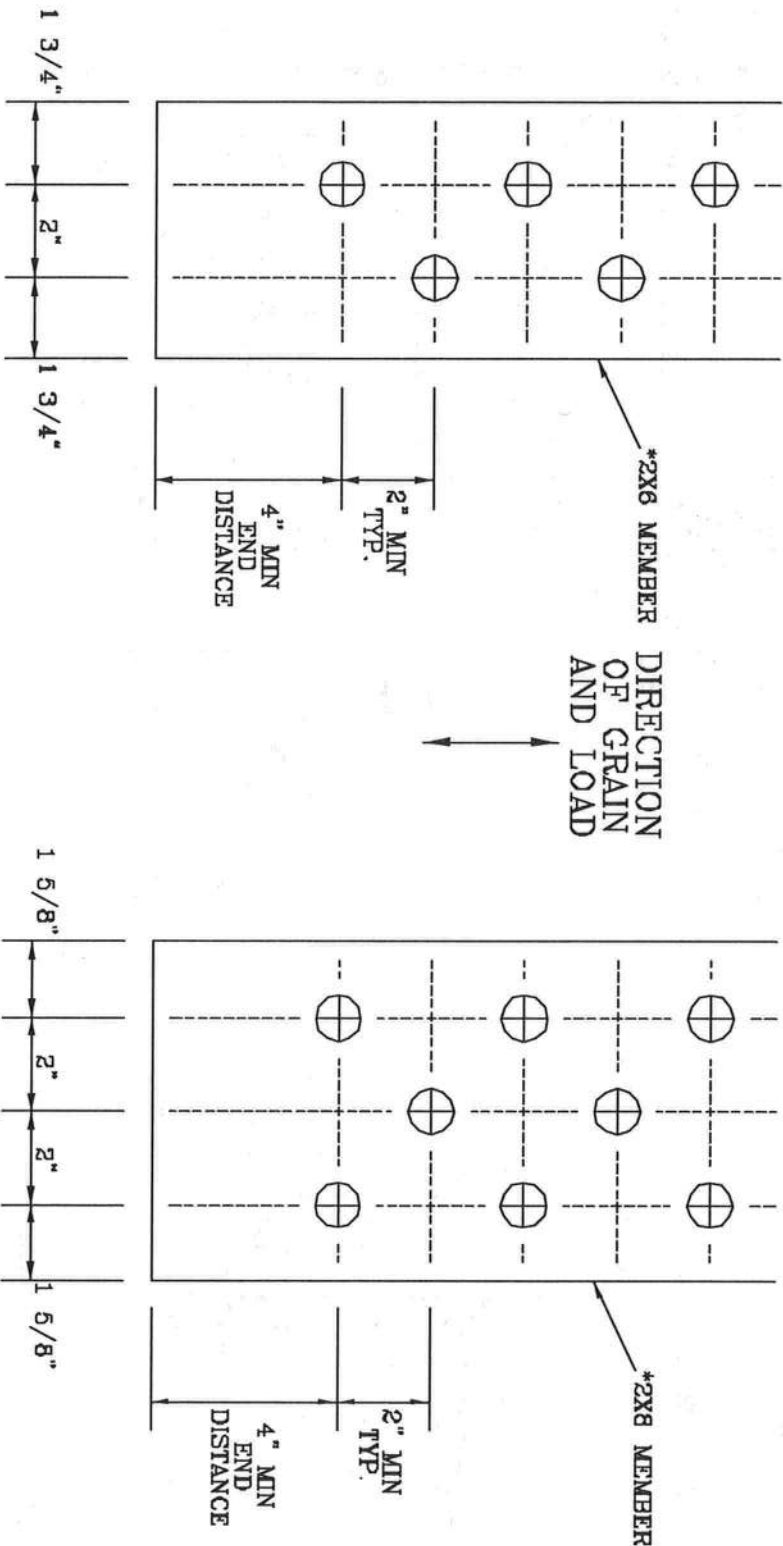
REVIEWED

By Julius Lee at 11:59 am, Jun 11, 2008

# 1/2" DIAMETER BOLT SPACING FOR LOAD APPLIED PARALLEL TO GRAIN.

\* GRADE AND SPECIES AS SPECIFIED ON THE ALPINE DESIGN.  
BOLT HOLES SHALL BE A MINIMUM OF 1/32" TO A MAXIMUM OF 1/16" LARGER THAN BOLT DIAMETER.

TYPICAL LOCATION OF 1/2" DIAMETER THRU BOLTS. BOLT QUANTITIES AS NOTED ON SEALED DESIGN MUST BE APPLIED IN ONE OF THE PATTERNS SHOWN BELOW.  
WASHERS REQUIRED UNDER BOLT HEAD AND NUT



2X6 DETAIL

2X8 DETAIL

THIS DRAWING REPLACES DRAWING A828.016

WARNING: TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND ERECTION. REFER TO POST-TENSIONING GUIDELINES (PUBLISHED BY THE TRUSS ASSOCIATION) FOR ADDITIONAL INFORMATION. THIS DRAWING IS THE PROPERTY OF JULIUS LEE'S CONSULTING ENGINEERS P.A. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING. UNLESS OTHERWISE INDICATED, ALL DIMENSIONS SHALL HAVE PRECISELY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIBBON CEMENT.

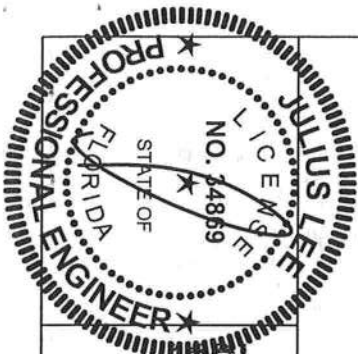
**JULIUS LEE'S**  
CONS. ENGINEERS P.A.  
1400 5TH AVE. N.E.  
DELMAR BEACH, FL 33444-2461

TC LL	PSF	REF	BOLT SPACING
TC DL	PSF	DATE	11/26/03
BC DL	PSF	DRWG	CNBOITSP1103
BC LL	PSF	-ENG	JL
TOT. LD.	PSF		

REVIEWED

By Julius Lee at 11:59 am, Jun 11, 2008

No. 34968  
STATE OF FLORIDA



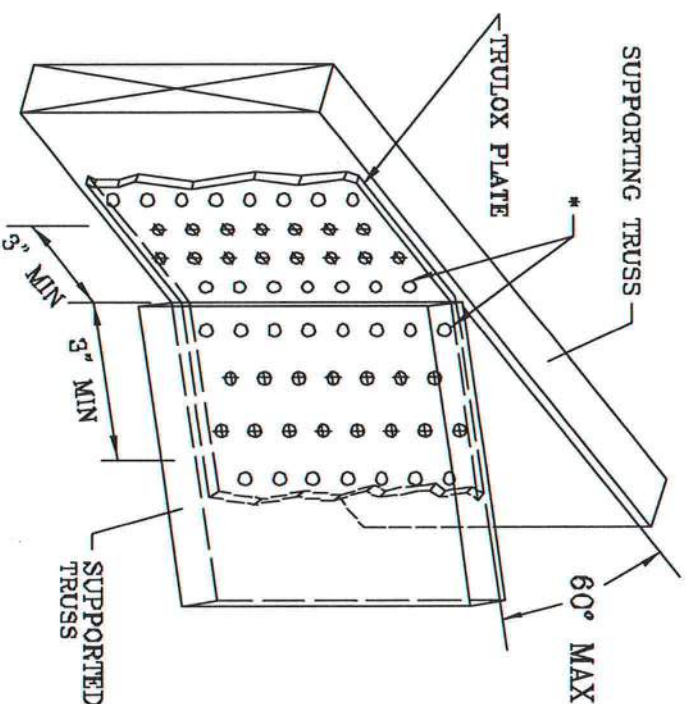
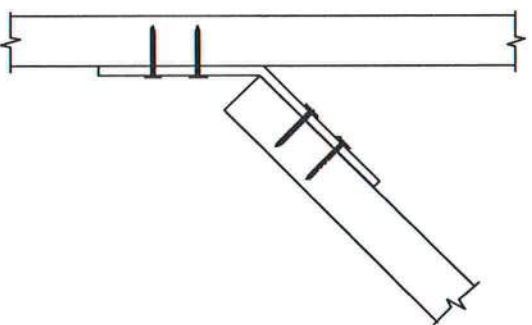
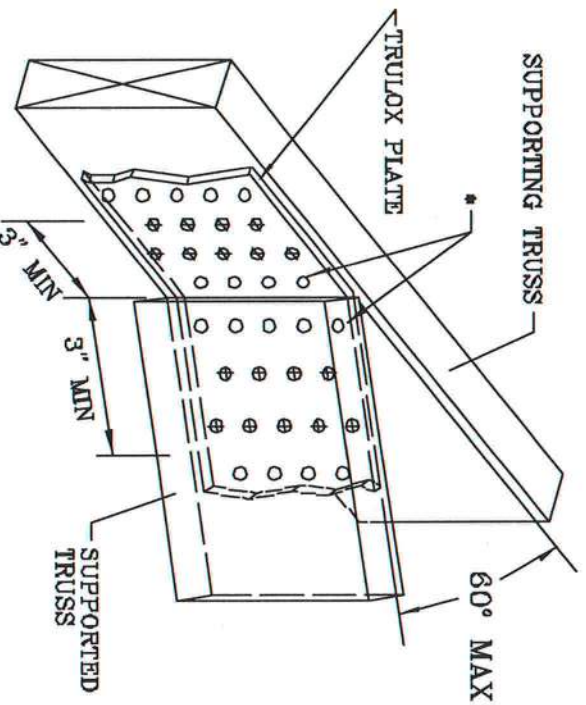
# TRULOX CONNECTION DETAIL

11 GAUGE (0.120" X 1.375") NAILS REQUIRED FOR TRULOX PLATE ATTACHMENT. FILL ROWS COMPLETELY WHERE SHOWN (Φ).

\* NAILS MAY BE OMITTED FROM THESE ROWS.

THIS DETAIL MAY BE USED WITH SO. PINE, DOUGLAS-FIR OR HEM-FIR CHORDS WITH A MINIMUM 1.00 DURATION OF LOAD OR SPRUCE-PINE-FIR CHORDS WITH A MINIMUM 1.15 DURATION OF LOAD. CHORD SIZE OF BOTH TRUSSES MUST EXCEED THE TRULOX PLATE WIDTH.

TRULOX PLATE IS CENTERED ON THE CHORDS AND BENT BETWEEN NAIL ROWS.  
REFER TO ENGINEER'S SEALED DESIGN REFERENCING THIS DETAIL FOR LUMBER, PLATES, AND OTHER INFORMATION NOT SHOWN.



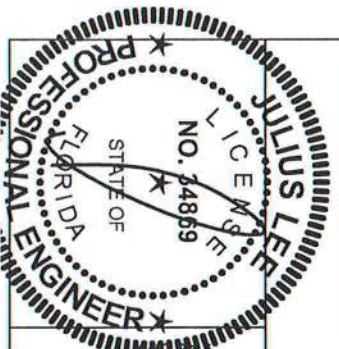
MINIMUM 3X6 TRULOX PLATE

TRULOX PLATE SIZE	REQUIRED NAILS PER TRUSS	MAXIMUM LOAD UP OR DOWN
3X6	9	350#
6X6	15	990#

MINIMUM 5X6 TRULOX PLATE

REVIEWED  
By Julius Lee at 11:58 am, Jun 11, 2008

THIS DRAWING REPLACES DRAWINGS 1.158,986 1.158,989/R  
1.154,844 1.152,217 1.152,017 1.159,154 & 1.151,524



WARNING: TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO SPEC 1-00 (BUILDING DEPARTMENT SAFETY DEPARTMENT, PUBLISHED BY THE TRUSS MANUFACTURERS ASSOCIATION, 380 JEFFERSON DR., SUITE 200, MARIETTA, GA 30067) FOR TRUSS CHORDS, END PLATES, AND EXTERIOR END PLATES. TRUSSES MUST BE PROPERLY ATTACHED TO FLOORING, CEILING, WALLS AND OTHER STRUCTURAL MEMBERS. ALL TRUSSES MUST HAVE A PROPERLY ATTACHED RIGID CEILING.

JULIUS LEE'S  
CONS. ENGINEERS P.A.

1455 SW 4TH AVENUE  
DECATUR, GA 30033-4001

No. 344869  
STATE OF FLORIDA

REF TRULOX

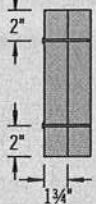
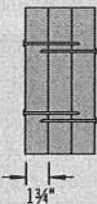
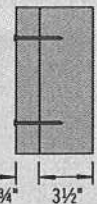

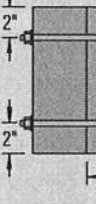
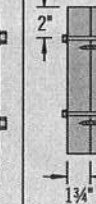
DATE 11/26/03

DRWG CNTRULOX1103

-ENG JL

# MULTIPLE-MEMBER CONNECTIONS FOR SIDE-LOADED BEAMS

## Maximum Uniform Load Applied to Either Outside Member (PLF)

Connector Type	Number of Rows	Connector On-Center Spacing	Connector Pattern					
			Assembly A	Assembly B	Assembly C	Assembly D	Assembly E	Assembly F
								
			3 1/2" 2-ply	5 1/4" 3-ply	5 1/4" 2-ply	7" 3-ply	7" 2-ply	7" 4-ply
10d (0.128" x 3") Nail <sup>(1)</sup>	2	12"	370	<b>280</b>	280	<b>245</b>		
	3	12"	555	<b>415</b>	415	<b>370</b>		
1/2" A307 Through Bolts <sup>(2)(4)</sup>	2	24"	505	380	520	465	860	340
		19.2"	635	475	655	580	1,075	425
		16"	760	570	785	695	1,290	505
SDS 1/4" x 3 1/2" <sup>(4)</sup>	2	24"	680	<b>510</b>	510	<b>455</b>		
		19.2"	850	<b>640</b>	640	<b>565</b>		
		16"	1,020	<b>765</b>	765	<b>680</b>		
SDS 1/4" x 6" <sup>(3)(4)</sup>	2	24"				<b>455</b>	<b>465</b>	<b>455</b>
		19.2"				<b>565</b>	<b>580</b>	<b>565</b>
		16"				<b>680</b>	<b>695</b>	<b>680</b>
USP WS35 <sup>(4)</sup>	2	24"	480	<b>360</b>	360	<b>320</b>		
		19.2"	600	<b>450</b>	450	<b>400</b>		
		16"	715	<b>540</b>	540	<b>480</b>		
USP WS6 <sup>(3)(4)</sup>	2	24"				<b>350</b>	<b>525</b>	<b>350</b>
		19.2"				<b>440</b>	<b>660</b>	<b>440</b>
		16"				<b>525</b>	<b>790</b>	<b>525</b>
3 3/8" TrussLok <sup>(4)</sup>	2	24"	635	<b>475</b>	475	<b>425</b>		
		19.2"	795	<b>595</b>	595	<b>530</b>		
		16"	955	<b>715</b>	715	<b>635</b>		
5" TrussLok <sup>(4)</sup>	2	24"		<b>500</b>	500	<b>445</b>	<b>480</b>	<b>445</b>
		19.2"		<b>625</b>	625	<b>555</b>	<b>600</b>	<b>555</b>
		16"		<b>750</b>	750	<b>665</b>	<b>725</b>	<b>665</b>
6 3/4" TrussLok <sup>(4)</sup>	2	24"				445	620	445
		19.2"				555	770	555
		16"				665	925	665

(1) Nailed connection values may be doubled for 6" on-center or tripled for 4" on-center nail spacing.

(2) Washers required. Bolt holes to be 1/16" maximum.

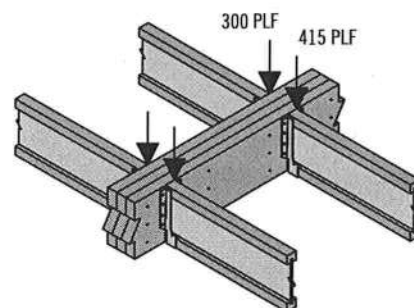
(3) 6" SDS or WS screws can be used with Parallam® PSL and Microllam® LVL, but are not recommended for TimberStrand® LSL.

(4) 24" on-center bolted and screwed connection values may be doubled for 12" on-center spacing.

## General Notes

- Connections are based on NDS® 2005 or manufacturer's code report.
- Use specific gravity of 0.5 when designing lateral connections.
- Values listed are for 100% stress level. Increase 15% for snow-loaded roof conditions or 25% for non-snow roof conditions, where code allows.
- Bold Italic** cells indicate **Connector Pattern** must be installed on both sides. Stagger fasteners on opposite side of beam by 1/2 the required **Connector Spacing**.
- Verify adequacy of beam in allowable load tables on pages 16–33.
- 7" wide beams should be side-loaded only when loads are applied to both sides of the members (to minimize rotation).
- Minimum end distance for bolts and screws is 6".
- Beams wider than 7" require special consideration by the design professional.

## Uniform Load Design Example

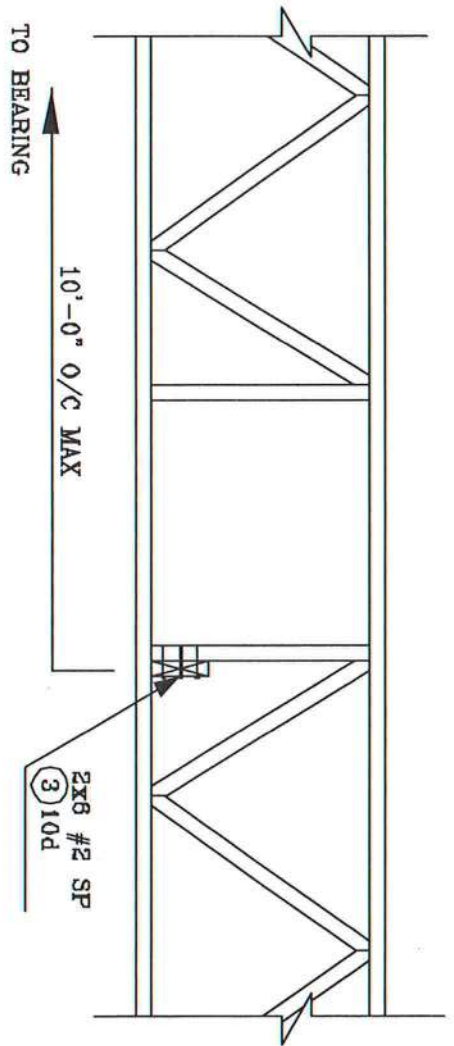


First, check the allowable load tables on pages 16–33 to verify that three pieces can carry the total load of 715 plf with proper live load deflection criteria. Maximum load applied to either outside member is 415 plf. For a 3-ply 1 3/4" assembly, two rows of 10d (0.128" x 3") nails at 12" on-center is good for only 280 plf. Therefore, use three rows of 10d (0.128" x 3") nails at 12" on-center (good for 415 plf).

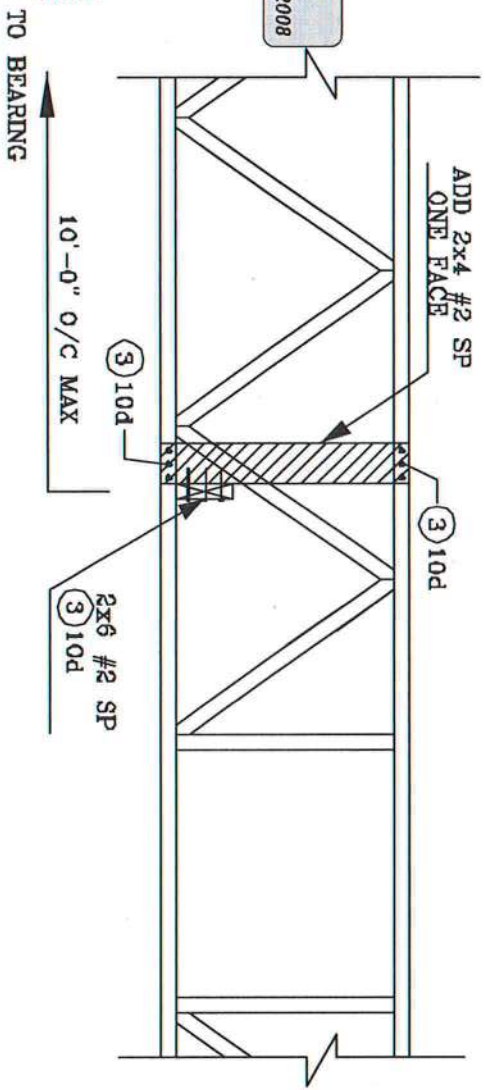
### Alternates:

Two rows of 1/2" bolts or SDS 1/4" x 3 1/2" screws at 19.2" on-center.

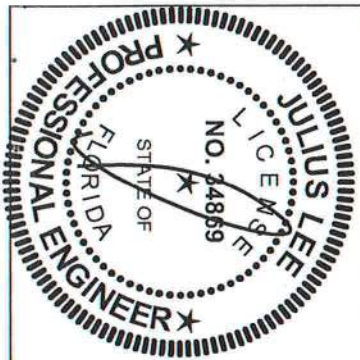
# STRONG BACK DETAIL SYSTEM-42 OR FLAT TRUSS



## ALTERNATE DETAIL FOR STRONG BACK WITH VERTICAL NOT LINING UP



**REVIEWED**  
By Julius Lee at 11:58 am, Jun 11, 2008



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# MULTIPLE-MEMBER CONNECTIONS FOR SIDE-LOADED BEAMS

## Point Load—Maximum Point Load Applied to Either Outside Member (lbs)

Connector Type	Number of Connectors	Connector Pattern					
		Assembly A	Assembly B	Assembly C	Assembly D	Assembly E	Assembly F
		3 1/2" 2-ply	5 1/4" 3-ply	5 1/4" 2-ply	7" 3-ply	7" 2-ply	7" 4-ply
10d (0.128" x 3") Nail	6	1,110	835	835	740		
	12	2,225	1,670	1,670	1,485		
	18	3,335	2,505	2,505	2,225		
	24	4,450	3,335	3,335	2,965		
SDS Screws 1/4" x 3 1/2" or WS35 1/4" x 6" or WS6 <sup>(1)</sup>	4	1,915	1,435 <sup>(4)</sup>	1,435	1,275	1,860 <sup>(2)</sup>	1,405 <sup>(2)</sup>
	6	2,870	2,150 <sup>(4)</sup>	2,150	1,915	2,785 <sup>(2)</sup>	2,110 <sup>(2)</sup>
	8	3,825	2,870 <sup>(4)</sup>	2,870	2,550	3,715 <sup>(2)</sup>	2,810 <sup>(2)</sup>
3 3/8" or 5" TrussLok™	4	2,545	1,910 <sup>(4)</sup>	1,910	1,695	1,925 <sup>(3)</sup>	1,775 <sup>(3)</sup>
	6	3,815	2,860 <sup>(4)</sup>	2,860	2,545	2,890 <sup>(3)</sup>	2,665 <sup>(3)</sup>
	8	5,090	3,815 <sup>(4)</sup>	3,815	3,390	3,855 <sup>(3)</sup>	3,550 <sup>(3)</sup>

(1) 6" SDS or WS screws can be used with Parallam® PSL and Microllam® LVL, but are not recommended for TimberStrand® LSL.

See General Notes on page 38

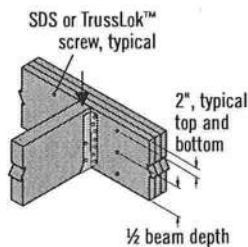
(2) 6" long screws required.

(3) 5" long screws required.

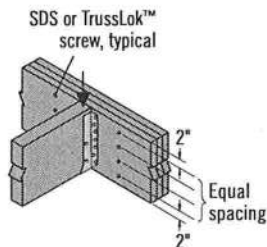
(4) 3 1/2" and 3 3/8" long screws must be installed on both sides.

## Connections

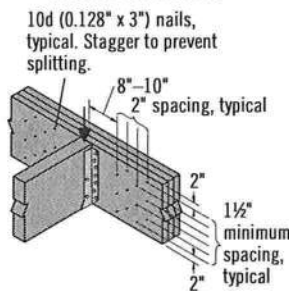
### 4 or 6 or Screw Connection



### 8 Screw Connection

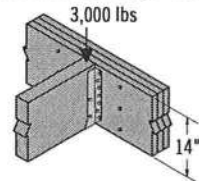


### Nail Connection



There must be an equal number of nails on each side of the connection

## Point Load Design Example



First, verify that a 3-ply 1 1/4" x 14" beam is capable of supporting the 3,000 lb point load as well as all other loads applied. The 3,000 lb point load is being transferred to the beam with a face mount hanger. For a 3-ply 1 1/4" assembly, eight 3 3/8" TrussLok™ screws are good for 3,815 lbs with a face mount hanger.

# MULTIPLE-MEMBER CONNECTIONS FOR TOP-LOADED BEAMS

## 1 3/4" Wide Pieces

- Minimum of three rows of 10d (0.128" x 3") nails at 12" on-center.
- Minimum of four rows of 10d (0.128" x 3") nails at 12" on-center for 14" or deeper.
- If using 12d-16d (0.148"-0.162" diameter) nails, the number of nailing rows may be reduced by one.
- Minimum of two rows of SDS, WS, or TrussLok™ screws at 16" on-center. Use 3 3/8" minimum length with two or three plies; 5" minimum for 4-ply members. 6" SDS and WS screws are not recommended for use with TimberStrand® LSL. For 3- or 4-ply members, connectors must be installed

on both sides. Stagger fasteners on opposite side of beam by 1/2 of the required connector spacing.

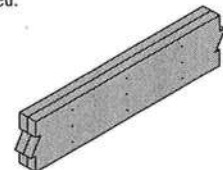
- Load must be applied evenly across entire beam width. Otherwise, use connections for side-loaded beams.

## 3 1/2" Wide Pieces

- Minimum of two rows of SDS, WS, or TrussLok™ screws, 5" minimum length, at 16" on-center. 6" SDS and WS screws are not recommended for use with TimberStrand® LSL. Connectors must be installed on both sides. Stagger fasteners on opposite side of beam by 1/2 of the required connector spacing.

- Load must be applied evenly across entire beam width. Otherwise, use connections for side-loaded beams.

- Minimum of two rows of 1/2" bolts at 24" on-center staggered.



Multiple pieces can be nailed or bolted together to form a header or beam of the required size, up to a maximum width of 7"

