Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447350	T18	SPECIAL	1	1	I6125510
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Nov 15 07:14:47 2012 Page 1

ID:_ZUGJcnJtmLZ336HHPF6zRyd1jG-LprjVoOD4SzurNCU_qJFaA2eprZvB8nikpRTfPyJ?ys

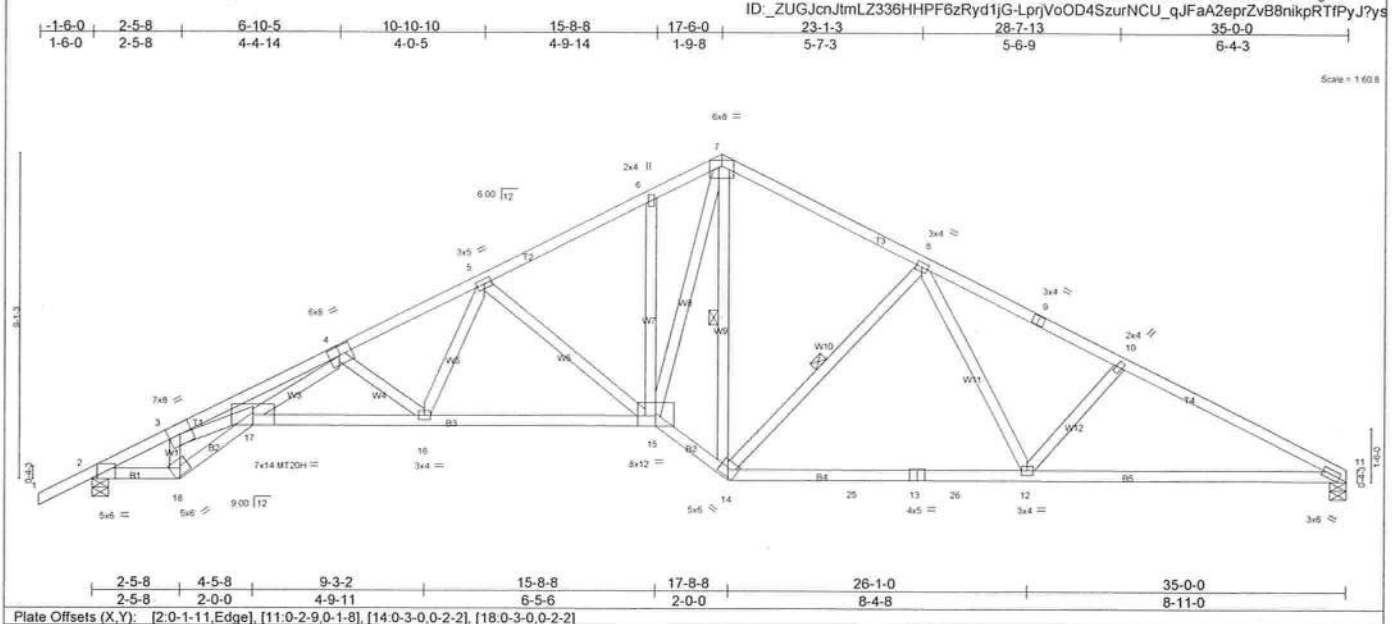


Plate Offsets (X,Y): [2:0-1-11,Edge], [11:0-2-9,0-1-8], [14:0-3-0,0-2-2], [18:0-3-0,0-2-2]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.67	Vert(LL)	-0.30	12-14	>999	240	MT20	244/190
TCDL	10.0	Lumber Increase	1.25	BC	0.87	Vert(TL)	-0.80	12-14	>524	180	MT20H	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.98	Horz(TL)	0.43	11	n/a	n/a		
BCDL	10.0	Code FBC2010/TPI2007		(Matrix-M)							Weight: 203 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except*
T1: 2x4 SYP No.1
BOT CHORD 2x4 SP No.2 *Except*
B1,B3: 2x4 SYP No.1
WEBS 2x4 SP No.3 *Except*
W2,W3: 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-6-9 oc bracing.
WEBS 1 Row at midpt 7-14, 8-14

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

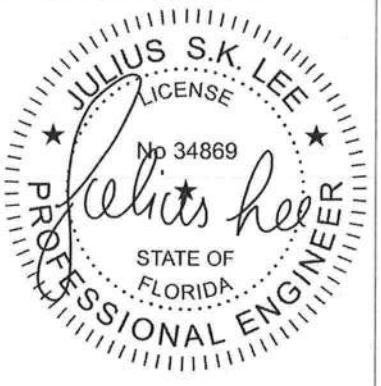
REACTIONS (lb/size) 2=1347/0-5-8 (min. 0-1-13), 11=1263/0-5-8 (min. 0-1-11)
Max Horz 2=97(LC 11)
Max Uplift2=-153(LC 12), 11=-133(LC 13)
Max Grav 2=1508(LC 2), 11=1382(LC 2)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3493/944, 3-4=-6324/1840, 4-5=-3240/998, 5-6=-2170/721, 6-7=-2140/782, 7-8=-1686/618, 8-9=-2297/766, 9-10=-2411/754, 10-11=-2609/793
BOT CHORD 2-18=-1195/4420, 17-18=-529/1732, 16-17=-993/3554, 15-16=-633/2507, 14-15=-312/1700, 14-25=-449/1825, 13-25=-449/1825, 13-26=-449/1825, 12-26=-449/1825, 11-12=-659/2253
WEBS 3-18=-1190/394, 3-17=-1141/4266, 4-17=-726/2665, 4-16=-944/359, 5-16=-210/823, 5-15=-891/337, 7-15=-514/1842, 7-14=-423/25, 8-14=-683/300, 8-12=-111/521, 10-12=-303/205

NOTES (9-11)

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; 125mph (3-second gust) Vasd=97mph; TCDL=4.2psf; BCDL=3.0psf; h=28ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=153, 11=133.
8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
10) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
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



November 15,2012

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447350	T19	SPECIAL	1	1	I6125511
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Nov 15 07:14:50 2012 Page 2

ID:_ZUGJcnJtmLZ336HHPF6zRyd1jG-IOWs8qQ6NNMSiqx3fysyCog5J3Z?OYw8Rnf7GkyJ?yp

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-7=-50, 7-10=-50, 10-11=-50, 11-13=-50, 22-23=-20, 21-22=-20, 19-21=-20, 18-19=-20, 18-29=-20, 29-30=-50, 26-30=-20

Concentrated Loads (lb)

Vert: 11=29(F) 14=8(F)

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447350	T21	SPECIAL	1	1	I6125513
					Job Reference (optional)

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ID:_ZUGJcnJtmLZ336HHPF6zRyd1jG-6MKIBXUFCv_Iobp0SVS7vsN?F4Ih3oJta3NuxxyJ?yk

1-6-0	2-5-8	6-10-5	10-10-10	15-8-8	17-6-0	23-7-0	26-7-0	31-9-7	38-0-0	39-6-0
1-6-0	2-5-8	4-4-14	4-0-5	4-9-14	1-9-8	6-1-0	3-0-0	5-2-7	6-2-9	1-6-0

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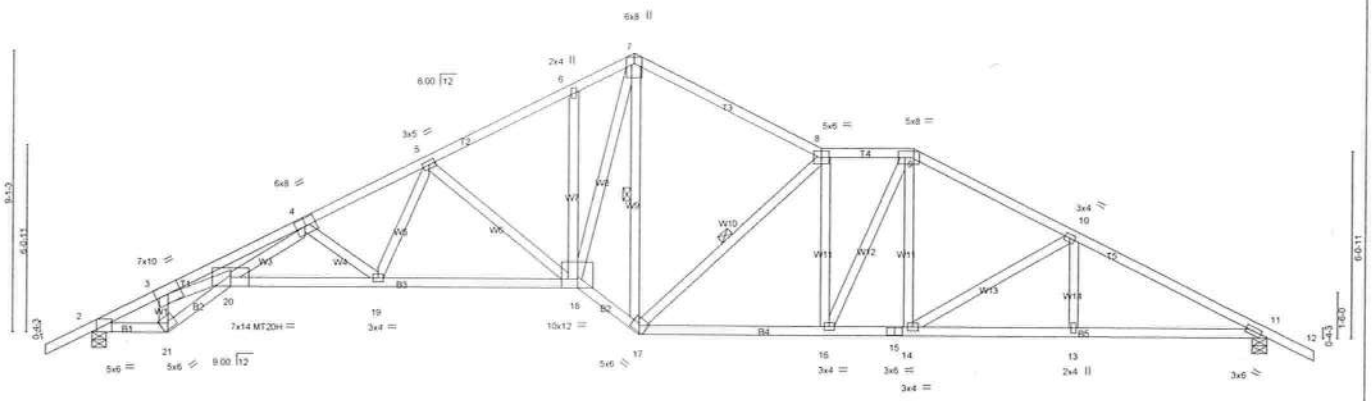


2-5-8	4-5-8	9-3-2	15-8-8	17-8-8	23-7-0	26-7-0	31-9-7	38-0-0
2-5-8	2-0-0	4-9-11	6-5-6	2-0-0	5-10-8	3-0-0	5-2-7	6-2-9

Plate Offsets (X,Y): [2:0-1-11,Edge], [9:0-6-0,0-2-8], [11:0-2-9,0-1-8], [17:0-3-0,0-2-2], [21:0-3-0,0-2-2]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.76	Vert(LL)	-0.34	18-19	>999	240	MT20	244/190
TCDL	10.0	Lumber Increase	1.25	BC	0.81	Vert(TL)	-0.91	18-19	>501	180	MT20H	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.81	Horz(TL)	0.48	11	n/a	n/a		
BCDL	10.0	Code	FBC2010/TPI2007	(Matrix-M)							Weight: 237 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except*
T1: 2x4 SYP No.1
BOT CHORD 2x4 SP No.2 *Except*
B1,B3: 2x4 SYP No.1
WEBS 2x4 SP No.3 *Except*
W2: 2x4 SYP No.1, W3: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-0-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-4-9 oc bracing.
WEBS 1 Row at midpt 7-17, 8-17

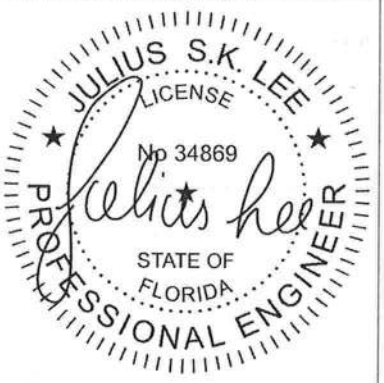
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=1422/0-5-8 (min. 0-1-15), 11=1388/0-5-8 (min. 0-1-14)
Max Horz 2=87(LC 16)
Max Uplift2=-158(LC 12), 11=-170(LC 13)
Max Grav 2=1629(LC 2), 11=1591(LC 2)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3761/1006, 3-4=-6774/1942, 4-5=-3505/1082, 5-6=-2403/802, 6-7=-2360/855, 7-8=-1863/684, 8-9=-2279/803, 9-10=-2329/772, 10-11=-2744/844
BOT CHORD 2-21=-1244/4767, 20-21=-526/1808, 19-20=-1047/3862, 18-19=-682/2768, 17-18=-363/1979, 16-17=-555/2264, 15-16=-478/2021, 14-15=-478/2021, 13-14=-652/2407, 11-13=-652/2407
WEBS 3-21=-1268/403, 3-20=-1211/4650, 4-20=-742/2834, 4-19=-990/364, 5-19=-213/853, 5-18=-915/341, 7-18=-528/2014, 7-17=-413/21, 8-17=-974/369, 8-16=-393/185, 9-16=-164/528, 9-14=-93/325, 10-14=-458/205

NOTES (10-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; 125mph (3-second gust) Vasd=97mph; TCDL=4.2psf; BCDL=3.0psf; h=28ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=158, 11=170.
9) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
11) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
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



November 15,2012

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447350	T23	HIP	1	1	I6125515
					Job Reference (optional)

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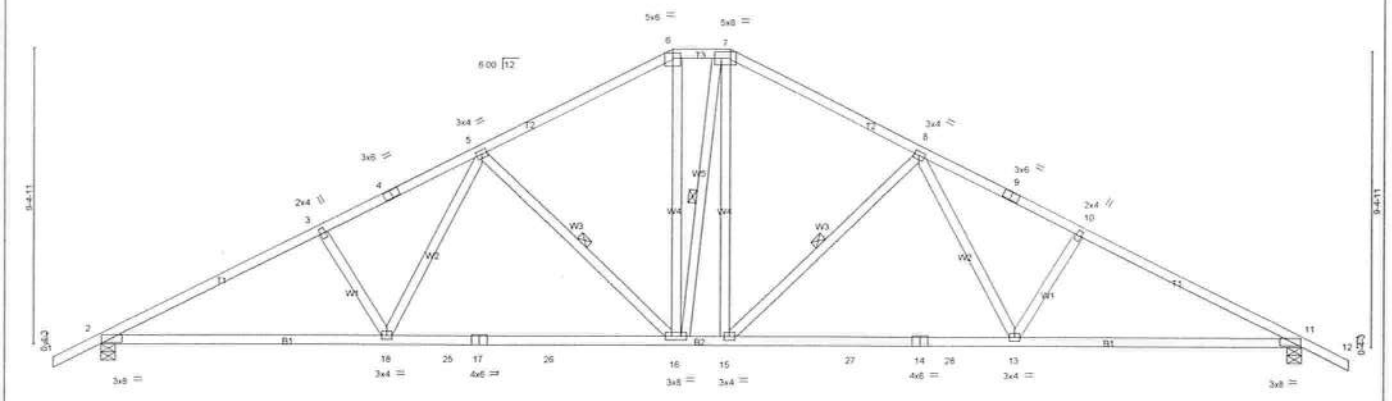
ID:_ZUGJcnJtmLZ336HHPF6zRyd1jG-xWh0SaZ?nlkvWWGAomZX87d0VVNVTdemy?qC9byJ?ye

-1-6-0	7-0-3	12-0-10	18-1-0	19-11-0	25-11-6	30-11-13	38-0-0	39-6-0
1-6-0	7-0-3	5-0-8	6-0-6	1-10-0	6-0-6	5-0-8	7-0-3	1-6-0

Scale = 1:68.9



9-0-8	18-1-0	19-11-0	28-11-8	38-0-0
9-0-8	9-0-8	1-10-0	9-0-8	9-0-8

Plate Offsets (X,Y): [2:0-8-4,0-0-6], [6:0-3-0,0-2-0], [7:0-6-0,0-2-8], [11:0-8-4,0-0-6]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.72	Vert(LL)	-0.28	13-15	>999	240	MT20	244/190
TCDL	10.0	Lumber Increase	1.25	BC	0.72	Vert(TL)	-0.72	13-15	>635	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.37	Horz(TL)	0.15	11	n/a	n/a		
BCDL	10.0	Code FBC2010/TPI2007		(Matrix-M)							Weight: 220 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-8-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-7-3 oc bracing.
WEBS 1 Row at midpt 5-16, 7-16, 8-15

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=1666/0-5-8 (min. 0-2-4), 11=1666/0-5-8 (min. 0-2-4)
Max Horz 2=90(LC 12)
Max Uplift2=-184(LC 12), 11=-184(LC 13)
Max Grav 2=1800(LC 2), 11=1800(LC 2)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3288/956, 3-4=-3122/943, 4-5=-3019/960, 5-6=-2228/748, 6-7=-1951/717, 7-8=-2224/747, 8-9=-3021/961, 9-10=-3124/943, 10-11=-3289/957
BOT CHORD 2-18=-745/2882, 18-25=-567/2437, 17-25=-567/2437, 17-26=-567/2437, 16-26=-567/2437, 15-16=-332/1889, 15-27=-568/2438, 14-27=-568/2438, 14-28=-568/2438, 13-28=-568/2438, 11-13=-762/2887
WEBS 3-18=-300/200, 5-18=-159/660, 5-16=-780/333, 6-16=-218/740, 7-15=-215/730, 8-15=-786/335, 8-13=-161/664, 10-13=-298/200

NOTES (10-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; 125mph (3-second gust) Vasd=97mph; TCDL=4.2psf; BCDL=3.0psf; h=28ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=184, 11=184.
8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
11) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
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
1) Regular: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-6=-50, 6-7=-50, 7-12=-50, 19-25=-29(F=-9), 25-26=-59(F=-9), 26-27=-29(F=-9), 27-28=-59(F=-9), 22-28=-29(F=-9)

JULIUS S.K. LEE LICENSE No 34869 STATE OF FLORIDA PROFESSIONAL ENGINEER

November 15,2012

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI1 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447350	T24	HIP	1	2	I6125516
					Job Reference (optional)

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NOTES (12-14)

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 117 lb down and 112 lb up at 12-8-0, 117 lb down and 112 lb up at 14-8-12, 117 lb down and 112 lb up at 16-8-12, 117 lb down and 112 lb up at 18-8-12, 117 lb down and 112 lb up at 19-3-4, 117 lb down and 112 lb up at 21-3-4, and 117 lb down and 112 lb up at 23-3-4, and 117 lb down and 112 lb up at 25-4-0 on top chord, and 654 lb down and 263 lb up at 8-8-12, 255 lb down and 97 lb up at 10-8-12, 89 lb down and 27 lb up at 12-8-12, 89 lb down and 27 lb up at 14-8-12, 89 lb down and 27 lb up at 16-8-12, 89 lb down and 27 lb up at 18-8-12, 89 lb down and 27 lb up at 19-3-4, 89 lb down and 27 lb up at 21-3-4, 89 lb down and 27 lb up at 23-3-4, 89 lb down and 27 lb up at 25-3-4, and 255 lb down and 97 lb up at 27-3-4, and 654 lb down and 263 lb up at 29-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

12) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

13) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.

14) 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: 1-5=-50, 5-7=-50, 7-11=-50, 2-18=-29(F=-9), 18-32=-59(F=-9), 32-35=-29(F=-9), 14-35=-59(F=-9), 10-14=-29(F=-9)

Concentrated Loads (lb)

Vert: 5=-99(B) 7=-99(B) 18=-66(B) 16=-131(B) 6=-198(B) 14=-66(B) 25=-99(B) 26=-99(B) 27=-99(B) 28=-99(B) 29=-569(B) 30=-255(B) 31=-66(B) 33=-66(B) 34=-66(B) 36=-66(B) 37=-255(B) 38=-569(B)

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447350	T26	COMMON	11	1	I6125518
					Job Reference (optional)

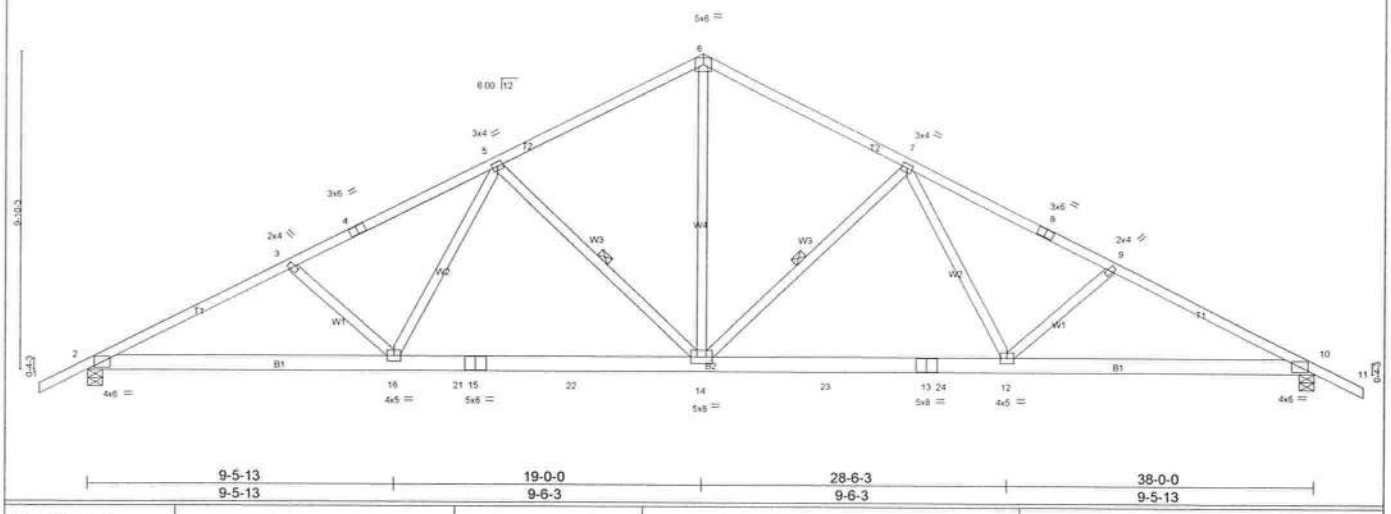
Builders FirstSource, Lake City, FL 32055

7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Nov 15 07:15:10 2012 Page 1

ID:_ZUGJcnJtmLZ336HHPF6zRyd1jG-AFkPKfgfgWtd5vSvq9De00Vat7RX4Zs51uVBzZyJ?yV

-1-6-0	6-4-2	12-7-13	19-0-0	25-4-3	31-7-14	38-0-0	39-6-0
1-6-0	6-4-2	6-3-11	6-4-3	6-4-3	6-3-11	6-4-2	1-6-0

Scale = 1:67.4



9-5-13	19-0-0	28-6-3	38-0-0
9-5-13	9-6-3	9-6-3	9-5-13

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.67	Vert(LL)	-0.18	14-16	>999	240	MT20	244/190
TCDL	10.0	Lumber Increase	1.25	BC	0.73	Vert(TL)	-0.46	14-16	>981	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.89	Horz(TL)	0.12	10	n/a	n/a		
BCDL	10.0	Code FBC2010/TPI2007		(Matrix-M)							Weight: 229 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-7-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-6-2 oc bracing.
WEBS 1 Row at midpt 7-14, 5-14

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=1679/0-5-8 (min. 0-2-4), 10=1679/0-5-8 (min. 0-2-4)
Max Horz 2=94(LC 16)
Max Uplift2=-187(LC 12), 10=-187(LC 13)
Max Grav 2=1800(LC 2), 10=1800(LC 2)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3535/1044, 3-4=-3294/970, 4-5=-3224/986, 5-6=-2261/756, 6-7=-2261/756, 7-8=-3225/986, 8-9=-3295/970, 9-10=-3535/1044
BOT CHORD 2-16=-827/3137, 16-21=-583/2525, 15-21=-583/2525, 15-22=-583/2525, 14-22=-583/2525, 14-23=-586/2530, 13-23=-586/2530, 13-24=-586/2530, 12-24=-586/2530, 10-12=-834/3152
WEBS 6-14=-489/1604, 7-14=-878/370, 7-12=-168/758, 9-12=-385/238, 5-14=-878/370, 5-16=-168/758, 3-16=-385/238

NOTES (9-11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; 125mph (3-second gust) Vasd=97mph; TCDL=4.2psf; BCDL=3.0psf; h=28ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=187, 10=187.
7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
10) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
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: 1-6=-50, 6-11=-50, 2-21=-29(F=-9), 21-22=-59(F=-9), 22-23=-29(F=-9), 23-24=-59(F=-9), 10-24=-29(F=-9)

November 15,2012

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design paramenters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI1 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447350	T28	COMMON	4	1	I6125520
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Nov 15 07:15:12 2012 Page 1

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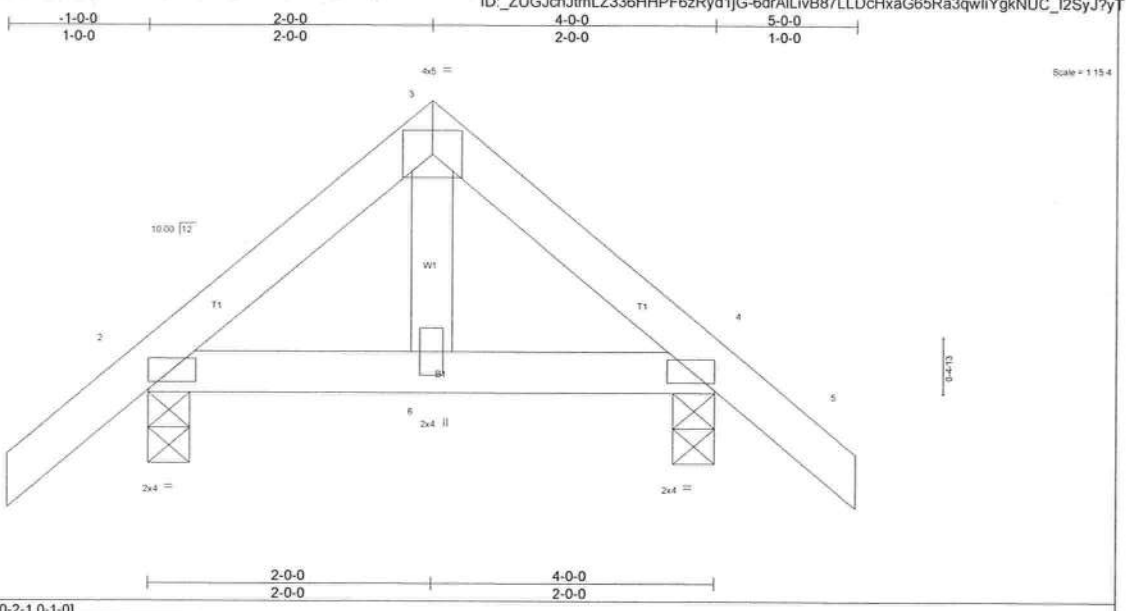


Plate Offsets (X,Y): [2:0-2-1,0-1-0], [4:0-2-1,0-1-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.07	Vert(LL)	-0.00	6	>999	240	MT20	244/190
TCDL	10.0	Lumber Increase	1.25	BC	0.04	Vert(TL)	-0.00	6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2010/TPI2007		(Matrix-M)							Weight: 20 lb	FT = 20%

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

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

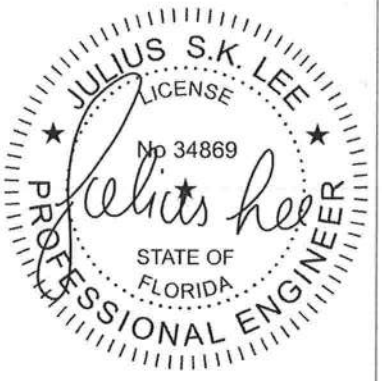
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=190/0-3-8 (min. 0-1-8), 4=190/0-3-8 (min. 0-1-8)
Max Horz 2=32(LC 9)
Max Uplift2=-26(LC 12), 4=-26(LC 13)
Max Grav 2=220(LC 2), 4=220(LC 2)

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

NOTES (8-10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; 125mph (3-second gust) Vasd=97mph; TCDL=4.2psf; BCDL=3.0psf; h=28ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
9) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
10) 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



November 15,2012

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447350	T29	MONO HIP	1	1	I6125521
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Nov 15 07:15:13 2012 Page 2

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LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-3=-50, 3-5=-50, 6-10=-20
   Concentrated Loads (lb)
   Vert: 3=-120(B) 8=-70(B) 14=-42(B) 15=-42(B) 16=-42(B) 17=-25(B) 18=-25(B) 19=-25(B)

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447350	T31	MONO HIP	1	1	I6125523
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

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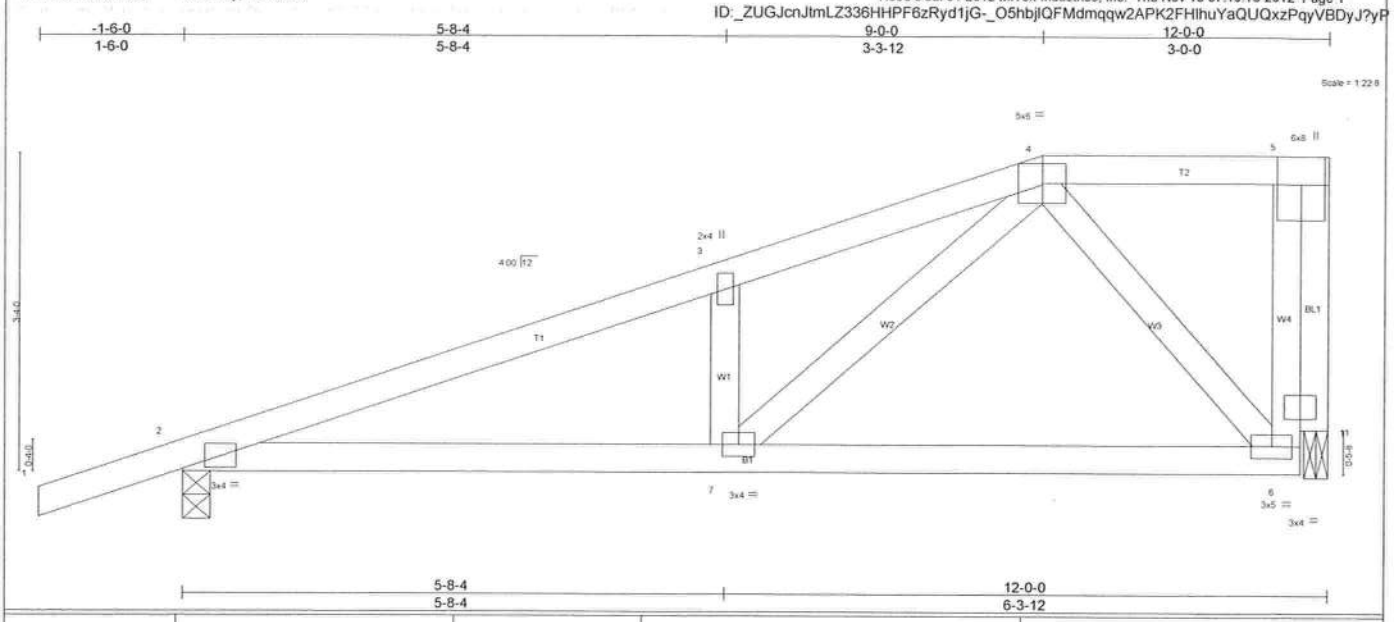

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.32	Vert(LL)	0.10	6-7	>999	240	MT20	244/190
TCDL	10.0	Lumber Increase	1.25	BC	0.37	Vert(TL)	-0.10	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.27	Horz(TL)	0.01	11	n/a	n/a		
BCDL	10.0	Code FBC2010/TPI2007		(Matrix-M)							Weight: 61 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-5-11 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=507/0-3-8 (min. 0-1-8), 11=377/0-3-0 (min. 0-1-8)
Max Horz 2=98(LC 8)
Max Uplift 2=-203(LC 8), 11=-157(LC 8)
Max Grav 2=584(LC 2), 11=431(LC 2)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-873/731, 3-4=-849/799, 5-6=-381/365
BOT CHORD 2-7=-854/958, 6-7=-322/346
WEBS 3-7=-288/186, 4-7=-624/592, 4-6=-403/354

NOTES (10-12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; 125mph (3-second gust) Vasd=97mph; TCDL=4.2psf; BCDL=3.0psf; h=28ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=203, 11=157.
9) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
11) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
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

November 15,2012

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447350	T33	MONO TRUSS	14	1	I6125525
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Nov 15 07:15:19 2012 Page 1

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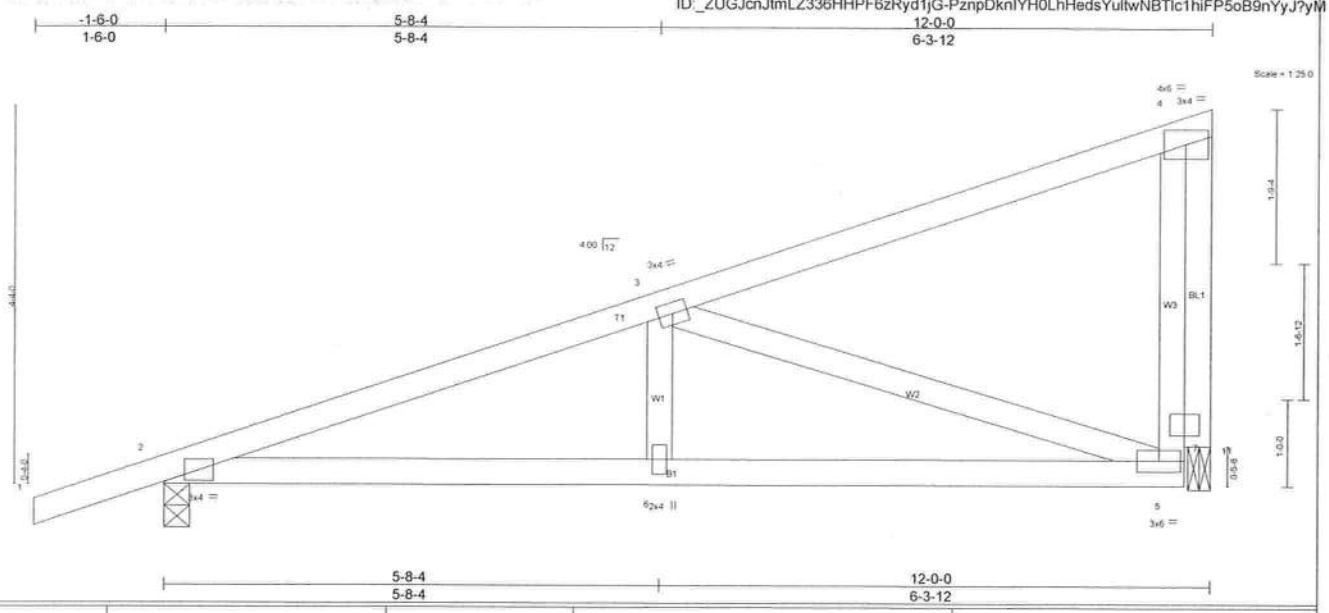

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.36	Vert(LL)	0.11	5-6	>999	240	MT20	244/190
TCDL	10.0	Lumber Increase	1.25	BC	0.38	Vert(TL)	-0.11	5-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.62	Horz(TL)	0.02	11	n/a	n/a		
BCDL	10.0	Code FBC2010/TPI2007		(Matrix-M)							Weight: 61 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-11-12 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-3-5 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=506/0-3-8 (min. 0-1-8), 11=379/0-3-0 (min. 0-1-8)
Max Horz 2=114(LC 8)
Max Uplift2=-196(LC 8), 11=-164(LC 8)
Max Grav 2=582(LC 2), 11=433(LC 2)

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

TOP CHORD	2-3=-864/719, 5-7=-352/305, 4-7=-352/305
BOT CHORD	2-6=-835/908, 5-6=-803/822
WEBS	3-5=-794/776

NOTES (8-10)

1) Wind: ASCE 7-10; 125mph (3-second gust) Vasd=97mph; TCDL=4.2psf; BCDL=3.0psf; h=28ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Bearing at joint(s) 11 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 100 lb uplift at joint(s) except (jt=lb) 2=196, 11=164.
7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
9) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
10) 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

November 15,2012

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447350	T34	SPECIAL	1	1	I6125526
					Job Reference (optional)

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=-50, 3-6=-50, 10-13=-20, 9-10=-20, 7-8=-20

Concentrated Loads (lb)

Vert: 3=-120(F) 5=-42(F) 12=-70(F) 10=-25(F) 16=-42(F) 17=-42(F) 18=-25(F) 19=-25(F)

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447350	T36	SPECIAL	1	1	I6125528
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Nov 15 07:15:23 2012 Page 1

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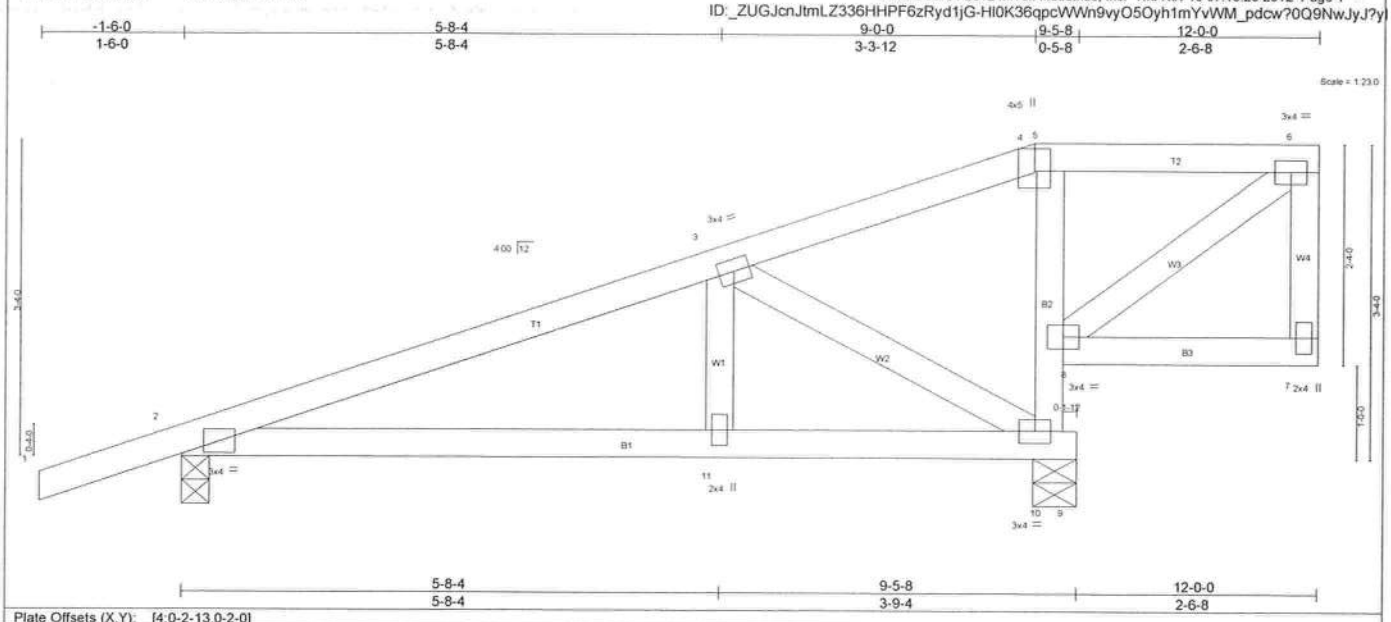

Plate Offsets (X,Y): [4:0-2-13,0-2-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.23	Vert(LL)	0.06	11-14	>999	240	MT20	244/190
TCDL	10.0	Lumber Increase	1.25	BC	0.26	Vert(TL)	-0.05	11-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(TL)	-0.01	10	n/a	n/a		
BCDL	10.0	Code FBC2010/TPI2007		(Matrix-M)							Weight: 58 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
B2: 2x4 SP No.3
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-8-11 oc bracing. Except:
6-0-0 oc bracing: 8-10

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=388/0-3-8 (min. 0-1-8), 10=522/0-5-8 (min. 0-1-8)
Max Horz 2=93(LC 8)
Max Uplift2=-161(LC 8), 10=-160(LC 8)
Max Grav 2=448(LC 2), 10=596(LC 2)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-714/617
BOT CHORD 2-11=-743/800, 10-11=-427/384, 8-10=-329/140
WEBS 3-10=-536/516

NOTES (9-11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; 125mph (3-second gust) Vasd=97mph; TCDL=4.2psf; BCDL=3.0psf; h=28ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=161, 10=160.
8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
10) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
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

November 15,2012

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447350	T38	SPECIAL	1	1	I6125530
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Nov 15 07:15:26 2012 Page 1

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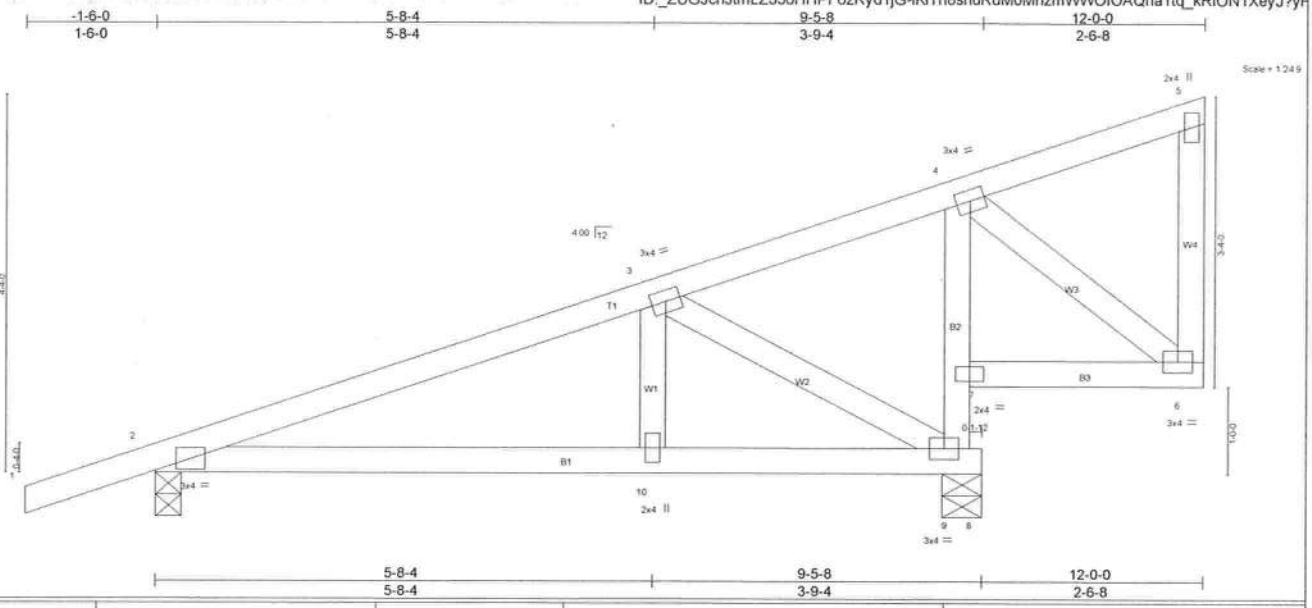


LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.23	Vert(LL)	0.06	10-13	>999	240	MT20	244/190
TCDL	10.0	Lumber Increase	1.25	BC	0.24	Vert(TL)	-0.05	10-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(TL)	-0.01	9	n/a	n/a		
BCDL	10.0	Code FBC2010/TPI2007		(Matrix-M)							Weight: 60 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
B2: 2x4 SP No.3
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
6-0-0 oc bracing: 7-9

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=388/0-3-8 (min. 0-1-8), 9=522/0-5-8 (min. 0-1-8)
Max Horz 2=117(LC 8)
Max Uplift2=-152(LC 8), 9=-169(LC 8)
Max Grav 2=448(LC 2), 9=596(LC 2)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-712/607
BOT CHORD 2-10=-757/805, 9-10=-420/378, 7-9=-346/161, 4-7=-308/165
WEBS 3-9=-528/512

NOTES (7-9)
1) Wind: ASCE 7-10; 125mph (3-second gust) Vasd=97mph; TCDL=4.2psf; BCDL=3.0psf; h=28ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=152, 9=169.
6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
8) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
9) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

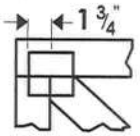
LOAD CASE(S) Standard

November 15,2012

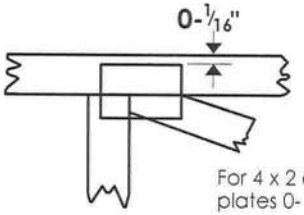
Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

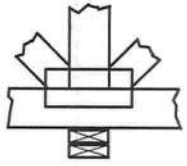
4 x 4

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

LATERAL BRACING LOCATION

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

BEARING



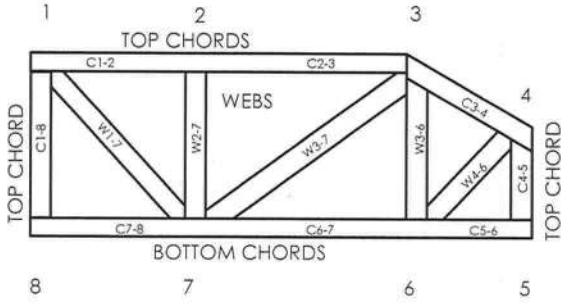
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI1: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

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



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ER-5243, 9604B,
9730, 95-43, 96-31, 9667A
NER-487, NER-561
95110, 84-32, 96-67, ER-3907, 9432A

Julius Lee PE
1109 Coastal Bay ,
Boynton Beach ,FL 33435

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI1.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T, I, or Eliminator bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

August 10, 2010	T-BRACE / I-BRACE DETAIL WITH 2X BRACE ONLY	ST - T-BRACE 2

MiTek Industries, Inc.

Note: T-Bracing / I-Bracing to be used when continuous lateral bracing is impractical. T-Brace / I-Brace must cover 90% of web length.

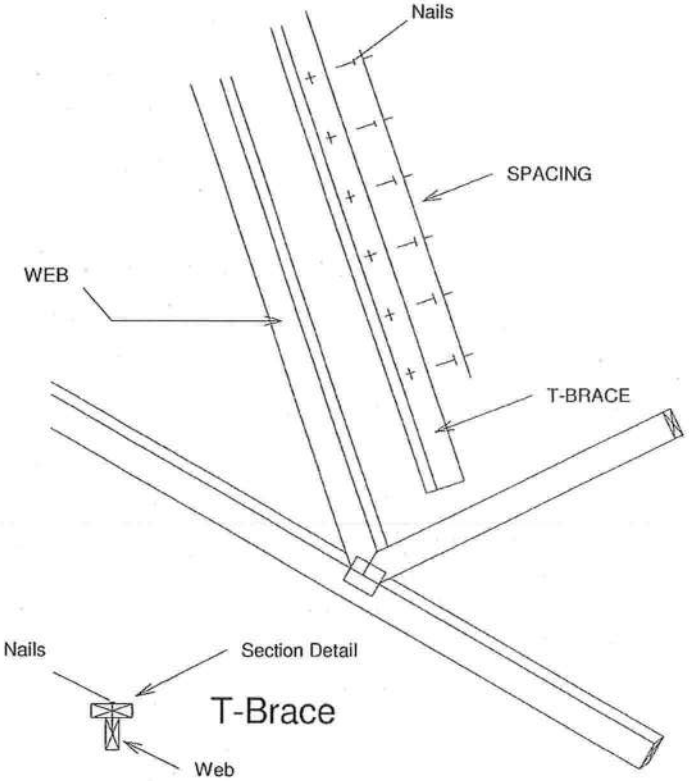
Note: This detail NOT to be used to convert T-Brace / I-Brace webs to continuous lateral braced webs.

Nailing Pattern		
T-Brace size	Nail Size	Nail Spacing
2x4 or 2x6 or 2x8	10d	6" o.c.
Note: Nail along entire length of T-Brace / I-Brace (On Two-Ply's Nail to Both Plies)		

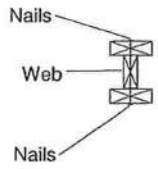
	Brace Size for One-Ply Truss	
	Specified Continuous Rows of Lateral Bracing	
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

	Brace Size for Two-Ply Truss	
	Specified Continuous Rows of Lateral Bracing	
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

T-Brace / I-Brace must be same species and grade (or better) as web member.



T-Brace



I-Brace

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JANUARY 1, 2009	LATERAL TOE-NAIL DETAIL	ST-TOENAIL_SP

MiTek Industries, Inc.

NOTES:
1. TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 45 DEGREES WITH THE MEMBER AND MUST HAVE FULL WOOD SUPPORT. (NAIL MUST BE DRIVEN THROUGH AND EXIT AT THE BACK CORNER OF THE MEMBER END AS SHOWN.
2. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
3. ALLOWABLE VALUE SHALL BE THE LESSER VALUE OF THE TWO SPECIES FOR MEMBERS OF DIFFERENT SPECIES.

	TOE-NAIL SINGLE SHEAR VALUES PER NDS 2001 (lb/nail)					
	DIAM.	SYP	DF	HF	SPF	SPF-S
3.5" LONG	.131	88.0	80.6	69.9	68.4	59.7
	.135	93.5	85.6	74.2	72.6	63.4
	.162	108.8	99.6	86.4	84.5	73.8
3.25" LONG	.128	74.2	67.9	58.9	57.6	50.3
	.131	75.9	69.5	60.3	59.0	51.1
	.148	81.4	74.5	64.6	63.2	52.5

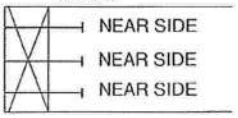
VALUES SHOWN ARE CAPACITY PER TOE-NAIL.
APPLICABLE DURATION OF LOAD INCREASES MAY BE APPLIED.

THIS DETAIL APPLICABLE TO THE THREE END DETAILS SHOWN BELOW

VIEWS SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY

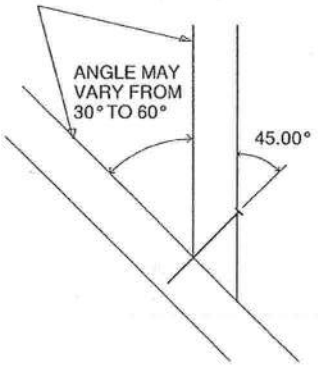
SIDE VIEW

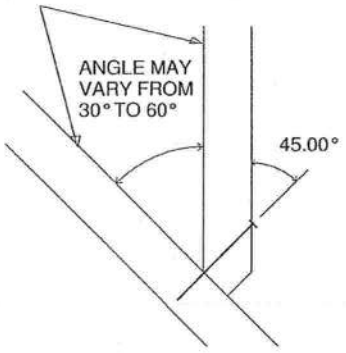
3 NAILS

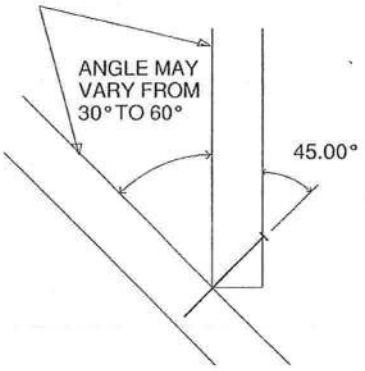


EXAMPLE:
(3) - 16d NAILS (.162" diam. x 3.5") WITH SPF SPECIES BOTTOM CHORD

For load duration increase of 1.15:
3 (nails) X 84.5 (lb/nail) X 1.15 (DOL) = 291.5 lb Maximum Capacity







1109 COASTAL BAY
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FEBRUARY 14, 2012	STANDARD PIGGYBACK TRUSS CONNECTION DETAIL	ST-PIGGY-7-10

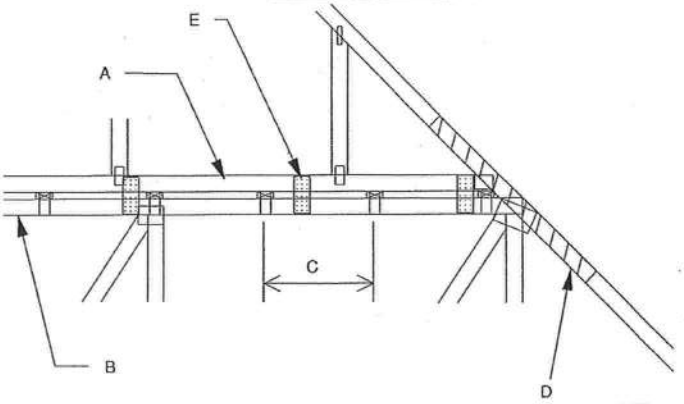
MiTek Industries, Chesterfield, MO

MiTek Industries, Inc.

MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E MAX MEAN ROOF HEIGHT = 30 FEET MAX TRUSS SPACING = 24 " O.C. CATEGORY II BUILDING EXPOSURE B or C ASCE 7-10 DURATION OF LOAD INCREASE : 1.60
DETAIL IS NOT APPLICABLE FOR TRUSSES TRANSFERING DRAG LOADS (SHEAR TRUSSES). ADDITIONAL CONSIDERATIONS BY BUILDING ENGINEER/DESIGNER ARE REQUIRED.

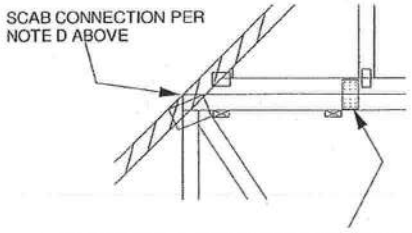
A - PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) 0.131" X 3.5" TOE NAILED.
B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT TO BASE TRUSS WITH (2) 0.131" X 3.5" NAILS EACH.
D - 2 X___ X 4'-0" SCAB, SIZE AND GRADE TO MATCH TOP CHORD OF PIGGYBACK TRUSS, ATTACHED TO ONE FACE, CENTERED ON INTERSECTION, WITH (2) ROWS OF 0.131" X 3" NAILS @ 4" O.C. SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH DIRECTIONS AND:
1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR
2. WIND SPEED OF 116 MPH TO 160 MPH WITH A MAXIMUM PIGGYBACK SPAN OF 12 ft.

E - FOR WIND SPEEDS BETWEEN 126 AND 160 MPH, ATTACH MITEK 3X8 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 72" O.C. W/ (4) 0.131" X 1.5" PER MEMBER. STAGGER NAILS FROM OPPOSING FACES. ENSURE 0.5" EDGE DISTANCE. (MIN. 2 PAIRS OF PLATES REQ. REGARDLESS OF SPAN)

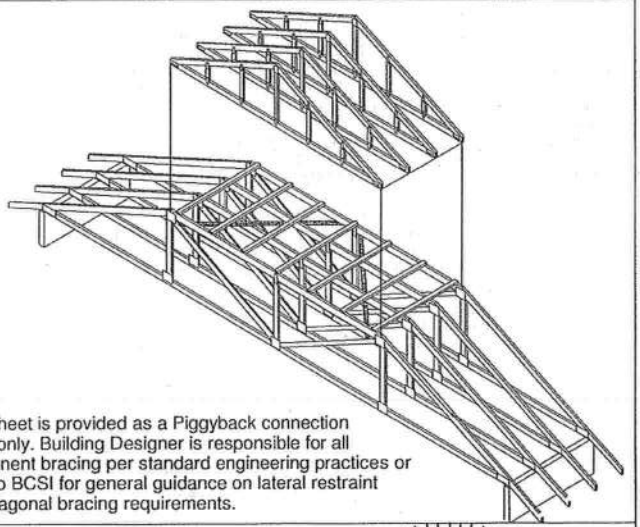


WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH Nail-On PLATES AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.

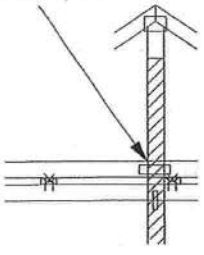


FOR ALL WIND SPEEDS, ATTACH MITEK 3X6 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) 0.131" X 1.5" PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" EDGE DISTANCE.



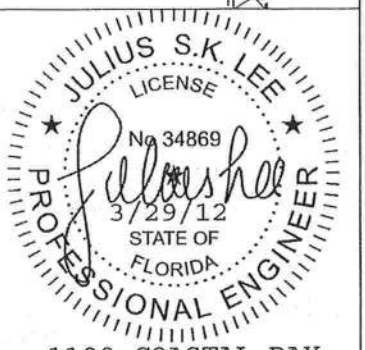
This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

VERTICAL WEB TO EXTEND THROUGH BOTTOM CHORD OF PIGGYBACK



FOR LARGE CONCENTRATED LOADS APPLIED TO CAP TRUSS REQUIRING A VERTICAL WEB:

1) VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS MUST MATCH IN SIZE, GRADE, AND MUST LINE UP AS SHOWN IN DETAIL.
2) ATTACH 2 x ___ x 4'-0" SCAB TO EACH FACE OF TRUSS ASSEMBLY WITH 2 ROWS OF 10d (0.131" X 3") NAILS SPACED 4" O.C. FROM EACH FACE. (SIZE AND GRADE TO MATCH VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.) (MINIMUM 2X4)
3) THIS CONNECTION IS ONLY VALID FOR A MAXIMUM CONCENTRATED LOAD OF 4000 LBS (@1.15). REVIEW BY A QUALIFIED ENGINEER IS REQUIRED FOR LOADS GREATER THAN 4000 LBS.
4) FOR PIGGYBACK TRUSSES CARRYING GIRDER LOADS, NUMBER OF PLYS OF PIGGYBACK TRUSS TO MATCH BASE TRUSS.
5) CONCENTRATED LOAD MUST BE APPLIED TO BOTH THE PIGGYBACK AND THE BASE TRUSS DESIGN.



1109 COASTAL BAY
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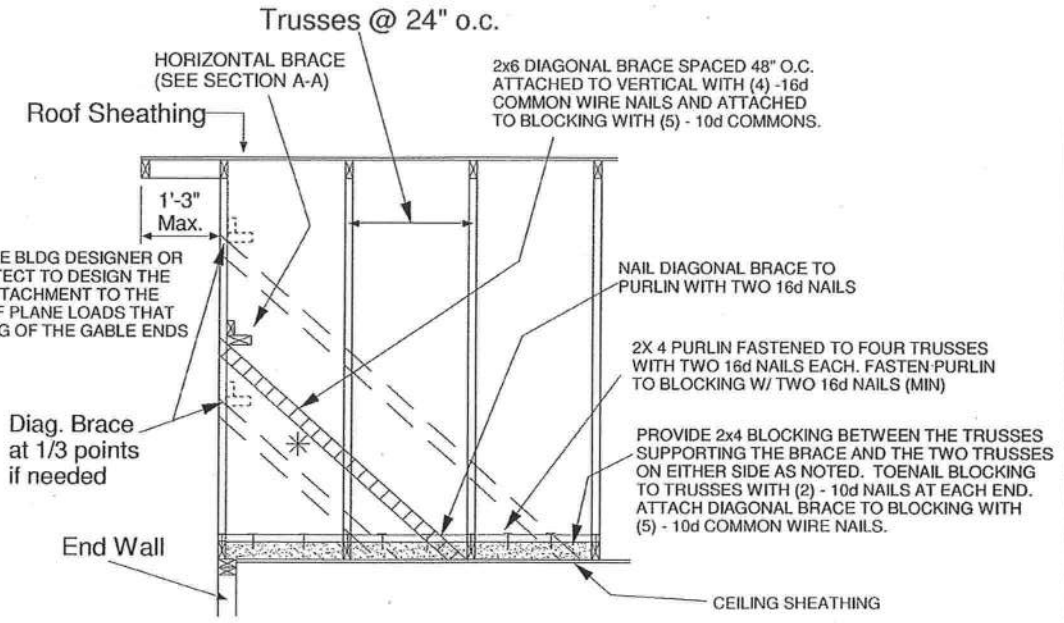
FEBRUARY 14, 2012	Standard Gable End Detail	SHEET 2

MiTek Industries, Chesterfield, MO

MiTek Industries, Inc.

ALTERNATE DIAGONAL BRACING TO THE BOTTOM CHORD



BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES

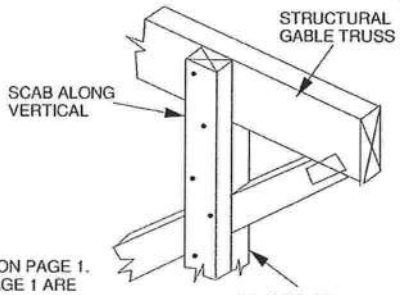
STRUCTURAL GABLE TRUSSES MAY BE BRACED AS NOTED:

METHOD 1 : ATTACH A MATCHING GABLE TRUSS TO THE INSIDE FACE OF THE STRUCTURAL GABLE AND FASTEN PER THE FOLLOWING NAILING SCHEDULE.

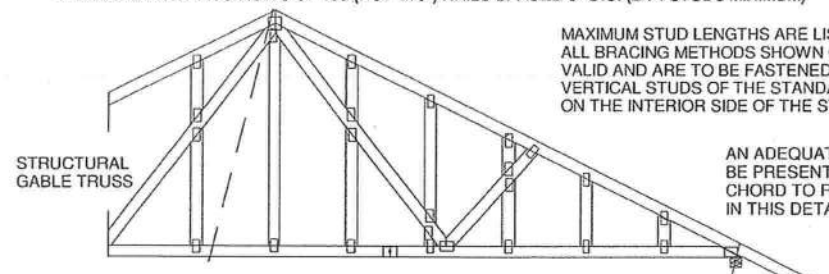
METHOD 2 : ATTACH 2X__ SCABS TO THE FACE OF EACH VERTICAL MEMBER ON THE STRUCTURAL GABLE PER THE FOLLOWING NAILING SCHEDULE. SCABS ARE TO BE OF THE SAME SIZE, GRADE AND SPECIES AS THE TRUSS VERTICALS

NAILING SCHEDULE:

- FOR WIND SPEEDS 120 MPH (ASCE 7-98, 02, 05), 150 MPH (ASCE 7-10) OR LESS, NAIL ALL MEMBERS WITH ONE ROW OF 10d (.131" X 3") NAILS SPACED 6" O.C.
- FOR WIND SPEEDS GREATER 120 MPH (ASCE 7-98, 02, 05), 150 MPH (ASCE 7-10) NAIL ALL MEMBERS WITH TWO ROWS OF 10d (.131" X 3") NAILS SPACED 6" O.C. (2X 4 STUDS MINIMUM)

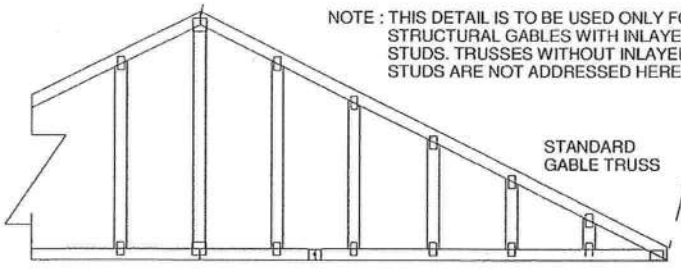


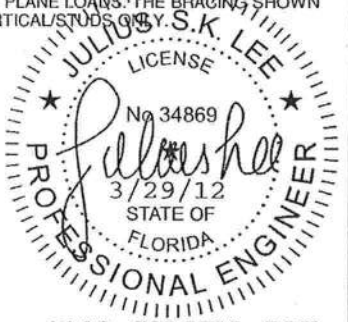
MAXIMUM STUD LENGTHS ARE LISTED ON PAGE 1. ALL BRACING METHODS SHOWN ON PAGE 1 ARE VALID AND ARE TO BE FASTENED TO THE SCABS OR VERTICAL STUDS OF THE STANDARD GABLE TRUSS ON THE INTERIOR SIDE OF THE STRUCTURE.



AN ADEQUATE DIAPHRAGM OR OTHER METHOD OF BRACING MUST BE PRESENT TO PROVIDE FULL LATERAL SUPPORT OF THE BOTTOM CHORD TO RESIST ALL OUT OF PLANE LOADS. THE BRACING SHOWN IN THIS DETAIL IS FOR THE VERTICAL STUDS ONLY.

NOTE : THIS DETAIL IS TO BE USED ONLY FOR STRUCTURAL GABLES WITH INLAYED STUDS. TRUSSES WITHOUT INLAYED STUDS ARE NOT ADDRESSED HERE.





1109 COASTAL BAY
BOYNTON BC, FL 33435

JULIUS LEE PE.

RE: 447351 - GIEBEIG HOMES - KETCHAM RES.

1109 COASTAL BAY BLVD,
BOYNTON BEACH, FL 33435

Site Information:
Project Customer: GIEBEIG HOMES Project Name: 447351 Model: KETCHAM RES.
Lot/Block: Subdivision:
Address: HWY 441 SOUTH
City: COLUMBIA CTY State: FL

Name Address and License # of Structural Engineer of Record, If there is one, for the building.
Name: BRIAN TRENT GIEBEIG License #: RR282811523
Address: 462 SW FAIRLINGTON CT
City: LAKE CITY State: FL

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):
FBC 2010/TPI 2007

Design Program: MiTek 20/20 7.3
Floor Load: 60.0 psf

This package includes 14 individual, dated Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.
This document processed per section 16G15-23.003 of the Florida Board of Professionals Rules

In the event of changes from Builder or E.O.R. additional coversheets and drawings may accompany this coversheet. The latest approval dates supersede and replace the previous drawings.

No.	Seal#	Truss Name	Date
1	I6125532	F01	11/15/012
2	I6125533	F01A	11/15/012
3	I6125534	F02	11/15/012
4	I6125535	F03	11/15/012
5	I6125536	F04	11/15/012
6	I6125537	F05	11/15/012
7	I6125538	F06	11/15/012
8	I6125539	F07	11/15/012
9	I6125540	F07A	11/15/012
10	I6125541	F08	11/15/012
11	I6125542	F09	11/15/012
12	I6125543	F10	11/15/012
13	I6125544	KW1	11/15/012
14	I6125545	KW3	11/15/012

COLUMBIA COUNTY BUILDING DEPARTMENT
Received for FILE COPY
Code Compliance
PLANS EXAMINER

The truss drawing(s) referenced above have been prepared by MiTek Industries, Inc. under my direct supervision based on the parameters provided by Builders FirstSource (Jax).

Truss Design Engineer's Name: Julius Lee

My license renewal date for the state of Florida is February 28, 2013.

NOTE: The seal on these drawings indicate acceptance of professional engineering responsibility solely for the truss components shown. The suitability and use of this component for any particular building is the responsibility of the building designer, per ANSI/TPI-1 Chapter 2.

JULIUS S.K. LEE
LICENSE
No 34869
STATE OF FLORIDA
PROFESSIONAL ENGINEER

November 15,2012

Julius Lee

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447351	F01	FLOOR	8	1	I6125532
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Nov 15 07:16:39 2012 Page 1

ID:_ZUGJcnJtmLZ336HHPF6zRyd1jG-3Mc305lUis5?Ham?YLJW7nhtK?sRRuzBVFZObvyJ?x6

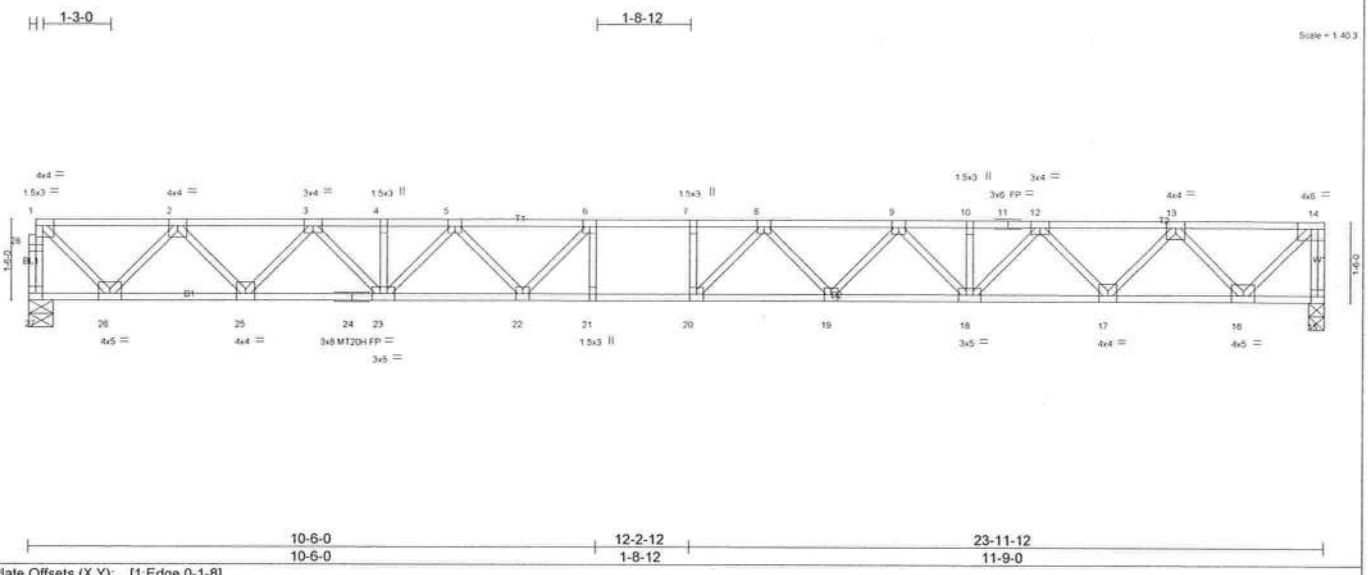


Plate Offsets (X,Y): [1:Edge,0-1-8]

LOADING (psf)		SPACING	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plates Increase	1.00	TC	0.30	Vert(LL)	-0.31	20	>922	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.00	BC	0.53	Vert(TL)	-0.54	19-20	>523	240	MT20H	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.63	Horz(TL)	0.09	15	n/a	n/a		
BCDL	10.0	Code FBC2010/TPI2007		(Matrix)							Weight: 130 lb	FT = 2%F, 11%E

LUMBER
TOP CHORD 2x4 SYP M 31(flat)
BOT CHORD 2x4 SYP M 31(flat)
WEBS 2x4 SP No.3(flat)

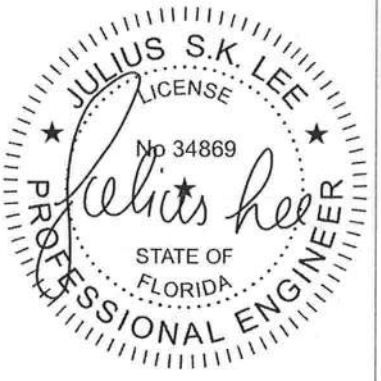
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 27=945/0-5-6 (min. 0-1-8), 15=949/0-3-8 (min. 0-1-8)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 27-28=-939/0, 1-28=-938/0, 14-15=-942/0, 1-2=-872/0, 2-3=-2224/0, 3-4=-3236/0, 4-5=-3236/0, 5-6=-3834/0, 6-7=-4064/0, 7-8=-4064/0, 8-9=-3838/0, 9-10=-3234/0, 10-11=-3234/0, 11-12=-3234/0, 12-13=-2225/0, 13-14=-871/0
BOT CHORD 25-26=0/1638, 24-25=0/2780, 23-24=0/2780, 22-23=0/3606, 21-22=0/4064, 20-21=0/4064, 19-20=0/4024, 18-19=0/3611, 17-18=0/2779, 16-17=0/1639
WEBS 14-16=0/1232, 1-26=0/1202, 13-16=-1141/0, 2-26=-1138/0, 13-17=0/872, 2-25=0/872, 12-17=-823/0, 3-25=-826/0, 12-18=0/659, 3-23=0/661, 9-18=-546/0, 5-23=-535/0, 9-19=0/337, 5-22=0/443, 8-19=-325/0, 6-22=-532/13, 8-20=-221/380

NOTES (8-10)
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 3x3 MT20 unless otherwise indicated.
4) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
5) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
9) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
10) 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



November 15,2012

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447351	F02	FLOOR	11	1	I6125534
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Nov 15 07:16:42 2012 Page 1

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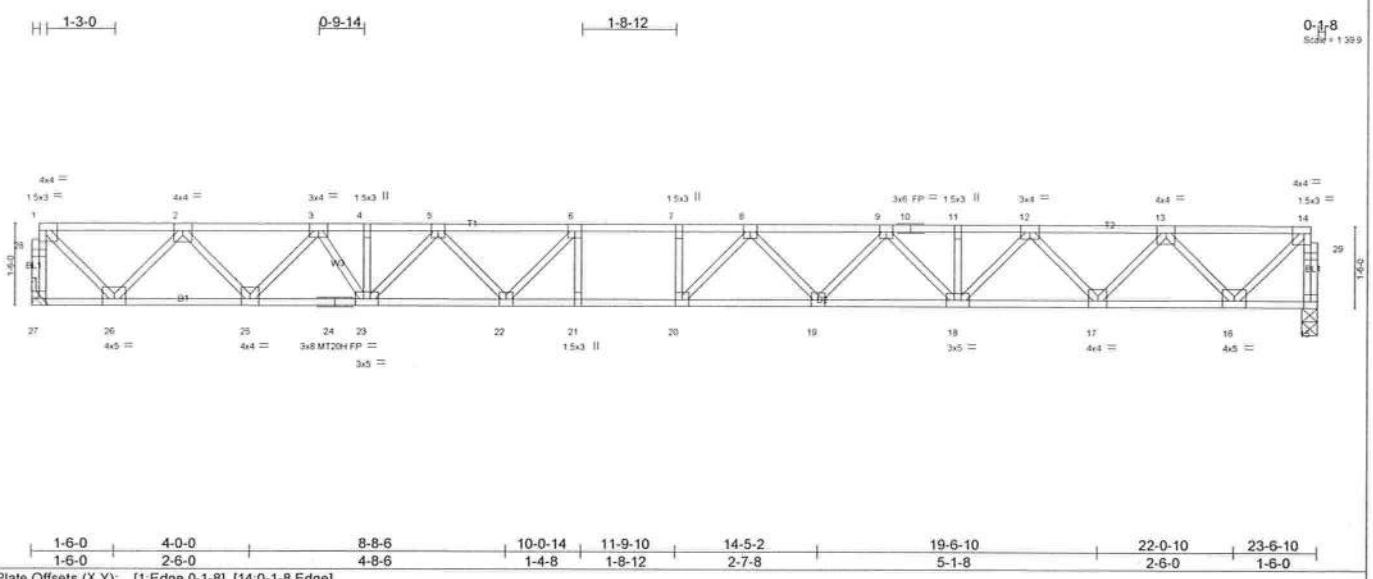


Plate Offsets (X,Y): [1:Edge,0-1-8], [14:0-1-8,Edge]

LOADING (psf)		SPACING	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plates Increase	1.00	TC	0.30	Vert(LL)	-0.29	19-20	>952	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.00	BC	0.53	Vert(TL)	-0.52	19-20	>539	240	MT20H	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.60	Horz(TL)	0.09	15	n/a	n/a		
BCDL	10.0	Code FBC2010/TPI2007		(Matrix)							Weight: 128 lb	FT = 2%F, 11%E

LUMBER
TOP CHORD 2x4 SYP M 31(flat)
BOT CHORD 2x4 SYP M 31(flat)
WEBS 2x4 SP No.3(flat)

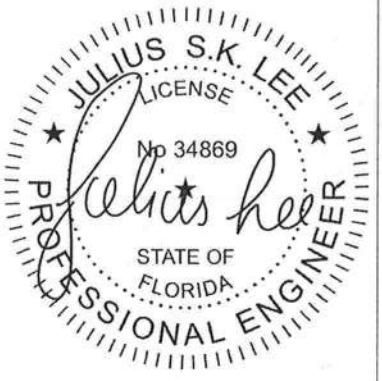
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 27=928/Mechanical, 15=928/0-3-6 (min. 0-1-8)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 27-28=-922/0, 1-28=-921/0, 15-29=-921/0, 14-29=-920/0, 1-2=-856/0, 2-3=-2175/0, 3-4=-3020/0, 4-5=-3020/0, 5-6=-3652/0, 6-7=-3910/0, 7-8=-3910/0, 8-9=-3728/0, 9-10=-3154/0, 10-11=-3154/0, 11-12=-3154/0, 12-13=-2177/0, 13-14=-855/0
BOT CHORD 25-26=0/1605, 24-25=0/2718, 23-24=0/2718, 22-23=0/3405, 21-22=0/3910, 20-21=0/3910, 19-20=0/3896, 18-19=0/3515, 17-18=0/2716, 16-17=0/1605
WEBS 1-26=0/1179, 2-26=-1114/0, 2-25=0/848, 3-25=-807/0, 3-23=0/558, 5-23=-558/0, 5-22=0/459, 6-22=-554/0, 14-16=0/1178, 13-16=-1115/0, 13-17=0/850, 12-17=-801/0, 12-18=0/634, 9-18=-523/0, 9-19=0/317, 8-19=-303/0, 8-20=-242/347

NOTES (7-10)
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 3x3 MT20 unless otherwise indicated.
4) Bearings are assumed to be: , Joint 15 SYP No.2 .
5) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
8) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
9) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435
10) Use Simpson THA422 to attach Truss to Carrying member

LOAD CASE(S) Standard



November 15,2012

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design paramenters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI1 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447351	F04	FLOOR	8	1	I6125536
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Nov 15 07:16:44 2012 Page 1

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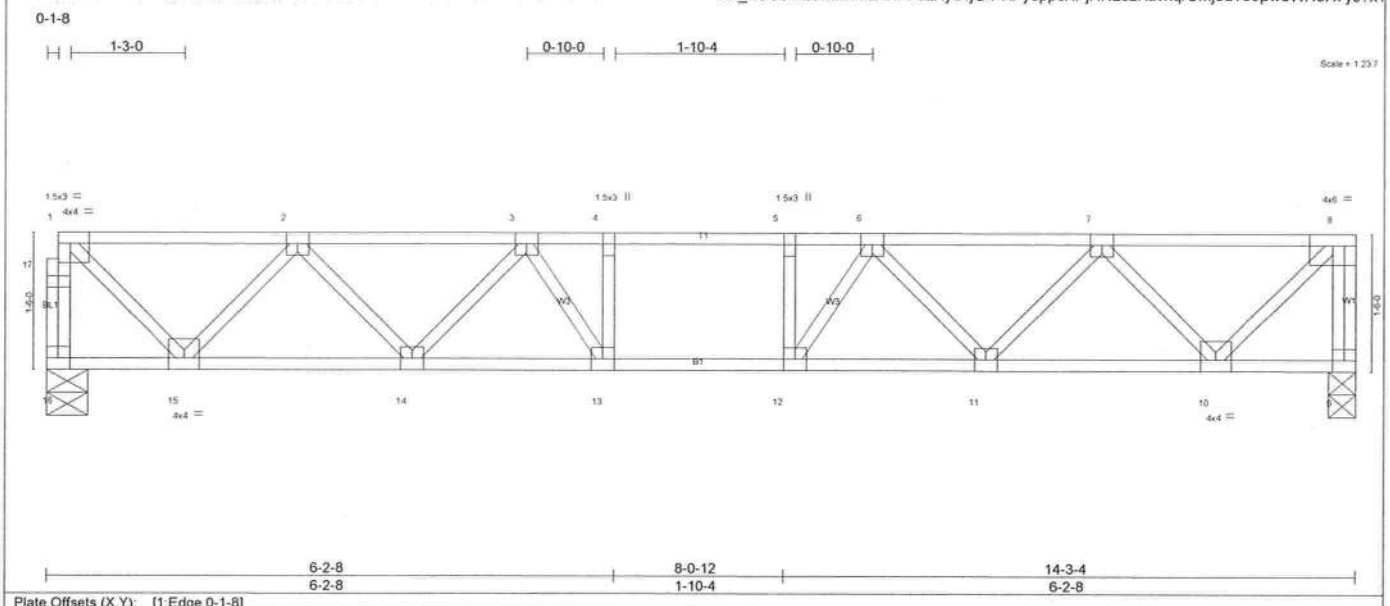

Plate Offsets (X,Y): [1:Edge,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plates Increase	1.00	TC	0.19	Vert(LL)	-0.07	11-12	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.00	BC	0.28	Vert(TL)	-0.12	11-12	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(TL)	0.03	9	n/a	n/a		
BCDL	10.0	Code FBC2010/TPI2007		(Matrix)							Weight: 79 lb	FT = 2%F, 11%E

LUMBER
TOP CHORD 2x4 SYP M 31(flat)
BOT CHORD 2x4 SYP M 31(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS (lb/size) 16=835/0-5-6 (min. 0-1-8), 9=841/0-3-8 (min. 0-1-8)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 16-17=-826/0, 1-17=-825/0, 8-9=-831/0, 1-2=-729/0, 2-3=-1698/0, 3-4=-2117/0, 4-5=-2117/0, 5-6=-2117/0, 6-7=-1698/0, 7-8=-727/0
BOT CHORD 14-15=0/1348, 13-14=0/2003, 12-13=0/2117, 11-12=0/2002, 10-11=0/1350
WEBS 8-10=0/1029, 1-15=0/1001, 7-10=-926/0, 2-15=-921/0, 7-11=0/518, 2-14=0/520, 6-11=-452/0, 3-14=-454/0, 6-12=-34/446, 3-13=-35/446, 4-13=-271/5, 5-12=-271/4

NOTES (7-9)
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 MT20 unless otherwise indicated.
3) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
4) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
8) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
9) 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

November 15,2012

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design paramenters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI1 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447351	F06	FLOOR	1	1	I6125538
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055 — 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Nov 15 07:16:46 2012 Page 1

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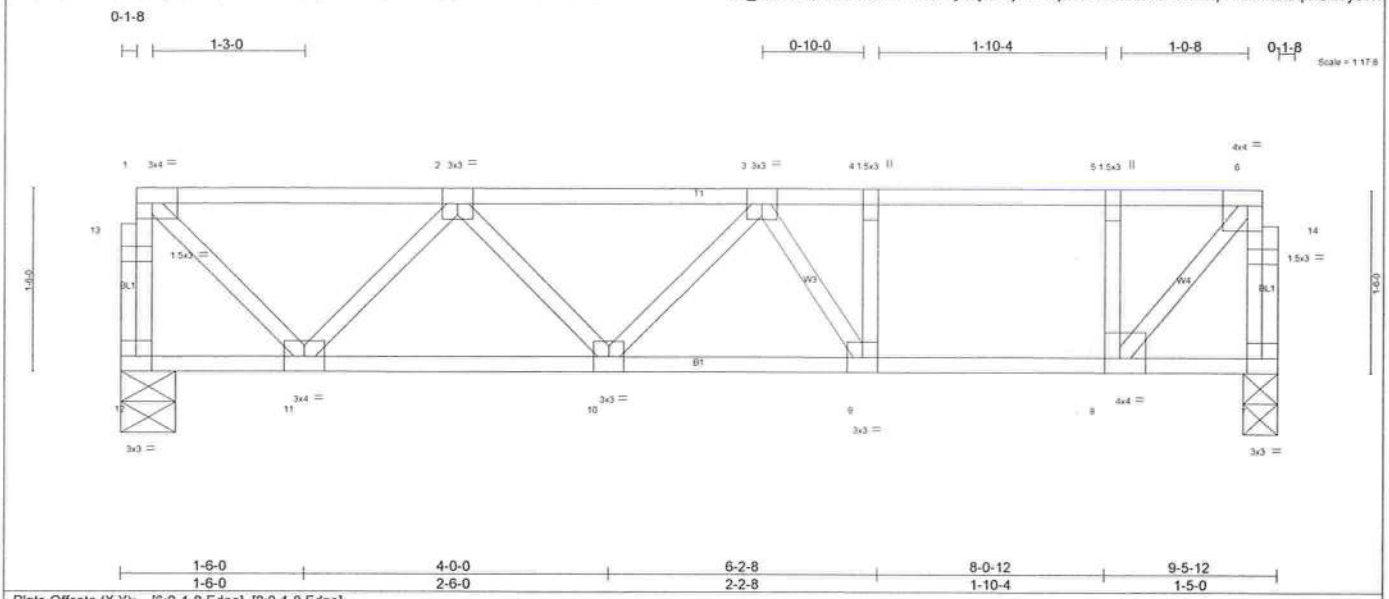

Plate Offsets (X,Y): [6:0-1-8,Edge], [8:0-1-8,Edge]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plates Increase	1.00	TC	0.43	Vert(LL)	-0.11	9-10	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.00	BC	0.42	Vert(TL)	-0.19	9-10	>579	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(TL)	0.01	7	n/a	n/a		
BCDL	10.0	Code FBC2010/TPI2007		(Matrix)							Weight: 54 lb	FT = 2%F, 11%E

LUMBER
TOP CHORD 2x4 SYP M 31(flat)
BOT CHORD 2x4 SYP M 31(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS (lb/size) 12=548/0-5-6 (min. 0-1-8), 7=548/0-3-6 (min. 0-1-8)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 12-13=-532/0, 1-13=-532/0, 7-14=-647/0, 6-14=-647/0, 1-2=-434/0, 2-3=-916/0, 3-4=-658/0, 4-5=-658/0, 5-6=-658/0
BOT CHORD 10-11=0/804, 9-10=0/909, 8-9=0/658
WEBS 5-8=-471/0, 1-11=0/593, 2-11=-551/0, 3-9=-478/0, 6-8=0/971

NOTES (5-7)
1) Unbalanced floor live loads have been considered for this design.
2) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
3) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
6) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
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

November 15,2012

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447351	F07A	FLOOR	2	1	I6125540
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Nov 15 07:16:48 2012 Page 1

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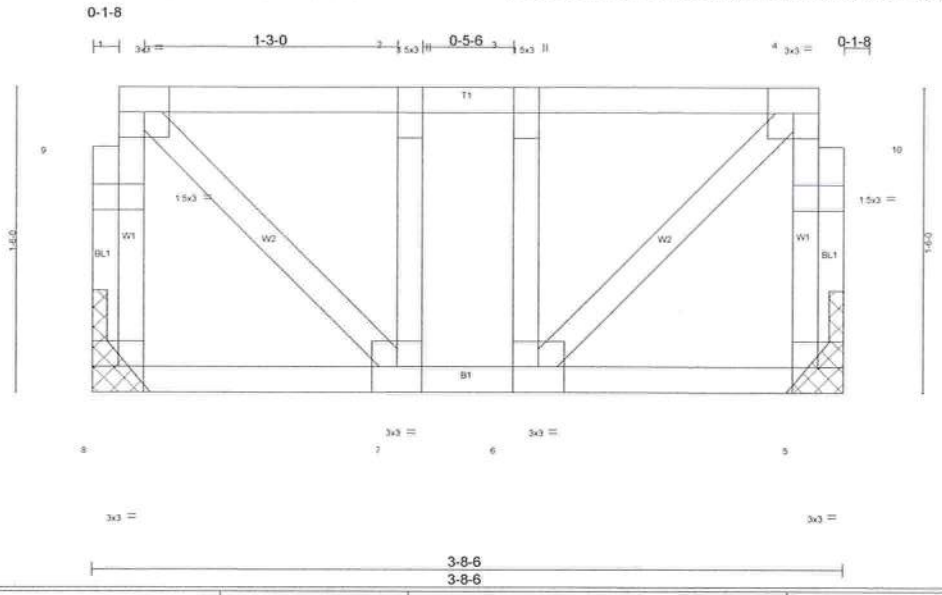

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plates Increase	1.00	TC	0.17	Vert(LL)	-0.00	7	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.00	BC	0.11	Vert(TL)	-0.01	7-8	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.12	Horz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code FBC2010/TPI2007		(Matrix)							Weight: 27 lb	FT = 2%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-8-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 8=267/Mechanical, 5=267/Mechanical

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 8-9=-254/0, 1-9=-254/0, 5-10=-254/0, 4-10=-254/0

NOTES (5-9)
1) Unbalanced floor live loads have been considered for this design.
2) Bearings are assumed to be: Joint 8 SYP No.2 .
3) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
6) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
7) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435
8) Use Simpson LUS46 to attach Truss to Carrying member
9) Use Simpson THA422 to attach Truss to Carrying member

LOAD CASE(S) Standard

November 15,2012

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.
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Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447351	F09	FLOOR	3	1	I6125542
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Nov 15 07:16:49 2012 Page 1

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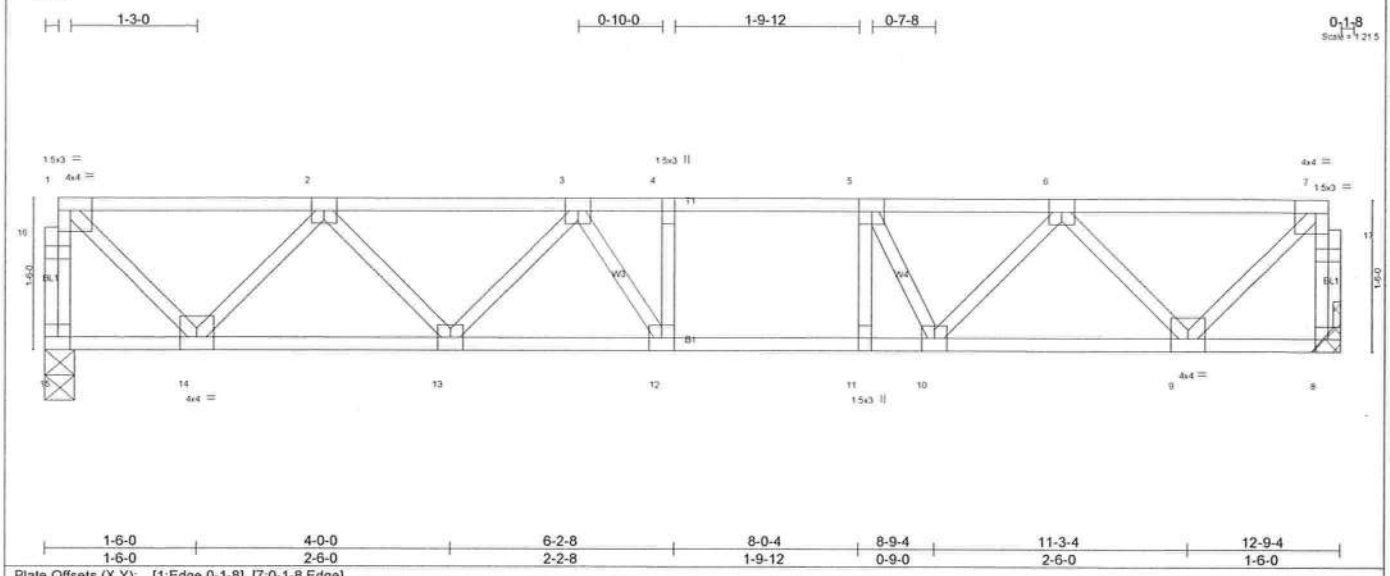


Plate Offsets (X,Y): [1:Edge,0-1-8], [7:0-1-8,Edge]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plates Increase	1.00	TC	0.21	Vert(LL)	-0.08	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.00	BC	0.36	Vert(TL)	-0.12	12-13	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.44	Horz(TL)	0.02	8	n/a	n/a		
BCDL	10.0	Code FBC2010/TPI2007		(Matrix)							Weight: 71 lb	FT = 2%F, 11%E

LUMBER
TOP CHORD 2x4 SYP M 31(flat)
BOT CHORD 2x4 SYP M 31(flat)
WEBS 2x4 SP No.3(flat)

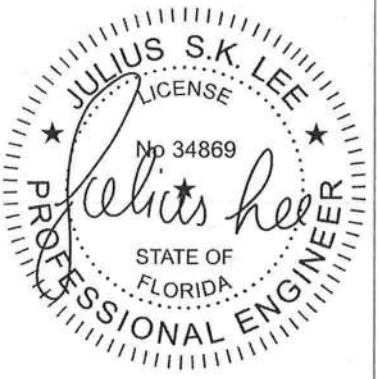
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 15=745/0-3-8 (min. 0-1-8), 8=745/Mechanical

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 15-16=-734/0, 1-16=-734/0, 8-17=-738/0, 7-17=-737/0, 1-2=-636/0, 2-3=-1453/0, 3-4=-1662/0, 4-5=-1662/0, 5-6=-1472/0, 6-7=-633/0
BOT CHORD 13-14=0/1178, 12-13=0/1661, 11-12=0/1662, 10-11=0/1662, 9-10=0/1162
WEBS 1-14=0/873, 2-14=-805/0, 2-13=0/409, 3-13=-309/0, 3-12=-149/261, 7-9=0/869, 6-9=-785/0, 6-10=0/501, 5-10=-531/0

NOTES (6-9)
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 MT20 unless otherwise indicated.
3) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
4) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
7) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
8) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435
9) Use Simpson THA422 to attach Truss to Carrying member

LOAD CASE(S) Standard



November 15,2012

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447351	F10	FLOOR	3	1	I6125543
					Job Reference (optional)

LOAD CASE(S) Standard

Concentrated Loads (lb)
Vert: 1=-500 2=-90

4) 2nd chase Floor: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 8-16=-20, 1-2=-20, 2-4=-140, 4-7=-220
Concentrated Loads (lb)
Vert: 1=-500 2=-90

5) 3rd chase Live Only: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 8-16=-20, 1-2=-100, 2-5=-220, 5-7=-140
Concentrated Loads (lb)
Vert: 1=-500 2=-90

6) 4th chase Live Only: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 8-16=-20, 1-2=-20, 2-4=-140, 4-7=-220
Concentrated Loads (lb)
Vert: 1=-500 2=-90

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Boynton Beach,FL 33435

Job	Truss	Truss Type	Qty	Ply	GIEBEIG HOMES - KETCHAM RES.
447351	KW3	GABLE	1	1	I6125545
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

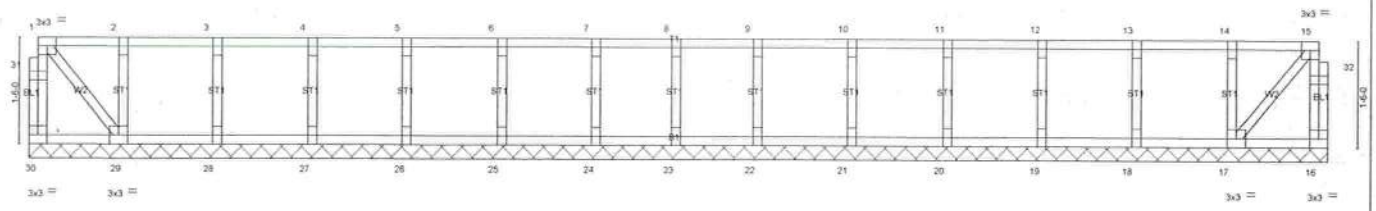
7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Nov 15 07:16:52 2012 Page 1

ID:_ZUGJcnJtmLZ336HHPF6zRyd1jG-AsuzkYveesj9LaFVoa2Z8Xk8PEQR_vH5UmDaYfyJ?wv

0-1-8

0-1-8

Scale = 1:30.6



1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-1-10	10-3-4	11-7-4	12-11-4	14-3-4	15-7-4	16-11-4	18-3-4
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-1-10	1-1-10	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plates Increase	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber Increase	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(TL)	-0.00	17	n/a	n/a		
BCDL	10.0	Code FBC2010/TPI2007		(Matrix)							Weight: 90 lb	FT = 2%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 29-30,16-17.

REACTIONS All bearings 18-3-4.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 30, 16, 23, 17, 18, 19, 20, 21, 22, 29, 28, 27, 26, 25, 24

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

NOTES (8-10)

1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
9) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
10) 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

November 15,2012

Julius Lee PE.
1109 Coastal Bay
Boynton Beach,FL 33435

August 10, 2010	T-BRACE / I-BRACE DETAIL WITH 2X BRACE ONLY	ST - T-BRACE 2

MiTek Industries, Chesterfield, MO

MiTek Industries, Inc.

Note: T-Bracing / I-Bracing to be used when continuous lateral bracing is impractical. T-Brace / I-Brace must cover 90% of web length.

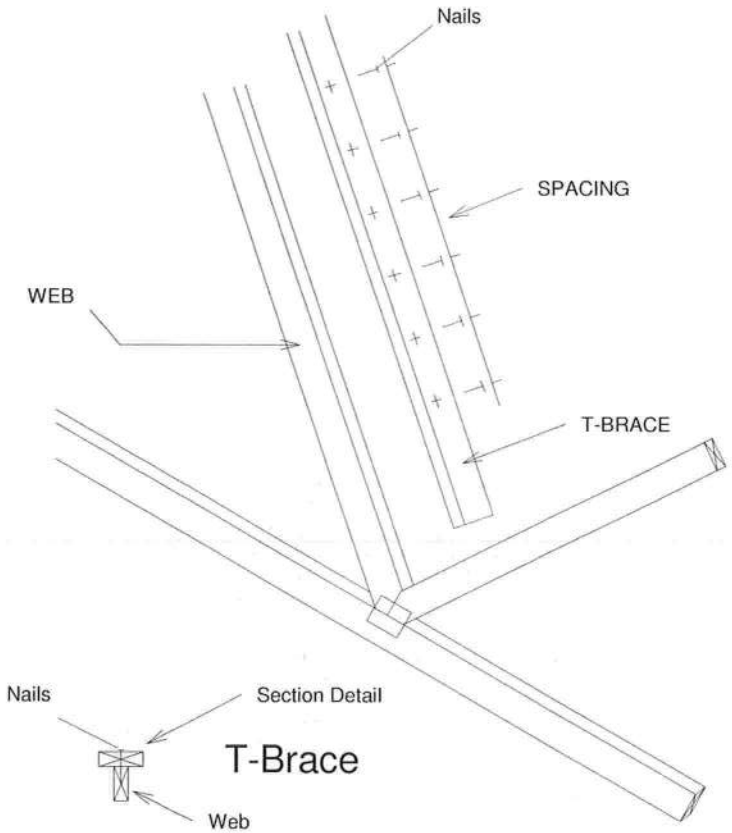
Note: This detail NOT to be used to convert T-Brace / I-Brace webs to continuous lateral braced webs.

Nailing Pattern		
T-Brace size	Nail Size	Nail Spacing
2x4 or 2x6 or 2x8	10d	6" o.c.
Note: Nail along entire length of T-Brace / I-Brace (On Two-Ply's Nail to Both Plies)		

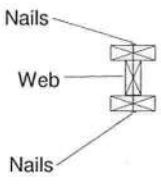
	Brace Size for One-Ply Truss	
	Specified Continuous Rows of Lateral Bracing	
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

	Brace Size for Two-Ply Truss	
	Specified Continuous Rows of Lateral Bracing	
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

T-Brace / I-Brace must be same species and grade (or better) as web member.



T-Brace



I-Brace

1109 COASTAL BAY
BOYNTON BC, FL 33435

JANUARY 1, 2009	LATERAL TOE-NAIL DETAIL	ST-TOENAIL_SP

MiTek Industries, Chesterfield, MO

MiTek Industries, Inc.

NOTES:
1. TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 45 DEGREES WITH THE MEMBER AND MUST HAVE FULL WOOD SUPPORT. (NAIL MUST BE DRIVEN THROUGH AND EXIT AT THE BACK CORNER OF THE MEMBER END AS SHOWN.
2. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
3. ALLOWABLE VALUE SHALL BE THE LESSER VALUE OF THE TWO SPECIES FOR MEMBERS OF DIFFERENT SPECIES.

THIS DETAIL APPLICABLE TO THE THREE END DETAILS SHOWN BELOW

VIEWS SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY

	TOE-NAIL SINGLE SHEAR VALUES PER NDS 2001 (lb/nail)					
	DIAM.	SYP	DF	HF	SPF	SPF-S
3.5" LONG	.131	88.0	80.6	69.9	68.4	59.7
	.135	93.5	85.6	74.2	72.6	63.4
	.162	108.8	99.6	86.4	84.5	73.8
3.25" LONG	.128	74.2	67.9	58.9	57.6	50.3
	.131	75.9	69.5	60.3	59.0	51.1
	.148	81.4	74.5	64.6	63.2	52.5

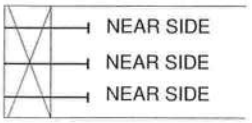
VALUES SHOWN ARE CAPACITY PER TOE-NAIL.
APPLICABLE DURATION OF LOAD INCREASES MAY BE APPLIED.

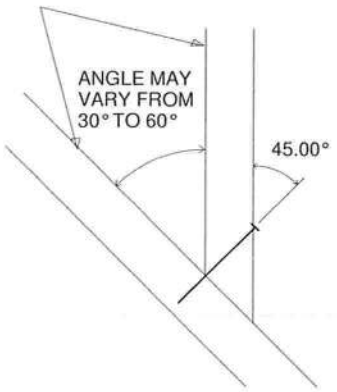
EXAMPLE:
(3) - 16d NAILS (.162" diam. x 3.5") WITH SPF SPECIES BOTTOM CHORD

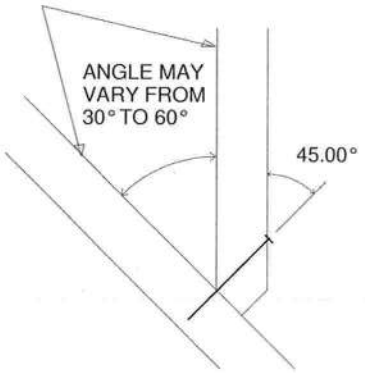
For load duration increase of 1.15:
3 (nails) X 84.5 (lb/nail) X 1.15 (DOL) = 291.5 lb Maximum Capacity

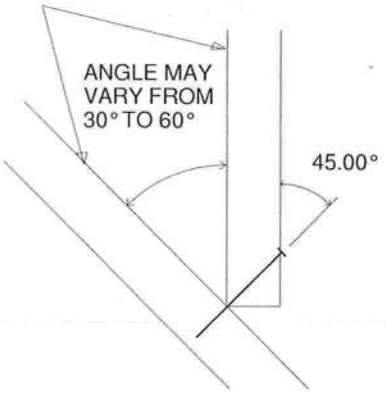
SIDE VIEW

3 NAILS









1109 COASTAL BAY
BOYNTON BC, FL 33435

FEBRUARY 14, 2012	STANDARD PIGGYBACK TRUSS CONNECTION DETAIL	ST-PIGGY-7-10

MiTek Industries, Chesterfield, MO

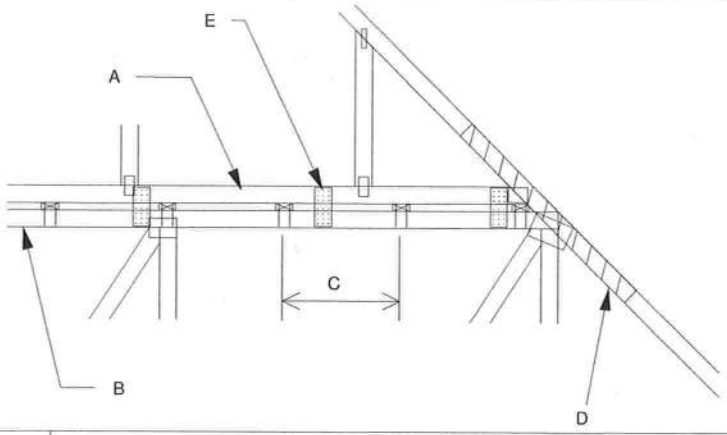
MiTek Industries, Inc.

MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E
MAX MEAN ROOF HEIGHT = 30 FEET
MAX TRUSS SPACING = 24 " O.C.
CATEGORY II BUILDING
EXPOSURE B or C
ASCE 7-10
DURATION OF LOAD INCREASE : 1.60

DETAIL IS NOT APPLICABLE FOR TRUSSES TRANSFERING DRAG LOADS (SHEAR TRUSSES). ADDITIONAL CONSIDERATIONS BY BUILDING ENGINEER/DESIGNER ARE REQUIRED.

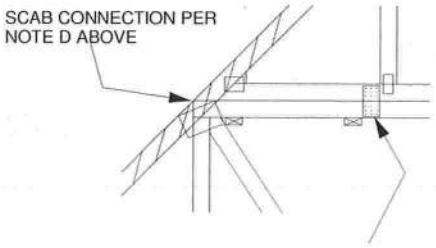
A - PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) 0.131" X 3.5" TOE NAILED.
B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT TO BASE TRUSS WITH (2) 0.131" X 3.5" NAILS EACH.
D - 2 X__ X 4'-0" SCAB, SIZE AND GRADE TO MATCH TOP CHORD OF PIGGYBACK TRUSS, ATTACHED TO ONE FACE, CENTERED ON INTERSECTION, WITH (2) ROWS OF 0.131" X 3" NAILS @ 4" O.C. SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH DIRECTIONS AND:
1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR
2. WIND SPEED OF 116 MPH TO 160 MPH WITH A MAXIMUM PIGGYBACK SPAN OF 12 ft.

E - FOR WIND SPEEDS BETWEEN 126 AND 160 MPH, ATTACH MITEK 3X8 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 72" O.C. W/ (4) 0.131" X 1.5" PER MEMBER. STAGGER NAILS FROM OPPOSING FACES. ENSURE 0.5" EDGE DISTANCE. (MIN. 2 PAIRS OF PLATES REQ. REGARDLESS OF SPAN)

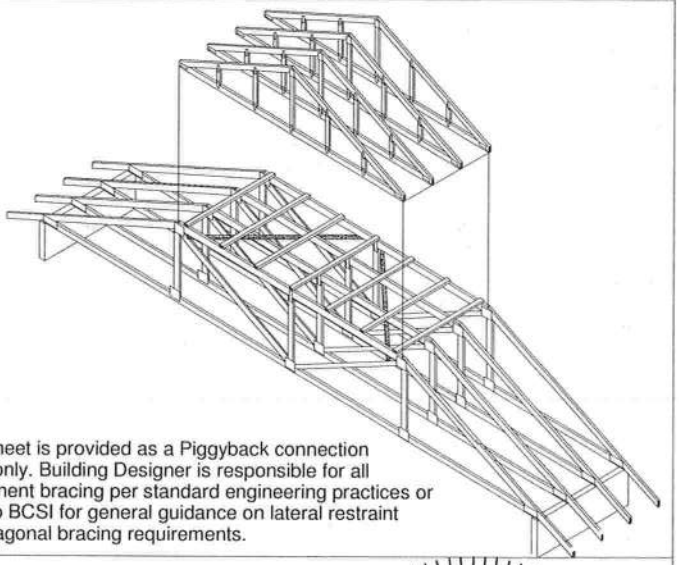


WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH Nail-On PLATES AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.

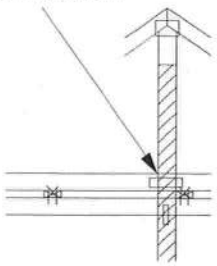


FOR ALL WIND SPEEDS, ATTACH MITEK 3X6 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) 0.131" X 1.5" PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" EDGE DISTANCE.



This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

VERTICAL WEB TO EXTEND THROUGH BOTTOM CHORD OF PIGGYBACK



FOR LARGE CONCENTRATED LOADS APPLIED TO CAP TRUSS REQUIRING A VERTICAL WEB:

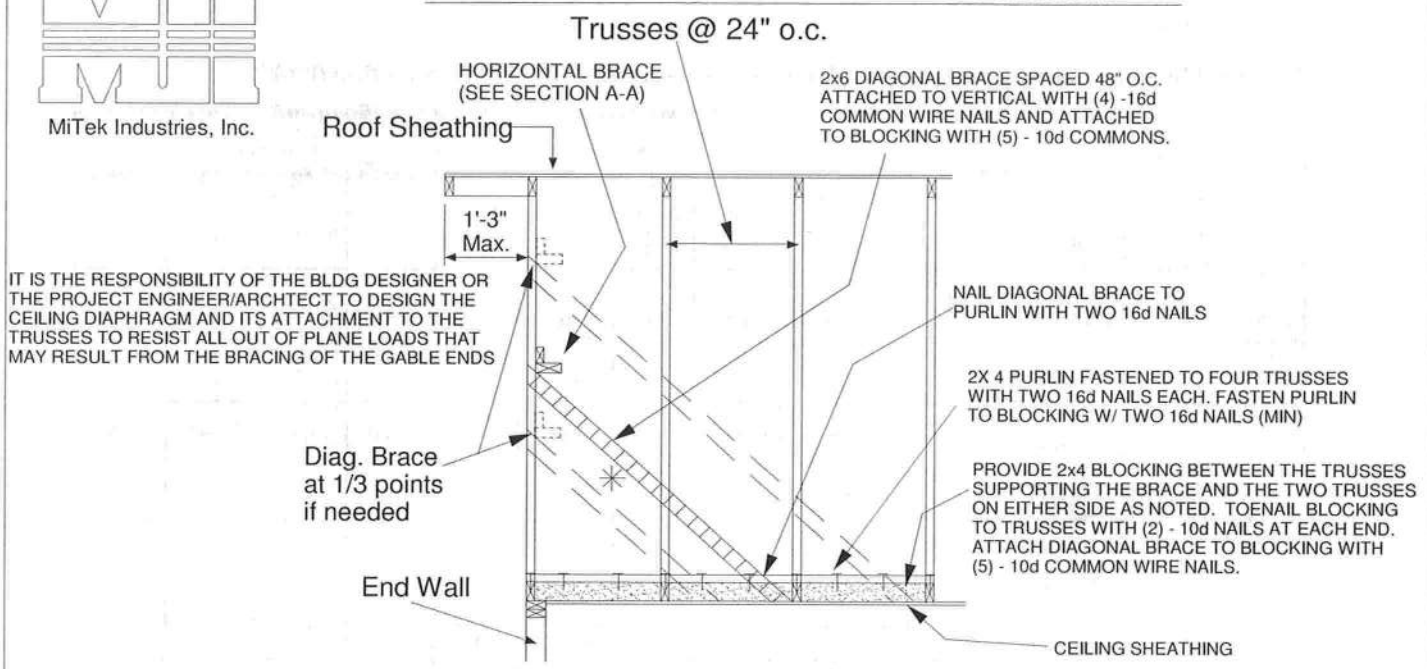
1) VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS MUST MATCH IN SIZE, GRADE, AND MUST LINE UP AS SHOWN IN DETAIL.
2) ATTACH 2 x ___ x 4'-0" SCAB TO EACH FACE OF TRUSS ASSEMBLY WITH 2 ROWS OF 10d (0.131" X 3") NAILS SPACED 4" O.C. FROM EACH FACE. (SIZE AND GRADE TO MATCH VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.) (MINIMUM 2X4)
3) THIS CONNECTION IS ONLY VALID FOR A MAXIMUM CONCENTRATED LOAD OF 4000 LBS (@1.15). REVIEW BY A QUALIFIED ENGINEER IS REQUIRED FOR LOADS GREATER THAN 4000 LBS.
4) FOR PIGGYBACK TRUSSES CARRYING GIRDER LOADS, NUMBER OF PLYS OF PIGGYBACK TRUSS TO MATCH BASE TRUSS.
5) CONCENTRATED LOAD MUST BE APPLIED TO BOTH THE PIGGYBACK AND THE BASE TRUSS DESIGN.

1109 COASTAL BAY
BOYNTON BC, FL 33435

FEBRUARY 14, 2012	Standard Gable End Detail	SHEET 2

MiTek Industries, Inc.

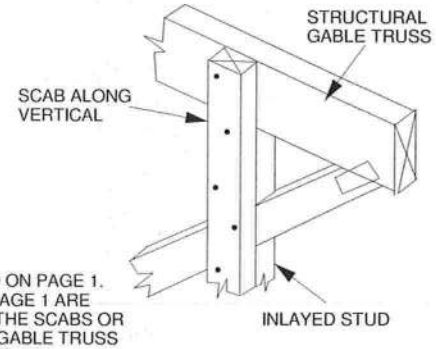
ALTERNATE DIAGONAL BRACING TO THE BOTTOM CHORD



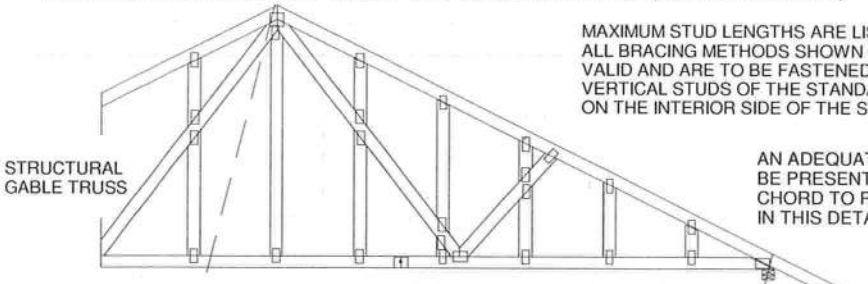
BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES

STRUCTURAL GABLE TRUSSES MAY BE BRACED AS NOTED:
METHOD 1 : ATTACH A MATCHING GABLE TRUSS TO THE INSIDE FACE OF THE STRUCTURAL GABLE AND FASTEN PER THE FOLLOWING NAILING SCHEDULE.
METHOD 2 : ATTACH 2X _ SCABS TO THE FACE OF EACH VERTICAL MEMBER ON THE STRUCTURAL GABLE PER THE FOLLOWING NAILING SCHEDULE. SCABS ARE TO BE OF THE SAME SIZE, GRADE AND SPECIES AS THE TRUSS VERTICALS

NAILING SCHEDULE:
- FOR WIND SPEEDS 120 MPH (ASCE 7-98, 02, 05), 150 MPH (ASCE 7-10) OR LESS, NAIL ALL MEMBERS WITH ONE ROW OF 10d (.131" X 3") NAILS SPACED 6" O.C.
- FOR WIND SPEEDS GREATER 120 MPH (ASCE 7-98, 02, 05), 150 MPH (ASCE 7-10) NAIL ALL MEMBERS WITH TWO ROWS OF 10d (.131" X 3") NAILS SPACED 6" O.C. (2X 4 STUDS MINIMUM)

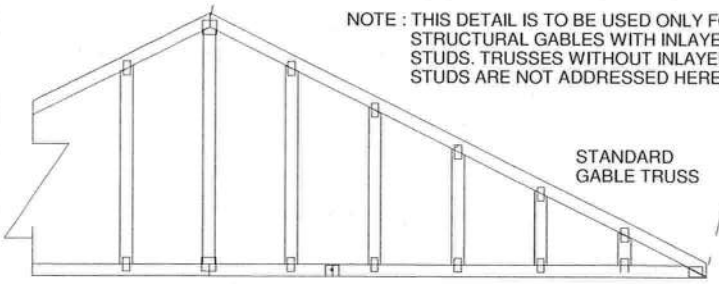


MAXIMUM STUD LENGTHS ARE LISTED ON PAGE 1. ALL BRACING METHODS SHOWN ON PAGE 1 ARE VALID AND ARE TO BE FASTENED TO THE SCABS OR VERTICAL STUDS OF THE STANDARD GABLE TRUSS ON THE INTERIOR SIDE OF THE STRUCTURE.



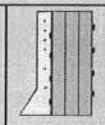
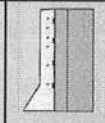
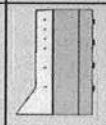
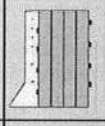
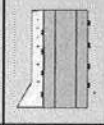
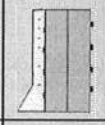
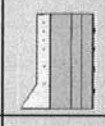
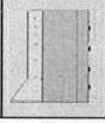
AN ADEQUATE DIAPHRAGM OR OTHER METHOD OF BRACING MUST BE PRESENT TO PROVIDE FULL LATERAL SUPPORT OF THE BOTTOM CHORD TO RESIST ALL OUT OF PLANE LOADS. THE BRACING SHOWN IN THIS DETAIL IS FOR THE VERTICAL/STUDS ONLY.

NOTE : THIS DETAIL IS TO BE USED ONLY FOR STRUCTURAL GABLES WITH INLAYED STUDS. TRUSSES WITHOUT INLAYED STUDS ARE NOT ADDRESSED HERE.



1109 COASTAL BAY
BOYNTON BC, FL 33435

Table 2A: Maximum Concentrated Load Applied to Beam – Wood Screw Connection (lbs)[1]

Beam Configuration		Hanger Type	Wood Screw Length	Fastener Type							
				USP WS				Simpson SDS			
				# Screws				# Screws			
				2	4	6	8	2	4	6	8
3-ply 1¾" (5¼" Beam)		FACE [3]	3½"	1,435	2,870	4,305	5,740	2,040	4,080	6,120	8,160
		TOP [2]	3½"	720	1,435	2,155	2,870	1,020	2,040	3,060	4,080
3½"+1¾" (5¼" Beam)		FACE	3½"	---	---	---	---	---	---	---	---
		TOP [4]	3½"	720	1,435	2,155	2,870	1,020	2,040	3,060	4,080
3½"+1¾" (5¼" Beam)		FACE / TOP [3]	3½"	1,435	2,870	4,305	5,740	2,040	4,080	6,120	8,160
4-ply 1¾" (7" Beam)		FACE [2]	6"[5]	1,055	2,110	3,165	4,220	1,360	2,720	4,080	5,440
		TOP [2]	6"[5]	705	1,405	2,110	2,810	905	1,815	2,720	3,625
2-ply 1¾" + 3½" (7" Beam)		FACE [3]	3½"	1,915	3,825	5,740	7,655	2,720	5,440	8,160	10,880
			6"[5]	2,110	4,220	6,325	8,435	2,720	5,440	8,160	10,880
		TOP [2]	3½"	640	1,275	1,915	2,550	905	1,815	2,720	3,625
			6"[5]	705	1,405	2,110	2,810	905	1,815	2,720	3,625
2-ply 3½" (7" Beam)		FACE / TOP [2]	6"[5]	1,055	2,110	3,165	4,220	930	1,860	2,785	3,715
2-ply 1¾" + 3½" (7" Beam)		FACE / TOP [3]	6"[5]	1,055	2,110	3,165	4,220	1,360	2,720	4,080	5,440
2-ply 1¾" + 3½" (7" Beam)		FACE[4]	6"[5]	1,055	2,110	3,165	4,220	930	1,860	2,785	3,715
		TOP[4]	6"[5]	705	1,405	2,110	2,810	905	1,815	2,720	3,625
5¼" + 1¾" (7" Beam)		FACE / TOP [3]	3½"	1,915	3,825	5,740	7,655	2,720	5,440	8,160	10,880

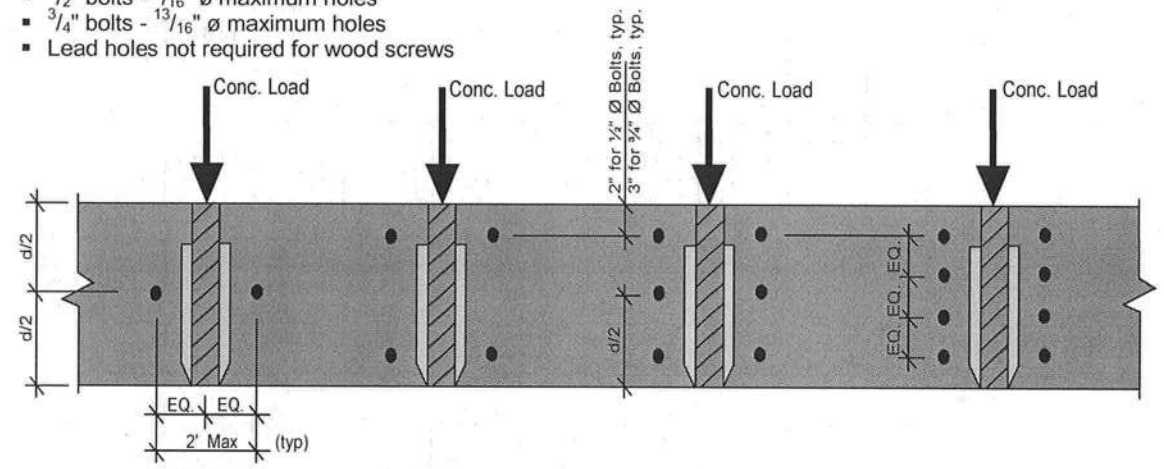
1. See page 4 for table General Notes, connection details and beam depth limitations.
2. Install screws from both sides of beam.
3. Install screws from side opposite hanger only.
4. Install screws from hanger side only.
5. 6" SDS or WS screws can be used with Parallam® PSL and Microllam® LVL, but are not recommended for TimberStrand® LSL.

Table 1, 2A, 2B General Notes

- Connections are based on NDS® 2005 or manufacturer's code report.
- All plies must be the same material and grade.
- Values are for 100% duration of load. Increase 15% for snow load or 25% for non-snow roof load conditions, where code allows.
- Rotational effects should be considered for 7" wide beams loaded from one side only.
- Capacities shown for face mount hanger conditions are based on 16d common (0.162" x 3½") nails installed in the hanger. Other nails used for face mount hanger installations invalidate the capacities in these tables.
- Verify adequacy of beam with all loads applied by using iLevel software or other methods.
- See the iLevel Trus Joist® Beams, Headers, and Columns Specifier's Guide (#TJ-9000) for required connections for uniform side loads.

Bolt or Wood Screw Connection Details

- 1/2" bolts - 9/16" ø maximum holes
- 3/4" bolts - 13/16" ø maximum holes
- Lead holes not required for wood screws



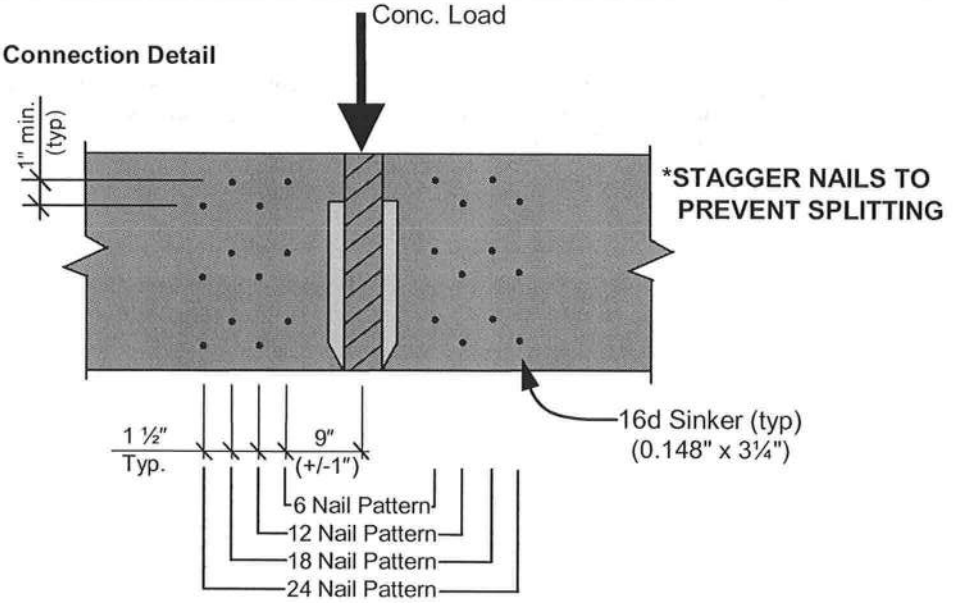
2 Fastener Pattern

4 Fastener Pattern
Min. Beam Depth:
d = 7¼" for ½" ø bolts
d = 9¼" for ¾" ø bolts

6 Fastener Pattern
Min. Beam Depth:
d = 9¼" for ½" ø bolts
d = 14" for ¾" ø bolts

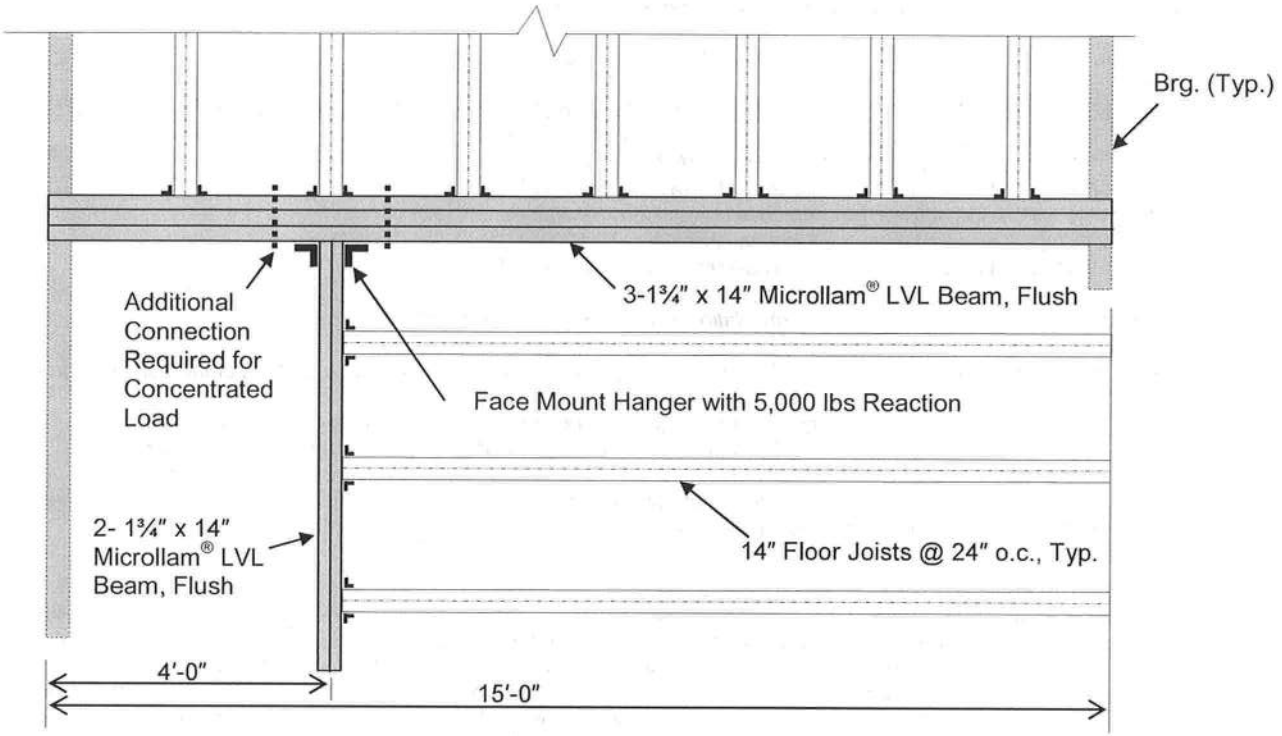
8 Fastener Pattern
Min. Beam Depth:
d = 11¼" for ½" ø bolts
d = 16" for ¾" ø bolts

Nailed Connection Detail



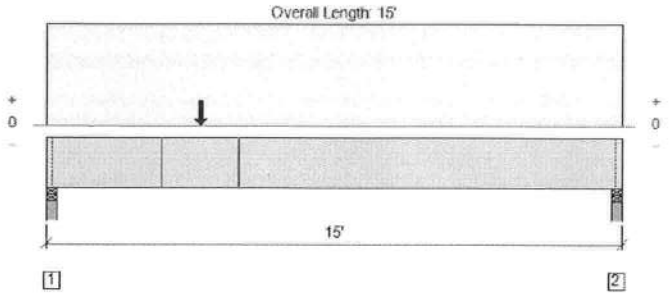
Connection Design Example

Given the floor framing shown below, specify the necessary connections for the a 3-ply Microllam® LVL beam supporting a 2-ply Microllam® LVL beam on one side and floor joists from the other side. The floor joists apply a 500 plf load to the side of the beam while the 2-ply beam reaction is 5,000 lbs. See the following page for the solution.



Partial Framing Plan

3 PIECE(S) 1 3/4" x 14" 1.9E Microllam® LVL PASSED



All Dimensions are Horizontal; Drawing is Conceptual

Design Results	Actual @ Location	Allowed	Result	LDF
Member Reaction (lbs)	7595 @ 2"	7809	Passed (97%)	--
Shear (lbs)	6837 @ 1' 5 1/2"	13965	Passed (49%)	1.0
Moment (Ft-lbs)	25215 @ 4' 11 7/8"	36387	Passed (69%)	1.0
Live Load Defl. (in)	0.356 @ 7' 1 13/16"	0.489	Passed (L/494)	--
Total Load Defl. (in)	0.456 @ 7' 1 7/8"	0.733	Passed (L/386)	--

System : Floor
Member Type : Flush Beam
Building Use : Residential
Building Code : IBC
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Design results assume a fully braced condition where all compression edges (top and bottom) are properly braced to provide lateral stability.
- Bracing (Lu): All compression edges (top and bottom) must be braced at 13' 15/16" o/c unless detailed otherwise. Proper attachment and positioning of lateral bracing is required to achieve member stability.

Supports	Total Bearing	Available Bearing	Required Bearing	Support Reactions (lbs) Dead / Floor / Roof / Snow	Accessories
1 - Stud wall - Spruce Pine Fir	3.50"	3.50"	3.40"	1641 / 5955 / 0 / 0	Blocking
2 - Stud wall - Spruce Pine Fir	3.50"	3.50"	2.33"	1164 / 4045 / 0 / 0	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Loads	Location	Tributary Width	Dead (0.90)	Floor Live (1.00)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
1 - Uniform(PSF)	0 to 15'	1'	100.0	400.0	0.0	0.0	10' Floor
2 - Point(lb)	4'	N/A	1000	4000	0	0	

Location Analysis	Shear (lbs) Actual / Allowed / LDF	Moment (Ft – lbs) Actual / Allowed / LDF	Comments
1 - 3'	6035 / 13965 / 1.0	19186 / 36387 / 1.0	BOLTS LEFT OF HANGER
2 - 5'	39 / 12569 / 0.9	25215 / 36387 / 1.0	BOLTS RIGHT OF HANGER

Forte™ Software Operator	Job Notes

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iLevel® Forte™ v1.1, Design Engine: V4.8.0.1

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