



GTC DESIGN GROUP

**WIND LOAD AND STRUCTURAL CALCULATIONS
FOR**

**Sky Designs
Kapadia Residence**

GARY GILL, PE
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AUTH. # 9461

Project name: KAPADIA RESIDENCE
Project: PF06-999
Client DILIP & PRI
Calculations: Gary Gill, PE
Date: 8/28/2006

Design Basis

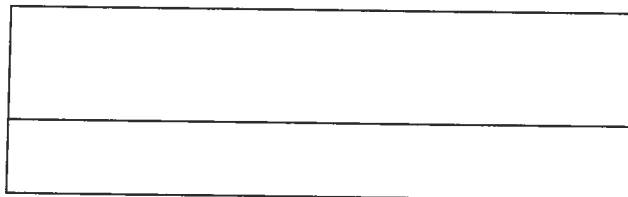
Design Loads

Wind Load	110
Floor Live Load	
Sleep Areas =	30 psf
All Others =	40 psf
Floor Dead Load	10 psf
Wall Dead Load	10 psf
Roof Live Load	20 psf
Roof Dead Load	10 psf

Load Combinations

DL + LL(floor) + LL (roof)
DL + LL(floor) +WL
DL + WL
Wind load

Exposure B



Building Information

Shape	Rectangle
Length	60 ft
Width	47 ft
Type	2 story sog

References

2001 Florida Building Code
ASCE 7-98 Minimum Design Loads for Buildings and Other Structures
AITC Timber Construction Manual

Truss / Rafter Uplift

TR-A

Loading Description	Design Pressure psf (Wind) Normal to surface	Design Pressure psf (Wind) Horizontal	Design Pressure psf (Wind) Vertical	Gravity psf (2/3 Dead Load)	Design Force # (Wind)	Horizontal Components # (Wind)	Vertical Components # (Wind)	Vertical Components # (Gravity)	Net Vertical Component # (Wind + Gravity)
Windward Overhang	-40.58	-25.98	-31.17	6.67	-105.6466	-67.63	-81.16	17.36	-63.80
Windward Roof	-21.37	-13.68	-16.42	6.67	-650.2342	-416.27	-499.52	202.85	-296.67
Leeward Roof	-12.14	-7.77	-9.33	6.67	-369.389	-236.48	-283.77	202.85	-80.92
Leeward Overhang	0.00	0.00	0.00	6.67	0	0.00	0.00	17.36	17.36
Misc. Information									

Total Vertical Uplift (lbs) -424.04

Span (ft) 46.75

Pitch (x:12) 10

Dead Load (psf) 10

Pitch Info 15.62

Reaction at Leeward Wall

R= 151.78 up per ft

Reaction at Windward Wall

A -63.80
 B 3467.379827
 C 2837.361278
 D -828.75
 F -67.63
 G 4054.294325
 H -2303.18826
 I 0.00

R= 272.27 up per ft
 Max uplift at truss end 544.53 lb

TR-B

Loading Description	Design Pressure psf (Wind) Normal to surface	Design Pressure psf (Wind) Horizontal	Design Pressure psf (Wind) Vertical	Gravity psf (2/3 Dead Load)	Design Force # (Wind)	Horizontal Components # (Wind)	Vertical Components # (Wind)	Vertical Components # (Gravity)	Net Vertical Component # (Wind + Gravity)
Windward Overhang	-40.58	-25.98	-31.17	6.67	-105.6466	-67.63	-81.16	17.36	-63.80
Windward Roof	-21.37	-13.68	-16.42	6.67	-730.2095	-467.47	-560.96	227.80	-333.16
Leeward Roof	-12.14	-7.77	-9.33	6.67	-414.8219	-265.56	-318.68	227.80	-90.88
Leeward Overhang	0.00	0.00	0.00	6.67	0	0.00	0.00	17.36	17.36
Misc. Information									

Total Vertical Uplift (lbs) -470.49

Span (ft) 52.5
Pitch (x:12) 10
Dead Load (psf) 10
Pitch Info 15.62

Reaction at Leeward Wall

R= 173.32 up per ft

Reaction at Windward Wall

R= 297.17 up per ft
Max uplift at truss end 594.33 lb

A -63.80
B 4372.771608
C 3578.244513
D -928.55
F -67.63
G 5112.939453
H -2904.589844
I 0.00

TR-C

Loading Description	Design Pressure psf (Wind) Normal to surface	Design Pressure psf (Wind) Horizontal	Design Pressure psf (Wind) Vertical	Gravity psf (2/3 Dead Load)	Design Force # (Wind)	Horizontal Components # (Wind)	Vertical Components # (Wind)	Vertical Components # (Gravity)	Net Vertical Component # (Wind + Gravity)
Windward Overhang	-40.58	-25.98	-31.17	6.67	-105.6466	-67.63	-81.16	17.36	-63.80
Windward Roof	-21.37	-13.68	-16.42	6.67	-625.8939	-400.69	-480.83	195.26	-285.57
Leeward Roof	-12.14	-7.77	-9.33	6.67	-355.5616	-227.63	-273.15	195.26	-77.89
Leeward Overhang	0.00	0.00	0.00	6.67	0	0.00	0.00	17.36	17.36
Misc. Information									

Total Vertical Uplift (lbs) -409.91

Span (ft) 45
Pitch (x:12) 10
Dead Load (psf) 10
Pitch Info 15.62

Reaction at Leeward Wall

R= 145.20 up per ft

Reaction at Windward Wall

R= 264.71 up per ft
Max uplift at truss end 529.41 lb

A -63.80
B 3212.648529
C 2628.914336
D -798.38
F -67.63
G 3756.445313
H -2133.984375
I 0.00

Shearwall Design - N/S Direction

Rigid Diaphragm Analysis

Wind load acting on building

General Data

Roof Pitch (x:12)		10 Roof Dia	15.62
		Length of	
Vertical Roof height		19.58 Building	60
		Width of	
2nd Floor height	8	Building	47
1st Floor height	10		

Wind Pressure per ASCE 7- Normal to surface Case A

Windward Roof - Surface 2	-4.88	psf	Wall -	6.47 psf
			Leeward	
Leeward Roof - Surface 3	-10.98	psf	Wall -	
			Surface 4	-9.99 psf
			Total Wall	16.46 psf

Horizontal loads from wind perpendicular to ridge (N / S)

Roof Pressure (interior)

Windward Roof Horz.(psf)	-3.12
Leeward Roof Horz.(psf)	-7.03
Total	3.91
Tributary area (roof)	898.00
Roof shear values	3506.80

Wall Pressure - 2nd Floor

Sum. of wind. & lee. (psf)	16.46
Tributary area to each Shearwall (sf)	0.00
Wall shear values to each shearwall	0.00

Wall Pressure - 1st Floor

Sum. of wind. & lee. (psf)	16.46
Tributary area to each Shearwall (sf)	342.08
Wall shear values to each shearwall	5630.64

Total shear to top of 2nd floor (lb) per wall (actual)	0.00
Total shear to top of 1st floor (lb) per wall (actual)	9137.44

2nd Floor shearwalls	Shearwall column #		
	1	2	3
Number of shearwall segments in each column			
Shearwall #1 length			
Shearwall #2 length			
Shearwall #3 length			
Lateral load on shear wall column (lbs)			
Percent Full-Height Sheathing			
Shear capacity adjustment			
Shearwall rating (plf) w/ 1.4			
Design Shear Capacity			
Stress Ratio			
uplift at shear ends			
shear and uplift between holddown, v and u			

1st Floor shearwall (ft)

Number of shearwall segments in each column	1	1	1
Full wall length	40.8	34.2	10.7
Shearwall #1 length	20.8	20.2	4.7
Shearwall #2 length		0	0
Wall height ratio (h/b)	0.48	0.50	2.13
Rigidities of shearwalls	6.44	6.22	0.62
Lateral load on shearwall column (lbs) based on rigidity	4645.41	4492.03	429.43
Percent Full-Height Sheathing Shearwall #1	50.98%	59.06%	100.00
Shear capacity adjustment	0.8	0.83	1
Shearwall rating (plf) w/ 1.4 increase for wind	483	483	483
Design Shear Capacity	8037.12	8097.98	2270.10
Stress Ratio	0.58	0.55	0.19
uplift at shear ends	2791.71	2679.25	913.68
shear and uplift between holddown, v and u	279.17	267.93	91.37

Anchor Bolt Shear Capacity plf			
Bolt size / spacing	24"	36"	48"
1/2" dia	422.5	281.67	211.25
5/8" dia	660	440.00	330
3/4" dia	930	620.00	465

Shearwall Design - E/W Direction

Rigid Diaphragm Analysis

Wind load acting on building

General Data

Roof Pitch (x:12)		6 Roof Dia	13.42
		Length of	
Vertical Roof height		11.75 Building	60
		Width of	
2nd Floor height	0	Building	47
1st Floor height	10		

Wind Pressure per ASCE 7- Normal to surface Case B

Windward Wall - Surface 5	-11.56	psf
Leeward Wall - Surface 6	-21.89	psf
Total Wall	10.33	

Horizontal loads from parallel to ridge (N/S)

Roof Pressure (interior)	
Windward Roof Horz. (psf)	-11.56
Leeward Roof Horz. (psf)	-21.89
Total	10.33
Tributary area (roof) to each shearwall (sf)	356.00
Roof shear values to each shearwall	3677.48

Wall Pressure - 2nd Floor

Sum. of wind. & lee. (psf)	0
Tributary area to each Shearwall (sf)	0.00
Wall shear values to each shearwall	0.00

Wall Pressure - 1st Floor

Sum. of wind. & lee. (psf)	10.33
Tributary area to each Shearwall (sf)	347.00
Wall shear values to each shearwall	3584.51

Total shear to top of 2nd floor (lb) per wall (actual)	0.00
Total shear to top of 1st floor (lb) per wall (actual)	7261.99

2nd Floor shearwalls

	Shearwall column #		
	A	B	C
Number of shearwall segments in each column			
Full wall length			
Shearwall #1 length			
Shearwall #2 length			
Shearwall #3 length			
Lateral load on shear wall column (lbs)			
Percent Full-Height Sheathing			
Shear capacity adjustment			
Shearwall rating (plf) w/ 1.4			
Design Shear Capacity			
Stress Ratio			
uplift at shear ends			
shear and uplift between holddown, v and u			

1st Floor shearwall (ft)

Number of shearwall segments in each column	A	B	C
Full wall length	60.8	16.6	32.75
Shearwall #1 length	33.7	10.6	23.75
Shearwall #2 length	0	0	0
Wall height ratio (h/b)	0.30	0.94	0.42
Rigidities of shearwalls	10.91	2.72	7.47
Lateral load on shearwall column (lbs) based on rigidity	3753.64	937.27	2571.08
Percent Full-Height Sheathing			
Shearwall #1	0.55	0.64	0.73
Shear capacity adjustment	1	0.85	0.85
Shearwall rating (plf) w/ 1.4 increase for wind	483	483	483
Design Shear Capacity	16277.10	4351.83	9750.56
Stress Ratio	0.23	0.22	0.26
uplift at shear ends	1113.84	1040.25	1273.60
shear and uplift between holddown, v and u	111.38	104.03	127.36

Anchor Bolt Shear Capacity plf			
Bolt size / spacing	24"	36"	48"
1/2" dia	422.5	281.67	211.25
5/8" dia	660	440.00	330
3/4" dia	930	620.00	465

WIND98 v3-02

Wind Load Design per ASCE 7-98

Description: KAPADIA RESIDENCE**Analysis by:** Gary Gill**User Input Data**

Structure Type	Building	
Basic Wind Speed (V)	110	mph
Structural Category	II	
Exposure	B	
Struc Nat Frequency (n1)	1	Hz
Slope of Roof (Theta)	26.57	Deg
Type of Roof	Hipped	
Kd (Directonality Factor)	0.85	
Eave Height (Eht)	20.00	ft
Ridge Height (RHt)	30.00	ft
Mean Roof Height (Ht)	25.00	ft
Width Perp. To Wind Dir (B)	60.00	ft
Width Paral. To Wind Dir (L)	47.00	ft
Damping Ratio (beta)	0.02	

*Red values should be changed only through "Main Menu"***Calculated Parameters**

Type of Structure	
Height/Least Horizontal Dim	0.53
Flexible Structure	No

Calculated Parameters

Importance Factor	1	
<i>Hurricane Prone Region (V>100 mph)</i>		
Table C6-4 Values		
Alpha =	7.000	
zg =	1200.000	
At =	0.143	
Bt =	0.840	
Am =	0.250	
Bm =	0.450	
Cc =	0.300	
I =	320.00	ft
Epsilon =	0.333	
Zmin =	30.00	ft

Gust Factor Category I: Rigid Structures - Simplified Method

Gust1	For rigid structures (Nat Freq > 1 Hz) use 0.85	0.85
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Gust Factor Category II: Rigid Structures - Complete Analysis

Zm	Zmin	30.00	ft
Izm	$Cc * (33/z)^{0.167}$	0.3048	
Lzm	$I*(zm/33)^{Epsilon}$	309.99	ft
Q	$(1/(1+0.63*((Min(B,L)+Ht)/Lzm)^{0.63}))^{0.5}$	0.8940	
Gust2	$0.925*((1+1.7*Izm*3.4*Q)/(1+1.7*3.4*Izm))$	0.8625	

Gust Factor Summary

G	Since this is not a flexible structure the lessor of Gust1 or Gust2 are used	0.85
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WIND98 v3-02

Wind Load Design per ASCE 7-98

6.5.12.2.1 Design Wind Pressure - Buildings of All Heights (Non-flexible)

Elev ft	Kz	Kzt	qz lb/ft ²	Pressure (lb/ft ²)	
				Windward Wall*	
				+GCpi	-GCpi
30	0.70	1.00	18.45	9.39	15.70
25	0.67	1.00	17.51	8.75	15.06
20	0.62	1.00	16.43	8.02	14.32
15	0.57	1.00	15.13	7.14	13.44

Table 6-7 Internal Pressure Coefficients for Buildings, Gcpi

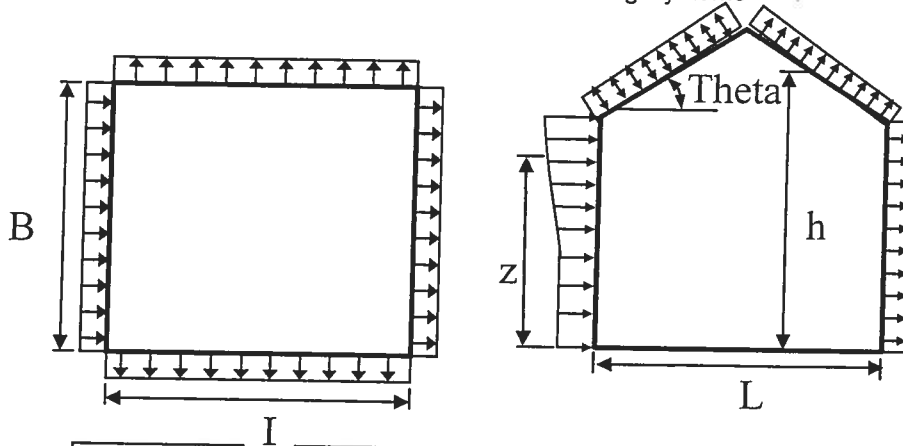
Condition	Gcpi	
	Max +	Max -
Open Buildings	0.00	0.00
Partially Enclosed Buildings	0.55	-0.55
Enclosed Buildings	0.18	-0.18
Enclosed Buildings	0.18	-0.18

WIND98 v3-02

Wind Load Design per ASCE 7-98

Figure 6-3 - External Pressure Coefficients, C_p

Loads on Main Wind-Force Resisting Systems



Variable	Formula	Value	Units
K_h	$2.01 \cdot (H/z_g)^{2/\alpha}$	0.67	
K_{ht}	Topographic factor (Fig 6-2)	1.00	
Q_h	$.00256 \cdot (V)^2 \cdot I \cdot K_h \cdot K_{ht} \cdot K_d$	17.51	psf
K_{hcc}	Comp & Clad: Table 6-5 Case 2	0.70	
Q_{hcc}	$.00256 \cdot V^2 \cdot I \cdot K_{hcc} \cdot K_{ht} \cdot K_d$	18.45	psf

Wall Pressure Coefficients, C_p	
Surface	C_p
Windward Wall (See Figure 6.5.12.2.1 for Pressures)	0.8

Roof Pressure Coefficients, C_p	
Roof Area (sq. ft.)	-
Reduction Factor	1.00

Calculations for Wind Normal to 60 ft Face	C_p	Pressure (psf)	
<i>Additional Runs may be req'd for other wind directions</i>		+GCpi	-GCpi
Leeward Walls (Wind Dir Normal to 60 ft wall)	-0.50	-10.59	-4.29
Side Walls	-0.70	-13.57	-7.27
Roof - Wind Normal to Ridge ($\theta \geq 10$) - for Wind Normal to 60 ft face			
Windward - Max Negative	-0.28	-7.31	-1.01
Windward - Max Positive	0.19	-0.31	6.00
Leeward Normal to Ridge	-0.60	-12.08	-5.78
Overhang Top (Windward)	-0.28	-4.16	-4.16
Overhang Top (Leeward)	-0.60	-8.93	-8.93
Overhang Bottom (Applicable on Windward only)	0.80	11.17	11.17
Roof - Wind Parallel to Ridge (All θ) - for Wind Normal to 60 ft face			
Dist from Windward Edge: 0 ft to 12.5 ft	-0.93	-16.93	-10.62
Dist from Windward Edge: 12.5 ft to 25 ft	-0.89	-16.36	-10.05

* Horizontal distance from windward edge

WIND98 v3-02

Wind Load Design per ASCE 7-98

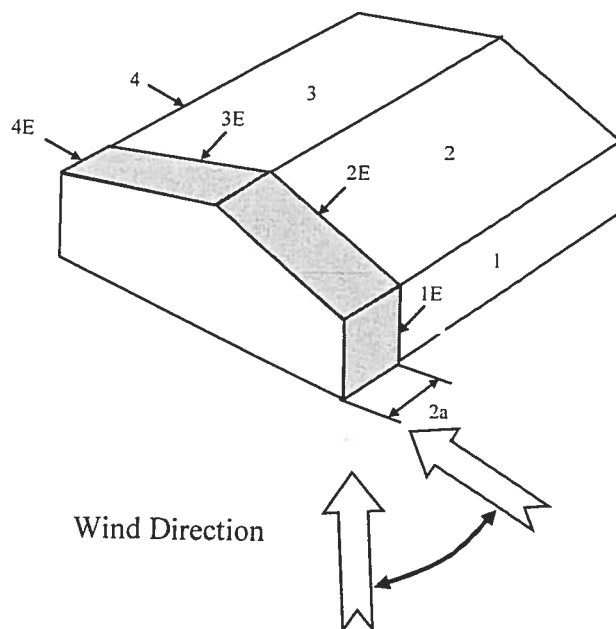
Figure 6-4 - External Pressure Coefficients, GCpf

Loads on Main Wind-Force Resisting Systems w/ Ht ≤ 60 ft

$$\begin{aligned}
 K_h &= 2.01 \cdot (H_t/z_g)^{2/\alpha} &= & 0.67 \\
 K_{ht} &= \text{Topographic factor (Fig 6-2)} &= & 1.00 \\
 Q_h &= 0.00256 \cdot (V)^2 \cdot \text{ImpFac} \cdot K_h \cdot K_{ht} \cdot K_d &= & 17.51
 \end{aligned}$$

Case A						
Surface	GCpf	+GCpi	-GCpi	qh (psf)	Min P (psf)	Max P (psf)
1	0.55	0.18	-0.18	17.51	6.47	12.78
2	-0.10	0.18	-0.18	17.51	-4.88	1.42
3	-0.45	0.18	-0.18	17.51	-10.98	-4.68
4	-0.39	0.18	-0.18	17.51	-9.99	-3.69
5	0.00	0.18	-0.18	17.51	-3.15	3.15
6	0.00	0.18	-0.18	17.51	-3.15	3.15
1E	0.73	0.18	-0.18	17.51	9.59	15.89
2E	-0.19	0.18	-0.18	17.51	-6.47	-0.17
3E	-0.58	0.18	-0.18	17.51	-13.39	-7.09
4E	-0.53	0.18	-0.18	17.51	-12.52	-6.21
5E	0.00	0.18	-0.18	17.51	-3.15	3.15
6E	0.00	0.18	-0.18	17.51	-3.15	3.15

$$* p = q_h * (GCpf - GCpi)$$



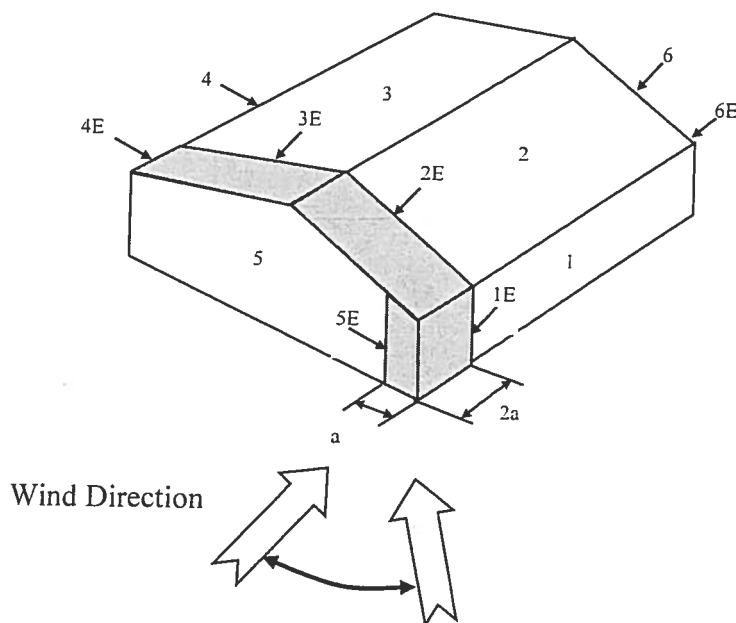
WIND98 v3-02
Wind Load Design per ASCE 7-98

Figure 6-4 - External Pressure Coefficients, GCpf
Loads on Main Wind-Force Resisting Systems w/ Ht ≤ 60 ft

$$\begin{array}{llll} K_h = & 2.01 \cdot (H_t/z_g)^{2/\alpha} & = & 0.67 \\ K_{ht} = & \text{Topographic factor (Fig 6-2)} & = & 1.00 \\ Q_h = & 0.00256 \cdot (V)^2 \cdot \text{ImpFac} \cdot K_h \cdot K_{ht} \cdot K_d & = & 17.51 \end{array}$$

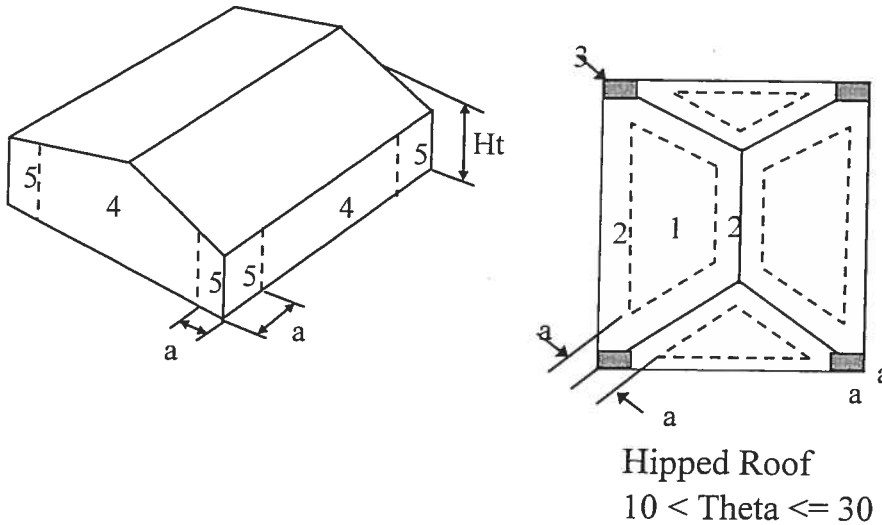
Case B						
Surface	GCpf	+GCpi	-GCpi	qh (psf)	Min P (psf)	Max P (psf)
1	-0.45	0.18	-0.18	17.51	-11.03	-4.73
2	-0.69	0.18	-0.18	17.51	-15.23	-8.93
3	-0.37	0.18	-0.18	17.51	-9.63	-3.33
4	-0.45	0.18	-0.18	17.51	-11.03	-4.73
5	0.40	0.18	-0.18	17.51	3.85	10.16
6	-0.29	0.18	-0.18	17.51	-8.23	-1.93
1E	-0.48	0.18	-0.18	17.51	-11.56	-5.25
2E	-1.07	0.18	-0.18	17.51	-21.89	-15.58
3E	-0.53	0.18	-0.18	17.51	-12.43	-6.13
4E	-0.48	0.18	-0.18	17.51	-11.56	-5.25
5E	0.61	0.18	-0.18	17.51	7.53	13.83
6E	-0.43	0.18	-0.18	17.51	-10.68	-4.38

* $p = q_h \cdot (GC_{pf} - GC_{pi})$



WIND98 v3-02

Wind Load Design per ASCE 7-98

Figure 6-5 - External Pressure Coefficients, G_Cp Loads on Components and Cladding for Buildings w/ $H_t \leq 60$ ft

a = 4.7 ==> 4.70 ft

Component	Width (ft)	Span (ft)	Area (ft ²)	Zone	GCp		Wind Press (lb/ft ²)	
					Max	Min	Max	Min

Note: * Enter Zone 1 through 5, or 1H through 3H for overhangs.

Permit # 25113

**Cal-Tech Testing, Inc.**

- Engineering
- Geotechnical
- Environmental

P.O. Box 1025 • Lake City, FL 32050-1025 • Tel: (386) 763-5533 • Fax: (386) 763-5466

6919 Distribution Ave. S., Unit #6, Jacksonville, FL 32257 • Tel: (904) 262-4646 • Fax: (904) 262-4047

2230 Greenbaze Hwy • Quincy, FL 32351 • Tel: (904) 442-0495 • Fax: (904) 442-1008

REPORT OF IN-PLACE DENSITY TEST

JOB NO.: 08-550

DATE TESTED: 10/10/06

DATE REPORTED: 10/10/06

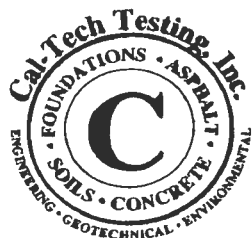
PROJECT:		Kapadia Residence, Lake City, FL						
CLIENT:		Blake Construction Co., 251 SW Shiloh Welcome Road, #102, Lake City, FL 32025						
GENERAL CONTRACTOR:		Blake Construction Company						
EARTHWORK CONTRACTOR:		Blake Construction Company						
INSPECTOR:		Pam Geiger						
ASTM METHOD:		SOIL USE:						
(D-1555) Nuclear		BUILDING FILL						
SPECIFICATION REQUIREMENTS:		95%						
TEST NO.	TEST LOCATION	TEST DEPTH	WET DENSITY (pcf)	MOISTURE PERCENT	DRY DENSITY (pcf)	PROCTOR TEST NO.	PROCTOR VALUE	% MAXIMUM DENSITY
1	16'6" x 10'6" of NW Corner	0-12"	108.3	2.5	106.7	1	107.2	98.6%
2	10'8" x 15'4" of NE Corner	0-12"	104.9	2.8	102.0	1	107.2	95.2%
3	7'4" x 16'4" of SE Corner	0-12"	108.3	2.4	106.8	1	107.2	98.8%
4	10'4" x 20'6" of SW Corner	0-12"	104.3	2.2	102.1	1	107.2	95.2%
REMARKS: The Above Tests Meet Specification Requirements.								
PROCTORS								
PROCTOR NO.	SOIL DESCRIPTION	MAXIMUM DRY UNIT WEIGHT (pcf)	OPT. MOIST.	TYPE				
1	Tennish Gray Fine Sand	107.2	9.8	MODIFIED (ASTM D-1557)				

Respectfully Submitted,
CAL-TECH TESTING, INC.Linda M. Creamer
President - CEO

Reviewed By:

Robert W. Clark
 Date: 10/19/06
 Florida Registration No: 52210

The test results presented in this report are specific only to the samples tested at the time of testing. The tests were performed in accordance with generally accepted methods and standards. Since material conditions can vary between test locations and change with time, sound judgment should be exercised with regard to the use and interpretation of the data.



Cal-Tech Testing, Inc.

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• Geotechnical
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Laboratories

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2230 Greensboro Hwy • Quincy, FL 32351 • Tel(850)442-3495 • Fax(850)442-4008

25113

REPORT OF IN-PLACE DENSITY TEST

JOB NO.: 06-580

DATE TESTED: 10/10/06

DATE REPORTED: 10/19/06

PROJECT:	Kapadia Residence, Lake City, FL
CLIENT:	Blake Construction Co., 291 SW Sisters Welcome Road, #102, Lake City, FL 32025
GENERAL CONTRACTOR:	Blake Construction Company
EARTHWORK CONTRACTOR:	Blake Construction Company
INSPECTOR:	Pam Geiger
ASTM METHOD	SOIL USE
(D-2922) Nuclear	BUILDING FILL
SPECIFICATION REQUIREMENTS: 95%	

TEST NO.	TEST LOCATION	TEST DEPTH	WET DENSITY (lb/ft ³)	MOISTURE PERCENT	DRY DENSITY (lb/ft ³)	PROCTOR TEST NO.	PROCTOR VALUE	% MAXIMUM DENSITY
1	15'S x 10'E of NW Corner	0-12"	108.3	2.5	105.7	1	107.2	98.6%
2	10'S x 15'W of NE Corner	0-12"	104.9	2.8	102.0	1	107.2	95.2%
3	7'N x 15'W of SE Corner	0-12"	106.3	2.4	103.8	1	107.2	96.8%
4	10'N x 20'E of SW Corner	0-12"	104.3	2.2	102.1	1	107.2	95.2%

REMARKS: The Above Tests Meet Specification Requirements.

PROCTORS				
PROCTOR NO.	SOIL DESCRIPTION	MAXIMUM DRY UNIT WEIGHT (lb/ft ³)	OPT. MOIST.	TYPE
1	Tannish Grey Fine Sand	107.2	9.8	MODIFIED (ASTM D-1557)

Respectfully Submitted,
CAL-TECH TESTING, INC.

Linda M. Creamer, CEO
Linda M. Creamer
President - CEO

sw

Reviewed By:

Rahmit W. Charn
Date: 10/19/06
Florida Registration No: 52210

The test results presented in this report are specific only to the samples tested at the time of testing. The tests were performed in accordance with generally accepted methods and standards. Since material conditions can vary between test locations and change with time, sound judgement should be exercised with regard to the use and interpretation of the data.



Cal-Tech Testing, Inc.

- **Engineering**

P.O. Box 1625 • Lake City, FL 32056-1625 • Tel(386)755-3633 • Fax(386)752-5456

- **Geotechnical**

6919 Distribution Ave. S., Unit #5, Jacksonville, FL 32257 • Tel(904)262-4046 • Fax(904)4047

- **Environmental**

2230 Greensboro Hwy • Quincy, FL 32351 • Tel(850)442-3495 • Fax(850)442-4008

Laboratories

REPORT OF LABORATORY COMPACTION TEST

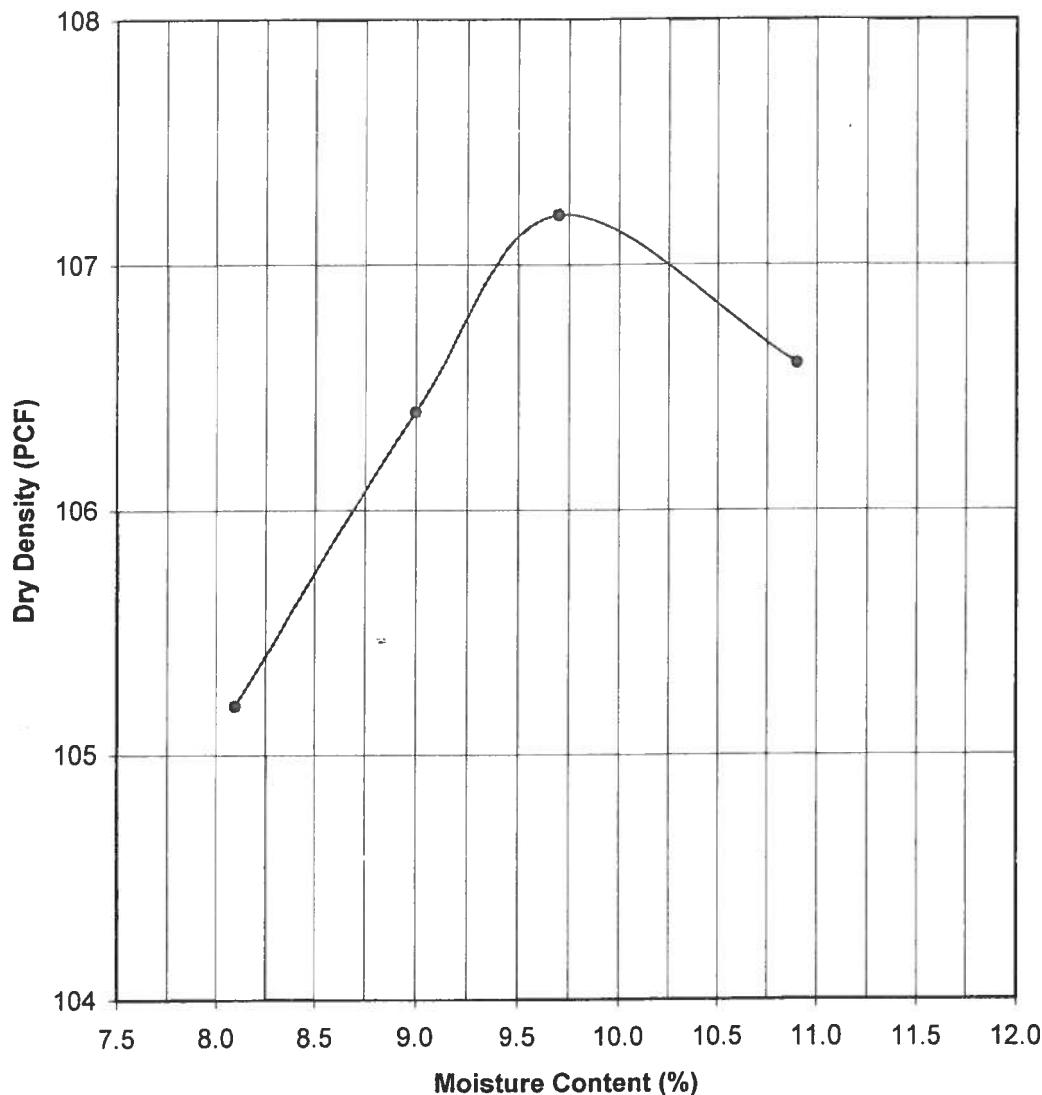
Client:
Project Name:
Project Location:
Contractor:

Blake Construction Co., 291 SW Sisters Welcome Road, #102, Lake City, FL 32025
Kapadia Residence
Lake City, FL
Blake Construction Co.

File No: 06-580

Date: 10/16/2006

Lab No: 9085



PROCTOR DATA

Proctor No.: 1

Modified Proctor ☒
(ASTM D-1557)

Standard Proctor ☐
(ASTM D-698)

Maximum Dry
Dens. Pcf: 107.2

Optimum Moisture
Percent: 9.8

The test results presented in this report are specific only to the samples tested at the time of testing. The tests were performed in accordance with generally accepted methods and standards. Since material conditions can vary between test locations and change with time, sound judgement should be exercised with regard to the use and interpretation of the data.

Sample Description:

Tannish Grey Fine Sand

Sample Location:

Stockpile and Building Fill

Proposed Use:

Building Pad

Sampled By:

Pam Geiger

Date: 10/10/2006

Tested By:

Tim Cassidy

Date: 10/12/2006

Remarks:

1cc: Client

1cc: File

Linda Creamer, CEO

Linda M. Creamer

President - CEO

Reviewed By: *Rahunt W. Chen*

Date: 10/18/06

FL Registration No: 52210

OCT-19-2006 11:03A FROM: CAL TECH TESTING

3867525456

TO: 7196708

P.1

25113

**Cal-Tech Testing, Inc.**

• Engineering
• Geotechnical
• Environmental
Laboratories

P.O. Box 1625 • Lake City, FL 32056-1625 • Tel(386)755-3533 • Fax(386)752-5458

6819 Distribution Ave. S., Unit #5, Jacksonville, FL 32257 • Tel(904)262-4048 • Fax(904)262-4047

2230 Greensboro Hwy • Quincy, FL 32351 • Tel(850)442-3495 • Fax(850)442-4008

REPORT OF IN-PLACE DENSITY TEST

JOB NO.: 08-580

DATE TESTED: 10/10/06

DATE REPORTED: 10/19/06

PROJECT:	Kapadia Residence, Lake City, FL
CLIENT:	Blake Construction Co., 291 SW Sisters Welcome Road, #102, Lake City, FL 32026
GENERAL CONTRACTOR:	Blake Construction Company
EARTHWORK CONTRACTOR:	Blake Construction Company
INSPECTOR:	Pam Gelger
ASTM METHOD	SOIL USE
(D-2922) Nuclear	BUILDING FILL
SPECIFICATION REQUIREMENTS: 95%	

TEST NO.	TEST LOCATION	TEST DEPTH	WET DENSITY (lb/ft ³)	MOISTURE PERCENT	DRY DENSITY (lb/ft ³)	PROCTOR TEST NO.	PROCTOR VALUE	% MAXIMUM DENSITY
1	15'S x 10'E of NW Corner	0-12"	108.3	2.5	105.7	1	107.2	98.6%
2	10'S x 15'W of NE Corner	0-12"	104.9	2.8	102.0	1	107.2	95.2%
3	7'N x 15'W of SE Corner	0-12"	108.3	2.4	103.8	1	107.2	98.8%
4	10'N x 20'E of SW Corner	0-12"	104.3	2.2	102.1	1	107.2	95.2%

REMARKS: The Above Tests Meet Specification Requirements.

PROCTORS				
PROCTOR NO.	SOIL DESCRIPTION	MAXIMUM DRY UNIT WEIGHT (lb/ft ³)	OPT. MOIST.	TYPE
1	Tannish Grey Fine Sand	107.2	9.8	MODIFIED (ASTM D-1557)

Respectfully Submitted,
CAL-TECH TESTING, INC.

Linda M. Creamer
President - CEO

ew

The test results presented in this report are specific only to the samples tested at the time of testing. The tests were performed in accordance with generally accepted methods and standards. Since material conditions can vary between test locations and change with time, sound judgement should be exercised with regard to the use and interpretation of the data.

Reviewed By:

Robert W. Clark
Date: 10/19/06
Florida Registration No: 62210



**WIND LOAD AND STRUCTURAL CALCULATIONS
FOR**

**Sky Designs
Kapadia Residence**

A handwritten signature in black ink, which appears to be 'Gary Gill', is written over the date '10/9/08'. The signature is fluid and cursive.

GARY GILL, PE
GTC DESIGN GROUP, LLC
P.O. BOX 187
LIVE OAK, FL 32064
386-362-3678
386-362-6133 (FAX)
AUTH. # 9461

Project name: KAPADIA RESIDENCE
Project: PF06-194
Client DILIP & PRI
Calculations: Gary Gill, PE
Date: 10/10/2006

Design Basis

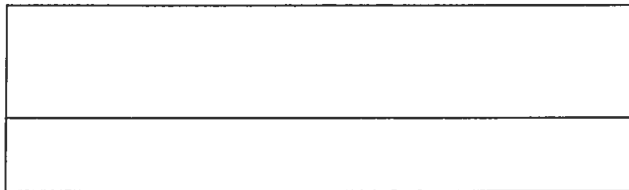
Design Loads

Wind Load	110
Floor Live Load	
Sleep Areas =	30 psf
All Others =	40 psf
Floor Dead Load	10 psf
Wall Dead Load	10 psf
Roof Live Load	20 psf
Roof Dead Load	10 psf

Load Combinations

DL + LL(floor) + LL (roof)
DL + LL(floor) +WL
DL + WL
Wind load

Exposure B



Building Information

Shape	Rectangle
Length	60 ft
Width	47 ft
Type	2 story sog

References

2004 Florida Building Code
ASCE 7-02 Minimum Design Loads for Buildings and Other Structures
AITC Timber Construction Manual

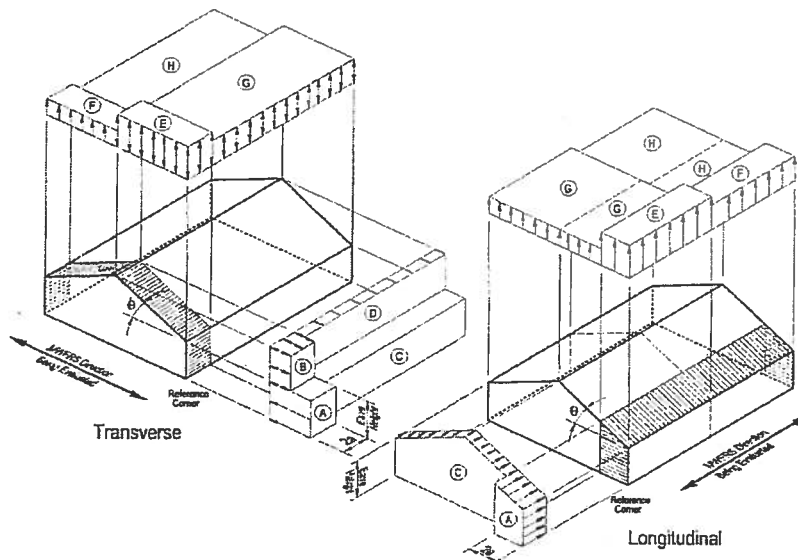
WIND02 v2-21

Simplified Wind Load Design (Method 1) per ASCE 7-02

Description: Kapadia

Analysis by: Gary Gill

V	Basic Wind Speed	110 mph
Cat	Structural Category (I, II, III, and IV)	II
Exp	Exposure Category (B, C, or D)	B
RHt	Ridge Height	30 ft
Eht	Eave Height	20 ft
Ht	Mean Roof Height of Building	25.00 ft
Theta	Roof Angle	18.43 Deg
L	Length of Building (If Gabled roof, along Ridge)	47 ft
B	Width of Building (Perpendicular to Ridge)	60 ft
Lambda	Adjustment Factor for Building Height and Exposure	1.00
I	Importance Factor	1.00
a	10% of Least Horiz Dim or 0.4h, whichever is less	4.70 ft
2a	Length over which Zone A acts on Each Corner	9.40 ft



Wind Pressure ps (psf) on Main Wind Force Resisting System (MWFRS)										
Load Case	Zones									
	Horizontal Pressures				Vertical Pressures				Overhangs	
	A	B	C	D	E	F	G	H	EOH	GOH
1	25.82	-7.31	17.17	-4.12	-23.10	-15.72	-16.00	-11.98	-32.30	-25.30
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes:

* ps = Lambda * I * ps30

Simplified Wind Load Design (Method 1) per ASCE 7-02

Analysis by: Gary Gill



Wind Pressure ps (psf) on Components and Cladding (C&C)

Notes:

www.mecaconsulting.com

PF06-194



Project name: MIKE HUNTER (HOUSE)
 Project number: PF06-078
 Date: 10/10/2006
 Client: MIKE HUNTER
 Calc's by: GG

RAFTER LOADS

Element	Spacing (ft)	Length (ft)	Pitch (:12)	Loads							
				Dead (psf)	Live (psf)	w dead "D" (plf)	w live "L" (plf)	D+L	Wind (psf)	w wind "W" (plf)	0.6D+W
Rafter 1	4	14	12	10	20	56.57	80.00	136.57	-31.91	-116.94	-83.00
Rafter 2	4	14	5.25	10	20	43.66	80.00	123.66	-34.14	-125.11	-98.91
Rafter 3	4	7	12	10	20	56.57	80.00	136.57	-30.64	-86.66	-52.72
0	0	0	0	0	0	0.00	0.00	0.00	0.00	0	0
0	0	0	0	0	0	0.00	0.00	0.00	0.00	0	0
0	0	0	0	0	0	0.00	0.00	0.00	0.00	0	0

RIDGE BEAMS

Element	Tributary Width (ft)	w dead "D" (plf)	w live "L" (plf)	D+L	Wind (psf)	w wind "W" (plf)	0.6D+W
Ridge Beam 1	14	197.99	280.00	477.99	-31.91	-631.79	-512.99
Ridge Beam 2	7	98.99	140.00	238.99	-34.14	-337.97	-278.57
0	0	0.00	0.00	0.00	0.00	0.00	0.00

Load factor based on slope

pitch (x/12)

12

***pitch of 12 used as conservative

Load factor:

1.41

WALL LOADS

Dead (psf)	Wall Height (ft)	w dead "D" (plf)
8	8	64

***only used if wall is load bearing

FLOOR JOIST

Element	Spacing	Dead (psf)	Live (psf)	w dead "D" (plf)	w live "L" (plf)	D+L (plf)
Floor Joist 1	2.67	10	40	26.70	106.80	133.50
Floor Joist 2	1.33	10	40	13.30	53.20	66.50
0 2004 Florida		0	0	#VALUE!	#VALUE!	#VALUE!
0 ASCE 7-02		0	0	#VALUE!	#VALUE!	#VALUE!

GIRDERS

Element	Tributary Width (ft)	Dead (psf)	Live (psf)	w dead (plf)	w live (plf)
Floor Girder 1	14	10	40	140.00	560.00
Floor Girder 2	14	10	40	140.00	560.00
0	0	0	0	0.00	0.00
0	0	0	0	0.00	0.00

BEAMS

Element	Tributary Width (ft)	Dead (psf)	Live (psf)	w dead (plf)	w live (plf)
0	0	0	0	64.00	0.00
0	0	0	0	0.00	0.00
0	0	0	0	0.00	0.00
0	0	0	0	0.00	0.00

Truss / Rafter Uplift

TR-A

PF06-194

Loading Description	Design Pressure psf (Wind) Normal to surface	Design Pressure psf (Wind) Horizontal	Design Pressure psf (Wind) Vertical	Gravity psf (2/3 Dead Load)	Design Force # (Wind)	Horizontal Components # (Wind)	Vertical Components # (Wind)	Vertical Components # (Gravity)	Net Vertical Component # (Wind + Gravity)
Windward Overhang	-40.58	-25.98	-31.17	6.67	-105.6466	-67.63	-81.16	17.36	-63.80
Windward Roof	-21.37	-13.68	-16.42	6.67	-650.2342	-416.27	-499.52	202.85	-296.67
Leeward Roof	-12.14	-7.77	-9.33	6.67	-369.389	-236.48	-283.77	202.85	-80.92
Leeward Overhang	0.00	0.00	0.00	6.67	0	0.00	0.00	17.36	17.36
Misc. Information									

Total Vertical Uplift (lbs) -424.04

Span (ft) 46.75

Pitch (x:12) 10

Dead Load (psf) 10

Pitch Info 15.62

Reaction at Leeward Wall

R= 151.78 up per ft

Reaction at Windward Wall

R= 272.27 up per ft
Max uplift at truss end

544.53 lb

- A -63.80
- B 3467.379827
- C 2837.361278
- D -828.75
- F -67.63
- G 4054.294325
- H -2303.18826
- I 0.00

TR-B

Loading Description	Design Pressure psf (Wind) Normal to surface	Design Pressure psf (Wind) Horizontal	Design Pressure psf (Wind) Vertical	Gravity psf (2/3 Dead Load)	Design Force # (Wind)	Horizontal Components # (Wind)	Vertical Components # (Wind)	Vertical Components # (Gravity)	Net Vertical Component # (Wind + Gravity)
Windward Overhang	-40.58	-25.98	-31.17	6.67	-105.6466	-67.63	-81.16	17.36	-63.80
Windward Roof	-21.37	-13.68	-16.42	6.67	-730.2095	-467.47	-560.96	227.80	-333.16
Leeward Roof	-12.14	-7.77	-9.33	6.67	-414.8219	-265.56	-318.68	227.80	-90.88
Leeward Overhang	0.00	0.00	0.00	6.67	0	0.00	0.00	17.36	17.36
Misc. Information									
Span (ft)	52.5								
Pitch (x:12)	10								
Dead Load (psf)	10								
Pitch Info	15.62								
Total Vertical Uplift (lbs)									-470.49

Reaction at Leeward Wall

R= 122.85 up per ft

Reaction at Windward Wall

R= 347.84 up per ft
Max uplift at truss end

695.27 lb

- A -63.80
- B 4372.771608
- C 2004 Florida Building Code
- D ASCE 7-02 Minimum Design Loads for Buildings and Other Structures
- F -67.63
- G 5112.939453
- H -2904.589844
- I 0.00

TR-C

Loading Description	Design Pressure psf (Wind) Normal to surface	Design Pressure psf (Wind) Horizontal	Design Pressure psf (Wind) Vertical	Gravity psf (2/3 Dead Load)	Design Force # (Wind)	Horizontal Components # (Wind)	Vertical Components # (Wind)	Vertical Components # (Gravity)	Net Vertical Component # (Wind + Gravity)
Windward Overhang	-40.58	-25.98	-31.17	6.67	-105.6466	-67.63	-81.16	17.36	-63.80
Windward Roof	-21.37	-13.68	-16.42	6.67	-625.8939	-400.69	-480.83	195.26	-285.57
Leeward Roof	-12.14	-7.77	-9.33	6.67	-355.5616	-227.63	-273.15	195.26	-77.89
Leeward Overhang	0.00	0.00	0.00	6.67	0	0.00	0.00	17.36	17.36
Misc. Information									

Total Vertical Uplift (lbs) -409.91

Span (ft) 45
Pitch (x:12) 10
Dead Load (psf) 10
Pitch Info 15.62

Reaction at Leeward Wall

R= 145.20 up per ft

Reaction at Windward Wall

R= 264.71 up per ft
Max uplift at truss end 529.41 lb

A -63.80
B 3212.648529
C 2628.914336
D -798.38
F -67.63
G 3756.445313
H -2133.984375
I 0.00

Shearwall Design - N/S Direction

Rigid Diaphragm Analysis

PF06-194

Wind load acting on building

General Data

Roof Pitch (x:12)		10	Roof Dia	15.62
			Length of	
Vertical Roof height		19.58	Building	60
			Width of	
2nd Floor height	8		Building	47
1st Floor height	10			

Wind Pressure per ASCE 7- Normal to surface Case A

Windward Roof - Surface 2	-4.88	psf	Wall -	6.47 psf
			Leeward	
Leeward Roof - Surface 3	-10.98	psf	Wall -	
			Surface 4	-9.99 psf
			Total Wall	16.46 psf

Horizontal loads from wind perpendicular to ridge (N / S)

Roof Pressure (interior)

Windward Roof Horz. (psf)	-3.12
Leeward Roof Horz. (psf)	-7.03
Total	3.91
Tributary area (roof)	898.00
Roof shear values	3506.80

Wall Pressure - 2nd Floor

Sum. of wind. & lee. (psf)	16.46
Tributary area to each Shearwall (sf)	0.00
Wall shear values to each shearwall	0.00

Wall Pressure - 1st Floor

Sum. of wind. & lee. (psf)	16.46
Tributary area to each Shearwall (sf)	342.08
Wall shear values to each shearwall	5630.64

Total shear to top of 2nd floor (lb) per wall (actual)	0.00
Total shear to top of 1st floor (lb) per wall (actual)	9137.44

2nd Floor shearwalls

	Shearwall column #		
	1	2	3
Number of shearwall segments in each column			
Shearwall #1 length			
Shearwall #2 length			
Shearwall #3 length			
Lateral load on shear wall column (lbs)	2004 Florida Building Code		
Percent Full-Height Sheathing	ASCE 7-02 Minimum Design Loads for Buildings and Other Structures		
Shear capacity adjustment			
Shearwall rating (plf) w/ 1.4			
Design Shear Capacity			
Stress Ratio			
uplift at shear ends			
shear and uplift between holddown, v and u			

1st Floor shearwall (ft)

Number of shearwall segments in each column	1	1	1
Full wall length	40.8	34.2	10.7
Shearwall #1 length	20.8	20.2	4.7
Shearwall #2 length		0	0
Wall height ratio (h/b)	0.48	0.50	2.13
Rigidities of shearwalls	6.44	6.22	0.62
Lateral load on shearwall column (lbs) based on rigidity	4645.41	4492.03	429.43
Percent Full-Height Sheathing			
Shearwall #1	50.98%	59.06%	100.00
Shear capacity adjustment	0.8	0.83	1
Shearwall rating (plf) w/ 1.4 increase for wind	483	483	483
Design Shear Capacity	8037.12	8097.98	2270.10
Stress Ratio	0.58	0.55	0.19
uplift at shear ends	2791.71	2679.25	913.68
shear and uplift between holddown, v and u	279.17	267.93	91.37

Anchor Bolt Shear Capacity plf			
Bolt size / spacing	24"	36"	48"
1/2" dia	422.5	281.67	211.25
5/8" dia	660	440.00	330
3/4" dia	930	620.00	465

Shearwall Design - E/W Direction

Rigid Diaphragm Analysis

PF06-194

Wind load acting on building

General Data

Roof Pitch (x:12)		6 Roof Dia	13.42
		Length of	
Vertical Roof height		11.75 Building	60
		Width of	
2nd Floor height	0	Building	47
1st Floor height	10		

Wind Pressure per ASCE 7- Normal to surface Case B

Windward Wall - Surface 5	-11.56	psf
Leeward Wall - Surface 6	-21.89	psf
Total Wall	10.33	

Horizontal loads from parallel to ridge (N/S)

Roof Pressure (interior)	
Windward Roof Horz.(psf)	-11.56
Leeward Roof Horz.(psf)	-21.89
Total	10.33
Tributary area (roof) to each shearwall (sf)	356.00
Roof shear values to each shearwall	3677.48

Wall Pressure - 2nd Floor

Sum. of wind. & lee. (psf)	0
Tributary area to each Shearwall (sf)	0.00
Wall shear values to each shearwall	0.00

Wall Pressure - 1st Floor

Sum. of wind. & lee. (psf)	10.33
Tributary area to each Shearwall (sf)	347.00
Wall shear values to each shearwall	3584.51

Total shear to top of 2nd floor (lb) per wall (actual)	0.00
Total shear to top of 1st floor (lb) per wall (actual)	7261.99

2nd Floor shearwalls	Shearwall column #		
	A	B	C
Number of shearwall segments in each column			
Full wall length	2004 Florida Building Code		
Shearwall #1 length	ASCE 7-02 Minimum Design Loads for Buildings and		
Shearwall #2 length			
Shearwall #3 length			
Lateral load on shear wall column (lbs)			
Percent Full-Height Sheathing			
Shear capacity adjustment			
Shearwall rating (plf) w/ 1.4			
Design Shear Capacity			
Stress Ratio			
uplift at shear ends			
shear and uplift between holddown, v and u			

1st Floor shearwall (ft)

Number of shearwall segments in each column	A	B	C
Full wall length	60.8	16.6	32.75
Shearwall #1 length	33.7	10.6	23.75
Shearwall #2 length	0	0	0
Wall height ratio (h/b)	0.30	0.94	0.42
Rigidities of shearwalls	10.91	2.72	7.47
Lateral load on shearwall column (lbs) based on rigidity	3753.64	937.27	2571.08
Percent Full-Height Sheathing			
Shearwall #1	0.55	0.64	0.73
Shear capacity adjustment	1	0.85	0.85
Shearwall rating (plf) w/ 1.4 increase for wind	483	483	483
Design Shear Capacity	16277.10	4351.83	9750.56
Stress Ratio	0.23	0.22	0.26
uplift at shear ends	1113.84	1040.25	1273.60
shear and uplift between holddown, v and u	111.38	104.03	127.36

Anchor Bolt Shear Capacity plf			
Bolt size / spacing	24"	36"	48"
1/2" dia	422.5	281.67	211.25
5/8" dia	660	440.00	330
3/4" dia	930	620.00	465

GTC Design Group, LLC
P.O. Box 187
Live Oak, FL 32064
(Phone) 386.362.3678
(Fax) 386.362.6133
ggill@gtcdesigngroup.com



GTC DESIGN GROUP

March 15, 2007

Columbia County Building and Zoning Department
Building Inspector
135 NE Hernando Ave, Suite B-21
Lake City, FL 32055

**SUBJECT: STRAPPING AND ANCHORING INSPECTION
KAPADIA RESIDENCE - BLAKE CONSTRUCTION**

On March 13, 2007, per Blake Construction request, I inspected the above mentioned project. The scope of the inspection included the wall flat strapping, threaded anchor rods, and the truss connections. The flat strapping is adequate. The threaded rods are spaced on the average 4 ft. on centers. Additional rods are located at each wall openings. The anchor rods are installed properly. All of the truss connectors are adequate.

If you have any questions or require additional information, please contact me at your convenience.

Thank you,

G. Gill
Gary Gill, P.E. #51942
Project Manager

25113

COLUMBIA COUNTY DEPARTMENT OF BUILDING AND ZONING OCCUPANCY

COLUMBIA COUNTY, FLORIDA

Department of Building and Zoning Inspection

This Certificate of Occupancy is issued to the below named permit holder for the building and premises at the below named location, and certifies that the work has been completed in accordance with the Columbia County Building Code.

Parcel Number 33-3S-16-02434-111

Building permit No. 000025113

Use Classification SFD, UTILITY

Fire: 77.00

Permit Holder BLAKE LUNDE

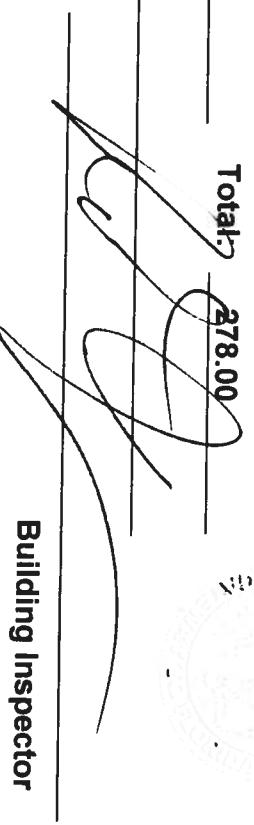
Waste: 201.00

Owner of Building DILIP & PRIYA KAPADIA

Total: 278.00

Location: 330 SW RIDGEVIEW PLACE, LAKE CITY, FL

Date: 10/17/2007



Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)

Project Information for:		L202722	
Builder:	BLAKE CONST.	Date:	9/26/2006
Lot:	N/A	Start Number:	1034
Subdivision:	330 SW RIDGEVIEW PL	SEI Ref:	L202722
County or City:	COLUMBIA COUNTY		
Truss Page Count:	40		

Truss Design Load Information (UNO)		Design Program: MiTek	
Gravity	Wind	Building Code: FBC2004	
Roof (psf): 42	Wind Standard: ASCE 7-02		
Floor (psf): 55	Wind Speed (mph): 110		

Note: See individual truss drawings for special loading conditions

Building Designer, responsible for Structural Engineering: (See attached)	
LUNDE, BLAKE N II RR 0067618	
Address:	2250 SW JAGUAR DR LAKE CITY, FL. 32025
Designer:	90

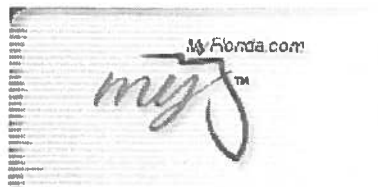
Truss Design Engineer: Thomas, E. Miller, P.E., 56877 - Byron K. Anderson, PE FL 60987	
Company:	Structural Engineering and Inspections, Inc. EB 9196
Address:	16105 N. Florida Ave, Ste B, Lutz, FL 33549
Phone:	813-849-5769

Notes:

1. Truss Design Engineer is responsible for the individual trusses as components only.
2. Determination as to the suitability and use of these truss components for the structure is the responsibility of the Building Designer of Record, as defined in ANSI/TPI
3. The seal date shown on the individual truss component drawings must match the seal date on this index sheet.
4. Trusses designed for vertical loads only, unless noted otherwise.
5. Where hangers are shown, Carried Member hanger capacity per Simpson C-2006 (SYP/Full Nailing Value) as an individual component. Building Designer shall verify the suitability and use of Carrying Member hanger capacity.

#	Truss ID	Dwg. #	Seal Date	#	Truss ID	Dwg. #	Seal Date
1	CJ1	0926061034	9/26/2006				
2	CJ1C	0926061035	9/26/2006				
3	CJ2	0926061036	9/26/2006				
4	CJ2A	0926061037	9/26/2006				
5	CJ2B	0926061038	9/26/2006				
6	CJ3	0926061039	9/26/2006				
7	CJ3A	0926061040	9/26/2006				
8	CJ3C	0926061041	9/26/2006				
9	CJ6	0926061042	9/26/2006				
10	CJ6A	0926061043	9/26/2006				
11	CJ7	0926061044	9/26/2006				
12	EJ2	0926061045	9/26/2006				
13	EJ4	0926061046	9/26/2006				
14	EJ5	0926061047	9/26/2006				
15	EJ5A	0926061048	9/26/2006				
16	HJ2	0926061049	9/26/2006				
17	HJ4	0926061050	9/26/2006				
18	HJ5	0926061051	9/26/2006				
19	HJ5A	0926061052	9/26/2006				
20	PB1	0926061053	9/26/2006				
21	T01	0926061054	9/26/2006				
22	T01G	0926061055	9/26/2006				
23	T02	0926061056	9/26/2006				
24	T03	0926061057	9/26/2006				
25	T04	0926061058	9/26/2006				
26	T05	0926061059	9/26/2006				
27	T06	0926061060	9/26/2006				
28	T07	0926061061	9/26/2006				
29	T08	0926061062	9/26/2006				
30	T09	0926061063	9/26/2006				
31	T10	0926061064	9/26/2006				
32	T10G	0926061065	9/26/2006				
33	T12	0926061066	9/26/2006				
34	T13	0926061067	9/26/2006				
35	T14	0926061068	9/26/2006				
36	T14G	0926061069	9/26/2006				
37	T15	0926061070	9/26/2006				
38	T15A	0926061071	9/26/2006				
39	T16	0926061072	9/26/2006				
40	T16G	0926061073	9/26/2006				

SEP 26 2006



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Licensee Details**Licensee Information**

Name: **LUNDE, BLAKE N II (Primary Name)**
BLAKE CONSTRUCTION (DBA Name)
Main Address: **872 SW JAGUAR DR**
LAKE CITY Florida 32025

License Mailing:

LicenseLocation: **2250 SW JAGUAR DR**
LAKE CITY FL 32025

License Information

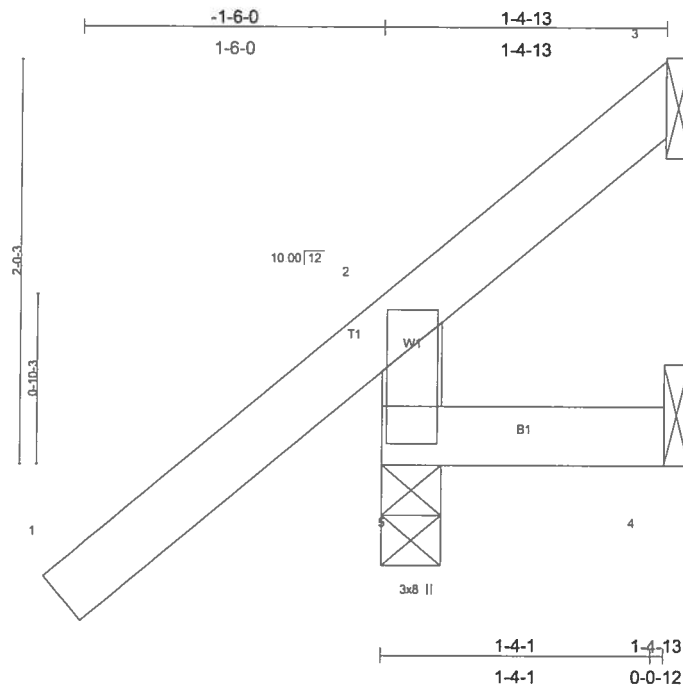
License Type: **Registered Residential Contractor**
Rank: **Reg Residential**
License Number: **RR0067618**
Status: **Current,Active**
Licensure Date: **03/13/2001**
Expires: **08/31/2005**

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Job L202722	Truss CJ1	Truss Type JACK	Qty 3	Ply 1	KAPADIA RESIDENCE
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Builders FirstSource, Lake City, FL 32055

6.200 s Jul 13 2005 MiTek Industries, Inc. Tue Sep 26 12:09:19 2006 Page 1



Scale = 1:11.0

Plate Offsets (X,Y): [5.0-4-12,0-1-8]

LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCDL 20.0	Plates Increase 1.25	TC 0.30	Vert(LL) 0.00	5	>999	240		MT20	244/190
BCDL 7.0	Lumber Increase 1.25	BC 0.05	Vert(TL) 0.00	5	>999	180			
BCLL 10.0	Rep Stress Incr YES	WB 0.00	Horz(TL) -0.00	3	n/a	n/a			
BCDL 5.0	Code FBC2004/TPI2002	(Matrix)							
								Weight: 9 lb	

LUMBER

TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2
 WEBS 2 X 4 SYP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-4-13 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 5=212/0-3-8, 4=-1/Mechanical, 3=-12/Mechanical

Max Horz 5=141(load case 5)
 Max Uplift 5=-148(load case 5), 4=-4(load case 6), 3=-14(load case 6)
 Max Grav 5=212(load case 1), 4=7(load case 3), 3=22(load case 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-173/181, 1-2=0/60, 2-3=-51/13
 BOT CHORD 4-5=0/0

JOINT STRESS INDEX

2 = 0.00 and 5 = 0.54

NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 148 lb uplift at joint 5, 4 lb uplift at joint 4 and 14 lb uplift at joint 3.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	KAPADIA RESIDENCE
L202722	CJ1C	JACK	2	1	Job Reference (optional)

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

LOADING (psf)	SPACING 2-0-0	CSI	DEFL in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.28	Vert(LL) 0.00	5	>999	240	MT20
TCDL 7.0	Lumber Increase 1.25	BC 0.04	Vert(TL) 0.00	5	>999	180	244/190
BCLL 10.0	Rep Stress Incr YES	WB 0.00	Horz(TL) -0.00	3	n/a	n/a	
BCDL 5.0	Code FBC2004/TP12002	(Matrix)					Weight: 7 lb

LUMBER

TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied or 1-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(lb/size) 5=226/0-3-8, 4=-14/Mechanical, 3=-48/Mechanical
Max Horz 5=126(load case 5)
Max Uplift 5=-184(load case 5), 4=-14(load case 1), 3=-48(load case 1)
Max Grav 5=226(load case 1), 4=4(load case 3), 3=60(load case 5)

FORCES

TOP CHORD 2-5=-187/221, 1-2=0/60, 2-3=-60/45
BOT CHORD 4-5=0/0

JOINT STRESS INDEX

2 = 0.00 and 5 = 0.50

NOTES

1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDF=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.

2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi

3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 184 lb uplift at joint 5, 14 lb uplift at joint 4 and 48 lb uplift at joint 3.

LOAD CASE(S) Standard

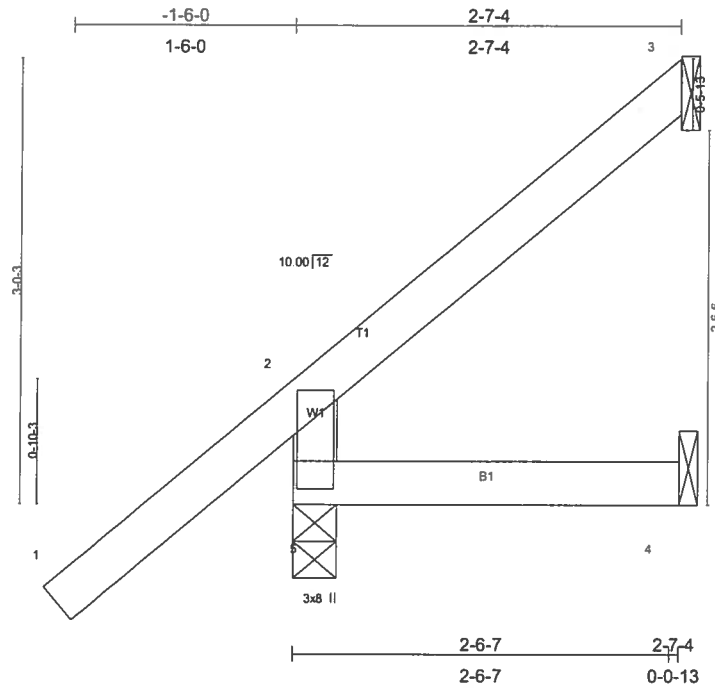
**SEPTEMBER 26, 2006 TRUSS DESIGN ENGINEER:
THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987
STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196
16105 N. FLORIDA AVE. STE B. LUTZ, FL 33549**

Job L202722	Truss CJ2	Truss Type JACK	Qty 2	Ply 1	KAPADIA RESIDENCE
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Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

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Scale = 1/4" = 1'-0"

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

LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 2-0-0	TC 0.33	Vert(LL)	-0.00	5	>999	240	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.05	Vert(TL)	-0.00	4-5	>999	180		
BCLL 10.0	Rep Stress Incr YES	WB 0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL 5.0	Code FBC2004/TPI2002	(Matrix)							
								Weight: 13 lb	

LUMBER

TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2
 WEBS 2 X 4 SYP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-7-4 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 5=229/0-3-8, 3=41/Mechanical, 4=26/Mechanical

Max Horz 5=200(load case 5)

Max Uplift 5=-110(load case 5), 3=-60(load case 5), 4=-6(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-183/150, 1-2=0/60, 2-3=-57/18

BOT CHORD 4-5=0/0

JOINT STRESS INDEX

2 = 0.00 and 5 = 0.60

NOTES

1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.

2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi

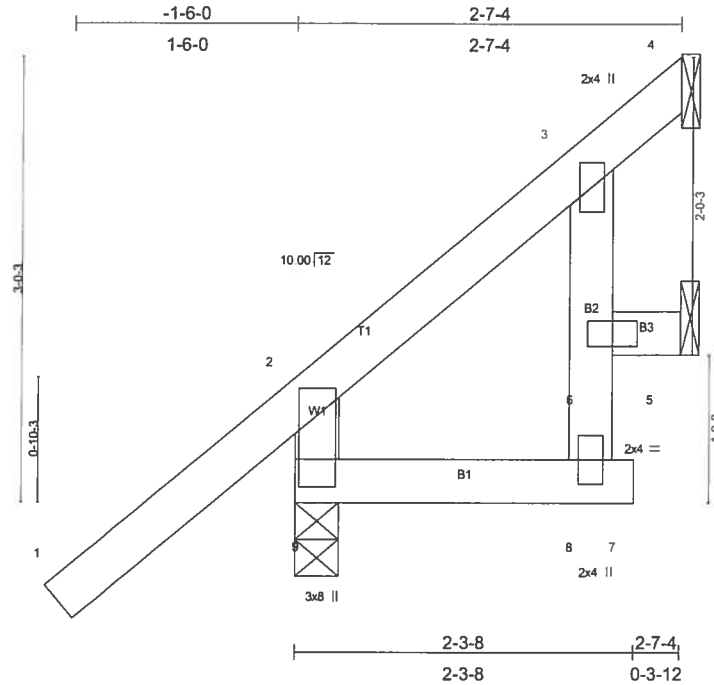
3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 5, 60 lb uplift at joint 3 and 6 lb uplift at joint 4.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	KAPADIA RESIDENCE
L202722	CJ2A	SPECIAL	1	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055

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Scale = 1/14.9

Plate Offsets (X,Y): [9.0-4-12.0-1-8]

LOADING (psf)	SPACING 2-0-0	CSI	DEFL in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.33	Vert(LL) -0.00 8 >999 240	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.05	Vert(TL) -0.00 8 >999 180		
BCLL 10.0	Rep Stress Incr YES	WB 0.00	Horz(TL) -0.00 4 n/a n/a		
BCDL 5.0	Code FBC2004/TP12002	(Matrix)			Weight: 16 lb

LUMBER

TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2 *Except*
 B2 2 X 4 SYP No.3
 WEBS 2 X 4 SYP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-7-4 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 9=230/0-3-8, 4=42/Mechanical, 5=31/Mechanical

Max Horz 9=200(load case 5)

Max Uplift 9=-110(load case 5), 4=-35(load case 5), 5=-34(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-9=-187/150, 1-2=0/60, 2-3=-64/0, 3-4=-28/25

BOT CHORD 8-9=-19/15, 7-8=0/0, 6-8=-8/22, 3-6=-14/30, 5-6=0/0

JOINT STRESS INDEX

2 = 0.00, 3 = 0.16, 6 = 0.19, 8 = 0.07 and 9 = 0.59

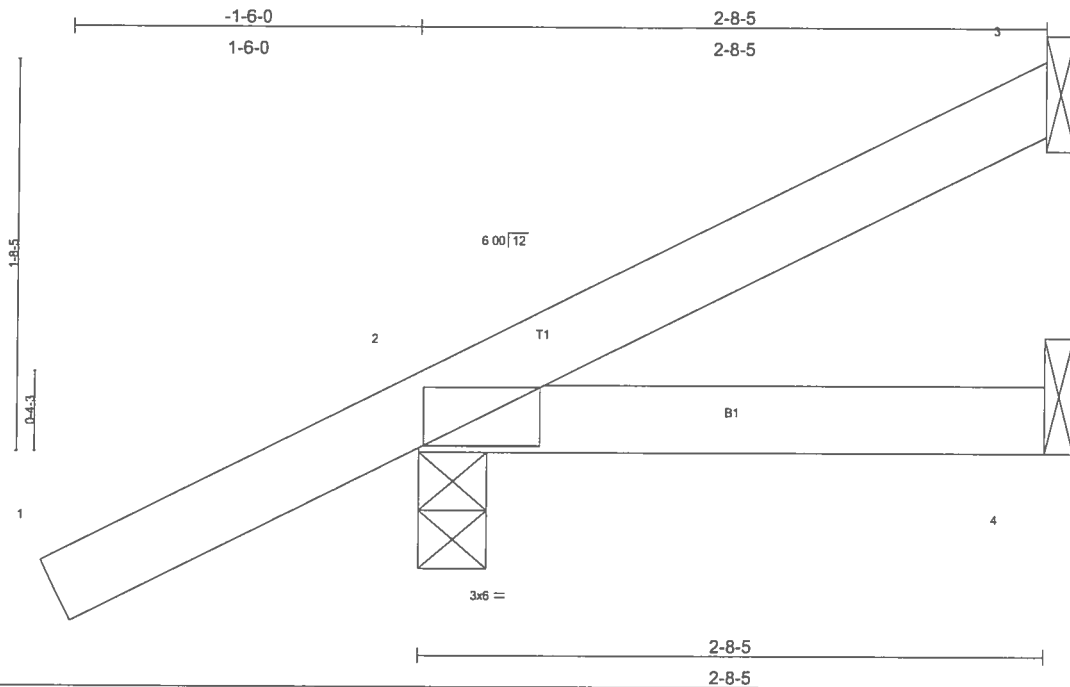
NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 9, 35 lb uplift at joint 4 and 34 lb uplift at joint 5.

LOAD CASE(S) Standard

Job L202722	Truss CJ2B	Truss Type JACK	Qty 3	Ply 1	KAPADIA RESIDENCE
Builders FirstSource, Lake City, FL 32055			Job Reference (optional)		

6.200 s Jul 13 2005 MiTek Industries, Inc. Tue Sep 26 12:09:21 2006 Page 1



Scale = 1:9.5

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.18	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.04	Vert(LL) -0.00 2-4 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.00	Vert(TL) -0.00 2-4 >999 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) -0.00 3 n/a n/a		
	Code FBC2004/TPI2002			Weight: 11 lb	

LUMBER
 TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2

BRACING
 TOP CHORD Structural wood sheathing directly applied or 2-8-5 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=35/Mechanical, 2=229/0-3-8, 4=37/Mechanical
 Max Horz 2=110(load case 5)
 Max Uplift 3=28(load case 6), 2=159(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/37, 2-3=47/10
 BOT CHORD 2-4=0/0

JOINT STRESS INDEX
 2 = 0.11

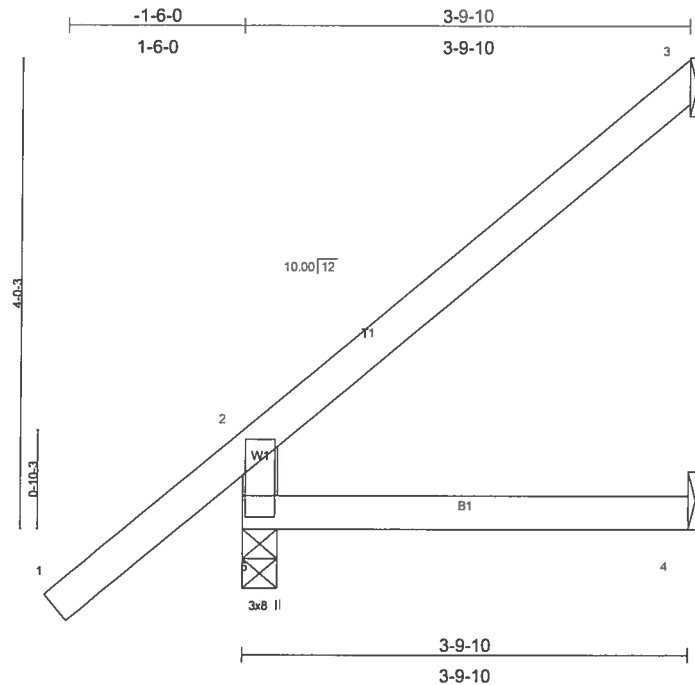
NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 3 and 159 lb uplift at joint 2.

LOAD CASE(S) Standard

Job L202722	Truss CJ3	Truss Type JACK	Qty 2	Ply 1	KAPADIA RESIDENCE
Builders FirstSource, Lake City, FL 32055			Job Reference (optional)		

6.200 s Jul 13 2005 MiTek Industries, Inc. Tue Sep 26 12:09:21 2006 Page 1



Scale = 1/18"

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

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.29	Vert(LL)	0.01	4-5	>999	240	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.11	Vert(TL)	0.01	4-5	>999	180		
BCLL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(TL)	-0.01	3	n/a	n/a		
BCDL 5.0	Code FBC2004/TP12002		(Matrix)							
									Weight: 17 lb	

LUMBER

TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2
 WEBS 2 X 4 SYP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-9-10 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 5=268/0-3-8, 3=78/Mechanical, 4=50/Mechanical

Max Horz 5=246(load case 5)

Max Uplift 5=98(load case 5), 3=106(load case 5), 4=8(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-210/149, 1-2=0/60, 2-3=-95/38

BOT CHORD 4-5=0/0

JOINT STRESS INDEX

2 = 0.00 and 5 = 0.53

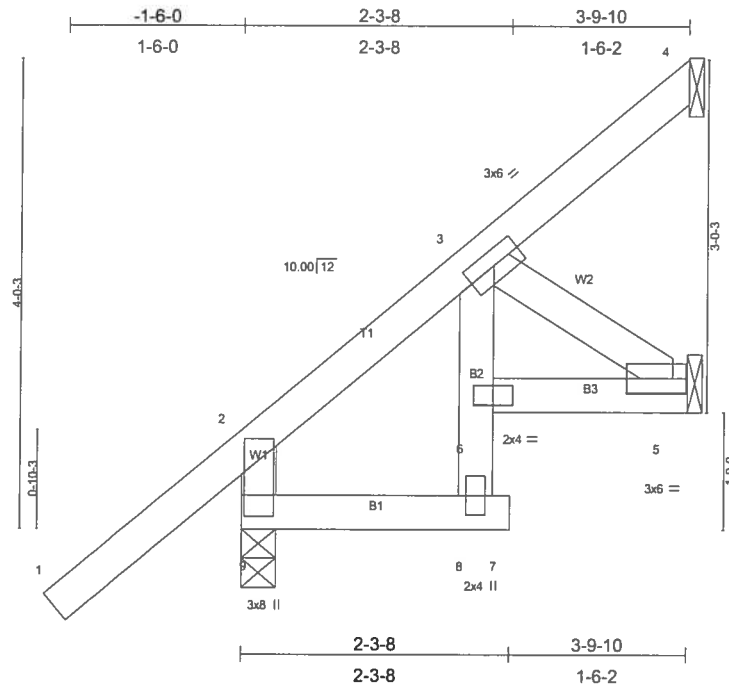
NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 98 lb uplift at joint 5, 106 lb uplift at joint 3 and 8 lb uplift at joint 4.

LOAD CASE(S) Standard

Job L202722	Truss CJ3A	Truss Type SPECIAL	Qty 1	Ply 1	KAPADIA RESIDENCE
Builders FirstSource, Lake City, FL 32055					Job Reference (optional)

6.200 s Jul 13 2005 MiTek Industries, Inc. Tue Sep 26 12:09:22 2006 Page 1



Scale = 1/16

Plate Offsets (X,Y): [9-0-4-12,0-1-8]

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)	-0.00	8	>999	240	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.13	Vert(TL)	-0.01	7	>999	180		
BCLL 10.0	Rep Stress Incr	YES	WB 0.03	Horz(TL)	-0.00	5	n/a	n/a		
BCDL 5.0	Code FBC2004/TPI2002		(Matrix)							
										Weight: 23 lb

LUMBER

TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2 *Except*
 B2 2 X 4 SYP No.3
 WEBS 2 X 4 SYP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-9-10 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(lb/size) 9=270/0-3-8, 4=43/Mechanical, 5=90/Mechanical
 Max Horz 9=246(load case 5)
 Max Uplift 9=96(load case 5), 4=50(load case 5), 5=64(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-9=-226/145, 1-2=0/60, 2-3=-114/0, 3-4=-46/21
 BOT CHORD 8-9=-60/38, 7-8=0/0, 6-8=-18/21, 3-6=-3/43, 5-6=-97/88
 WEBS 3-5=-108/118

JOINT STRESS INDEX

2 = 0.00, 3 = 0.60, 5 = 0.03, 6 = 0.18, 8 = 0.18 and 9 = 0.59

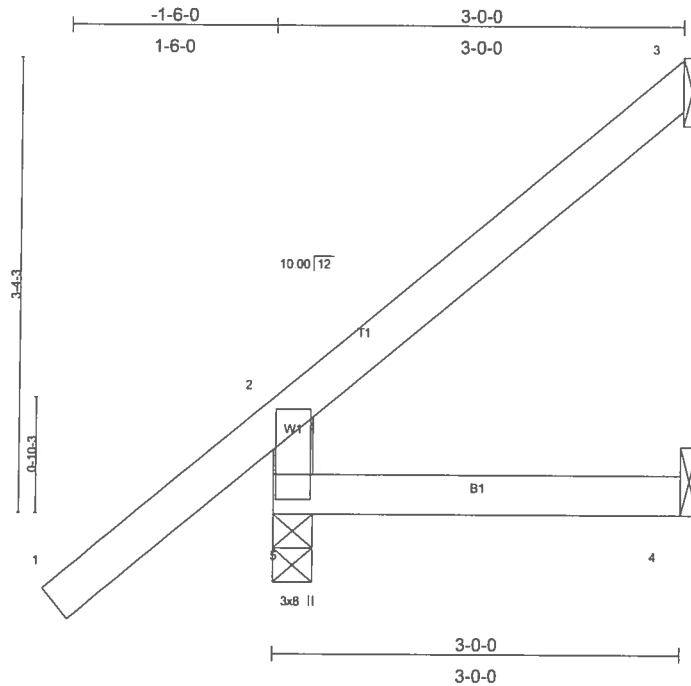
NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 9, 50 lb uplift at joint 4 and 64 lb uplift at joint 5.

LOAD CASE(S) Standard

Job L202722	Truss CJ3C	Truss Type JACK	Qty 2	Ply 1	KAPADIA RESIDENCE
Builders FirstSource, Lake City, FL 32055					Job Reference (optional)

6.200 s Jul 13 2005 Mitek Industries, Inc. Tue Sep 26 12:09:22 2006 Page 1



Scale = 1/16" = 1'-0"

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

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.32	Vert(LL)	-0.00	4-5	>999	240	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.06	Vert(TL)	-0.00	4-5	>999	180		
BCLL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(TL)	-0.01	3	n/a	n/a		
BCDL 5.0	Code FBC2004/TPI2002		(Matrix)							
										Weight: 14 lb

LUMBER

TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2
 WEBS 2 X 4 SYP No.3

BRACING

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

REACTIONS (lb/size) 5=240/0-3-8, 3=54/Mechanical, 4=34/Mechanical

Max Horz 5=216(load case 5)

Max Uplift 5=-105(load case 5), 3=-76(load case 5), 4=-6(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-191/148, 1-2=0/60, 2-3=-69/25

BOT CHORD 4-5=0/0

JOINT STRESS INDEX

2 = 0.00 and 5 = 0.59

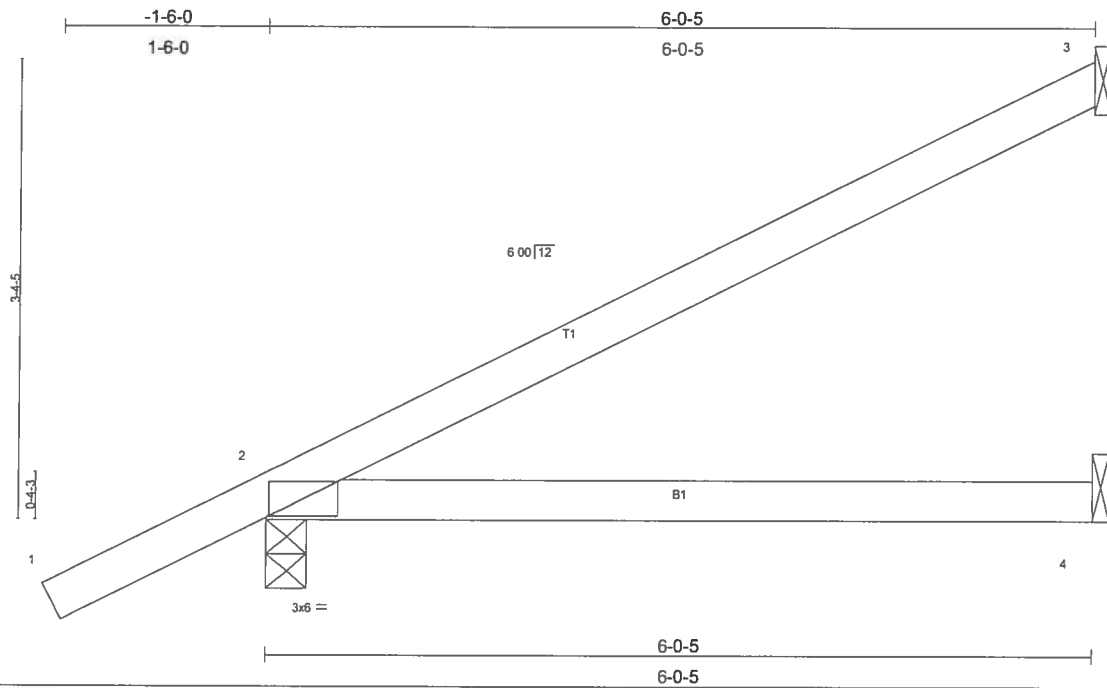
NOTES

- 1) Wind: ASCE 7-02: 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 105 lb uplift at joint 5, 76 lb uplift at joint 3 and 6 lb uplift at joint 4.

LOAD CASE(S) Standard

Job L202722	Truss CJ6	Truss Type JACK	Qty 1	Ply 1	KAPADIA RESIDENCE
Builders FirstSource, Lake City, FL 32055					Job Reference (optional)

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LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.38	Vert(LL)	-0.06	2-4	>999	240	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.24	Vert(TL)	-0.11	2-4	>664	180		
BCLL 10.0	Lumber Increase 1.25	WB 0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL 5.0	Rep Stress incr YES	(Matrix)							
	Code FBC2004/TPI2002							Weight: 22 lb	

LUMBER
 TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2

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

REACTIONS (lb/size) 3=143/Mechanical, 2=350/0-3-8, 4=87/Mechanical
 Max Horz 2=187(load case 5)
 Max Uplift 3=-129(load case 5), 2=-169(load case 5)

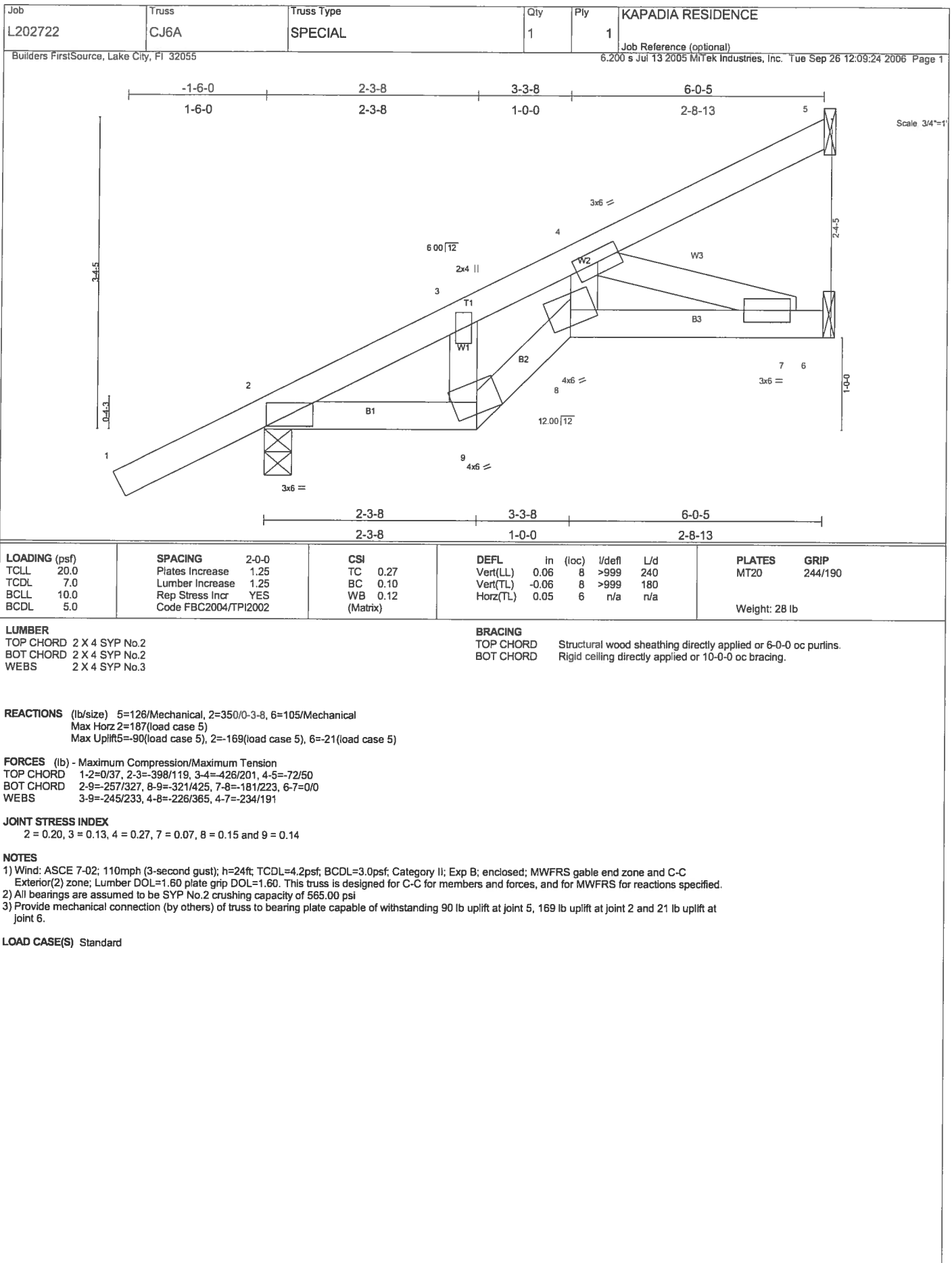
FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/37, 2-3=-116/52
 BOT CHORD 2-4=0/0

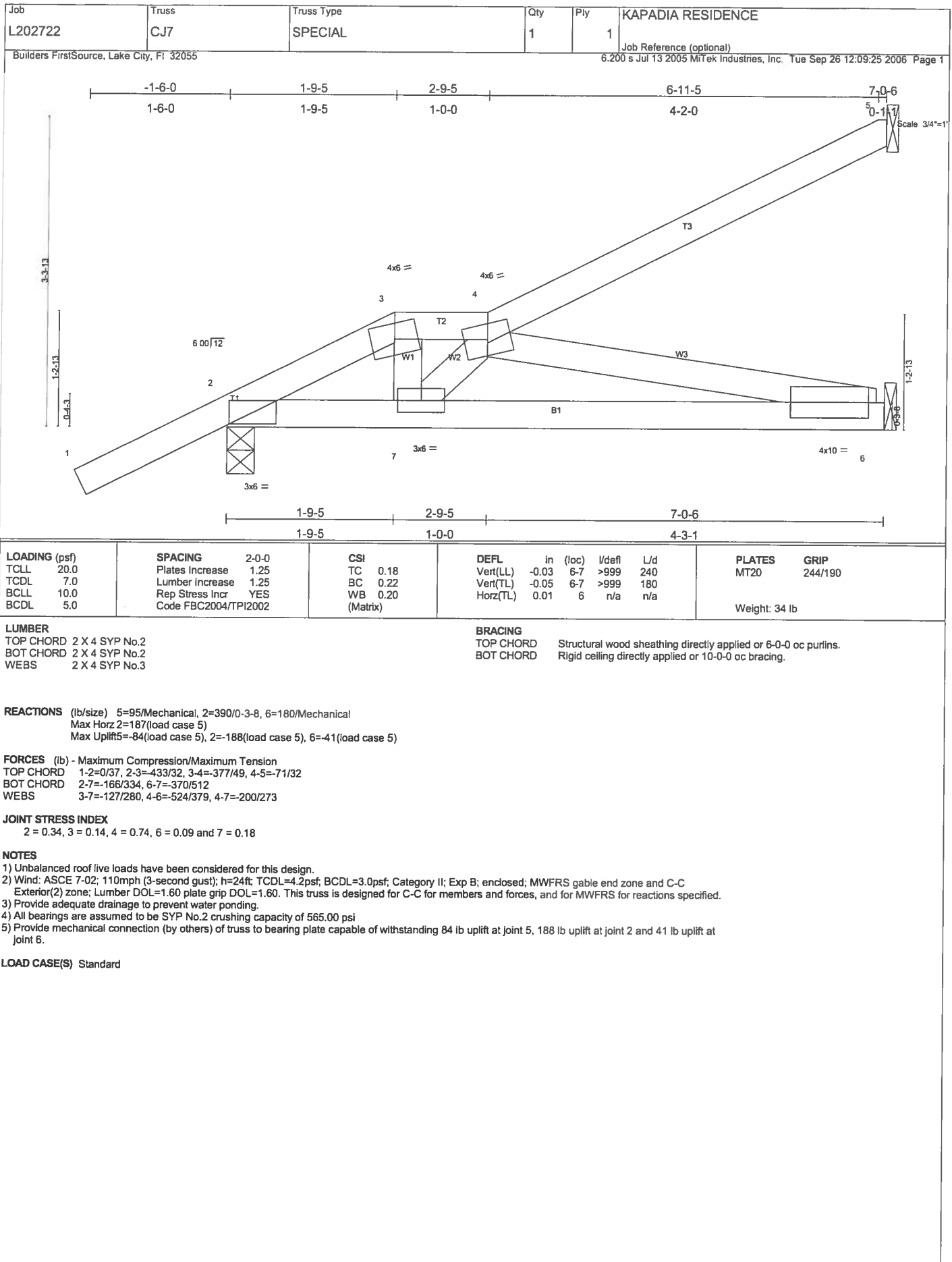
JOINT STRESS INDEX
 2 = 0.14

NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 129 lb uplift at joint 3 and 169 lb uplift at joint 2.

LOAD CASE(S) Standard

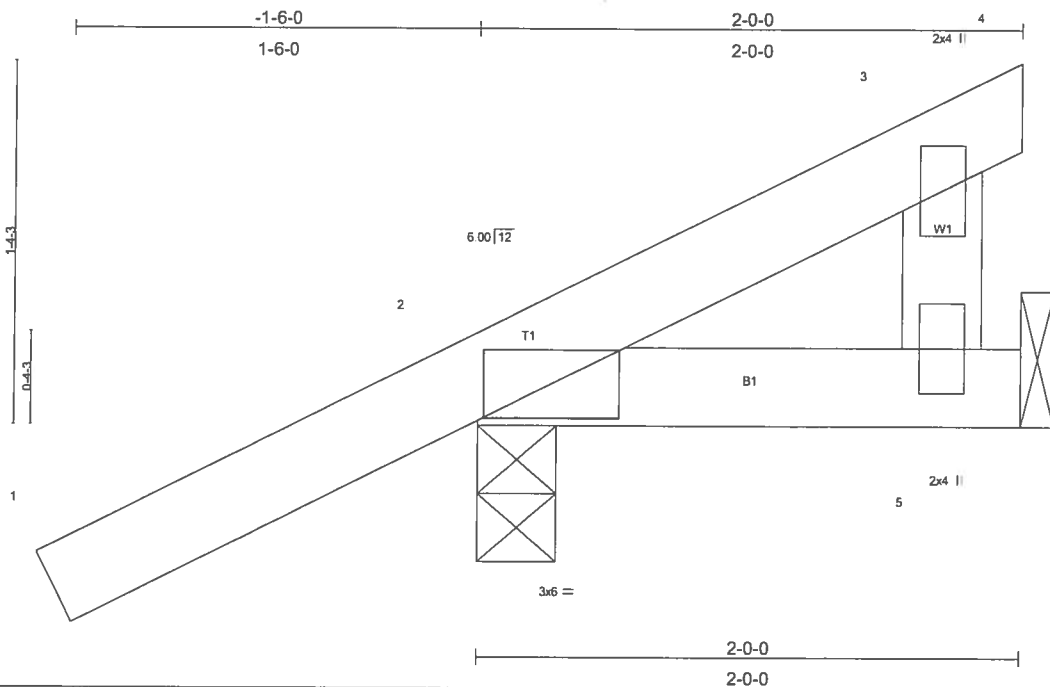




Job L202722	Truss EJ2	Truss Type MONO TRUSS	Qty 6	Ply 1	KAPADIA RESIDENCE
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Builders FirstSource, Lake City, Fl 32055

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Scale = 1/8\"

LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.16	Vert(LL)	-0.00	2	>999	240	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.02	Vert(TL)	-0.00	2	>999	180		
BCLL 10.0	Lumber Increase 1.25	WB 0.00	Horz(TL)	0.00		n/a	n/a		
BCDL 5.0	Rep Stress Incr YES	(Matrix)							
	Code FBC2004/TPI2002								
								Weight: 10 lb	

LUMBER
 TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2
 WEBS 2 X 4 SYP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=197/0-3-8, 5=34/Mechanical
 Max Horz 2=95(load case 5)
 Max Uplift 2=-154(load case 5), 5=-13(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/36, 2-3=-40/5, 3-4=-2/0
 BOT CHORD 2-5=0/0
 WEBS 3-5=-15/18

JOINT STRESS INDEX
 2 = 0.10, 3 = 0.01 and 5 = 0.01

NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 154 lb uplift at joint 2 and 13 lb uplift at joint 5.

LOAD CASE(S) Standard

Job L202722	Truss EJ4	Truss Type JACK	Qty 1	Ply 1	KAPADIA RESIDENCE
Builders FirstSource, Lake City, Fl 32055			Job Reference (optional)		

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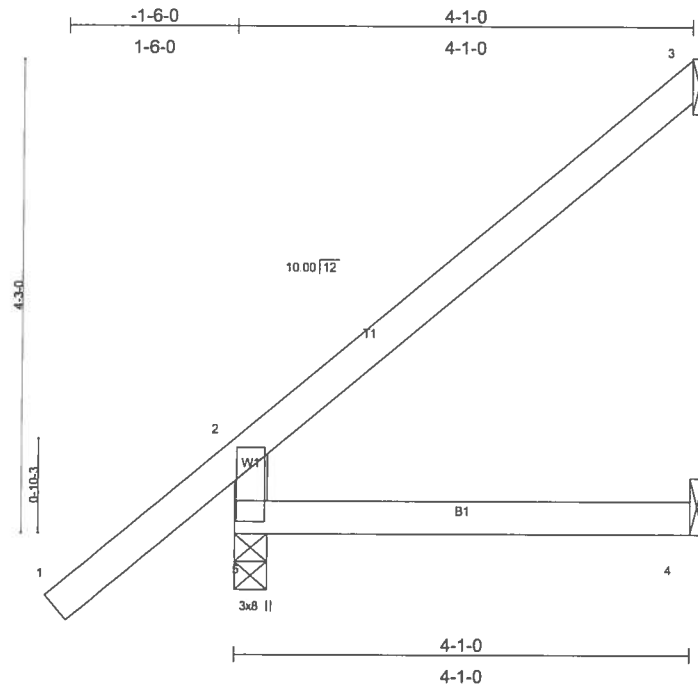


Plate Offsets (X,Y): [5-0-4-12,0-1-8]

LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.27	Vert(LL)	0.02	4-5	>999	240	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.14	Vert(TL)	-0.02	4-5	>999	180		
BCLL 10.0	Lumber Increase 1.25	WB 0.00	Horz(TL)	-0.02	3	n/a	n/a		
BCDL 5.0	Rep Stress Incr YES	(Matrix)							
	Code FBC2004/TPI2002							Weight: 18 lb	

LUMBER

TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2
 WEBS 2 X 4 SYP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-1-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 5=278/0-3-8, 3=86/Mechanical, 4=55/Mechanical

Max Horz 5=257/(load case 5)

Max Uplift 5=-96/(load case 5), 3=-116/(load case 5), 4=-10/(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-217/150, 1-2=0/60, 2-3=-103/42

BOT CHORD 4-5=0/0

JOINT STRESS INDEX

2 = 0.00 and 5 = 0.51

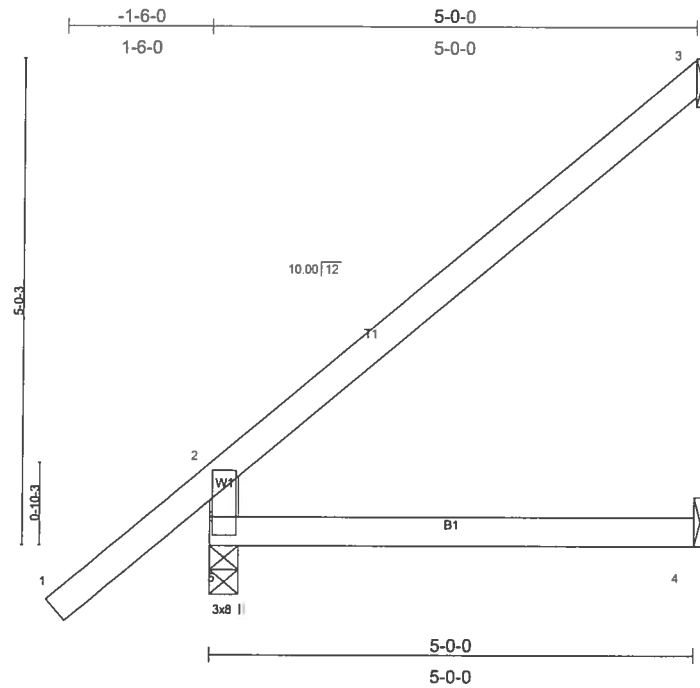
NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 5, 116 lb uplift at joint 3 and 10 lb uplift at joint 4.

LOAD CASE(S) Standard

Job L202722	Truss EJ5	Truss Type JACK	Qty 16	Ply 1	KAPADIA RESIDENCE
Builders FirstSource, Lake City, FL 32055					Job Reference (optional)

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Scale = 1.227

Plate Offsets (X,Y): [5'-0"-4'-12'-0"-1'-8"]

LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2'-0"-0"	TC 0.41	Vert(LL)	0.04	4-5	>999	240	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.21	Vert(TL)	-0.05	4-5	>999	180		
BCLL 10.0	Lumber Increase 1.25	WB 0.00	Horz(TL)	-0.03	3	n/a	n/a		
BCDL 5.0	Rep Stress Incr YES	(Matrix)							
	Code FBC2004/TPI2002								
									Weight: 21 lb

LUMBER

TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2
 WEBS 2 X 4 SYP No.3

BRACING

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

REACTIONS (lb/size) 5=312/0-3-8, 3=112/Mechanical, 4=73/Mechanical

Max Horz 5=292(load case 5)

Max Uplift 5=-91(load case 5), 3=-146(load case 5), 4=-13(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-241/155, 1-2=0/60, 2-3=-130/55

BOT CHORD 4-5=0/0

JOINT STRESS INDEX

2 = 0.00 and 5 = 0.64

NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 5, 146 lb uplift at joint 3 and 13 lb uplift at joint 4.

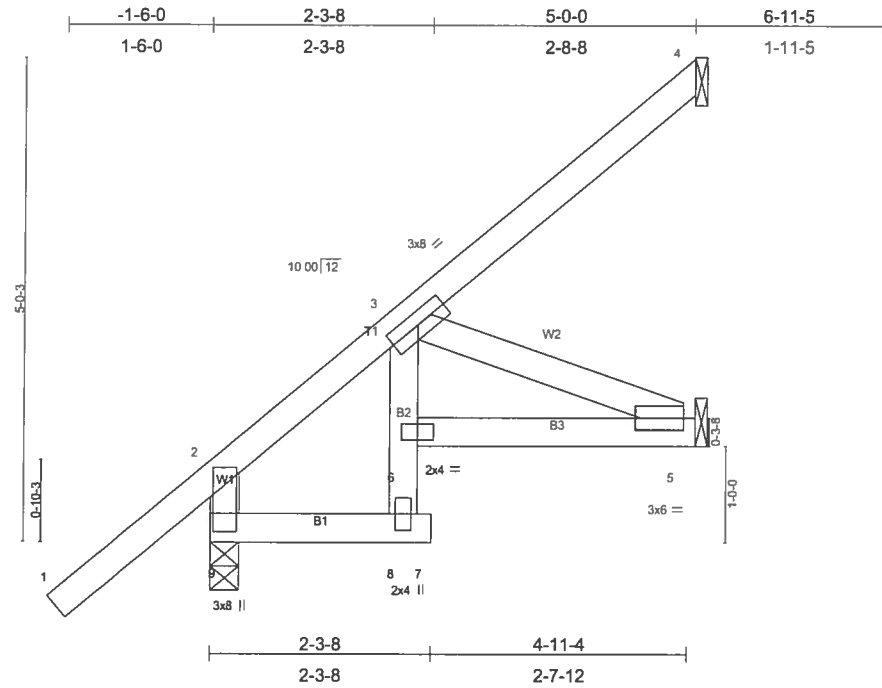
LOAD CASE(S) Standard

Job L202722	Truss EJ5A	Truss Type SPECIAL	Qty 1	Ply 1	KAPADIA RESIDENCE
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Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

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Scale = 1.22 8

Plate Offsets (X,Y): [5:0-0-11,0-1-8], [9:0-4-12,0-1-8]

LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.32	Vert(LL)	0.01	7	>999	240	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.29	Vert(TL)	0.01	7	>999	180		
BCLL 10.0	Lumber Increase 1.25	WB 0.06	Horz(TL)	-0.01	5	n/a	n/a		
BCDL 5.0	Rep Stress Incr YES	(Matrix)							
	Code FBC2004/TPI2002							Weight: 29 lb	

LUMBER

TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2 *Except*
 B2 2 X 4 SYP No.3
 WEBS 2 X 4 SYP No.3

BRACING

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

REACTIONS (lb/size) 9=316/0-3-8, 4=66/Mechanical, 5=122/Mechanical

Max Horz 9=292(load case 5)

Max Uplift 9=89(load case 5), 4=83(load case 5), 5=76(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-9=-272/147, 1-2=0/60, 2-3=-173/0, 3-4=-75/32

BOT CHORD 8-9=-113/77, 7-8=0/0, 6-8=-26/20, 3-6=-9/66, 5-6=-212/198

WEBS 3-5=-213/229

JOINT STRESS INDEX

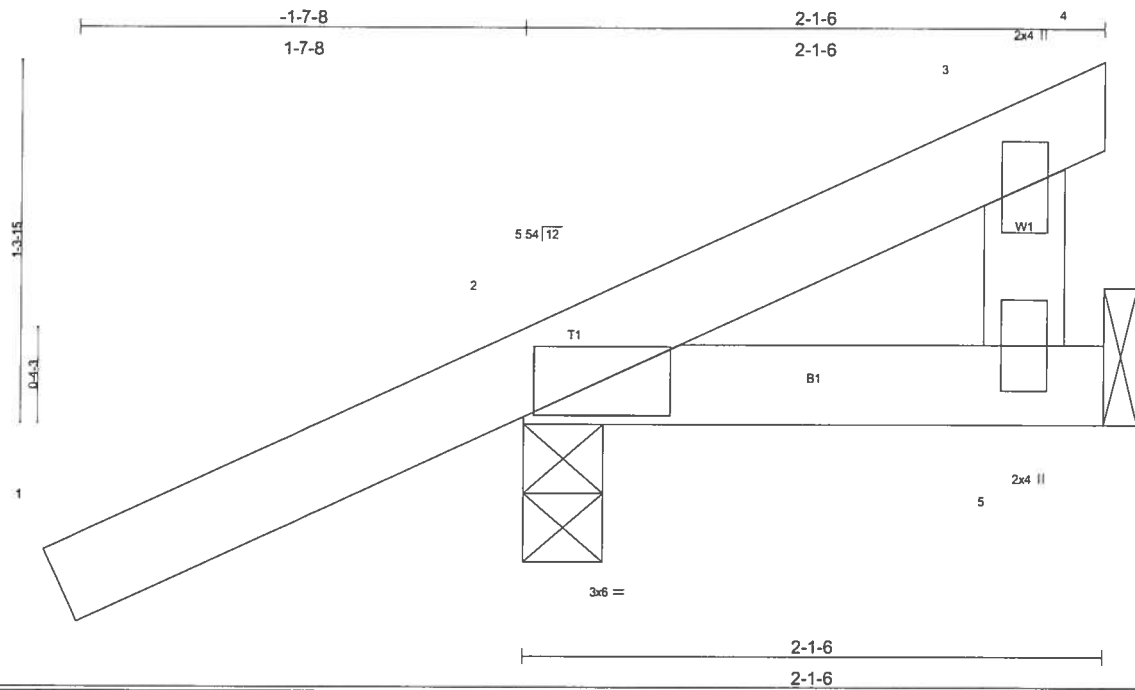
2 = 0.00, 3 = 0.81, 5 = 0.06, 6 = 0.30, 8 = 0.31 and 9 = 0.58

NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 9, 83 lb uplift at joint 4 and 76 lb uplift at joint 5.

LOAD CASE(S) Standard

Job L202722	Truss HJ2	Truss Type MONO TRUSS	Qty 4	Ply 1	KAPADIA RESIDENCE
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.200 s Jul 13 2005 MiTek Industries, Inc. Tue Sep 26 12:09:28 2006 Page 1		



LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.20	Vert(LL) -0.00	2	>999	240		MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.02	Vert(TL) -0.00	2	>999	180			
BCLL 10.0	Lumber Increase 1.25	WB 0.00	Horz(TL) 0.00		n/a	n/a			
BCDL 5.0	Rep Stress Incr NO	(Matrix)							
	Code FBC2004/TPI2002								
								Weight: 10 lb	

LUMBER
 TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2
 WEBS 2 X 4 SYP No.3

BRACING
 TOP CHORD Structural wood sheathing directly applied or 2-1-6 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=223/0-3-8, 5=21/Mechanical
 Max Horz 2=94(load case 4)
 Max Uplift 2=-182(load case 4), 5=-8(load case 5)
 Max Grav 2=223(load case 1), 5=24(load case 2)

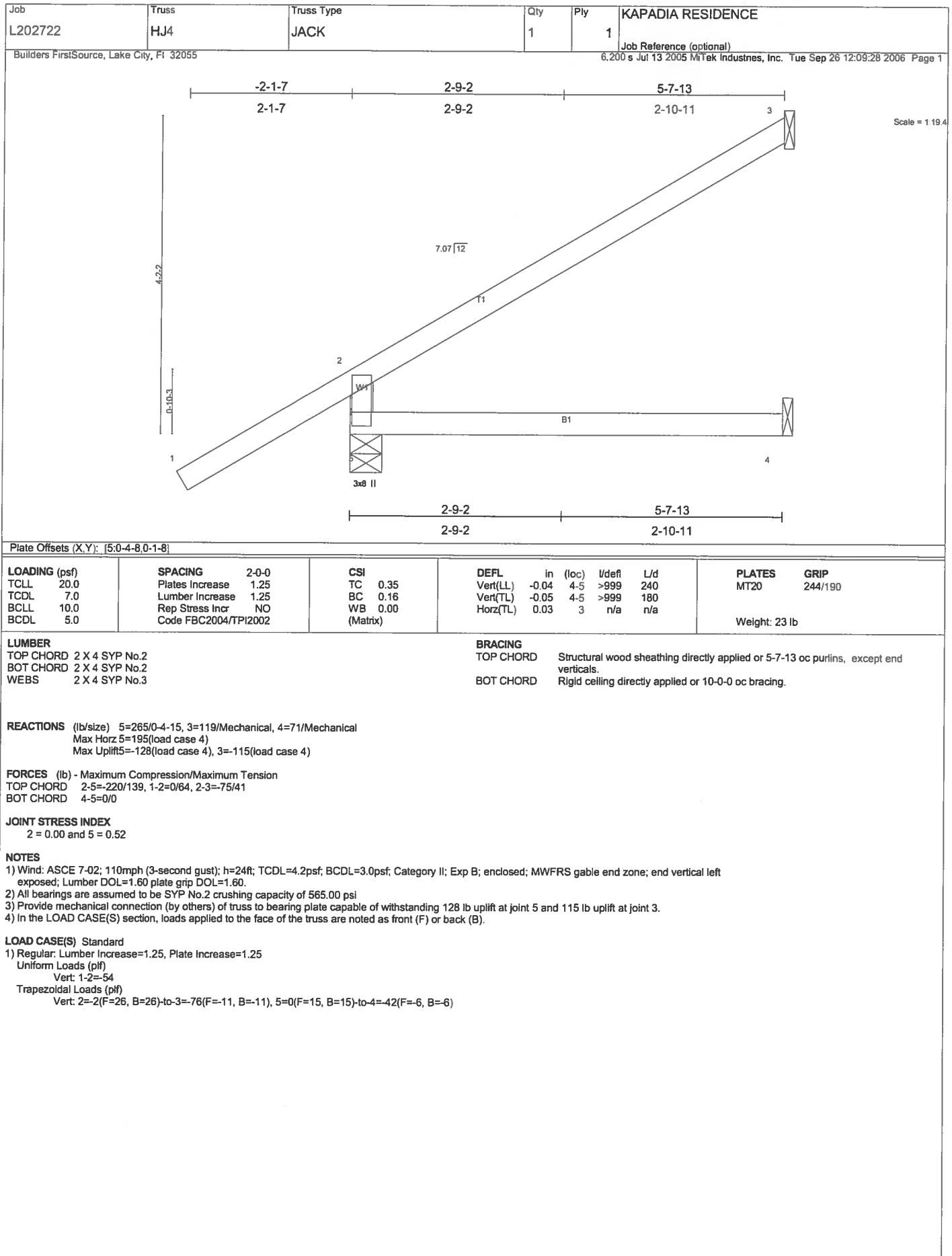
FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/37, 2-3=-46/7, 3-4=-2/0
 BOT CHORD 2-5=0/0
 WEBS 3-5=-19/14

JOINT STRESS INDEX
 2 = 0.09, 3 = 0.01 and 5 = 0.01

NOTES

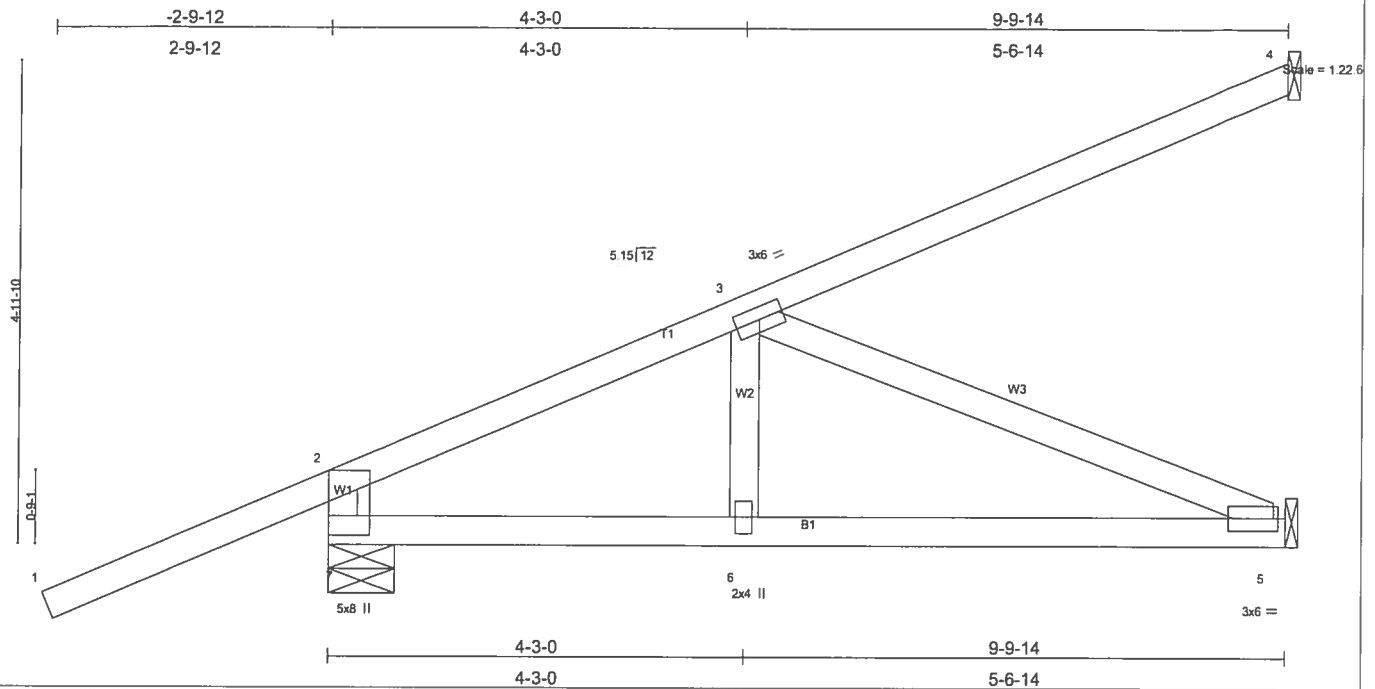
- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; Lumber DOL=1.60 plate grip DOL=1.60.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 182 lb uplift at joint 2 and 8 lb uplift at joint 5.

LOAD CASE(S) Standard



Job L202722	Truss HJ5	Truss Type MONO TRUSS	Qty 2	Ply 1	KAPADIA RESIDENCE
Builders FirstSource, Lake City, FL 32055			Job Reference (optional)		

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LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.94	Vert(LL)	-0.10	5-6	>999	240	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.62	Vert(TL)	-0.16	5-6	>713	180		
BCLL 10.0	Lumber Increase 1.25	WB 0.35	Horz(TL)	-0.04	4	n/a	n/a		
BCDL 5.0	Rep Stress Incr NO	(Matrix)							
	Code FBC2004/TPI2002							Weight: 47 lb	

LUMBER
 TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2
 WEBS 2 X 4 SYP No.3

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) 7=524/0-8-1, 4=271/Mechanical, 5=367/Mechanical
 Max Horz 7=341(load case 4)
 Max Uplift 7=234(load case 4), 4=251(load case 4), 5=86(load case 4)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 2-7=-448/186, 1-2=0/64, 2-3=-576/20, 3-4=-131/79
 BOT CHORD 6-7=-252/505, 5-6=-252/505
 WEBS 3-6=0/120, 3-5=-547/273

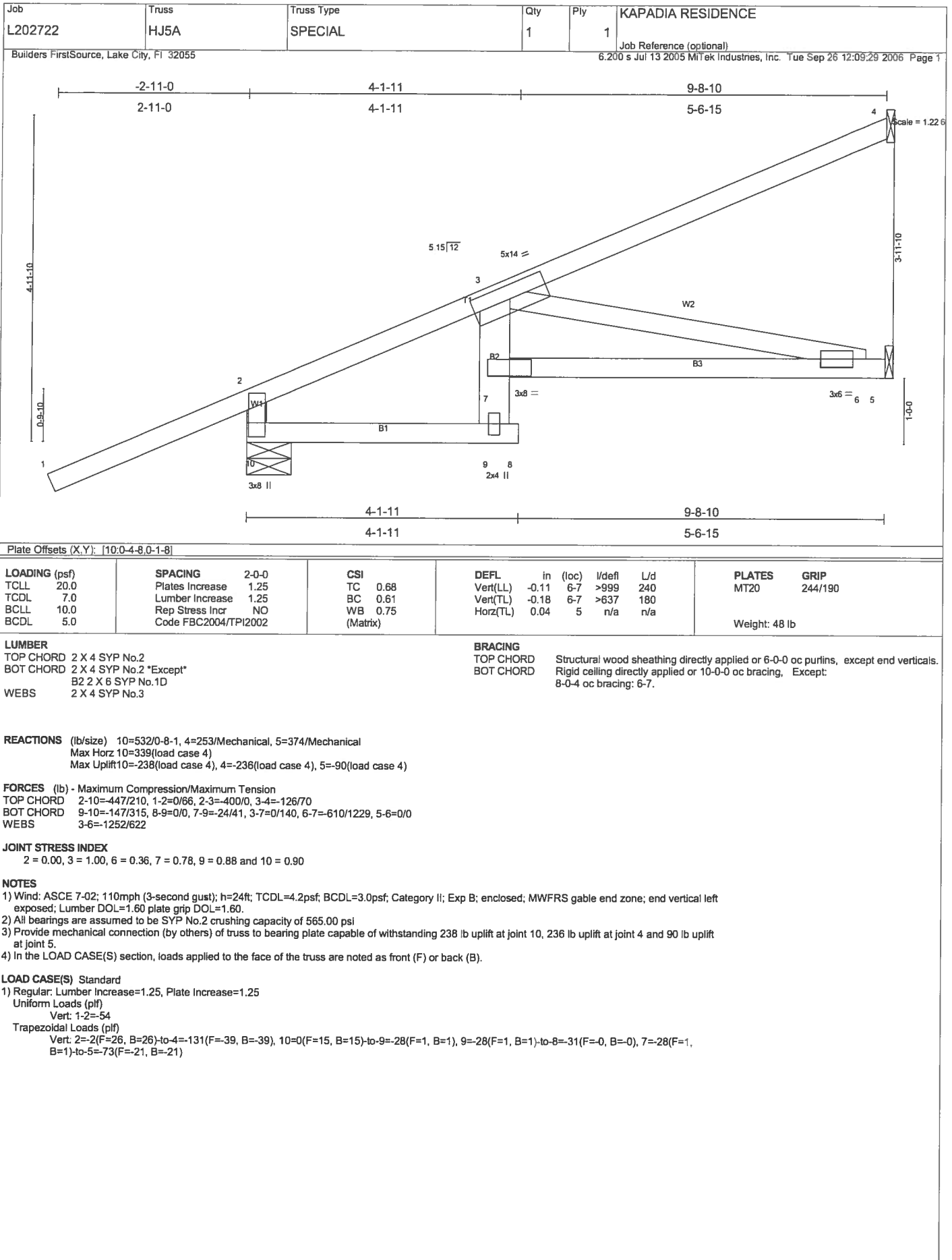
JOINT STRESS INDEX
 2 = 0.00, 3 = 0.15, 5 = 0.15, 6 = 0.09 and 7 = 0.60

NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 234 lb uplift at joint 7, 251 lb uplift at joint 4 and 86 lb uplift at joint 5.
- 4) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

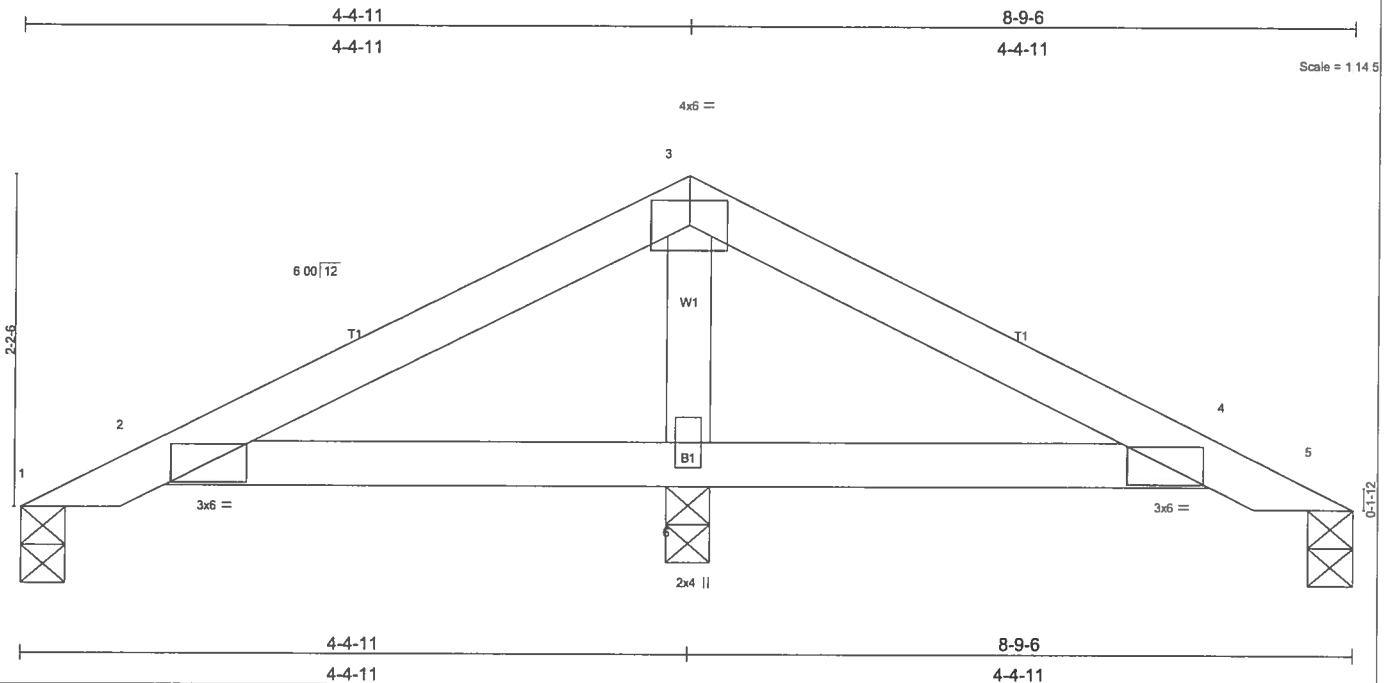
LOAD CASE(S) Standard

- 1) Regular: Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 1-2=-54
 Trapezoidal Loads (plf)
 Vert: 2=-2(F=26, B=26)-to-4=-133(F=-39, B=-39), 7=0(F=15, B=15)-to-5=-74(F=-22, B=-22)



Job L202722	Truss PB1	Truss Type PIGGYBACK	Qty 10	Ply 1	KAPADIA RESIDENCE
Builders FirstSource, Lake City, FL 32055					Job Reference (optional)

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LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.15	Vert(LL)	0.01	2-6	>999	240	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.13	Vert(TL)	-0.02	4-6	>999	180		
BCLL 10.0	Lumber Increase 1.25	WB 0.09	Horz(TL)	0.00	5	n/a	n/a		
BCDL 5.0	Rep Stress Incr YES	(Matrix)							
	Code FBC2004/TPI2002							Weight: 27 lb	

LUMBER
 TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2
 WEBS 2 X 4 SYP No.3

BRACING
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
 1 Row at midpt 2-4

REACTIONS (lb/size) 1=45/0-3-8, 5=45/0-3-8, 6=594/0-3-8
 Max Horz 1=31(load case 4)
 Max Uplift 1=22(load case 5), 5=33(load case 6), 6=186(load case 5)
 Max Grav 1=74(load case 9), 5=74(load case 10), 6=594(load case 1)

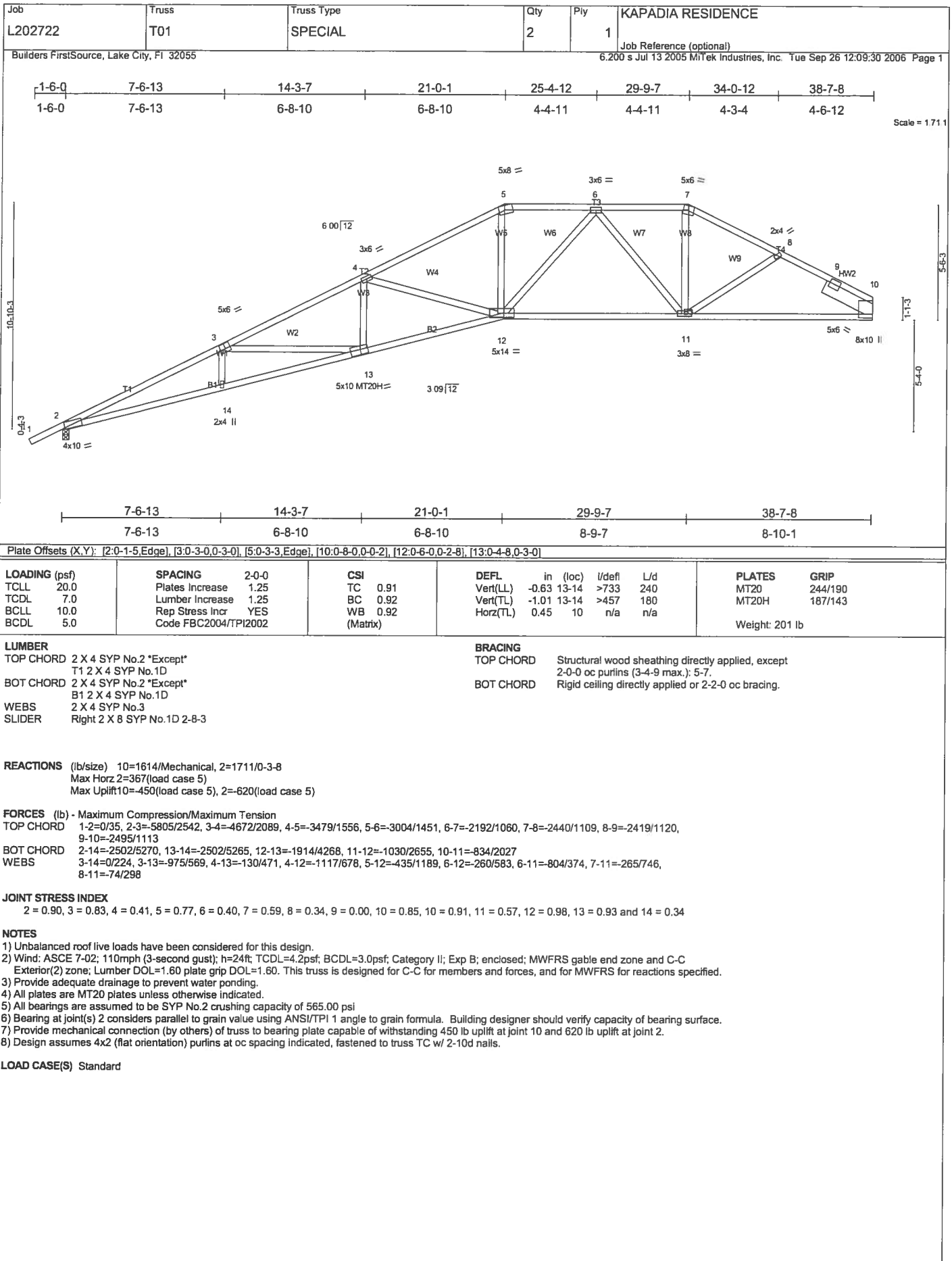
FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-30/37, 2-3=-145/286, 3-4=-145/286, 4-5=-30/20
 BOT CHORD 2-6=-209/199, 4-6=-209/199
 WEBS 3-6=-439/347

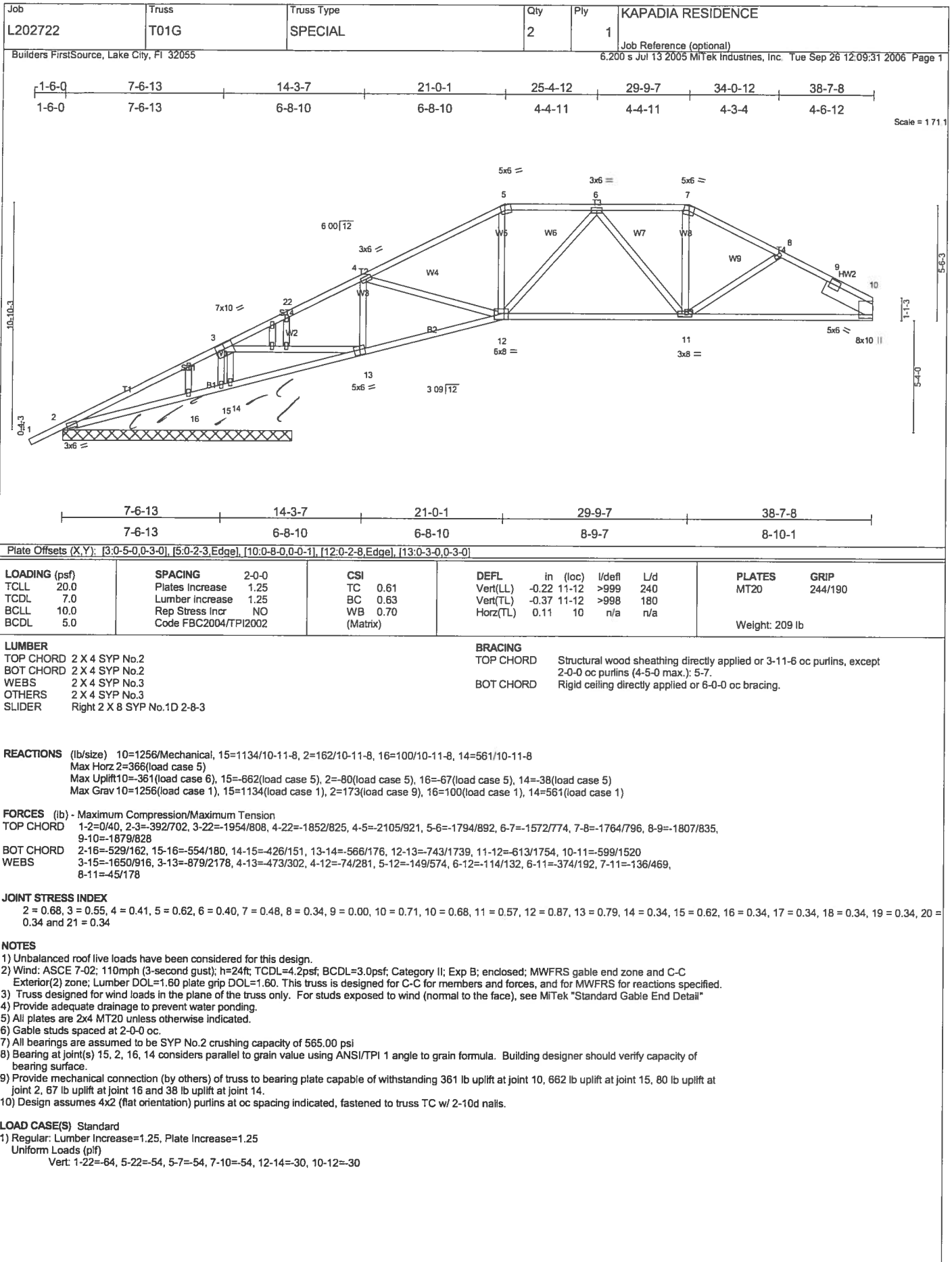
JOINT STRESS INDEX
 2 = 0.28, 3 = 0.40, 4 = 0.28 and 6 = 0.20

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 4) Bearing at joint(s) 1, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 1, 33 lb uplift at joint 5 and 186 lb uplift at joint 6.

LOAD CASE(S) Standard





Job L202722	Truss T02	Truss Type SPECIAL	Qty 6	Ply 1	KAPADIA RESIDENCE
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Builders FirstSource, Lake City, FL 32055

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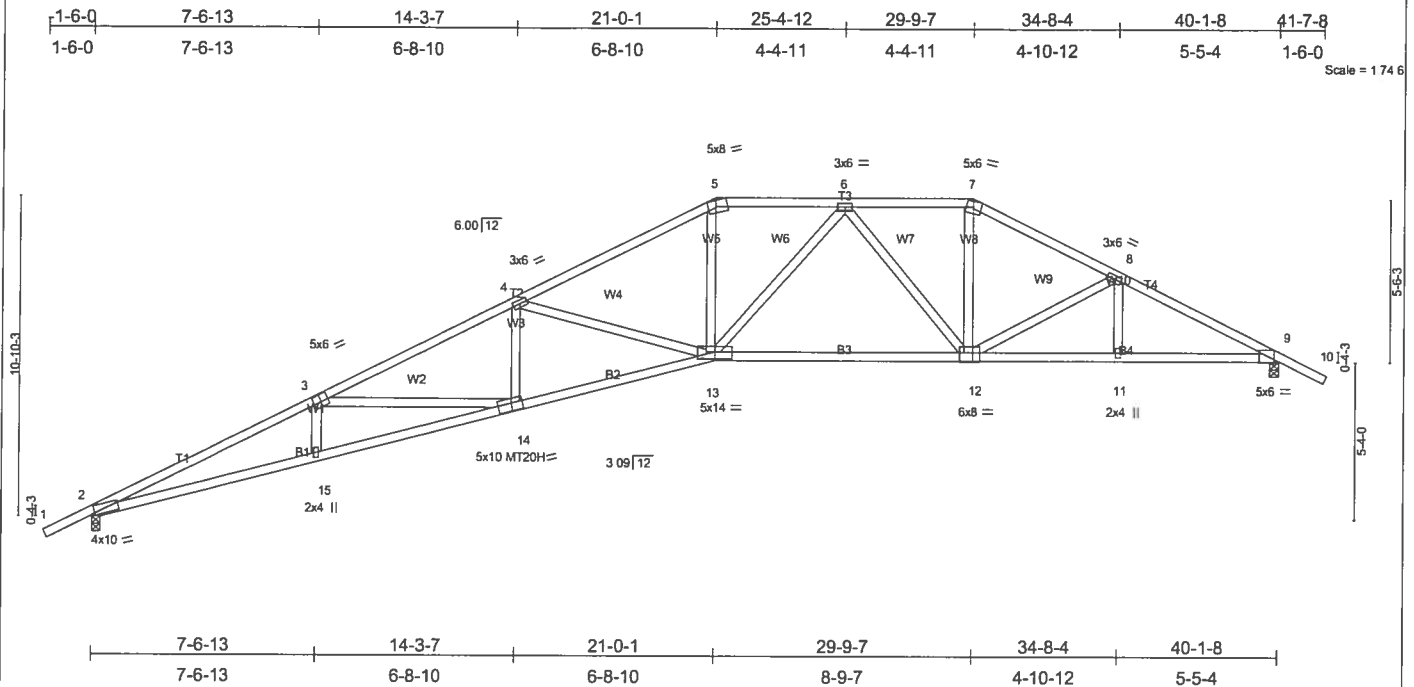


Plate Offsets (X,Y): [2:0-1-9,0-0-9], [3:0-3-0,0-3-0], [5:0-3-3,Edge], [9:0-1-11,Edge], [12:0-2-12,Edge], [13:0-7-0,0-2-12], [14:0-4-12,0-3-4]

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.97	in (loc) l/defl L/d	MT20	244/190
TCCL 7.0	Plates Increase 1.25	BC 0.97	Vert(LL) -0.68 14-15 >703 240	MT20H	187/143
BCCL 10.0	Lumber Increase 1.25	WB 0.91	Vert(TL) -1.09 14-15 >438 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.50 9 n/a n/a		
	Code FBC2004/TP12002			Weight: 204 lb	

LUMBER

TOP CHORD 2 X 4 SYP No.2 *Except*
T1 2 X 4 SYP No.1D
BOT CHORD 2 X 4 SYP No.2 *Except*
B1 2 X 4 SYP No.1D
WEBS 2 X 4 SYP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (3-3-1 max.): 5-7,
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS

(lb/size) 2=1765/0-3-8, 9=1765/0-3-8
Max Horz 2=348(load case 5)
Max Uplift 2=637(load case 5), 9=565(load case 6)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=6037/2601, 3-4=4913/2151, 4-5=-3727/1616, 5-6=-3222/1504, 6-7=-2470/1159, 7-8=-2821/1236, 8-9=-3216/1336,
9-10=0/37
BOT CHORD 2-15=-2494/5483, 14-15=-2494/5477, 13-14=-1908/4492, 12-13=-1053/2918, 11-12=-1043/2796, 9-11=-1043/2796
WEBS 3-15=0/224, 3-14=-967/566, 4-14=-132/466, 4-13=-1111/680, 5-13=-463/1302, 6-13=-231/528, 6-12=-781/342, 7-12=-342/964,
8-12=-391/241, 8-11=0/125

JOINT STRESS INDEX

2 = 0.95, 3 = 0.84, 4 = 0.41, 5 = 0.79, 6 = 0.40, 7 = 0.50, 8 = 0.41, 9 = 0.80, 11 = 0.34, 12 = 0.80, 13 = 0.88, 14 = 0.90 and 15 = 0.34

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TP1 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 637 lb uplift at joint 2 and 565 lb uplift at joint 9.
- Design assumes 4x2 (flat orientation) purlins at oc spacing indicated, fastened to truss TC w/ 2-10d nails.

LOAD CASE(S) Standard

Job L202722	Truss T03	Truss Type SPECIAL	Qty 1	Ply 2	KAPADIA RESIDENCE
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 MiTek Industries, Inc. Tue Sep 26 12:09:33 2006 Page 1		

-1-6-0	2-3-8	5-9-12	9-4-0	10-3-8	14-5-8	18-7-8	23-0-4	27-11-8	29-5-8
1-6-0	2-3-8	3-6-4	3-6-4	0-11-8	4-2-0	4-2-0	4-4-12	4-11-4	1-6-0

Scale = 1:53.0

2-3-8	3-3-8	9-4-0	10-3-8	14-5-8	18-7-8	27-11-8
2-3-8	1-0-0	6-0-8	0-11-8	4-2-0	4-2-0	9-4-0

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.46	in (loc)	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.72	Vert(LL) -0.24 17-18 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.77	Vert(TL) -0.39 17-18 >857 180		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL) 0.19 10 n/a n/a		
	Code FBC2004/TPI2002			Weight: 331 lb	

LUMBER

TOP CHORD 2 X 4 SYP No.2

BOT CHORD 2 X 4 SYP No.2 *Except

B5 2 X 4 SYP No.3

WEBS 2 X 4 SYP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-2-4 oc purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=1977/0-3-8, 10=1975/0-3-8

Max Horz 2=95(load case 4)

Max Uplift 2=816(load case 4), 10=817(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/37, 2-3=3589/1317, 3-4=8420/3081, 4-5=4232/1639, 5-6=3814/1526, 6-7=4008/1601, 7-8=2991/1227, 8-9=3359/1306, 9-10=3591/1402, 10-11=0/37

BOT CHORD 2-19=-1137/3041, 18-19=-1342/3662, 17-18=-1802/4784, 16-17=-1461/3967, 14-16=0/142, 6-16=-215/561, 14-15=0/0, 13-14=-103/390, 12-13=-1184/3258, 10-12=-1123/3151

WEBS 3-19=-2345/888, 3-18=-1704/4815, 4-18=-1160/3480, 4-17=-1148/522, 5-17=-589/1579, 6-17=-705/378, 13-16=-1130/2999, 7-16=-398/1023, 7-13=-763/372, 7-12=-505/267, 8-12=-384/1164, 9-12=-224/195

JOINT STRESS INDEX

2 = 0.76, 3 = 0.59, 4 = 0.60, 5 = 0.45, 6 = 0.37, 7 = 0.57, 8 = 0.36, 9 = 0.34, 10 = 0.76, 12 = 0.57, 13 = 0.84, 14 = 0.31, 16 = 0.97, 17 = 0.60, 18 = 0.71 and 19 = 0.57

NOTES

- 2-ply truss to be connected together with 0.131"x3" Nails as follows:
Top chords connected as follows: 2 X 4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2 X 4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2 X 4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all piles, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf, BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; Lumber DOL=1.60 plate grip DOL=1.60.
- Provide adequate drainage to prevent water ponding.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 816 lb uplift at joint 2 and 817 lb uplift at joint 10.
- Girder carries hip end with 9-4-0 right side setback, 9-4-0 left side setback, and 5-0-0 end setback.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 457 lb down and 235 lb up at 18-7-8, and 457 lb down and 235 lb up at 9-4-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

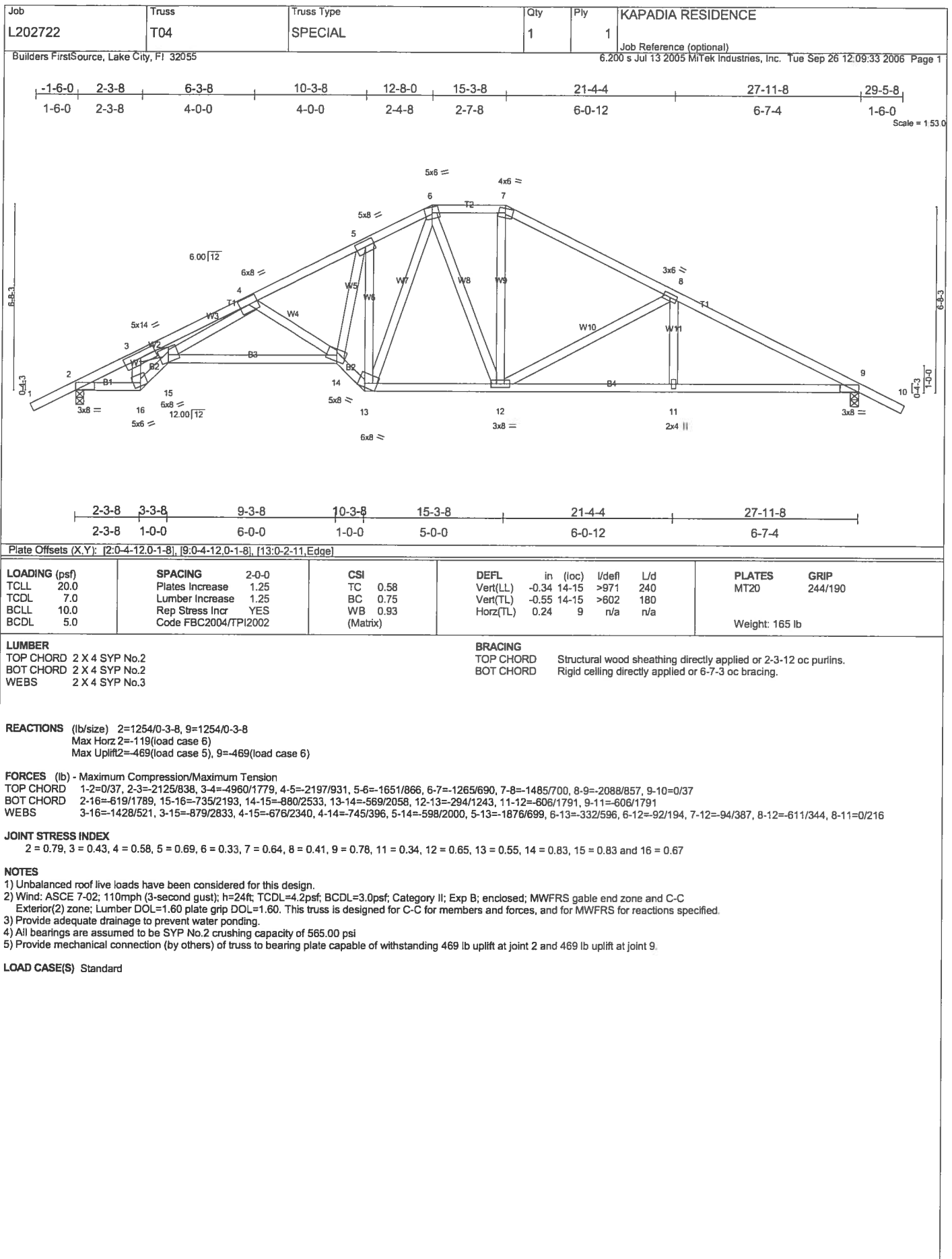
1) Regular: Lumber Increase=1.25, Plate Increase=1.25

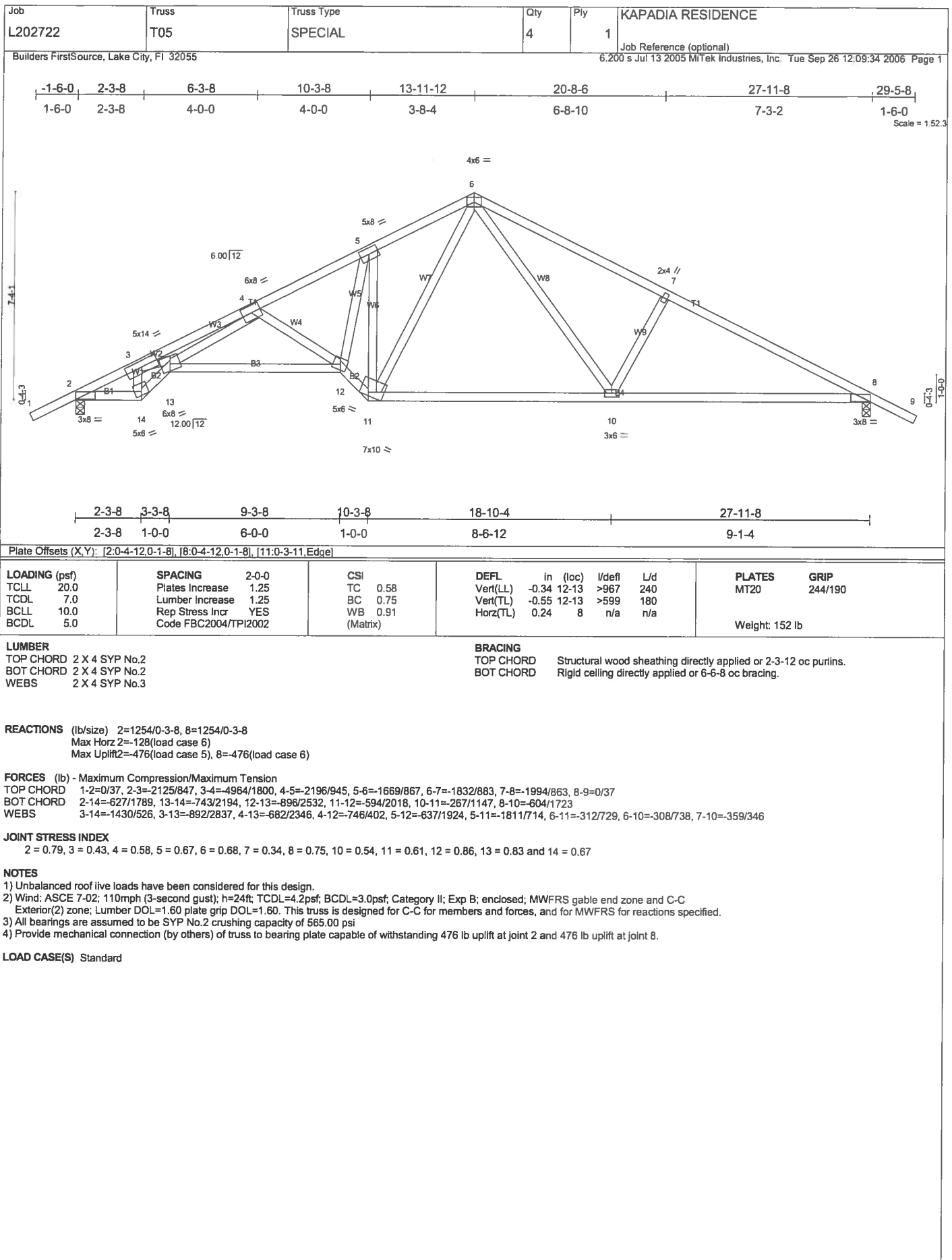
Uniform Loads (plf)

Vert: 1-5=-54, 5-8=-91(F=-37), 8-11=-54, 2-19=-30, 18-19=-30, 17-18=-30, 16-17=-50(F=-20), 14-15=-20(F), 12-14=-50(F=-20), 10-12=-30

Concentrated Loads (lb)

Vert: 17=457(F) 12=457(F)





Job L202722	Truss T06	Truss Type COMMON	Qty 4	Ply 1	KAPADIA RESIDENCE
Builders FirstSource, Lake City, FL 32055			Job Reference (optional)		
			6.200 s Jul 13 2005 MiTek Industries, Inc. Tue Sep 26 12:09:35 2006 Page 1		

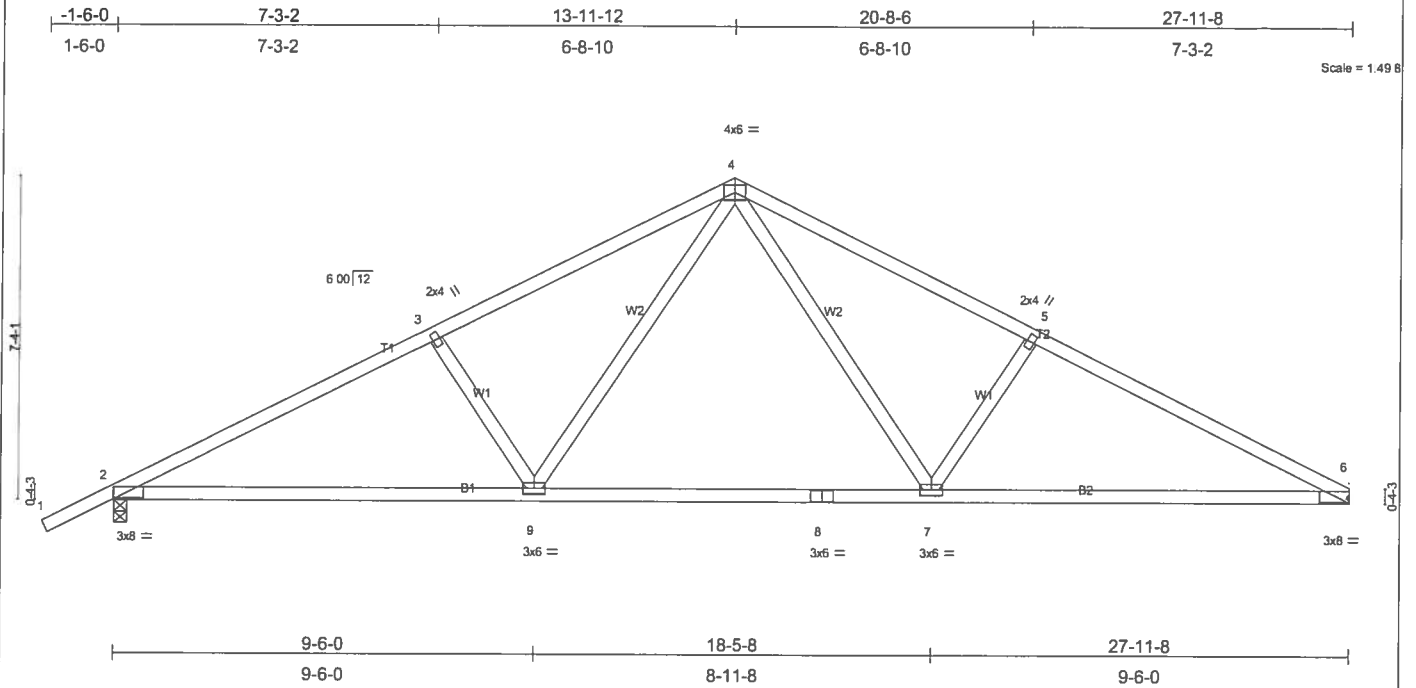


Plate Offsets (X,Y): [2:0-8-0,0-0-6], [6:0-8-0,0-0-6]

LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.58	Vert(LL)	-0.28	6-7	>999	240	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.66	Vert(TL)	-0.47	6-7	>706	180		
BCLL 10.0	Lumber Increase 1.25	WB 0.38	Horz(TL)	0.07	6	n/a	n/a		
BCDL 5.0	Rep Stress Incr YES	(Matrix)							
	Code FBC2004/TPI2002							Weight: 127 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-5-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-2-2 oc bracing.

REACTIONS (lb/size) 6=1163/Mechanical, 2=1261/0-3-8
Max Horz 2=147(load case 5)
Max Uplift 6=378(load case 6), 2=478(load case 5)

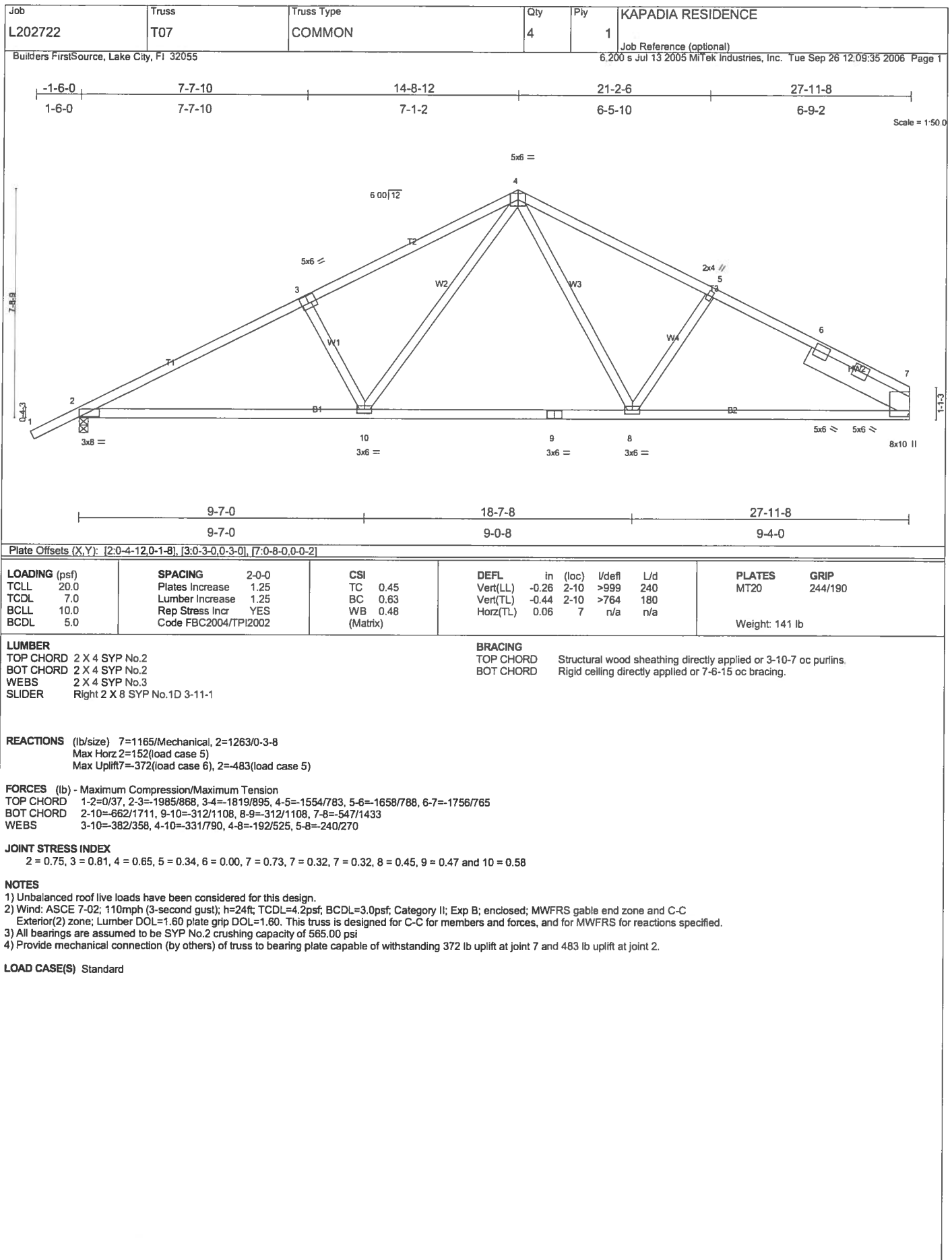
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/37, 2-3=-1995/876, 3-4=-1804/868, 4-5=-1824/890, 5-6=-2018/901
BOT CHORD 2-9=-675/1724, 8-9=-345/1162, 7-8=-345/1162, 6-7=-704/1752
WEBS 3-9=-370/340, 4-9=-275/717, 4-7=-309/747, 5-7=-389/358

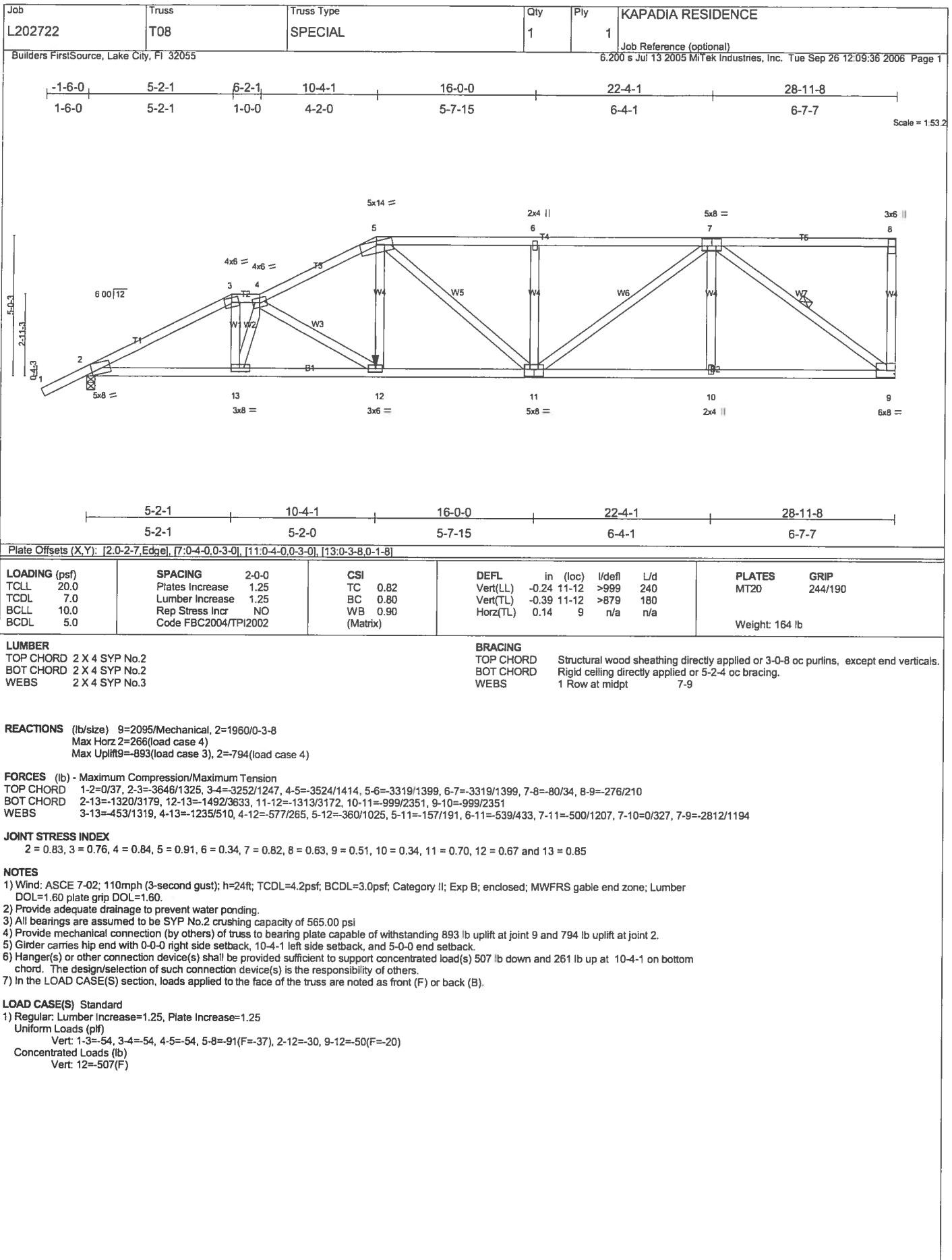
JOINT STRESS INDEX
2 = 0.64, 3 = 0.34, 4 = 0.83, 5 = 0.34, 6 = 0.63, 7 = 0.57, 8 = 0.40 and 9 = 0.57

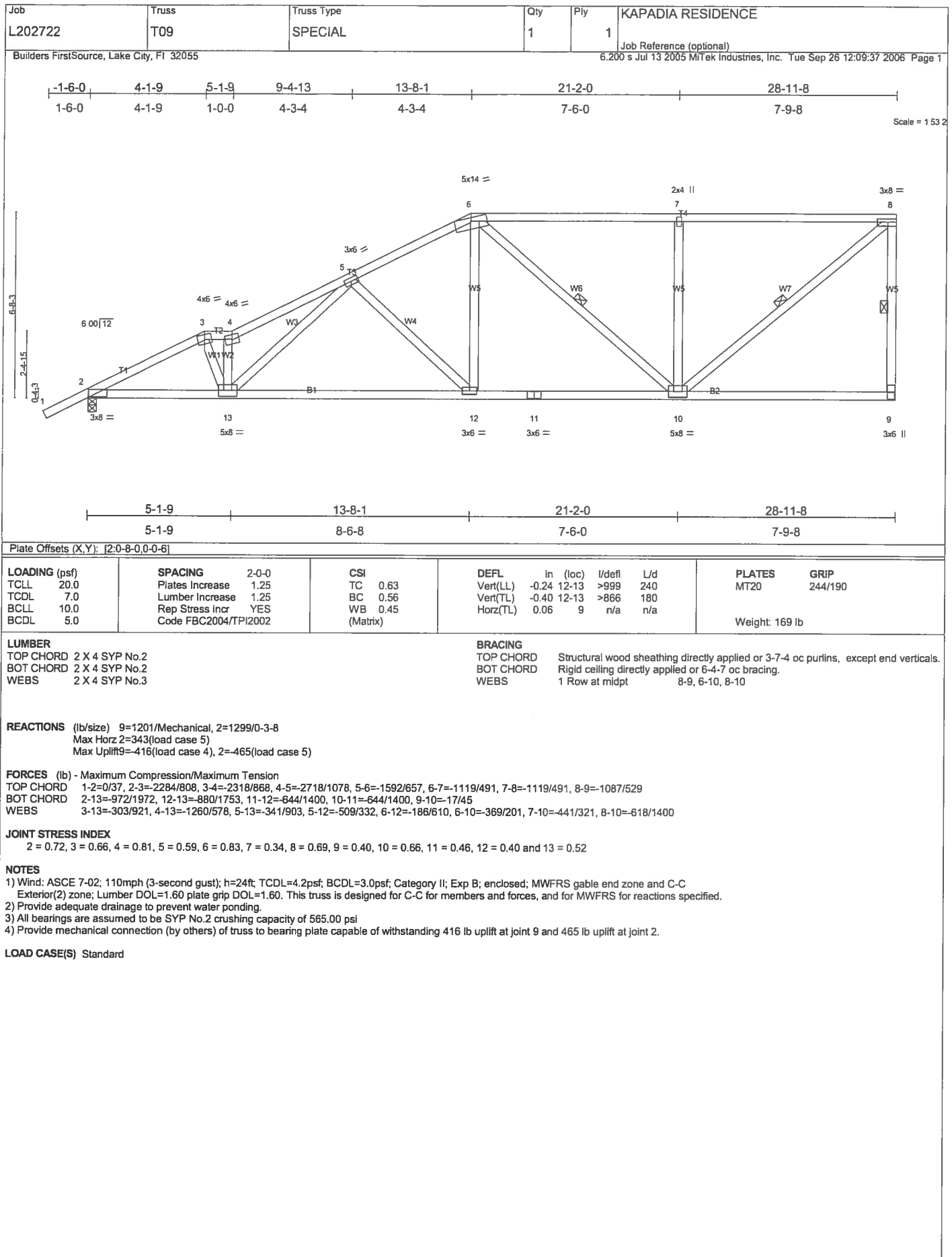
NOTES

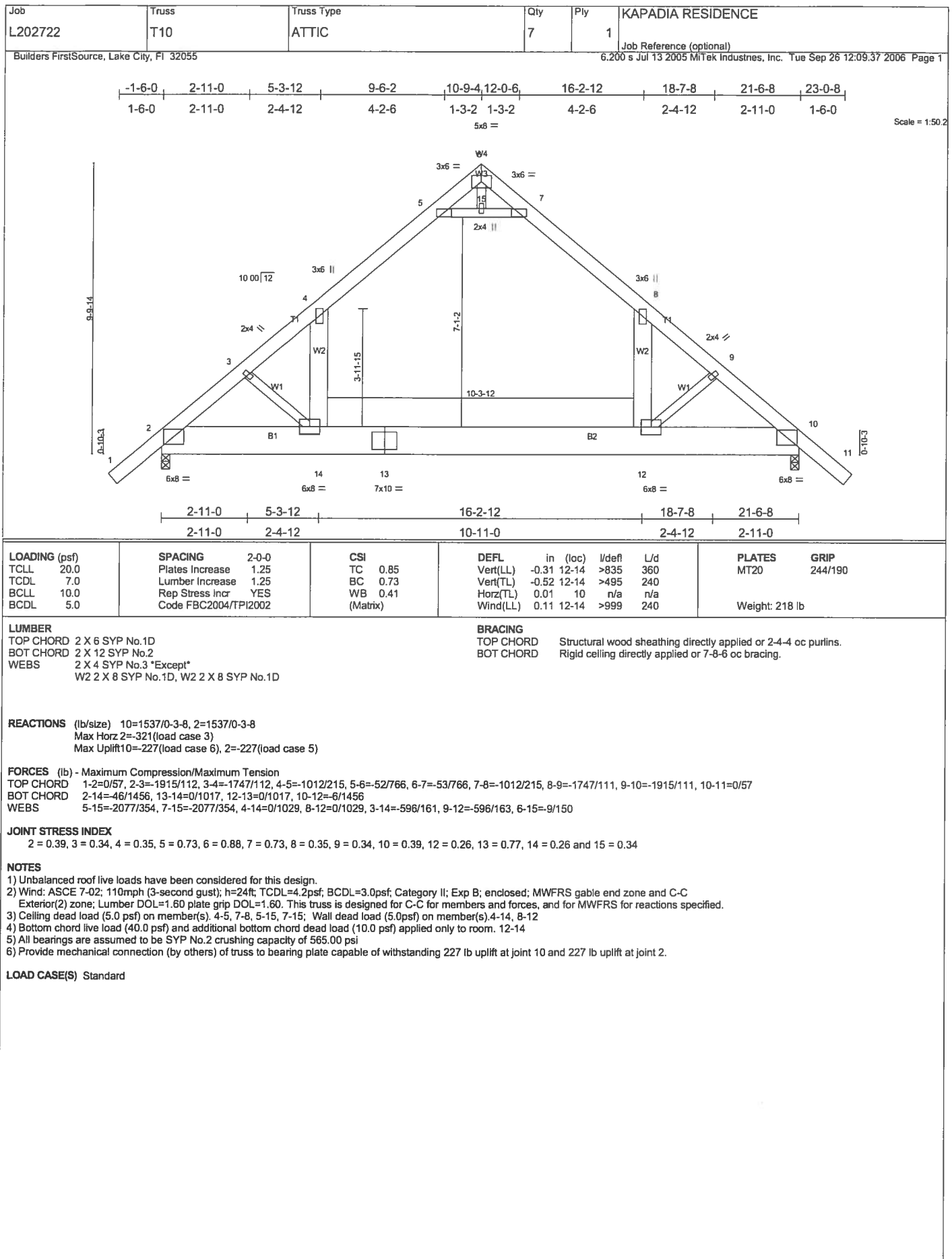
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 378 lb uplift at joint 6 and 478 lb uplift at joint 2.

LOAD CASE(S) Standard









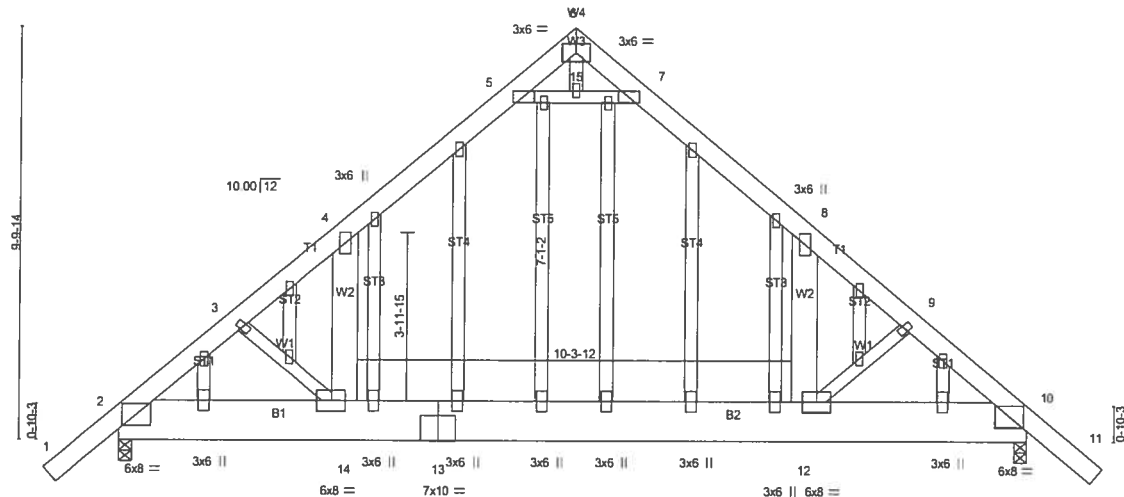
Job L202722	Truss T10G	Truss Type ATTIC	Qty 1	Ply 1	KAPADIA RESIDENCE
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Builders FirstSource, Lake City, FL 32055

Job Reference (optional)
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-1-6-0	2-11-0	5-3-12	9-6-2	10-9-4, 12-0-6	16-2-12	18-7-8	21-6-8	23-0-8
1-6-0	2-11-0	2-4-12	4-2-6	1-3-2 1-3-2	4-2-6	2-4-12	2-11-0	1-6-0

Scale = 1/52

I~360
I~240I~240
I~180

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP
TCCLL 20.0	Plates Increase	1.25	TC 1.00	Vert(LL)	-0.32 12-14	>809	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.81	Vert(TL)	-0.53 12-14	>477	240		
BCCL 10.0	Rep Stress Incr	NO	WB 0.44	Horz(TL)	0.01 10	n/a	n/a		
BCDL 5.0	Code FBC2004/TPI2002		(Matrix)	Wind(LL)	0.12 12-14	>999	240		
								Weight: 279 lb	

LUMBER
 TOP CHORD 2 X 6 SYP No.1D
 BOT CHORD 2 X 12 SYP No.2
 WEBS 2 X 4 SYP No.3 *Except*
 W2 2 X 8 SYP No.1D, W2 2 X 8 SYP No.1D
 OTHERS 2 X 4 SYP No.3

BRACING
 TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied or 7-6-1 oc bracing.

REACTIONS (lb/size) 10=1662/0-3-8, 2=1662/0-3-8
 Max Horz 2=-321(load case 3)
 Max Uplift 10=-289(load case 6), 2=-289(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/67, 2-3=-2047/169, 3-4=-1858/160, 4-5=-1100/244, 5-6=-60/792, 6-7=-61/792, 7-8=-1100/244, 8-9=-1858/158, 9-10=-2047/167, 10-11=0/67
 BOT CHORD 2-14=-92/1550, 13-14=0/1086, 12-13=0/1086, 10-12=-52/1550
 WEBS 5-15=-2183/402, 7-15=-2183/402, 4-14=0/1039, 8-12=0/1039, 3-14=-629/177, 9-12=-629/179, 6-15=-12/156

JOINT STRESS INDEX
 2 = 0.42, 3 = 0.34, 4 = 0.35, 5 = 0.83, 6 = 0.90, 7 = 0.76, 8 = 0.35, 9 = 0.34, 10 = 0.42, 12 = 0.26, 13 = 0.94, 14 = 0.26, 15 = 0.34, 16 = 0.16, 17 = 0.34, 18 = 0.34, 19 = 0.34, 20 = 0.16, 21 = 0.34, 22 = 0.16, 23 = 0.34, 24 = 0.16, 25 = 0.34, 26 = 0.16, 27 = 0.34, 28 = 0.34, 29 = 0.34, 30 = 0.16, 31 = 0.34, 32 = 0.16, 33 = 0.34, 34 = 0.16 and 35 = 0.34

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see MiTek "Standard Gable End Detail"
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-15, 7-15; Wall dead load (5.0psf) on member(s).4-14, 8-12
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 289 lb uplift at joint 10 and 289 lb uplift at joint 2.

LOAD CASE(S) Standard

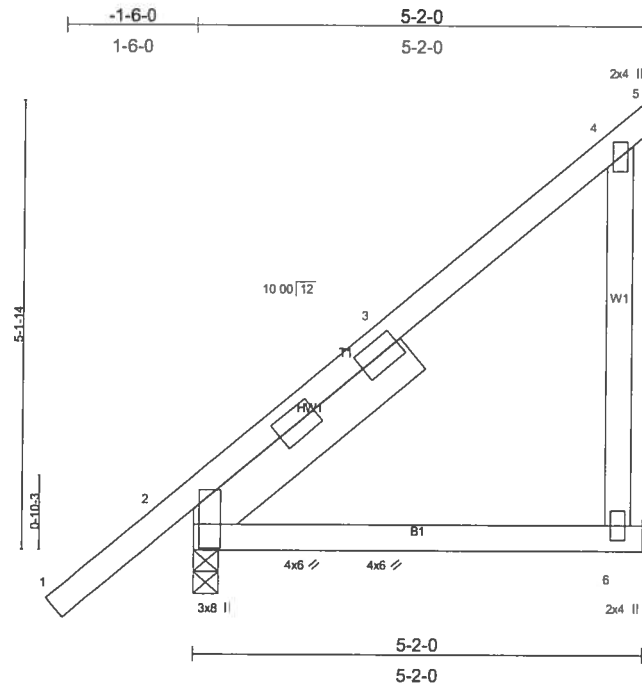
- Regular: Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 2-14=-30, 12-14=-110, 10-12=-30, 1-4=-64, 4-5=-77, 5-6=-64, 6-7=-64, 7-8=-77, 8-11=-64, 5-7=-10
 Drag: 4-14=-10, 8-12=-10

Job L202722	Truss T12	Truss Type MONO TRUSS	Qty 11	Ply 1	KAPADIA RESIDENCE
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Builders FirstSource, Lake City, Fl 32055

Job Reference (optional)

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Scale = 1.25.3

Plate Offsets (X,Y): [2.0-3.4.0.0-12]

LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.33	Vert(LL)	-0.03	2-6	>999	240	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.17	Vert(TL)	-0.05	2-6	>999	180		
BCLL 10.0	Lumber Increase 1.25	WB 0.05	Horz(TL)	0.00		n/a	n/a		
BCDL 5.0	Rep Stress Incr YES	(Matrix)							
	Code FBC2004/TP12002								
								Weight: 35 lb	

LUMBER
 TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2
 WEBS 2 X 4 SYP No.3
 SLIDER Left 2 X 6 SYP No.1D 3-2-5

BRACING
 TOP CHORD Structural wood sheathing directly applied or 5-2-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=305/0-3-8, 6=195/Mechanical
 Max Horz 2=273(load case 5)
 Max Uplift 2=77(load case 5), 6=176(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/39, 2-3=-150/17, 3-4=-137/57, 4-5=-3/0
 BOT CHORD 2-6=0/0
 WEBS 4-6=-122/191

JOINT STRESS INDEX
 2 = 0.19, 2 = 0.04, 2 = 0.04, 3 = 0.00, 4 = 0.10 and 6 = 0.11

NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 2 and 176 lb uplift at joint 6.

LOAD CASE(S) Standard

Job L207222	Truss T13	Truss Type MONO HIP	Qty 1	Ply 1	KAPADIA RESIDENCE
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.200 s Jul 13 2005 MiTek Industries, Inc. Tue Sep 26 12:09:39 2006 Page 1		

Scale = 1/23.2

Plate Offsets (X,Y): (2-0-1-11,0-0-4)					
LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.20	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.12	Vert(LL) -0.01 2-6 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.10	Vert(TL) -0.01 2-6 >999 180		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL) 0.00 5 n/a n/a		
	Code FBC2004/TP12002			Weight: 43 lb	

LUMBER TOP CHORD 2 X 4 SYP No.2 BOT CHORD 2 X 4 SYP No.2 WEBS 2 X 4 SYP No.3 SLIDER Left 2 X 6 SYP No.1D 2-8-11	BRACING TOP CHORD Structural wood sheathing directly applied or 5-2-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
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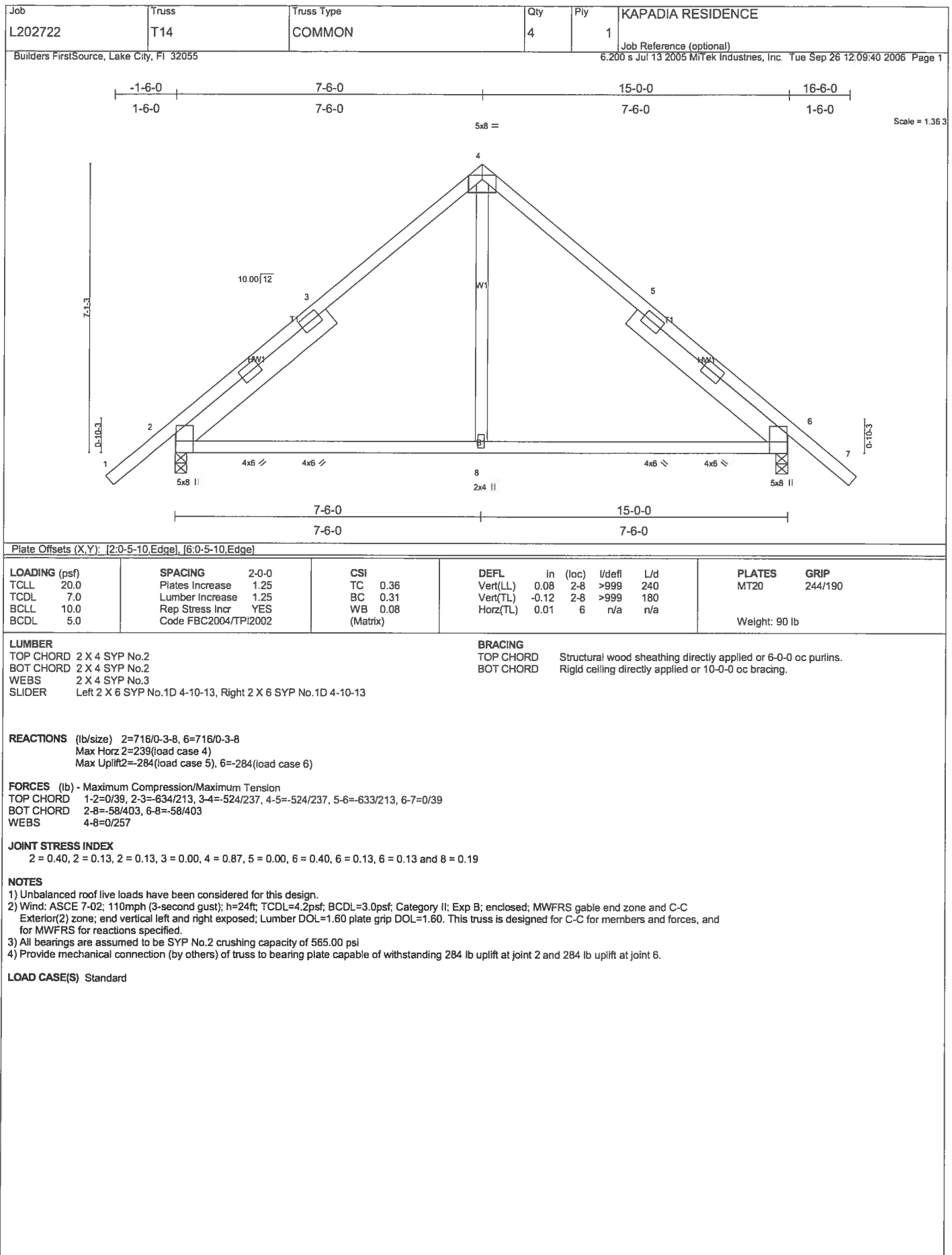
REACTIONS (lb/size) 5=352/Mechanical, 2=337/0-3-8
 Max Horz 2=236(load case 4)
 Max Uplift 5=-266(load case 4), 2=-138(load case 4)

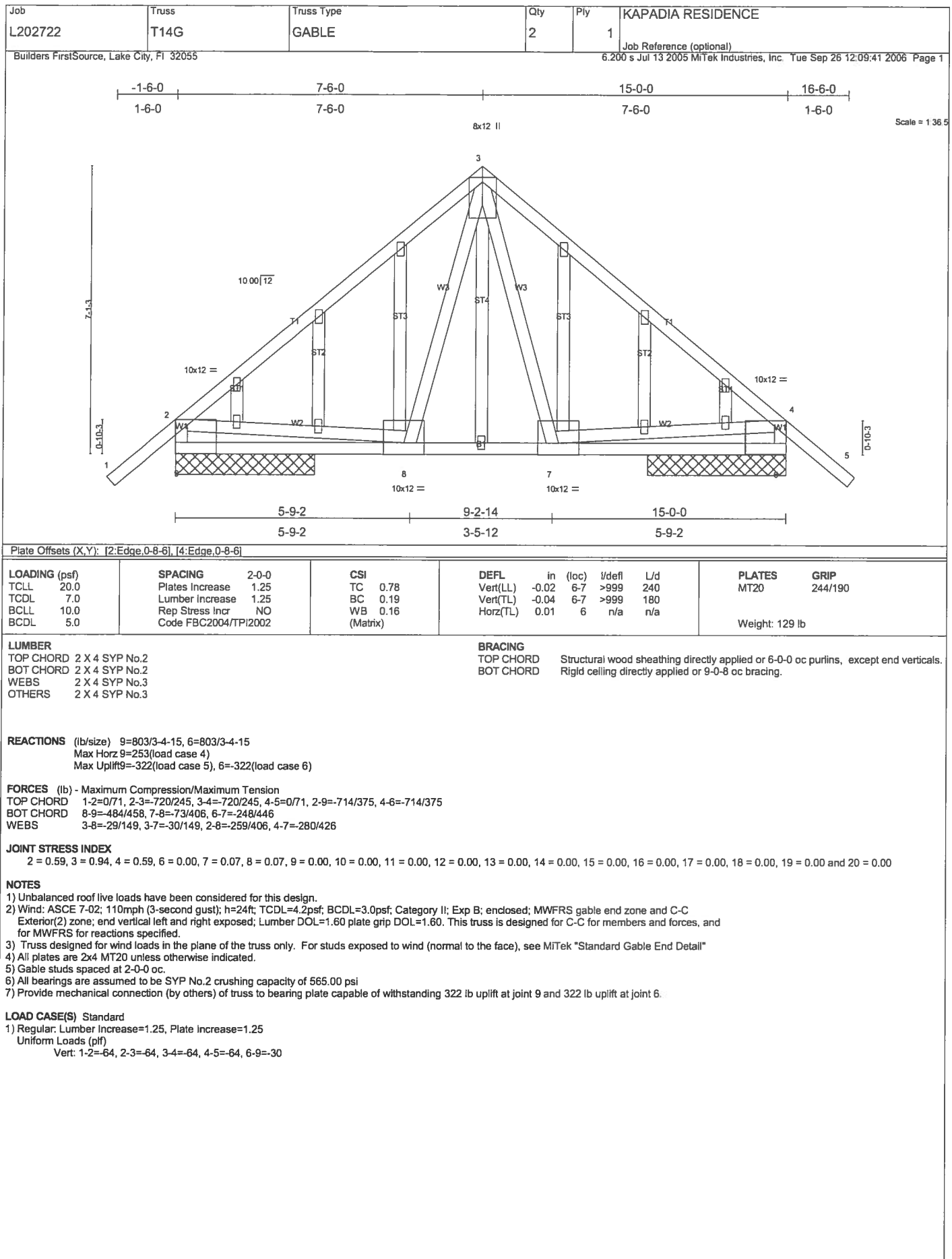
FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/39, 2-3=-180/44, 3-4=-1/1, 4-5=-37/39
 BOT CHORD 2-7=-49/66, 6-7=-49/66, 5-6=-52/76
 WEBS 3-6=-99/251, 3-5=-326/225

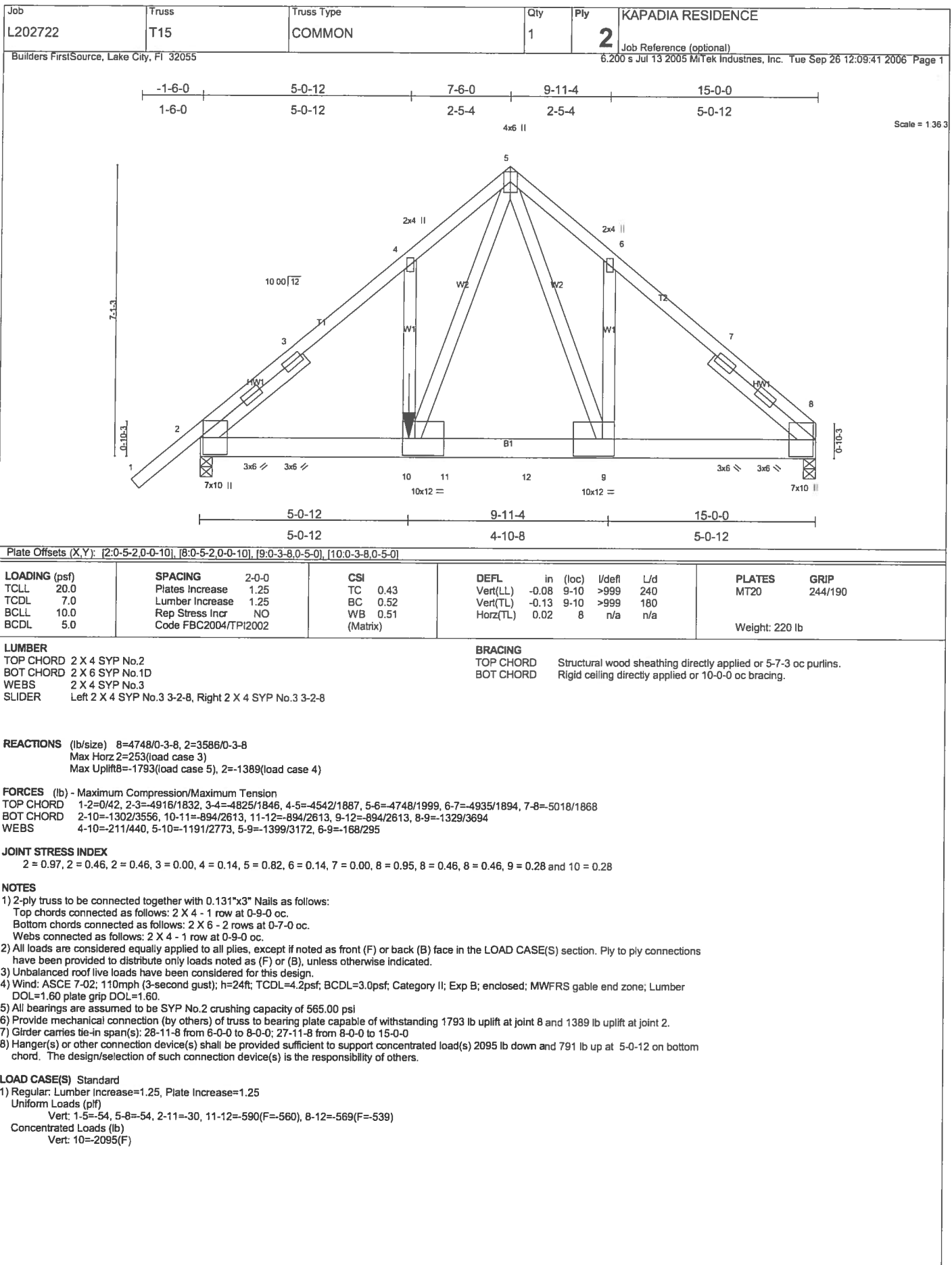
JOINT STRESS INDEX
 2 = 0.64, 2 = 0.08, 3 = 0.28, 4 = 0.02, 5 = 0.18, 6 = 0.18 and 7 = 0.00

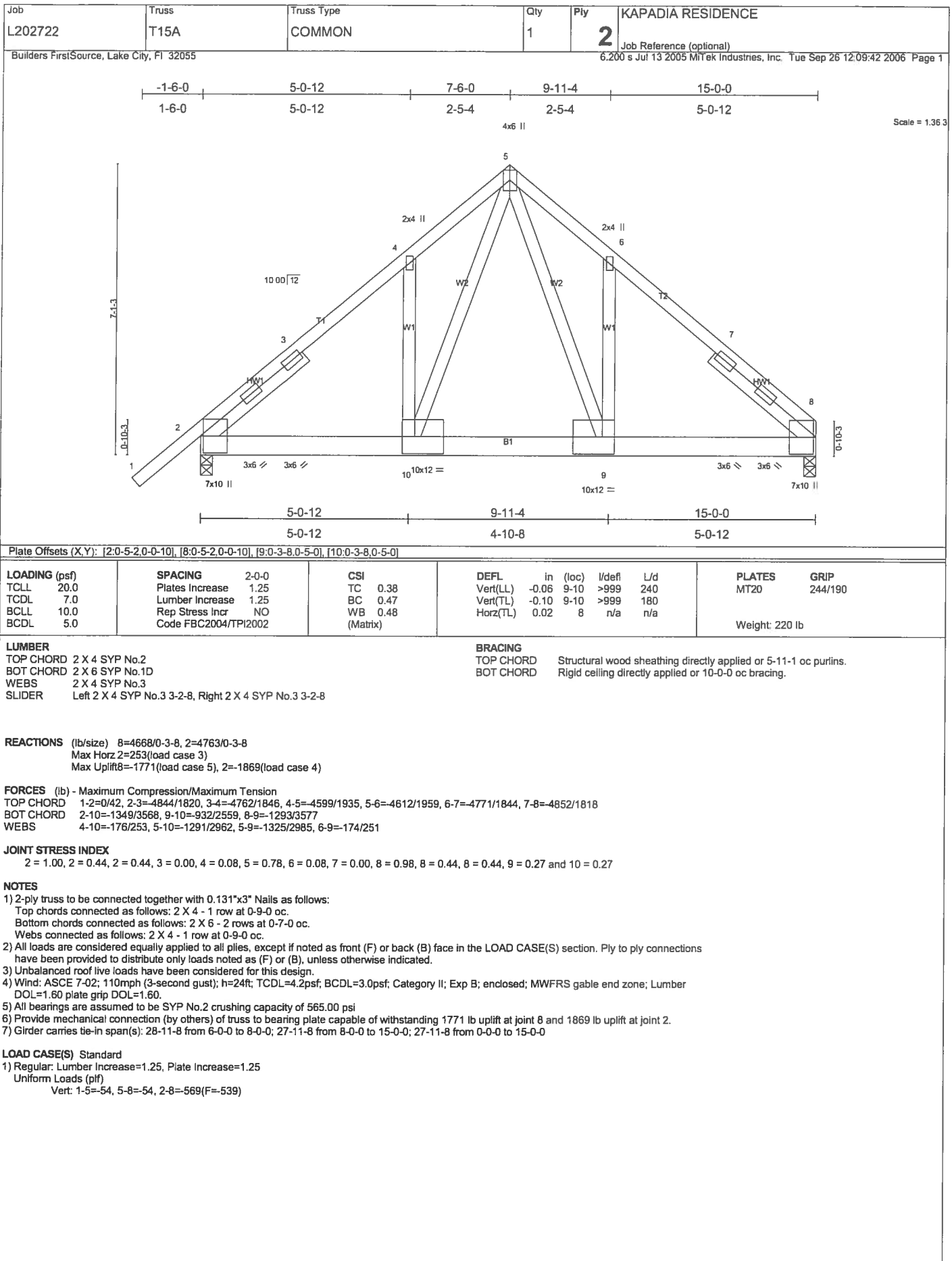
NOTES
 1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60.
 2) Provide adequate drainage to prevent water ponding.
 3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 266 lb uplift at joint 5 and 138 lb uplift at joint 2.
 5) Girder carries hip end with 0-0-0 right side setback, 4-1-0 left side setback, and 4-1-0 end setback.
 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 148 lb down and 136 lb up at 4-1-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
 1) Regular: Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 1-3=-54, 3-4=-78(F=-24), 2-6=-30, 5-6=-43(F=-13)
 Concentrated Loads (lb)
 Vert: 6=-148(F)

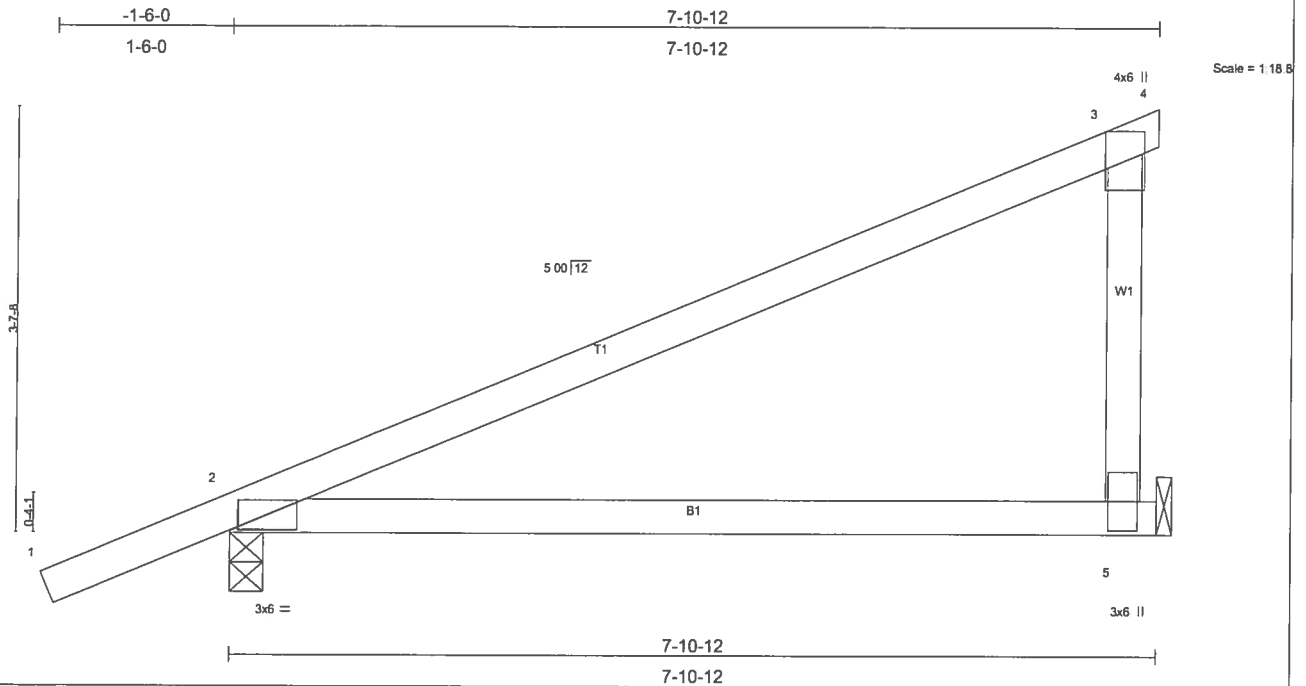








Job L202722	Truss T16	Truss Type MONO TRUSS	Qty 4	Ply 1	KAPADIA RESIDENCE
Builders FirstSource, Lake City, FL 32055					Job Reference (optional)
6.200 s Jul 13 2005 MiTek Industries, Inc. Tue Sep 26 12:09:42 2006 Page 1					



LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	L/def	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 1.00	Vert(LL)	0.25	2-5	>354	240	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.39	Vert(TL)	0.21	2-5	>418	180		
BCLL 10.0	Rep Stress Incr YES	WB 0.00	Horz(TL)	-0.00	5	n/a	n/a		
BCDL 5.0	Code FBC2004/TPI2002	(Matrix)							
Weight: 31 lb									

LUMBER
 TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2
 WEBS 2 X 4 SYP No.3

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) 5=307/Mechanical, 2=416/0-3-8
 Max Horz 2=192(load case 5)
 Max Uplift 5=-242(load case 5), 2=-286(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/31, 2-3=-222/106, 3-4=-2/0, 3-5=-164/192
 BOT CHORD 2-5=-199/137

JOINT STRESS INDEX
 2 = 0.32, 3 = 0.84 and 5 = 0.90

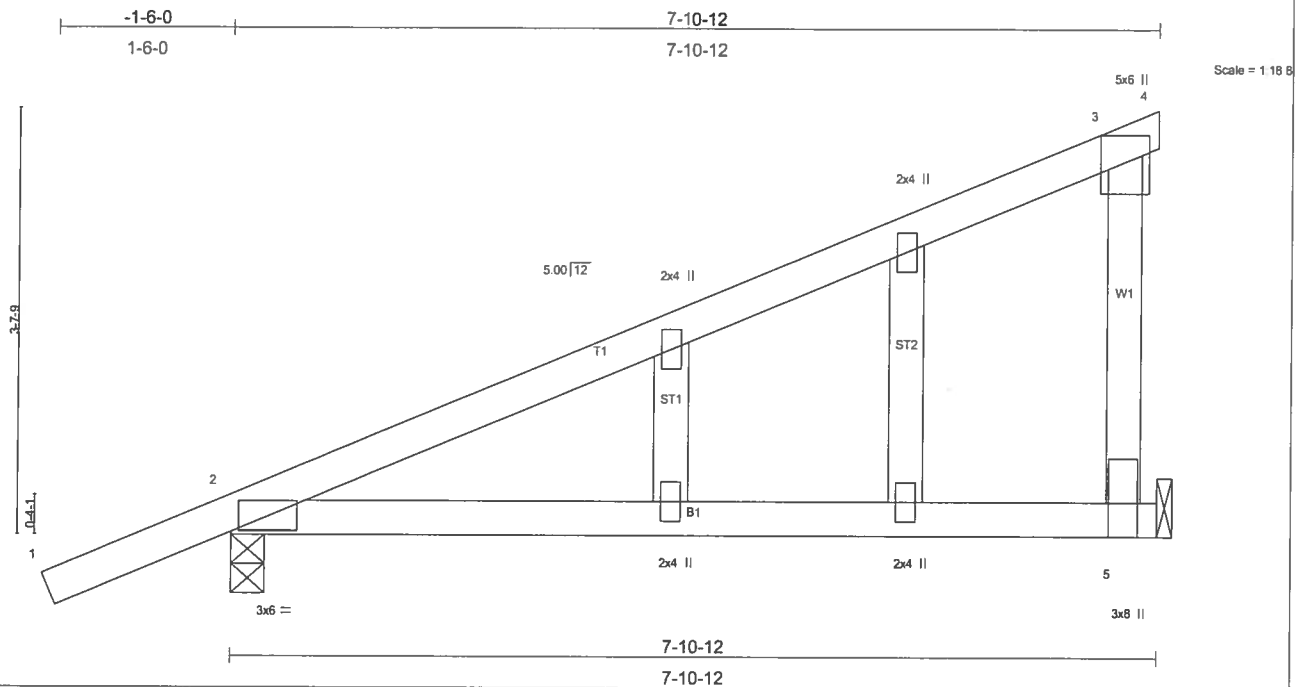
NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 242 lb uplift at joint 5 and 286 lb uplift at joint 2.

LOAD CASE(S) Standard

Job L202722	Truss T16G	Truss Type MONO TRUSS	Qty 2	Ply 1	KAPADIA RESIDENCE
Builders FirstSource, Lake City, Fl 32055			Job Reference (optional)		

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LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.67	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.54	Vert(LL) 0.26 2-5 >348 240		
BCCL 10.0	Lumber Increase 1.25	WB 0.00	Vert(TL) 0.22 2-5 >411 180		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL) -0.00 5 n/a n/a		
	Code FBC2004/TPI2002			Weight: 37 lb	

LUMBER
 TOP CHORD 2 X 4 SYP No.2
 BOT CHORD 2 X 4 SYP No.2
 WEBS 2 X 4 SYP No.2
 OTHERS 2 X 4 SYP No.3

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

REACTIONS (lb/size) 5=345/Mechanical, 2=472/0-3-8
 Max Horz 2=192(load case 5)
 Max Uplift 5=-268(load case 5), 2=-324(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-3/37, 2-3=-257/129, 3-4=-3/1, 3-5=-198/235
 BOT CHORD 2-5=-225/156

JOINT STRESS INDEX
 2 = 0.46, 3 = 0.87, 5 = 0.82, 6 = 0.00, 7 = 0.00, 8 = 0.00 and 9 = 0.00

NOTES

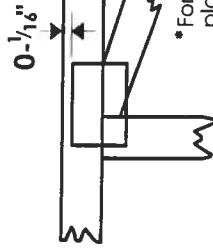
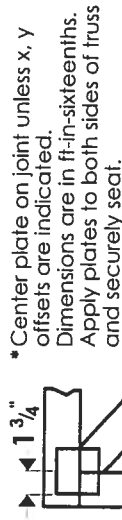
- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=24ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see MiTek "Standard Gable End Detail"
- 3) Gable studs spaced at 2-0-0 oc.
- 4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 268 lb uplift at joint 5 and 324 lb uplift at joint 2.

LOAD CASE(S) Standard

- 1) Regular: Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 1-3=-64, 3-4=-24, 2-5=-30

Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

4 X 4

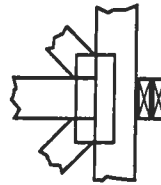
The first dimension is the width perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING



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

BEARING

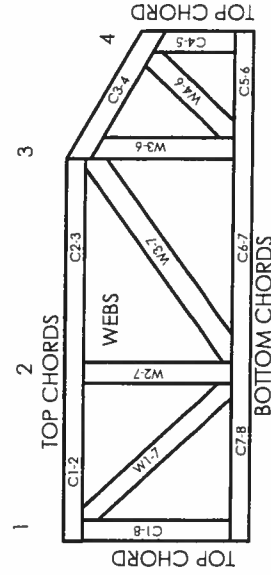


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

Industry Standards:

- ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
- DSB-89: Design Standard for Bracing.
- BCS11: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



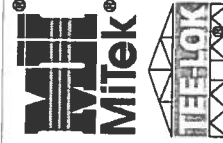
8 7 6 5

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.

CONNECTOR PLATE CODE APPROVALS

BOCA	96-31, 95-43, 96-20-1, 96-67, 84-32
ICBO	4922, 5243, 5363, 3907
SBCCI	9667, 9730, 9604B, 9511, 9432A



Mitek Engineering Reference Sheet: MII-7473



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCS11.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant or preservative treated lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions shown indicate minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing shown on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of a professional engineer.
- Install and load vertically unless indicated otherwise.