

8' PLAT

NOTES:

- 1) STEEL TO BE UP TO RECOMMENDATIONS FOR HANDLING INSTALLATION AND TEMPORARY BRACING OR REFER TO DETAILED VIBRO PILING DRAWING REQUIRED.
- 2) ALL TUBES/SECT (INCLUDING TUBES/SECT UNDER VALLEY FRAMING) MUST BE COMPLETELY DOCKED OR REFER TO DETAILED VIBRO PILING DRAWING REQUIREMENTS.
- 3) ALL VALVEYS ARE TO BE CONVENTIONALLY FRAMED BY BUILDER.
- 4) ALL TUBES/SECT ARE DESIGNED FOR 2 o.c. MAXIMUM SPACING, UNLESS OTHERWISE NOTED
- 5) ALL WALLS SHOWN ON FLAGMENT PLAN ARE CONSIDERED TO BE LOAD BEARING, UNLESS OTHERWISE NOTED.
- 6) 5/4x4 TUBES/SECT MUST BE INSTALLED WITH THE TOP BEING UP.
- 7) ALL DOOF TUBES/SECT HANGERS TO BE SIMPSON H/5/6 UNLESS OTHERWISE NOTED. ALL FLOOR TUBES/SECT HANGERS TO BE SIMPSON TH/4x2 UNLESS OTHERWISE NOTED.
- 8) BEARING/DOOF/INTEL (H/6) TO BE FURNISHED BY BUILDER.

THIS LAYOUT IS THE SOLE SOURCE FOR FABRICATION TRUSSES AND JOISTS. ALL PREVIOUS ARCHITECTURAL OR TRUSS LAYOUTS, REVIEW AND APPROVAL OF THIS LAYOUT BE RECEIVED BEFORE ANY TRUSSES WILL BE BUILT. VENDOR CONDITIONS TO INSURE AGAINST CHANGES THAT WILL REQUIRE EXTRA CHARGES TO YOU.

Approved by: _____ Date: _____



THOMAS DUILDER

LOT 20 EMERALD LA

MODEL: CUSTOM
REVISION: NT
SCALE: NT

DATE:	09/05/05	PLANT:	J.BENZ	WOB:	L1308
-------	----------	--------	--------	------	-------

NOTICE OF TREATMENT

Applicator Name McCall Service Inc
Address 415 NW 250 St Suite 1
City Newberry, FL
Time 9:30 AM Date 9-7-06

SITE LOCATION

Lot # _____ Block # _____ Permit # 000023693

Subdivision _____

Address 989 NW Zack Dr. Lake City FL 32055

Name of Chemical Applied Demon Max Used .25 %

Area Treated Perimeter

Gallons Used 100

Remarks Final Spray 9/7/06 CEO

NOTICE OF TREATMENT

Applicator Name NIC CARL T. LUCE INC

Address 4047 NW 6 ST SUIT F

City GLADE FLD

Time 5:30 PM Date 10-19-05

SITE LOCATION

23693

Lot # _____ Block # _____ Permit # _____

Subdivision RECREATION TRAILS

Address 3000 E Browne Rd Lake City

Name of Chemical Applied Wesban Used 05 %

Area Treated 2400

Gallons Used 240

Remarks _____

DATE 10/07/2005

Columbia County Building Permit

PERMIT

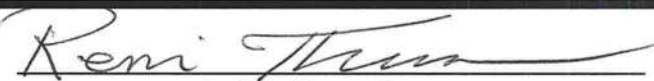
This Permit Expires One Year From the Date of Issue

000023693

APPLICANT RENNIE THOMAS PHONE 352 538-1002
ADDRESS 3222 NW 136TH ST GAINESVILLE FL 32606
OWNER EUGENE THOMAS PHONE 352 258-1914
ADDRESS 989 NW ZACK DRIVE LAKE CITY FL 32055
CONTRACTOR EUGENE THOMAS PHONE 352 258-1914
LOCATION OF PROPERTY 90W, TR ON BROWN RD, TL ON EMERALD LAKE DR, TL ON ZACK DR,
TO END OF CUL-DE-SAC ON RIGHT

TYPE DEVELOPMENT SFD, UTILITY ESTIMATED COST OF CONSTRUCTION 98300.00
HEATED FLOOR AREA 1966.00 TOTAL AREA 3814.00 HEIGHT .08 STORIES 1
FOUNDATION CONC WALLS FRAMED ROOF PITCH 8/12 FLOOR SLAB
LAND USE & ZONING RSF-2 MAX. HEIGHT 20
Minimum Set Back Requirments: STREET-FRONT 25.00 REAR 15.00 SIDE 10.00
NO. EX.D.U. 0 FLOOD ZONE X PP DEVELOPMENT PERMIT NO. _____

PARCEL ID 28-3S-16-02372-620 SUBDIVISION ARBOR GREEN AT EMERALD LAKES
LOT 20 BLOCK _____ PHASE 2 UNIT _____ TOTAL ACRES .50

000000837 _____ CGC007568 
Culvert Permit No. Culvert Waiver Contractor's License Number Applicant/Owner/Contractor
CULVERT 05-0907-N BK JH Y
Driveway Connection Septic Tank Number LU & Zoning checked by Approved for Issuance New Resident

COMMENTS: ONE FOOT ABOVE THE ROAD

Check # or Cash 1329

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power _____ Foundation _____ Monolithic _____
date/app. by date/app. by date/app. by
Under slab rough-in plumbing _____ Slab _____ Sheathing/Nailing _____
date/app. by date/app. by date/app. by
Framing _____ Rough-in plumbing above slab and below wood floor _____
date/app. by date/app. by
Electrical rough-in _____ Heat & Air Duct _____ Peri. beam (Lintel) _____
date/app. by date/app. by date/app. by
Permanent power _____ C.O. Final _____ Culvert _____
date/app. by date/app. by date/app. by
M/H tie downs, blocking, electricity and plumbing _____ Pool _____
date/app. by date/app. by
Reconnection _____ Pump pole _____ Utility Pole _____
date/app. by date/app. by date/app. by
M/H Pole _____ Travel Trailer _____ Re-roof _____
date/app. by date/app. by date/app. by

BUILDING PERMIT FEE \$ 495.00 CERTIFICATION FEE \$ 19.07 SURCHARGE FEE \$ 19.07
MISC. FEES \$.00 ZONING CERT. FEE \$ 50.00 FIRE FEE \$.00 WASTE FEE \$ _____
FLOOD DEVELOPMENT FEE \$ _____ FLOOD ZONE FEE \$ 25.00 CULVERT FEE \$ 25.00 TOTAL FEE 633.14

INSPECTORS OFFICE  CLERKS OFFICE 

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY. AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.

"WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT."

This Permit Must Be Prominently Posted on Premises During Construction

PLEASE NOTIFY THE COLUMBIA COUNTY BUILDING DEPARTMENT AT LEAST 24 HOURS IN ADVANCE OF EACH INSPECTION, IN ORDER THAT IT MAY BE MADE WITHOUT DELAY OR INCONVENIENCE, PHONE 758-1008. THIS PERMIT IS NOT VALID UNLESS THE WORK AUTHORIZED BY IT IS COMMENCED WITHIN 6 MONTHS AFTER ISSUANCE.

The Issuance of this Permit Does Not Waive Compliance by Permittee with Deed Restrictions.

23693

THE UNDERSIGNED hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

Tax Parcel ID Number 28-35-16-02372-620

1. Description of property: (legal description of the property and street address or 911 address)

Lot #20 ARBOO Green at Emerald Lakes phase two

Inst:2005025189 Date:10/10/2005 Time:14:50

B DC,P.DeWitt Cason,Columbia County B:1061 P:1007

2. General description of improvement: House

3. Owner Name & Address Eugene and Rennie Thomas - 3222 NW 136th St
Gainesville FL 32606 Interest in Property _____

4. Name & Address of Fee Simple Owner (If other than owner): N/A

5. Contractor Name owner Phone Number 352 538-1002
Address _____

6. Surety Holders Name N/A Phone Number _____
Address _____
Amount of Bond _____

7. Lender Name N/A Phone Number _____
Address _____

8. Persons within the State of Florida designated by the Owner upon whom notices or other documents may be served as provided by section 718.13 (1)(a) 7; Florida Statutes:

Name N/A Phone Number _____
Address _____

9. In addition to himself/herself the owner designates N/A of _____
to receive a copy of the Lienor's Notice as provided in Section 713.13 (1) -
(a) 7. Phone Number of the designee _____

10. Expiration date of the Notice of Commencement (the expiration date is 1 (one) year from the date of recording,
(Unless a different date is specified) 1 year

NOTICE AS PER CHAPTER 713, Florida Statutes:

The owner must sign the notice of commencement and no one else may be permitted to sign in his/her stead.

Sworn to (or affirmed) and subscribed before
day of 10-10, 2005

NOTARY STAMP/SEAL

Rennie Thomas
Signature of Owner



Laurie Hodson
Signature of Notary

Columbia County Building Permit Application CR# 1329

Revised 9-23-04

For Office Use Only Application # 0509-51 Date Received 9/15/05 By JW Permit # 837/23693
Application Approved by - Zoning Official BLK Date 29.07.05 Plans Examiner OK JTH Date 9-26-05
Flood Zone XP⁴ plat Development Permit N/A Zoning RSF-2 Land Use Plan Map Category RES. Ln Dev.
Comments See 9/15/05 letter

Applicants Name Rennie Thomas Phone 352 538-1002
Address 3222 NW 136 St Gville Fl, 32606
Owners Name Eugene Thomas Builders Co. Phone same
911 Address 989 NW Zack Drive Emerald Lakes Lake City Fl,
Contractors Name Eugene Thomas Phone 352 258-1914
Address 3222 NW 136 St Gville Fl, 32606
Fee Simple Owner Name & Address _____
Bonding Co. Name & Address _____
Architect/Engineer Name & Address William Myers P.O. Box 1513 Lake City, FL 32056-1513
Mortgage Lenders Name & Address Ruth T. Turner 4558 W State Rd. 238 Lake Butler, FL 32054
Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy
Property ID Number 28-35-16-02372-620 Estimated Cost of Construction 1800,000
Subdivision Name ARBUCK GREEN AT Emerald Lakes Lot 20 Block _____ Unit _____ Phase 2
Driving Directions Lot 20 NW Zack Lake City Fl
Hwy 90 W T/R on Brown Rd T/L on Emerald Lakes Dr
T/R on Zack Dr. Go to Cal-Desac - lot on right.
Type of Construction Masonry and Frame Number of Existing Dwellings on Property 0
Total Acreage .50 Lot Size _____ Do you need a Culvert Permit or Culvert Waiver or Have an Existing Drive
Actual Distance of Structure from Property Lines - Front 93.1' Side 80.8' Side 33.8' Rear 59.85.3'
Total Building Height 8 FT Number of Stories 1 Heated Floor Area 1966 Roof Pitch 8/12
Porches 371 GARAGE 477 TOTAL 2814

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction.

OWNERS AFFIDAVIT: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

Eugene Thomas
Owner Builder or Agent (Including Contractor)

STATE OF FLORIDA
COUNTY OF COLUMBIA



Eugene Thomas
Contractor Signature
Contractors License Number CGC007568
Competency Card Number _____
NOTARY STAMP/SEAL

Sworn to (or affirmed) and subscribed before me
this 15th day of September 2005.
Personally known ✓ or Produced Identification _____

Janet L. Cheek
Notary Signature

Rennie Thomas

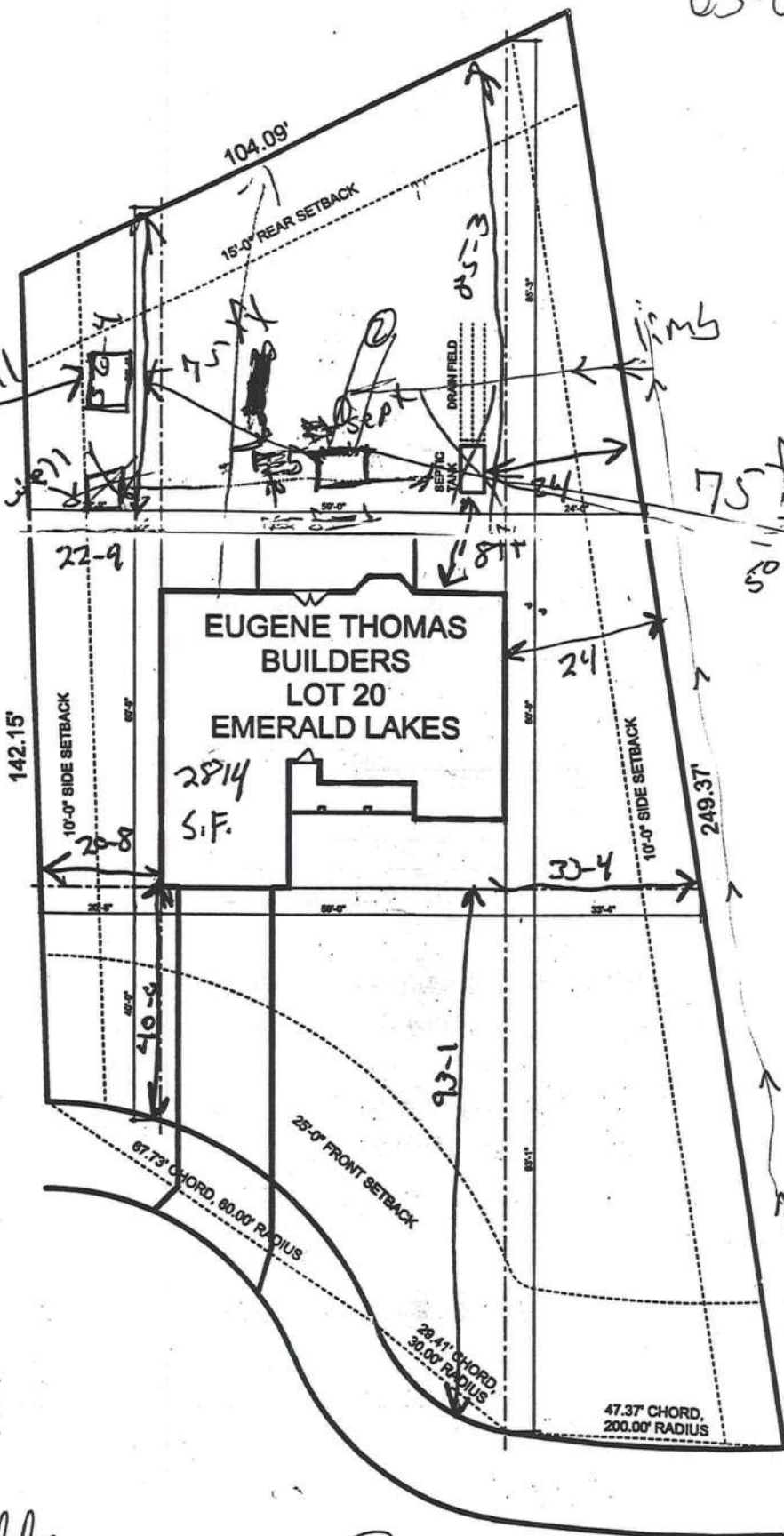
WELL = 100'

05-0907 N

Neighbor
Well = 75'

well

well



Call if need
to Rennie
352 538-100

walk along
the pond you
will see a
limb make
left

Salli Graddy

EST- COLUMBIA
9-15-05

SCALE: 1" = 30' Rennie Thomas 9-12-2005

Rennie Thomas

REVISED
9-12-05

8/30/2005
RECEIVED
9-12-05
sm

1051

Prepared by and Return to:

Katie Lilly

Gateway Title Agency, LLC

4255 SW Cambridge Glen

Lake City, Florida 32024

File Number: 33579GW

Parcel I.D. Number: R02372-620

Incidental to the issuance of a Title Insurance Policy

Return To Keystone Title Agency, Inc.
9735 U.S. Hwy. 19
Port Richey, FL 34668
File # 33579GW

General Warranty Deed

Parcel ID Number: R02372-620

Made this June 30, 2005 A.D. By Matthew A. Register, a single person, whose mailing address is: 249 SW Sweetbriar Dr., Lake City, FL 32025, hereinafter called the grantor, to Eugene Thomas Builders, Inc., whose post office address is: 3222 NW 136th St., Gainesville, FL 32606, hereinafter called the grantee:

(Whenever used herein the term "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

Witnesseth, that the grantor, for and in consideration of the sum of **Thirty Four Thousand Nine Hundred dollars & no cents, (\$34,900.00)** and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee, all that certain land situate in Columbia County, Florida, viz:

Lot 20, of Arbor Green at Emerald Lakes, Phase 2, according to the Plat thereof, as recorded in Plat Book 7, at Pages 131 through 133, of the Public Records of Columbia County, Florida.

Said property is not the homestead of the Grantor(s) under the laws and constitution of the State of Florida in that neither Grantor(s) or any members of the household of Grantor(s) reside thereon.

Subject, however, to all covenants, conditions, restrictions, reservations, limitations, easements and to all applicable zoning ordinances and/or restrictions and prohibitions imposed by governmental authorities, if any..

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances except taxes accruing subsequent to December 31, 2005.

In Witness Whereof, the said grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in our presence:

REQUIRES TWO DIFFERENT WITNESSES

Witness #1 signature

Evelyn H. Willis

Print Witness #2 signature

Witness #2 signature

Print Witness #2 signature

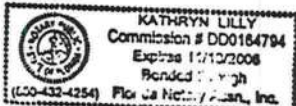
Matthew A. Register (Seal)

Inst: 2005016670 Date: 07/14/2005 Time: 11:56
Loc Stamp-Deed: 244.30
mk DC, P. Dewitt Cason, Columbia County B:1051 P:2383

State of Florida
County of Columbia

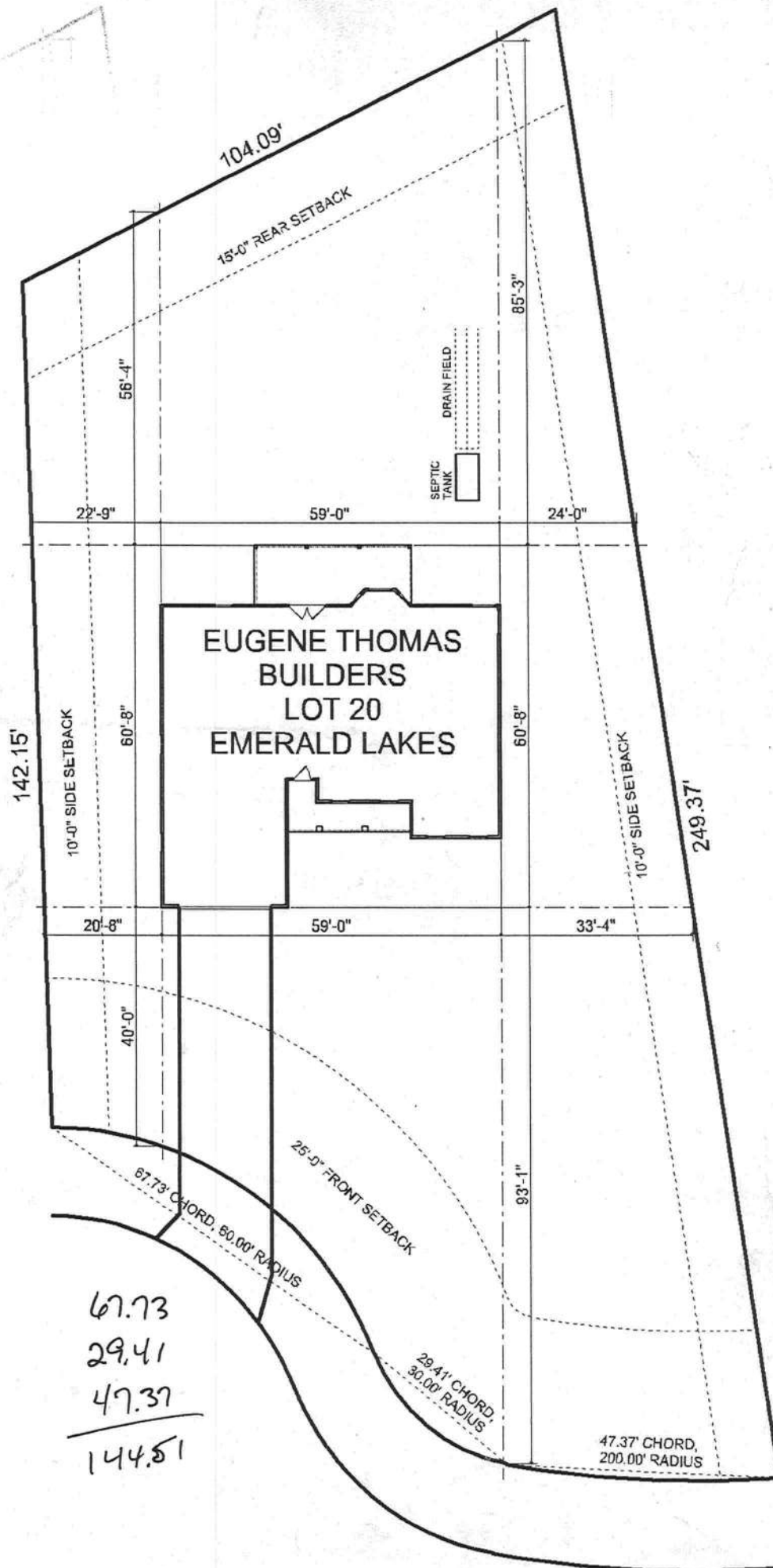
The foregoing instrument was acknowledged before me this June 30, 2005 by Matthew A. Register, a single person, who has produced a drivers license as identification.

Notary Seal



Kathryn Lilly
Notary Public

My Commission Expires: 12/12/2008



67.73

29.41

47.37

144.51

HALL'S PUMP & WELL SERVICE, INC.

SPECIALIZING IN 4"-6" WELLS



DONALD AND MARY HALL
OWNERS

PHONE (904) 752-1854
FAX (904) 755-7022
~~XXXXXX~~
LAKE CITY, FLORIDA 32055
904 NW Main Blvd.

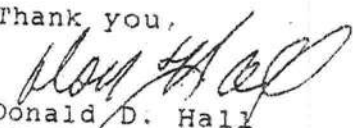
June 12, 2002

NOTICE TO ALL CONTRACTORS

Please be advised that due to the new building codes we will use a large capacity diaphragm tank on all new wells. This will insure a minimum of one (1) minute draw down or one (1) minute refill. If a smaller diaphragm tank is used then we will install a cycle stop valve which will produce the same results.

If you have any questions please feel free to call our office anytime.

Thank you,


Donald D. Hall
DDH/jk

4" well

1 hp submersible pump
PC 244 diaphragm tank (110L)(81gal)
1 1/4" drop pipe

Columbia County Building Department Culvert Permit

Culvert Permit No.
000000837

DATE 10/07/2005 PARCEL ID # 28-3S-16-02372-620
APPLICANT RENNIE THOMAS PHONE 352 538-1002
ADDRESS 3222 NW 136TH ST GAINESVILLE FL 32606
OWNER EUGENE THOMAS PHONE 352 258-1914
ADDRESS 989 NW ZACK DRIVE LAKE CITY FL 32055
CONTRACTOR EUGENE THOMAS PHONE 352 258-1914
LOCATION OF PROPERTY 90W, TR ON BROWN ROAD, TL ON EMERALD LAKE, TL ON ZACK DRIVE,
TO END OF CUL-DE-SAC ON RIGHT

SUBDIVISION/LOT/BLOCK/PHASE/UNIT AR.GREEN AT EM LAKES 20

SIGNATURE



INSTALLATION REQUIREMENTS



Culvert size will be 18 inches in diameter with a total length of 32 feet, leaving 24 feet of driving surface. Both ends will be mitered 4 foot with a 4 : 1 slope and poured with a 4 inch thick reinforced concrete slab.

INSTALLATION NOTE: Turnouts will be required as follows:

- a) a majority of the current and existing driveway turnouts are paved, or;
 - b) the driveway to be served will be paved or formed with concrete.
- Turnouts shall be concrete or paved a minimum of 12 feet wide or the width of the concrete or paved driveway, whichever is greater. The width shall conform to the current and existing paved or concreted turnouts.



Culvert installation shall conform to the approved site plan standards.



Department of Transportation Permit installation approved standards.



Other _____

ALL PROPER SAFETY REQUIREMENTS SHOULD BE FOLLOWED
DURING THE INSTALLATION OF THE CULVERT.

135 NE Hernando Ave., Suite B-21
Lake City, FL 32055
Phone: 386-758-1008 Fax: 386-758-2160

Amount Paid 25.00



FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs
Residential Whole Building Performance Method A

Project Name:	Eugene Thomas	Builder:	Eugene Thomas
Address:	Lot: 20, Sub: Emerald Lakes, Plat:	Permitting Office:	20000000
City, State:	Lake City, FL 32025-	Permit Number:	22693
Owner:	Spec House	Jurisdiction Number:	221006
Climate Zone:	North		

1. New construction or existing	New	12. Cooling systems	
2. Single family or multi-family	Single family	a. Central Unit	Cap: 35.0 kBtu/hr
3. Number of units, if multi-family	1		SEER: 11.00
4. Number of Bedrooms	3	b. N/A	
5. Is this a worst case?	No	c. N/A	
6. Conditioned floor area (ft ²)	1966 ft ²	13. Heating systems	
7. Glass area & type		a. Electric Heat Pump	Cap: 35.0 kBtu/hr
a. Clear - single pane	0.0 ft ²		HSPF: 6.80
b. Clear - double pane	202.0 ft ²	b. N/A	
c. Tint/other SHGC - single pane	0.0 ft ²	c. N/A	
d. Tint/other SHGC - double pane	0.0 ft ²	14. Hot water systems	
8. Floor types		a. Electric Resistance	Cap: 50.0 gallons
a. Slab-On-Grade Edge Insulation	R=0.0, 198.0(p) ft		EF: 0.90
b. N/A		b. N/A	
c. N/A		c. Conservation credits	
9. Wall types		(HR-Heat recovery, Solar	
a. Frame, Wood, Exterior	R=13.0, 1186.0 ft ²	DHP-Dedicated heat pump)	
b. Frame, Wood, Adjacent	R=13.0, 156.0 ft ²	15. HVAC credits	
c. N/A		(CF-Ceiling fan, CV-Cross ventilation,	
d. N/A		HF-Whole house fan,	
e. N/A		PT-Programmable Thermostat,	
10. Ceiling types		MZ-C-Multizone cooling,	
a. Under Attic	R=30.0, 2000.0 ft ²	MZ-H-Multizone heating)	
b. N/A			
c. N/A			
11. Ducts			
a. Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 40.0 ft		
b. N/A			

Glass/Floor Area: 0.10

Total as-built points: 25345

Total base points: 28271

PASS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.

PREPARED BY: Will Myers

DATE: 8/11/05

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.

OWNER/AGENT:

DATE:

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.



BUILDING OFFICIAL:

DATE:

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 20, Sub: Emerald Lakes, Plat: , Lake City, FL, 32025-

PERMIT #:

BASE				AS-BUILT							
GLASS TYPES											
.18 X Conditioned X BSPM = Points Floor Area				Type/SC	Overhang Ornt Len Hgt		Area X SPM X SOF = Points				
.18	1966.0	20.04	7091.8	Double, Clear	W	1.5	6.0	15.0	36.99	0.91	506.7
				Double, Clear	W	11.5	7.7	40.0	36.99	0.45	663.9
				Double, Clear	SW	13.5	6.0	10.0	38.46	0.39	148.3
				Double, Clear	W	8.5	6.0	20.0	36.99	0.46	339.1
				Double, Clear	NW	3.5	6.0	10.0	25.46	0.75	190.2
				Double, Clear	W	1.5	5.0	16.0	36.99	0.88	518.1
				Double, Clear	N	1.5	5.0	16.0	19.22	0.92	281.5
				Double, Clear	E	1.5	6.0	30.0	40.22	0.91	1101.4
				Double, Clear	E	6.5	6.0	30.0	40.22	0.50	599.7
				Double, Clear	S	1.5	6.0	15.0	34.50	0.86	443.1
				As-Built Total:				202.0	4792.0		
WALL TYPES Area X BSPM = Points				Type	R-Value		Area X SPM = Points				
Adjacent	156.0	0.70	109.2	Frame, Wood, Exterior	13.0		1186.0	1.50	1779.0		
Exterior	1186.0	1.70	2016.2	Frame, Wood, Adjacent	13.0		156.0	0.60	93.6		
Base Total: 1342.0 2125.4				As-Built Total:		1342.0		1872.6			
DOOR TYPES Area X BSPM = Points				Type	R-Value		Area X SPM = Points				
Adjacent	20.0	2.40	48.0	Exterior Insulated			20.0	4.10	82.0		
Exterior	20.0	6.10	122.0	Adjacent Insulated			20.0	1.60	32.0		
Base Total: 40.0 170.0				As-Built Total:		40.0		114.0			
CEILING TYPES Area X BSPM = Points				Type	R-Value		Area X SPM X SCM = Points				
Under Attic	1966.0	1.73	3401.2	Under Attic	30.0		2000.0	1.73 X 1.00	3460.0		
Base Total: 1966.0 3401.2				As-Built Total:		2000.0		3460.0			
FLOOR TYPES Area X BSPM = Points				Type	R-Value		Area X SPM = Points				
Slab	198.0(p)	-37.0	-7326.0	Slab-On-Grade Edge Insulation	0.0		198.0(p)	-41.20	-8157.6		
Raised	0.0	0.00	0.0								
Base Total: -7326.0				As-Built Total:		198.0		-8157.6			
INFILTRATION Area X BSPM = Points						Area X SPM = Points					
1966.0 10.21 20072.9						1966.0 10.21		20072.9			

SUMMER CALCULATIONS**Residential Whole Building Performance Method A - Details**

ADDRESS: Lot: 20, Sub: Emerald Lakes, Plat: , Lake City, FL, 32025-

PERMIT #:

BASE				AS-BUILT									
Summer Base Points: 25535.2				Summer As-Built Points: 22153.9									
Total Summer Points	X	System Multiplier	= Cooling Points	Total Component	X	Cap Ratio	X	Duct Multiplier	X	System Multiplier	X	Credit Multiplier	= Cooling Points
								(DM x DSM x AHU)					
25535.2		0.4266	10893.3	22153.9	1.000	(1.090 x 1.147 x 1.00)	0.310		1.000			8593.8	
				22153.9	1.00	1.250	0.310		1.000			8593.8	

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 20, Sub: Emerald Lakes, Plat: , Lake City, FL, 32025-

PERMIT #:

BASE				AS-BUILT							
GLASS TYPES											
.18 X Conditioned X BWPM = Points Floor Area				Type/SC	Overhang Ornt Len Hgt		Area X WPM X WOF = Points				
.18	1966.0	12.74	4508.4	Double, Clear	W	1.5	6.0	15.0	10.77	1.02	165.3
				Double, Clear	W	11.5	7.7	40.0	10.77	1.20	518.6
				Double, Clear	SW	13.5	6.0	10.0	7.17	1.96	140.6
				Double, Clear	W	8.5	6.0	20.0	10.77	1.20	258.3
				Double, Clear	NW	3.5	6.0	10.0	14.03	1.02	142.5
				Double, Clear	W	1.5	5.0	16.0	10.77	1.03	178.2
				Double, Clear	N	1.5	5.0	16.0	14.30	1.00	229.7
				Double, Clear	E	1.5	6.0	30.0	9.09	1.04	282.4
				Double, Clear	E	6.5	6.0	30.0	9.09	1.31	356.8
				Double, Clear	S	1.5	6.0	15.0	4.03	1.12	67.6
				As-Built Total:				202.0	2340.1		
WALL TYPES Area X BWPM = Points				Type			R-Value	Area X WPM = Points			
Adjacent	156.0	3.60	561.6	Frame, Wood, Exterior			13.0	1186.0	3.40	4032.4	
Exterior	1186.0	3.70	4388.2	Frame, Wood, Adjacent			13.0	156.0	3.30	514.8	
Base Total:				As-Built Total:				1342.0	4547.2		
DOOR TYPES Area X BWPM = Points				Type				Area X WPM = Points			
Adjacent	20.0	11.50	230.0	Exterior Insulated				20.0	8.40	168.0	
Exterior	20.0	12.30	246.0	Adjacent Insulated				20.0	8.00	160.0	
Base Total:				As-Built Total:				40.0	328.0		
CEILING TYPES Area X BWPM = Points				Type			R-Value	Area X WPM X WCM = Points			
Under Attic	1966.0	2.05	4030.3	Under Attic			30.0	2000.0	2.05 X 1.00	4100.0	
Base Total:				As-Built Total:				2000.0	4100.0		
FLOOR TYPES Area X BWPM = Points				Type			R-Value	Area X WPM = Points			
Slab	198.0(p)	8.9	1762.2	Slab-On-Grade Edge Insulation			0.0	198.0(p)	18.80	3722.4	
Raised	0.0	0.00	0.0								
Base Total:				As-Built Total:				198.0	3722.4		
INFILTRATION Area X BWPM = Points								Area X WPM = Points			
								1966.0	-0.59	-1159.9	

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 20, Sub: Emerald Lakes, Plat: , Lake City, FL, 32025-

PERMIT #:

BASE				AS-BUILT							
Winter Base Points:		14566.8		Winter As-Built Points:				13877.7			
Total Winter Points	X	System Multiplier	= Heating Points	Total Component	X	Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Heating Points	
14566.8		0.6274	9139.2	^{13877.7} 13877.7		^{1.000} 1.00	^(1.069 x 1.169 x 1.00) 1.250	^{0.501} 0.501	^{1.000} 1.000	^{8696.7} 8696.7	

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 20, Sub: Emerald Lakes, Plat: , Lake City, FL, 32025-

PERMIT #:

BASE				AS-BUILT					
WATER HEATING									
Number of Bedrooms	X	Multiplier	= Total	Tank Volume	EF	Number of Bedrooms	X Tank Ratio	Multiplier X Credit Multiplier	= Total
3		2746.00	8238.0	50.0	0.90	3	1.00	2684.98	8054.9
				As-Built Total:					8054.9

CODE COMPLIANCE STATUS

BASE					AS-BUILT								
Cooling Points	+	Heating Points	+	Hot Water Points	=	Total Points	Cooling Points	+	Heating Points	+	Hot Water Points	=	Total Points
10893		9139		8238		28271	8594		8697		8055		25345

PASS

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 20, Sub: Emerald Lakes, Plat: , Lake City, FL, 32025-

PERMIT #:

6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	606.1.ABC.1.1	Maximum: .3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	606.1.ABC.1.2.1	Caulk, gasket, weatherstrip or seal between: windows/doors & frames, surrounding wall; foundation & wall sole or sill plate; joints between exterior wall panels at corners; utility penetrations; between wall panels & top/bottom plates; between walls and floor. EXCEPTION: Frame walls where a continuous infiltration barrier is installed that extends from, and is sealed to, the foundation to the top plate.	
Floors	606.1.ABC.1.2.2	Penetrations/openings >1/8" sealed unless backed by truss or joint members. EXCEPTION: Frame floors where a continuous infiltration barrier is installed that is sealed to the perimeter, penetrations and seams.	
Ceilings	606.1.ABC.1.2.3	Between walls & ceilings; penetrations of ceiling plane of top floor; around shafts, chases, soffits, chimneys, cabinets sealed to continuous air barrier; gaps in gyp board & top plate; attic access. EXCEPTION: Frame ceilings where a continuous infiltration barrier is installed that is sealed at the perimeter, at penetrations and seams.	
Recessed Lighting Fixtures	606.1.ABC.1.2.4	Type IC rated with no penetrations, sealed; or Type IC or non-IC rated, installed inside a sealed box with 1/2" clearance & 3" from insulation; or Type IC rated with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	606.1.ABC.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	606.1.ABC.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	

6A-22 OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	612.1	Comply with efficiency requirements in Table 6-12. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	612.1	Spas & heated pools must have covers (except solar heated). Non-commercial pools must have a pump timer. Gas spa & pool heaters must have a minimum thermal efficiency of 78%.	
Shower heads	612.1	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distribution Systems	610.1	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated, and installed in accordance with the criteria of Section 610. Ducts in unconditioned attics: R-6 min. insulation.	
HVAC Controls	607.1	Separate readily accessible manual or automatic thermostat for each system.	
Insulation	604.1, 602.1	Ceilings-Min. R-19. Common walls-Frame R-11 or CBS R-3 both sides. Common ceiling & floors R-11.	

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE SCORE* = 84.9

The higher the score, the more efficient the home.

Spec House, Lot: 20, Sub: Emerald Lakes, Plat: , Lake City, FL, 32025-

1. New construction or existing	New	12. Cooling systems	
2. Single family or multi-family	Single family	a. Central Unit	Cap: 35.0 kBtu/hr
3. Number of units, if multi-family	1		SEER: 11.00
4. Number of Bedrooms	3	b. N/A	
5. Is this a worst case?	No	c. N/A	
6. Conditioned floor area (ft ²)	1966 ft ²		
7. Glass area & type		13. Heating systems	
a. Clear - single pane	0.0 ft ²	a. Electric Heat Pump	Cap: 35.0 kBtu/hr
b. Clear - double pane	202.0 ft ²		HSPF: 6.80
c. Tint/other SHGC - single pane	0.0 ft ²	b. N/A	
d. Tint/other SHGC - double pane	0.0 ft ²	c. N/A	
8. Floor types		14. Hot water systems	
a. Slab-On-Grade Edge Insulation	R=0.0, 198.0(p) ft	a. Electric Resistance	Cap: 50.0 gallons
b. N/A			EF: 0.90
c. N/A		b. N/A	
9. Wall types		c. Conservation credits	
a. Frame, Wood, Exterior	R=13.0, 1186.0 ft ²	(HR-Heat recovery, Solar	
b. Frame, Wood, Adjacent	R=13.0, 156.0 ft ²	DHP-Dedicated heat pump)	
c. N/A		15. HVAC credits	
d. N/A		(CF-Ceiling fan, CV-Cross ventilation,	
e. N/A		HF-Whole house fan,	
10. Ceiling types		PT-Programmable Thermostat,	
a. Under Attic	R=30.0, 2000.0 ft ²	MZ-C-Multizone cooling,	
b. N/A		MZ-H-Multizone heating)	
c. N/A			
11. Ducts			
a. Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 40.0 ft		
b. N/A			

I certify that this home has complied with the Florida Energy Efficiency Code For Building Construction through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPL Display Card will be completed based on installed Code compliant features.

Builder Signature: _____

Date: _____

Address of New Home: _____

City/FL Zip: _____



**NOTE: The home's estimated energy performance score is only available through the FLA/RES computer program. This is not a Building Energy Rating. If your score is 80 or greater (or 86 for a US EPA/DOE EnergyStarTM designation), your home may qualify for energy efficiency mortgage (EEM) incentives if you obtain a Florida Energy Gauge Rating. Contact the Energy Gauge Hotline at 321/638-1492 or see the Energy Gauge web site at www.fsec.ucf.edu for information and a list of certified Raters. For information about Florida's Energy Efficiency Code For Building Construction, contact the Department of Community Affairs.*

[Log On](#)**Public Services**

[Search for a Licensee](#)
[Apply for a License](#)
[View Application Status](#)
[Apply to Retake Exam](#)
[Find Exam Information](#)
[File a Complaint](#)
[AB&T Delinquent Invoice
& Activity List Search](#)

User Services

[Renew a License](#)
[Change License Status](#)
[Maintain Account](#)
[Change My Address](#)
[View Messages](#)
[Change My PIN](#)
[View Continuing Ed](#)

[Term Glossary](#)[Online Help](#)[DBPR Home](#) | [Online Services Home](#) | [Help](#) | [Site Map](#)

2:33:48 F

Licensee Details**Licensee Information**

Name: **THOMAS, EUGENE (Primary Name)**
INDIVIDUAL (DBA Name)
Main Address: **3222 NW 136TH ST**
GAINESVILLE Florida 32606-4736
County: **ALACHUA**

License Mailing:

License Location: **3222 NW 136TH ST**
GAINESVILLE FL 32606-4736
County: **ALACHUA**

License Information

License Type: **Certified General Contractor**
Rank: **Cert General**
License Number: **CGC007568**
Status: **Current,Active**
Licensure Date:
Expires: **08/31/2006**

Special Qualifications **Qualification Effective**
Bldg Code Core
Course Credit
No Qualified
Business License **02/20/2004**
Required

[View Related License Information](#)[View License Complaint](#)[Terms of Use](#) | [Privacy Statement](#)

Job	Truss	Truss Type	Qty	Ply	Dwg.#090905314
L130846	CJ1	MONO TRUSS	8	1	

Builders FirstSource, Lake City, FL 32055

6.200 s Jul 13 2005 Mitek Industries, Inc. Thu Sep 08 16:55:07 2005 Page 1

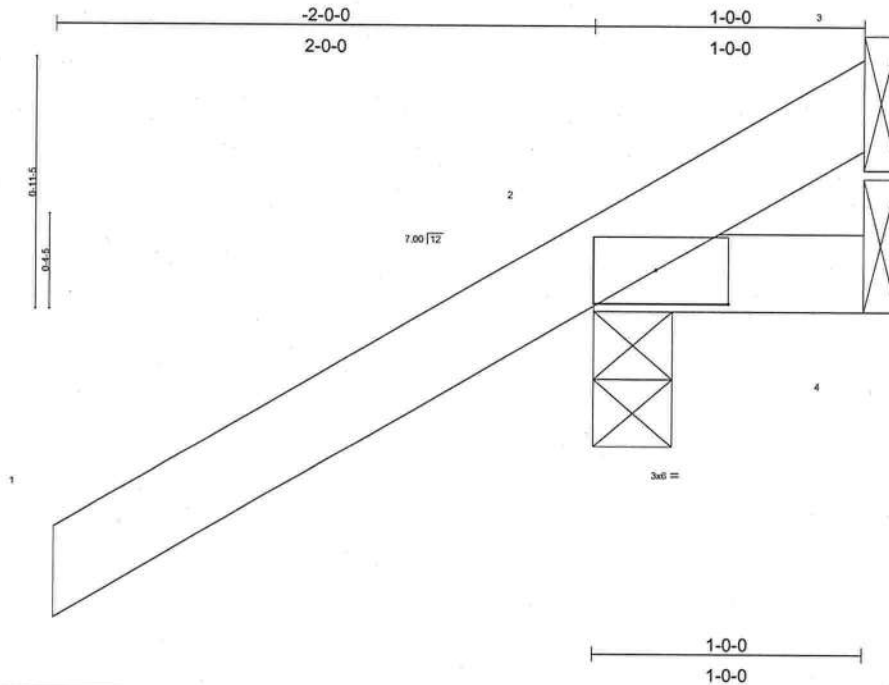


Plate Offsets (X,Y): [2:0-3-3,0-1-8]

LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.24	Vert(LL)	-0.00	2	>999	240	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.01	Vert(TL)	-0.00	2	>999	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 FBC2001/ANSI95								
								Weight: 7 lb	

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

BRACING
TOP CHORD Sheathed or 1-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=266/0-3-8, 4=14/Mechanical, 3=90/Mechanical
Max Horz 2=101(load case 5)
Max Uplift 2=-283(load case 5), 3=-90(load case 1)
Max Grav 2=266(load case 1), 4=14(load case 1), 3=136(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/53, 2-3=-77/86
BOT CHORD 2-4=0/0

NOTES

- 1) Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; 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) Refer to girder(s) for truss to truss connections.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 283 lb uplift at joint 2 and 90 lb uplift at joint 3.

LOAD CASE(S) Standard

Job L130846	Truss CJ3	Truss Type MONO TRUSS	Qty 8	Ply 1	Dwg.#090905315
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mittek Industries, Inc. Thu Sep 08 16:55:07 2005 Page 1		

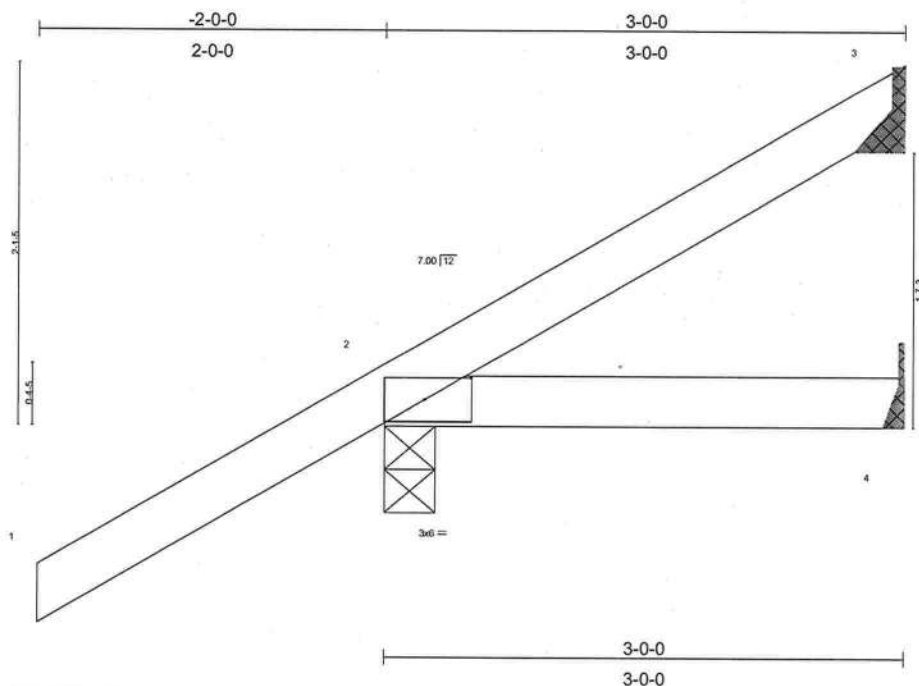


Plate Offsets (X,Y): [2-0-3-3,0-1-8]

LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.25	Vert(LL)	-0.00	2-4	>999	240	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.05	Vert(TL)	-0.00	2-4	>999	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 FBC2001/ANSI95							Weight: 13 lb	

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

BRACING
TOP CHORD Sheathed or 3-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

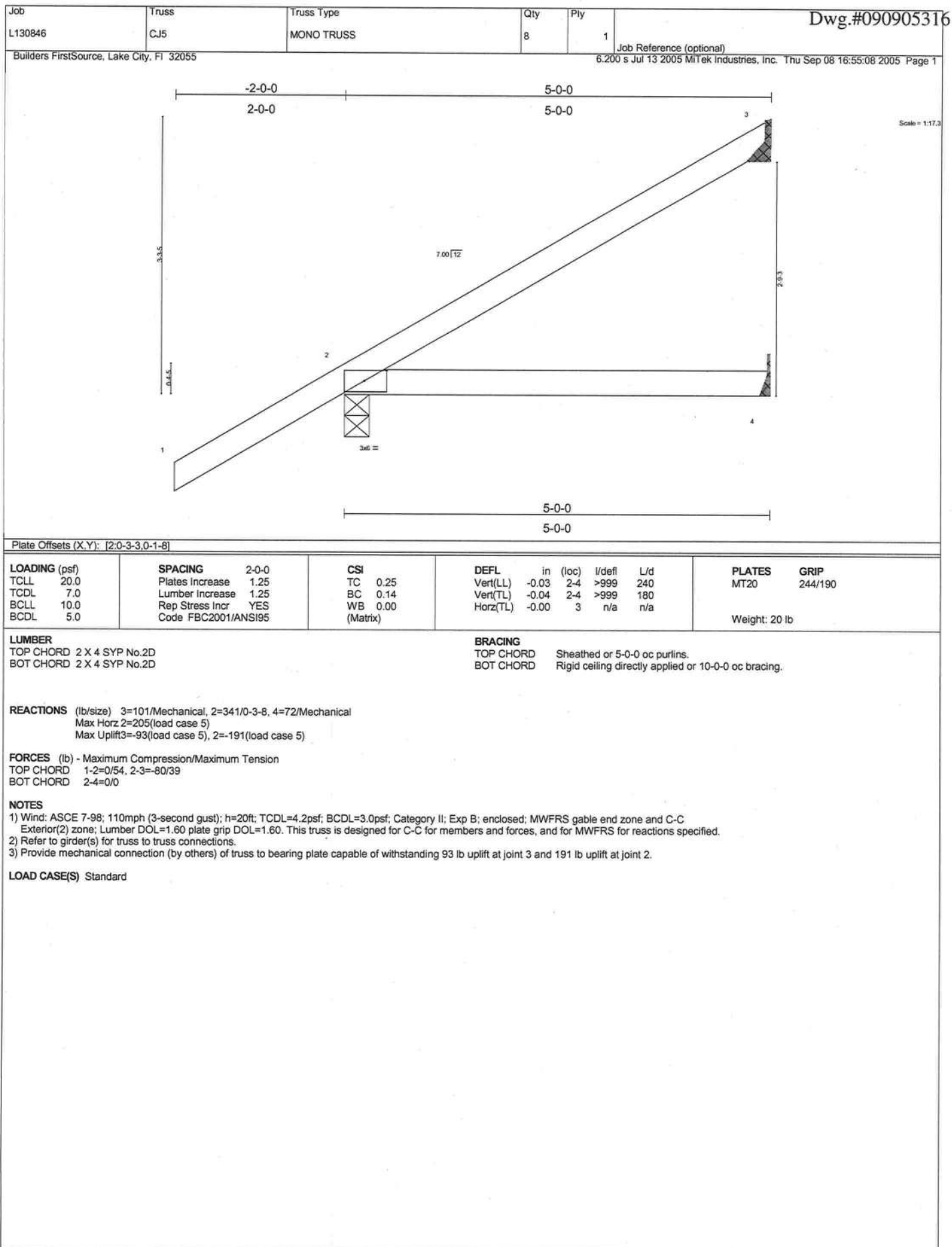
REACTIONS (lb/size) 3=27/Mechanical, 2=277/0-3-8, 4=42/Mechanical
Max Horz 2=151(load case 5)
Max Uplift 3=-24(load case 4), 2=-201(load case 5)
Max Grav 3=31(load case 3), 2=277(load case 1), 4=42(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/54, 2-3=-64/15
BOT CHORD 2-4=0/0

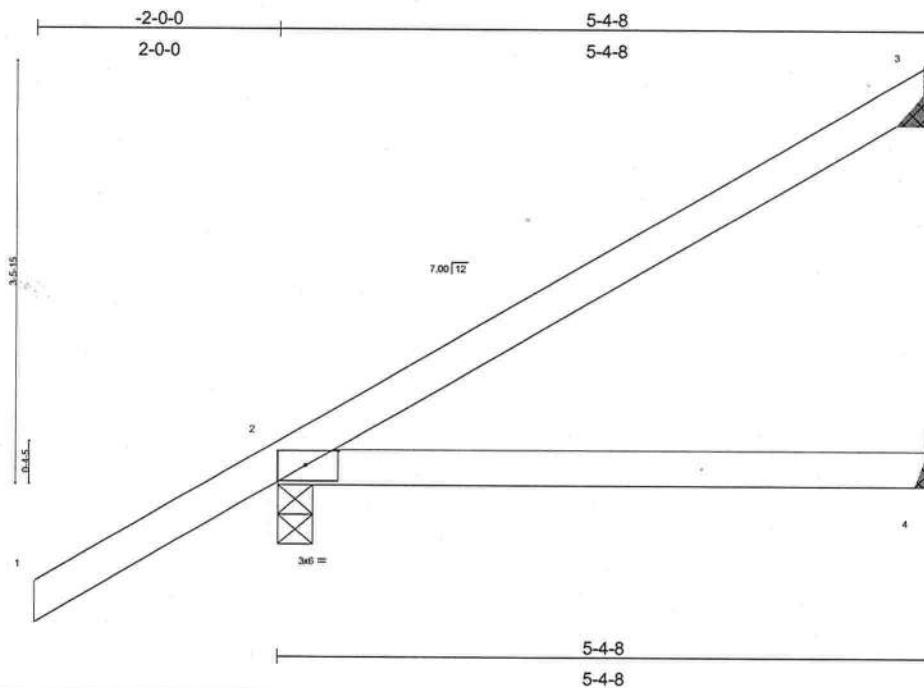
NOTES

- 1) Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; 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) Refer to girder(s) for truss to truss connections.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 3 and 201 lb uplift at joint 2.

LOAD CASE(S) Standard



Job L130846	Truss EJ5	Truss Type MONO TRUSS	Qty 6	Ply 1	Dwg.#090905317
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.200 s Jul 13 2005 Mitek Industries, Inc. Thu Sep 08 16:55:09 2005 Page 1		



Scale = 1:16.2

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

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.25	in (loc) l/def L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.16	Vert(LL) -0.04 2-4 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.00	Vert(TL) -0.05 2-4 >999 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) -0.00 3 n/a n/a		
	Code FBC2001/ANSI95			Weight: 21 lb	

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

BRACING
TOP CHORD Sheathed or 5-4-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=113/Mechanical, 2=355/0-3-8, 4=77/Mechanical
Max Horz 2=215(load case 5)
Max Uplift 3=-106(load case 5), 2=-191(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/54, 2-3=-84/44
BOT CHORD 2-4=0/0

NOTES

- 1) Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; 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) Refer to girder(s) for truss to truss connections.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 106 lb uplift at joint 3 and 191 lb uplift at joint 2.

LOAD CASE(S) Standard

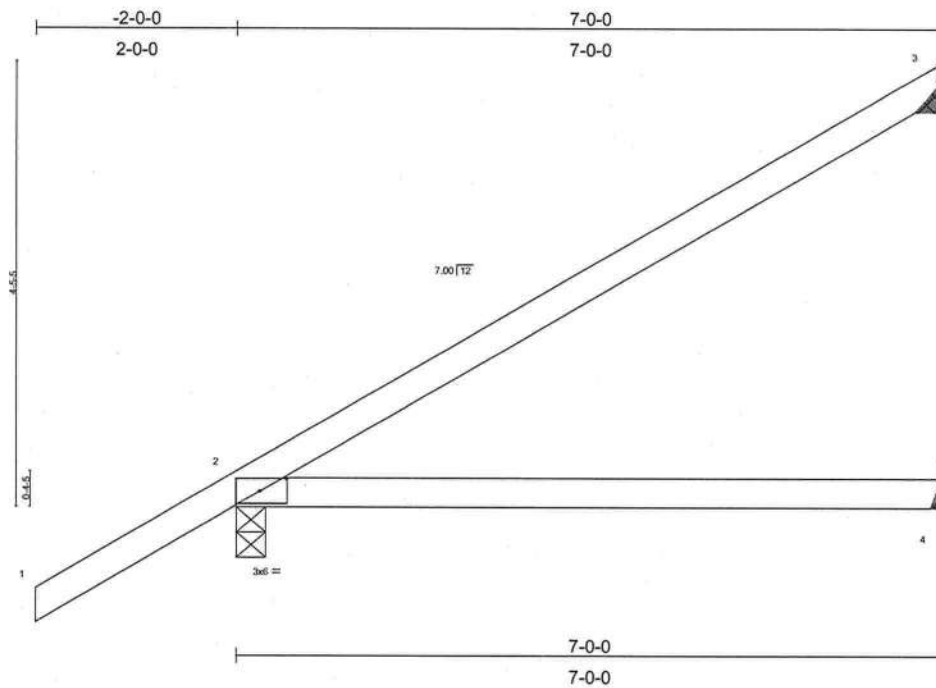


Plate Offsets (X,Y): [2-0-3-3-0-1-8]

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.39	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.28	Vert(LL) -0.11 2-4 >776 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.00	Vert(TL) -0.16 2-4 >517 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) -0.00 3 n/a n/a		
	Code FBC2001/ANSI95			Weight: 26 lb	

LUMBER

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

BRACING

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

REACTIONS (lb/size) 3=163/Mechanical, 2=417/0-3-8, 4=102/Mechanical
Max Horz 2=259(load case 5)
Max Uplift 3=-157(load case 5), 2=-196(load case 5)

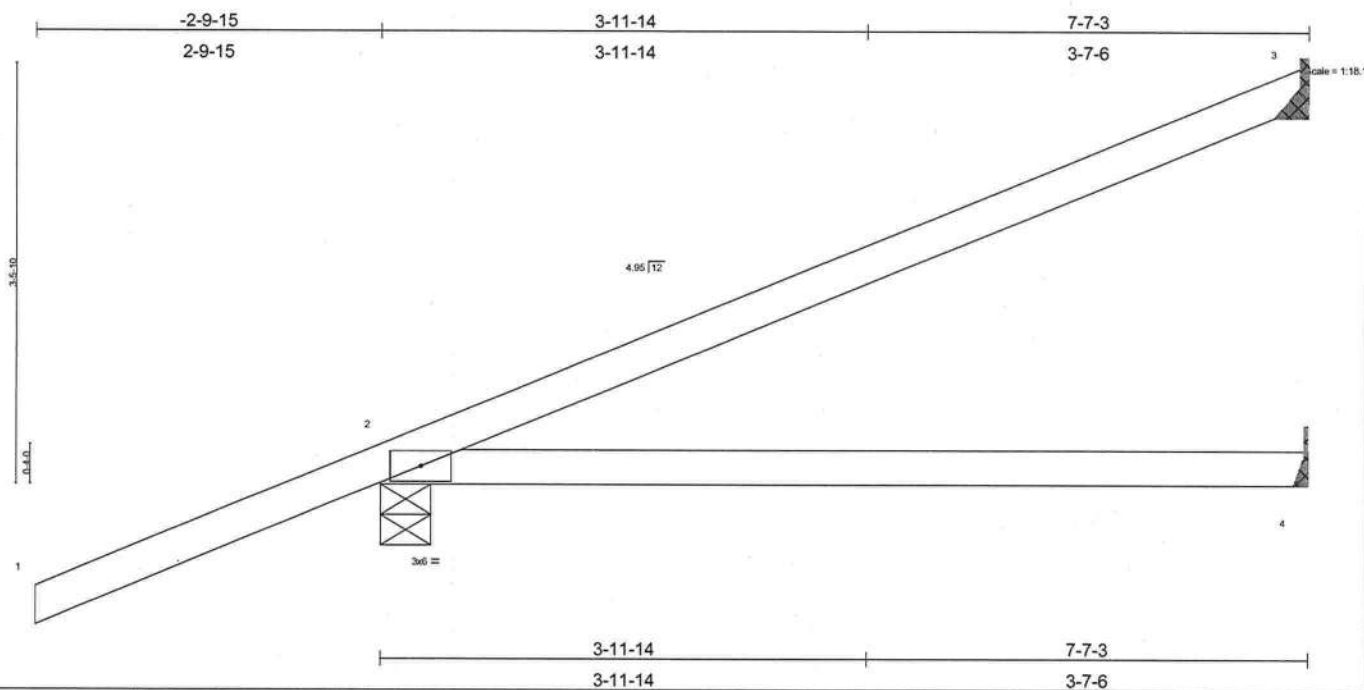
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/54, 2-3=-116/65
BOT CHORD 2-4=0/0

NOTES

- 1) Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; 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) Refer to girder(s) for truss to truss connections.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 157 lb uplift at joint 3 and 196 lb uplift at joint 2.

LOAD CASE(S) Standard

6.200 s Jul 13 2005 Mitek Industries, Inc. Thu Sep 08 16:55:10 2005 Page 1



LOADING (psf)	SPACING 2-0-0	CSI	DEFL in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.48	Vert(LL) -0.14 2-4 >647 240	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.36	Vert(TL) -0.20 2-4 >432 180		
BCLL 10.0	Rep Stress Incr NO	WB 0.00	Horz(TL) -0.00 3 n/a n/a		
BCDL 5.0	Code FBC2001/ANSI95	(Matrix)			
				Weight: 28 lb	

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

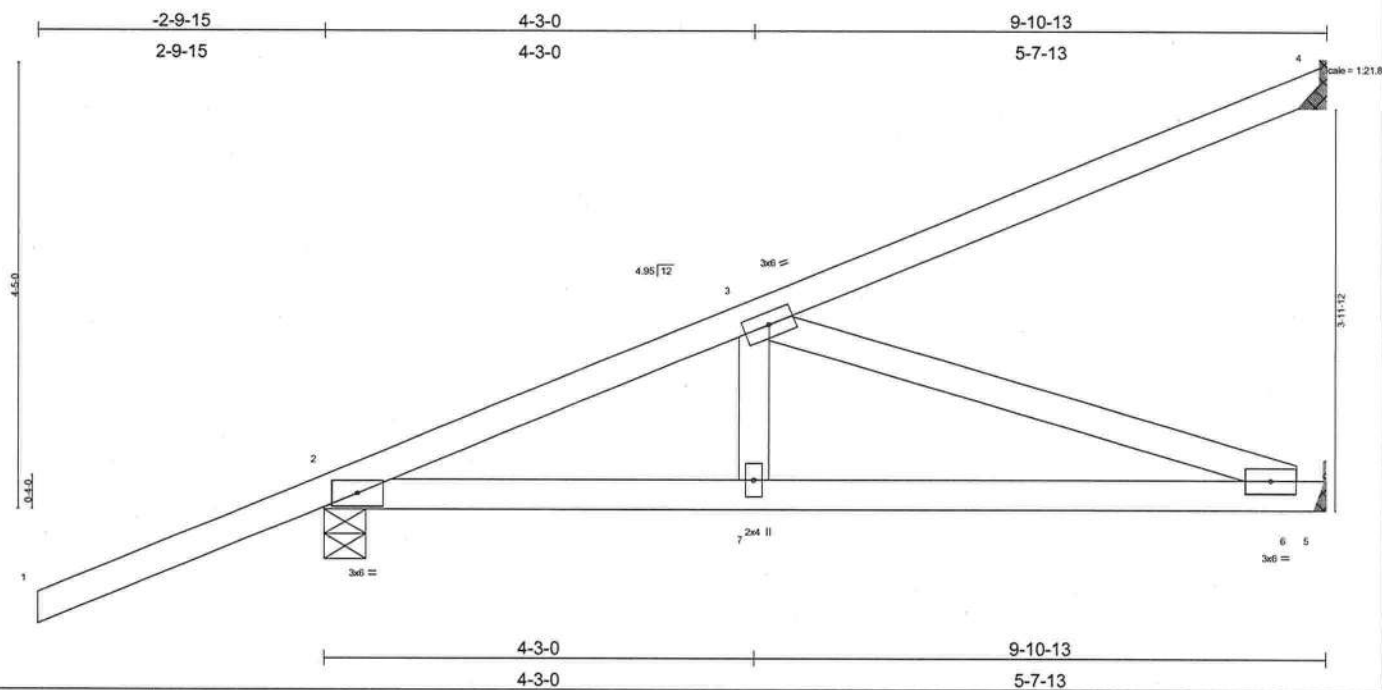
TOP CHORD	Sheathed or 7-7-3 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=217/Mechanical, 2=399/0-4-15, 4=139/Mechanical
Max Horiz 2=213(load case 4)
Max Uplift3=-183(load case 4), 2=-239(load case 4)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/58, 2-3=-95/58
 BOT CHORD 2-4=0/0

1) Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; TCDF=4.2psf; BCDF=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; Lumber DOL=1.60 plate grip DOL=1.60.
2) Refer to girder(s) for truss to truss connections.
3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 183 lb uplift at joint 3 and 239 lb uplift at joint 2.
4) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=-54
Trapezoidal Loads (plf)
Vert: 2=-3(F=26, B=26)-to-3=-103(F=-24, B=-24), 2=0(F=15, B=15)-to-4=-57(F=-14, B=-14)



LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2'-0-0	TC 0.52	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.49	Vert(LL) -0.09 6-7 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.44	Vert(TL) -0.13 6-7 >884 180		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL) 0.01 5 n/a n/a		
	Code FBC2001/ANSI95				
				Weight: 46 lb	

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

BRACING
 TOP CHORD Sheathed or 6'-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.

REACTIONS (lb/size) 4=265/Mechanical, 2=532/0-4-15, 5=369/Mechanical
 Max Horz 2=314(load case 4)
 Max Uplift 4=-245(load case 4), 2=-259(load case 4), 5=-71(load case 4)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/58, 2-3=-780/61, 3-4=-125/74
 BOT CHORD 2-7=-286/705, 6-7=-286/705, 5-6=0/0
 WEBS 3-7=0/182, 3-6=-743/301

NOTES

- 1) Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; 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) Refer to girder(s) for truss to truss connections.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 245 lb uplift at joint 4, 259 lb uplift at joint 2 and 71 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=-3(F=26, B=26)-to-4=-134(F=-40, B=-40), 2=0(F=15, B=15)-to-6=-72(F=-21, B=-21), 6=-42(F=-21, B=-21)-to-5=-44(F=-22, B=-22)

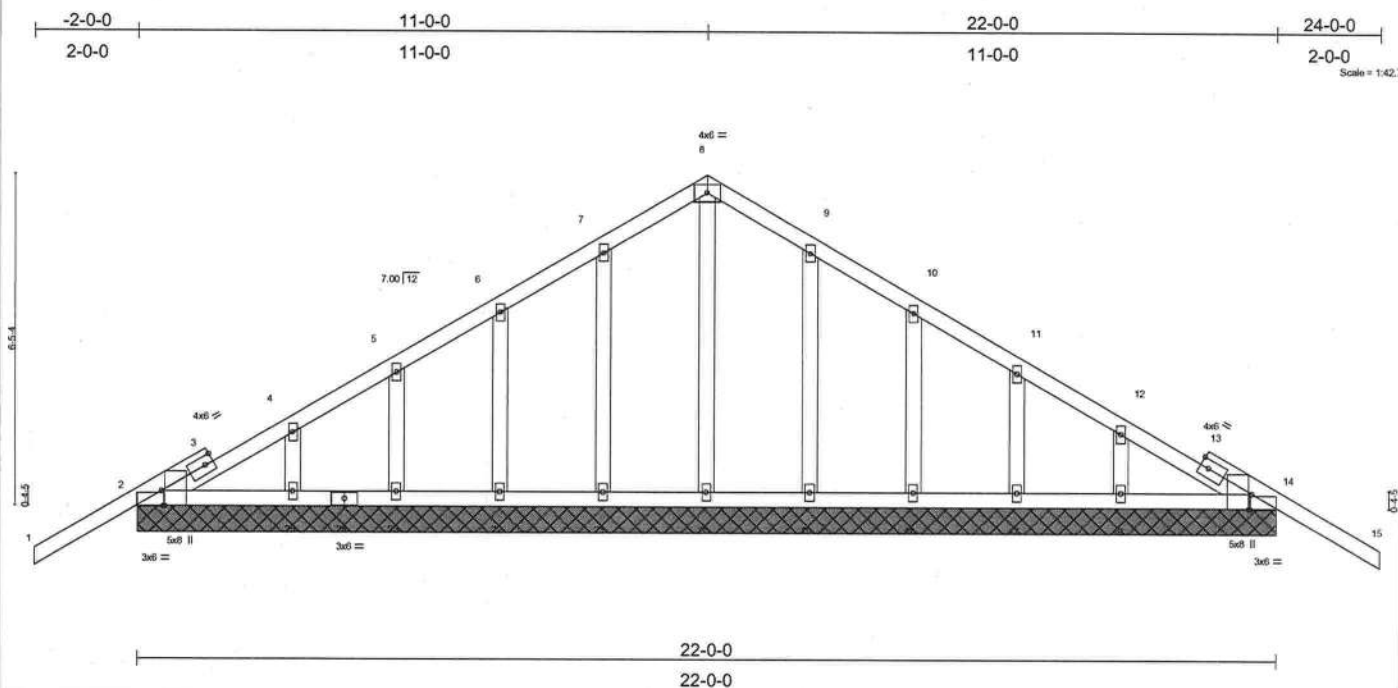


Plate Offsets (X,Y): [2:0-3-8,Edge], [2:0-7,Edge], [14:0-3-8,Edge], [14:0-7,Edge]							
LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	I/defl	L/d
TCLL 20.0	Plates Increase 1.25	TC 0.40	Vert(LL)	-0.04	15	n/r	90
TCDL 7.0	Lumber increase 1.25	BC 0.07	Vert(TL)	-0.05	15	n/r	80
BCLL 10.0	Rep Stress Incr NC	WB 0.12	Horz(TL)	0.00	14	n/a	n/a
BCDL 5.0	Code FBC2001/ANSI95	(Matrix)					
						PLATES	GRIP
						MT20	244/190
						Weight: 125 lb	

LUMBER		BRACING	
TOP CHORD	2 X 4 SYP No.2D	TOP CHORD	Sheathed or 6-0-0 oc purlins.
BOT CHORD	2 X 4 SYP No.2D	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2 X 4 SYP No.3		

REACTIONS (lb/size) 2=471/22-0-0, 14=471/22-0-0, 20=244/22-0-0, 21=267/22-0-0, 22=270/22-0-0, 23=262/22-0-0, 25=290/22-0-0, 19=267/22-0-0, 18=270/22-0-0, 17=262/22-0-0, 16=290/22-0-0
Max Horz 2=218(load case 4)
Max Uplift 2=237(load case 5), 14=-264(load case 6), 21=-128(load case 5), 22=-130(load case 5), 23=-152(load case 5), 25=-83(load case 6), 19=-124(load case 6), 18=-132(load case 6), 17=-149(load case 6), 16=-79(load case 6)
Max Grav 2=471(load case 1), 14=471(load case 1), 20=244(load case 1), 21=272(load case 7), 22=270(load case 1), 23=262(load case 7), 25=290(load case 1), 19=272(load case 8), 18=270(load case 1), 17=262(load case 8), 16=290(load case 1)

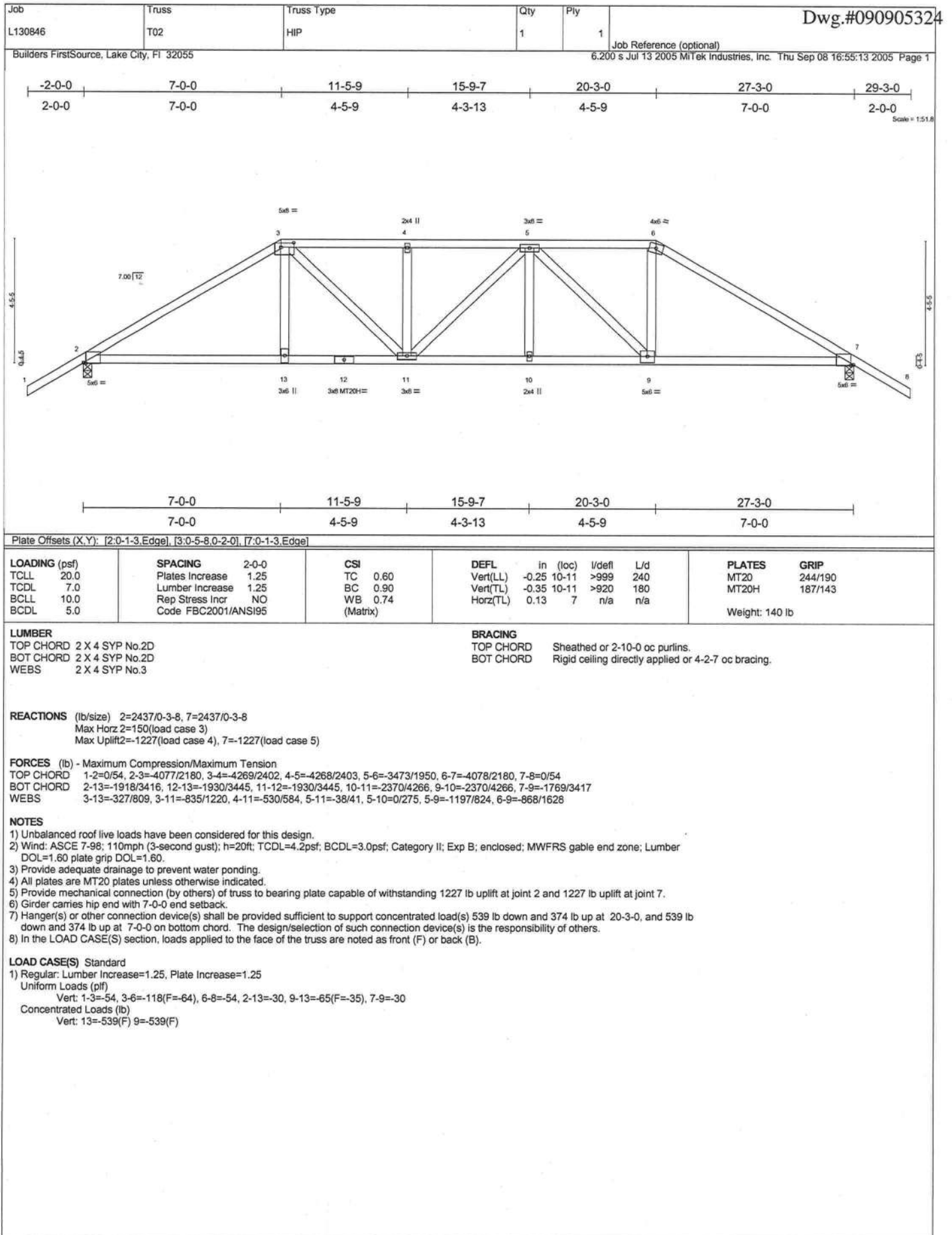
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-10/102, 2-3=-151/144, 3-4=-150/145, 4-5=-116/136, 5-6=-76/143, 6-7=-77/181, 7-8=-77/214, 8-9=-77/214, 9-10=-77/162, 10-11=-76/102, 11-12=-78/49, 12-13=-68/63, 13-14=-96/62, 14-15=-10/102
BOT CHORD	2-25=-32/159, 24-25=-32/159, 23-24=-32/159, 22-23=-32/159, 21-22=-32/159, 20-21=-32/159, 19-20=-32/159, 18-19=-32/159, 17-18=-32/159, 16-17=-32/159, 14-16=-32/159
WEBS	8-20=-184/8, 7-21=-212/140, 6-22=-209/145, 5-23=-205/155, 4-25=-221/105, 9-19=-212/136, 10-18=-209/147, 11-17=-205/153, 12-16=-221/113

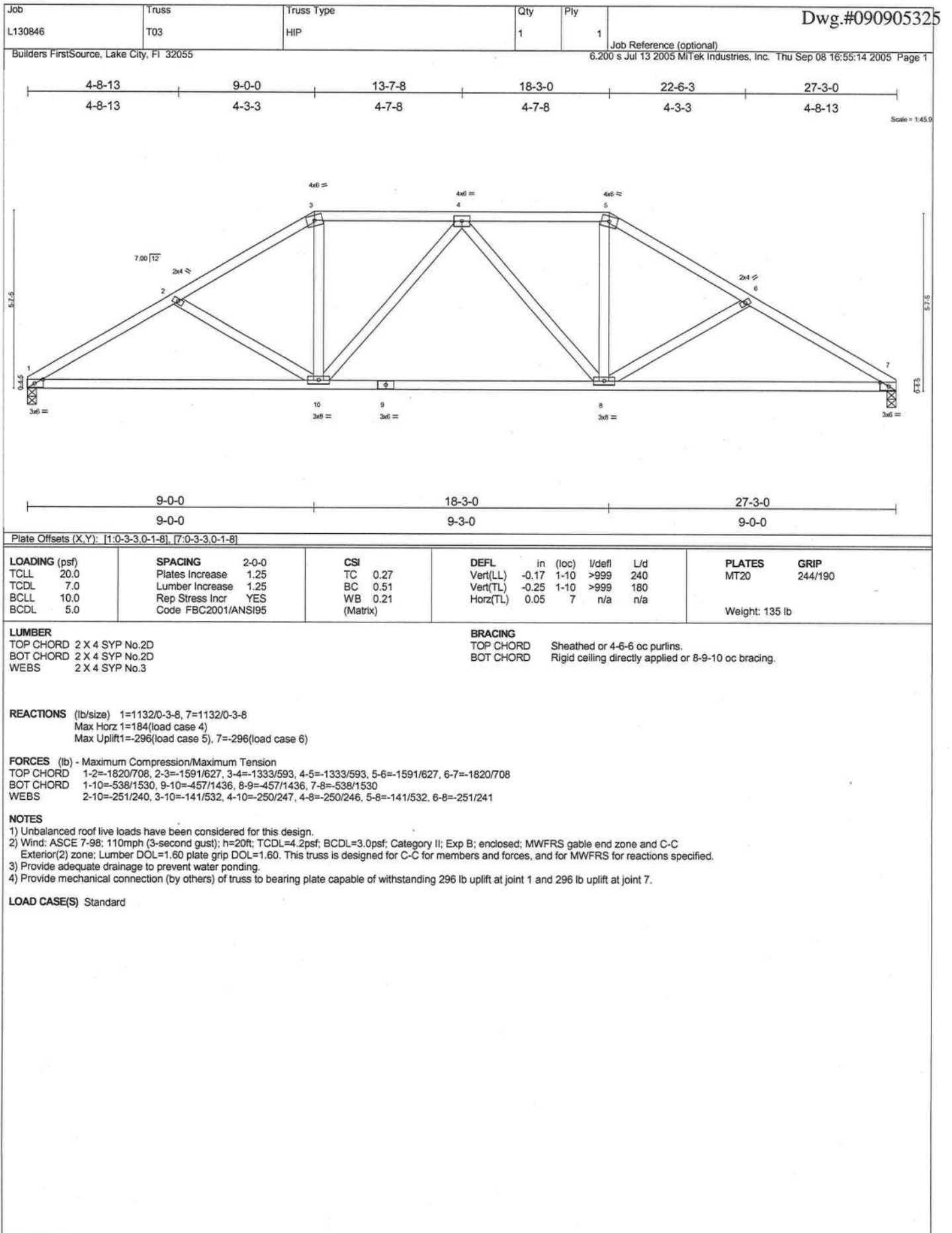
NOTES

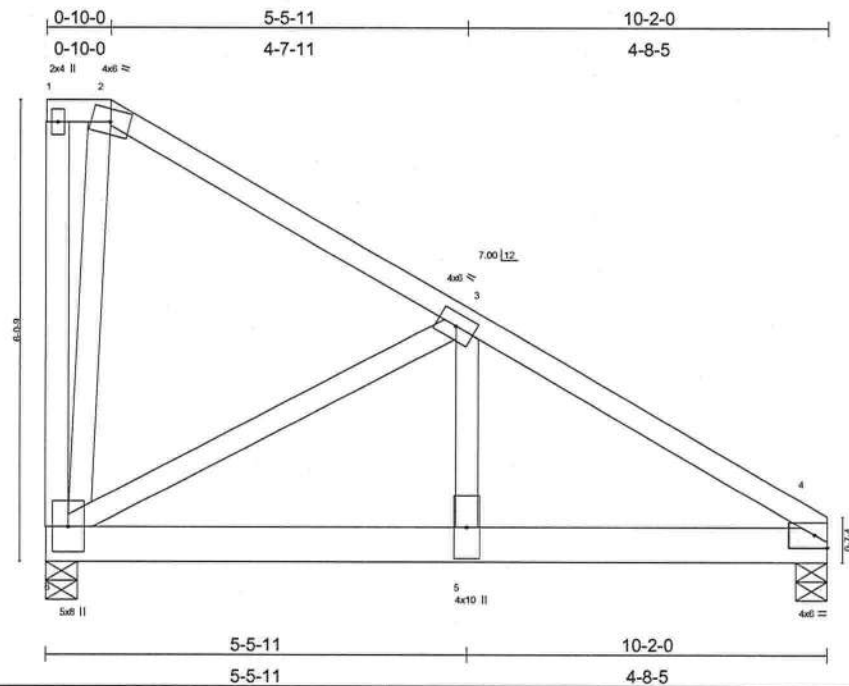
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; TCDF=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see MITek "Standard Gable End Detail"
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2'-0" oc.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 237 lb uplift at joint 2, 264 lb uplift at joint 14, 128 lb uplift at joint 21, 130 lb uplift at joint 22, 152 lb uplift at joint 23, 83 lb uplift at joint 25, 124 lb uplift at joint 19, 132 lb uplift at joint 18, 149 lb uplift at joint 17 and 79 lb uplift at joint 16.
- 8) 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: 1-8=-104(F=50), 8-15=-104(F=50), 2-14=-30







LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.62	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.72	Vert(LL) -0.08 5-6 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.64	Vert(TL) -0.11 5-6 >999 180		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL) 0.01 4 n/a n/a		
	Code FBC2001/ANSI95			Weight: 138 lb	

LUMBER
 TOP CHORD 2 X 4 SYP No.2D
 BOT CHORD 2 X 6 SYP No.1D
 WEBS 2 X 4 SYP No.3

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

REACTIONS (lb/size) 6=3642/0-4-15, 4=3642/0-4-15
 Max Horz 6=-261(load case 5)
 Max Uplift 6=-1750(load case 5), 4=-1612(load case 5)

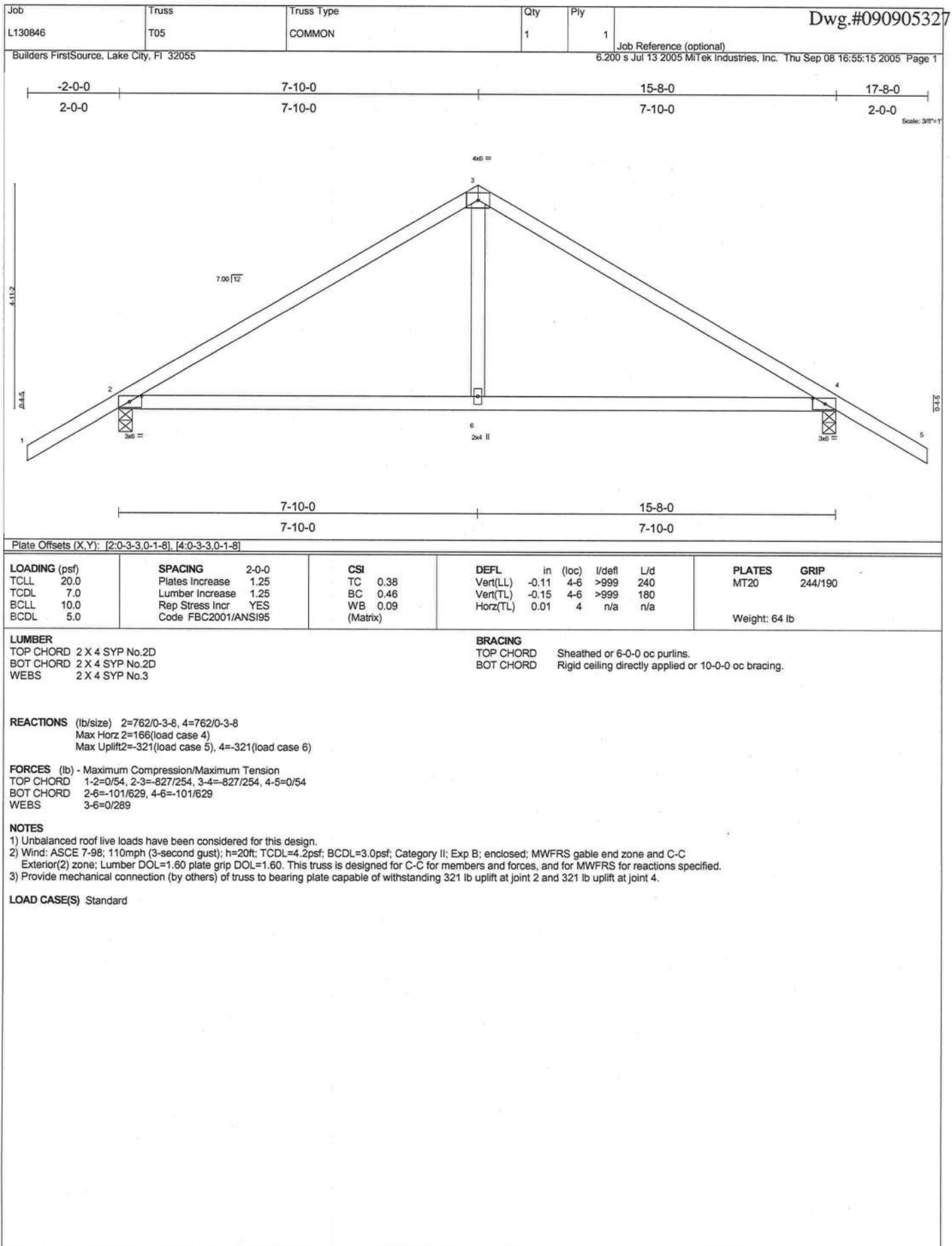
FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-6=-75/108, 1-2=-84/39, 2-3=-165/36, 3-4=-4366/1884
 BOT CHORD 5-6=-1509/3625, 4-5=-1509/3625
 WEBS 2-6=-116/123, 3-6=-4037/1960, 3-5=-1790/3992

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 6 - 2 rows at 0-7-0 oc.
 Webs connected as follows: 2 X 4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1750 lb uplift at joint 6 and 1612 lb uplift at joint 4.
- Girder carries tie-in span(s): 33-9-0 from 0-0-0 to 10-2-0

LOAD CASE(S) Standard

- Regular: Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 1-2=-54, 2-4=-54, 4-6=-688(F=-658)



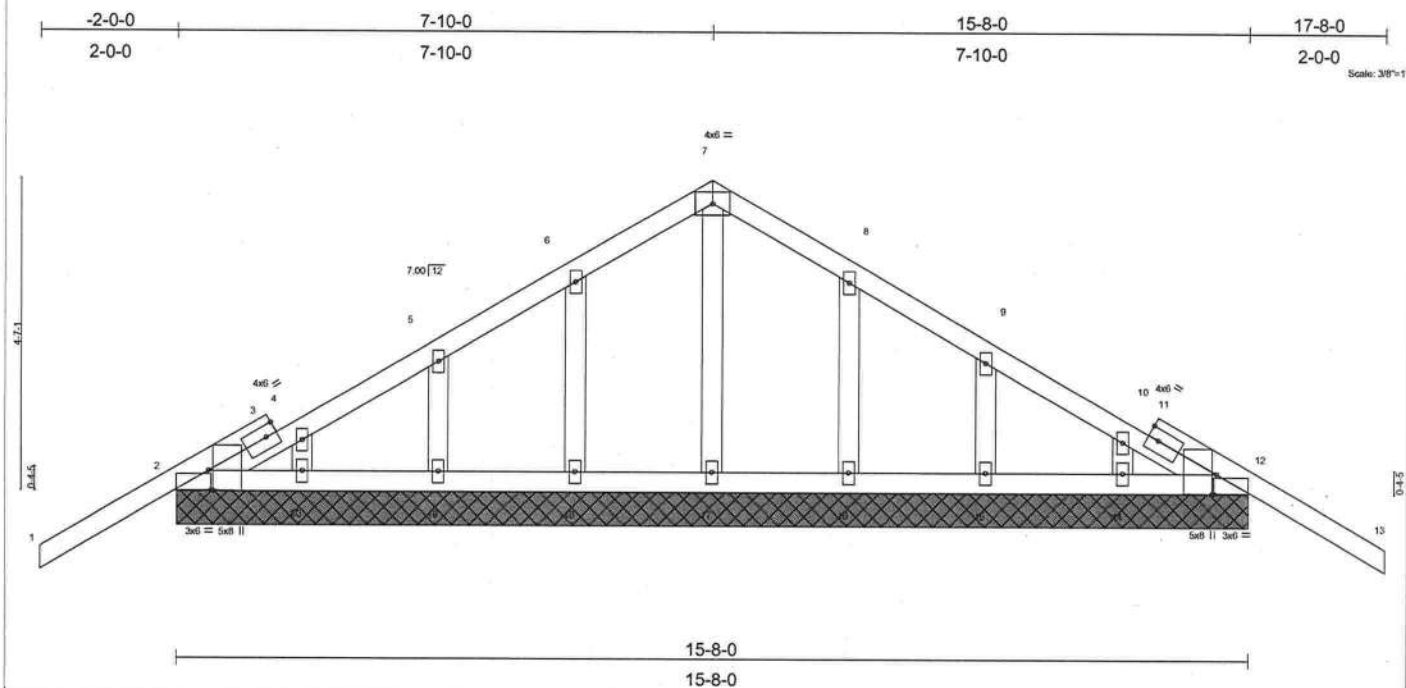


Plate Offsets (X,Y): [2-0-3-8,Edge], [2-0-0-7,Edge], [12-0-3-8,Edge], [12-0-0-7,Edge]

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.44	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.09	Vert(LL) -0.04 13 n/r 90		
BCLL 10.0	Lumber Increase 1.25	WB 0.07	Vert(TL) -0.06 13 n/r 80		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL) 0.00 12 n/a n/a		
	Code FBC2001/ANSI95			Weight: 82 lb	

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

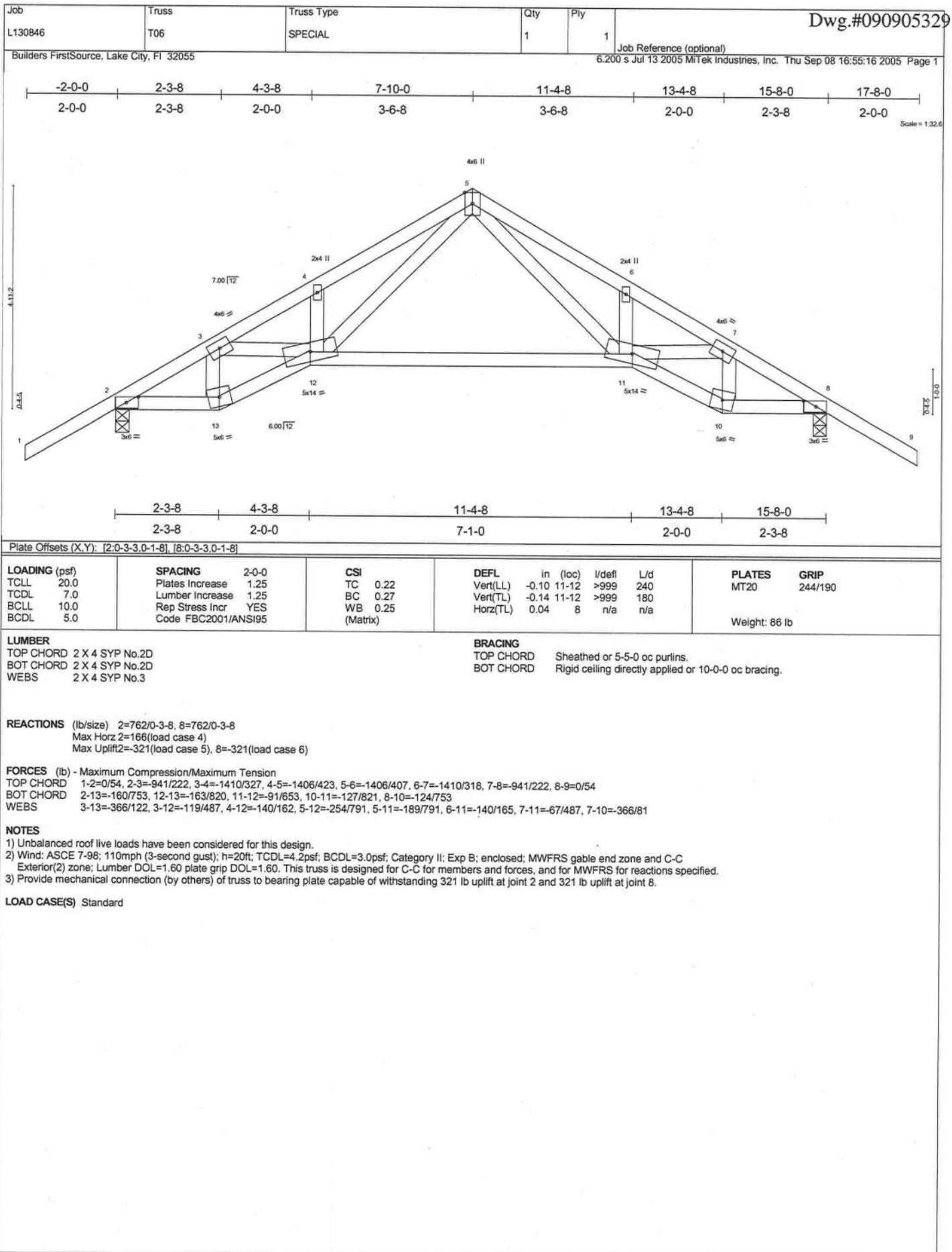
BRACING
 TOP CHORD Sheathed or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

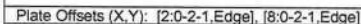
REACTIONS (lb/size) 2=488/15-8-0, 12=488/15-8-0, 17=252/15-8-0, 18=282/15-8-0, 19=310/15-8-0, 20=150/15-8-0, 16=282/15-8-0, 15=310/15-8-0, 14=150/15-8-0
 Max Horz 2=154(load case 4)
 Max Uplift 2=285(load case 5), 12=305(load case 6), 17=-8(load case 4), 18=-134(load case 5), 19=-161(load case 5), 20=-40(load case 6), 16=-131(load case 6), 15=-162(load case 6), 14=-32(load case 5)
 Max Grav 2=488(load case 1), 12=488(load case 1), 17=252(load case 1), 18=287(load case 7), 19=310(load case 1), 20=150(load case 1), 16=287(load case 8), 15=310(load case 1), 14=150(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-14/112, 2-3=-107/110, 3-4=-98/111, 4-5=-91/102, 5-6=-98/131, 6-7=-96/161, 7-8=-96/160, 8-9=-98/106, 9-10=-91/38, 10-11=-46/52, 11-12=-107/50, 12-13=-14/112
 BOT CHORD 2-20=-18/118, 19-20=-18/118, 18-19=-18/118, 17-18=-18/118, 16-17=-18/118, 15-16=-18/118, 14-15=-18/118, 12-14=-18/118
 WEBS 7-17=-191/19, 6-18=-229/148, 5-19=-242/166, 4-20=-124/63, 8-16=-229/145, 9-15=-242/167, 10-14=-124/55

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; 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 requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 285 lb uplift at joint 2, 305 lb uplift at joint 12, 8 lb uplift at joint 17, 134 lb uplift at joint 18, 161 lb uplift at joint 19, 40 lb uplift at joint 20, 131 lb uplift at joint 16, 162 lb uplift at joint 15 and 32 lb uplift at joint 14.
 - 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: 1-7=-114(F=-60), 7-13=-114(F=-60), 2-12=-30





LOADING (psf)	SPACING 2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.47	Vert(LL)	-0.18 11-12	>999	240	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.91	Vert(TL)	-0.26 11-12	>720	180		
BCLL 10.0	Rep Stress Incr NO	WB 0.70	Horz(TL)	0.15 8	n/a	n/a		
BCDL 5.0	Code FBC2001/ANSI95	(Matrix)					Weight: 202 lb	

BRACING	
TOP CHORD	Sheathed or 3-6-2 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/57, 2-3=-7482/2721, 3-4=-12035/4213, 4-5=-7780/2794, 5-6=-7780/2804, 6-7=-12782/4627, 7-8=-9492/3560
BOT CHORD 2-13=-1939/6345, 12-13=-2002/6584, 12-14=-3137/10005, 14-15=-3143/10021, 11-15=-3143/10028, 10-11=-3377/10616, 9-10=-3016/8830, 8-9=-3004/8083
WEBS 3-13=-2632/909, 3-12=-1427/4342, 4-12=-1160/3552, 4-11=-3586/1292, 5-11=-2660/7460, 6-11=-4230/1655, 6-10=-1518/4179, 7-10=-1017/3165, 7-9=-1875/631

NOTES

- 1) 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 6 - 2 rows at 0-7-0 oc, 2 X 8 - 2 rows at 0-4-0 oc.
Webs connected as follows: 2 X 4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; TCDF=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; Lumber DCL=1.60 plate grip DCL=1.60.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2113 lb uplift at joint 8 and 1635 lb uplift at joint 2.
- 6) Girder carries tie-in span(s): 33-0-0 from 6-4-8 to 15-8-0
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2449 lb down and 925 lb up at 5-4-8 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=-54, 2-13=-30, 12-13=-30, 12-15=-30, 10-15=-675(F=-645), 9-10=-675(F=-645), 8-9=-675(F=-645)
Concentrated Loads (lb)
Vert: 14=-2449(F)

Job L130846	Truss T08	Truss Type MONO HIP	Qty 1	Ply 1	Dwg.#090905331
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.200 s Jul 13 2005 Mittek Industries, Inc. Thu Sep 08 16:55:18 2005 Page 1		

-2-0-0	7-0-0	11-6-10	15-11-9	20-4-7	24-9-6	29-4-0
2-0-0	7-0-0	4-6-10	4-4-14	4-4-14	4-4-14	4-6-10

Scale = 1:52.9

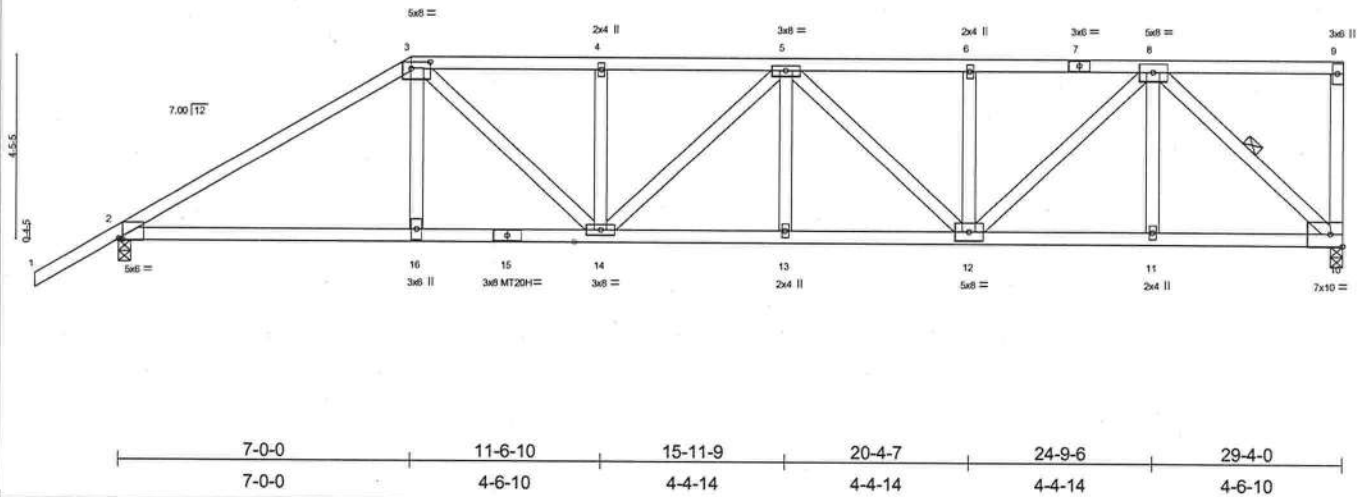


Plate Offsets (X,Y): [2:0-1-3,Edge], [3:0-5-8,0-2-0]

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.65	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.96	Vert(LL) 0.29 13-14 >999 240	MT20H	187/143
BCLL 10.0	Lumber Increase 1.25	WB 0.96	Vert(TL) -0.41 13-14 >857 180		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL) 0.14 10 n/a n/a		
	Code FBC2001/ANSI95			Weight: 169 lb	

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

BRACING
TOP CHORD Sheathed or 2-8-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 3-11-10 oc bracing.
WEBS 1 Row at midpt 8-10

REACTIONS (lb/size) 10=2700/0-3-8, 2=2583/0-3-8
Max Horz 2=265(load case 4)
Max Uplift 10=-1561(load case 2), 2=-1271(load case 4)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/54, 2-3=-4361/2273, 3-4=-4680/2619, 4-5=-4679/2620, 5-6=-4084/2337, 6-7=-4084/2337, 7-8=-4084/2337, 8-9=-59/34, 9-10=-246/244
BOT CHORD 2-16=-1993/3659, 15-16=-2005/3688, 14-15=-2005/3688, 13-14=-2723/4813, 12-13=-2723/4813, 11-12=-1445/2507, 10-11=-1445/2507
WEBS 3-16=-325/812, 3-14=-966/1340, 4-14=-497/598, 5-14=-183/141, 5-13=0/287, 5-12=-1001/551, 6-12=-508/528, 8-12=-1225/2165, 8-11=0/283, 8-10=-3363/1938

NOTES

- 1) Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; 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) Provide adequate drainage to prevent water ponding.
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1561 lb uplift at joint 10 and 1271 lb uplift at joint 2.
- 5) Girder carries hip end with 0-0-0 right side setback, 7-0-0 left side setback, and 7-0-0 end setback.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 539 lb down and 374 lb up at 7-0-0 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, 3-9=-118(F=-64), 2-16=-30, 10-16=-65(F=-35)
Concentrated Loads (lb)
Vert: 16=-539(F)

LOAD CASE(S) Standard

Job L130846	Truss T10	Truss Type MONO HIP	Qty 1	Ply 1	Dwg.#090905333
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.200 s Jul 13 2005 Miltek Industries, Inc. Thu Sep 08 16:55:19 2005 Page 1		

-2-0-0	5-8-13	11-0-0	17-0-3	23-0-5	29-4-0
2-0-0	5-8-13	5-3-3	6-0-3	6-0-3	6-3-11

Scale = 1:52.9

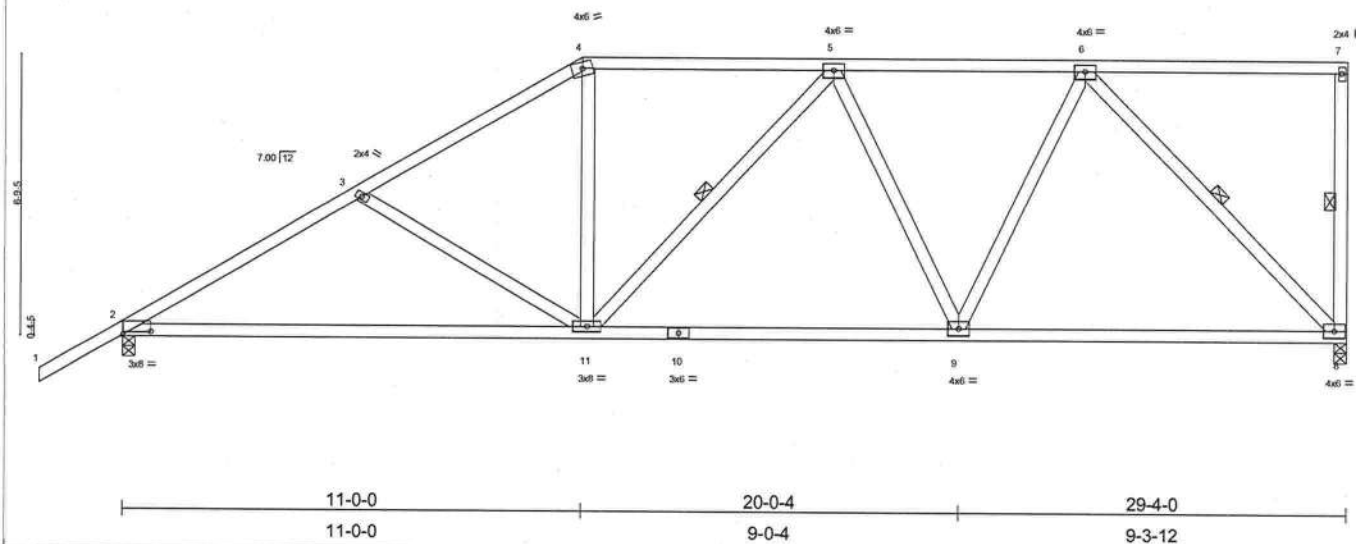


Plate Offsets (X,Y): [2-0-8-1,0-0-14]

LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.48	Vert(LL)	-0.31	2-11	>999	240	MT20	244/190
TCCL 7.0	Plates Increase 1.25	BC 0.68	Vert(TL)	-0.46	2-11	>758	180		
BCCL 10.0	Lumber Increase 1.25	WB 0.74	Horz(TL)	0.05	8	n/a	n/a		
BCDL 5.0	Rep Stress Incr YES	(Matrix)							
	Code FBC2001/ANSI95								
								Weight: 167 lb	

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

BRACING
TOP CHORD Sheathed or 4-4-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-5-4 oc bracing.
WEBS 1 Row at midpt 7-8, 5-11, 6-8

REACTIONS (lb/size) 8=1215/0-3-8, 2=1340/0-3-8
Max Horz 2=371(load case 5)
Max Uplift 8=-457(load case 3), 2=-440(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/54, 2-3=-1894/664, 3-4=-1613/576, 4-5=-1337/561, 5-6=-1192/471, 6-7=-411/8, 7-8=-157/125
BOT CHORD 2-11=-759/1586, 10-11=-570/1340, 9-10=-570/1340, 8-9=-399/921
WEBS 3-11=-303/268, 4-11=-64/473, 5-11=-80/234, 5-9=-351/235, 6-9=-173/645, 6-8=-1277/570

NOTES

- 1) Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; TCCL=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) Provide adequate drainage to prevent water ponding.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 457 lb uplift at joint 8 and 440 lb uplift at joint 2.

LOAD CASE(S) Standard

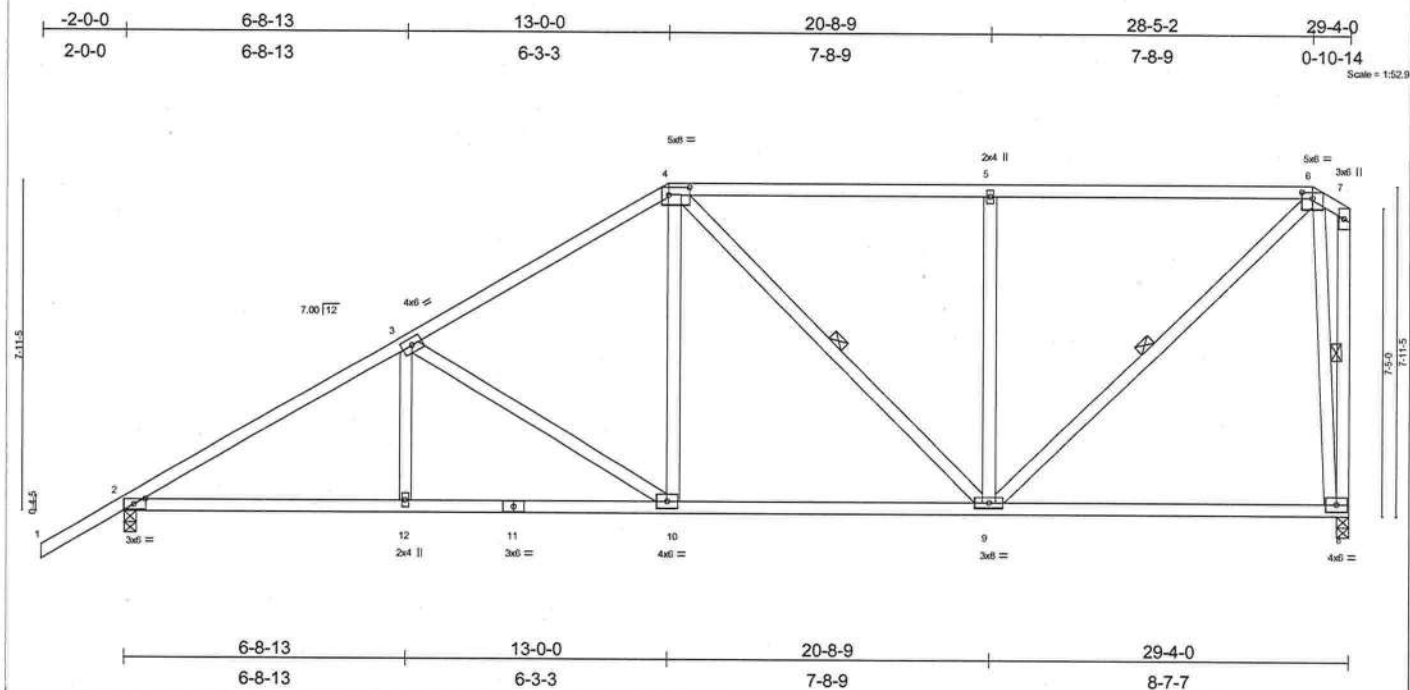


Plate Offsets (X,Y): [2-0-3-3-0-1-8], [4-0-6-0-0-2-4], [6-0-3-0-0-1-12]											
LOADING (psf)		SPACING 2-0-0		CSI		DEFL				PLATES GRIP	
TCLL	20.0	Plates Increase	1.25	TC	0.36	in	(loc)	I/defl	L/d	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.41	Vert(LL)	-0.11	8-9	>999		
BCLL	10.0	Rep Stress Incr	YES	WB	0.52	Vert(TL)	-0.17	8-9	>999		
BCDL	5.0	Code FBC2001/ANSI95		(Matrix)		Horz(TL)	0.04	8	n/a	n/a	
										Weight: 185 lb	

LUMBER	BRACING
TOP CHORD 2 X 4 SYP No.2D	TOP CHORD Sheathed or 4-4-15 oc purlins, except end verticals.
BOT CHORD 2 X 4 SYP No.2D	BOT CHORD Rigid ceiling directly applied or 7-7-10 oc bracing.
WEBS 2 X 4 SYP No.3 *Except*	WEBS 1 Row at midpt 4-9, 6-9, 6-8
W7 2 X 4 SYP No.2D	

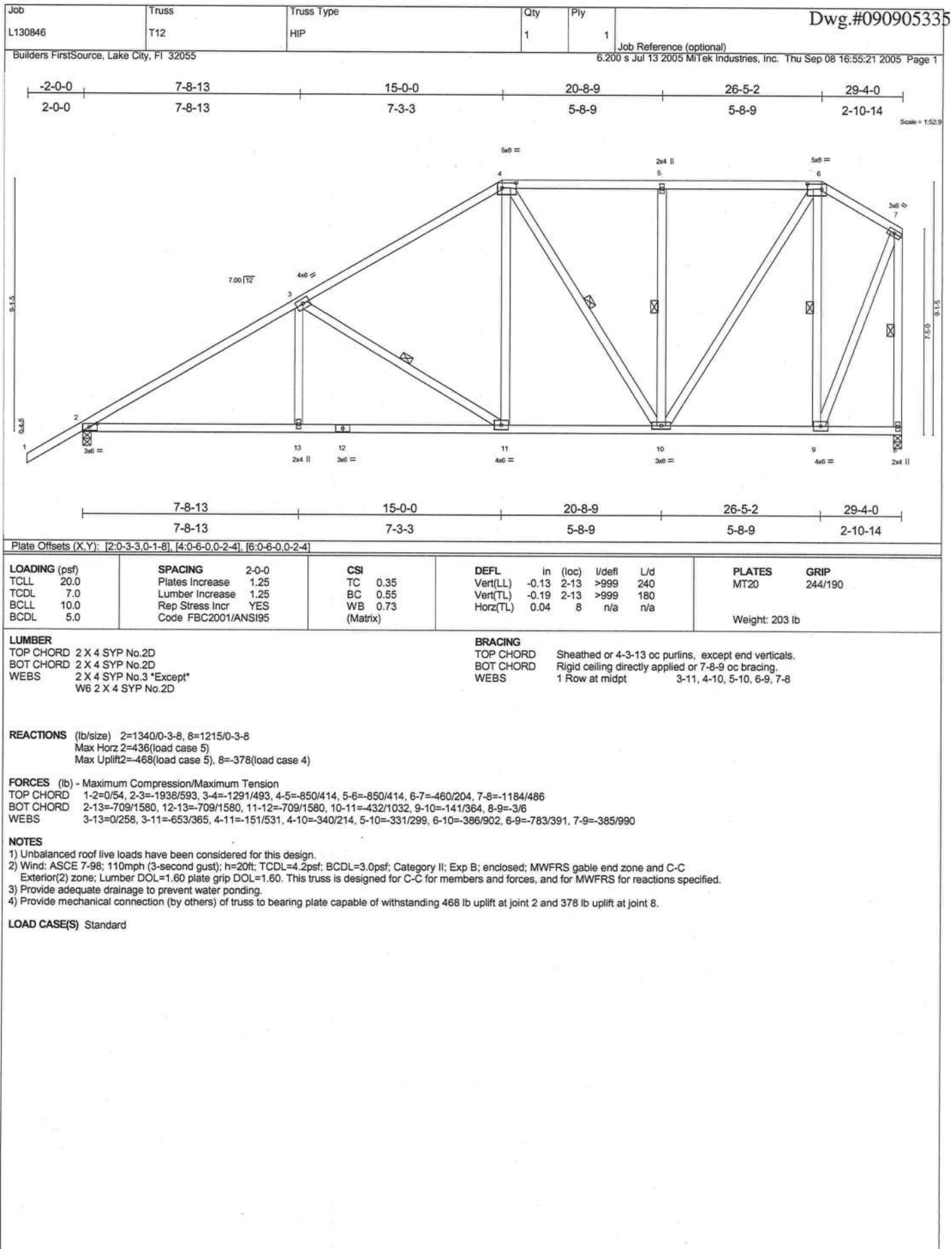
REACTIONS (lb/size) 2=1340/0-3-8, 8=1215/0-3-8
Max Horz 2=413(load case 5)
Max Uplift2=-454(load case 5), 8=-498(load case 4)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/54, 2-3=1971/607, 3-4=-1439/535, 4-5=-1014/439, 5-6=-1014/439, 6-7=-105/49, 7-8=-203/115
BOT CHORD 2-12=732/1614, 11-12=732/1614, 10-11=-732/1614, 9-10=-513/1179, 8-9=73/148
WEBS 3-12=0/211, 3-10=-522/302, 4-10=-120/475, 4-9=-234/182, 5-9=-451/390, 6-9=-516/1219, 6-8=-1200/726

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-98; 110mph (3-second gust); $h=20$ ft; $TCDL=4.2$ psf; $BCDL=3.0$ psf; 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) Provide adequate drainage to prevent water ponding.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 454 lb uplift at joint 2 and 498 lb uplift at joint 8.

LOAD CASE(S) Standard



Job L130846	Truss T13	Truss Type SPECIAL	Qty 1	Ply 1	Dwg.#090905336
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Sep 08 16:55:21 2005 Page 1		

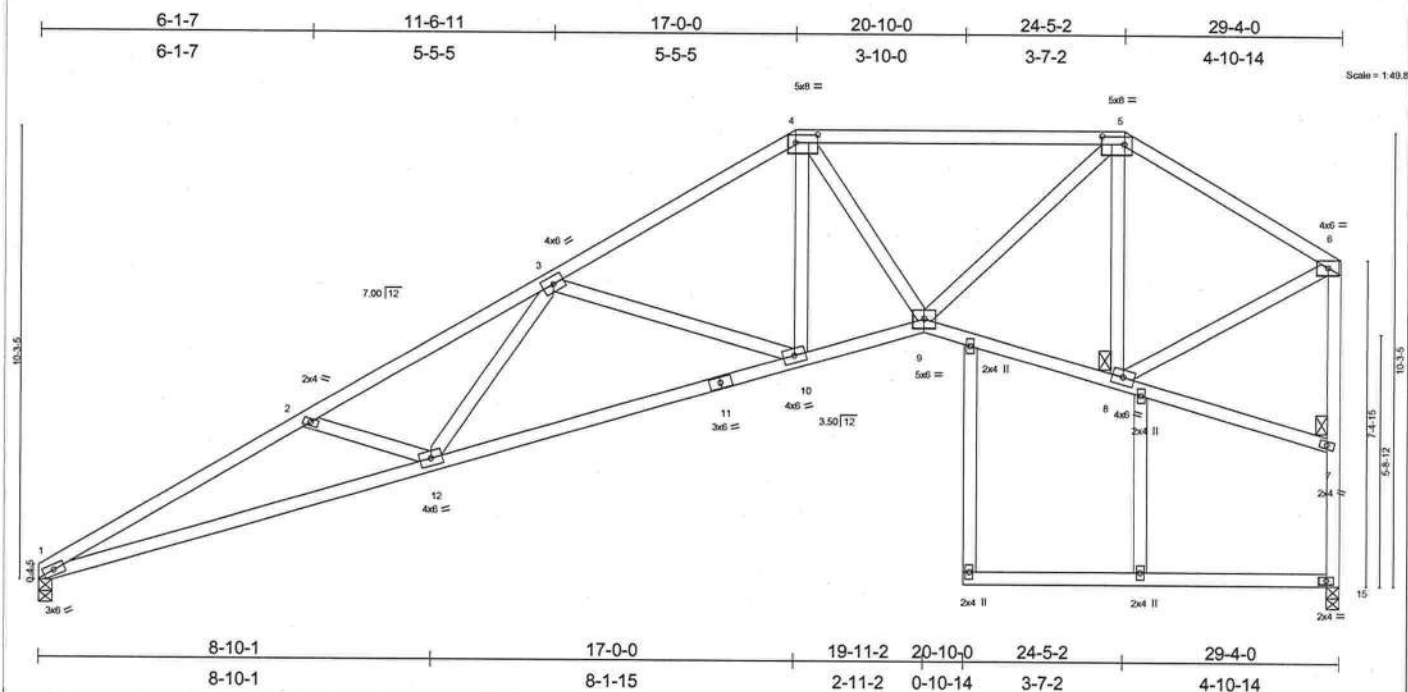


Plate Offsets (X,Y): [4:0-6-0-0-2-4], [5:0-6-0-0-2-4]

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.52	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.78	Vert(LL) -0.30 10-12 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.46	Vert(TL) -0.43 10-12 >816 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.32 15 n/a n/a		
	Code FBC2001/ANSI95			Weight: 190 lb	

LUMBER	BRACING
TOP CHORD 2 X 4 SYP No.2D	TOP CHORD Sheathed or 2-11-15 oc purlins, except end verticals.
BOT CHORD 2 X 4 SYP No.2D *Except*	BOT CHORD Rigid ceiling directly applied or 5-1-14 oc bracing.
B4 2 X 4 SYP No.3	WEBS 1 Row at midpt 6-15
WEBS 2 X 4 SYP No.3 *Except*	JOINTS 1 Brace at Jt(s): 8
W10 2 X 4 SYP No.2D	

REACTIONS (lb/size) 1=1220/0-3-8, 15=1220/0-3-8
Max Horz 1=389(load case 5)
Max Uplift 1=-352(load case 5), 15=-327(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-3643/1466, 2-3=-3307/1297, 3-4=-2083/871, 4-5=-1778/805, 5-6=-1140/481, 7-15=-1220/482, 6-7=-1157/495
BOT CHORD 1-12=-1551/3235, 11-12=-1148/2531, 10-11=-1135/2563, 9-10=-733/1833, 8-9=-367/974, 7-8=-19/44
WEBS 2-12=-298/322, 3-12=-213/669, 3-10=-724/477, 4-10=-242/628, 4-9=-88/109, 5-9=-461/1171, 5-8=-613/324, 6-8=-396/1052

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; TCCL=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) Provide adequate drainage to prevent water ponding.
 - 4) Bearing at joint(s) 1, 15 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 352 lb uplift at joint 1 and 327 lb uplift at joint 15.

LOAD CASE(S) Standard



LOADING (psf)	SPACING 2-0-0	CSI	DEFL in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.67	Vert(LL) -0.40 1-12 >871 240	MT20	244/190
TCOL 7.0	Lumber Increase 1.25	BC 0.87	Vert(TL) -0.57 1-12 >607 180		
BCLL 10.0	Rep Stress Incr YES	WB 0.91	Horz(TL) 0.33 15 n/a n/a		
BCDL 5.0	Code FBC2001/ANSI95	(Matrix)		Weight: 191 lb	

BRACING	
TOP CHORD	Sheathed or 2-9-9 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 5-0-6 oc bracing.
WEBS	1 Row at midpt 7-15
JOINTS	1 Brace at Jt(s): 9

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-357/1434, 2-3=-3143/1179, 3-4=-3054/1204, 4-5=-1669/687, 5-6=-1462/687, 6-7=-1345/554, 8-15=-1220/471, 7-8=-1130/497
 BOT CHORD 1-12=-1585/3183, 11-12=-1076/2341, 10-11=-1067/2413, 9-10=-391/1132, 8-9=-44/103
 WEBS 2-12=-388/395, 4-12=-213/736, 4-10=-947/577, 5-10=-195/571, 6-10=-390/970, 6-9=-503/233, 7-9=-360/1054

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-98; 110mph (3-second gust); $h=20ft$; $TCFD=4$; $2psf$; $BCDL=3.0psf$; 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) Provide adequate drainage to prevent water ponding.
- 4) Bearing at joint(s) 15, 1 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 360 lb uplift at joint 15 and 359 lb uplift at joint 1.

LOAD CASE(S) Standard



Weight: 179 lb

TOP CHORD	Sheathed or 2-7-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 4-11-6 oc bracing.
WEBS	1 Row at midpt. 6-13

TOP CHORD 1-2=-3550/1412, 2-3=-3141/1188, 3-4=-3042/1214, 4-5=-1651/678, 5-6=-1531/611, 7-13=-1220/462, 6-7=-1115/498
BOT CHORD 1-10=-1608/3159, 9-10=-1037/2168, 8-9=-1023/2241, 7-8=-70/162
WEBS 2-10=-388/391, 4-8=-319/891, 4-8=-859/552, 5-8=-385/1083, 6-8=-416/1125

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; TCFL=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) Bearing at joint(s) 13, 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 391 lb uplift at joint 13 and 362 lb uplift at joint 1.

SEPTEMBER 09, 2005 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 L130846	Truss T16	Truss Type SPECIAL	Qty 3	Ply 1	Dwg.#090905339
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Sep 08 16:55:24 2005 Page 1		

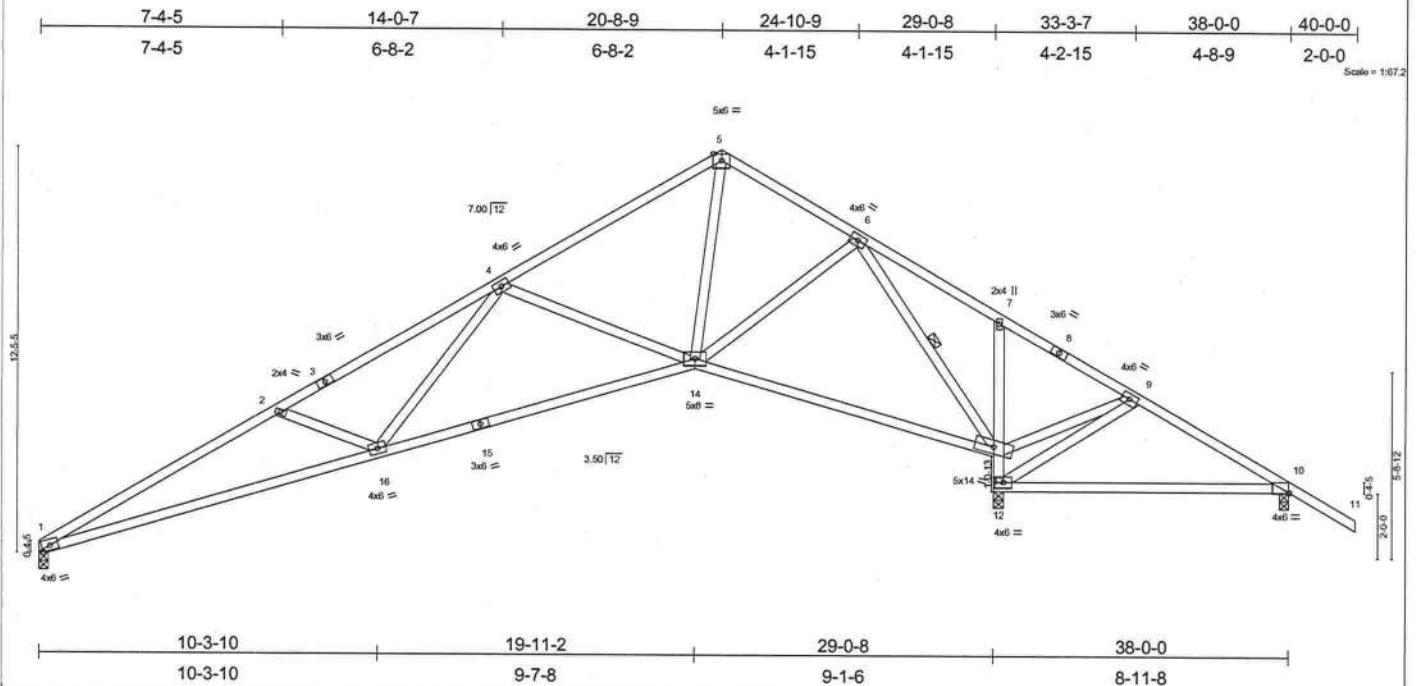


Plate Offsets (X,Y): [10-Edge,0-0-4]																	
LOADING (psf)		SPACING		2-0-0		CSI		DEFL		in (loc)		l/defl L/d		PLATES		GRIP	
TCLL 20.0		Plates Increase		1.25		TC 0.68		Vert(LL)		-0.39 1-16		>887 240		MT20		244/190	
TCDL 7.0		Lumber Increase		1.25		BC 0.86		Vert(TL)		-0.57 1-16		>617 180					
BCLL 10.0		Rep Stress Incr		YES		WB 0.96		Horz(TL)		0.16 12		n/a n/a					
BCDL 5.0		Code FBC2001/ANSI95				(Matrix)										Weight: 201 lb	

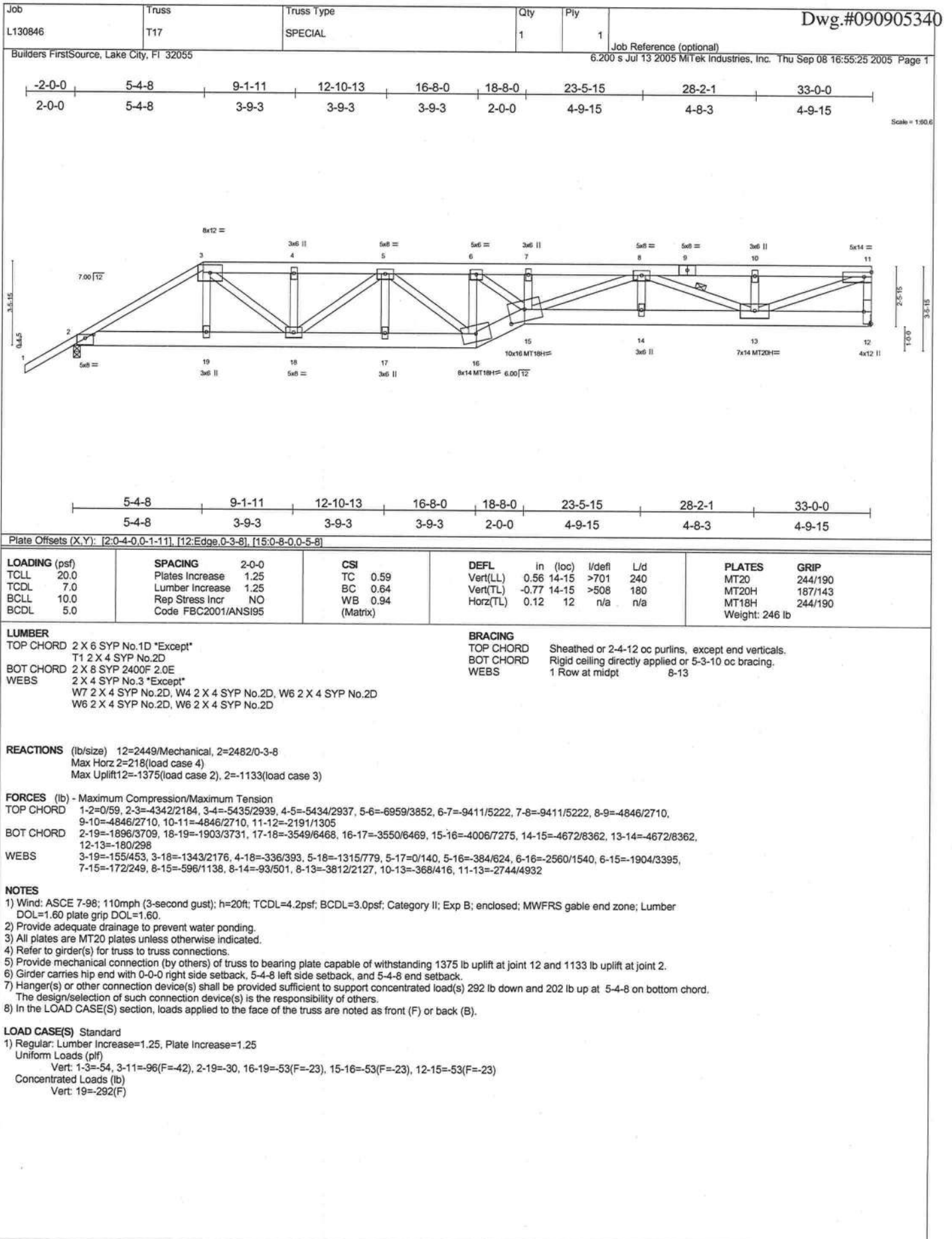
LUMBER		BRACING	
TOP CHORD 2 X 4 SYP No.2D		TOP CHORD Sheathed or 3-0-5 oc purlins.	
BOT CHORD 2 X 4 SYP No.2D *Except*		BOT CHORD Rigid ceiling directly applied or 2-5-1 oc bracing.	
WEBS B4 2 X 4 SYP No.3		WEBS 1 Row at midpt 6-13	

REACTIONS (lb/size)	
12=2303/0-3-8, 10=711/0-3-8, 1=1051/0-3-8	
Max Horz 1=394(load case 4)	
Max Uplift 12=764(load case 5), 10=379(load case 3), 1=329(load case 5)	
Max Grav 12=2303(load case 1), 10=143(load case 8), 1=1051(load case 1)	

FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD 1-2=-2927/1123, 2-3=-2514/891, 3-4=-2417/917, 4-5=-990/334, 5-6=-860/334, 6-7=-352/1310, 7-8=-411/1332, 8-9=-427/1228, 9-10=-241/867, 10-11=0/54	
BOT CHORD 1-16=-1186/2604, 15-16=-609/1598, 14-15=-595/1671, 13-14=-95/250, 12-13=-2547/955, 7-13=-253/224, 10-12=-707/245	
WEBS 2-16=-397/395, 4-16=-324/905, 4-14=-868/568, 5-14=-136/550, 6-14=-240/850, 6-13=-2091/631, 9-13=-1109/751, 9-12=-418/767	

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; porch 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.
 - 3) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 764 lb uplift at joint 12, 379 lb uplift at joint 10 and 329 lb uplift at joint 1.

LOAD CASE(S) Standard



6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Sep 08 16:55:26 2005 Page 1



PLATES	GRIP
MT20	244/190
MT20H	187/143

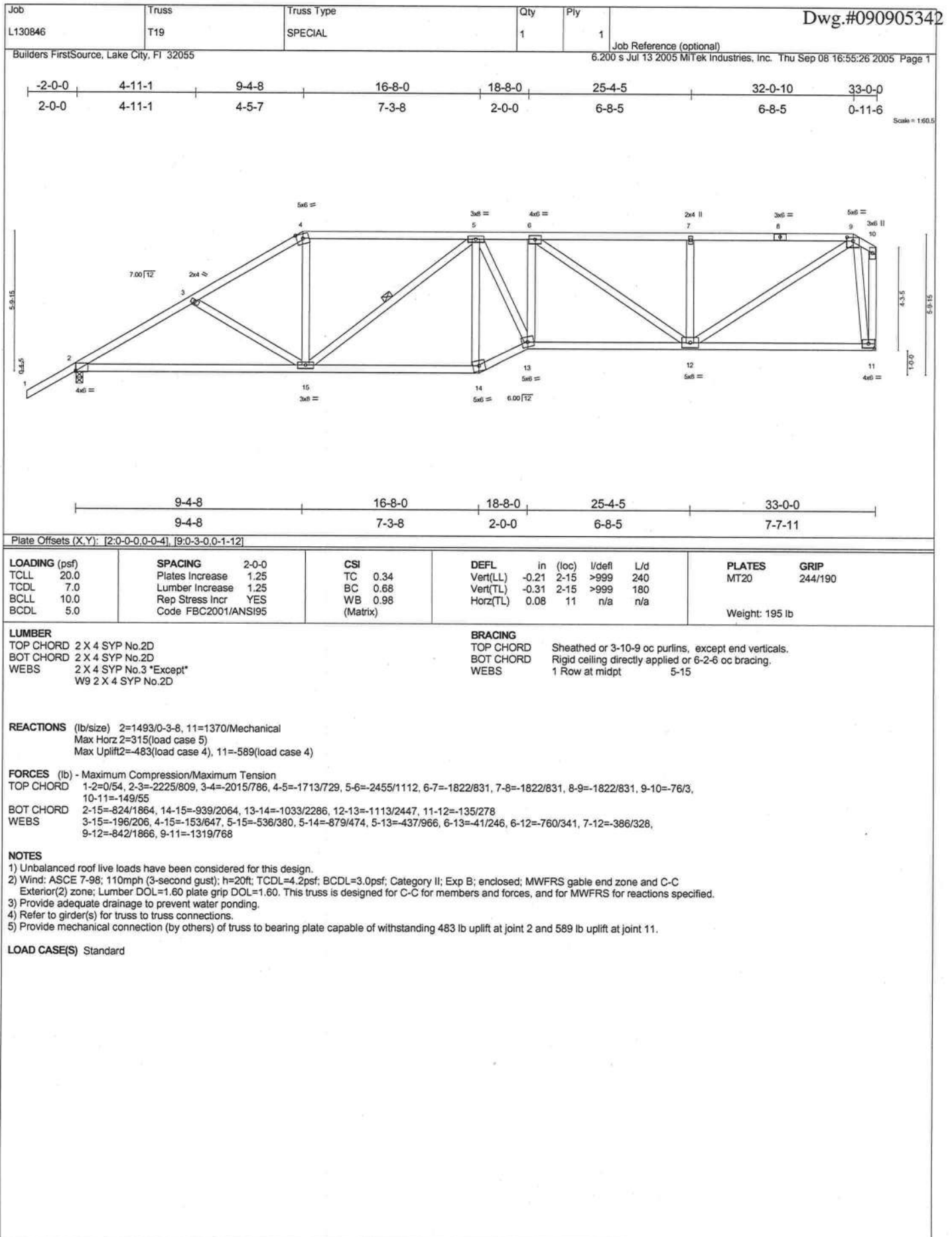
Weight: 175 lb

BRACING	
TOP CHORD	Sheathed or 3-4-14 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 5-6-10 oc bracing.
WEBS	1 Row at midpt 6-11, 9-11

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/54, 2-3=-2250/784, 3-4=-1870/755, 4-5=-2613/1044, 5-6=-3313/1377, 6-7=-2347/1015, 7-8=-2347/1015, 8-9=-2347/1015, 9-10=-1265/615
 BOT CHORD 1-2=-750/1845, 13-14=-968/2349, 12-13=-1145/2855, 11-12=-1380/3305, 10-11=-42/89
 WEBS 2-14=-299/746, 4-14=-667/530, 4-13=-158/363, 5-13=-1304/645, 5-12=-658/1381, 6-12=-5/184, 6-11=-1062/435, 8-11=-402/347, 9-11=-1079/2505

- 1) Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; TCDF=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) Provide adequate drainage to prevent water ponding.
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 603 lb uplift at joint 10 and 433 lb uplift at joint 2.

LOAD CASE(S) Standard



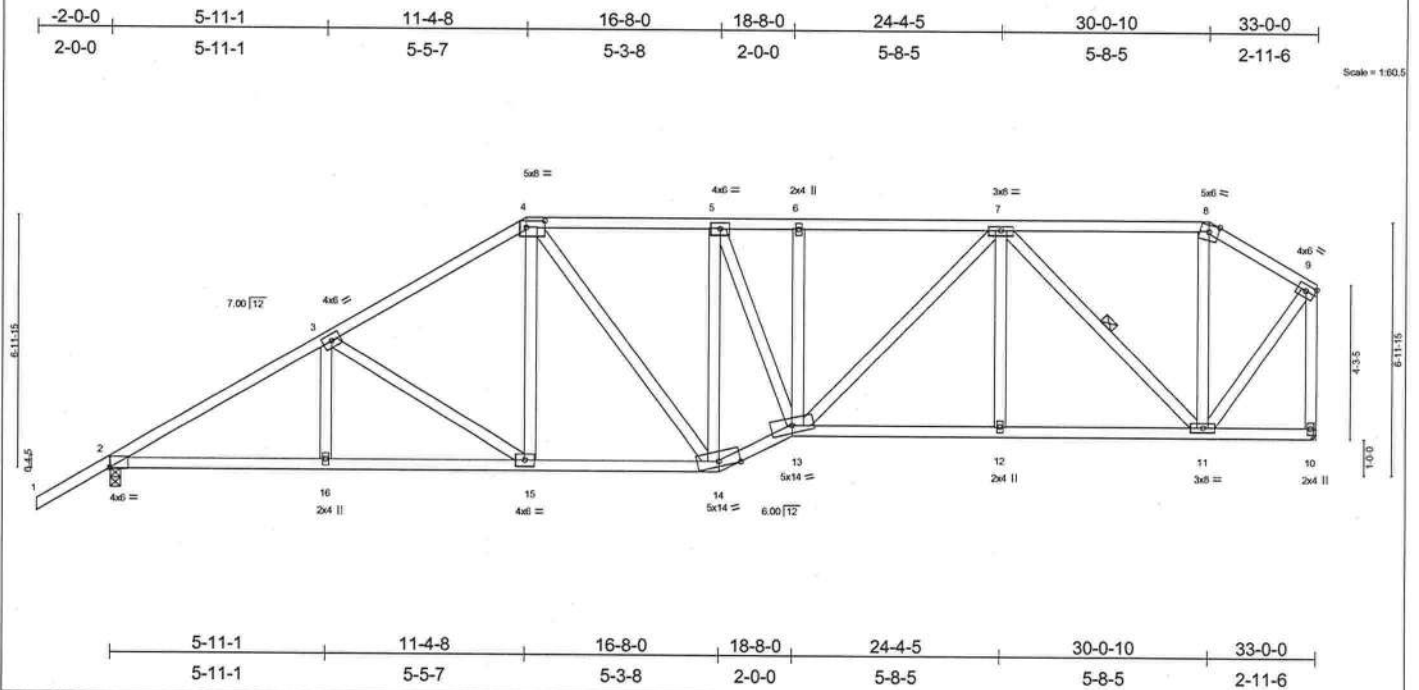


Plate Offsets (X,Y): [2:0-0-0-0-0-4], [4:0-6-0-0-2-4]							
LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d
TCLL 20.0	Plates Increase	1.25	TC 0.33	Vert(LL)	-0.13 12-13	>999	240
TCDL 7.0	Lumber Increase	1.25	BC 0.42	Vert(TL)	-0.19 12-13	>999	180
BCLL 10.0	Rep Stress Incr	YES	WB 0.68	Horz(TL)	0.07 10	n/a	n/a
BCDL 5.0	Code	FBC2001/ANSI95	(Matrix)				
				PLATES	GRIP		
				MT20	244/190		
				Weight: 219 lb			

LUMBER	BRACING
TOP CHORD 2 X 4 SYP No.2D	TOP CHORD Sheathed or 4-1-15 oc purlins, except end verticals.
BOT CHORD 2 X 4 SYP No.2D	BOT CHORD Rigid ceiling directly applied or 7-3-15 oc bracing.
WEBS 2 X 4 SYP No.3 "Except"	WEBS 1 Row at midpt 7-11
W9 2 X 4 SYP No.2D	

REACTIONS (lb/size) 2=1493/0-3-8, 10=1370/Mechanical
 Max Horz 2=338(load case 5)
 Max Uplift 2=480(load case 5), 10=471(load case 4)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/54, 2-3=-2297/772, 3-4=-1843/721, 4-5=-1691/737, 5-6=-1937/835, 6-7=-1937/835, 7-8=-669/323, 8-9=-793/326, 9-10=-1336/532
 BOT CHORD 2-16=-790/1898, 15-16=-790/1898, 14-15=-641/1535, 13-14=-794/1848, 12-13=-676/1553, 11-12=-676/1553, 10-11=-6/8
 WEBS 3-16=0/180, 3-15=-438/249, 4-15=-99/393, 4-14=-300/363, 5-14=-851/471, 5-13=-315/710, 6-13=-196/163, 7-13=-237/557, 7-12=0/186, 7-11=-1277/587, 8-11=-21/176, 9-11=-459/1117

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; 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) Provide adequate drainage to prevent water ponding.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 480 lb uplift at joint 2 and 471 lb uplift at joint 10.

LOAD CASE(S) Standard

Job L130846	Truss T21	Truss Type HIP	Qty 1	Ply 1	Dwg.#090905344
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Sep 08 16:55:28 2005 Page 1		

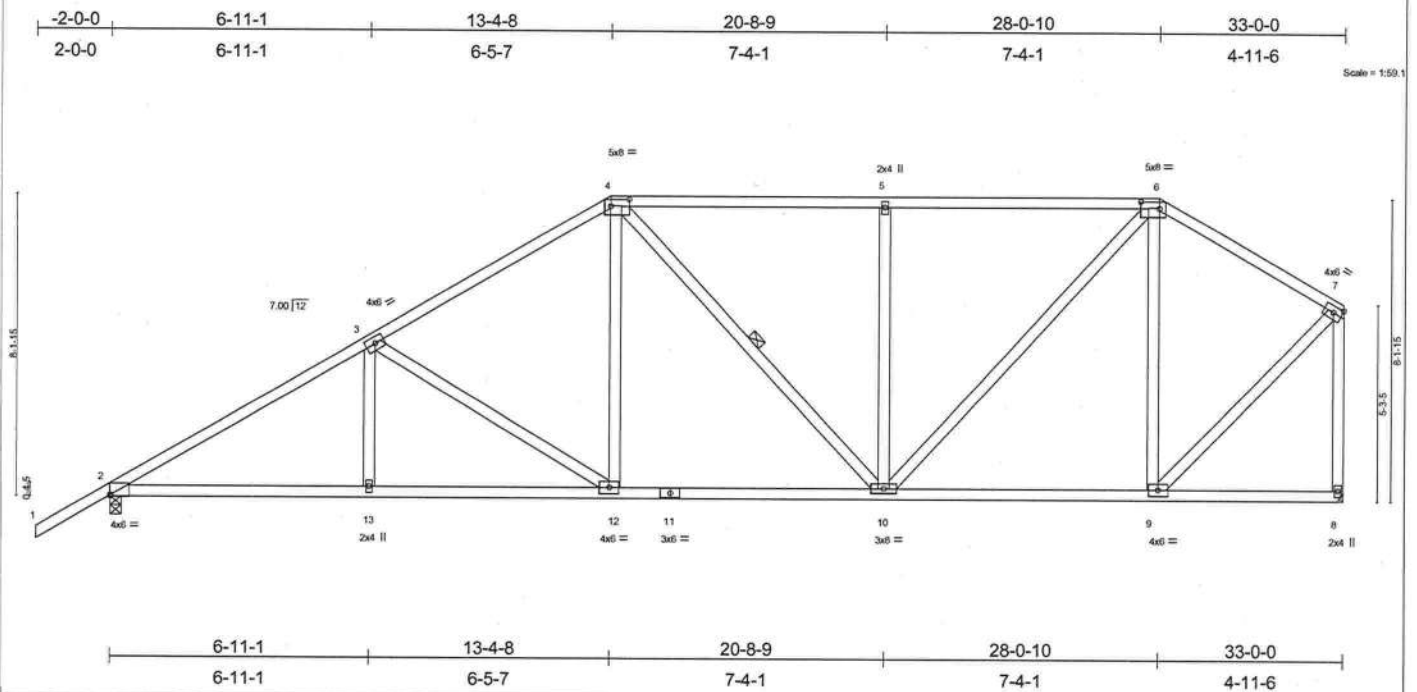


Plate Offsets (X,Y): [2-0-0-0-0-4], [4-0-6-0-0-2-4], [6-0-6-0-0-2-4]

LOADING (psf)	SPACING 2-0-0	CSI	DEFL in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.74	Vert(LL) -0.12 10-12 >999 240	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.46	Vert(TL) -0.18 10-12 >999 180		
BCLL 10.0	Rep Stress Incr YES	WB 0.86	Horz(TL) 0.05 8 n/a n/a		
BCDL 5.0	Code FBC2001/ANSI95	(Matrix)			
Weight: 204 lb					

LUMBER
TOP CHORD 2 X 4 SYP No.2D
BOT CHORD 2 X 4 SYP No.2D
WEBS 2 X 4 SYP No.3 "Except"
W6 2 X 4 SYP No.2D

BRACING
TOP CHORD Sheathed or 4-0-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-5-11 oc bracing.
WEBS 1 Row at midpt 4-10

REACTIONS (lb/size) 2=1493/0-3-8, 8=1370/Mechanical
Max Horz 2=361(load case 5)
Max Uplift 2=500(load case 5), 8=370(load case 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/54, 2-3=-2261/757, 3-4=-1711/681, 4-5=-1377/639, 5-6=-1377/639, 6-7=-936/389, 7-8=-1308/530
BOT CHORD 2-13=-765/1862, 12-13=-765/1862, 11-12=-555/1411, 10-11=-555/1411, 9-10=-270/753, 8-9=-14/18
WEBS 3-13=0/218, 3-12=-542/313, 4-12=-124/488, 4-10=-230/128, 5-10=-423/373, 6-10=-436/941, 6-9=-571/318, 7-9=-396/1066

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-98: 110mph (3-second gust); h=20ft; 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) Provide adequate drainage to prevent water ponding.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 500 lb uplift at joint 2 and 370 lb uplift at joint 8.

LOAD CASE(S) Standard

Job L130846	Truss T23	Truss Type SPECIAL	Qty 1	Ply 1	Dwg.#090905346
Builders FirstSource, Lake City, FL 32055			Job Reference (optional)		

6.200 s Jul 13 2005 MiTek Industries, Inc. Mon Sep 12 10:13:17 2005 Page 1

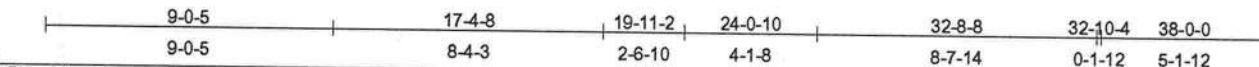
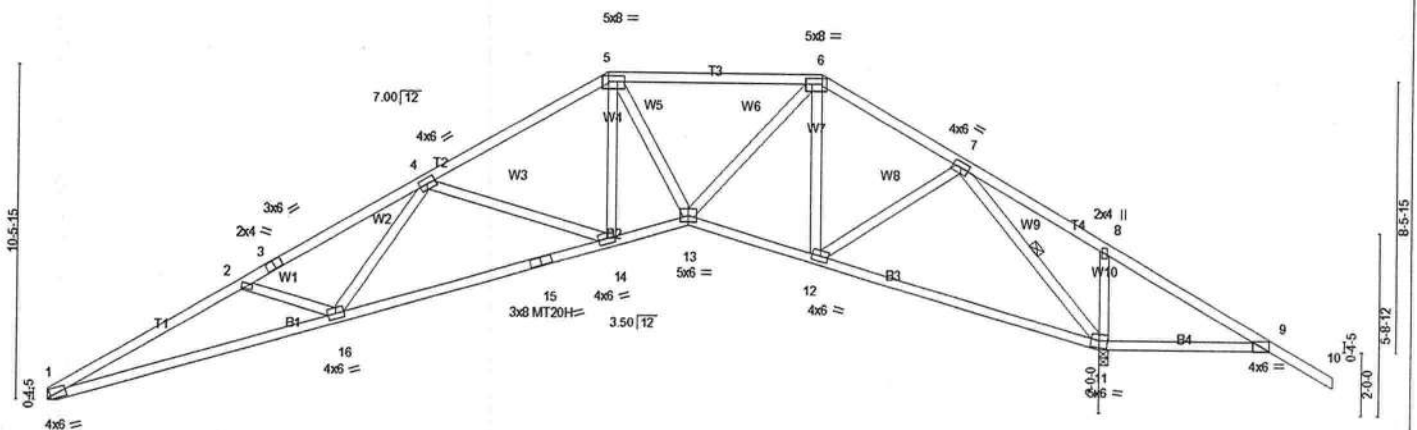
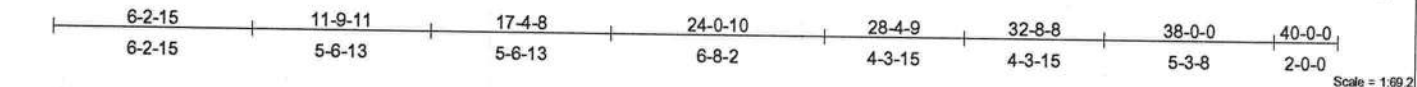


Plate Offsets (X,Y): [5:0-6-0,0-2-4], [6:0-6-0,0-2-4], [9:0-0-0,0-0-4]

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.60	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.85	Vert(LL) -0.36 14-16 >999 240	MT20H	187/143
BCLL 10.0	Lumber Increase 1.25	WB 0.82	Vert(TL) -0.52 14-16 >758 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.31 11 n/a n/a		
	Code FBC2001/ANSI95			Weight: 200 lb	

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

BRACING
TOP CHORD Sheathed or 2-9-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-4-10 oc bracing.
WEBS 1 Row at midpt 7-11

REACTIONS (lb/size) 11=1980/0-3-8, 1=1313/Mechanical
Max Horz 1=328/load case 4)
Max Uplift 11=768/load case 6), 1=403/load case 5)

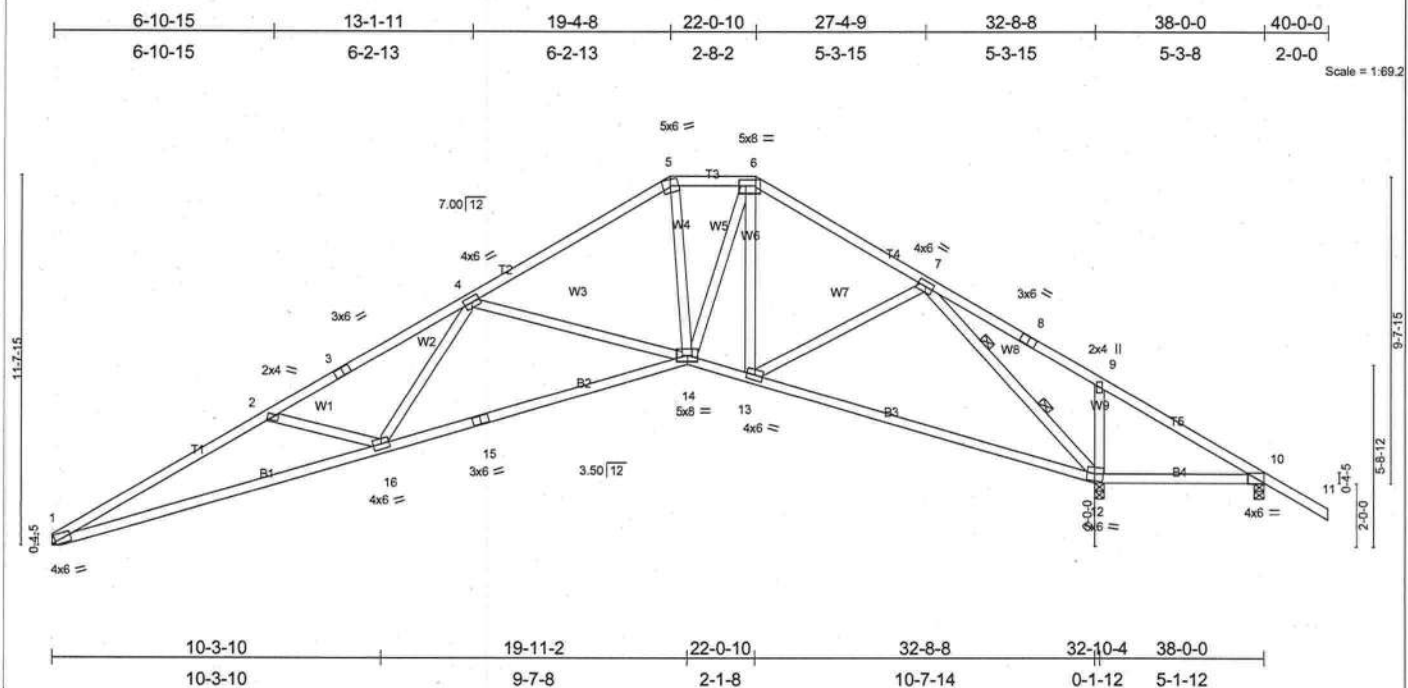
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-3998/1403, 2-3=-3649/1188, 3-4=-3567/1210, 4-5=-2382/707, 5-6=-2101/644, 6-7=-1628/453, 7-8=-464/622, 8-9=-608/634, 9-10=0/53
BOT CHORD 1-16=-1409/3556, 15-16=-950/2826, 14-15=-937/2859, 13-14=-656/2088, 12-13=-353/1414, 11-12=-134/856, 9-11=-481/651
WEBS 2-16=-310/336, 4-16=-225/689, 4-14=-756/494, 5-14=-245/672, 5-13=-41/212, 6-13=-413/1095, 6-12=-328/264, 7-12=-262/703, 7-11=-2107/829, 8-11=-288/267

JOINT STRESS INDEX
1 = 1.00, 2 = 0.27, 3 = 0.33, 4 = 0.32, 5 = 0.65, 6 = 0.52, 7 = 0.65, 8 = 0.27, 9 = 0.24, 11 = 0.67, 12 = 0.21, 13 = 0.61, 14 = 0.25, 15 = 0.68 and 16 = 0.23

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; cantilever 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.
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 768 lb uplift at joint 11 and 403 lb uplift at joint 1.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
L130846	T24	SPECIAL	1	1	
Builders FirstSource, Lake City, FL 32055					Job Reference (optional)
					6.200 s Jul 13 2005 MiTek Industries, Inc. Mon Sep 12 10:13:25 2005 Page 1



LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.71	Vert(LL)	-0.43	1-16	>916	240	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.89	Vert(TL)	-0.61	1-16	>639	180		
BCLL 10.0	Rep Stress Incr	YES	WB 0.85	Horz(TL)	0.27	12	n/a	n/a		
BCDL 5.0	Code	FBC2001/ANSI95	(Matrix)							
										Weight: 201 lb

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

BRACING
 TOP CHORD Sheathed or 2-8-9 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 5-1-1 oc bracing.
 WEBS 2 Rows at 1/3 pts 7-12

REACTIONS (lb/size) 12=2610/0-3-8, 10=549/0-3-8, 1=1228/Mechanical
 Max Horz 1=368(load case 4)
 Max Uplift 12=717(load case 5), 10=674(load case 7), 1=376(load case 5)
 Max Grav 12=2610(load case 1), 10=239(load case 5), 1=1228(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-3619/1304, 2-3=-3182/1045, 3-4=-3092/1069, 4-5=-1682/538, 5-6=-1430/538, 6-7=-1390/481, 7-8=-458/1640, 8-9=-479/1506,
 9-10=-575/1644, 10-11=0/54
 BOT CHORD 1-16=-1338/3226, 15-16=-803/2330, 14-15=-795/2403, 13-14=-185/1165, 12-13=0/538, 10-12=-1341/570
 WEBS 2-16=-401/404, 4-16=-241/786, 4-14=-935/576, 5-14=-95/557, 6-14=-351/881, 6-13=-348/221, 7-13=-240/800, 7-12=-2795/832,
 9-12=-325/270

JOINT STRESS INDEX
 1 = 0.90, 2 = 0.27, 3 = 0.41, 4 = 0.39, 5 = 0.38, 6 = 0.32, 7 = 0.88, 8 = 0.66, 9 = 0.27, 10 = 0.38, 12 = 0.89, 13 = 0.23, 14 = 0.84, 15 = 0.97 and 16 = 0.27

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; cantilever 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.
- Provide adequate drainage to prevent water ponding.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 717 lb uplift at joint 12, 674 lb uplift at joint 10 and 376 lb uplift at joint 1.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
L130846	T25	SPECIAL	6	1	
Builders FirstSource, Lake City, FL 32055					Job Reference (optional)
					6.200 s Jul 13 2005 MiTek Industries, Inc. Mon Sep 12 10:14:01 2005 Page 1

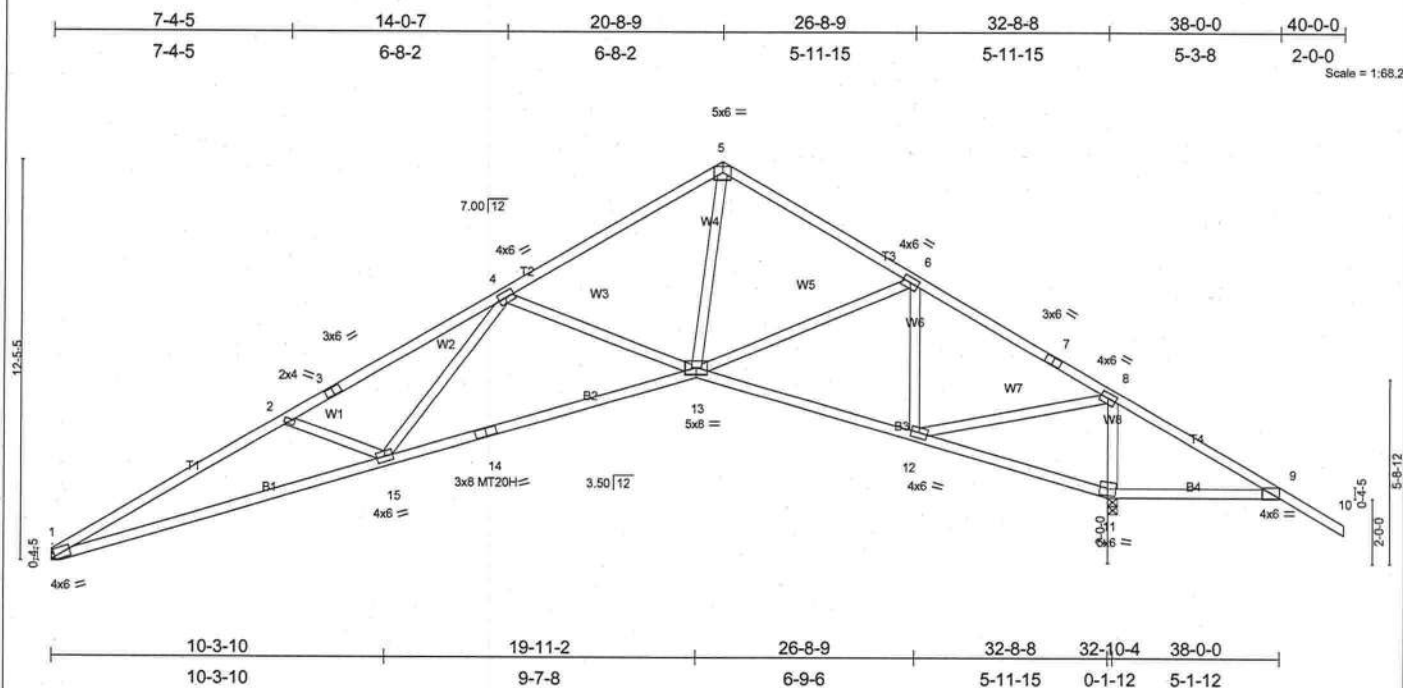


Plate Offsets (X, Y): [9.0-0.0-0.0-4]					
LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.88	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.93	Vert(LL) -0.46 1-15 >844 240	MT20H	187/143
BCLL 10.0	Lumber Increase 1.25	WB 0.64	Vert(TL) -0.66 1-15 >589 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.29 11 n/a n/a		
	Code FBC2001/ANSI95			Weight: 191 lb	

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

BRACING
 TOP CHORD Sheathed or 1-7-8 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 5-1-13 oc bracing.

REACTIONS (lb/size) 11=1980/0-3-8, 1=1313/Mechanical
 Max Horz 1=395(load case 4)
 Max Uplift 11=801(load case 6), 1=418(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-3914/1457, 2-3=-3507/1225, 3-4=-3410/1252, 4-5=-1993/655, 5-6=-1772/628, 6-7=-1286/438, 7-8=-1372/415, 8-9=-591/658, 9-10=0/53
 BOT CHORD 1-15=-1485/3487, 14-15=-914/2494, 13-14=-906/2567, 12-13=-231/1189, 11-12=-623/706, 9-11=-498/634
 WEBS 2-15=-385/393, 4-15=-317/901, 4-13=-868/563, 5-13=-454/1473, 6-13=-222/386, 6-12=-672/339, 8-12=-588/1720, 8-11=-1624/741

JOINT STRESS INDEX
 1 = 0.98, 2 = 0.27, 3 = 0.32, 4 = 0.39, 5 = 0.39, 6 = 0.23, 7 = 0.17, 8 = 0.59, 9 = 0.24, 11 = 0.68, 12 = 0.50, 13 = 0.94, 14 = 0.62 and 15 = 0.30

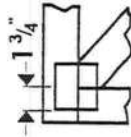
NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-98; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; cantilever 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.
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 801 lb uplift at joint 11 and 418 lb uplift at joint 1.

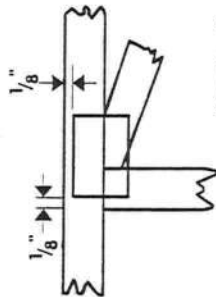
LOAD CASE(S) Standard

Symbols

PLATE LOCATION AND ORIENTATION



* Center plate on joint unless dimensions indicate otherwise. Dimensions are in inches. Apply plates to both sides of truss and securely seat.



* For 4 x 2 orientation, locate plates 1/8" from outside edge of truss and vertical web.

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



PLATE SIZE

4 X 4

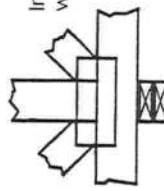
The first dimension is the width perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING



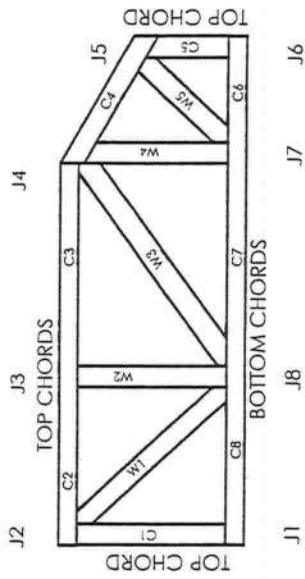
Indicates location of required continuous lateral bracing.

BEARING



Indicates location of joints at which bearings [supports] occur.

Numbering System



JOINTS AND CHORDS ARE NUMBERED CLOCKWISE AROUND THE TRUSS STARTING AT THE LOWEST JOINT FARTHEST TO THE LEFT.

WEBS ARE NUMBERED FROM LEFT TO RIGHT

CONNECTOR PLATE CODE APPROVALS

BOCA	96-31, 96-67
ICBO	3907, 4922
SBCCI	9667, 9432A
WISC/DILLHR	960022-W, 970036-N
NER	561



MiTek Engineering Reference Sheet: MII-7473

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
2. Cut members to bear tightly against each other.
3. Place plates on each face of truss at each joint and embed fully. Avoid knots and wane at joint locations.
4. Unless otherwise noted, locate chord splices at 1/4 panel length ($\pm 6"$ from adjacent joint.)
5. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
6. Unless expressly noted, this design is not applicable for use with fire retardant or preservative treated lumber.
7. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
8. Plate type, size and location dimensions shown indicate minimum plating requirements.
9. Lumber shall be of the species and size, and in all respects, equal to or better than the grade specified.
10. Top chords must be sheathed or purlins provided at spacing shown on design.
11. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
12. Anchorage and / or load transferring connections to trusses are the responsibility of others unless shown.
13. Do not overload roof or floor trusses with stacks of construction materials.
14. Do not cut or alter truss member or plate without prior approval of a professional engineer.
15. Care should be exercised in handling, erection and installation of trusses.

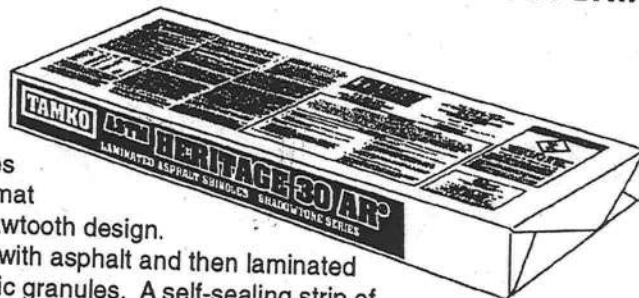
© 1993 MiTek® Holdings, Inc.

ASTM HERITAGE 30 AR®

LAMINATED ASPHALT SHINGLES

PRODUCT DATA

Manufactured in Tuscaloosa, AL.



ASTM HERITAGE 30 AR® shingles feature a double-layer fiberglass mat construction with a random-cut sawtooth design. The two layers of mat are coated with asphalt and then laminated together and surfaced with ceramic granules. A self-sealing strip of asphalt helps provide added wind resistance.

USES

For application to roof decks with inclines of not less than 2 inches per foot. For slopes between 2 inches and 4 inches per foot, refer to wrapper instructions.

ADVANTAGES

- 30-year limited warranty, 5-year FULL START, limited transferability, winds up to 70 MPH.
- Affordable upgrade from 3-tab shingles.
- Superior fire resistance compared to organic shingles.
- Rustic beauty of wood shakes.
- Shadowtone feature adds depth and dimensional appearance.
- 10-year Algae-Relief (AR) limited warranty that provides for cleaning of discoloration caused by certain algae growth that may occur in areas with high humidity.

CERTIFICATIONS

UL Class A Fire Rating

UL Wind Resistant

ASTM D 3018, Type I

Miami Dade County Florida NOA 02-0501-03

Expiration Date: 04/11/07

ASTM D 3161, Type I (modified to 110 mph)

ASTM D 3462

ASTM E 108, Class A

TAS 100-95 Wind and Wind Driven Rain

Fed. Spec.: Exceeds SS-S-001534,
Class A, Type I

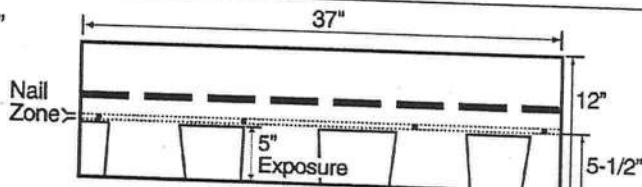
COLORS

Classic Heritage Colors:

- Weathered Wood
- Rustic Cedar
- Rustic Hickory
- Driftwood
- Oxford Grey
- Shadow Grey
- Desert Sand
- Rustic Black
- Olde English Pewter
- Glacier White
- Rustic Evergreen

PRODUCT DATA*

Shingle size	12" X 37"
Exposure	5"
Shingles per square	78
Bundles per square	3



*All values stated as nominal

CAUTION: The National Institute for Occupational Safety and Health (NIOSH) has concluded that fumes of heated asphalt are a potential occupational carcinogen. Do not heat or burn this product.



TAMKO
ROOFING PRODUCTS

TAMKO® and HERITAGE® are registered trademarks of TAMKO Roofing Products, Inc.

Visit our Web Site at www.tamko.com

03/2003

Central District	220 West 4th St., Joplin, MO	64801	800-641-4691
Northeast District	4500 Tamko Dr., Frederick, MD	21701	800-368-2055
Southeast District	2300 35th St., Tuscaloosa, AL	35401	800-228-2656
Southwest District	7910 S. Central Exp., Dallas, TX	75216	800-443-1834
Western District	5300 East 43rd Ave., Denver, CO	80216	800-530-8868

TAMKO®

ROOFING PRODUCTS

WARRANTY INFORMATION (To be completed by Owner and Contractor)

Owner's Name _____

Address Where Applied _____

City _____

State _____ Zip _____

Type of TAMKO shingle applied:

DTAMKO Glass-Seal	240 Months (20 Year) Limited Warranty
DTAMKO Elite Glass-Seal	300 Months (25 Year) Limited Warranty
DTAMKO Elite Glass-Seal AR	300 Months (25 Year) Limited Warranty
DTAMKO Heritage 30	360 Months (30 Year) Limited Warranty
DTAMKO Heritage 30 AR	360 Months (30 Year) Limited Warranty
DTAMKO Heritage MXL	360 Months (30 Year) Limited Warranty
DTAMKO Heritage XL (AR)	360 Months (30 Year) Limited Warranty
DTAMKO Heritage 50	480 Months (40 Year) Limited Warranty
DTAMKO Heritage 50 AR	480 Months (40 Year) Limited Warranty
DTAMKO Heritage M50	600 Months (50 Year) Limited Warranty
DTAMKO Heritage Declaration (AR)	600 Months (50 Year) Limited Warranty

NO REPRESENTATIVE, EMPLOYEE OR OTHER AGENT OF TAMKO, OR ANY PERSON OTHER THAN TAMKO'S PRESIDENT, HAS AUTHORITY TO ASSUME FOR TAMKO ANY ADDITIONAL LIABILITY OR RESPONSIBILITY IN CONNECTION WITH THE SHINGLES EXCEPT AS DESCRIBED ABOVE.

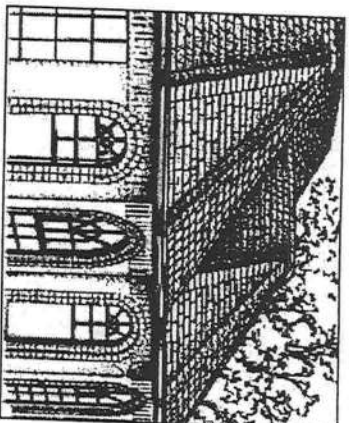
THIS FORM IS NOT TO BE COPIED OR REPRODUCED IN ANY MANNER. THIS LIMITED WARRANTY IS VALID ONLY IN THE UNITED STATES, EXCLUDING HAWAII AND ALASKA. THIS LIMITED WARRANTY APPLIES TO TAMKO FIBERGLASS SHINGLES SOLD ON OR AFTER JANUARY 1, 2003 AND SUPERSEDES ALL PREVIOUSLY PUBLISHED WARRANTIES.

PAGE 5



RETAIN THIS WARRANTY WITH CONTRACTORS
RECEIPT FOR FUTURE REFERENCE

221071



**PROVEN TO LAST
A LONG, LONG TIME.**
Since 1944, TAMKO has been protecting homes with premium roofing products that last a long, long time.

ROOFING PRODUCTS FOR THE PROFESSIONAL.

TAMKO Roofing Products, Inc. has grown to become the largest independent manufacturer of residential and commercial roofing materials for the roofing professional. TAMKO offers a complete line of fiberglass, organic, and modified asphalt roofing products.

Our emphasis on quality products, and customer satisfaction has made TAMKO the leader in the roofing industry that it is today.



P.O. Box 1404
Joplin, MO 64802 USA
www.tamko.com



997449



Heritage® Declaration™
Heritage® 50
Heritage® 50 AR
Heritage® M50
Heritage® XL
Heritage® MXL
Heritage 30®
Heritage 30 AR®
Heritage M30®

Elite Glass-Seal®
Elite Glass-Seal® AR
Glass-Seal
Glass-Seal AR

FIBERGLASS SHINGLES
LIMITED WARRANTY



The Owner may transfer this limited warranty one time during the first two years of Term to a Purchaser. No other transfers are permitted.

FIBERGLASS/ASPHALT SHINGLE LIMITED WARRANTY

In this limited warranty certain capitalized words have specific meanings:

- "TAMKO" means TAMKO Roofing Products, Inc.
- "Term" means the period of time this limited warranty lasts. The Term begins on the date of Purchase and continues, unless sooner terminated, for the number of months set forth in Table 1.
- "Owner" means the owner of the building at the time the Shingles are installed on that building. If you purchase a new residence and are the first person to occupy the residence, TAMKO will consider you to be the Owner even though the Shingles were already installed.
- "Shingles" means the TAMKO shingles identified in this limited warranty which were installed on a building owned by the Owner.
- "Purchase" means the retail purchase of the Shingles.
- "Full Start Period" means the initial period of the Term during which TAMKO's obligation is not prorated. The length of the Full Start Period is listed in Table 1.
- "Maximum Liability" means the obligation of TAMKO described in the paragraphs titled "TAMKO Full Start Period" and "After the Full Start Period," whichever is applicable.
- "Labor Payment Certificate" means a certificate issued by TAMKO that may be redeemed to pay some or all of the cost of labor for roof repairs.
- "Material Certificate" means a certificate issued by TAMKO and redeemable at participating distributors for a stated quantity of replacement shingles of the same type and color as the Shingles which are to be replaced. If shingles of the same type or color are no longer available, the certificate will be for the closest TAMKO substitute available.
- "AR" means Shingles which are covered by a warranty that provides for cleaning or discoloration caused by certain algae growth. "AR" appears as part of the name or description on the wrapper of AR designated shingles, such as "Glass Seal AR" or "Heritage 30 AR." Only AR designated shingles are covered by an Algae Cleaning Limited Warranty.
- "Square" means 100 square feet for most shingles. For Heritage M50 and Heritage MXL, "Square" means 98.4 square feet.
- "High Wind Application" means application of shingles with six nails in accordance with Mansard application instructions appearing on the single wrapper, with TAMKO Hip and Ridge shingles installed on all hips and ridges.

TABLE 1

SHINGLE	TERM	FULL START PERIOD	IF APPLICATION WIND SPEED MPH	MAXIMUM WARRANTY PER SQUARE	DOLLAR LIMIT PER SQUARE
Glass Seal	240 months	3 years	60	—	\$25.00
Glass Seal AR	240 months	3 years	60	—	\$25.00
Elite Glass Seal	300 months	3 years	60	—	\$30.00
Elite Glass Seal AR	300 months	3 years	60	—	\$30.00
Heritage 30	360 months	5 years	70	—	\$40.00
Heritage 30 AR	360 months	5 years	70	—	\$40.00
Heritage M30	360 months	5 years	70	—	\$40.00
Heritage XL (AR)	480 months	7 years	80	90	\$45.00
Heritage MXL (AR)	480 months	7 years	80	90	\$45.00
Heritage 50	600 months	7 years	90	110	\$55.00
Heritage 50 AR	600 months	7 years	90	110	\$55.00
Heritage M50	600 months	7 years	90	110	\$55.00
Heritage Dedication (AR)	600 months	7 years	110	110	\$85.00

TAMKO Full Start Period: If, during the Full Start Period, Shingles are determined to have manufacturing defects which have directly caused leaks, TAMKO will provide the Owner with a Material Certificate for replacement shingles (or, at TAMKO's option, the Dollar Limit Per Square identified in Table 1) and a Labor Payment Certificate that may be used to pay the reasonable cost of installing replacement shingles, according to the terms of this limited warranty. This is TAMKO's Maximum Liability during the Full Start Period.

After the Full Start Period: If, after the end of the Full Start Period, Shingles are determined to have manufacturing defects which have directly caused leaks, TAMKO's obligation is limited to providing the Owner with a Material Certificate for replacement shingles or, at TAMKO's option, the Dollar Limit Per Square identified in Table 1. The Dollar Limit Per Square and the quantity of replacement shingles will be prorated over the life of this limited warranty. This is TAMKO's Maximum Liability after the Full Start Period. TAMKO is not responsible for the cost of labor for installing replacement shingles after the Full Start Period. Proration shall be determined by dividing the number of months remaining in the Term by the total number of months of the Term. For example, if TAMKO is notified of a warranty claim at a time when 100 months remain in a 300 month warranty Term, TAMKO's Maximum Liability is to provide a Certificate for one third of the replacement shingles or, at TAMKO's option, payment of one third of the Dollar Limit Per Square identified in Table 1. The remaining cost shall be the responsibility of the Owner.

Both during and after the Full Start Period, the extent of replacement is at the sole discretion of TAMKO. TAMKO is not responsible for the cost of flashings or metal work or for the cost of removing or disposing of Shingles which are to be replaced. Replacement shingles will be warranted only for the remainder of the original Term. Tender of payment of the prorated Dollar Limit Per Square shall extinguish all liability of TAMKO under this limited warranty and all applicable implied warranties.

Notification to TAMKO: The Owner must notify TAMKO by certified mail at P.O. Box 1404, Joplin, Missouri 64802 of any claims under this limited warranty within thirty (30) days following discovery of the problem with the Shingles. The notice must include documentary proof of Purchase.



Right of Inspection and Time for Payment: TAMKO shall have a reasonable time after notification to inspect the Shingles. The Owner shall provide TAMKO with reasonable access to the Shingles for purposes of inspection. If requested by TAMKO, the Owner must complete and deliver to TAMKO, at the Owner's expense, a warranty questionnaire, photographs of the roof and samples of the Shingles. If reasonable access is denied or made subject to unreasonable conditions by the Owner, or if the Owner fails or refuses to cooperate in TAMKO's investigation of the complaint (such as by failing to provide sample Shingles or photographs or a completed warranty questionnaire), TAMKO's obligation under this limited warranty shall immediately terminate. If TAMKO determines there are manufacturing defects covered by this limited warranty, TAMKO will have up to ninety (90) days after receipt of notification to process the Owner's claim.

120 Month Algae Cleaning Limited Warranty: If, during the initial 120 months of the Term, Shingles designated AR become stained by certain algae growth, including blue-green algae, TAMKO will issue to the Owner a Labor Payment certificate that may be used to pay the reasonable cost of cleaning the shingles (up to a maximum of \$15 per square). TAMKO shall have no liability or responsibility for cleaning shingles with algae growth; (a) after the initial 120 months of the Term for Shingles which are designated AR, or (b) at any time for Shingles that are not designated AR.

60 Month Limited Wind Warranty: The Shingles are also covered by a 60 month limited warranty against damage from wind up to the designated wind velocity per product identified in Table 1. This Limited Wind Warranty applies only if: (a) the Shingles were installed according to the instructions printed on the wrapper and (b) the Shingles have had the opportunity to seal down. Shingles that are installed in cool seasons may not seal until weather conditions are adequate to allow the seal down strip to activate. If conditions (a) and (b) have been met and during the first 60 months of the Term the Shingles are damaged or blown off by wind up to the designated wind velocity for the product as a result of a manufacturing defect, TAMKO will process the Owner's claim in accordance with the sections titled "TAMKO Full Start Period" or "After the Full Start Period," whichever is applicable. Alternatively, TAMKO may, solely at its option, provide the Owner with a Labor Payment Certificate that may be used to pay the reasonable cost of manually sealing unsealed Shingles and replacing Shingles which have blown off and a Material Certificate for the number of shingles that have blown off. Shingles will be conclusively deemed to have been exposed to winds in excess of the designated wind velocity for the product if the National Weather Service or other reputable weather agency records within the excess of the designated wind velocity for the product in the county or parish where the Shingles are installed or in any adjoining county or parish. TAMKO shall have no liability under this Limited Wind Warranty if the Shingles have been exposed at any time to winds in excess of the designated wind velocity for the product.

Exclusions from Coverage: TAMKO shall not be liable under any circumstances for:

1. Faulty or improper application of the Shingles, inadequate ventilation of the Shingles or Shingles not installed or applied in accordance with TAMKO written instructions to the installer on the packaging or leaks or damages resulting from any one or more of such causes;
2. Damage to any building, either exterior or interior, or any property contained therein or for injuries or damages of any kind whatsoever;
3. Tear-off, removal, or disposal of any Shingles, or for any costs related to such tear-off, removal, or disposal;
4. Removal or abatement of any asbestos present in the roof to which the Shingles are applied, or for any costs related to such removal or abatement;
5. Shading or discoloration from any cause whatsoever, including, but not limited to algae, moss or staining from overhanging trees, except as provided in the Algae Cleaning Limited Warranty set forth above;
6. Damage caused by Algae or fungus growth;
7. Leaks or damages resulting from Acts of God (including, but without limitation, lightning, wind (except as set forth in the Limited Wind Warranty), hurricane, tornado, hail, or other violent storm or casualty), impact of objects or damage to a roof due to settlement, distortion, failure or cracking of the roof deck, walls or foundation of a building, or for any defect in or failure of material used as a roof base over which the Shingles are applied, or for damage by traffic on the roof;
8. Chemical attack on the Shingles as a result of exposure to chemicals including, but not limited to, aliphatic or aromatic solvents, chlorinated hydrocarbons, turpentine, oils or organic or inorganic polar materials;
9. Leaks or damage to the Shingles from any cause other than inherent manufacturing defect in the Shingle.

Transferability: The Owner may transfer this limited warranty one (1) time during the first two (2) years of the Term to a purchaser of the building upon which the Shingles are installed (a "Purchaser"). The transfer must occur simultaneously with the sale of the building. To transfer this limited warranty, the Owner must provide TAMKO with written notice within thirty (30) days after the transfer. The written notice must include the names of the Owner and the Purchaser, the address of the building upon which the Shingles are installed, the date the Shingles were installed, and the date of the transfer. The Owner may transfer this limited warranty only one (1) time. Except for one transfer to a Purchaser during the first two (2) years of the Term, this limited warranty may not be sold, assigned or transferred in any manner whatsoever. Neither a Purchaser nor any other person may transfer this limited warranty. Except as set forth in this paragraph, any assignment, sale or transfer of this limited warranty or the building to which the TAMKO Shingles are applied shall immediately terminate all liability of TAMKO for the Shingles, all warranties contained herein or hereunder and any applicable implied warranties including warranties of merchantability and fitness for a particular purpose.

THESE ARE THE MANUFACTURER'S APPLICATION INSTRUCTIONS FOR THE ROOFING CONDITIONS DESCRIBED. TAMKO ROOFING PRODUCTS, INC. ASSUMES NO RESPONSIBILITY FOR LEAKS OR OTHER ROOFING DEFECTS RESULTING FROM FAILURE TO FOLLOW THE MANUFACTURER'S INSTRUCTIONS.

THIS PRODUCT IS COVERED BY A LIMITED WARRANTY, THE TERMS OF WHICH ARE PRINTED ON THE WRAPPER.

IN COLD WEATHER (BELOW 40°F), CARE MUST BE TAKEN TO AVOID DAMAGE TO THE EDGES AND CORNERS OF THE SHINGLES.

IMPORTANT: It is not necessary to remove the plastic strip from the back of the shingles.

1. ROOF DECK

These shingles are for application to roof decks capable of receiving and retaining fasteners, and to inclines of not less than 2 in. per foot. For roofs having pitches 2 in. per foot to less than 4 in. per foot, refer to special instructions titled "Low Slope Application". Shingles must be applied properly. TAMKO assumes no responsibility for leaks or defects resulting from improper application, or failure to properly prepare the surface to be roofed over.

NEW ROOF DECK CONSTRUCTION: Roof deck must be smooth, dry and free from warped surfaces. It is recommended that metal drip edges be installed at eaves and rakes.

PLYWOOD: All plywood shall be exterior grade as defined by the American Plywood Association. Plywood shall be a minimum of 3/8 in. thickness and applied in accordance with the recommendations of the American Plywood Association.

SHEATHING BOARDS: Boards shall be well-seasoned tongue-and-groove boards and not over 6 in. nominal width. Boards shall be a 1 in. nominal minimum thickness. Boards shall be properly spaced and nailed.

2. VENTILATION

Inadequate ventilation of attic spaces can cause accumulation of moisture in winter months and a build up of heat in the summer.

These conditions can lead to:

1. Vapor Condensation
2. Buckling of shingles due to deck movement.
3. Rotting of wood members.
4. Premature failure of roof.

To insure adequate ventilation and circulation of air, place louvers of sufficient size high in the gable ends and/or install continuous ridge and soffit vents. FHA minimum property standards require one square foot of net free ventilation area to each 150 square feet of space to be vented, or one square foot per 300 square feet if a vapor barrier is installed on the warm side of the ceiling or if at least one half of the ventilation is provided near the ridge. If the ventilation openings are screened, the total area should be doubled.

IT IS PARTICULARLY IMPORTANT TO PROVIDE ADEQUATE VENTILATION.

3. FASTENERS

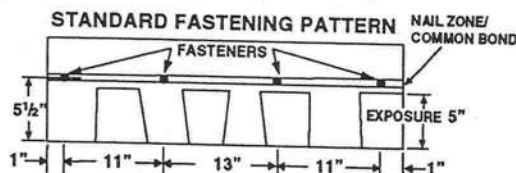
WIND CAUTION: Extreme wind velocities can damage these shingles after application when proper sealing of the shingles does not occur.

This can especially be a problem if the shingles are applied in cooler months or in areas on the roof that do not receive direct sunlight. These conditions may impede the sealing of the adhesive strips on the shingles. The inability to seal down may be compounded by prolonged cold weather conditions and/or blowing dust. In these situations, hand sealing of the shingles is recommended. Shingles must also be fastened according to the fastening instructions described below.

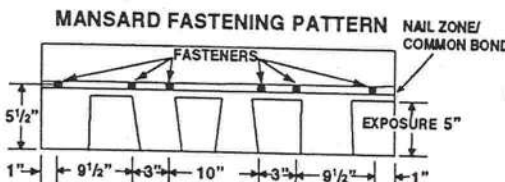
Correct placement of the fasteners is critical to the performance of the shingle. If the fasteners are not placed as shown in the diagram and described below, TAMKO will not be responsible for any shingles blown off or displaced. TAMKO will not be responsible for damage to shingles caused by winds in excess of the applicable mph as stated in the limited warranty.

FASTENING PATTERNS: Fasteners must be placed 5-1/2 in. from the bottom edge of the shingle, penetrating through the common bond, and located horizontally as follows:

1) Standard Fastening Pattern. (For use on decks with slopes 2 in. per foot to 21 in. per foot.) One fastener 1 in. back from each end and one 12 in. back from each end of the shingle for a total of 4 fasteners. (See standard fastening pattern illustrated below.)



2) Mansard Fastening Pattern. (For use on decks with slopes greater than 21 in. per foot.) One fastener 1 in. back from each end and one fastener 10-1/2 in. back from each end and one fastener 13-1/2 in. back from each end for a total of 6 fasteners per shingle. (See Mansard fastening pattern illustrated below.)



(Continued)

Visit Our Web Site at
www.tamko.com

Central District
Northeast District
Southeast District
Southwest District
Western District

220 West 4th St., Joplin, MO 64801
4500 Tamko Dr., Frederick, MD 21701
2300 35th St., Tuscaloosa, AL 35401
7910 S. Central Exp., Dallas, TX 75216
5300 East 43rd Ave., Denver, CO 80216

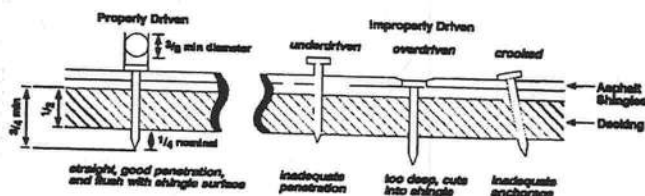
800-641-4691
800-368-2055
800-228-2656
800-443-1834
800-530-8868

01/02

• HERITAGE 30® • HERITAGE 30 AR®

LAMINATED ASPHALT SHINGLES

NAILS: TAMKO recommends the use of nails as the preferred method of application. Standard type roofing nails should be used. Nail shanks should be made of minimum 12 gauge wire, and a minimum head diameter of 3/8 in. Nails should be long enough to penetrate 3/4 in. into the roof deck. Where the deck is less than 3/4 in. thick, the nails should be long enough to penetrate completely through plywood decking and extend at least 1/8 in. through the roof deck. Drive nail head flush with the shingle surface.



STAPLES: If staples are used in the attaching process, follow the above instructions for placement. All staples must be driven with pneumatic staplers. The staple must meet the following minimum dimensional requirements. Staples must be made from a minimum 16 gauge galvanized wire. Crown width must be at least 15/16 in. (staple crown width is measured outside the legs). Leg length should be a minimum of 1-1/4 in. for new construction and 1-1/2 in. for reroofing thus allowing a minimum deck penetration of 3/4 in. The crown of the staple must be parallel to the length of the shingle. The staple crown should be driven flush with the shingle surface. Staples that are crooked, underdriven or overdriven are considered improperly applied.



CAUTION: ALL FASTENERS MUST BE DRIVEN INTO THE NAIL ZONE/Common Bond AS SHOWN IN THE DIAGRAM ABOVE.

4. UNDERLAYMENT

UNDERLAYMENT: An underlayment consisting of asphalt saturated felt must be applied over the entire deck before the installation of TAMKO shingles. Failure to add underlayment can cause premature failure of the shingles which is not covered by TAMKO's limited warranty. Apply the felt when the deck is dry. On roof decks 4 in. per foot and greater apply the felt parallel to the eaves lapping each course of the felt over the lower course at least 2 in. Where ends join, lap the felt 4 in. If left exposed, the underlayment felt may be adversely affected by moisture and weathering. Laying of the underlayment and the shingle application must be done together.

Products which are acceptable for use as underlayment are:

- TAMKO No. 15 Asphalt Saturated Organic Felt
- A non-perforated asphalt saturated organic felt which meets ASTM: D226, Type I

- Any TAMKO non-perforated asphalt saturated organic felt

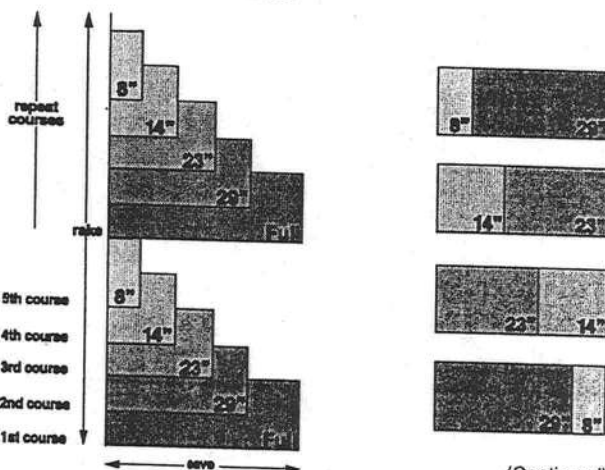
In areas where ice builds up along the eaves or a back-up of water from frozen or clogged gutters is a potential problem, TAMKO's Moisture Guard Plus® waterproofing underlayment (or any specialty eaves flashing product) may be applied to eaves, rakes, ridges, valleys, around chimneys, skylights or dormers to help prevent water damage. Contact TAMKO's Technical Services Department for more information.

TAMKO does not recommend the use of any substitute products as shingle underlayment.

5. APPLICATION INSTRUCTIONS

STARTER COURSE: A starter course may consist of TAMKO Shingle Starter, self-sealing type shingles or a 9 inch wide strip of mineral surface roll roofing. If self-sealing shingles are used, remove the exposed tab portion and install with the factory applied adhesive adjacent to the eave. Attach the starter course with approved fasteners along a line parallel to and 3 in. to 4 in. above the eave edge. The starter course should overhang both the eave and rake edges 1/4 in. to 3/8 in. If a roll roofing is used, seal down the shingles in the first course by applying adhesive cement in four spots equally spaced to the surface of the starter strip and press the shingle down on the spots of cement. Plastic cement should be used sparingly, as excessive amounts may cause blistering.

SHINGLE APPLICATION: Start the first course with a full size shingle and overhang the rake edge 1/4 in. Cut 8 in. from a full shingle to form a shingle 29 in. long. Use this to start the second course (see diagram below). Cut a 23 in. long shingle to start the third course. Use the remaining 14 in. piece of shingle to start the fourth course and use the remaining 8 in. piece to begin the fifth course. Continue up the rake in as many rows as necessary using the same formula as outlined above. The butt of the shingle should be aligned with the top edge of the sawtooth of the underlying shingle for a 5 in. exposure (see shingle application drawing illustrated on this panel). When you make your final cut at the roof's edge, flip any pieces that are 8 in. or longer back onto the roof. These pieces can be worked in anywhere without creating zippers or color variations.



(Continued)

Visit Our Web Site at
www.tamko.com

Central District
Northeast District
Southeast District
Southwest District
Western District

220 West 4th St., Joplin, MO 64801
4500 Tamko Dr., Frederick, MD 21701
2300 35th St., Tuscaloosa, AL 35401
7910 S. Central Exp., Dallas, TX 75216
5300 East 43rd Ave., Denver, CO 80216

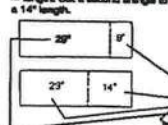
800-641-4691
800-368-2055
800-228-2656
800-443-1834
800-530-8868

01/02

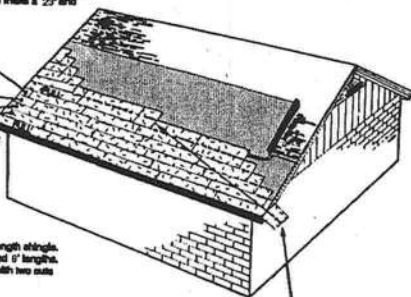
• HERITAGE 30® • HERITAGE 30 AR®

LAMINATED ASPHALT SHINGLES

1. Cut your first course shingle to make 25" and a 14" length. Cut a second shingle to make a 25" and a 14" length.



2. Begin application with a full length shingle. Then lay your 25", 25", 14" and 14" lengths. As you can see, three shingles with two cuts make five courses.



3. Continue working your way across the roof. When you make your last cut at the roof's edge, lay any pieces that are 8" or longer back onto the roof. These pieces can be worked in anywhere without creating slopes or color variations. NOTE: Do not align joints of shingle courses when working in cut pieces. Joints should be no closer than 4" from one another.

NOTE: Do not align joints of shingle courses when working in cut pieces. Joints should be no closer than 4 in. from one another.

6. LOW SLOPE APPLICATION

On pitches 2 in. per foot to 4 in. per foot cover the deck with two layers of asphalt saturated felt. Begin by applying the felt in a 19 in. wide strip along the eaves and overhanging the drip edge by 1/4 to 3/4 in. Place a full 36 in. wide sheet over the 19 in. wide starter piece, completely overlapping it. All succeeding courses will be positioned to overlap the preceding course by 19 in. If winter temperatures average 25°F or less, thoroughly cement the felts to each other with plastic cement from eaves and rakes to a point of a least 24 in. inside the interior wall line of the building. As an alternative, TAMKO's Moisture Guard Plus® self-adhering waterproofing underlayment may be used in lieu of the cemented felts.

7. MANSARD ROOF OR STEEP SLOPE ROOF

If the slope exceeds 21 in. per foot (60°), each shingle must be sealed with quick setting asphalt adhesive cement immediately upon installation. Spots of cement must be equivalent in size to a \$.25 piece and applied to shingles with a 5 in. exposure, use 6 fasteners per shingle. See Section 3 for the Mansard Fastening Pattern.

8. RE-ROOFING

Before re-roofing, be certain to inspect the roof decks. All plywood shall meet the requirements listed in Section 1.

Nail down or remove curled or broken shingles from the existing roof. Replace all missing shingles with new ones to provide a smooth base. Shingles that are buckled usually indicate warped decking or protruding nails. Hammer down all protruding nails or remove them and refasten in a new location. Remove all drip edge metal and replace with new.

If re-roofing over an existing roof where new flashing is required to protect against ice dams (freeze/thaw cycle of water and/or the backup of water in frozen or clogged gutters), remove the old roofing to a point at least 24 in. beyond the interior wall line and apply TAMKO's Moisture Guard Plus® waterproofing underlayment. Contact TAMKO's Technical Services Department for more information.

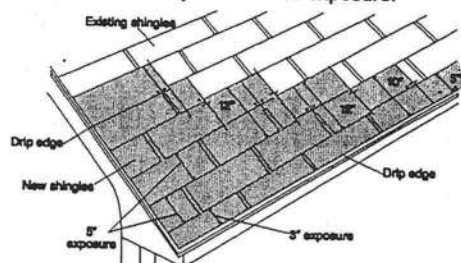
The nesting procedure described below is the preferred method for re-

roofing over square tab strip shingles with a 5 in. exposure.

Starter Course: Begin by cutting shingles into 5 x 36 inch strips. This is done by removing the 5 in. tabs from the bottom and approximately 2 in. from the top of the shingles so that the remaining portion is the same width as the exposure of the old shingles. Apply the starter piece so that the self-sealing adhesive lies along the eaves and is even with the existing roof. The starter strip should be wide enough to overhang the eaves and carry water into the gutter. Remove 3 in. from the length of the first starter shingle to ensure that the joints from the old roof do not align with the new.

First Course: Cut off approximately 2 in. from the bottom edge of the shingles so that the shingles fit beneath the existing third course and align with the edge of the starter strip. Start the first course with a full 36 in. long shingle and fasten according to the instructions printed in Section 3.

Second and Succeeding Courses: According to the off-set application method you choose to use, remove the appropriate length from the rake end of the first shingle in each succeeding course. Place the top edge of the new shingle against the butt edge of the old shingles in the courses above. The full width shingle used on the second course will reduce the exposure of the first course to 3 in. The remaining courses will automatically have a 5 in. exposure.



9. VALLEY APPLICATION

Over the shingle underlayment, center a 36 in. wide sheet of TAMKO Nail-Fast® or a minimum 50 lb. roll roofing in the valley. Nail the felt only where necessary to hold it in place and then only nail the outside edges.

IMPORTANT: PRIOR TO INSTALLATION WARM SHINGLES TO PREVENT DAMAGE WHICH CAN OCCUR WHILE BENDING SHINGLES TO FORM VALLEY.

After valley flashing is in place:

- Apply the first course of shingles along the eaves of one of the intersecting roof planes and across the valley.

Note: For proper flow of water over the trimmed shingle, always start applying the shingles on the roof plane that has the lower slope or less height.

- Extend the end shingle at least 12 in. onto the adjoining roof. Apply succeeding courses in the same manner, extending them across the valley and onto the adjoining roof.
- Press the shingles tightly into the valley.

(Continued)

Visit Our Web Site at
www.tamko.com

Central District
Northeast District
Southeast District
Southwest District
Western District

220 West 4th St., Joplin, MO 64801
4500 Tamko Dr., Frederick, MD 21701
2300 35th St., Tuscaloosa, AL 35401
7910 S. Central Exp., Dallas, TX 75216
5300 East 43rd Ave., Denver, CO 80216

800-641-4691
800-368-2055
800-228-2656
800-443-1834
800-530-8868

01/02

• **HERITAGE 30®** • **HERITAGE 30 AR®**
LAMINATED ASPHALT SHINGLES

- Use normal shingle fastening methods.

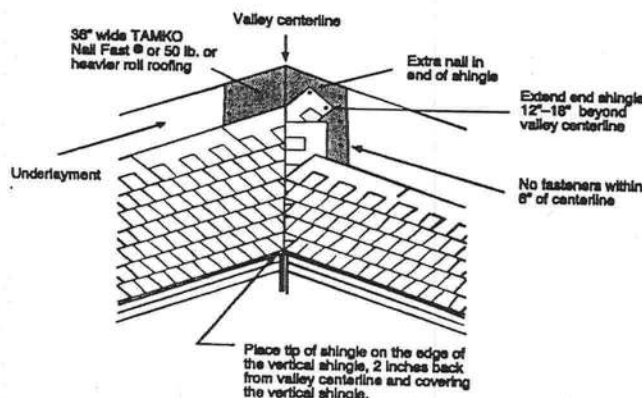
Note: No fastener should be within 6 in. of the valley centerline, and two fasteners should be placed at the end of each shingle crossing the valley.

- To the adjoining roof plane, apply one row of shingles vertically facing the valley and 2 in. back from the valley centerline.

Note: For a neater installation, snap a chalkline over the shingles for guidance.

- To complete the valley, apply shingles on the adjoining roof plane by positioning the tip of the first shingle of each row at the 2 in point from the centerline where the edge of the vertical shingle has been applied, covering the vertical shingle.

FOR ALTERNATE VALLEY APPLICATION METHODS, PLEASE CONTACT TAMKO'S TECHNICAL SERVICES DEPARTMENT



10. HIP AND RIDGE FASTENING DETAIL

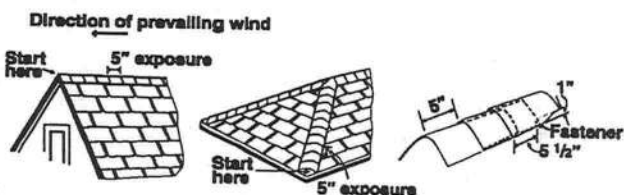
Apply the shingles with a 5 in. exposure beginning at the bottom of the hip or from the end of the ridge opposite the direction of the prevailing winds. Secure each shingle with one fastener on each side, 5-1/2 in. back from the exposed end and 1 in. up from the edge.

TAMKO recommends the use of TAMKO Hip & Ridge shingle products. Where matching colors are available, it is acceptable to use TAMKO's Glass-Seal or Elite Glass-Seal shingles cut down to 12 in. pieces.

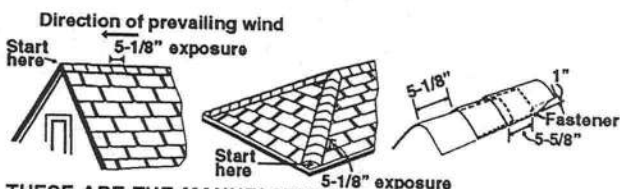
NOTE: AR type shingle products should be used as Hip & Ridge on Glass-Seal or Elite Glass-Seal AR shingles.

Fasteners should be 1/4 in. longer than the one used for shingles.

IMPORTANT: PRIOR TO INSTALLATION, CARE NEEDS TO BE TAKEN TO PREVENT DAMAGE WHICH CAN OCCUR WHILE BENDING SHINGLES IN COOL WEATHER.



NOTE: Exposure should be 1/8 in. more when using shingles produced in Frederick, Md. See illustration below.



THESE ARE THE MANUFACTURER'S APPLICATION INSTRUCTIONS FOR THE ROOFING CONDITIONS DESCRIBED. TAMKO ROOFING PRODUCTS, INC. ASSUMES NO RESPONSIBILITY FOR LEAKS OR OTHER ROOFING DEFECTS RESULTING FROM FAILURE TO FOLLOW THE MANUFACTURER'S INSTRUCTIONS.

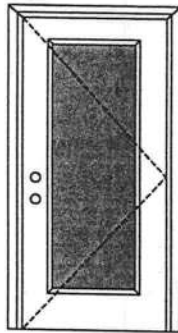
X

Glazed Inswing Unit

COP-WL-EN4141-02

WOOD-EDGE STEEL DOORS

APPROVED ARRANGEMENT:

**Note:**

Units of other sizes are covered by this report as long as the panel used does not exceed 3'0" x 6'8".

Single Door

Maximum unit size = 3'0" x 6'8"

Design Pressure**+50.5/-50.5**

Limited water unless special threshold design is used.

Large Missile Impact Resistance**Hurricane protective system (shutters) is REQUIRED.**

Actual design pressure and impact resistant requirements for a specific building design and geographic location is determined by ASCE 7-national, state or local building codes specify the edition required.

MINIMUM ASSEMBLY DETAIL:

Compliance requires that minimum assembly details have been followed – see MAD-WL-MA0001-02 and MAD-WL-MA0041-02.

MINIMUM INSTALLATION DETAIL:

Compliance requires that minimum installation details have been followed – see MID-WL-MA0001-02.

APPROVED DOOR STYLES:

1/4 GLASS:



100 Series



133, 135 Series



136 Series



680 Series



822 Series

1/2 GLASS:



105 Series*



106, 160 Series*



129 Series*



200 Series*



-12 R/L, 23 R/L, 24 R/L Series*



107 Series*



108 Series



304 Series

*This glass kit may also be used in the following door styles: 5-panel; 5-panel with scroll; Eyebrow 5-panel; Eyebrow 5-panel with scroll.

Entergy
Entry Systems

April 29, 2002

Our continuing program of product improvement makes specifications, design and product detail subject to change without notice.

PREMIER Collection
Premium Quality Doors

Exclusively from
Masonite
Masonite International Corporation

X

Glazed Inswing Unit

COP-WL-EN4141-02

WOOD-EDGE STEEL DOORS

APPROVED DOOR STYLES:

3/4 GLASS:



404 Series



410 Series



450 Series

FULL GLASS:



109 Series

114, 120, 122
Series

152 Series



149 Series



300 Series

CERTIFIED TEST REPORTS:

NCTL 210-1897-7, 8, 9

Certifying Engineer and License Number: Barry D. Portney, P.E. / 16258.

Unit Tested in Accordance with Miami-Dade BCCO PA202.

Door panels constructed from 26-gauge 0.017" thick steel skins. Both stiles constructed from wood. Top end rails constructed of 0.032" steel. Bottom end rails constructed of 0.032" steel. Interior cavity of slab filled with rigid polyurethane foam core. Slab glazed with insulated glass mounted in a rigid plastic lip lite surround.

Frame constructed of wood with an extruded aluminum threshold.

PRODUCT COMPLIANCE LABELING:

TESTED IN
ACCORDANCE WITH
MIAMI-DADE BCCO PA202

COMPANY NAME
CITY, STATE

To the best of my knowledge and ability the above side-hinged exterior door unit conforms to the requirements of the 2001 Florida Building Code, Chapter 17 (Structural Tests and Inspections).

State of Florida, Professional Engineer
Kurt Balthazor, P.E. – License Number 56533

2

Entergy
Entry Systems

April 29, 2002

Our continuing program of product improvement makes specifications, design and product detail subject to change without notice.

PREMIER Collection
Premium Quality Doors



Exclusively from

Masonite
Masonite International Corporation

TABLE 1

DOOR HEIGHT	SPRUT SPACING (BASED ON RECOMMENDED SECTION CONFIGURATION)																			TOP
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
6'6"	5'12"	18'14"	25'12"	33'14"	40'12"	48'14"	56'14"	64'14"	72'14"	80'14"	88'14"	96'14"	104'14"	112'14"	120'14"	128'14"	136'14"	144'14"	152'14"	160'14"
7'0"	5'12"	18'14"	25'12"	33'14"	40'12"	48'14"	56'14"	64'14"	72'14"	80'14"	88'14"	96'14"	104'14"	112'14"	120'14"	128'14"	136'14"	144'14"	152'14"	160'14"
7'6"	5'12"	18'14"	25'12"	33'14"	40'12"	48'14"	56'14"	64'14"	72'14"	80'14"	88'14"	96'14"	104'14"	112'14"	120'14"	128'14"	136'14"	144'14"	152'14"	160'14"
8'0"	5'12"	18'14"	25'12"	33'14"	40'12"	48'14"	56'14"	64'14"	72'14"	80'14"	88'14"	96'14"	104'14"	112'14"	120'14"	128'14"	136'14"	144'14"	152'14"	160'14"
8'6"	5'12"	18'14"	25'12"	33'14"	40'12"	48'14"	56'14"	64'14"	72'14"	80'14"	88'14"	96'14"	104'14"	112'14"	120'14"	128'14"	136'14"	144'14"	152'14"	160'14"
9'0"	5'12"	18'14"	25'12"	33'14"	40'12"	48'14"	56'14"	64'14"	72'14"	80'14"	88'14"	96'14"	104'14"	112'14"	120'14"	128'14"	136'14"	144'14"	152'14"	160'14"
9'6"	5'12"	18'14"	25'12"	33'14"	40'12"	48'14"	56'14"	64'14"	72'14"	80'14"	88'14"	96'14"	104'14"	112'14"	120'14"	128'14"	136'14"	144'14"	152'14"	160'14"
10'0"	5'12"	18'14"	25'12"	33'14"	40'12"	48'14"	56'14"	64'14"	72'14"	80'14"	88'14"	96'14"	104'14"	112'14"	120'14"	128'14"	136'14"	144'14"	152'14"	160'14"
10'6"	5'12"	18'14"	25'12"	33'14"	40'12"	48'14"	56'14"	64'14"	72'14"	80'14"	88'14"	96'14"	104'14"	112'14"	120'14"	128'14"	136'14"	144'14"	152'14"	160'14"
11'0"	5'12"	18'14"	25'12"	33'14"	40'12"	48'14"	56'14"	64'14"	72'14"	80'14"	88'14"	96'14"	104'14"	112'14"	120'14"	128'14"	136'14"	144'14"	152'14"	160'14"
11'6"	5'12"	18'14"	25'12"	33'14"	40'12"	48'14"	56'14"	64'14"	72'14"	80'14"	88'14"	96'14"	104'14"	112'14"	120'14"	128'14"	136'14"	144'14"	152'14"	160'14"
12'0"	5'12"	18'14"	25'12"	33'14"	40'12"	48'14"	56'14"	64'14"	72'14"	80'14"	88'14"	96'14"	104'14"	112'14"	120'14"	128'14"	136'14"	144'14"	152'14"	160'14"
12'6"	5'12"	18'14"	25'12"	33'14"	40'12"	48'14"	56'14"	64'14"	72'14"	80'14"	88'14"	96'14"	104'14"	112'14"	120'14"	128'14"	136'14"	144'14"	152'14"	160'14"
13'0"	5'12"	18'14"	25'12"	33'14"	40'12"	48'14"	56'14"	64'14"	72'14"	80'14"	88'14"	96'14"	104'14"	112'14"	120'14"	128'14"	136'14"	144'14"	152'14"	160'14"
13'6"	5'12"	18'14"	25'12"	33'14"	40'12"	48'14"	56'14"	64'14"	72'14"	80'14"	88'14"	96'14"	104'14"	112'14"	120'14"	128'14"	136'14"	144'14"	152'14"	160'14"
14'0"	5'12"	18'14"	25'12"	33'14"	40'12"	48'14"	56'14"	64'14"	72'14"	80'14"	88'14"	96'14"	104'14"	112'14"	120'14"	128'14"	136'14"	144'14"	152'14"	160'14"

TABLE 2

DOOR HEIGHT	SECTION HEIGHTS							
	#1	#2	#3	#4	#5	#6	#7	#8
6'6"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"
7'0"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"
7'6"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"
8'0"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"
8'6"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"
9'0"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"
9'6"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"
10'0"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"
10'6"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"
11'0"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"
11'6"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"
12'0"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"
12'6"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"
13'0"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"
13'6"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"
14'0"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"

TABLE 3

DOOR HEIGHT	TRACK ATTACHMENT							SPLICE
	A	B	C	D	E	F	G	S
6'6"	10'	38'	58'					76'
7'	10'	38'	58'					76'
7'6"	10'	38'	58'					76'
8'	10'	34'	58'	82'				88'
8'6"	10'	34'	52'	76'				94'
9'	10'	34'	58'	82'				100'
9'6"	10'	28'	52'	76'	100'			106'
10'	10'	34'	58'	82'	106'			112'
10'6"	10'	28'	52'	76'	100'			118'
11'	10'	34'	58'	82'	106'			124'
11'6"	10'	28'	52'	76'	100'	124'		130'
12'	10'	34'	58'	82'	106'	130'		136'
12'6"	10'	28'	52'	76'	100'	124'		142'
13'	10'	34'	58'	82'	106'	130'		148'
13'6"	10'	28'	52'	76'	100'	124'		154'
14'	10'	34'	58'	82'	106'	130'	154'	160'

TABLE 4

Section Width (ft)	Panel Type	Center Sillie Locations (Measured from Left Edge)				
		1st (in)	2nd (in)	3rd (in)	4th (in)	5th (in)
10'0"	Short	48.406	71.594			
10'6"	Long	30.000	60.000	90.000		
12'0"	Short	48.812	72.000	96.364		
12'6"	Long	49.625	72.000	94.375		
14'0"	Short	49.625	73.000	96.364		
14'6"	Long	50.084	73.000	95.916		
16'0"	Short	50.636	74.000	97.364		
16'6"	Long	51.084	74.000	96.916		
18'0"	Short	51.670	75.000	98.830		
18'6"	Long	52.100	76.000	99.900		
20'0"	Short	52.550	77.000	101.750		
20'6"	Long	53.100	77.000	100.900		
22'0"	Short	53.000	78.000	103.000		
22'6"	Long	54.100	78.000	101.900		
24'0"	Short	54.000	79.000	104.000		
24'6"	Long	55.100	79.000	102.900		
26'0"	Short	54.400	80.000	105.600		
26'6"	Long	54.900	80.000	105.100		
28'0"	Short	55.400	81.000	106.600		
28'6"	Long	55.900	81.000	106.100		
30'0"	Short	56.400	82.000	107.600		
30'6"	Long	56.900	82.000	107.100		
32'0"	Short	57.400	83.000	108.600		
32'6"	Long	57.900	83.000	108.100		
34'0"	Short	58.400	84.000	109.600		
34'6"	Long	58.900	84.000	109.100		
36'0"	Short	59.400	85.000	110.600		
36'6"	Long	59.900	85.000	110.100		
38'0"	Short	60.400	86.000	111.600		
38'6"	Long	60.900	86.000	111.100		
40'0"	Short	61.400	87.000	112.600		
40'6"	Long	61.900	87.000	112.100		
42'0"	Short	62.400	88.000	113.600		
42'6"	Long	62.900	88.000	113.100		
44'0"	Short	63.400	89.000	114.600		
44'6"	Long	63.900	89.000	114.100		
46'0"	Short	64.400	90.000	115.600		
46'6"	Long	64.900	90.000	115.100		
48'0"	Short	65.400	91.000	116.600		
48'6"	Long	65.900	91.000	116.100		
50'0"	Short	66.400	92.000	117.600		
50'6"	Long	66.900	92.000	117.100		
52'0"	Short	67.400	93.000	118.600		
52'6"	Long	67.900	93.000	118.100		
54'0"	Short	68.400	94.000	119.600		
54'6"	Long	68.900	94.000	119.100		
56'0"	Short	69.400	95.000	120.600		
56'6"	Long	69.900	95.000	120.100		
58'0"	Short	70.400	96.000	121.600		
58'6"	Long	70.900	96.000	121.100		
60'0"	Short	71.400	97.000	122.600		
60'6"	Long	71.900	97.000	122.100		

* Sillies do not need to be hinged

TABLE 5

Section Width (ft)	Panel Type	Max Design Loads Allowed	
		Positive (PSF)	Negative (PSF)
10'0"	Short	29.1	33.1
10'6"	Long	34.7	39.5
12'0"	Short	28.9	32.9
12'6"	Long	28.9	32.9
14'0"	Short	28.5	32.5
14'6"	Long	28.1	32.0
16'0"	Short	27.8	31.6
16'6"	Long	27.4	31.2
18'0"	Short	27.0	30.8
18'6"	Long	26.7	30.4
20'0"	Short	26.4	30.0
20'6"	Long	26.0	29.6
22'0"	Short	25.7	29.2
22'6"	Long	25.4	28.9
24'0"	Short	25.1	28.5
24'6"	Long	24.8	28.2
26'0"	Short	24.5	27.9
26'6"	Long	24.2	27.5
28'0"	Short	23.9	27.2
28'6"	Long	23.7	26.9
30'0"	Short	23.4	26.6
30'6"	Long	23.1	26.3
32'0"	Short	22.9	26.0
32'6"	Long	22.6	25.7
34'0"	Short	22.4	25.4
34'6"	Long	22.2	25.2
36'0"	Short	21.9	24.9
36'6"	Long	21.8	24.8
38'0"	Short	21.5	24.5
38'6"	Long	21.2	24.2

1. X011

PRODUCT APPROVAL SPECIFICATION SHEET

Location: _____

Project Name: _____

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and the product approval number(s) on the building components listed below if they will be utilized on the construction project for which you are applying for a building permit on or after April 1, 2004. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. More information about statewide product approval can be obtained at www.floridabuilding.org

Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
A. EXTERIOR DOORS			
1. Swinging	Masonite	6 Panel	FL 18
2. Sliding			
3. Sectional			
4. Roll up			
5. Automatic	Gmarr	Garage Door Sectional	FL 697
6. Other			
B. WINDOWS			
1. Single hung	Betterbuilt	Aluminum	FL 663
2. Horizontal Slider			
3. Casement			
4. Double Hung			
5. Fixed			
6. Awning			
7. Pass-through			
8. Projected			
9. Mullion			
10. Wind Breaker			
11. Dual Action			
12. Other			
C. PANEL WALL			
1. Siding	Kaycan	Wood	FL 1139
2. Soffits	Kaycan	Wood	FL 1146
3. EIFS			
4. Storefronts			
5. Curtain walls			
6. Wall louver			
7. Glass block			
8. Membrane			
9. Greenhouse			
10. Other			
D. ROOFING PRODUCTS			
1. Asphalt Shingles	Tomko		FL 623
2. Underlayments			
3. Roofing Fasteners			
4. Non-structural Metal Rf			
5. Built-Up Roofing			
6. Modified Bitumen			
7. Single Ply Roofing Sys			
8. Roofing Tiles			
9. Roofing Insulation			
10. Waterproofing			
11. Wood shingles /shakes			
12. Roofing Slate			



MI Home Products, Inc.
650 West Market St.
P.O. Box 370
Gratz, PA 17030-0370

(717) 365-3300
(717) 362-7025 Fax

740/744 SINGLE HUNG (FIN & FLANGE)
165 SINGLE HUNG (FIN & FLANGE)
BB165/740/744 FIXED (FIN & FLANGE)

- Test Reports
 - 165 Single Hung
 - #CTLA-787W (Fin)
 - #CTLA-787W-1 (Flange)
 - 740/744 Single Hung
 - #01-40351.03 (Fin)
 - #01-40351.04 (Flange)
 - 165/740/744 Fixed
 - #NCTL-310-0005-2.1 (Fin)
 - # NCTL-310-0005-5.1 (Flange)
 - #01-40486.03 (2-Panel Fixed)
- Installation Instructions
- Sample 110/120/140 MPH Labels

AAMA/NWWDA 101/I.S.2-97
TEST REPORT SUMMARY

Rendered to:

MI HOME PRODUCTS, INC.

SERIES/MODEL: 740/744

TYPE: Aluminum Single Hung Window with Nail Fin

Title of Test	Results
Rating	H R45 52 x 72
Overall Design Pressure	45 psf
Operating Force	24 lb max.
Air Infiltration	0.10 cfm/ft ²
Water Resistance	6.75 psf
Structural Test Pressure	+67.5 psf -70.8 psf
Deglazing	Passed
Forced Entry Resistance	Grade 10

Reference should be made to Report No. 01-40351.03 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.


Mark A. Hess, Technician

MAH:baw

Allen N. Reeves
15 FEBRUARY 2002



AAMA/NWWDA 101/I.S.2-97 TEST REPORT

Rendered to:

MI HOME PRODUCTS, INC.
P.O. Box 370
Gratz, Pennsylvania 17030-0370

Report No: 01-40351.03
Test Dates: 10/22/01
And: 10/23/01
Report Date: 02/15/02
Expiration Date: 10/23/05

Project Summary: Architectural Testing, Inc. (ATT) was contracted by MI Home Products, Inc. to witness performance testing on a Series/Model 740/744, aluminum single hung window at MI Home Products, Inc.'s test facility in Elizabethville, Pennsylvania. The sample tested successfully met the performance requirements for a H-R45 52 x 72 rating.

Test Specification: The test specimen was evaluated in accordance with AAMA/NWWDA 101/I.S.2-97, *Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors*.

Test Specimen Description:

Series/Model: 740/744

Type: Aluminum Single Hung Window With Nail Fin

Overall Size: 4' 4-1/8" wide by 5' 11-5/8" high

Active Sash Size: 4' 2-3/4" wide by 2' 11-5/8" high

Fixed Daylight Opening Size: 4' 1-1/8" wide by 2' 9" high

Screen Size: 4' 1-7/8" wide by 2' 11-5/16" high

Finish: All aluminum was polished.

Glazing Details: The active sash and fixed lite were glazed with one sheet of 1/8" thick clear tempered glass. Each sash was channel glazed using a flexible vinyl gasket.

130 Derry Court
York, PA 17402-9405
phone: 717.764.7700
fax: 717.764.4129
www.testatl.com



Allen H. Reeves
15 FEBRUARY 2002

Test Specimen Description: (Continued)

Weatherstripping:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
0.330" high by 0.187" backed polypile with center fin	1 Row	Fixed meeting rail interlock
0.170" high by 0.187" backed polypile with center fin	1 Row	Fixed lite, stiles and top rail
3/8" diameter hollow bulb gasket	1 Row	Bottom rail
0.310" high by 0.187" backed polypile with center fin	1 Row	Active sash stiles
0.150" high by 0.187" wide polypile	1 Row	Active sash stiles

Frame Construction: All frame members were constructed of extruded aluminum with coped, butted and sealed corners fastened with two screws each. Fixed meeting rail was secured utilizing one screw in each end directly through exterior face into jamb. Silicone was utilized around exterior meeting rail/jamb joinery.

Sash Construction: All sash members were constructed of extruded aluminum with coped and butted corners fastened with one screw each.

Screen Construction: The screen frame was constructed from roll-formed aluminum members with plastic keyed corners. The screening consisted of a fiberglass mesh and was secured with a flexible vinyl spline.

Hardware:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Plastic tilt latch	2	One each end of the interior Meeting rail
Metal sweep lock	2	13" from meeting rail ends
Balance assembly	2	One per jamb
Screen tension spring	2	One per end of screen stile
Tilt pin	2	One each end of bottom rail

Allen N. Reeves
15 FEBRUARY 2002



Test Specimen Description: (Continued)**Drainage:** Sloped sill**Reinforcement:** No reinforcement was utilized.**Installation:** The test specimen was installed into the #2 2 x 8 Spruce-Pine-Fir wood buck with 1" galvanized roofing nails through the nail fin every 8" on center. Polyurethane was used as a sealant under the nail fin and around the exterior perimeter.**Test Results:**

The results are tabulated as follows:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
2.2.1.6.1	Operating Force	24 lbs	30 lbs max.
2.1.2	Air Infiltration (ASTM E 283) @ 1.57 psf (25 mph)	0.10 cfm/ft ²	0.30 cfm/ft ² max.
<i>Note #1: The tested specimen meets the performance levels specified in AAMA/NWDA 101/I.S. 2-97 for air infiltration.</i>			
2.1.3	Water Resistance (ASTM E 547-96) (with and without screen) WTP = 6.75 psf	No leakage	No leakage
2.1.4.1	Uniform Load Deflection per ASTM E 330 (Measurements reported were taken on the meeting rail) (Loads were held for 52 seconds) @ 15.0 psf (positive) @ 15.0 psf (negative)	0.86"* 0.81"*	0.29" max. 0.29" max.

*Note: * Exceeds L/175 for deflection, but meets all other test requirements.*

2.1.4.2	Uniform Load Structural per ASTM E 330 (Measurements reported were taken on the meeting rail) (Loads were held for 10 seconds) @ 22.5 psf (positive) @ 22.5 psf (negative)	0.01" <0.01"	0.20" max. 0.20" max.
2.2.1.6.2	Deglazing Test per ASTM E 987 In operating direction at 70 lbs		
	Top rail	0.06"/12%	0.50"/100%
	Bottom rail	0.06"/12%	0.50"/100%
	In remaining direction at 50 lbs		
	Left stile	0.03"/6%	0.50"/100%
	Right stile	0.03"/6%	0.50"/100%


 Allen M. Renna
 15 FEBRUARY 2002

Test Results: (Continued)

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
2.1.8	Forced Entry Resistance per ASTM F 588-97		
	Type: A		
	Grade: 10		
	Lock Manipulation Test	No entry	No entry
	Test A1 thru A5	No entry	No entry
	Test A7	No entry	No entry
	Lock Manipulation Test	No entry	No entry

Optional Performance

4.4.1	Uniform Load Deflection per ASTM E 330 (Measurements reported were taken on the meeting rail) (Loads were held for 52 seconds)		
	@ 45.0 psf (positive)	0.91"	0.29" max.
	@ 45.0 psf (negative)	0.97"	0.29" max.
* Exceeds L/175 for deflection, but meets all other test requirements.			
4.4.2	Uniform Load Structural per ASTM E 330 (Measurements reported were taken on the meeting rail) (Loads held for 10 seconds)		
	@ 67.5 psf (positive)	0.14"	0.20" max.
	@ 67.5 psf (negative)	0.19"	0.20" max.
4.4.2	@ 70.8 psf (negative)	0.20"	0.20" max.

Detailed drawings, representative samples of the test specimen, and a copy of this report will be retained by ATI for a period of four years. The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specification. This report does not constitute certification of this product, which may only be granted by the certification program administrator.

For ARCHITECTURAL TESTING, INC:

Mark A. Hess
Mark A. Hess
Technician

MAH:baw
01-40351.03

Allen N. Reeves
Allen N. Reeves, P.E.
Director - Engineering Services
15 FEBRUARY 2002



DOCUMENT CONTROL ADDENDUM #01-40351.00

Current Issue Date: 02/15/02

Report No.: 01-40351.01

Requested by: William Emley, MI Home Products, Inc.
Purpose: AAMA/NWWDA 101/I.S.2-97 testing of Series/Model 744 aluminum single hung window with flange.
Issued Date: 12/28/01
Comments: Florida P.E. seal required on report.
Certification copy to John Smith at Associated Laboratories, Inc.

Report No.: 01-40351.02

Requested by: William Emley, MI Home Products, Inc.
Purpose: Change of glass type.
Issued Date: 12/28/01
Comments: Florida P.E. seal required on report.
Certification copy to John Smith at Associated Laboratories.

Report No.: 01-40351.03

Requested by: William Emley, MI Home Products, Inc.
Purpose: AAMA/NWWDA 101/I.S.2-97 testing of Series/Model 740/744 aluminum single hung window with nail fin.
Issued Date: 02/15/02
Comments: Florida P.E. seal required on report.
Certification copy to John Smith at Associated Laboratories, Inc.



Allen N. Reeves
15 FEBRUARY 2002

AAMA/NWWDA 101/I.S.2-97
TEST REPORT SUMMARY

Rendered to:

MI HOME PRODUCTS, INC.

SERIES/MODEL: 740/744
TYPE: Aluminum Single Hung Window with Flange

Title of Test	Results
Rating	H-R45 53 x 73
Overall Design Pressure	45 psf
Operating Force	23 lbs max.
Air Infiltration	0.10 cfm/ft ²
Water Resistance	6.75 psf
Structural Test Pressure	+67.5 psf -70.8 psf
Deglazing	Passed
Forced Entry Resistance	Grade 10

Reference should be made to Report No. 01-40351.04 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.

Mark A. Hess

Mark A. Hess, Technician

MAH:baw

Allen M. Reeves
15 FEBRUARY 2002



AAMA/NWWDA 101/I.S.2-97 TEST REPORT

Rendered to:

MI HOME PRODUCTS, INC.
P.O. Box 370
Gratz, Pennsylvania 17030-0370

Report No: 01-40351.04
Test Date: 10/22/01
And: 10/23/01
Report Date: 02/14/02
Expiration Date: 10/23/05

Project Summary: Architectural Testing, Inc. (ATI) was contracted by MI Home Products, Inc. to witness performance testing on a Series/Model 740/744, aluminum single hung window at MI Home Products, Inc.'s test facility in Elizabethville, Pennsylvania. The sample tested successfully met the performance requirements for an H-R45 53 x 73 rating.

Test Specification: The test specimen was evaluated in accordance with AAMA/NWWDA 101/I.S.2-97, *Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors*.

Test Specimen Description:

Series/Model: 740/744

Type: Aluminum Single Hung Window With Flange

Overall Size: 4' 4-7/8" wide by 6' 0-1/8" high

Active Sash Size: 4' 2-3/4" wide by 2' 11-3/4" high

Fixed Daylight Opening Size: 4' 1-1/8" wide by 2' 9" high

Screen Size: 4' 1-7/8" wide by 2' 11-5/16" high

Finish: All aluminum was polished.

Glazing Details: The active sash and fixed lite were glazed with one sheet of 1/8" thick clear, tempered glass. Each sash was channel glazed using a flexible vinyl gasket.

130 Derry Court
York, PA 17402-9405
phone: 717.764.7700
fax: 717.764.4129
www.testati.com

Allen N. Reeves
15 FEBRUARY 2002



Test Specimen Description: (Continued)

Weatherstripping:

Description	Quantity	Location
0.330" high by 0.187" backed polypile with center fin	1 Row	Fixed meeting rail interlock
0.170" high by 0.187" backed polypile with center fin	1 Row	Fixed lite, stiles and top rail
3/8" diameter hollow bulb gasket	1 Row	Bottom rail
0.310" high by 0.187" backed polypile with center fin	1 Row	Active sash stiles
0.150" high by 0.187" wide polypile	1 Row	Active sash stiles

Frame Construction: All frame members were constructed of extruded aluminum with coped, butted and sealed corners fastened with two screws each. Fixed meeting rail was secured utilizing one screw in each end directly through exterior face into jamb. Silicone was utilized around exterior meeting rail/jamb joinery.

Sash Construction: All sash members were constructed of extruded aluminum with coped and butted corners fastened with one screw each.

Screen Construction: The screen frame was constructed from roll formed aluminum members with plastic keyed corners. The screening consisted of a fiberglass mesh and was secured with a flexible vinyl spline.

Hardware:

Description	Quantity	Location
Plastic tilt latch	2	One each end of the interior meeting rail
Metal sweep lock	2	13" from meeting rail ends
Balance assembly	2	One per jamb
Screen tension spring	2	One per end of screen stile
Tilt pin	2	One each end of bottom

Allen M. Reeves
15 FEBRUARY 2002



Test Specimen Description:**Drainage:** Sloped sill**Reinforcement:** No reinforcement was utilized.**Installation:** The test buck was fabricated from 2 x 8 #2 Spruce-Pine-Fir. The unit was secured utilizing three 1-5/8" drywall screws through the jamb track, 5" from sill, 1-3/4" below meeting rail and 1" from head. The head utilized drywall screws 3-1/2" from jambs and midspan. Exterior perimeter was sealed with silicone.**Test Results:**

The results are tabulated as follows:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
2.2.1.6.1	Operating Force	23 lbs	30 lbs max.
2.1.2	Air Infiltration per ASTM E 283 (See Note #1) @ 1.57 psf (25 mph)	0.10 cfm/ft ²	0.30 cfm/ft ² max.
<i>Note #1: The tested specimen meets (or exceeds) the performance levels specified in AAMA/NWDA 101/I.S. 2-97 for air infiltration.</i>			
2.1.3	Water Resistance per ASTM E 547-96 (with and without screen) WTP = 2.86 psf	See Note #2	No leakage
<i>Note #2: The client opted to start at a pressure higher than the minimum required. Those results are listed under "Optional Performance".</i>			
2.1.4.2	Uniform Load Structural per ASTM E 330-97 (Measurements were taken on the meeting rail) @ 22.5 psf (positive) @ 22.5 psf (negative)	See Note #2	0.20" max. 0.20" max.
2.2.1.6.2	Deglazing Test per ASTM E 987 In operating direction at 70 lbs		
	Top rail	0.06"/12%	0.50"/100%
	Bottom rail	0.06"/12%	0.50"/100%
	In remaining direction at 50 lbs		
	Left stile	0.03"/6%	0.50"/100%
	Right stile	0.03"/6%	0.50"/100%

Allen N. Reeves
15 FEBRUARY 2002




Test Results: (Continued)

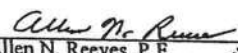
Paragraph	Title of Test - Test Method	Results	Allowed
2.1.8	Forced Entry Resistance per ASTM F 588-97		
	Type: A		
	Grade: 10		
	Lock Manipulation Test	No entry	No entry
	Test A1 thru A5	No entry	No entry
	Test A7	No entry	No entry
	Lock Manipulation Test	No entry	No entry
<u>Optional Performance</u>			
4.3	Water Resistance per ASTM E 547-96 (with and without screen) WTP = 6.75 psf	No leakage	No leakage
4.4.1	Uniform Load Deflection per ASTM E 330-97 (Measurements were taken on the meeting rail) (Loads held for 52 seconds)		
	@ 45.0 psf (positive)	0.95*	0.29" max.
	@ 45.0 psf (negative)	0.79*	0.29" max.
	* Exceeds L/175 for deflection, but meets all other test requirements		
4.4.2	Uniform Load Structural per ASTM E 330-97 (Measurements were taken on the meeting rail) (Loads held for 10 seconds)		
	@ 67.5 psf (positive)	0.14"	0.20" max.
	@ 67.5 psf (negative)	0.16"	0.20" max.
4.4.2	@ 70.8 psf (negative)	0.19"	0.20" max.

Detailed drawings, representative samples of the test specimen, and a copy of this report will be retained by ATI for a period of four years. The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specification. This report does not constitute certification of this product which may only be granted by the certification program administrator.

For ARCHITECTURAL TESTING, INC:


Mark A. Hess
Technician

MAH:baw
01-40351.04


Allen N. Reeves, P.E.
Director - Engineering Services
15 FEBRUARY 2001



Current Issue Date: 02/14/02

Report No.: 01-40351.01

Requested by: William Emley, MI Home Products, Inc.
Purpose: AAMA/NWDA 101/I.S.2-97 testing of Series/Model 744 aluminum single hung window with flange.
Issued Date: 12/28/01
Comments: Florida P.E. seal required on report.
Certification copy to John Smith at Associated Laboratories, Inc.

Report No.: 01-40351.02

Requested by: William Emley, MI Home Products, Inc.
Purpose: Change of glass type.
Issued Date: 12/28/01
Comments: Florida P.E. seal required on report.
Certification copy to John Smith at Associated Laboratories.

Report No.: 01-40351.03

Requested by: William Emley, MI Home Products, Inc.
Purpose: AAMA/NWDA 101/I.S.2-97 testing of Series/Model 740/744 aluminum single hung window with nail fin.
Issued Date: 02/14/02
Comments: Florida P.E. seal required on report.
Certification copy to John Smith at Associated Laboratories, Inc.

Report No.: 01-40351.04

Requested by: William Emley, MI Home Products, Inc.
Purpose: Revised Report No. 01-40351.01
Issued Date: 02/14/02
Comments: Changed Series/Model from 744 to 740/744 and unit size from 52 x 71 to 53 x 73. Florida P.E. seal required on report. Certification copy to John Smith at Associated Laboratories, Inc.



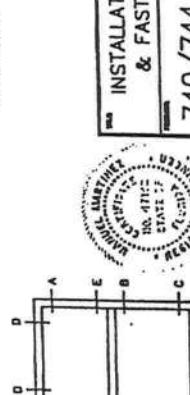
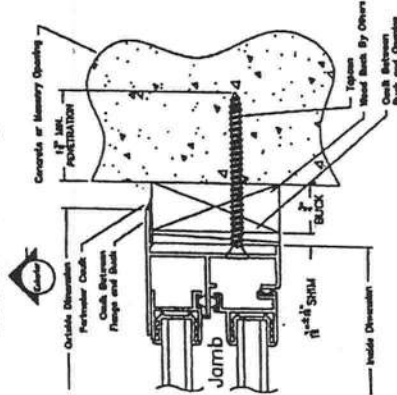
Allen M. Remar
15 FEBRUARY 2002



1. Shim as required at each installation anchor as shown, with lead bearing shim.
2. Anchor must be of sufficient length to provide $1\frac{1}{4}$ " min. embedment into masonry or concrete.
3. Caulk between window frame and back.
4. Caulk full perimeter of window.
5. If exact window size is not given, use anchor quantity for next larger window size in chart.
6. Glass must be installed with very thin window size and design lead, and must comply with ASTM E1300.
7. Letter designations on the tapcon location chart indicate where anchors are to be installed using the elevation as a key.
8. All factory applied holes not designated for tapcon* should be filled with 60 screws of sufficient l.u. to provide $5/8$ " min. embedment into wood back.

CODE	SIZE	WINDOW ID	TAPCON* LOCATIONS	
			FROM TOP	FROM BOTTOM
12	18 1/8 x 25	12	A, C	A, C
13	18 1/8 x 27 3/8	13	A, C	A, C
14	18 1/8 x 29 1/8	14	A, C	A, C
15	18 1/8 x 31 1/4	15	A, C	A, C
16	18 1/8 x 33 1/4	16	A, C	A, C
17	25 1/2 x 35	17	A, C	A, C
18	25 1/2 x 37 3/8	18	A, C	A, C
19	25 1/2 x 39 1/8	19	A, C	A, C
20	25 1/2 x 41 1/4	20	A, C	A, C
21	36 x 45	21	A, C	A, C
22	36 x 47 3/8	22	A, C	A, C
23	36 x 49 1/8	23	A, C	A, C
24	36 x 51 1/4	24	A, C	A, C
25	36 x 53 1/4	25	A, C	A, C
26	36 x 55 1/4	26	A, C	A, C
27	52 1/8 x 25	27	A, C	A, C
28	52 1/8 x 27 3/8	28	A, C	A, C
29	52 1/8 x 29 1/8	29	A, C	A, C
30	52 1/8 x 31 1/4	30	A, C	A, C
31	52 1/8 x 33 1/4	31	A, C	A, C
32	52 1/8 x 35	32	A, C	A, C
33	52 1/8 x 37 3/8	33	A, C	A, C
34	52 1/8 x 39 1/8	34	A, C	A, C
35	52 1/8 x 41 1/4	35	A, C	A, C
36	52 1/8 x 43 1/4	36	A, C	A, C

TAPCON TYPE UNDESIGNED MASONRY SIZES INCLUDE DPOCK, HALL, & BOPCON
Design Pressure values listed above are in PSI



EXTERIOR ELEVATION



INSTALLATION INSTRUCTIONS & FASTENER SCHEDULE	
740/744 SINGLE HUNG	
DATE	1/15/02
BY	NAME
1	1
INST740	

AAMA/NWWDA 101/I.S.2-97
TEST REPORT SUMMARY

Rendered to:

MI HOME PRODUCTS, INC.

SERIES/MODEL: 740/744
TYPE: Aluminum Picture Window with
Vertical Mullion

Title of Test	Results
Rating	F-R40 109 x 53
Overall Design Pressure	40 psf
Air Infiltration	0.03 cfm/ft ²
Water Resistance	6.00 psf
Structural Test Pressure	+60.0 psf
Forced Entry Resistance	Grade 10

Reference should be made to Report No. 01-40486.02 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.


Mark A. Hess, Technician

MAH:baw



Allen N. Reeves
15 FEBRUARY 2001

AAMA/NWWD 101/LS-2-97 TEST REPORT

Rendered to:

MI HOME PRODUCTS, INC.
P.O. Box 370
650 West Market Street
Gratz, Pennsylvania 17030-0370

Report No: 01-40486.02
Test Dates: 11/13/01
And: 11/14/01
Report Date: 02/15/02
Expiration Date: 11/14/05

Project Summary: Architectural Testing, Inc. (ATI) was contracted by MI Home Products, Inc. to witness performance testing on a Series/Model 740/744, aluminum picture window with vertical mullion at their facility located in Elizabethville, Pennsylvania. The sample tested successfully met the performance requirements for an F-R40 109 x 53 rating.

Test Specification: The test specimen was evaluated in accordance with AAMA/NWWD 101/LS-2-97, *Voluntary Specifications for Aluminum, Vinyl (PVC), and Wood Windows and Glass Doors*.

Test Specimen Description:

Series/Model: 740/744

Type: Aluminum Picture Window with Vertical Mullion

Overall Size: 9' 1" wide by 4' 5-1/8" high

Fixed Daylight Opening Size (2): 4' 5-1/8" wide by 4' 2-7/8" high

Finish: All aluminum was painted.

Glazing Details: The unit utilized one sheet of 1/8" thick, clear tempered glass. The lites were interior glazed against double-sided adhesive tape and secured with an aluminum glazing bead, held-in-place with 7/8" screws placed 12" on center.

Frame Construction: The frame was constructed of extruded aluminum with corner butted, and sealed corners fastened with two screws each. The vertical mullion was secured utilizing two 5/8" screws per end.

130 Derry Court
York, PA 17402-9405
phone: 717.764.7700
fax: 717.764.4129
www.testatl.com

Allen M. Reeves
15 FEBRUARY 2002



Test Specimen Description: (Continued)

Installation: The wood test buck was fabricated using 2 x 8 #2 Spruce-Pine-Fir. #8 x 1-5/8" installation screws were utilized 3" from ends and midspan through all frame members. Exterior perimeter was sealed with silicone.

Reinforcement: No reinforcement was utilized.

Test Results:

The results are tabulated as follows:

Paragraph	Title of Test - Test Method	Results	Allowed
2.1.2	Air Infiltration per ASTM E 283 (See Note #1) @ 1.57 psf (25 mph)	0.03 cfm/ft ²	0.3 cfm/ft ² max.

Note #1: The tested specimen meets the performance levels specified in AAMA/NWDA 101/I.S.2-97 for air infiltration.

2.1.3	Water Resistance per ASTM E 547 (See Note #2)		
-------	---	--	--

Note #2: The client opted to begin at a pressure higher than the minimum required. Those results are listed under "Optional Performance".

2.1.4.2	Uniform Load Structural per ASTM E 330 (See Note #2)		
---------	--	--	--

2.1.8	Forced Entry Resistance per ASTM F 588-97		
-------	---	--	--

Type: D
Grade: 10

Manipulation Test

No entry

No entry

Optional Performance

4.3	Water Resistance per ASTM E 547-96 WTP = 6.00 psf	No leakage	No leakage
4.4.1	Uniform Load Deflection per ASTM E 330-97 (Measurements reported were taken on mullion) (Loads were held for 52 seconds) @ 45.0 psf (positive) @ 47.2 psf (negative)	0.87"* 0.54"*	0.30"* 0.30"*

*Exceeds L/175 for deflection, but meets all other test requirements.

Allen M. Reeves
15 FEBRUARY 2002



Test Results:

Optional Performance: (Continued)

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
4.4.2	Uniform Load Structural per ASTM E 330-97 (Measurements reported were taken on mullion) (Loads held for 10 seconds)		
	@ 60.0 psf (positive)	0.08"	0.21" max.
	@ 60.0 psf (negative)	0.11"	0.21" max.

Detailed drawings, representative samples of the test specimen, and a copy of this report will be retained by ATI for a period of four years. The above results were secured by using the designated test methods an they indicated compliance with the performance requirements of the above referenced specification. This report does not constitute certification of this product, which may only be granted by the certification program administrator.

For ARCHITECTURAL TESTING, INC.:

Mark A. Hess

Mark A. Hess
Technician

MAH:baw
01-40486.02

Allen N. Reeves

Allen N. Reeves, P.E.
Director - Engineering Services

15 FEBRUARY 2002



Current Issue Date: 02/15/02

Report No.: 01-40486.01

Requested by: William Emley, MI Home Products, Inc.
Purpose: AAMA/NWWDA 101/I.S.2-97 testing of Series/Model 744, aluminum picture window with vertical mullion.
Issued Date: 01/02/02
Comments: Florida P.E. seal required on report.

Report No.: 01-40486.02

Requested by: William Emley, MI Home Products, Inc.
Purpose: AAMA/NWWDA 101/I.S.2-97 testing of Series/Model 740/744, aluminum picture window with vertical mullion, and installation fasteners through frame.
Issued Date: 02/15/02
Comments: Florida P.E. seal required on all pages of report. Certification copy to John Smith at Associated Laboratories, Inc.



Allen N. Reeves
15 FEBRUARY 2002

Residential System Sizing Calculation

Summary

Spec House

Project Title:
Eugene Thomas

Class 3 Rating
Registration No. 0
Climate: North

Lake City, FL 32025-

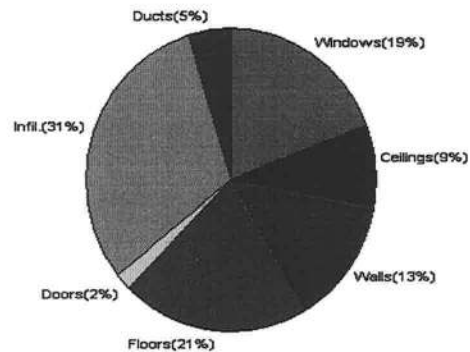
8/11/2005

Location for weather data: Gainesville - User customized: Latitude(29) Temp Range(M)			
Humidity data: Interior RH (50%) Outdoor wet bulb (78F) Humidity difference(51gr.)			
Winter design temperature	31 F	Summer design temperature	99 F
Winter setpoint	70 F	Summer setpoint	75 F
Winter temperature difference	39 F	Summer temperature difference	24 F
Total heating load calculation	29472 Btuh	Total cooling load calculation	32661 Btuh
Submitted heating capacity	35000 Btuh	Submitted cooling capacity	35000 Btuh
Submitted as % of calculated	118.8 %	Submitted as % of calculated	107.2 %

WINTER CALCULATIONS

Winter Heating Load (for 1966 sqft)

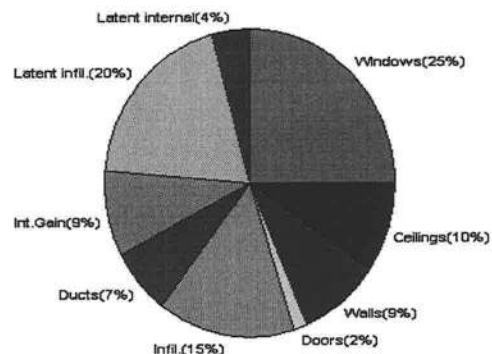
Load component		Load
Window total	202 sqft	5717 Btuh
Wall total	1342 sqft	3926 Btuh
Door total	40 sqft	555 Btuh
Ceiling total	2000 sqft	2600 Btuh
Floor total	198 ft	6257 Btuh
Infiltration	210 cfm	9014 Btuh
Subtotal		28069 Btuh
Duct loss		1403 Btuh
TOTAL HEAT LOSS		29472 Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 1966 sqft)

Load component		Load
Window total	202 sqft	8240 Btuh
Wall total	1342 sqft	2870 Btuh
Door total	40 sqft	518 Btuh
Ceiling total	2000 sqft	3160 Btuh
Floor total		0 Btuh
Infiltration	184 cfm	4854 Btuh
Internal gain		3000 Btuh
Subtotal(sensible)		22641 Btuh
Duct gain		2264 Btuh
Total sensible gain		24905 Btuh
Latent gain(infiltration)		6376 Btuh
Latent gain(internal)		1380 Btuh
Total latent gain		7756 Btuh
TOTAL HEAT GAIN		32661 Btuh



EnergyGauge® System Sizing based on ACCA Manual J.

PREPARED BY: _____

DATE: _____

System Sizing Calculations - Winter

Residential Load - Component Details

Spec House

Project Title:
Eugene Thomas

Class 3 Rating
Registration No. 0
Climate: North

Lake City, FL 32025-

Reference City: Gainesville (User customized) Winter Temperature Difference: 39.0 F

8/11/2005

Window	Panes/SHGC/Frame/U	Orientation	Area X	HTM=	Load
1	2, Clear, Metal, DEF	W	15.0	28.3	424 Btuh
2	2, Clear, Metal, DEF	W	40.0	28.3	1132 Btuh
3	2, Clear, Metal, DEF	SW	10.0	28.3	283 Btuh
4	2, Clear, Metal, DEF	W	20.0	28.3	566 Btuh
5	2, Clear, Metal, DEF	NW	10.0	28.3	283 Btuh
6	2, Clear, Metal, DEF	W	16.0	28.3	453 Btuh
7	2, Clear, Metal, DEF	N	16.0	28.3	453 Btuh
8	2, Clear, Metal, DEF	E	30.0	28.3	849 Btuh
9	2, Clear, Metal, DEF	E	30.0	28.3	849 Btuh
10	2, Clear, Metal, DEF	S	15.0	28.3	424 Btuh
Window Total			202		5717 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Exterior	13.0	1186	3.1	3677 Btuh
2	Frame - Adjacent	13.0	156	1.6	250 Btuh
Wall Total			1342		3926 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Exter		20	18.3	367 Btuh
2	Insulated - Adjac		20	9.4	188 Btuh
Door Total			40		555Btuh
Ceilings	Type	R-Value	Area X	HTM=	Load
1	Under Attic	30.0	2000	1.3	2600 Btuh
Ceiling Total			2000		2600Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab-On-Grade Edge Insul	0	198.0 ft(p)	31.6	6257 Btuh
Floor Total			198		6257 Btuh
Infiltration	Type	ACH X	Building Volume	CFM=	Load
	Natural	0.80	15728(sqft)	210	9014 Btuh
	Mechanical			0	0 Btuh
Infiltration Total				210	9014 Btuh

Totals for Heating	Subtotal	28069 Btuh
	Duct Loss(using duct multiplier of 0.05)	1403 Btuh
	Total Btuh Loss	29472 Btuh

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)

(Frame types - metal, wood or insulated metal)

(U - Window U-Factor or 'DEF' for default)

(HTM - ManualJ Heat Transfer Multiplier)

Key: Floor size (perimeter(p) for slab-on-grade or area for all other floor types)

System Sizing Calculations - Summer

Residential Load - Component Details

Spec House

Project Title:
Eugene Thomas

Class 3 Rating
Registration No. 0
Climate: North

Lake City, FL 32025-

Reference City: Gainesville (User customized) Summer Temperature Difference: 24.0 F 8/11/2005

Window	Type		Overhang		Window Area(sqft)			HTM		Load	
	Panes/SHGC/U/InSh/ExSh Ornt		Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2, Clear, DEF, N, N	W	1.5	6	15.0	0.0	15.0	25	74	1110	Btuh
2	2, Clear, DEF, N, N	W	11.5	7.66	40.0	40.0	0.0	25	74	1000	Btuh
3	2, Clear, DEF, N, N	SW	13.5	6	10.0	10.0	0.0	25	65	250	Btuh
4	2, Clear, DEF, N, N	W	8.5	6	20.0	20.0	0.0	25	74	500	Btuh
5	2, Clear, DEF, N, N	NW	3.5	6	10.0	0.0	10.0	25	53	530	Btuh
6	2, Clear, DEF, N, N	W	1.5	5	16.0	1.0	15.0	25	74	1136	Btuh
7	2, Clear, DEF, N, N	N	1.5	5	16.0	0.0	16.0	25	25	400	Btuh
8	2, Clear, DEF, N, N	E	1.5	6	30.0	4.0	26.0	25	74	2026	Btuh
9	2, Clear, DEF, N, N	E	6.5	6	30.0	26.7	3.3	25	74	912	Btuh
10	2, Clear, DEF, N, N	S	1.5	6	15.0	15.0	0.0	25	39	375	Btuh
Window Total					202					8240	Btuh
Walls	Type	R-Value			Area			HTM		Load	
1	Frame - Exterior	13.0			1186.0			2.2		2633 Btuh	
2	Frame - Adjacent	13.0			156.0			1.5		237 Btuh	
Wall Total					1342.0					2870 Btuh	
Doors	Type				Area			HTM		Load	
1	Insulated - Exter				20.0			12.9		259 Btuh	
2	Insulated - Adjac				20.0			12.9		259 Btuh	
Door Total					40.0					518 Btuh	
Ceilings	Type/Color	R-Value			Area			HTM		Load	
1	Under Attic/Dark	30.0			2000.0			1.6		3160 Btuh	
Ceiling Total					2000.0					3160 Btuh	
Floors	Type	R-Value			Size			HTM		Load	
1	Slab-On-Grade Edge Insulation	0.0			198.0 ft(p)			0.0		0 Btuh	
Floor Total					198.0					0 Btuh	
Infiltration	Type	ACH			Volume			CFM=		Load	
	Natural	0.70			15728			183.9		4854 Btuh	
	Mechanical							0		0 Btuh	
	Infiltration Total							184		4854 Btuh	
Internal gain	Occupants			Btuh/occupant			Appliance		Load		
	6			X 300 +			1200		3000 Btuh		

Manual J Summer Calculations

Residential Load - Component Details (continued)

Spec House

Project Title:
Eugene Thomas

Class 3 Rating
Registration No. 0
Climate: North

Lake City, FL 32025-

8/11/2005

Totals for Cooling	Subtotal	22641 Btuh
	Duct gain(using duct multiplier of 0.10)	2264 Btuh
	Total sensible gain	24905 Btuh
	Latent infiltration gain (for 51 gr. humidity difference)	6376 Btuh
	Latent occupant gain (6 people @ 230 Btuh per person)	1380 Btuh
	Latent other gain	0 Btuh
	TOTAL GAIN	32661 Btuh

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)
(U - Window U-Factor or 'DEF' for default)
(InSh - Interior shading device: none(N), Blinds/Daperies(B) or Roller Shades(R))
(ExSh - Exterior shading device: none(N) or numerical value)
(Ornt - compass orientation)

COLUMBIA COUNTY BUILDING DEPARTMENT

RESIDENTIAL MINIMUM PLAN REQUIREMENTS AND CHECKLIST FOR FLORIDA BUILDING CODE 2001

ONE (1) AND TWO (2) FAMILY DWELLINGS

ALL REQUIREMENTS ARE SUBJECT TO CHANGE

EFFECTIVE MARCH 1, 2002

ALL BUILDING PLANS MUST INDICATE THE FOLLOWING ITEMS AND INDICATE COMPLIANCE WITH CHAPTER 1606 OF THE FLORIDA BUILDING CODE 2001 BY PROVIDING CALCULATIONS AND DETAILS THAT HAVE THE SEAL AND SIGNATURE OF A CERTIFIED ARCHITECT OR ENGINEER REGISTERED IN THE STATE OF FLORIDA, OR ALTERNATE METHODOLOGIES, APPROVED BY THE STATE OF FLORIDA BUILDING COMMISSION FOR ONE-AND-TWO FAMILY DWELLINGS. FOR DESIGN PURPOSES THE FOLLOWING BASIC WIND SPEED AS PER FIGURE 1606 SHALL BE USED.

WIND SPEED LINE SHALL BE DEFINED AS FOLLOWS: THE CENTERLINE OF INTERSTATE 75.

1. ALL BUILDINGS CONSTRUCTED EAST OF SAID LINE SHALL BE ----- 100 MPH
2. ALL BUILDINGS CONSTRUCTED WEST OF SAID LINE SHALL BE -----110 MPH
3. NO AREA IN COLUMBIA COUNTY IS IN A WIND BORNE DEBRIS REGION

APPLICANT - PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL

GENERAL REQUIREMENTS: Two (2) complete sets of plans containing the following:

Applicant

Plans Examiner



All drawings must be clear, concise and drawn to scale ("Optional " details that are not used shall be marked void or crossed off). Square footage of different areas shall be shown on plans.



Designers name and signature on document (FBC 104.2.1). If licensed architect or engineer, official seal shall be affixed.



Site Plan including:

- a) Dimensions of lot
- b) Dimensions of building set backs
- c) Location of all other buildings on lot, well and septic tank if applicable, and all utility easements.
- d) Provide a full legal description of property.

Wind-load Engineering Summary, calculations and any details required

- a) Plans or specifications must state compliance with FBC Section 1606
- b) The following information must be shown as per section 1606.1.7 FBC
 - a. Basic wind speed (MPH)
 - b. Wind importance factor (I) and building category
 - c. Wind exposure - if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated
 - d. The applicable internal pressure coefficient
 - e. Components and Cladding. The design wind pressure in terms of psf (kN/m²), to be used for the design of exterior component and cladding materials not specifically designed by the registered design professional

Elevations including:

- a) All sides
- b) Roof pitch
- c) Overhang dimensions and detail with attic ventilation
- d) Location, size and height above roof of chimneys
- e) Location and size of skylights
- f) Building height
- e) Number of stories



Floor Plan including:

- a) Rooms labeled and dimensioned
- b) Shear walls
- c) Windows and doors (including garage doors) showing size, mfg., approval listing and attachment specs. (FBC 1707) and safety glazing where needed (egress windows in bedrooms to be shown)
- d) Fireplaces (gas appliance) (vented or non-vented) or wood burning with hearth
- e) Stairs with dimensions (width, tread and riser) and details of guardrails and handrails
- f) Must show and identify accessibility requirements (accessible bathroom)

Foundation Plan including:

- a) Location of all load-bearing wall with required footings indicated as standard Or monolithic and dimensions and reinforcing
- b) All posts and/or column footing including size and reinforcing
- c) Any special support required by soil analysis such as piling
- d) Location of any vertical steel

Roof System:

- a) Truss package including:
 - 1. Truss layout and truss details signed and sealed by FI. Pro. Eng.
 - 2. Roof assembly (FBC 104.2.1 Roofing system, materials, manufacturer, fastening requirements and product evaluation with wind resistance rating)
- b) Conventional Framing Layout including:
 - 1. Rafter size, species and spacing
 - 2. Attachment to wall and uplift
 - 3. Ridge beam sized and valley framing and support details
 - 4. Roof assembly (FBC 104.2.1 Roofing systems, materials, manufacturer, fastening requirements and product evaluation with wind resistance rating)

Wall Sections including:

- a) Masonry wall
 - 1. All materials making up wall
 - 2. Block size and mortar type with size and spacing of reinforcement
 - 3. Lintel, tie-beam sizes and reinforcement
 - 4. Gable ends with rake beams showing reinforcement or gable truss and wall bracing details
 - 5. All required connectors with uplift rating and required number and size of fasteners for continuous tie from roof to foundation
 - 6. Roof assembly shown here or on roof system detail (FBC 104.2.1 Roofing system, materials, manufacturer, fastening requirements and product evaluation with resistance rating)
 - 7. Fire resistant construction (if required)
 - 8. Fireproofing requirements
 - 9. Shoe type of termite treatment (termicide or alternative method)
 - 10. Slab on grade
 - a. Vapor retardant (6mil. Polyethylene with joints lapped 6 inches and sealed)
 - b. Must show control joints, synthetic fiber reinforcement or Welded fire fabric reinforcement and supports
 - 11. Indicate where pressure treated wood will be placed
 - 12. Provide insulation R value for the following:
 - a. Attic space
 - b. Exterior wall cavity
 - c. Crawl space (if applicable)

b) Wood frame wall

1. All materials making up wall
2. Size and species of studs
3. Sheathing size, type and nailing schedule
4. Headers sized
5. Gable end showing balloon framing detail or gable truss and wall hinge bracing detail
6. All required fasteners for continuous tie from roof to foundation (truss anchors, straps, anchor bolts and washers)
7. Roof assembly shown here or on roof system detail (FBC104.2.1 Roofing system, materials, manufacturer, fastening requirements and product evaluation with wind resistance rating)
8. Fire resistant construction (if applicable)
9. Fireproofing requirements
10. Show type of termite treatment (termicide or alternative method)
11. Slab on grade
 - a. Vapor retardant (6Mil. Polyethylene with joints lapped 6 inches and sealed
 - b. Must show control joints, synthetic fiber reinforcement or welded wire fabric reinforcement and supports
12. Indicate where pressure treated wood will be placed
13. Provide insulation R value for the following:
 - a. Attic space
 - b. Exterior wall cavity
 - c. Crawl space (if applicable)

c) Metal frame wall and roof (designed, signed and sealed by Florida Prof. Engineer or Architect)

Floor Framing System:

- a) Floor truss package including layout and details, signed and sealed by Florida Registered Professional Engineer
- b) Floor joist size and spacing
- c) Girder size and spacing
- d) Attachment of joist to girder
- e) Wind load requirements where applicable

Plumbing Fixture layout

Electrical layout including:

- a) Switches, outlets/receptacles, lighting and all required GFCI outlets identified
- b) Ceiling fans
- c) Smoke detectors
- d) Service panel and sub-panel size and location(s)
- e) Meter location with type of service entrance (overhead or underground)
- f) Appliances and HVAC equipment
- g) Arc Fault Circuits (AFCI) in bedrooms

HVAC information

- a) Manual J sizing equipment or equivalent computation
- b) Exhaust fans in bathroom

Energy Calculations (dimensions shall match plans)

Gas System Type (LP or Natural) Location and BTU demand of equipment

Disclosure Statement for Owner Builders

*****Notice Of Commencement Required Before Any Inspections Will Be Done**

Private Potable Water

- a) Size of pump motor
- b) Size of pressure tank
- c) Cycle stop valve if used

THE FOLLOWING ITEMS MUST BE SUBMITTED WITH BUILDING PLANS

1. **Building Permit Application:** A current Building Permit Application form is to be completed and submitted for all residential projects.
2. **Parcel Number:** The parcel number (Tax ID number) from the Property Appraiser (386) 758-1084 is required. A copy of property deed is also requested.
3. **Environmental Health Permit or Sewer Tap Approval:** A copy of the Environmental Health permit, existing septic approval or sewer tap approval is required before a building permit can be issued.
(386) 758-1058 (**Toilet facilities shall be provided for construction workers**)
4. **City Approval:** If the project is to be located within the city limits of the Town of Fort White, prior approval is required. The Town of Fort White approval letter is required to be submitted by the owner or contractor to this office when applying for a Building Permit. (386) 497-2321
5. **Flood Information:** All projects within the Floodway of the Suwannee or Santa Fe Rivers shall require permitting through the Suwannee River Water Management District, before submitting application to this office. Any project located within a flood zone where the base flood elevation (100 year flood) has been established shall meet the requirements of Section 8.8 of the Columbia County Land Development Regulations. Any project located within a flood zone where the base flood elevation has not been established (Zone A) shall meet the requirements of Section 8.7 of the Columbia County Land Development Regulations. **CERTIFIED FINISHED FLOOR ELEVATIONS WILL BE REQUIRED ON ANY PROJECT WHERE THE BASE FLOOD ELEVATION (100 YEAR FLOOD) HAS BEEN ESTABLISHED.**
A development permit will also be required. Development permit cost is **\$50.00**
6. **Driveway Connection:** If the property does not have an existing access to a public road, then an application for a culvert permit (**\$25.00**) must be made. If the applicant feels that a culvert is not needed, they may apply for a culvert waiver (**\$50.00**). All culvert waivers are sent to the Columbia County Public Works Department for approval or denial.
7. **911 Address:** If the project is located in an area where the 911 address has been issued, then the proper paperwork from the 911 Addressing Department must be submitted. (386) 752-8787

ALL REQUIRED INFORMATION IS TO BE SUBMITTED FOR REVIEW. YOU WILL BE NOTIFIED WHEN YOUR APPLICATION AND PLANS ARE APPROVED AND READY TO PERMIT. PLEASE DO NOT EXPECT OR REQUEST THAT PERMIT APPLICATIONS BE REVIEWED OR APPROVED WHILE YOU ARE HERE – TIME WILL NOT ALLOW THIS –PLEASE DO NOT ASK

NOTICE:

ADDRESSES BY APPOINTMENT ONLY!

TO OBTAIN A 9-1-1 ADDRESS THE REQUESTER MUST CONTACT THE COLUMBIA COUNTY 9-1-1 ADDRESSING DEPARTMENT AT (386) 752-8787 FOR AN APPOINTMENT TIME AND DATE:

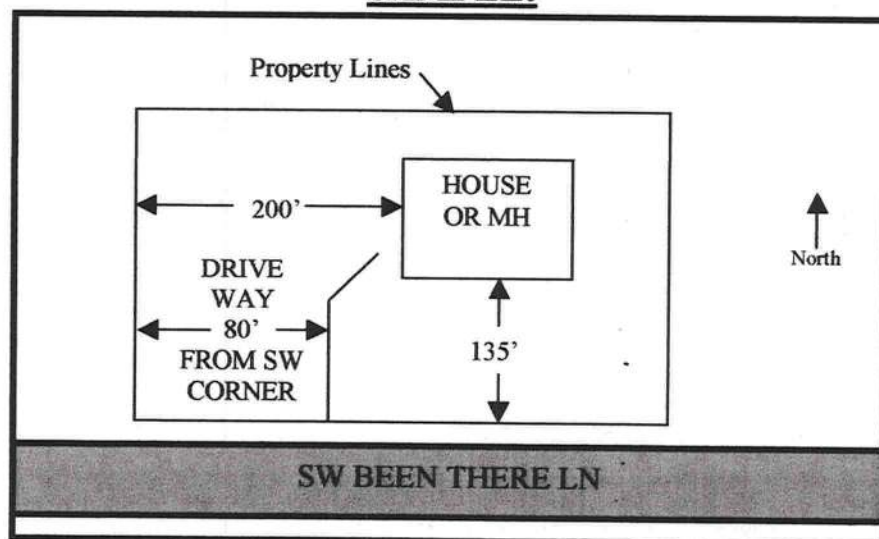
YOU CAN NOT OBTAIN A NEW ADDRESS OVER THE TELEPHONE. MUST MAKE AN APPOINTMENT!

THE ADDRESSING DEPARTMENT IS LOCATED AT 263 NW LAKE CITY AVENUE (OFF OF WEST U.S. HIGHWAY 90 WEST OF INTERSTATE 75 AT THE COLUMBIA COUNTY EMERGENCY OPERATIONS CENTER).

THE REQUESTER WILL NEED THE FOLLOWING:

1. THE PARCEL OR TAX ID NUMBER (SAMPLE: "25-4S-17-12345-123" OR "R12345-123) FOR THE PROPERTY.
2. A PLAT, PLAN, SITE PLAN, OR DRAWING SHOWING THE PROPERTY LINES OF THE PARCEL.
 - a. LOCATION OF PLANNED RESIDENT OR BUSINESS STRUCTURE ON THE PROPERTY WITH DISTANCES FROM TWO OF THE PROPERTY LINES TO THE STRUCTURE (SEE SAMPLE BELOW).
 - b. LOCATION OF THE ACCESS POINT (DRIVEWAY, ETC.) ON THE ROADWAY FROM WHICH LOCATION IS TO BE ADDRESSED WITH A DISTANCE FROM A PARALLEL PROPERTY LINE AND OR PROPERTY CORNER (SEE SAMPLE BELOW).
 - c. TRAVEL OF THE DRIVEWAY FROM THE ACCESS POINT TO THE STRUCTURE (SEE SAMPLE BELOW).

SAMPLE:



NOTE: 5 TO 7 WORKING DAYS MAY BE REQUIRED IF ADDRESSING DEPARTMENT NEEDS TO CONDUCT AN ON SITE SURVEY.

CERTIFICATE OF OCCUPANCY

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 28-3S-16-02372-620

Building permit No. 000023693

Use Classification SFD, UTILITY

Fire: 5.92

Permit Holder EUGENE THOMAS

Waste: 12.25

Owner of Building EUGENE THOMAS

Total: 18.17

Location: 989 NW ZACK DRIVE

Date: 09/14/2006

Harry Dickel

Building Inspector



POST IN A CONSPICUOUS PLACE
(Business Places Only)