

This Permit Expires One Year From the Date of Issue

APPLICANTMIKE ROBERTS

PHONE755-9476

ADDRESS657SW CATHERINE LANELAKE CITYFL32025

OWNERMIKE ROBERTS

PHONE755-9476

ADDRESS118SE WILDERNESS DRIVELAKE CITYFL32025

CONTRACTORMIKE ROBERTS

PHONE755-9476

LOCATION OF PROPERTYBAYA, TR ON SR 100, TR ON CR 245, TR ON PLANT ST, TR ON WILDERNESS, 1ST LOT ON LEFT

TYPE DEVELOPMENTSFD,UTILITYESTIMATED COST OF CONSTRUCTION74750.00

HEATED FLOOR AREAL495.00TOTAL AREAL2137.00HEIGHTSTORIES1

FOUNDATIONCONCWALLSFRAMEDROOF PITCH6/12FLOORSLAB

LAND USE & ZONINGRSF-2MAX. HEIGHT

Minimum Set Back Requirments:STREET-FRONT25.00REAR15.00SIDE10.00

NO. EX.D.U.0FLOOD ZONEX PSDEVELOPMENT PERMIT NO.

PARCEL ID03-4S-17-07570-117SUBDIVISIONSUZANNE

LOT11BLOCKPHASEUNIT5TOTAL ACRES

000001409

Culvert Permit No.Culvert WaiverContractor's License NumberApplicant/Owner/Contractor

WAIVER07-429BKJHY

Driveway ConnectionSeptic Tank NumberLU & Zoning checked byApproved for IssuanceNew Resident

COMMENTS: ONE FOOT ABOVE THE ROAD, NOC ON FILE

Check # or Cash2230

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Powerdate/app. byFoundationdate/app. byMonolithicdate/app. by

Under slab rough-in plumbingdate/app. bySlabdate/app. bySheathing/Nailingdate/app. by

Framingdate/app. byRough-in plumbing above slab and below wood floordate/app. by

Electrical rough-indate/app. byHeat & Air Ductdate/app. byPeri. beam (Lintel)date/app. by

Permanent powerdate/app. byC.O. Finaldate/app. byCulvertdate/app. by

M/H tie downs, blocking, electricity and plumbingdate/app. byPooldate/app. by

Reconnectiondate/app. byPump poledate/app. byUtility Poledate/app. by

M/H Poledate/app. byTravel Trailerdater/app. byRe-roofdate/app. by

BUILDING PERMIT FEE \$375.00CERTIFICATION FEE \$10.69SURCHARGE FEE \$10.69

MISC. FEES \$0.00ZONING CERT. FEE \$50.00FIRE FEE \$0.00WASTE FEE \$

FLOOD DEVELOPMENT FEE \$FLOOD ZONE FEE \$25.00CULVERT FEE \$TOTAL FEE471.38

INSPECTORS OFFICECLERKS 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 INCONVIENCE, 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.

**This Instrument Prepared by & return to:**

Name: **Joyce Kirpach, an employee of  
TITLE OFFICES, LLC**  
Address: **1089 SW MAIN BLVD.  
LAKE CITY, FLORIDA 32025  
04Y-01084JK**  
Parcel I.D. #: **07570-117**

Inst:2004002990 Date:02/11/2004 Time:08:44  
Doc Stamp-Deed : 77.00  
**MRK** DC,P.DeWitt Cason,Columbia County B:1006 P:2347

SPACE ABOVE THIS LINE FOR PROCESSING DATA

SPACE ABOVE THIS LINE FOR RECORDING DATA

**THIS WARRANTY DEED** Made the 3 day of February, A.D. 2004, by

**MARIAN L. JEWELL, a widow,** hereinafter called the grantor, to  
**MIKE W. ROBERTS, Single** whose post office address is  
**14863  
RT 3 BOX 14863, LAKE CITY, FL 32025,** hereinafter called the grantee:

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument, singular and plural, the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations, wherever the context so admits or requires.)

**Witnesseth:** That the grantor, for and in consideration of the sum of \$10.00 and other valuable consideration, receipt whereof is hereby acknowledged, does hereby grant, bargain, sell, alien, remise, release, convey and confirm unto the grantee all that certain land situate in **Columbia County, State of FLORIDA,** viz:

**X** Lot 11, SUZANNE SUBDIVISION, UNIT 5, according to the map or plat thereof as recorded in Plat Book 4, Page 100, of the Public Records of Columbia County, FLORIDA.

Restrictions, conditions, reservations, easements, and other matters common to the subdivision or shown on the map or plat thereof recorded in Plat Book 4, Page 100, but omitting any covenant or restriction based on race, color, religion, sex, handicap, familial status or national origin.

Subject to declaration of covenants, conditions and restrictions as recorded in Official Records Book 463 Page 622, but omitting any covenant or restrictions as to race, color, religion, sex, handicap, familial status or national origin.

**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 she is lawfully seized of said land in fee simple; that she has good right and lawful authority to sell and convey said land, and 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, 2003.**

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

Signed, sealed and delivered in the presence of:

Becky Worley  
Witness Signature

Becky Worley  
Printed Name

Libby Caudell  
Witness Signature

Libby Caudell  
Printed Name

Marian L. Jewell L.S.  
**MARIAN L. JEWELL**  
Address:  
**445 SHOAL CREEK CROSSING, LAVONIA, GA  
30553**

STATE OF Ga  
COUNTY OF Ht

The foregoing instrument was acknowledged before me this 3 day of February, 2004, by **MARIAN L. JEWELL,** who is known to me or who has produced Drivers License

Debra Jones  
Notary Public  
My commission expires \_\_\_\_\_



CK# 2229 CK# 2230  
Columbia County Building Permit Application

For Office Use Only Application # 0706-21 Date Received 6/7/07 By G Permit # 1409/25976  
Application Approved by - Zoning Official BZK Date 21.06.07 Plans Examiner OKJTH Date 6-29-07  
Flood Zone 2 per surveyors Development Permit N/A Zoning RSF-2 Land Use Plan Map Category RES Low Dev.  
Comments \_\_\_\_\_  
☒ NOC ☒ EH ☒ Deed or PA ☒ Site Plan ☐ State Road Info ☐ Parent Parcel # ☐ Development Permit

Name Authorized Person Signing Permit Mike Roberts Phone 755-9476  
Address 657 S.W. Catherine Lane HC. 32025  
Owners Name M. Roberts Phone 755-9476  
911 Address 118 SE Wilderness Dr, hawc h. city Fla. 32025  
Contractors Name none Phone \_\_\_\_\_  
Address \_\_\_\_\_

Fee Simple Owner Name & Address \_\_\_\_\_  
Bonding Co. Name & Address none  
Architect/Engineer Name & Address Schaffer Eng. 7104 N.W. 42nd hawc  
Mortgage Lenders Name & Address Gainesville 32606

Circle the correct power company FL Power & Light Clay Elec. Suwannee Valley Elec. Progressive Energy  
Property ID Number 03-45-17-07570-117 Estimated Cost of Construction 120,000.00  
Subdivision Name SUZANNE S/D Lot 11 Block \_\_\_\_\_ Unit 5 Phase \_\_\_\_\_  
Driving Directions S.E. BAY Right on 100 Right on C. 245  
Right on S.E. Plant St. Right S.E. Wilderness  
Drive First lot on left

Type of Construction Wood Frame - SED Number of Existing Dwellings on Property 0  
Total Acreage 13 Lot Size \_\_\_\_\_ Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive  
Actual Distance of Structure from Property Lines - Front 45' Side 55' Side 36' Rear 60'  
Total Building Height 18'2" Number of Stories 1 Heated Floor Area 1495 Roof Pitch 6/12  
TOTAL 2137

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.

Mike Roberts  
Owner Builder or Authorized Person Notarized Letter  
STATE OF FLORIDA  
COUNTY OF COLUMBIA  
Sworn to (or affirmed) and subscribed before me  
this 7th day of June 2007  
Personally known ☒ or Produced Identification \_\_\_\_\_  
Contractor Signature \_\_\_\_\_  
Contractors License Number \_\_\_\_\_  
Competency Card Number \_\_\_\_\_  
NOTARY STAMP/SEAL  
Mike Roberts  
Notary Signature \_\_\_\_\_  
(Revised Sept. 2006)



Attn: Weegie

**Columbia County Building Department  
Culvert Waiver**

**Culvert Waiver No.  
000001409**

DATE: 07/02/2007

BUILDING PERMIT NO. 25976

APPLICANT MIKE ROBERTS

PHONE 755-9476

ADDRESS 657 SW CATHERINE LANE

LAKE CITY

FL 32025

OWNER MIKE ROBERTS

PHONE 755-9476

ADDRESS 118 SE WILDERNESS DRIVE

LAKE CITY

FL 32025

CONTRACTOR MIKE ROBERTS

PHONE \_\_\_\_\_

LOCATION OF PROPERTY BAYA, TR ON SR 100, TR ON CR 245, TR ON PLANT ST, TR ON

WILDERNESS, 1ST LOT ON LEFT

SUBDIVISION/LOT/BLOCK/PHASE/UNIT SUZANNE

11

5

PARCEL ID # 03-4S-17-07570-117

I HEREBY CERTIFY THAT I UNDERSTAND AND WILL FULLY COMPLY WITH THE DECISION OF THE COLUMBIA COUNTY PUBLIC WORKS DEPARTMENT IN CONNECTION WITH THE HEREIN PROPOSED APPLICATION.

SIGNATURE: 

A SEPARATE CHECK IS REQUIRED  
MAKE CHECKS PAYABLE TO BCC

Amount Paid 50.00

**PUBLIC WORKS DEPARTMENT USE ONLY**

I HEREBY CERTIFY THAT I HAVE EXAMINED THIS APPLICATION AND DETERMINED THAT THE  
CULVERT WAIVER IS:



APPROVED \_\_\_\_\_

NOT APPROVED - NEEDS A CULVERT PERMIT

COMMENTS: \_\_\_\_\_

SIGNED: 

DATE: 7-10-07

ANY QUESTIONS PLEASE CONTACT THE PUBLIC WORKS DEPARTMENT AT 386-752-5955.

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





## NOTORIZED DISCLOSURE STATEMENT

### FOR OWNER/BUILDER WHEN ACTING AS THEIR OWN CONTRACTOR AND CLAIMING EXEMPTION OF CONTRACTOR LICENSING REQUIREMENTS IN ACCORDANCE WITH FLORIDA STATUTES, ss. 489.103(7).

State law requires construction to be done by licensed contractors. You have applied for a permit under an exemption to that law. The exemption allows you, as the owner of your property, to act as your own contractor with certain restrictions even though you do not have a license. You must provide direct, onsite supervision of the construction yourself. You may build or improve a one-family or two-family residence or a farm outbuilding. You may also build or improve a commercial building, provided your costs do not exceed \$75,000. The building or residence must be for your own use or occupancy. It may not be built or substantially improved for sale or lease. If you sell or lease a building you have built or substantially improved yourself within 1 year after the construction is complete, the law will presume that you built or substantially improved it for sale or lease, which is a violation of this exemption. You may not hire an unlicensed person to act as your contractor or to supervise people working on your building. It is your responsibility to make sure that people employed by you have licenses required by state law and by county or municipal licensing ordinances. You may not delegate the responsibility for supervising work to a licensed contractor who is not licensed to perform the work being done. Any person working on your building who is not licensed must work under your direct supervision and must be employed by you, which means that you must deduct F.I.C.A. and withholding tax and provide workers' compensation for that employee, all as prescribed by law. Your construction must comply with all applicable laws, ordinances, building codes, and zoning regulations.

#### TYPE OF CONSTRUCTION

☒ Single Family Dwelling  
☐ Farm Outbuilding

☐ Two-Family Residence  
☐ Other \_\_\_\_\_

#### NEW CONSTRUCTION OR IMPROVEMENT

☒ New Construction

☐ Addition, Alteration, Modification or other Improvement

I Mike Roberts, have been advised of the above disclosure statement for exemption from contractor licensing as an owner/builder. I agree to comply with all requirements provided for in Florida Statutes ss.489.103(7) allowing this exception for the construction permitted by Columbia County Building Permit Number \_\_\_\_\_

Mike Roberts 6/7/07  
Owner Builder Signature Date



The above signer is personally known to me or produced identification \_\_\_\_\_

Notary Signature Gale Tedder Date 6/7/07

( Stamp / Seal )

#### FOR BUILDING USE ONLY

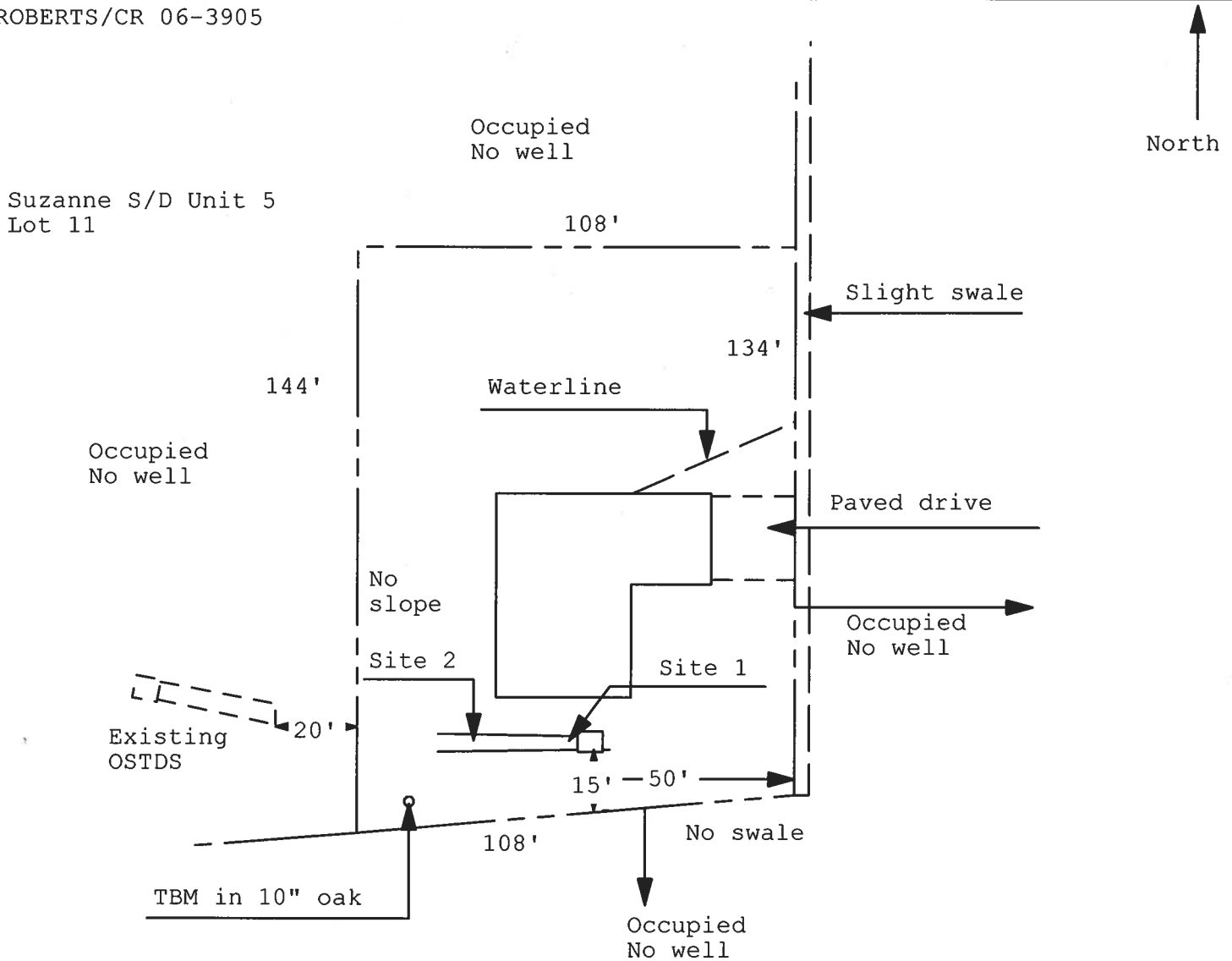
I hereby certify that the above listed owner/builder has been notified of the disclosure statement in Florida Statutes ss 489.103(7).

Date \_\_\_\_\_ Building Official/Representative \_\_\_\_\_

Application for Onsite Sewage Disposal System  
Construction Permit. Part II Site Plan  
Permit Application Number: 07-429

**ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT**

ROBERTS/CR 06-3905



1 inch = 40 feet

Site Plan Submitted By Paul Lopez Date 5/12/07  
Plan Approved ✓ Not Approved \_\_\_\_\_ Date 5/12/07  
By Mr. O'Leary Columbia CPHU

**Notes:** \_\_\_\_\_

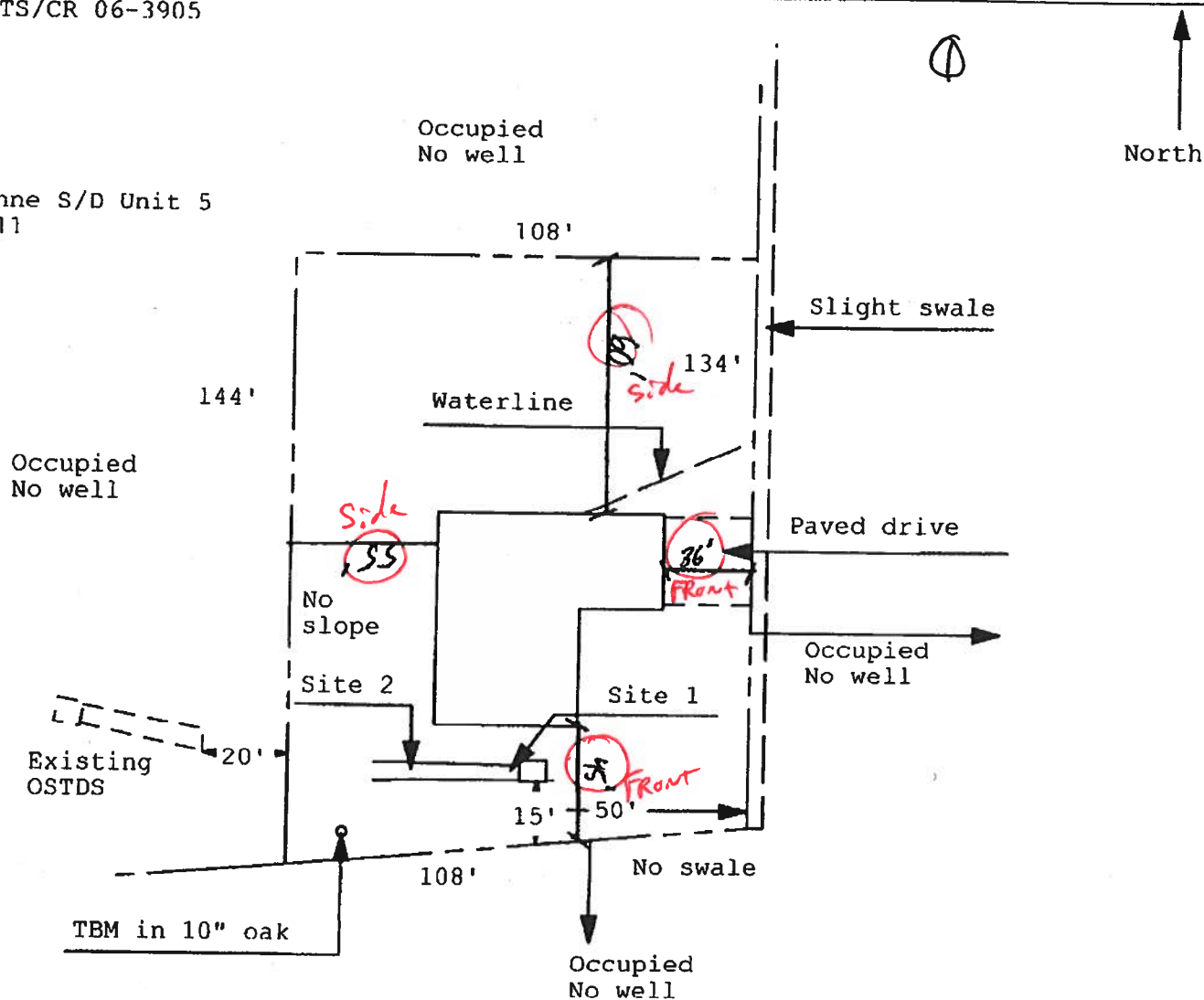
# Application for Onsite Sewage Disposal System Construction Permit. Part II Site Plan

Permit Application Number: \_\_\_\_\_

**ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT**

ROBERTS/CR 06-3905

Suzanne S/D Unit 5  
Lot 11



1 inch = 40 feet

Site Plan Submitted By Paul L. [Signature] Date 3/2/07  
Plan Approved \_\_\_\_\_ Not Approved \_\_\_\_\_ Date \_\_\_\_\_

By \_\_\_\_\_ CPHU

Notes: \_\_\_\_\_

# COLUMBIA COUNTY 9-1-1 ADDRESSING

P. O. Box 1787, Lake City, FL 32056-1787  
PHONE: (386) 758-1125 • FAX: (386) 758-1365 • Email: ron\_croft@columbiacountyfla.com

## Addressing Maintenance

To maintain the Countywide Addressing Policy you must make application for a 9-1-1 Address at the time you apply for a building permit. The established standards for assigning and posting numbers to all principal buildings, dwellings, businesses and industries are contained in Columbia County Ordinance 2001-9. The addressing system is to enable Emergency Service Agencies to locate you in an emergency, and to assist the United States Postal Service and the public in the timely and efficient provision of services to residents and businesses of Columbia County.

DATE REQUESTED: 3/1/2007 DATE ISSUED: 3/2/2007

### ENHANCED 9-1-1 ADDRESS:

118 SE WILDERNESS DR  
LAKE CITY FL 32025

### PROPERTY APPRAISER PARCEL NUMBER:

03-4S-17-07570-117

### Remarks:

LOT 11 SUZANNE S/D UNIT 5

Address Issued By:   
Columbia County 9-1-1 Addressing / GIS Department

**NOTICE: THIS ADDRESS WAS ISSUED BASED ON LOCATION INFORMATION RECEIVED FROM THE REQUESTER. SHOULD, AT A LATER DATE, THE LOCATION INFORMATION BE FOUND TO BE IN ERROR, THIS ADDRESS IS SUBJECT TO CHANGE.**

646

Approved Address

MAR 02 2007

911Addressing/GIS Dept



①

# Lenvil Dicks Water Systems

1286 W. US HWY 90  
PO BOX 1  
LAKE CITY, FL 32056

1-800-545-3501  
FAX(386)758-6760

June 6, 2007

To Whom It May Concern:

The purpose of this letter is to verify that Suzanne Subdivision Units I through 5, recorded subdivisions in Columbia County, Florida, are served by the Clayton Smith community water system. This system, identified by I.D. number 2124213, is regulated by the Florida Public Service Commission and the Department of Environmental Protection. The Columbia County Environmental Health office receives our monthly bacteriological testing. We would be happy to provide copies of recent test results. Further inquiries may be directed to one of these official agencies.

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy J. Dicks', with a stylized, cursive script.

Andy J. Dicks

NOTICE OF COMMENCEMENT FORM  
COLUMBIA COUNTY, FLORIDA

THIS DOCUMENT MUST BE RECORDED AT THE COUNTY  
CLERKS OFFICE BEFORE YOUR FIRST INSPECTION

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.

IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE  
RECORDING YOUR NOTICE OF COMMENCEMENT.

Tax Parcel ID Number 03-45-17-07570-117

Permit Number \_\_\_\_\_

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

Lot 11 Suzanne S/D Unit 5  
118 S.E. Wilderness Dr.  
Wake City FLA 32025

2. General description of improvement: NEW Home

3. Owner Name & Address Mike Roberts 657 S.W. Catherine  
Lane H.C. FLA. 32025 Interest in Property Owner

4. Name & Address of Fee Simple Owner (if other than owner): \_\_\_\_\_

5. Contractor Name Mike Roberts Phone Number 755-9476  
Address \_\_\_\_\_

6. Surety Holders Name none

Address \_\_\_\_\_ Inst: 2007011788 Date: 05/29/2007 Time: 12:57  
Mike DC, P. Dewitt Cason, Columbia County B: 1120 P: 843

Amount of Bond \_\_\_\_\_

7. Lender Name none

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

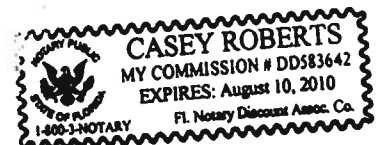
\_\_\_\_\_ to receive a copy of the Lien Notice as provided in Section 713.13 (1) -

(a) 7. Phone Number of the designee N.A.

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) \_\_\_\_\_

THE OWNER MUST SIGN THE NOTICE OF COMMENCEMENT AND NO ONE ELSE MAY BE PERMITTED TO SIGN  
IN HIS/HER STEAD.

Mike Roberts  
Signature of Owner



Sworn to (or affirmed) and subscribed before day of 29th May, 2007.

Casey Roberts  
Signature of Notary

NOTARY STAMP/SEAL

As to signature only

# FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs  
Residential Whole Building Performance Method A

Project Name: <b>Mike Roberts</b>	Builder: <b>owner</b>
Address:	Permitting Office: <b>Columbia</b>
City, State:	Permit Number: <b>25976</b>
Owner:	Jurisdiction Number: <b>24000</b>
Climate Zone: <b>North</b>	

1. New construction or existing <span style="float: right;">New <input type="checkbox"/></span>	12. Cooling systems
2. Single family or multi-family <span style="float: right;">Single family <input type="checkbox"/></span>	a. Central Unit <span style="float: right;">Cap: 28.0 kBtu/hr SEER: 13.00</span>
3. Number of units, if multi-family <span style="float: right;">1 <input type="checkbox"/></span>	b. N/A
4. Number of Bedrooms <span style="float: right;">3 <input type="checkbox"/></span>	c. N/A
5. Is this a worst case? <span style="float: right;">Yes <input type="checkbox"/></span>	13. Heating systems
6. Conditioned floor area (ft <sup>2</sup> ) <span style="float: right;">1404 ft<sup>2</sup> <input type="checkbox"/></span>	a. Electric Heat Pump <span style="float: right;">Cap: 30.0 kBtu/hr HSPF: 8.00</span>
7. Glass type <sup>1</sup> and area: (Label reqd. by 13-104.4.5 if not default)	b. N/A
a. U-factor: <span style="float: right;">Description Area</span>	c. N/A
(or Single or Double DEFAULT) 7a. (Dble Default) 146.0 ft <sup>2</sup> <input type="checkbox"/>	14. Hot water systems
b. SHGC: <span style="float: right;">7b. (Clear) 146.0 ft<sup>2</sup> <input type="checkbox"/></span>	a. Electric Resistance <span style="float: right;">Cap: 50.0 gallons EF: 0.90</span>
(or Clear or Tint DEFAULT)	b. N/A
8. Floor types	c. Conservation credits (HR-Heat recovery, Solar DHP-Dedicated heat pump)
a. Slab-On-Grade Edge Insulation <span style="float: right;">R=0.0, 180.0(p) ft <input type="checkbox"/></span>	15. HVAC credits
b. N/A	(CF-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, PT-Programmable Thermostat, MZ-C-Multizone cooling, MZ-H-Multizone heating)
c. N/A	
9. Wall types	
a. Frame, Wood, Adjacent <span style="float: right;">R=13.0, 290.0 ft<sup>2</sup> <input type="checkbox"/></span>	
b. Frame, Wood, Exterior <span style="float: right;">R=13.0, 1100.0 ft<sup>2</sup> <input type="checkbox"/></span>	
c. N/A	
d. N/A	
e. N/A	
10. Ceiling types	
a. Under Attic <span style="float: right;">R=30.0, 1404.0 ft<sup>2</sup> <input type="checkbox"/></span>	
b. Under Attic <span style="float: right;">R=19.0, 200.0 ft<sup>2</sup> <input type="checkbox"/></span>	
c. N/A	
11. Ducts	
a. Sup: Unc. Ret: Unc. AH: Garage <span style="float: right;">Sup. R=6.0, 123.0 ft <input type="checkbox"/></span>	
b. N/A	

Glass/Floor Area: 0.10

Total as-built points: 20876

Total base points: 21356

**PASS**

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

PREPARED BY: Suncoast Insulators

DATE: 5/31/07

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: \_\_\_\_\_

<sup>1</sup> Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.  
EnergyGauge® (Version: FLRCSB v4.5)

# SUMMER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

BASE				AS-BUILT							
<b>GLASS TYPES</b>											
.18 X Conditioned X BSPM = Points Floor Area				Type/SC	Overhang Omt Len Hgt		Area X SPM X SOF = Points				
.18	1404.0	18.59	4698.0	1.Double, Clear	E	2.0	5.0	59.0	42.06	0.80	1977.0
				2.Double, Clear	W	2.0	5.0	77.0	38.52	0.80	2371.0
				3.Double, Clear	S	2.0	5.0	4.0	35.87	0.72	103.0
				4.Double, Clear	N	2.0	5.0	6.0	19.20	0.87	100.0
				As-Built Total:				146.0	4551.0		
<b>WALL TYPES</b>											
Area X BSPM = Points				Type	R-Value		Area X SPM = Points				
Adjacent	290.0	0.70	203.0	1. Frame, Wood, Adjacent	13.0		290.0	0.60		174.0	
Exterior	1100.0	1.70	1870.0	2. Frame, Wood, Exterior	13.0		1100.0	1.50		1650.0	
Base Total:				As-Built Total:		1390.0		1824.0			
<b>DOOR TYPES</b>											
Area X BSPM = Points				Type	R-Value		Area X SPM = Points				
Adjacent	18.0	2.40	43.2	1.Exterior Insulated			18.0	4.10		73.8	
Exterior	18.0	6.10	109.8	2.Adjacent Insulated			18.0	1.60		28.8	
Base Total:				As-Built Total:		36.0		102.6			
<b>CEILING TYPES</b>											
Area X BSPM = Points				Type	R-Value		Area X SPM X SCM = Points				
Under Attic	1404.0	1.73	2428.9	1. Under Attic	30.0		1404.0	1.73 X 1.00		2428.9	
				2. Under Attic	19.0		200.0	2.34 X 1.00		468.0	
Base Total:				As-Built Total:		1604.0		2896.9			
<b>FLOOR TYPES</b>											
Area X BSPM = Points				Type	R-Value		Area X SPM = Points				
Slab	180.0(p)	-37.0	-6660.0	1. Slab-On-Grade Edge Insulation	0.0		180.0(p)	-41.20		-7416.0	
Raised	0.0	0.00	0.0								
Base Total:				As-Built Total:		180.0		-7416.0			
<b>INFILTRATION</b>											
Area X BSPM = Points						Area X SPM = Points					
	1404.0	10.21	14334.8			1404.0		10.21		14334.8	

# SUMMER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

BASE				AS-BUILT						
<b>Summer Base Points: 17027.8</b>				<b>Summer As-Built Points: 16293.4</b>						
Total Summer Points	X System Multiplier	=	Cooling Points	Total Component (System - Points)	X Cap Ratio (DM x DSM x AHU)	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	=	Cooling Points
17027.8	0.3250		5534.0	(sys 1: Central Unit 28000btuh ,SEER/EFF(13.0) Ducts:Unc(S),Unc(R),Gar(AH),R6.0(INS) 16293                      1.00    (1.09 x 1.147 x 1.00)    0.260                      1.000                      5296.3 <b>16293.4                      1.00                      1.250                      0.260                      1.000                      5296.3</b>						



# WINTER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

BASE				AS-BUILT							
<b>GLASS TYPES</b>											
.18 X Conditioned X BWPM = Points Floor Area				Type/SC	Overhang Ornt Len Hgt		Area X WPM X WOF = Points				
.18	1404.0	20.17	5097.0	1.Double, Clear	E	2.0	5.0	59.0	18.79	1.08	1201.0
				2.Double, Clear	W	2.0	5.0	77.0	20.73	1.06	1690.0
				3.Double, Clear	S	2.0	5.0	4.0	13.30	1.40	74.0
				4.Double, Clear	N	2.0	5.0	6.0	24.58	1.01	148.0
				As-Built Total:		148.0 3113.0					
<b>WALL TYPES</b> Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Adjacent	290.0	3.60	1044.0	1. Frame, Wood, Adjacent	13.0		290.0	3.30	957.0		
Exterior	1100.0	3.70	4070.0	2. Frame, Wood, Exterior	13.0		1100.0	3.40	3740.0		
Base Total:				As-Built Total:		1390.0 4697.0					
<b>DOOR TYPES</b> Area X BWPM = Points				Type			Area X WPM = Points				
Adjacent	18.0	11.50	207.0	1.Exterior Insulated			18.0	8.40	151.2		
Exterior	18.0	12.30	221.4	2.Adjacent Insulated			18.0	8.00	144.0		
Base Total:				As-Built Total:		36.0 295.2					
<b>CEILING TYPES</b> Area X BWPM = Points				Type	R-Value		Area X WPM X WCM = Points				
Under Attic	1404.0	2.05	2878.2	1. Under Attic	30.0		1404.0	2.05 X 1.00	2878.2		
				2. Under Attic	19.0		200.0	2.70 X 1.00	540.0		
Base Total:				As-Built Total:		1604.0 3418.2					
<b>FLOOR TYPES</b> Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Slab	180.0(p)	8.9	1602.0	1. Slab-On-Grade Edge Insulation	0.0		180.0(p)	18.80	3384.0		
Raised	0.0	0.00	0.0								
Base Total:				As-Built Total:		180.0 3384.0					
<b>INFILTRATION</b> Area X BWPM = Points						Area X WPM = Points					
	1404.0	-0.59	-828.4			1404.0 -0.59 -828.4					

# WINTER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

BASE			AS-BUILT					
<b>Winter Base Points: 14291.2</b>			<b>Winter As-Built Points: 14079.0</b>					
Total Winter Points	X System Multiplier	= Heating Points	Total Component (System - Points)	X Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Heating Points
14291.2	0.5540	7917.3	(sys 1: Electric Heat Pump 30000 btuh ,EFF(8.0) Ducts:Unc(S),Unc(R),Gar(AH),R6.0 14079.0 1.000 (1.069 x 1.169 x 1.00)0.426 1.000 7499.5 14079.0 1.00 1.250 0.426 1.000 7499.5					

# WATER HEATING & CODE COMPLIANCE STATUS

## Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

BASE				AS-BUILT					
WATER HEATING									
Number of Bedrooms	X	Multiplier	= Total	Tank Volume	EF	Number of Bedrooms	X Tank X Ratio	Multiplier X Credit	= Total Multiplier
3		2635.00	7905.0	50.0	0.90	3	1.00	2693.56	1.00 8080.7
				As-Built Total:					8080.7

CODE COMPLIANCE STATUS									
BASE					AS-BUILT				
Cooling Points	+	Heating Points	+	Hot Water Points = Total Points	Cooling Points	+	Heating Points	+	Hot Water Points = Total Points
5534		7917		7905 21356	5296		7499		8081 20876

PASS



# Code Compliance Checklist

## Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

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 612.1.ABC.3.2. 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.**

1. New construction or existing	New	___	12. Cooling systems	
2. Single family or multi-family	Single family	___	a. Central Unit	Cap: 28.0 kBtu/hr
3. Number of units, if multi-family	1	___		SEER: 13.00
4. Number of Bedrooms	3	___	b. N/A	___
5. Is this a worst case?	Yes	___	c. N/A	___
6. Conditioned floor area (ft <sup>2</sup> )	1404 ft <sup>2</sup>	___		___
7. Glass type <sup>1</sup> and area: (Label reqd. by 13-104.4.5 if not default)		___	13. Heating systems	
a. U-factor:	Description Area	___	a. Electric Heat Pump	Cap: 30.0 kBtu/hr
(or Single or Double DEFAULT) 7a. (Dble Default) 146.0 ft <sup>2</sup>		___		HSPF: 8.00
b. SHGC:		___	b. N/A	___
(or Clear or Tint DEFAULT) 7b. (Clear) 146.0 ft <sup>2</sup>		___	c. N/A	___
8. Floor types		___	14. Hot water systems	
a. Slab-On-Grade Edge Insulation	R=0.0, 180.0(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, Adjacent	R=13.0, 290.0 ft <sup>2</sup>	___	(HR-Heat recovery, Solar	___
b. Frame, Wood, Exterior	R=13.0, 1100.0 ft <sup>2</sup>	___	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, 1404.0 ft <sup>2</sup>	___	MZ-C-Multizone cooling,	___
b. Under Attic	R=19.0, 200.0 ft <sup>2</sup>	___	MZ-H-Multizone heating)	___
c. N/A		___		___
11. Ducts		___		___
a. Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 123.0 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 EnergyStar<sup>TM</sup> 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](http://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 at 850/487-1824.

<sup>1</sup> Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.  
EnergyGauge® (Version: FLRCSB v4.5)



# **SCHAFER ENGINEERING, LLC**

**7104 N. W. 42<sup>ND</sup> LANE  
GAINESVILLE, FLORIDA 32606**

**THE ROBERTS RESIDENCE \ LOT 11 SUZANNE  
SUBDIVISION**

**SCHAFER ENGINEERING, LLC  
NO COPIES TO BE PERMITTED  
Florida Building Code \ Latest Edition**

**386-462-1340 / 352-375-6329**

**FILE COPY**

# SCHAFFER ENGINEERING LLC

**Trusses:** Pre-engineered with manufacturer's required bracing system installed.

**Roof sheathing:** Type OSB Size 7/16 Fastener type Nails Size 8d/113 Ring Shank  
R803.2.3.1

Interior zone spacing: Interior 6 in. Periphery 4 in.  
Edge and end zone spacing: Interior 6 in. Periphery 4 in.

**Top double pl:** Type Spruce Grade #1 #2 Size 2 x 4 Nail spacing 10 in.

**Studs:** Wood or Steel: Wood Type Spruce Grade #1 #2 Size 2 x 4

Interior stud spacing 16 in. Composite (yes or no) Y

End stud spacing 16 in. Composite (yes or no) Y

**Shearwall siding:** Type OSB Thickness 7/16 in.

Trans: Fastener 8d/131 Spacing: Int 8 in. Edge 4 in.

Long: Fastener 8d/131 Spacing: Int 8 in. Edge 4 in.

**Allowable unit shear on shearwalls:** 322 pounds per linear foot

**Unit shear transferred from diaphragm:** Trans: 65 Long: 62

**Wall tension transferred by:** Siding nails 8d/131 @ 4 O.C. edges

**Foundation anchor bolts:** Concrete strength 3000 psi

Size 1/2 in. Shape L Washer 2" Embedment 7 in.

Location of first anchor bolt from corner 8 in.

**Anchor Bolts @ 48" O.C.** Model A307 Loc. from corner 8 in.

**Type of foundation:** 1 #5 rebar continuous required in bond beam.

Floor slab 4 in. CMU: Size 8 x 16 in. Height 24 in. Reinf. #5 at 72 in.  
Monolithic footing: Depth 20 in. Bottom width 12 in.

**Footing:** Width 20 in. Depth 10 in. Reinforcing 2 --# 5 bars  
Interior Footings: 16" W X 10" D

**Porch Columns:** 4x4x8 Syp #2 PT @ 8'4" O.C. MAX

**Porch Column Fasteners:** Spruce CB44/CC44 OR EQUIV

## NOTE:

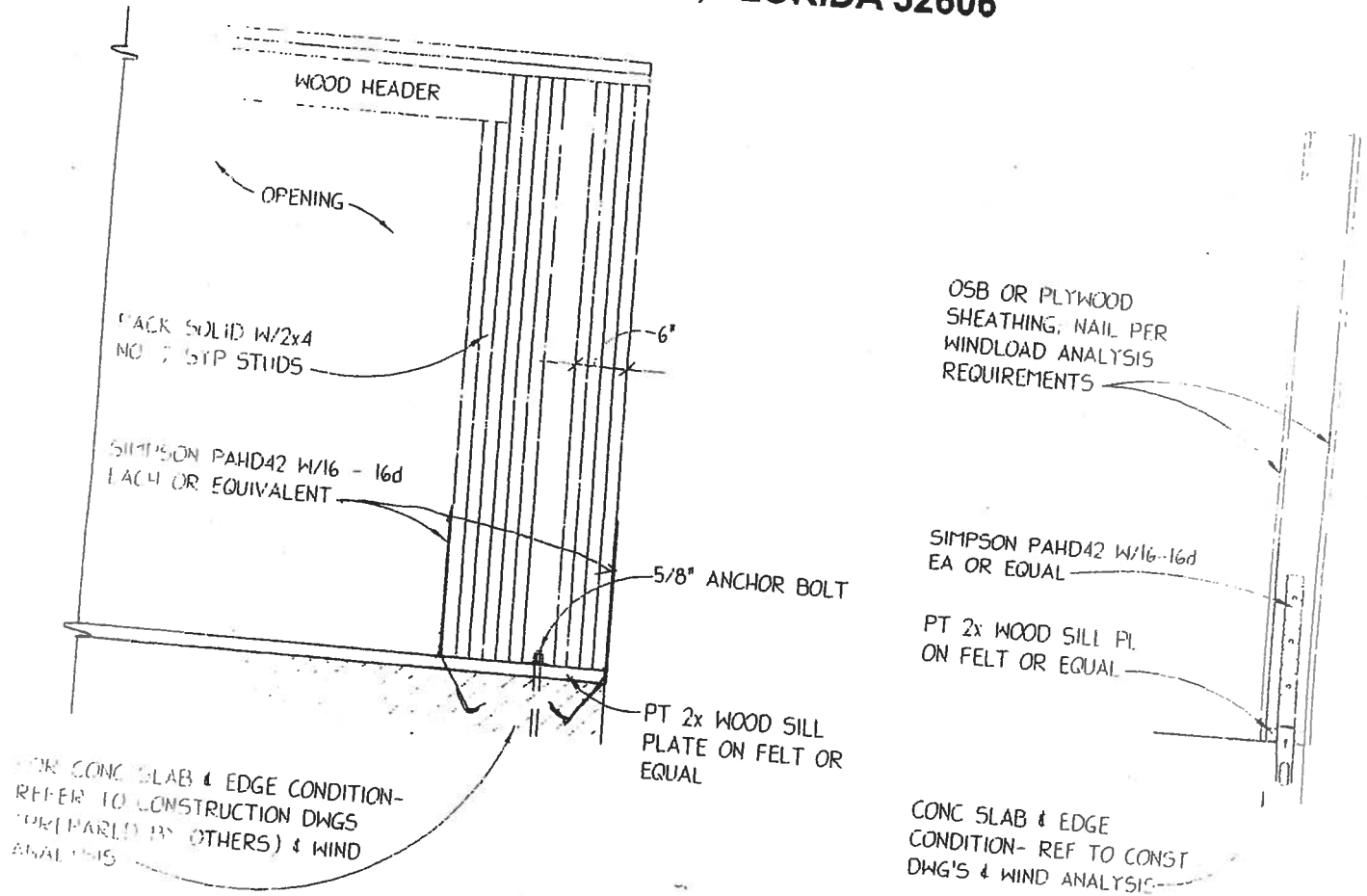
1. Balloon frame ALL gable ends unless this summary is accompanied by Gable End Wall Brace detail.
2. All trusses must bear on exterior walls & porch beams.
3. All walls to be nailed with same nailing pattern as shearwalls.
4. This is a windload only, NOT a structural analysis.
5. This windload is not valid without a raised, embossed seal.
6. It is assumed that ideal soil conditions and pad preparations are provided.
7. Fiber mesh or WWM may be used in concrete slab.
8. Trusses must be anchored and supported in accordance to the truss engineering.
9. Wind design and analysis valid for one use only, no copies permitted.
10. The foundation is for minimum design use and may be increased.
11. All headers over 12 feet to be pre-engineered.

48984

7104 NW 42nd Ln  
Gainesville, FL

# SCHAFER ENGINEERING, LLC

7104 N. W. 42<sup>ND</sup> LANE  
GAINESVILLE, FLORIDA 32606



FRONT VIEW

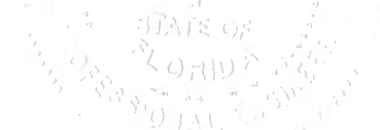
SIDE VIEW

EQUIVALENT 3'-0" SHEAR WALL SEGMENT

*B. Schaffer*

3-8-07

48984  
7104 NW 42nd Ln  
Gainesville, FL

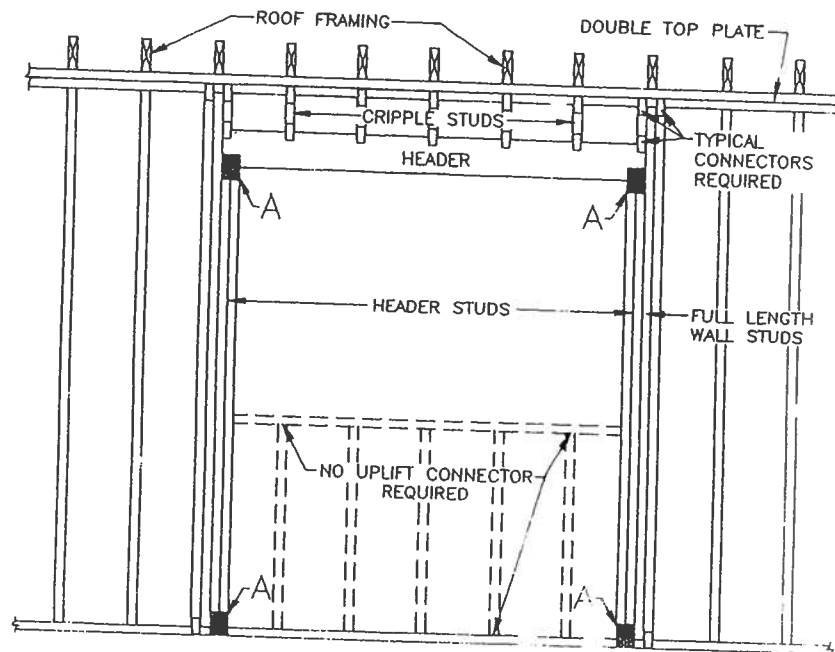


		Maximum Header Span (ft.)					
		3'	6'	9'	12'	15'	18'
		Number of Header Studs Supporting End of Header					
		1 <sup>1</sup>	1	2	2	2	2
Unsupported Wall Height	Stud Spacing	Number of Full-Length Studs at Each End of Header					
10' or less	12 in.	2	2	3	3	3	3
	16 in.	2	2	3	3	3	3
	24 in.	1	2	2	2	2	2
greater than 10'	12 in.	2	2	3	4	5	5
	16 in.	2	2	3	3	4	4
	24 in.	1	2	2	2	3	3

1. The header stud shall not be required if the header is supported by a suitable framing anchor.

Uplift connection requirement at points A (top and bottom of header studs). Uplift load per framing member above the header from Table 307F1 or 307A, as appropriate, multiplied by the number of framing members displaced divided by two.

NOTE. Uplift connection is required at each end of header and at bottom of header studs in addition to connectors at wall studs and at top and bottom of cripples.



## TIE-DOWN TABLES

HEADERS				
Uplift Force Lbs	Top Connector **	Rating Lbs	Bottom Connector **	Rating Lbs
to 455	LSTA9	725	H3	455
to 910	LSTA12	905	2-H3	910
to 1265	LSTA18	1265	LTT19	1350
to 1750	2-LSTA12	1810	LTT20	1750
to 2530	2-LSTA18	2530	HD2A-2.5	2565
to 2865	3-LSTA18	3255	HD2A-3.5	2865
to 3700	3-LSTA24	3880	HD5A-3	3700
Total uplift for each truss resting on the header and divide by 2 to determine the uplift force. Use proper bolt anchors sufficient to support required load.				

TRUSSES/GIRDERS		
Uplift Force Lbs	Top Connector **	Bottom Connector **
to 500	H2.5	N/A
501-1049	H10	N/A
1050-1350	TS22	LTT19
1351-1750	2-TS22	LTT20
1751-2570	2-TS22	HD2A
2571-3665	3-TS22	HD5A
3666-5260	2-MST148	HTT22
5261-8300	2-MST48	HD10A
Two 12d common toenails are required per truss/rafter per bearing point into plate. Use proper bolt anchors. Strap rafters to truss or at each end with minimum uplift resistance of 450# each end. Strap ridge beam at each end with minimum uplift resistance of 1000#. It is the contractors responsibility to provide a continuous load path from truss/rafter/ridge beam to foundation.		

	Top Connector **	Rating Lbs	Bottom Connector **	Rating
<b>BEAM SEATS</b>	LSTA18*	1200	LTT19*	1250
<b>POSTS</b> (max 17' spacing)	2-LSTA18	2400	ABU44	2300
*or per truss engineering Use proper bolt anchors All beams to be sheathed or strapped to Double Top Plate when applicable.				

<b>CRIPPLES</b>	Sheathing nailing alone adequate w/8d nails @ 3" O.C.
-----------------	---

<b>STUDS</b>
Wall sheathing nailing Adequate exterior walls bottom w/8d nails @ 3" O.C.
Use SP1 & SP2 @ 32" O.C. on all bearing walls.
Interior anchor bolts to be 1/2" x 8" A307 or 1/2" x 7" wedge anchor or equivalent.

\*\* Equivalent Simpson hardware, or other manufacturer, may be substituted for any of the hardware specified on this page as long as it meets the required load capacities/uplift resistance.

### NOTE:

1. For nailing into SPF members, multiply table values by .86
2. See truss engineering for anchor tie-down values.



# ASCE 7-02

3/7/07

## Wind Load Design per ASCE 7-02

User Input Data		
Structure Type	Building	
Basic Wind Speed (V)	110	mph
Structural Category	II	
Exposure	B	
Struc Nat Frequency (n1)	1	Hz
Slope of Roof (Theta)	26.6	Deg
Type of Roof	Hipped	
Eave Height (Eht)	9.50	ft
Ridge Height (RHt)	18.67	ft
Mean Roof Height (Ht)	14.02	ft
Width Perp. to Wind (B)	55.00	ft
Width Parallel to Wind (L)	50.00	ft
Damping Ratio (beta)	0.01	

Red values should be changed only through "Main Menu"

Calculated Parameters	
Type of Structure	
Height/Least Horizontal Dim	0.28
Flexible Structure	No

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

Gust Factor Category I: Rigid Structures - Simplified Method			
Gust1	For rigid structures (Nat Freq > 1 Hz) use 0.85	0.85	
Gust Factor Category II: Rigid Structures - Complete Analysis			
Zm	Zmin	30.00	ft
Izm	$Cc * (33/z)^{0.167}$	0.3048	
Lzm	$I*(zm/33)^{Epsilon}$	309.99	ft
Q	$(1/(1+0.63*((B+Ht)/Lzm)^{0.63}))^{0.5}$	0.8964	
Gust2	$0.925*((1+1.7*Izm*3.4*Q)/(1+1.7*3.4*Izm))$	0.8639	
Gust Factor Category III: Flexible or Dynamically Sensitive Structures			
Vhref	$V*(5280/3600)$	161.33	ft/s
Vzm	$bm*(zm/33)^{Am}*Vhref$	70.89	ft/s
NF1	$NatFreq*Lzm/Vzm$	4.37	Hz
Rn	$(7.47*Nf1)/(1+10.302*Nf1)^{1.667}$	0.0552	
Nh	$4.6*NatFreq*Ht/Vzm$	0.91	
Nb	$4.6*NatFreq*B/Vzm$	3.57	
Nd	$15.4*NatFreq*Depth/Vzm$	10.86	
Rh	$1/Nh-(1/(2*Nh^2)*(1-Exp(-2*Nh)))$	0.5930	
Rb	$1/Nb-(1/(2*Nb^2)*(1-Exp(-2*Nb)))$	0.2410	
Rd	$1/Nd-(1/(2*Nd^2)*(1-Exp(-2*Nd)))$	0.0878	
RR	$((1/Beta)*Rn*Rh*Rb*(0.53+0.47*Rd))^{0.5}$	0.6712	
gg	$+(2*LN(3600*n1))^{0.5}+0.577/(2*LN(3600*n1))^{0.5}$	4.19	
Gust3	$0.925*((1+1.7*Izm*(3.4^2*Q^2+GG^2*RR^2)/0.5)/(1+1.7*3.4*Izm))$	1.05	

Gust Factor Summary			
Main Wind-force resisting system:		Components and Cladding:	
Gust Factor Category:	I	Gust Factor Category:	I
Gust Factor (G)	0.86	Gust Factor (G)	0.86

# ASCE 7-02

3/7/07

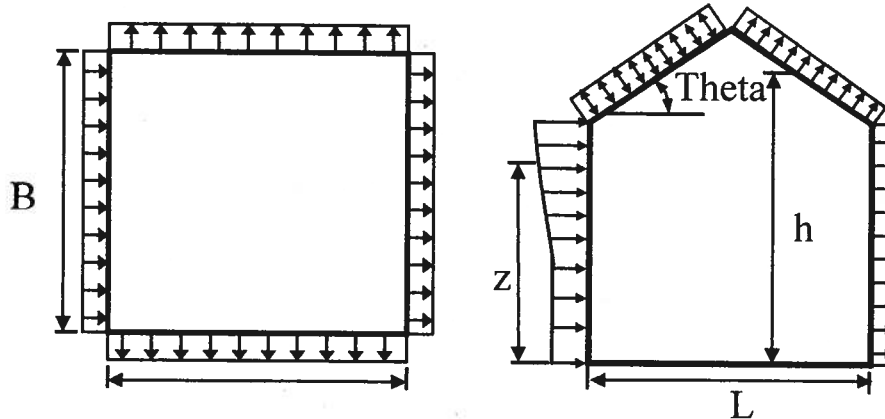
Wind Load Design per ASCE 7-02

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

Elev. ft	Kz	Kzt	Kd	qz lb/ft^2	Pressure (lb/ft^2)	
					Windward Wall*	
					+GCpi	-GCpi
18.67	0.70	1.00	1.00	21.70	11.79	18.20
15	0.70	1.00	1.00	21.70	11.79	18.20

**Figure 6-3 - External Pressure Coefficients, Cp**

Loads on Main Wind-Force Resisting Systems



Variable	Formula	Value	Units
Kh	$2.01 \cdot (15/z_g)^{2/\alpha}$	0.57	
Kht	Topographic factor (Fig 6-2)	1.00	
Qh	$.00256 \cdot (V)^2 \cdot \text{ImpFac} \cdot K_h \cdot K_{ht} \cdot K_d$	17.80	psf

Wall Pressure Coefficients, Cp	
Surface	Cp
Windward Wall (See Figure 6.5.12.2.1 for Pressures)	0.80

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

Description	Cp	Pressure (psf)	
		+GCpi	-GCpi
Leeward Walls (Wind Dir Parallel to 55 ft wall)	-0.50	-10.89	-4.48
Leeward Walls (Wind Dir Parallel to 50 ft wall)	-0.48	-10.59	-4.18
Side Walls	-0.70	-13.97	-7.56
Roof - Normal to Ridge (Theta >= 10)			
Windward - Max Negative	-0.21	-6.41	0.00
Windward - Max Positive	0.29	1.22	7.63
Leeward Normal to Ridge	-0.60	-12.43	-6.02
Overhang Top	-0.21	-3.20	-3.20
Overhang Bottom	0.80	0.69	0.69
Roof - Parallel to Ridge (All Theta)			
Dist from Windward Edge: 0 ft to 7.01 ft	-0.90	-17.05	-10.64
Dist from Windward Edge: 7.01 ft to 14.02 ft	-0.90	-17.05	-10.64
Dist from Windward Edge: 14.02 ft to 28.04 ft	-0.50	-10.89	-4.48

# ASCE 7-02

3/7/07

## Wind Load Design per ASCE 7-02

Dist from Windward Edge: > 28.04 ft	-0.30	-7.82	-1.41
-------------------------------------	-------	-------	-------

\* Horizontal distance from windward edge

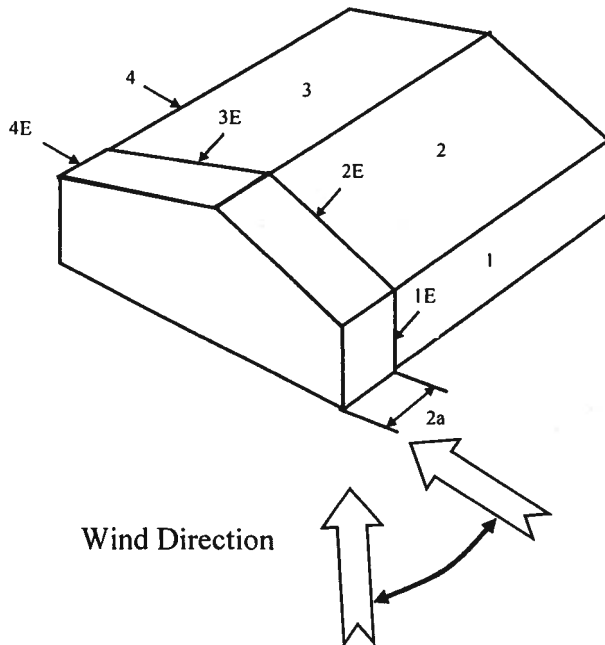
### Figure 6-4 - External Pressure Coefficients, GCpf

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

Kh =	$2.01 \cdot (15/z_g)^{(2/\alpha)}$	=	0.57
Kht =	Topographic factor (Fig 6-2)	=	1.00
Qh =	$0.00256 \cdot (V)^2 \cdot \text{ImpFac} \cdot K_h \cdot K_{ht} \cdot K_d$	=	17.80

Case A						
Surface	GCpf	+GCpi	-GCpi	qh (psf)	Min P (psf)	Max P (psf)
1	0.55	0.18	-0.18	21.70	8.03	15.84
2	-0.10	0.18	-0.18	21.70	-5.99	1.82
3	-0.45	0.18	-0.18	21.70	-13.61	-5.79
4	-0.39	0.18	-0.18	21.70	-12.38	-4.57
5	0.00	0.18	-0.18	21.70	-3.91	3.91
6	0.00	0.18	-0.18	21.70	-3.91	3.91
1E	0.73	0.18	-0.18	21.70	11.88	19.69
2E	-0.19	0.18	-0.18	21.70	-7.93	-0.12
3E	-0.58	0.18	-0.18	21.70	-16.59	-8.78
4E	-0.53	0.18	-0.18	21.70	-15.50	-7.69
5E	0.00	0.18	-0.18	21.70	-3.91	3.91
6E	0.00	0.18	-0.18	21.70	-3.91	3.91

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



# ASCE 7-02

3/7/07

## Wind Load Design per ASCE 7-02

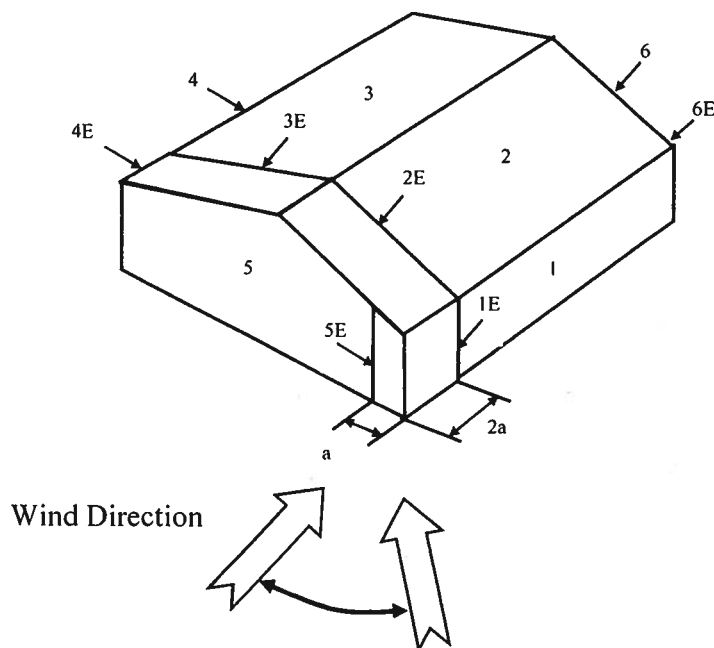
**Figure 6-4 - External Pressure Coefficients, GCpf**

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

$$\begin{aligned} K_h &= 2.01 \cdot (15/z_g)^{2/\alpha} &= & 0.57 \\ K_{ht} &= \text{Topographic factor (Fig 6-2)} &= & 1.00 \\ Q_h &= 0.00256 \cdot (V)^2 \cdot \text{ImpFac} \cdot K_h \cdot K_{ht} \cdot K_d &= & 17.80 \end{aligned}$$

Case B						
Surface	GCpf	+GCpi	-GCpi	qh (psf)	Min P (psf)	Max P (psf)
1	-0.45	0.18	-0.18	21.70	-13.67	-5.86
2	-0.69	0.18	-0.18	21.70	-18.88	-11.07
3	-0.37	0.18	-0.18	21.70	-11.94	-4.12
4	-0.45	0.18	-0.18	21.70	-13.67	-5.86
5	0.40	0.18	-0.18	21.70	4.77	12.59
6	-0.29	0.18	-0.18	21.70	-10.20	-2.39
1E	-0.48	0.18	-0.18	21.70	-14.32	-6.51
2E	-1.07	0.18	-0.18	21.70	-27.13	-19.31
3E	-0.53	0.18	-0.18	21.70	-15.41	-7.60
4E	-0.48	0.18	-0.18	21.70	-14.32	-6.51
5E	0.61	0.18	-0.18	21.70	9.33	17.14
6E	-0.43	0.18	-0.18	21.70	-13.24	-5.43

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

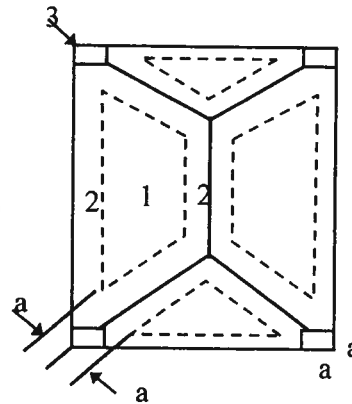
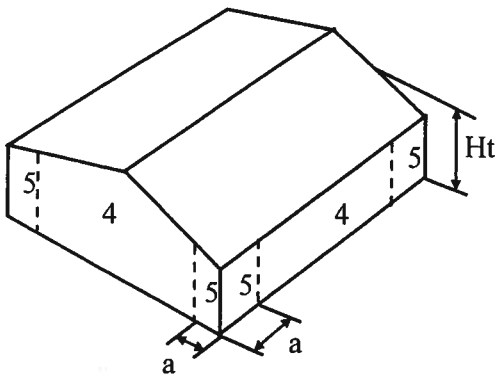


**Figure 6-5 - External Pressure Coefficients, GCp**

Loads on Components and Cladding for Buildings w/ Ht ≤ 60 ft

## Wind Load Design per ASCE 7-02

3/7/07



## Hipped Roof

 $10 < \text{Theta} \leq 30$ 
$$a = 5 \implies \boxed{5.00 \text{ ft}}$$
[illegible]

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

**Table 6-7 Internal Pressure Coefficients for Buildings,  $C_{pi}$**

Condition	Gcpi	
	Max +	Max -



**ASCE 7-02**

3/7/07

**Wind Load Design per ASCE 7-02**

Open Buildings	0.00	0.00
Partially Enclosed Buildings	0.55	-0.55
Enclosed Buildings	0.18	-0.18
<b>Enclosed Buildings</b>	<b>0.18</b>	<b>-0.18</b>

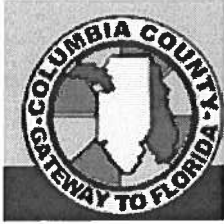
**Table 6-8 External Pressure Coefficients for Arched Roofs,  $C_p$** 

r (Rise-to-Span Ratio) = 0.3

Condition	Variable	$C_p$		
		Windward Quarter	Center Half	Leeward Quarter
Roof on Elevated Structure	$C_p$	0.13	-1	-0.5
	P (+GCpi) - psf	-1.28	-18.58	-10.89
	P (-GCpi) - psf	5.13	-12.17	-4.48
Roof Springing from Ground	$C_p$	0.42	-1	-0.5
	P (+GCpi) - psf	3.25	-18.58	-10.89
	P (-GCpi) - psf	3.25	-18.58	-10.89

**Table 6-9 Force Coefficients for Monoslope Roofs over Open Buildings,  $C_f$** 

Variable	Description	Value	
L	Roof dimension normal to wind direction	50.00	ft
B	Roof dimension parallel to wind direction	55.00	ft
L/B	Ratio of L to B	0.909	
Theta	Slope of Roof	26.6	Deg
$C_f$	Force Coefficient	1.19	
X	Distance to center of pressure from windward edge	0.42	ft



From: The Columbia County Building & Zoning Department  
Plan Review  
135 NE Hernando Av.  
P.O. Box 1529  
Lake City Florida 32056-1529

Reference to a building permit application Number: **0706-21**

Mike Roberts Owner/Builder Property ID# 03-4s-17-07590-117 on the date of June 13, 2007 application 0706-21 and plans for construction of a single family dwelling was reviewed and the following information or alteration to the plans will be required to continue processing this application. If you should have any question please contact the above address, or contact phone number (386) 758-1163 or fax any information to (386) 754-7088.

**Please include application number 0706-21 and when making reference to this application.**

**This is a plan review for compliance with the Florida Residential Code 2004 only and doesn't make any consideration toward the land use and zoning requirements.**

1. The energy efficiency which was submitted form 600A-2004R line number six (condition floor space) has the total square of condition floor space as 1404 square feet. The submitted plan notes within the area summary that the living area is 1495. Line six of the form should equal the living area. Please have the preparer of this Florida Energy Efficiency Code For Building Construction recalculate this for using the correct total condition (living) area.
2. The floor plan shows a 16 foot garage door opening. The truss plan shows that the roof trusses will bear over this opening. Please have your windload engineer design the proper header which will span this opening. Show the header size, type, number of king jack studs. Also show the required fastening device which will be required to connect this header to the foundation.

3. The electrical plans show no detail as to the size and location of the electrical service. On the electrical plans identify the electrical service overcurrent protection device for the main electrical service. This device shall be installed on the exterior of structures to serve as a disconnecting means for the utility company electrical service. Conductors used from the exterior disconnecting means to a panel or sub panel shall have four-wire conductors, of which one conductor shall be used as an equipment ground. Also show the total amperage rating for the electrical service.
4. The garage area shows an attic pull down access door. This door is considered by the residential building section R309.1 as an opening between the garage and residence this door shall have a 20-minute fire-rated door. The entry door into the living area from the garage shall also be a 20-minute fire-rated door.

Please correct the above requirements and submit a written addendum which corrects these requirements.

Joe Haltiwanger

Plan Examiner  
Columbia County Building Department

# **iLevel**™ **TRUS JOIST**®

engineered lumber products

Southeast Division  
6001 Jackson Square, Suite 600  
LaVergne, TN 37086  
Phone: (615) 793-7788  
Toll Free: (800) 854-5647  
Fax: (615) 793-7721

## Transmittal Cover Sheet

<b>To:</b>	<b>Kim Halloway</b>
<b>Company:</b>	<b>Builders First Source</b>
	<b>2525 East Duval Street</b>
	<b>Lake City, FL 32055</b>
<b>Phone:</b>	<b>386-755-6894</b>
<b>FAX:</b>	<b>386-755-7973</b>

**Date:** **6/22/07**

**From:** **Chad Wall**

**Number of pages  
(including cover)**

**2**

**3** Copies to follow by:

☐ Mail ☐ Electronic ☐ Next Day ☒ 2<sup>nd</sup> Day

☐ Original will not follow

**Project Information:**

**Lot 11 Suzanne**

**Columbia County, FL**

**Comments:**

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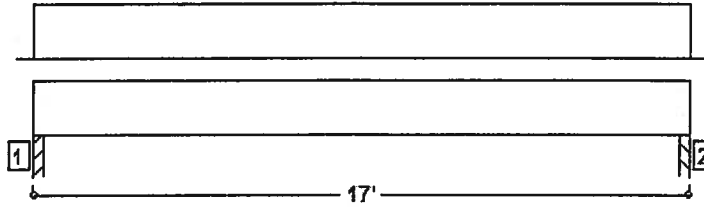
Thank you for specifying Trus Joist products.

## Garage Door Header

2 Pcs of 1 3/4" x 11 7/8" 1.9E Microllam® LVL

**THIS PRODUCT MEETS OR EXCEEDS THE SET DESIGN CONTROLS FOR THE APPLICATION AND LOADS LISTED**

Member Slope: 0/12 Roof Slope 0/12



All dimensions are horizontal.

Product Diagram is Conceptual.

### LOADS:

Analysis is for a Drop Beam Member. Tributary Load Width: 1'

Primary Load Group - Roof (psf): 20.0 Live at 125 % duration, 15.0 Dead

Vertical Loads:

Type	Class	Live	Dead	Location	Application	Comment
Uniform(plf)	Roof(1.25)	99.0	40.0	0 To 17'	Adds To	EJ3 Loads

### SUPPORTS:

	Input Width	Bearing Length	Vertical Reactions (lbs) Live/Dead/Uplift/Total	Detail	Other
1 Trimmers	3.00"	1.50"	1012 / 565 / 0 / 1577	L2	None
2 Trimmers	3.00"	1.50"	1012 / 565 / 0 / 1577	L2	None

### DESIGN CONTROLS:

	Maximum	Design	Control	Control	Location
Shear (lbs)	1553	-1347	9871	Passed (14%)	Rt. end Span 1 under Roof loading
Moment (Ft-Lbs)	6505	6505	22310	Passed (29%)	MID Span 1 under Roof loading
Live Load Defl (in)		0.239	0.558	Passed (L/840)	MID Span 1 under Roof loading
Total Load Defl (in)		0.373	0.837	Passed (L/539)	MID Span 1 under Roof loading

-Deflection Criteria: MINIMUM(LL:L/360,TL:L/240).

-Bracing(Lu): All compression edges (top and bottom) must be braced at 17' o/c unless detailed otherwise. Proper attachment and positioning of lateral bracing is required to achieve member stability.

### ADDITIONAL NOTES:

-IMPORTANT! The analysis presented is output from software developed by Trus Joist (TJ). Allowable product values shown are in accordance with current TJ materials and code accepted design values. TJ Engineering has verified the analysis. The input loads and dimensions have been provided by others (KIM HOLLOWAY: BFS) and must be verified and approved for the specific application by the design professional for the project.

-THIS ANALYSIS FOR TRUS JOIST PRODUCTS ONLY! PRODUCT SUBSTITUTION VOIDS THIS ANALYSIS.

-Allowable Stress Design methodology was used for Building Code IBC analyzing the TJ Custom product listed above.

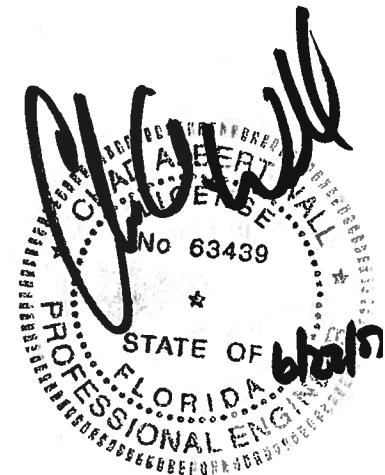
-Note: See TJ SPECIFIER'S / BUILDER'S GUIDES for multiple ply connection.

### PROJECT INFORMATION:

L229281  
 Lot 11 Suzanne  
 Columbia County, FL

### OPERATOR INFORMATION:

Chad A. Wall, P.E.  
 iLevel by Weyerhaeuser:  
 South Central Division  
 6001 Jackson Square Suite 600  
 LaVergne, TN 37086  
 Phone : 615-793-7788

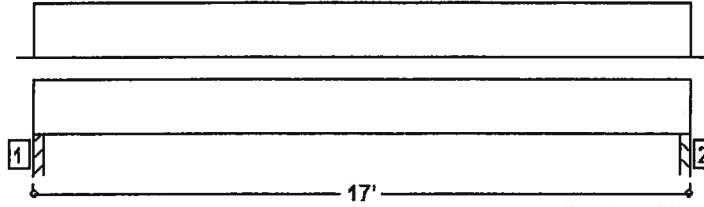


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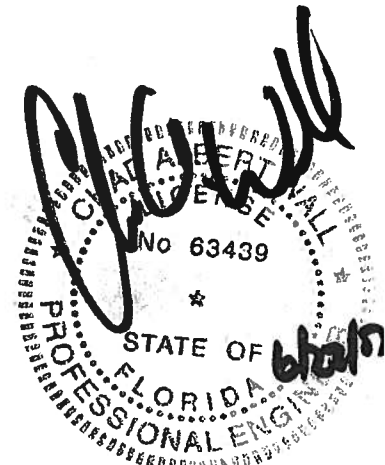
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### PROJECT INFORMATION:

L229281  
 Lot 11 Suzanne  
 Columbia County, FL

### OPERATOR INFORMATION:

Chad A. Wall, P.E.  
 iLevel by Weyerhaeuser:  
 South Central Division  
 6001 Jackson Square Suite 600  
 LaVergne, TN 37086  
 Phone : 615-793-7788

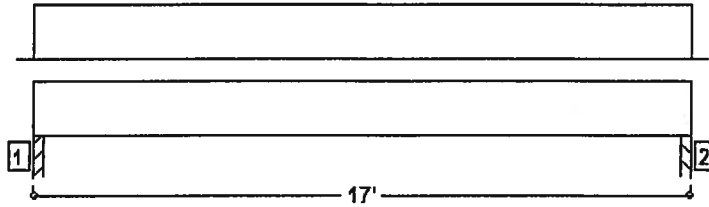


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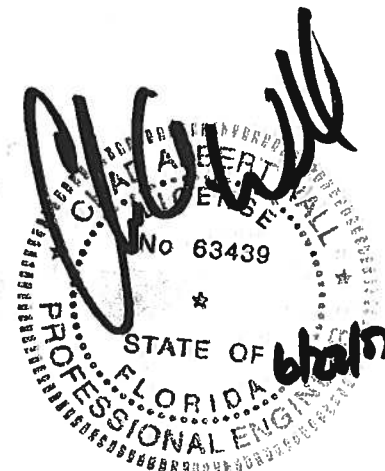
-Note: See TJ SPECIFIER'S / BUILDER'S GUIDES for multiple ply connection.

## PROJECT INFORMATION:

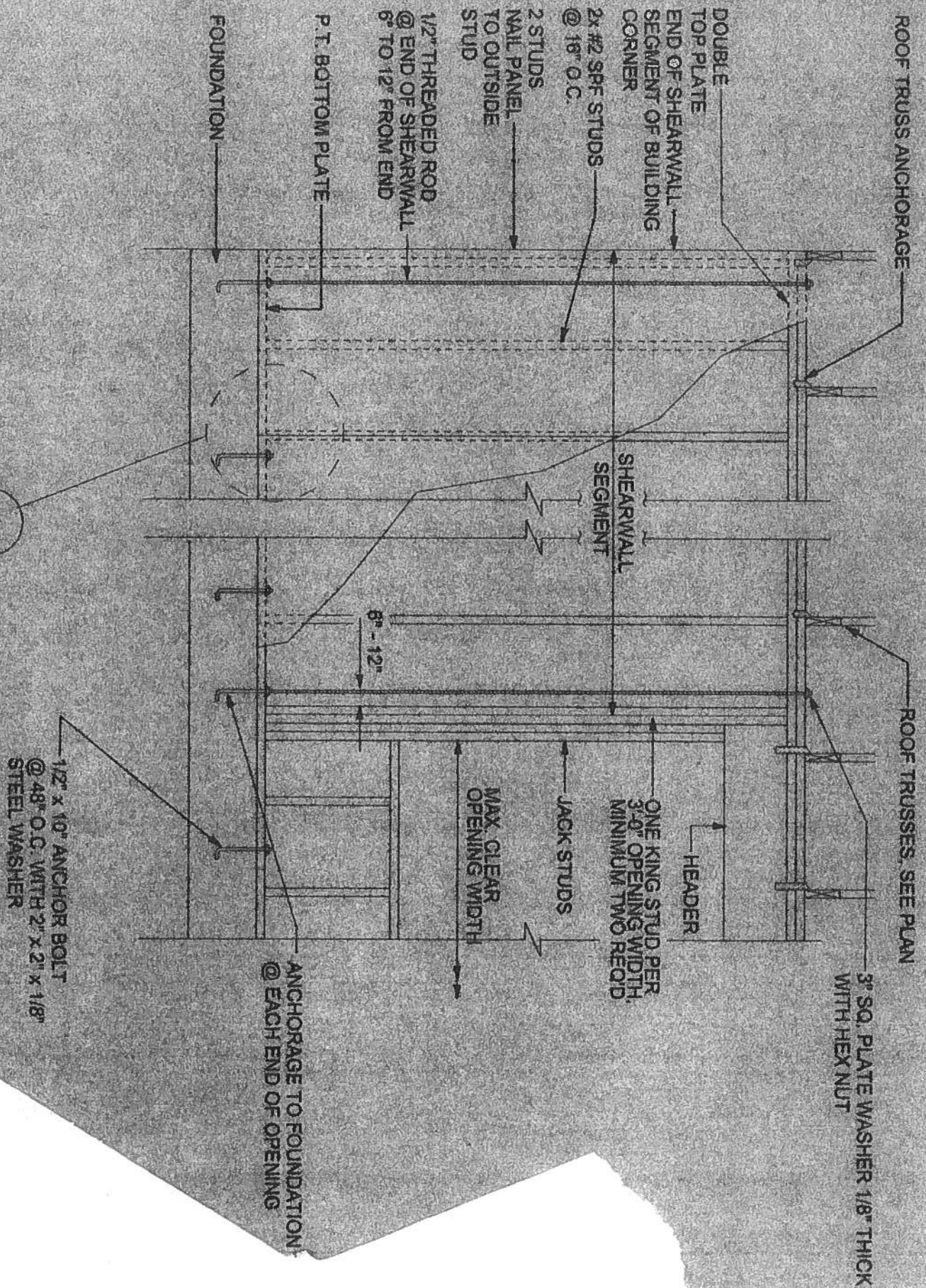
L229281  
 Lot 11 Suzanne  
 Columbia County, FL

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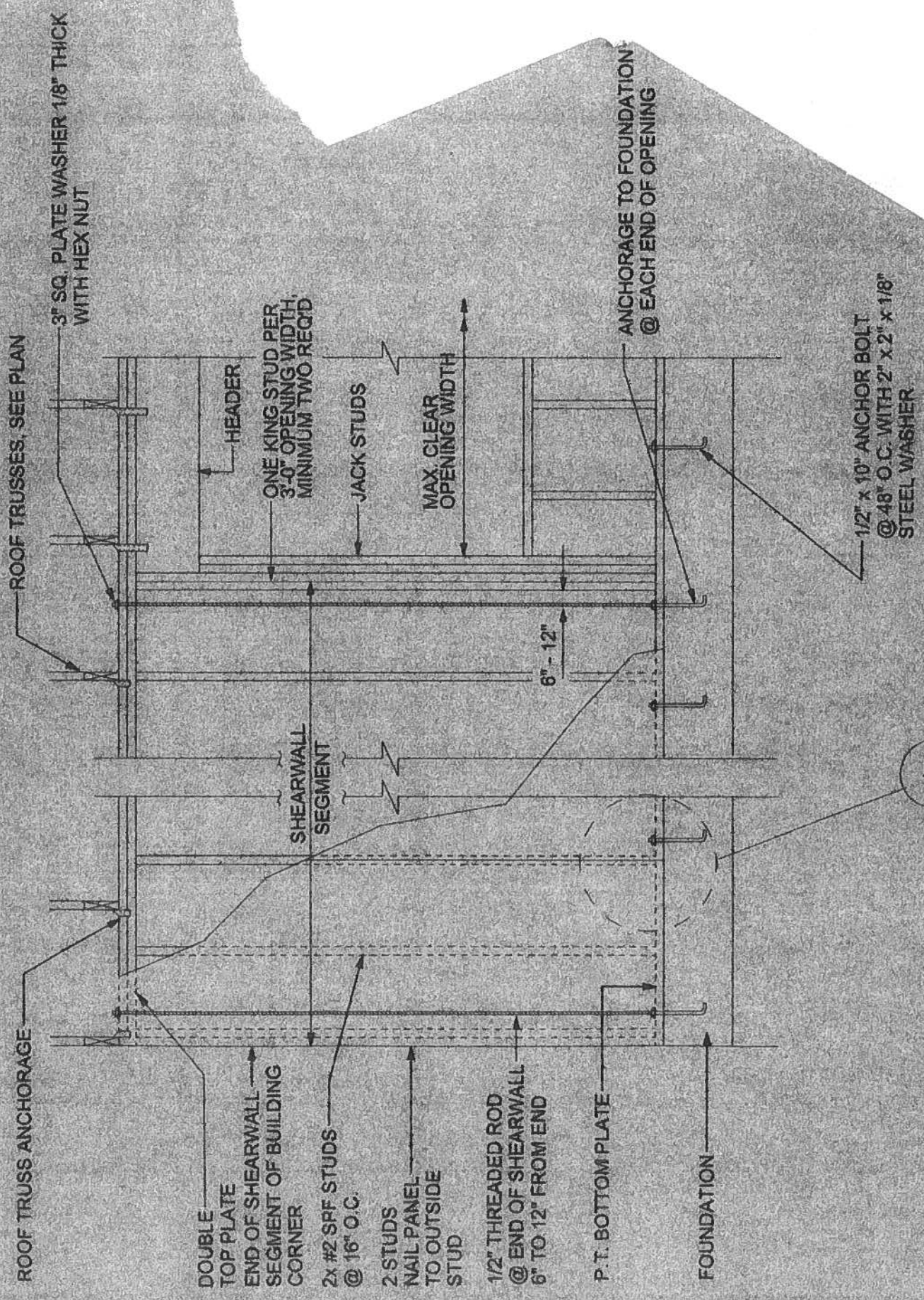




1

# SHEARWALL DETAILS

SCALE: 1/2" = 1'-0"



# SHEARWALL DETAILS

SCALE: 1/2" = 1'-0"



MAR 07 2007

# LATERAL TOE-NAIL DETAIL

## ST-TOENAIL

MITek Industries, Chesterfield, MO Page 1 of 1

### NOTES:

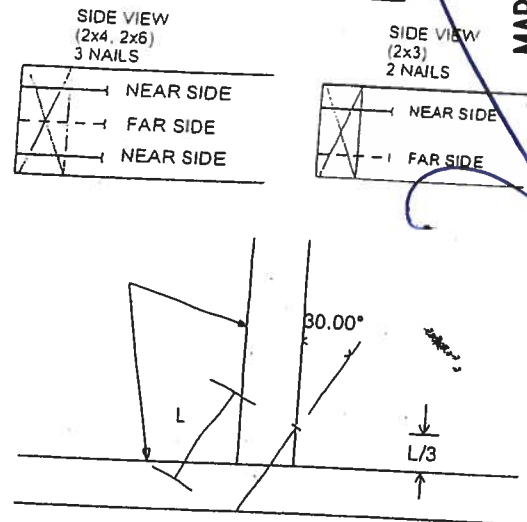
- TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 30 DEGREES WITH THE MEMBER AND STARTED 1/3 THE LENGTH OF THE NAIL FROM THE MEMBER END AS SHOWN.
- THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
- ALLOWABLE VALUE SHALL BE THE LESSER VALUE OF THE BOTTOM CHORD SPECIES FOR MEMBERS OF DIFFERENT SPECIES.

TOE-NAIL SINGLE SHEAR VALUES PER NDS 2001 (lb/nail)

	DIAM.	SYP
3.5" LONG	.131	83.3
	.135	89.6
	.162	118.3
3.25" LONG	.128	80.5
	.131	83.3
	.148	102.1
3.0" LONG	.120	70.5
	.128	80.5
	.131	83.3
	.148	102.1

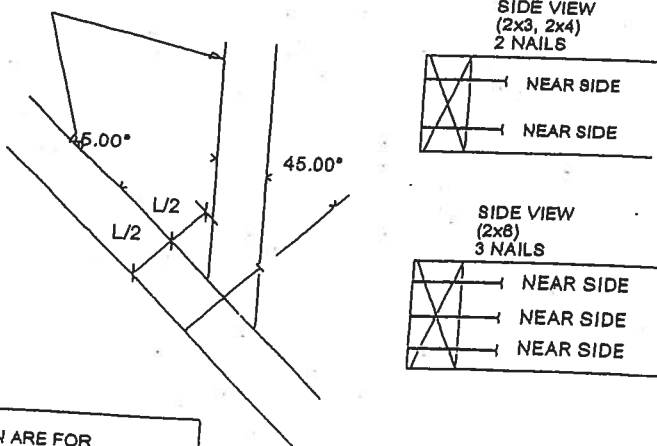
VALUES SHOWN ARE CAPACITY PER TOE-NAIL.  
APPLICABLE DURATION OF LOAD INCREASES MAY BE APPLIED.

### SQUARE CUT



### 45 DEGREE ANGLE BEVEL CUT

This detail may only be applied to Pre-engineered truss drawings signed and sealed by Structural Engineering and Inspections Inc.



VIEWS SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY

Byron K. Anderson, FL PE 60987 EB #9196

The seal on this drawing indicates acceptance of professional engineering responsibility solely for the truss component design shown. The suitability and use of this component for any particular building design is the responsibility of the building designer.

Job L229281	Truss CJ1	Truss Type JACK	Qty 16	Ply 1	CASH ACCOUNT - MIKE ROBERTS <small>Job Reference (optional)</small>
Builders FirstSource, Lake City, Fl 32055			6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Mar 02 10:57:18 2007 Page 1		

Scale = 1/2" = 1'-0"

<b>LOADING</b> (psf)	<b>SPACING</b> 2-0-0	<b>CSI</b>	<b>DEFL</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plates Increase 1.25	TC 0.28	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.01	Vert(LL) -0.00 2 >999 240		
BCLL 10.0	Rep Stress Incr YES	WB 0.00	Vert(TL) -0.00 2 >999 180		
BCDL 5.0	Code FBC2004/TPI2002	(Matrix)	Horz(TL) 0.00 3 n/a n/a		
				Weight: 7 lb	

<b>LUMBER</b> TOP CHORD 2 X 4 SYP No.2 BOT CHORD 2 X 4 SYP No.2	<b>BRACING</b> TOP CHORD Structural wood sheathing directly applied 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=87(load case 5)  
 Max Uplift2=-288(load case 5), 4=-9(load case 3), 3=-90(load case 1)  
 Max Grav 2=266(load case 1), 4=14(load case 1), 3=127(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/47, 2-3=-69/75  
 BOT CHORD 2-4=0/0

**NOTES**  
 1) Wind: ASCE 7-02; 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; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.  
 2) Refer to girder(s) for truss to truss connections.  
 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 286 lb uplift at joint 2, 9 lb uplift at joint 4 and 90 lb uplift at joint 3.

**LOAD CASE(S)** Standard

Job L229281	Truss CJ3	Truss Type JACK	Qty 16	Ply 1	CASH ACCOUNT - MIKE ROBERTS
Builders FirstSource, Lake City, FL 32055			6.300 s Apr 19 2006 Mike Industries, Inc. Fri Mar 02 10:57:40 2007 Page 1		

Scale = 1/11.1

<b>LOADING</b> (psf)	<b>SPACING</b>	<b>CSI</b>	<b>DEFL</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.29	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.08	Vert(LL) 0.01 2-4 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.00	Vert(TL) -0.01 2-4 >999 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) -0.00 3 n/a n/a		
	Code FBC2004/TPI2002			Weight: 13 lb	

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

**REACTIONS** (lb/size) 3=31/Mechanical, 2=278/0-3-8, 4=42/Mechanical  
 Max Horz 2=132(load case 5)  
 Max Uplift 3=-28(load case 6), 2=-238(load case 5), 4=-27(load case 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/47, 2-3=-57/7  
 BOT CHORD 2-4=0/0

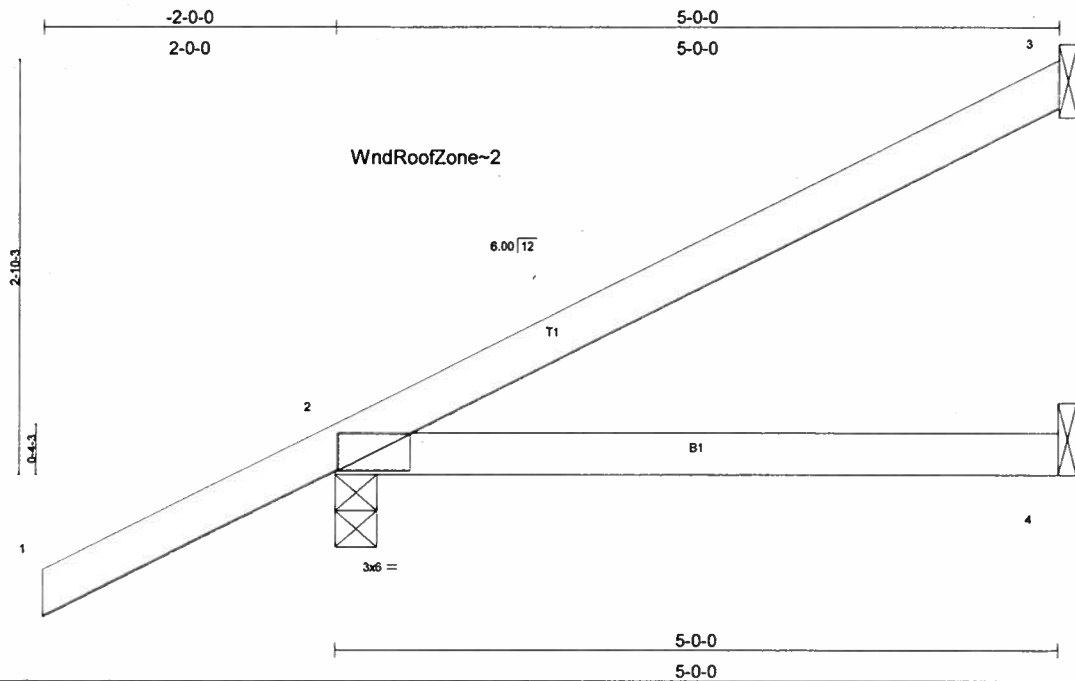
**NOTES**  
 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.  
 2) Refer to girder(s) for truss to truss connections.  
 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 3, 238 lb uplift at joint 2 and 27 lb uplift at joint 4.

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	CASH ACCOUNT - MIKE ROBERTS
L229281	CJ5	JACK	12	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

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Scale = 1:15.0

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.29	Vert(LL)	0.09	2-4	>663	240	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.24	Vert(TL)	0.07	2-4	>774	180		
BCLL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL 5.0	Code FBC2004/TPI2002		(Matrix)							
									Weight: 19 lb	

**LUMBER**

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

**BRACING**

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

**REACTIONS**

(lb/size) 3=103/Mechanical, 2=343/0-3-8, 4=72/Mechanical  
 Max Horz 2=178(load case 5)  
 Max Uplift 3=-87(load case 5), 2=-260(load case 5), 4=-46(load case 3)

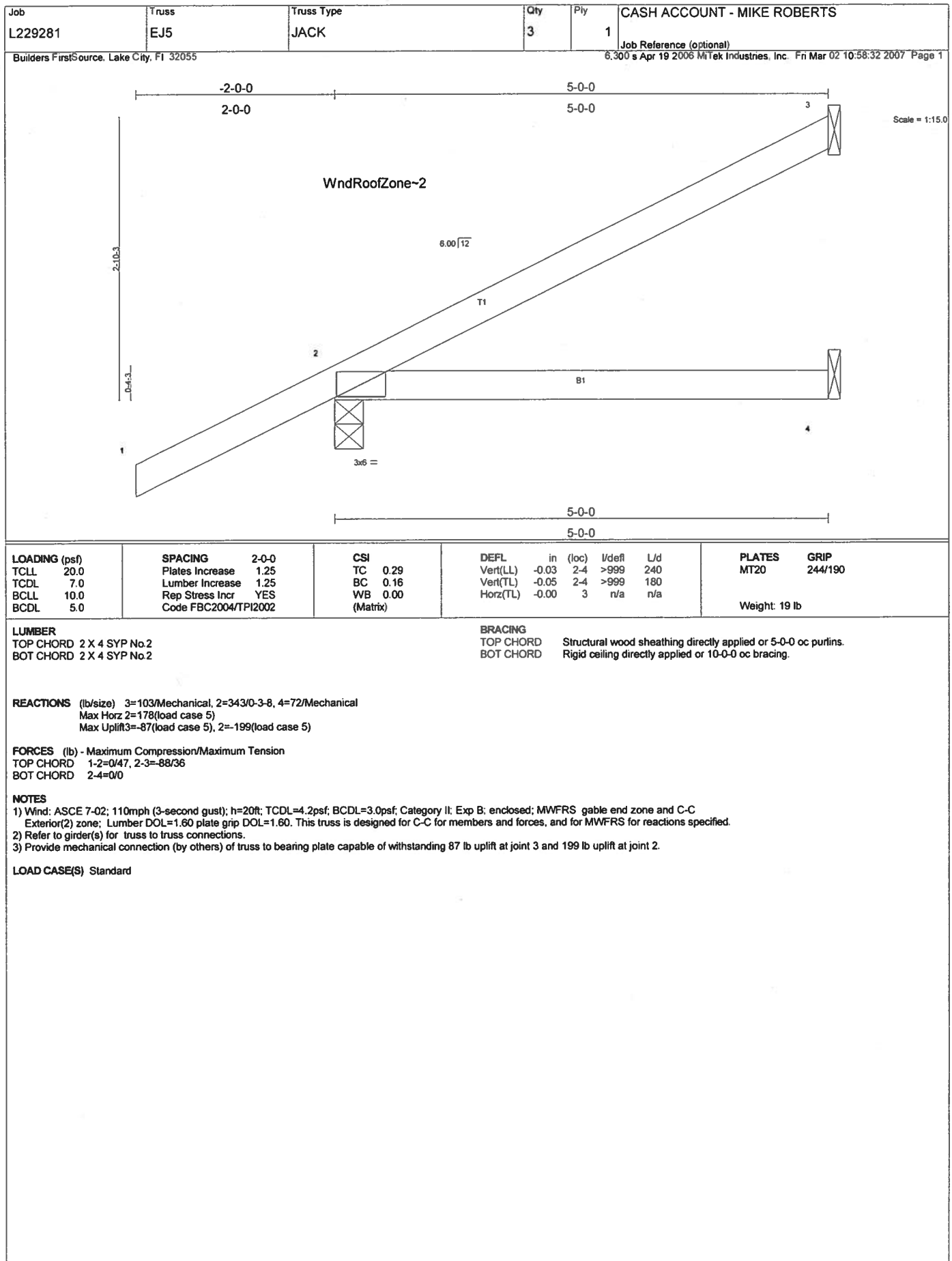
**FORCES (lb) - Maximum Compression/Maximum Tension**

TOP CHORD 1-2=0/47, 2-3=-88/36  
 BOT CHORD 2-4=0/0

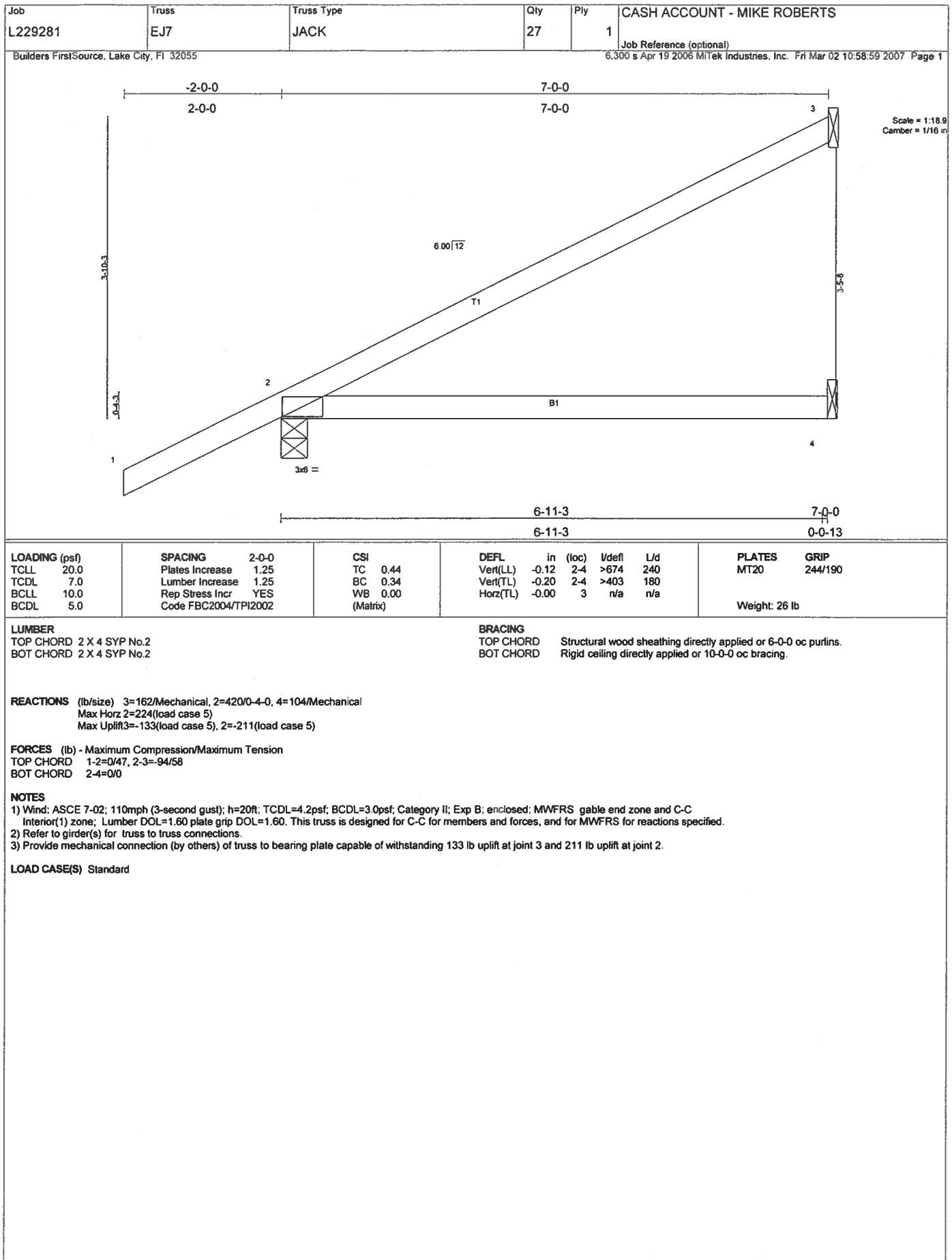
**NOTES**

- 1) Wind: ASCE 7-02; 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 left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) Refer to girder(s) for truss to truss connections.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 3, 260 lb uplift at joint 2 and 46 lb uplift at joint 4.

LOAD CASE(S) Standard







Job L229281	Truss EJ7A	Truss Type COMMON	Qty 1	Ply 1	CASH ACCOUNT - MIKE ROBERTS
Builders FirstSource, Lake City, FI 32055			Job Reference (optional) 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Mar 02 10:59:49 2007 Page 1		

Scale = 1/207  
Camber = 1/16 in

<b>LOADING</b> (psf)	<b>SPACING</b> 2-0-0	<b>CSI</b>	<b>DEFL</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plates Increase 1.25	TC 0.41	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.38	Vert(LL) -0.14 2-6 >597 240		
BCLL 10.0	Rep Stress Incr YES	WB 0.04	Vert(TL) -0.23 2-6 >360 180		
BCDL 5.0	Code FBC2004/TPI2002	(Matrix)	Horz(TL) 0.00 n/a n/a		
				Weight: 30 lb	

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

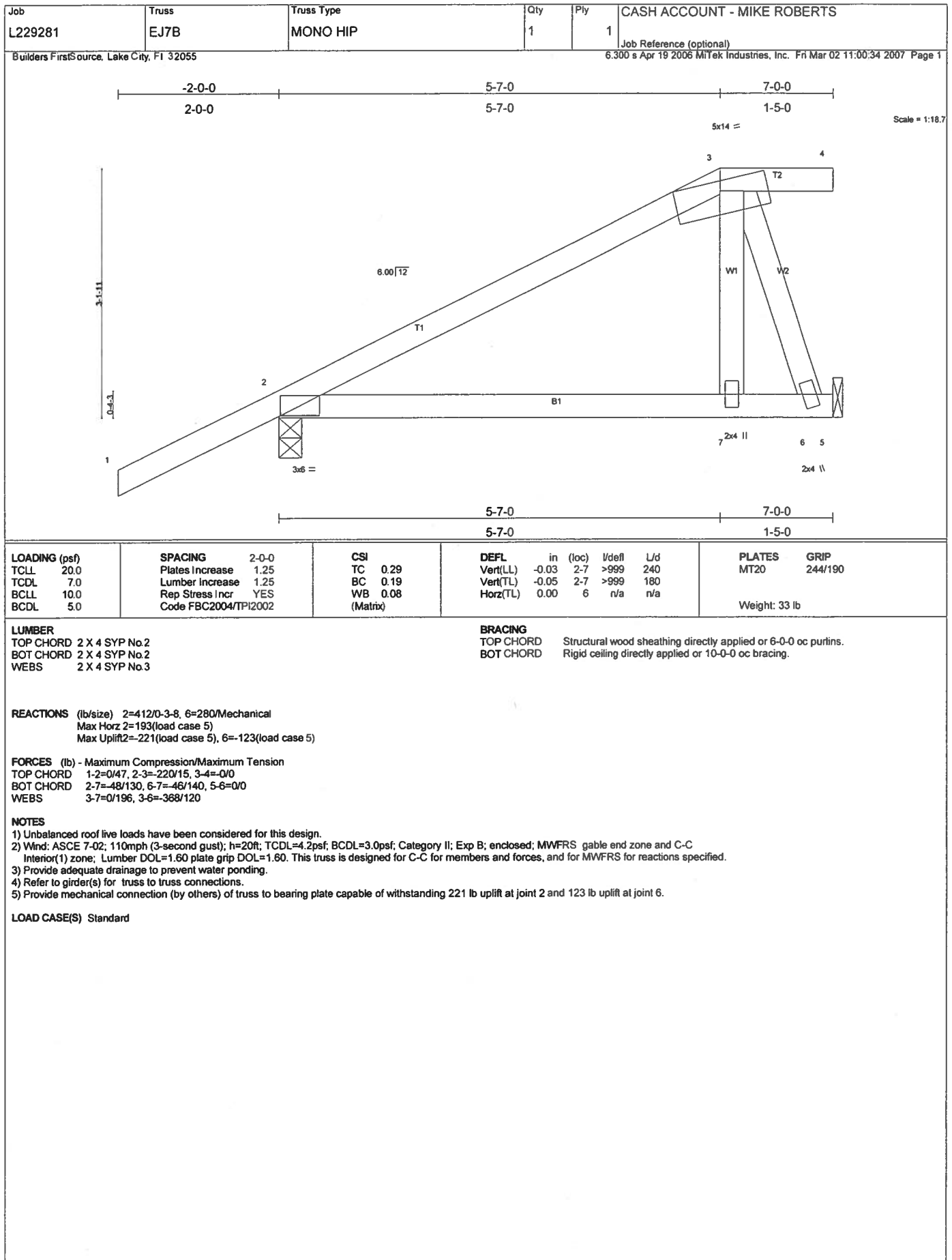
  

**REACTIONS** (lb/size) 2=419/0-3-8, 5=270/Mechanical  
 Max Horz 2=205(load case 5)  
 Max Uplift 2=-219(load case 5), 5=-121(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/47, 2-3=-87/56, 3-4=0/10  
 BOT CHORD 2-6=0/0, 5-6=0/0  
 WEBS 3-6=-180/140

**NOTES**  
 1) Unbalanced roof live loads have been considered for this design.  
 2) Wind: ASCE 7-02: 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Interior(1) 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) Refer to girder(s) for truss to truss connections.  
 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 219 lb uplift at joint 2 and 121 lb uplift at joint 5.

**LOAD CASE(S)** Standard



Job <b>L229281</b>	Truss <b>HJ7</b>	Truss Type <b>MONO TRUSS</b>	Qty <b>2</b>	Ply <b>1</b>	CASH ACCOUNT - MIKE ROBERTS <small>Job Reference (optional)</small>
<small>Builders FirstSource, Lake City, FL 32055</small>			<small>6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Mar 02 11:01:16 2007 Page 1</small>		

<b>LOADING (psf)</b>	<b>SPACING</b>	<b>CSI</b>	<b>DEFL</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.54	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.27	Vert(LL) -0.07 2-4 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.00	Vert(TL) -0.13 2-4 >627 180		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL) -0.00 3 n/a n/a		
	Code FBC2004/TPI2002			Weight: 26 lb	

<b>LUMBER</b> TOP CHORD 2 X 4 SYP No.2 BOT CHORD 2 X 4 SYP No.2	<b>BRACING</b> TOP CHORD Structural wood sheathing directly applied or 7-0-14 oc purlins. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
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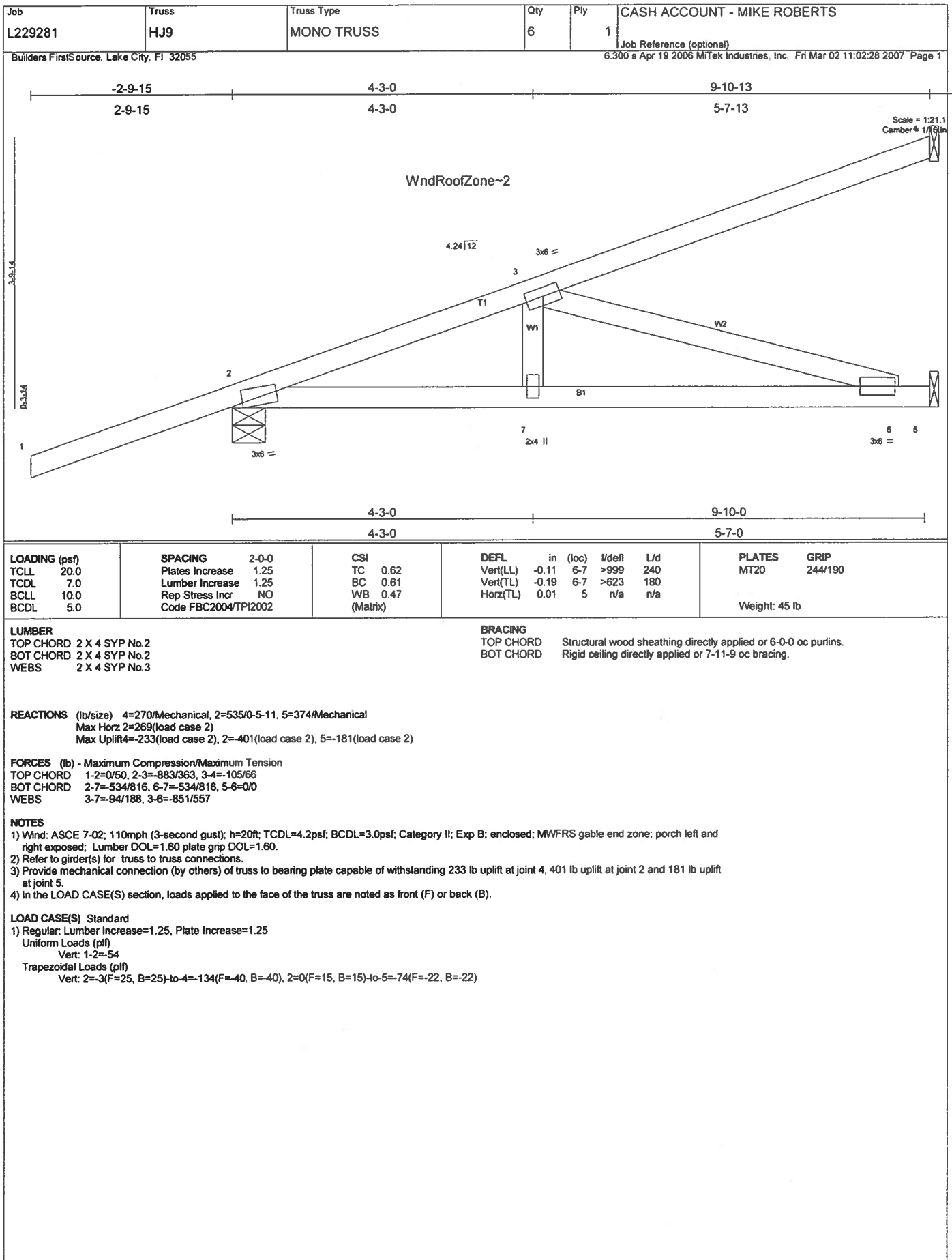
  

**REACTIONS** (lb/size) 3=191/Mechanical, 2=378/0-5-11, 4=110/Mechanical  
 Max Horz 2=167(load case 2)  
 Max Uplift 3=-144(load case 2), 2=-251(load case 2)

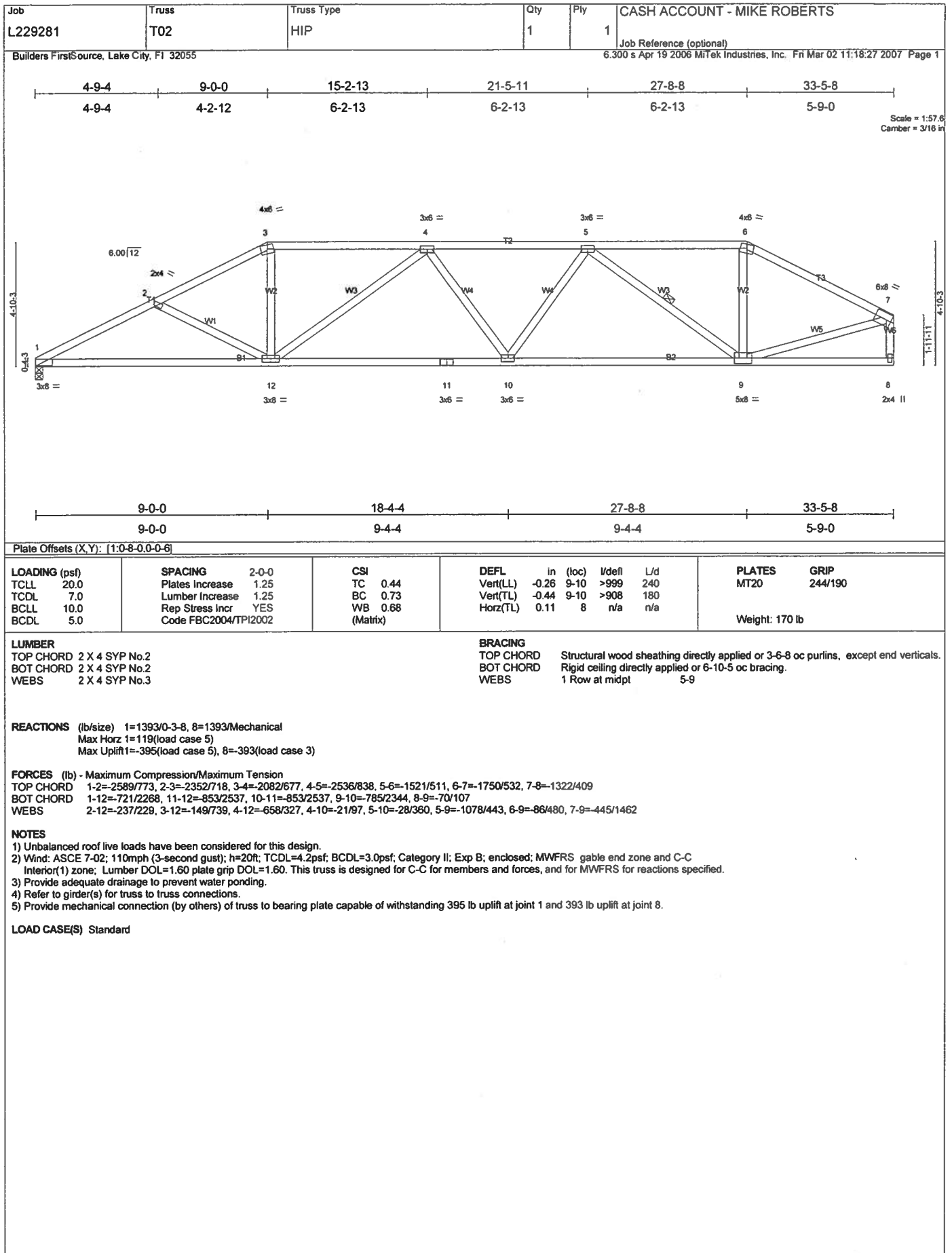
**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/50, 2-3=-68/45  
 BOT CHORD 2-4=0/0

**NOTES**  
 1) Wind: ASCE 7-02; 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 144 lb uplift at joint 3 and 251 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).

**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=25, B=25)-to 3=-95(F=-21, B=-21), 2=0(F=15, B=15)-to 4=-53(F=-12, B=-12)







Job L229281	Truss T03	Truss Type HIP	Qty 1	Ply 1	CASH ACCOUNT - MIKE ROBERTS
Builders FirstSource, Lake City, FL 32055			6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Mar 02 11:19:16 2007 Page 1		

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.84	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.88	Ver(TL) -0.41 1-11 >964 240		
BCLL 10.0	Rep Stress Incr YES	WB 0.44	Horz(TL) 0.09 7 n/a n/a		
BCDL 5.0	Code FBC2004/TPI2002	(Matrix)		Weight: 175 lb	

LUMBER	BRACING
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 3-2-7 oc purlins, except end verticals.
BOT CHORD 2 X 4 SYP No.2	BOT CHORD Rigid ceiling directly applied or 7-2-0 oc bracing.
WEBS 2 X 4 SYP No.3	WEBS 1 Row at midpt 4-11, 4-8

**REACTIONS** (lb/size) 1=1393/0-3-8, 7=1393/Mechanical  
 Max Horz 1=133(load case 5)  
 Max Uplift 1=413(load case 5), 7=383(load case 6)

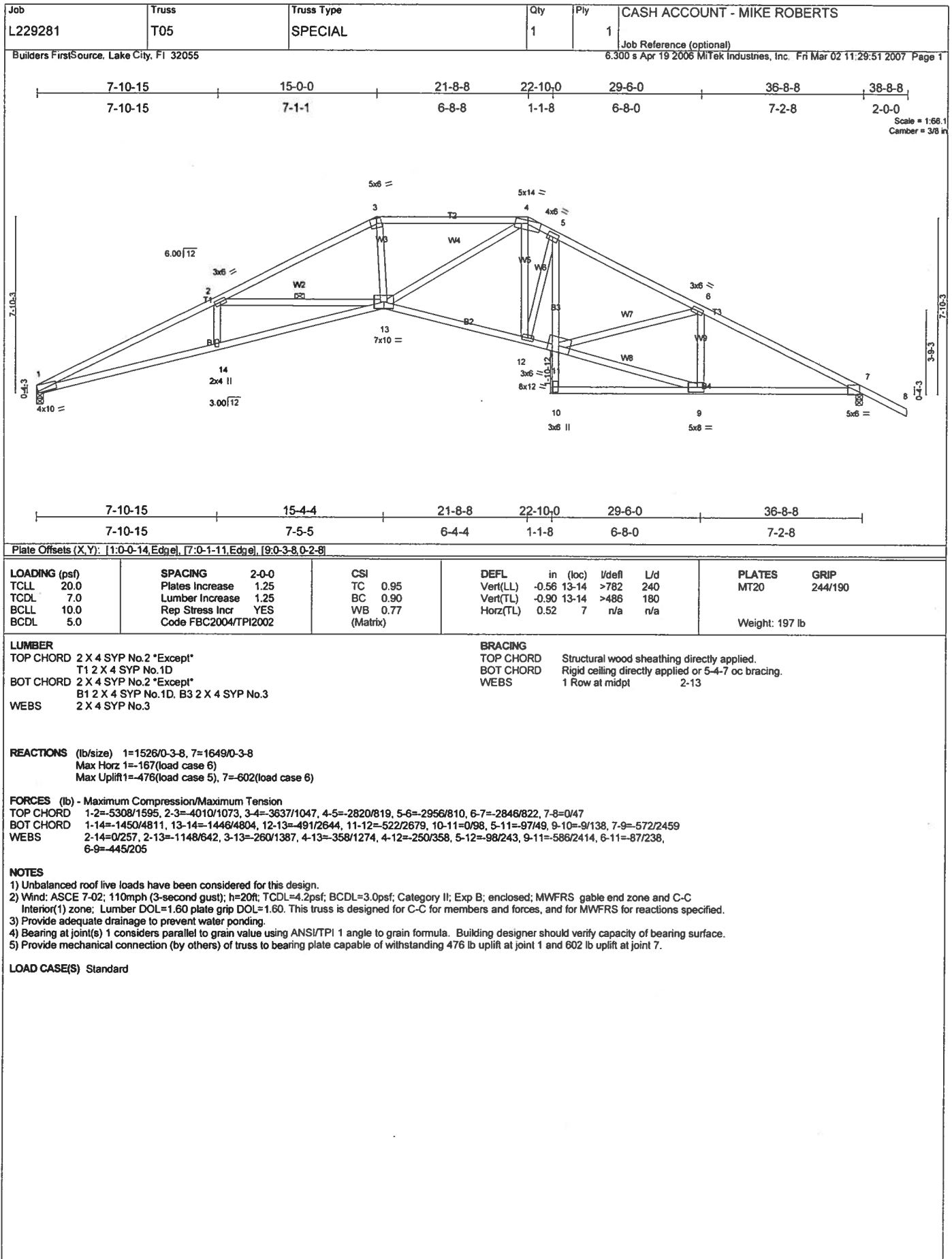
**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-2519/772, 2-3=-2198/659, 3-4=-1924/635, 4-5=-1557/541, 5-6=-1822/541, 6-7=-1274/411  
 BOT CHORD 1-11=-746/2210, 10-11=-632/2117, 9-10=-632/2117, 8-9=-632/2117, 7-8=-126/232  
 WEBS 2-11=-344/291, 3-11=-95/616, 4-11=-375/210, 4-9=0/182, 4-8=-794/305, 5-8=-50/438, 6-8=-401/1349

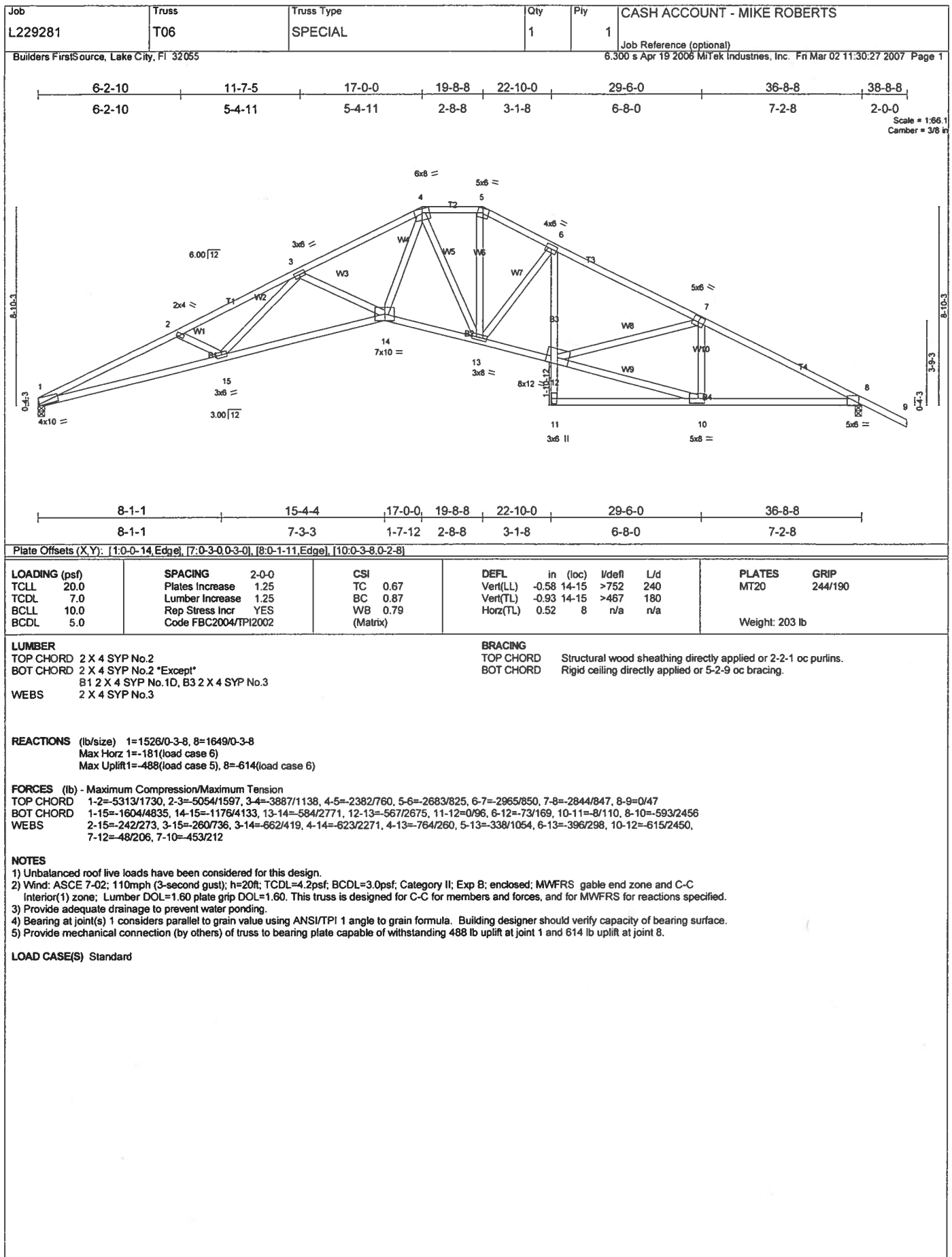
**NOTES**  
 1) Unbalanced roof live loads have been considered for this design.  
 2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Interior(1) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for 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 413 lb uplift at joint 1 and 383 lb uplift at joint 7.

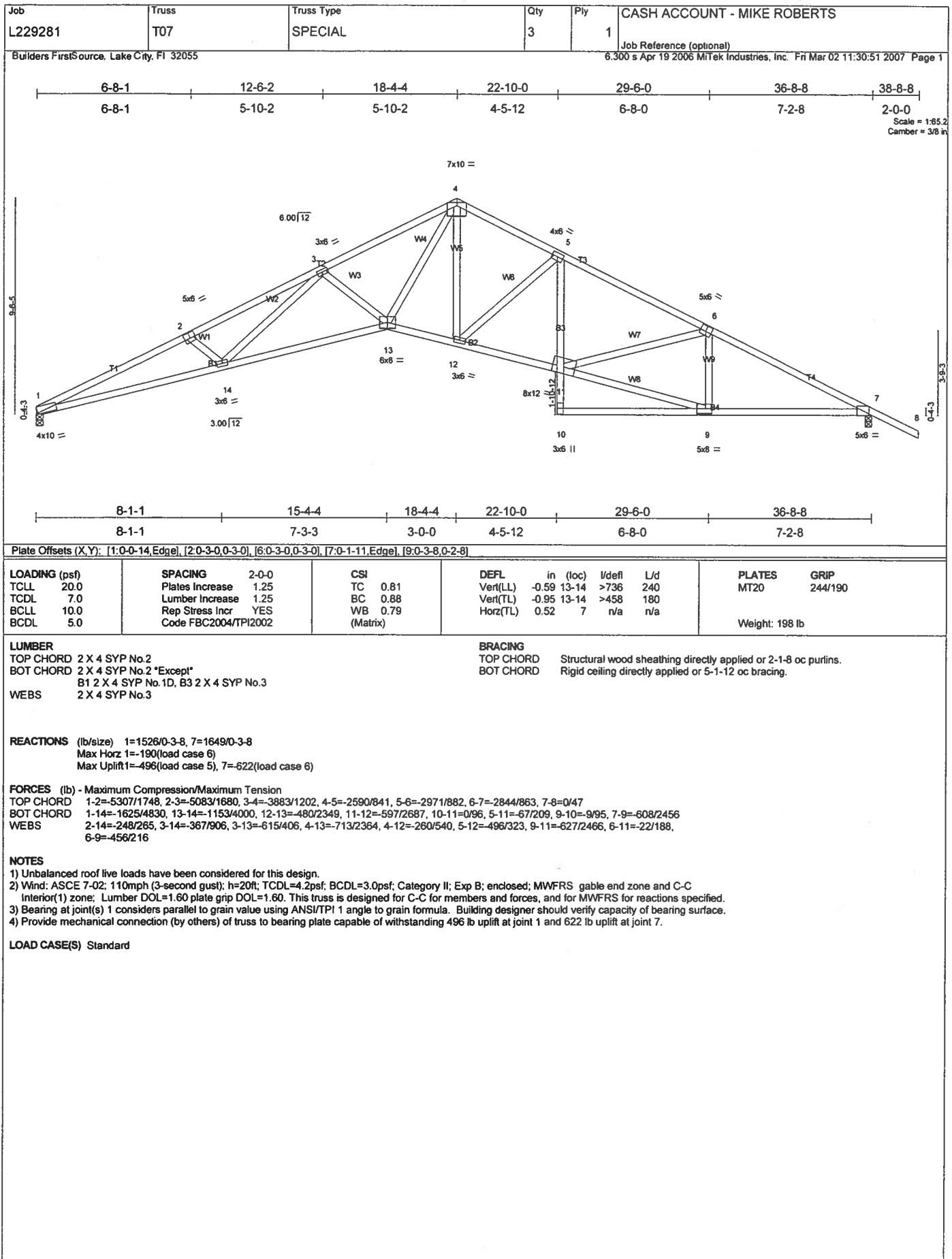
**LOAD CASE(S)** Standard

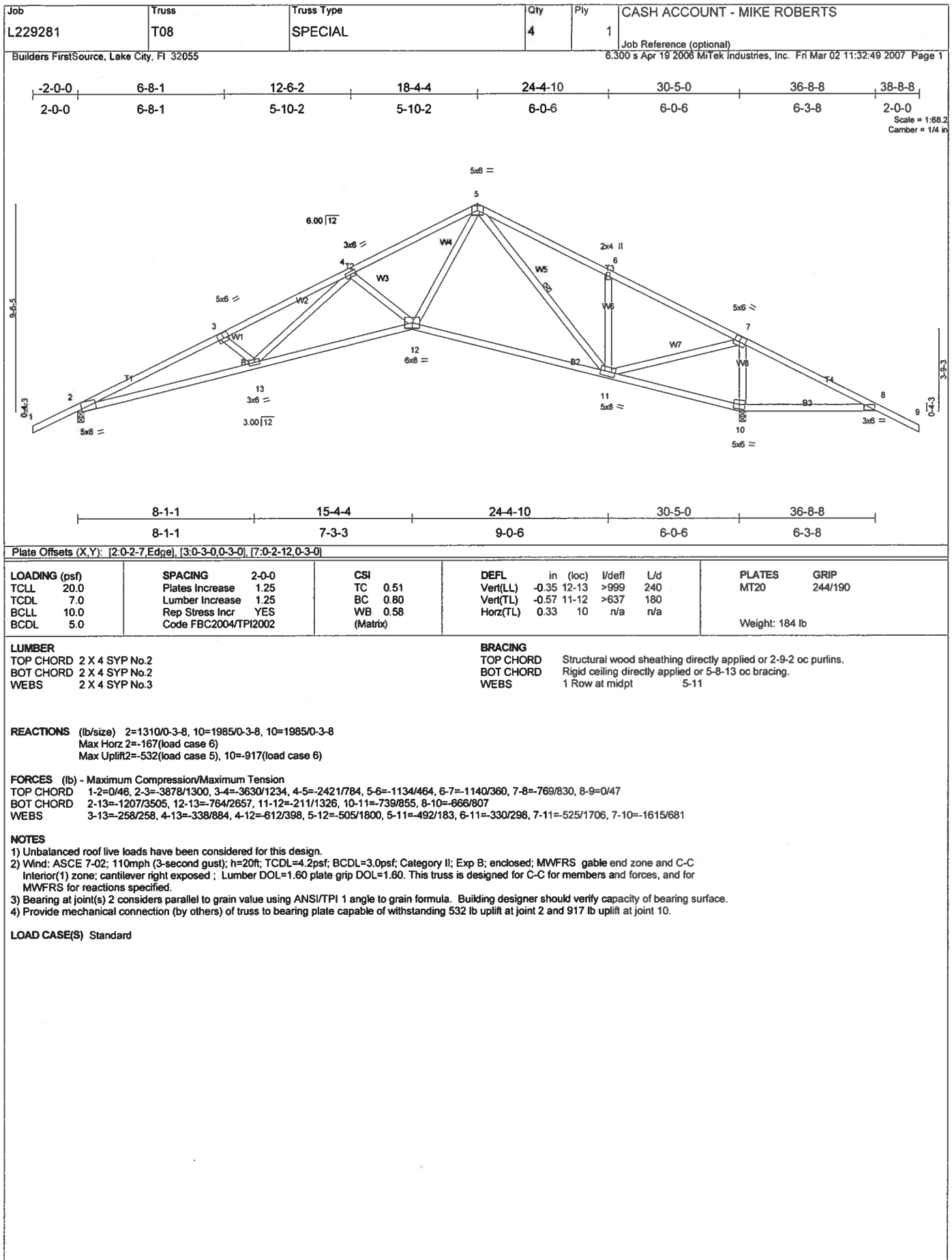


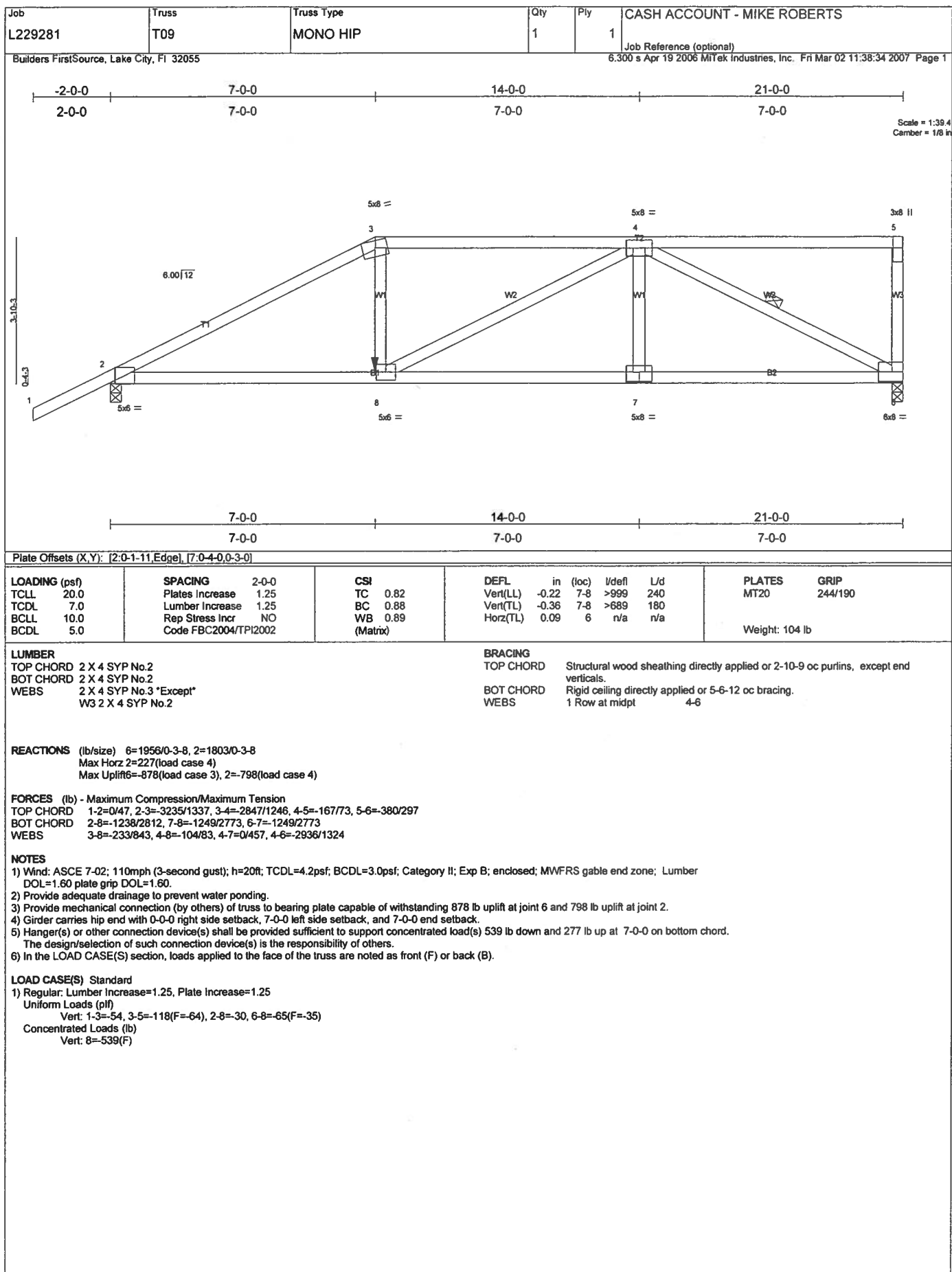




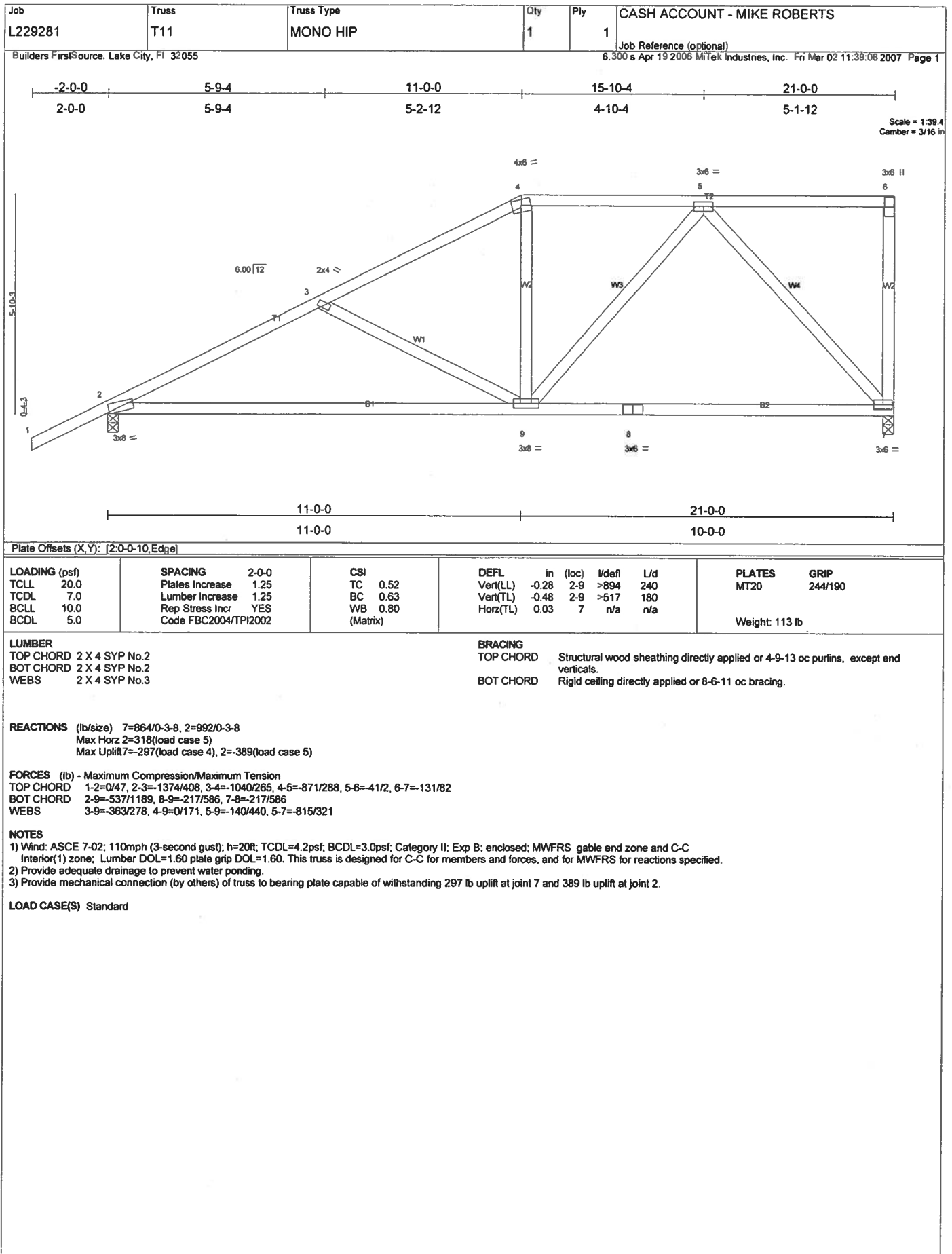




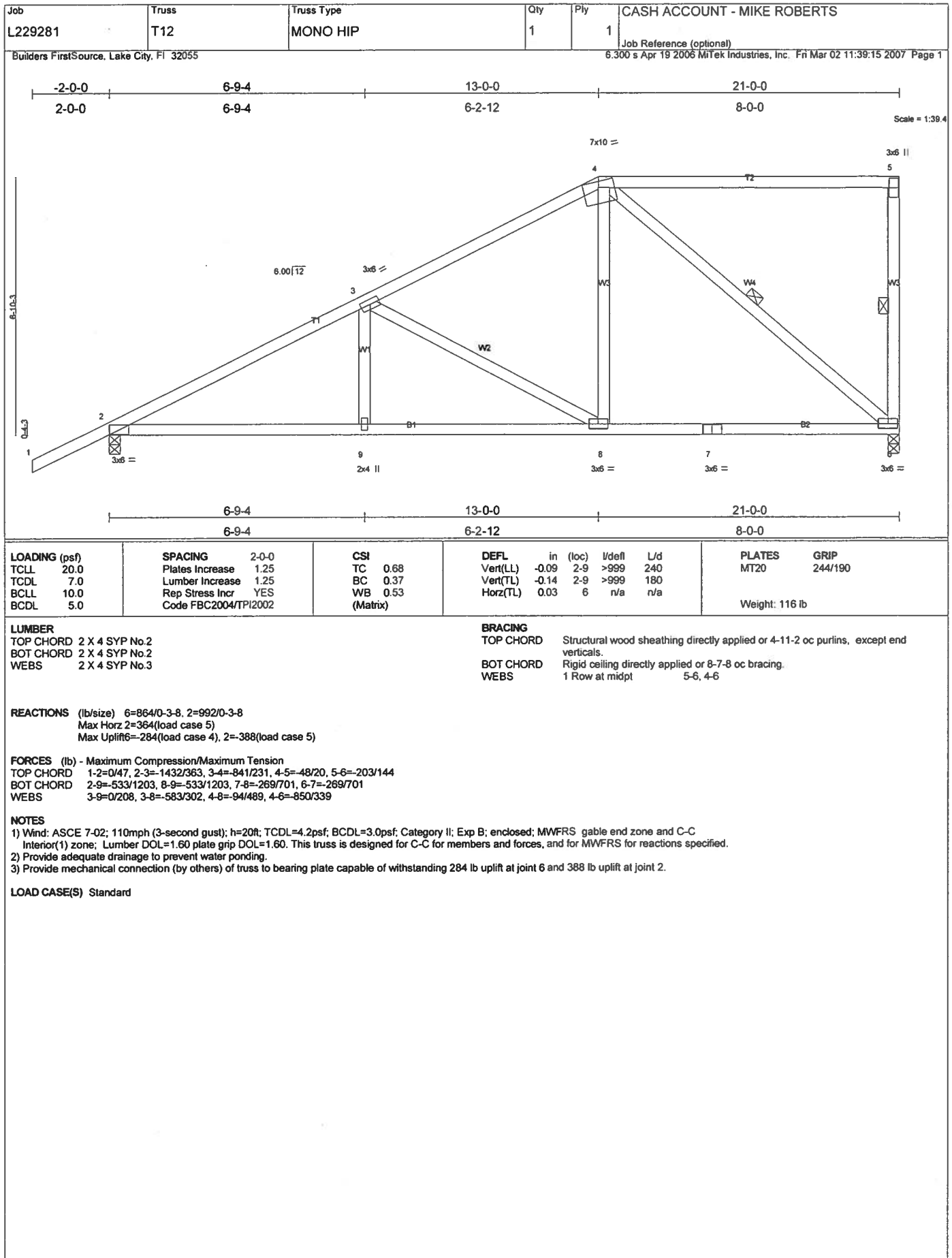


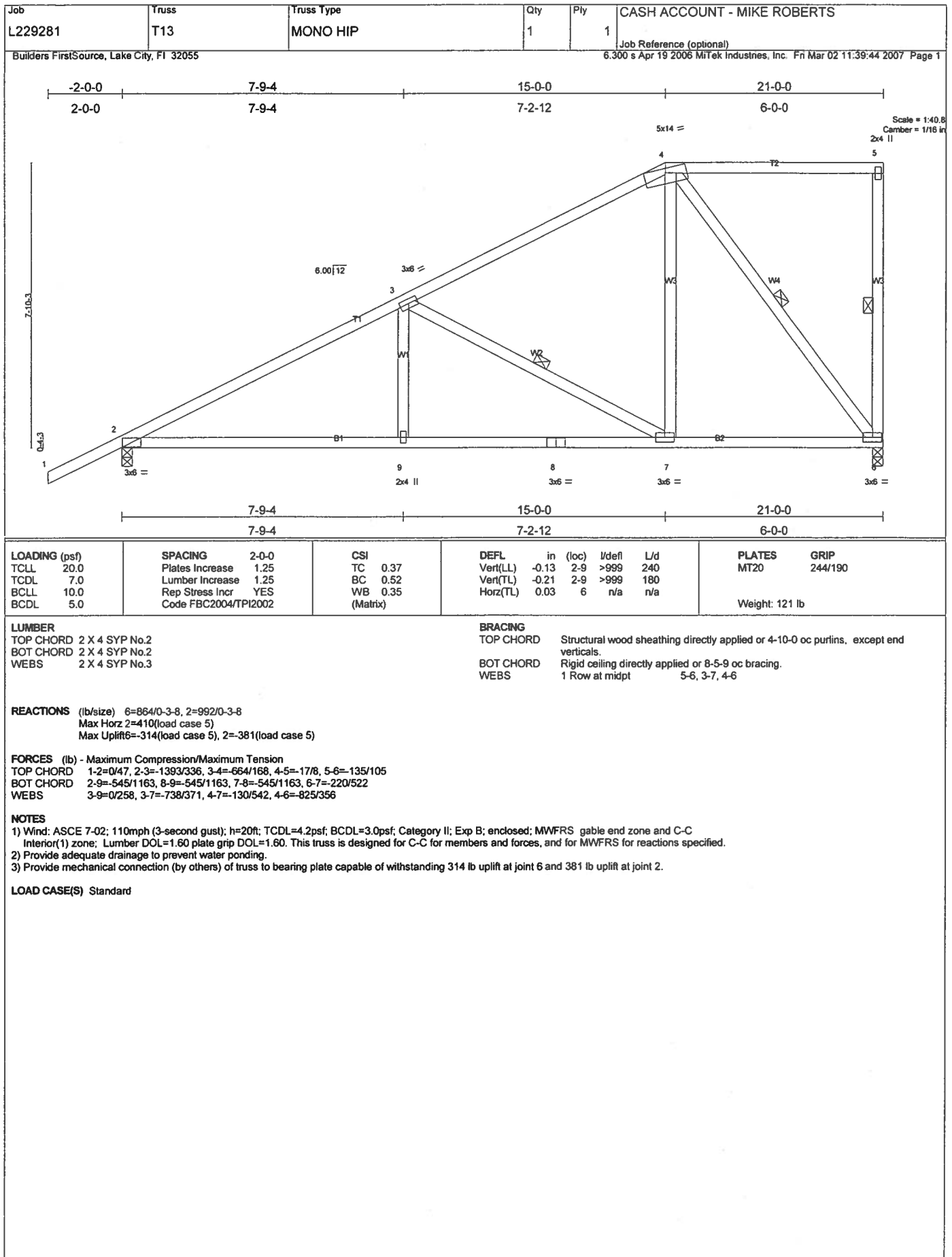


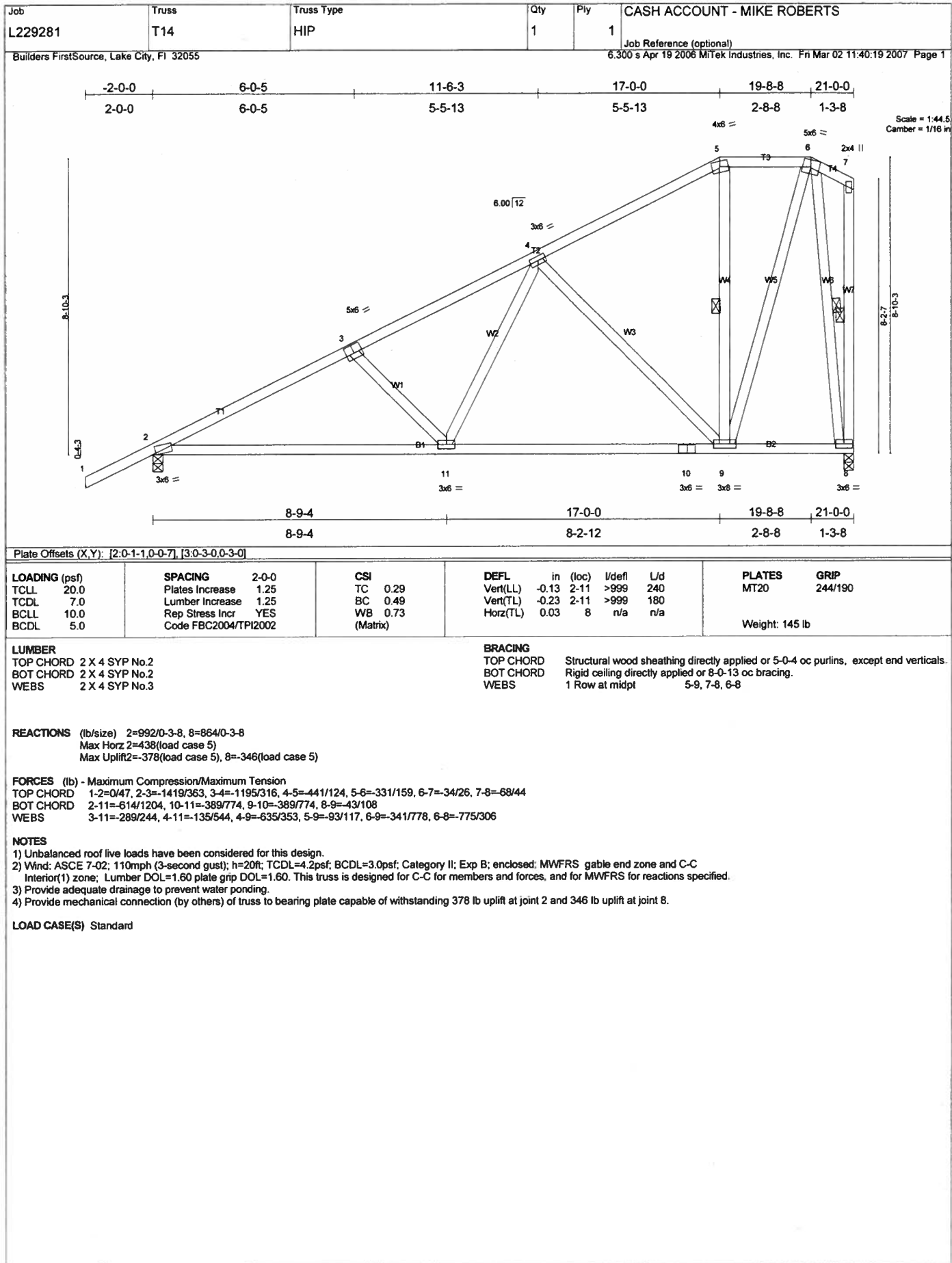












Job L229281	Truss T15	Truss Type HIP	Qty 1	Ply 1	CASH ACCOUNT - MIKE ROBERTS <small>Job Reference (optional)</small>
<small>Builders FirstSource, Lake City, FL 32055</small>			<small>6,300 s Apr 19 2006 MiTek Industries, Inc. Fri Mar 02 11:40:45 2007 Page 1</small>		

<b>Plate Offsets (X,Y):</b> [1:0-1-11,Edge], [4:0-1-11,Edge]					
<b>LOADING (psf)</b>	<b>SPACING</b>	<b>2-0-0</b>	<b>CSI</b>	<b>DEFL</b>	<b>PLATES GRIP</b>
TCLL 20.0	Plates Increase	1.25	TC 0.51	in (loc) I/defl L/d	MT20 244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.78	Vert(LL) -0.15 1-7 >999 240	
BCLL 10.0	Rep Stress Incr	NO	WB 0.28	Vert(TL) -0.24 1-7 >924 180	
BCDL 5.0	Code FBC2004/TPI2002		(Matrix)	Horz(TL) 0.08 4 n/a n/a	Weight: 81 lb

<b>LUMBER</b> TOP CHORD 2 X 4 SYP No.2 BOT CHORD 2 X 4 SYP No.2 WEBS 2 X 4 SYP No.3	<b>BRACING</b> TOP CHORD Structural wood sheathing directly applied or 3-2-15 oc purlins. BOT CHORD Rigid ceiling directly applied or 6-0-1 oc bracing.
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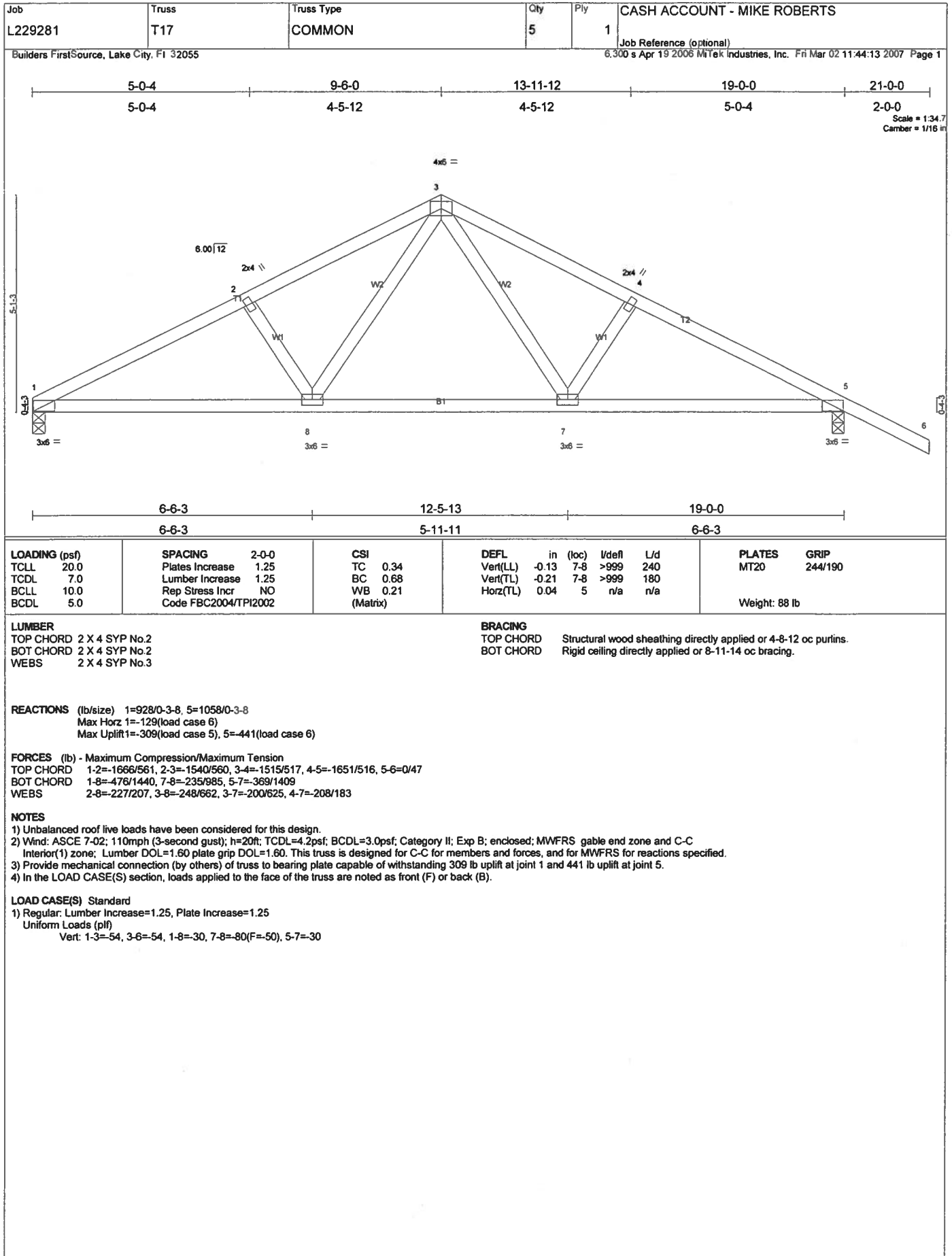
**REACTIONS** (lb/size) 1=1560/0-3-8, 4=1689/0-3-8  
 Max Horz 1=-112(load case 5)  
 Max Uplift 1=-642(load case 4), 4=-774(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-2942/1232, 2-3=-2578/1141, 3-4=-2941/1197, 4-5=0/47  
 BOT CHORD 1-7=-1031/2565, 6-7=-1041/2599, 4-6=-970/2544  
 WEBS 2-7=-248/832, 2-6=-149/119, 3-6=-267/884

**NOTES**  
 1) Unbalanced roof live loads have been considered for this design.  
 2) Wind: ASCE 7-02; 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.  
 3) Provide adequate drainage to prevent water ponding.  
 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 642 lb uplift at joint 1 and 774 lb uplift at joint 4.  
 5) Girder carries hip end with 7'-0" end setback.  
 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 539 lb down and 277 lb up at 12'-0", and 539 lb down and 277 lb up at 7'-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: 1-2=-54, 2-3=-118(F=-64), 3-5=-54, 1-7=-30, 6-7=-65(F=-35), 4-6=-30  
   Concentrated Loads (lb)  
     Vert: 7=-539(F) 6=-539(F)





Job <b>L229281</b>	Truss <b>T18</b>	Truss Type <b>HIP</b>	Qty <b>1</b>	Ply <b>1</b>	CASH ACCOUNT - MIKE ROBERTS
Builders FirstSource, Lake City, FL 32055					Job Reference (optional) 6,300 s Apr 19 2006 MiTek Industries, Inc. Fri Mar 02 12:11:11 2007 Page 1

-2-0-0      7-0-0      10-0-0      17-0-0      19-0-0  
 2-0-0      7-0-0      3-0-0      7-0-0      2-0-0

Scale = 1/32"  
 Camber = 1/16"

7-0-0      10-0-0      17-0-0  
 7-0-0      3-0-0      7-0-0

Plate Offsets (X,Y): [2-0-8-0-0-6], [5-0-8-0-0-6]									
<b>LOADING (psf)</b>	<b>SPACING</b>	<b>CSI</b>	<b>DEFL</b>	<b>PLATES</b>	<b>GRIP</b>				
TCLL 20.0	Plates Increase 1.25	TC 0.45	in (loc) l/defl L/d	MT20	244/190				
TCDL 7.0	Lumber Increase 1.25	BC 0.63	Vert(LL) 0.15 2-8 >999 240						
BCLL 10.0	Rep Stress Incr NO	WB 0.27	Vert(TL) -0.21 2-8 >942 180						
BCDL 5.0	Code FBC2004/TP12002	(Matrix)	Horz(TL) 0.06 5 n/a n/a						
Weight: 76 lb									

<b>LUMBER</b> TOP CHORD 2 X 4 SYP No.2 BOT CHORD 2 X 4 SYP No.2 WEBS 2 X 4 SYP No.3	<b>BRACING</b> TOP CHORD Structural wood sheathing directly applied or 3-6-15 oc purlins. BOT CHORD Rigid ceiling directly applied or 5-10-7 oc bracing.
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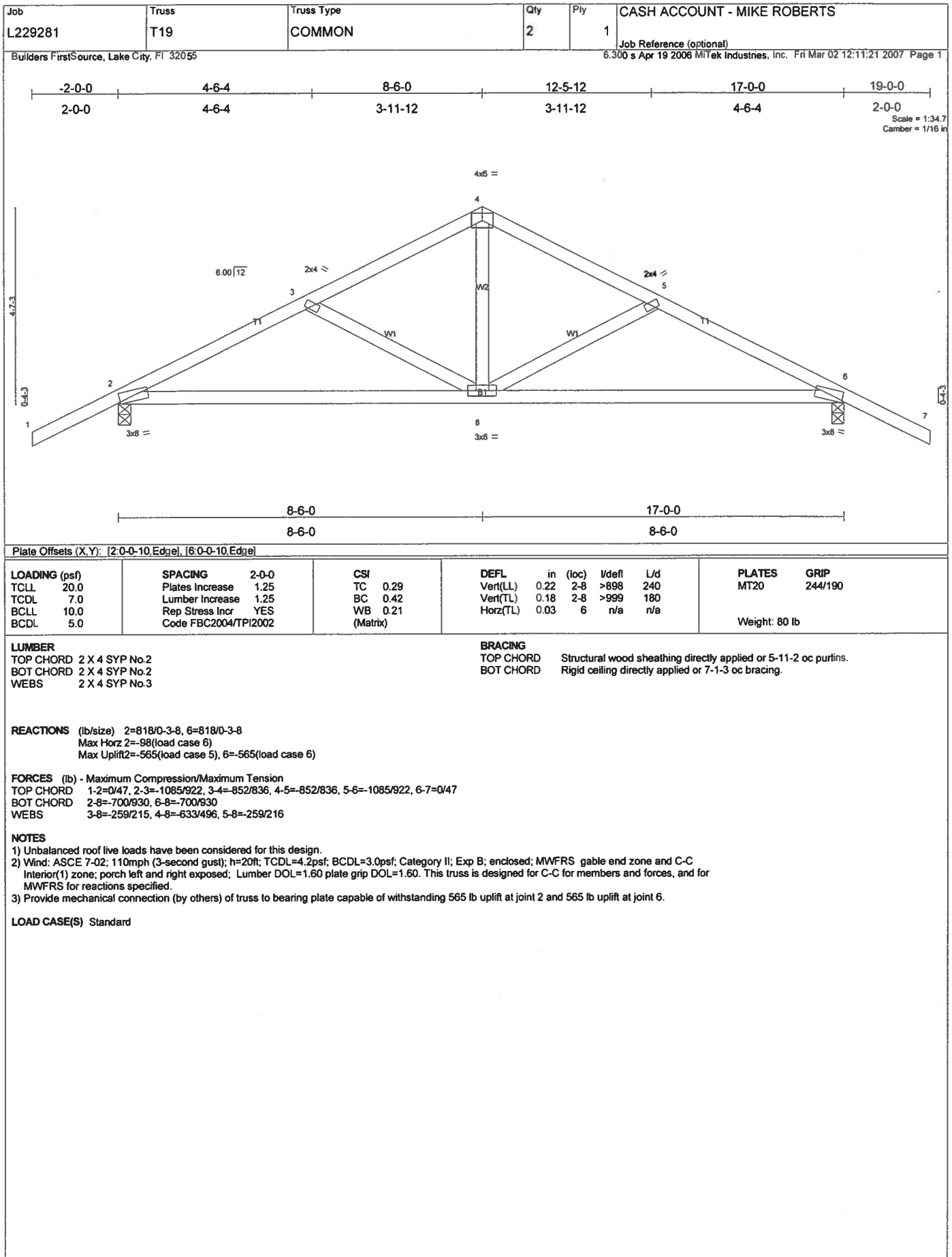
  

**REACTIONS** (lb/size) 2=1500/0-3-8, 5=1500/0-3-8  
 Max Horz 2=87(load case 4)  
 Max Uplift 2=910(load case 4), 5=910(load case 5)

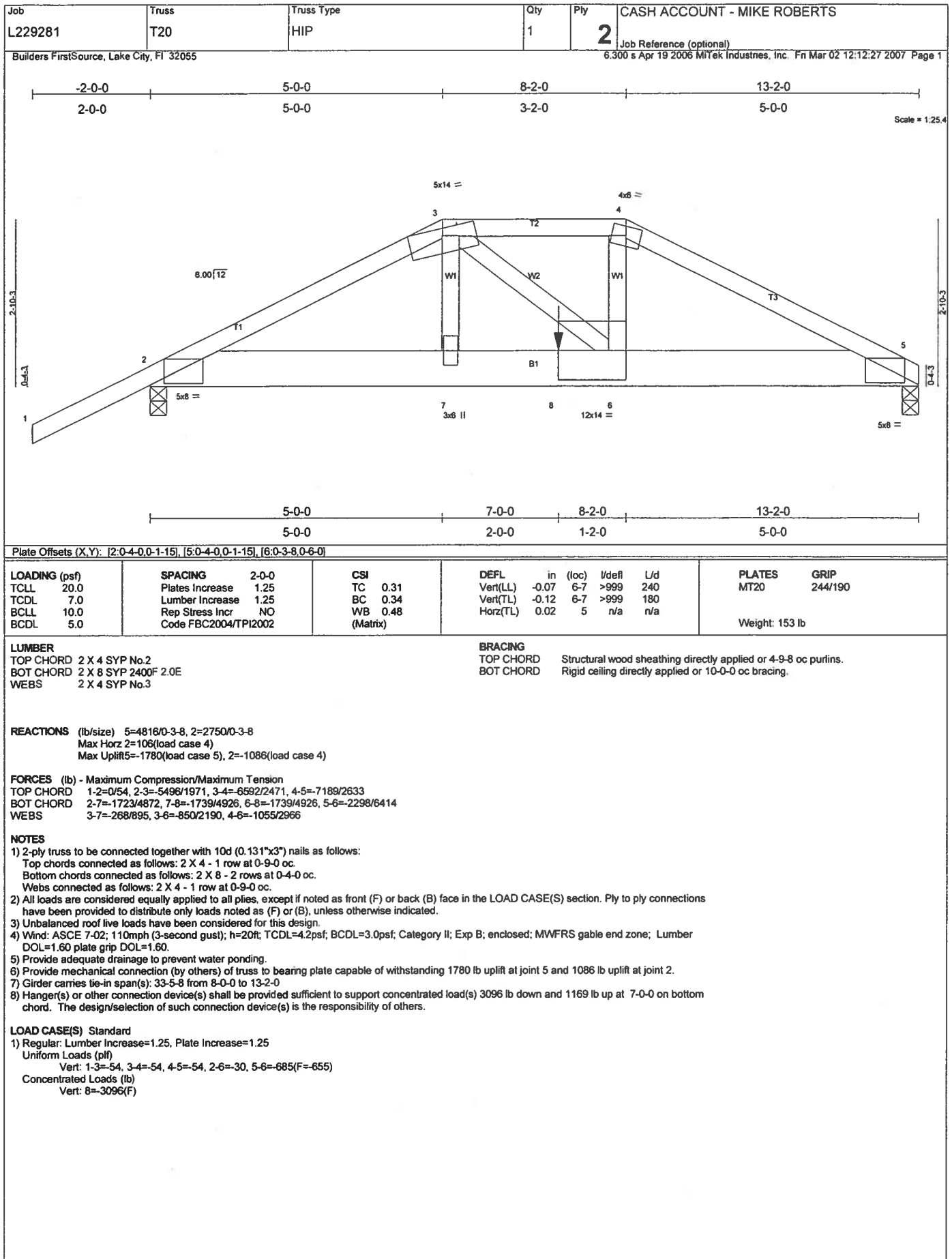
**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/47, 2-3=-2509/1322, 3-4=-2190/1260, 4-5=-2512/1323, 5-6=0/47  
 BOT CHORD 2-8=-1106/2157, 7-8=-1121/2187, 5-7=-1080/2159  
 WEBS 3-8=-376/749, 3-7=-126/136, 4-7=-410/833

**NOTES**  
 1) Unbalanced roof live loads have been considered for this design.  
 2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60.  
 3) Provide adequate drainage to prevent water ponding.  
 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 910 lb uplift at joint 2 and 910 lb uplift at joint 5.  
 5) Girder carries hip end with 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 277 lb up at 10-0-0, and 539 lb down and 277 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, 3-4=-118(F=-64), 4-6=-54, 2-8=-30, 7-8=-65(F=-35), 5-7=-30  
 Concentrated Loads (lb)  
 Vert: 8=-539(F) 7=-539(F)





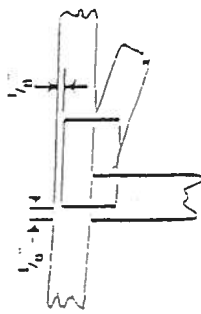


## Symbols

### 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

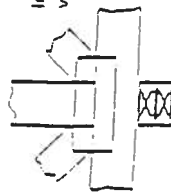
The first dimension is the width perpendicular to slots. Second dimension is the length parallel to slots

### LATERAL BRACING



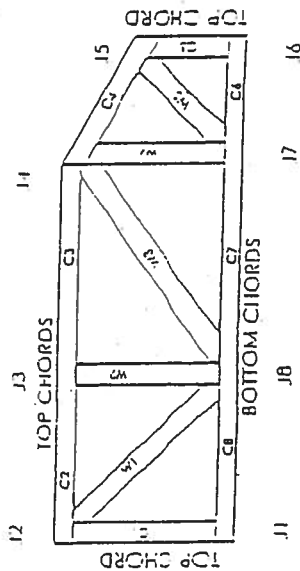
Indicates location of required continuous lateral bracing

### BEARINGS



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/DIIR	960022-W, 970036-11
IER	561



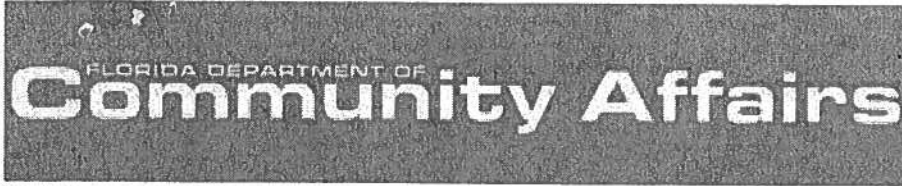
MTE Engineering Reference Sheet: MTE-7473

## 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 1/2 panel length (1/4" 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 pulins 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 lusses are the responsibility of others unless shown.
13. Do not overload roof or floor lusses 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 lusses.

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[Product Approval Menu](#) > [Product or Application Search](#) > [Application List](#) > **Application Detail**

► COMMUNITY PLANNING

► HOUSING &amp; COMMUNITY DEVELOPMENT

► EMERGENCY MANAGEMENT

► OFFICE OF THE SECRETARY

FL # FL7674  
Application Type New  
Code Version 2004  
Application Status Approved  
Comments  
Archived ☐

Product Manufacturer Alenco  
Address/Phone/Email 615 Carson  
Bryan, TX 77802  
(979) 779-7770 ext 343  
mkoppers@alenco.com

Authorized Signature Martin Koppers  
mkoppers@alenco.com

Technical Representative Martin Koppers  
Address/Phone/Email 615 Carson St.  
Bryan, TX 77802  
mkoppers@alenco.com

Quality Assurance Representative  
Address/Phone/Email

Category Windows  
Subcategory Single Hung

Compliance Method Certification Mark or Listing

Certification Agency National Accreditation & Management Institute,

Referenced Standard and Year (of **Standard**

Standard)

AAMA/NWWDA 101/IS2

1

Equivalence of Product Standards  
Certified By

Product Approval Method

Method 1 Option A

Date Submitted

10/06/2006

Date Validated

11/17/2006

Date Pending FBC Approval

11/20/2006

Date Approved

12/06/2006

**Summary of Products**

FL #	Model, Number or Name	Description
7674.1	3753	Single Hung
<b>Limits of Use</b> <b>Approved for use in HVHZ:</b> No <b>Approved for use outside HVHZ:</b> Yes <b>Impact Resistant:</b> N/A <b>Design Pressure:</b> +40 /-40 <b>Other:</b> 3753 - 4'0" X 6'0" H-R40 - 1/8" annealed glass - smaller units to comply with ASTM E-1300-02		<b>Certification Agency Certificate</b> <a href="#">FL7674 R0 C CAC 3753 H R-40.pdf</a> <b>Installation Instructions</b> <a href="#">FL7674 R0 II 3753 Installation Instructions.pdf</a> Verified By: National Accreditation & Management Institute,
7674.2	3753FL	Single Hung
<b>Limits of Use</b> <b>Approved for use in HVHZ:</b> No <b>Approved for use outside HVHZ:</b> Yes <b>Impact Resistant:</b> No <b>Design Pressure:</b> +35 /-35 <b>Other:</b> 3753FL - 4'5" X 5'3" H-R35 - 1/8" annealed glass - smaller units to comply with ASTM E-1300-02		<b>Certification Agency Certificate</b> <a href="#">FL7674 R0 C CAC 3753FL H R35.pdf</a> <b>Installation Instructions</b> <a href="#">FL7674 R0 II 3753FL - 4710FL Install Instructions.pdf</a> Verified By: National Accreditation & Management Institute,
7674.3	3753FL	Single Hung
<b>Limits of Use</b> <b>Approved for use in HVHZ:</b> No <b>Approved for use outside HVHZ:</b> Yes <b>Impact Resistant:</b> No <b>Design Pressure:</b> +30 /-30 <b>Other:</b> 3753FL - 4'4" X 5'11" H-R30 - 1/8" annealed glass - smaller units to comply with ASTM E-1300-02		<b>Certification Agency Certificate</b> <a href="#">FL7674 R0 C CAC 3753FL H R30.pdf</a> <b>Installation Instructions</b> <a href="#">FL7674 R0 II 3753FL - 4710FL Install Instructions.pdf</a> Verified By: National Accreditation & Management Institute,
7674.4	4710/4710F	Single Hung
<b>Limits of Use</b> <b>Approved for use in HVHZ:</b> No <b>Approved for use outside HVHZ:</b> Yes <b>Impact Resistant:</b> No		<b>Certification Agency Certificate</b> <a href="#">FL7674 R0 C CAC 4710 4710F H-R40 DP50.pdf</a> <b>Installation Instructions</b>

<b>Design Pressure:</b> +40 /-50 <b>Other:</b> 4710/4710F - 4'0" X 6'0" H-R40 -DP 50 - DSB annealed glass - smaller units to comply with ASTM E-1300-02		<a href="#">FL7674 R0 II 4710F Installation Instructions.pdf</a> Verified By: National Accreditation & Management Institute,
7674.5	4710FL	Single Hung
<b>Limits of Use</b> <b>Approved for use in HVHZ:</b> No <b>Approved for use outside HVHZ:</b> Yes <b>Impact Resistant:</b> No <b>Design Pressure:</b> +40 /-40 <b>Other:</b> 4710FL - 3'8" X 6'6" H-R40 - 1/8" annealed glass - smaller units to comply with ASTM E-1300-02		<b>Certification Agency Certificate</b> <a href="#">FL7674 R0 C CAC 4710FL H R-40.pdf</a> <b>Installation Instructions</b> <a href="#">FL7674 R0 II 3753FL - 4710FL Install Instructions.pdf</a> Verified By: National Accreditation & Management Institute,

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[DCA Administration](#)

**Department of Community Affairs**  
**Florida Building Code Online**  
**Codes and Standards**

2555 Shumard Oak Boulevard  
 Tallahassee, Florida 32399-2100

(850) 487-1824, Suncom 277-1824, Fax (850) 414-8436

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**Product Approval Accepts:**



**Short Form  
Entire House  
Ahlbrandt Ref. Inc.**

Job:  
Date: May 16, 2007  
By:

P O Box 1945, Alachua, FL 32616 Phone: 352-225-1308 Fax: 386-418-0549

**Project Information**

For: Mike Roberts

**Design Information**

	Htg	Clg	Infiltration	Simplified
Outside db (°F)	33	92	Method	Average
Inside db (°F)	70	75	Construction quality	1 (Average)
Design TD (°F)	37	17	Fireplaces	
Daily range	-	M		
Inside humidity (%)	-	50		
Moisture difference (gr/lb)	-	52		

**HEATING EQUIPMENT**

Make York  
Trade Guardian  
Model HP030X1321

Efficiency 8 HSPF  
Heating input 30000 Btuh @ 47°F  
Heating output 29 °F  
Temperature rise 933 cfm  
Actual air flow 0.035 cfm/Btuh  
Air flow factor 0.10 in H2O  
Static pressure  
Space thermostat

**COOLING EQUIPMENT**

Make York  
Trade Guardian  
Cond HP030X1321  
Coil G2FD036S17+1TV0701  
Efficiency 13 SEER  
Sensible cooling 19600 Btuh  
Latent cooling 8400 Btuh  
Total cooling 28000 Btuh  
Actual air flow 933 cfm  
Air flow factor 0.048 cfm/Btuh  
Static pressure 0.10 in H2O  
Load sensible heat ratio 0.69

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Dining rm	131	3391	1820	119	87
Kitchen	108	1408	2284	50	109
Bath	52	975	495	34	24
Bedrm 2	182	5143	3325	181	159
Bedrm 3	186	3195	2343	112	112
Fam rm	357	4398	4219	155	202
Master bedrm	219	3379	3010	119	144
Master bath	78	2926	1128	103	54
W.I.c.	48	1531	569	54	27
core	132	189	314	7	15

Printout certified by ACCA to meet all requirements of Manual J 8th Ed.

Entire House	1494	26536	19507	933	933
Other equip loads		5651	2596		
Equip. @ 0.97 RSM			21440		
Latent cooling			9979		
TOTALS	1494	32187	31419	933	933

Printout certified by ACCA to meet all requirements of Manual J 8th Ed.

# Anthony POWER HEADER®

GARAGE HEADER (84) 26F<sub>b</sub> - 1.9E

## ENGINEERED WOOD SECTION PROPERTIES AND LOAD CAPACITIES ALLOWABLE DESIGN STRESSES (PSI):

FLEXURAL STRESS ( $F_b$ ) = 2600  
COMPRESSION PERP. TO GRAIN ( $F_{c\perp}$ ) = 740  
HORIZONTAL SHEAR ( $F_v$ ) = 225  
MODULUS OF ELASTICITY (MOE) =  $1.9 \times 10^6$

Section	2x6	2x8	2x10	2x12	3x6	3x8	3x10
Weight (lb/ft)	9.0	10.4	11.7	12.9	14.2	15.5	16.8
Flexural Capacity (lb-ft)	326	514	789	1115	1521	2014	2604
Shear Capacity (lb)	885	1205	1596	2045	2472	2987	3546
Compression Capacity (lb)	3908	4350	5250	5892	6533	7175	7817

### NOTES:

1. Beam weights are based on 38 pcf.
2. Moment capacities are based on a span of 21 feet and must be modified for other spans.
3. Flexural Stress,  $F_b$ , shall be modified by the Volume Factor,  $C_v$ , as outlined in ATC 117 - Design 1993 and the NDS for Wood Construction 1997.
4. Allowable design properties and load capacities are based on a load duration of 100 percent and dry use conditions.
5. The ATC NER 466 was used in calculating the above allowable design stresses for Power Header®.

### GARAGE HEADER COMPARISONS

Weight (lb/ft)	3-1/2" x 8-3/4"	3-1/2" x 9-3/8"	3-1/2" x 9"	3-1/2" x 9-1/4"	3-1/2" x 11-1/4"
810 / 340	3-1/2" x 8-3/4"	3-1/2" x 9-3/8"	3-1/2" x 9"	3-1/2" x 9-1/4"	3-1/2" x 11-1/4"
950 / 320	3-1/2" x 9-3/8"	3-1/2" x 9-3/8"	3-1/2" x 10-1/2"	3-1/2" x 9-1/4"	3-1/2" x 11-1/4"
640 / 400	3-1/2" x 12-1/8"	3-1/2" x 13-3/4"	3-1/2" x 13-1/2"	3-1/2" x 14"	3-1/2" x 14"
265 / 510	3-1/2" x 14"	3-1/2" x 15-1/8"	3-1/2" x 15"	3-1/2" x 14"	3-1/2" x 16"
250 / 480	3-1/2" x 15-3/8"	3-1/2" x 16-1/2"	3-1/2" x 16-1/2"	3-1/2" x 16"	3-1/2" x 18"
500 / 600	3-1/2" x 16-3/4"	3-1/2" x 17-7/8"	3-1/2" x 18"	3-1/2" x 16"	---

For more information on POWER HEADER®, or other laminated structural products from Anthony Forest Products Company please call 1-800-221-2326 or FAX at 870-862-6502.

Power Header® is a trademark of  
**Anthony Forest Products Company**  
Post Office Box 1877 • El Dorado, Arkansas 71231  
Internet address: <http://www.anthonystore.com>  
e-mail: [info@anthonystore.com](mailto:info@anthonystore.com)  
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Distributed by:

**WOODFORD PLYWOOD, INC.**  
"Structural Wood Products"

11960 West Beaver Street  
Jacksonville, Florida 32220

(904) 625-0080  
(800) 447-6506  
FAX (904) 625-9160



26F<sub>b</sub> - 1.9E

# Anthony POWER HEADER®

## 3-1/2" WIDTH GARAGE HEADER PLF CAPACITY

2x4	2x6	2x8	2x10	2x12	3x4	3x6	3x8	3x10	3x12	4x4	4x6	4x8	4x10	4x12	6x6	6x8	6x10	6x12	8x8	8x10	8x12	10x10	10x12	12x12
161	207	254	330	390	510	552	669	752	824															
114	145	180	231	277	359	391	510	534	653	707	789													

2x4	2x6	2x8	2x10	2x12	3x4	3x6	3x8	3x10	3x12	4x4	4x6	4x8	4x10	4x12	6x6	6x8	6x10	6x12	8x8	8x10	8x12	10x10	10x12	12x12
161	207	254	330	390	510	552	669	752	824															
114	145	180	231	277	359	391	510	534	653	707	789													

2x4	2x6	2x8	2x10	2x12	3x4	3x6	3x8	3x10	3x12	4x4	4x6	4x8	4x10	4x12	6x6	6x8	6x10	6x12	8x8	8x10	8x12	10x10	10x12	12x12
161	207	254	330	390	510	552	669	752	824															
114	145	180	231	277	359	391	510	534	653	707	789													

### NOTES:

- Values shown are the maximum uniform loads in pounds per lineal foot (PLF) that can be applied to the header. Header weight has been subtracted from the allowable total load.
- Tables are based on simple span uniform load conditions using a design span equal to the center-to-center of bearing. Non-shaded areas are based on 3' of bearing at each support, shaded areas on 4.5' of bearing, and shaded & outlined areas on 6' of bearing at supports.
- Headers are assumed to be loaded on the top edge with continuous lateral support along compression edge.
- When no live load is listed, total load controls.
- Deflection limits are listed within the PLF table heading.

### GARAGE HEADER SIZING USING PLF TABLES:

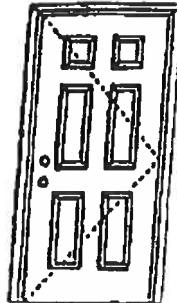
To size a garage header supporting roof only, determine the total load & live load in pounds per lineal foot (PLF). Check the appropriate PLF table for a header supporting roof loads only (125% Non-Snow vs. 115% Snow) and select a member with a total load and live load capacity which meets or exceeds the design load for the rough opening size. For a garage header supporting roof, wall, and floor framing, determine the total load and live load in pounds per lineal foot (PLF). Select a header size from the roof, wall, and floor table (100% load duration) which has a total load and live load capacity equal to or greater than the design load for the appropriate rough opening.

**X**  
Opaque Inswing Unit

COP-WL-JH4101-02

## 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".



Test Data Review Certificate #3078447A and COP/Test Report Verification Matrix #2278447A-001 provides additional information - available from the ITS who we serve (www.itsmasonry.com). The Masonite website (www.masonite.com) or the National Technical Center.

**Single Door**  
Maximum size: 3'0" x 6'8"

**Design Pressure**  
**+66.0/-66.0**

Exceeds ASCE 7-10 Minimum Wind Speed Design Criteria

**Large Missile Impact Resistance**

**Hurricane protective system (shutters) is NOT REQUIRED**

Actual design pressure and design resistance requirements for specific building codes and wind speed zones are determined by ASCE 7-10, and ASCE 7-10 is used to design doors directly for the design pressure.

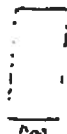
### MINIMUM ASSEMBLY DETAIL:

Compliance requires that minimum assembly details have been followed - see VLD 410, VLD001-02

### MINIMUM INSTALLATION DETAIL:

Compliance requires that minimum installation details have been followed - see VLD 410, VLD001-02

### APPROVED DOOR STYLES:



Panel



4 panel design



2 panel



4 panel



2 panel design



2 panel design



4 panel



4 panel



4 panel



2 panel



2 panel design



2 panel design



2 panel design with 10'0" x 10'0"

**Johnson**  
**EntrySystems**

July 17, 2023

Our Engineering Division is pleased to provide this report. Please refer to the report for details and contact us if you have any questions.

**PREVOCOR** Endorsed  
Product Testing Center

**Masonite**  
Masonite International Corporation

X  
Opaque Inswing Unit

COP-WL-JH4101-02

## WOOD-EDGE STEEL DOORS

### CERTIFIED TEST REPORTS:

NCTL 210-2185-1, 2, 3

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

Unit Tested in Accordance with Miami-Dade BCCO PA201, PA202 and PA203.

Door panels constructed from 26-gauge 0.017" thick steel skins. Both stiles constructed from wood. Top end rails constructed of 0.041" steel. Bottom end rails constructed of 0.021" steel. Interior cavity of slab filled with rigid polyurethane foam core.

Frame constructed of wood with an extruded aluminum threshold

### PRODUCT COMPLIANCE LABELING:

TESTED IN ACCORDANCE WITH  
MIAMI-DADE BCCO  
PA201, PA202 & PA203

COMPANY NAME  
COP-WL

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).

*Kurt L. Ballhazor*

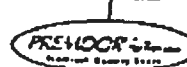
State of Florida, Professional Engineer  
Kurt Ballhazor, P.E. - License Number: 56333



Test Data Review Certificate #10054477  
and COP-WL Report Verification Matrix  
#32754477-001 prepared and reviewed  
electronically and signed by the F.S. by  
the State of Florida Building Code, the  
Miami-Dade Building Department and the  
City of Miami Building Department

**Johnson**  
EntrySystems

July 17, 2002  
Our company and its products are registered with the State of Florida  
as a Limited Liability Company.

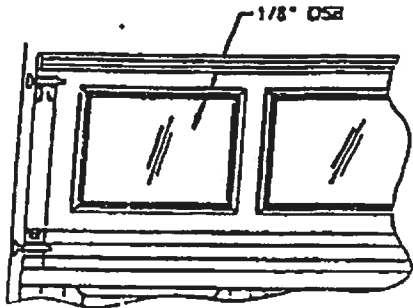


Johnson has  
**Masonite**  
Masonite International Corporation

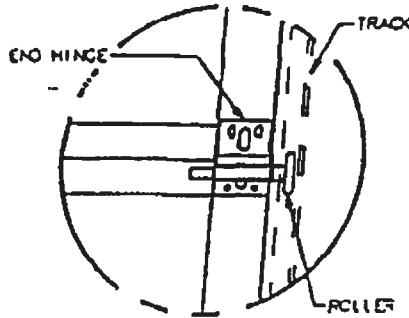
SECTION WITH 3 OR MORE SECTIONS MUST BE  
 1. STRUT FOR THE ADDITIONAL INTERMEDIATE  
 ON THE THIRD SECTION.  
 2. SECTIONS LESS THAN 20.812" MUST BE  
 THE ACTUAL SECTION HEIGHT & 20.812".  
 3. 1 X 5/8" LONG TYPE AB BOX HEAD METAL SCREW  
 4. WIND WARNINGS ISSUED.

# GARAGE DOORS

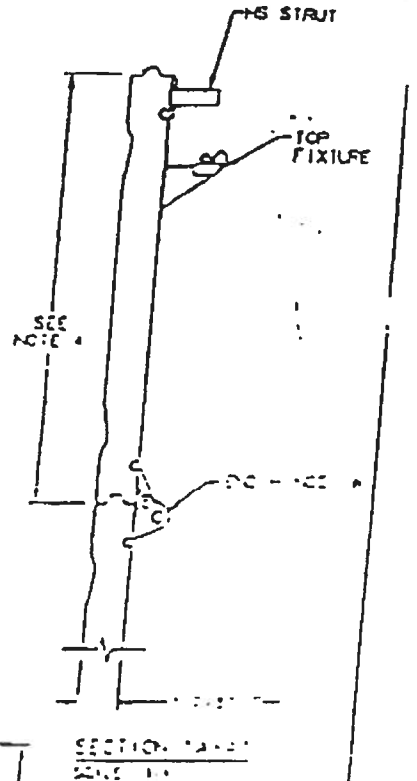
REVISIONS			
REV#	DESCRIPTION	DATE	BY
A	REV PER EN 10110	3/06/98	DL
B	REV PER EN 10111	3/13/98	DL
C	REV PER EN 10112	1/28/99	DL



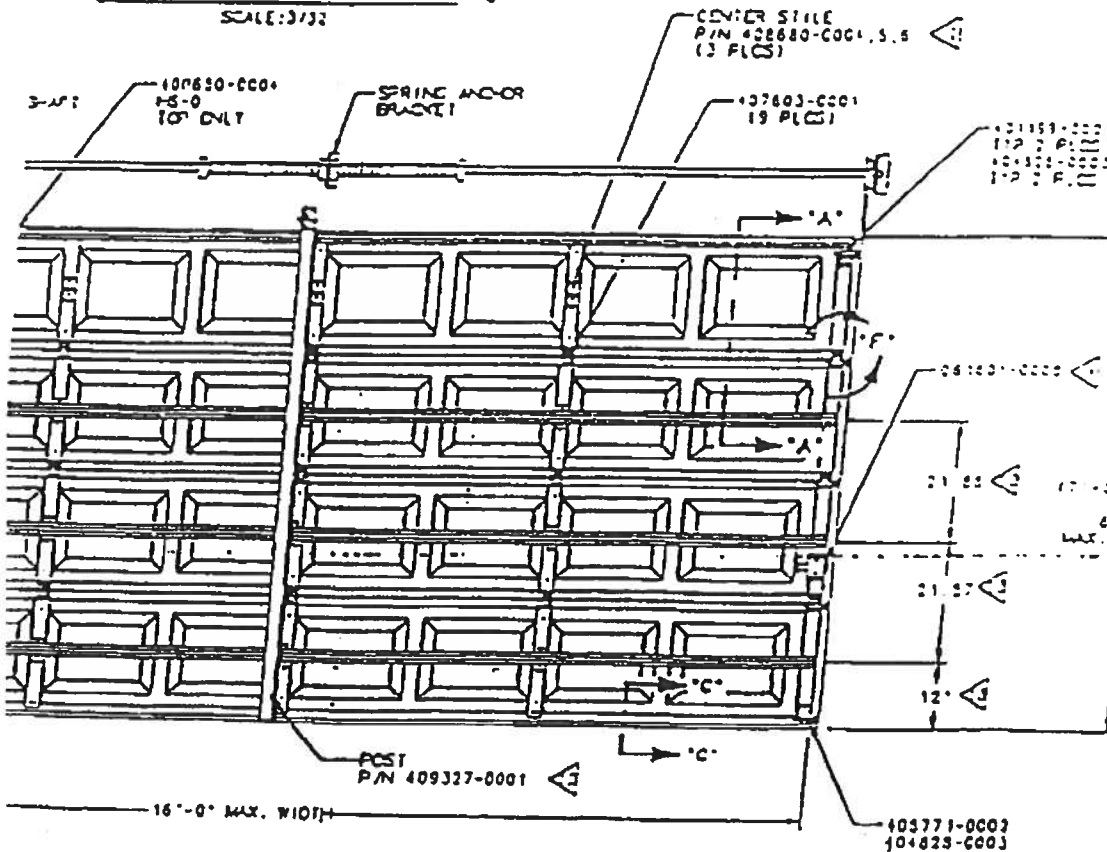
OPTIONAL WINDOW DETAIL  
 SCALE: 3/32



DETAIL 'F'  
 SCALE: 1/4  
 (16\"/>



SECTION 'A-A'  
 SCALE: 1/4



DESIGN LOAD  
 25 PSF =  
 TEST LOAD  
 37.5 PSF =  
 6'-0\"/>

SCALE: 1/16\"/>
 INTERIOR ELEVATION

*[Handwritten signature]*  
 10/10/01

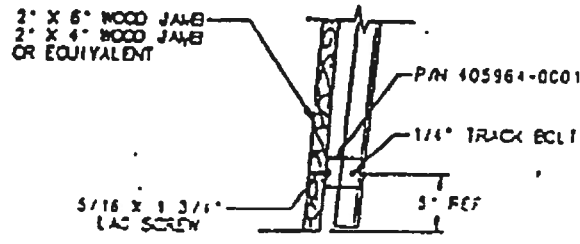
THE DRAWING AND/OR SPECIFICATIONS ON THIS SHEET IS THE PROPERTY OF GARAGE DOOR CORPORATION. IT IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND NO PART OF IT IS TO BE REPRODUCED OR USED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF GARAGE DOOR CORPORATION. ANY VIOLATION OF THIS POLICY WILL BE PROSECUTED TO THE FULL EXTENT OF THE LAW.

VALUATION SPECIFICATIONS		REVISIONS		DATE		BY	
REVISION	DESCRIPTION	DATE	BY	DATE	BY	DATE	BY
1	REV PER EN 10110	3/06/98	DL	01/13/98	M. TOLNIS	01/13/98	DL
2	REV PER EN 10111	3/13/98	DL	02/13/98	DAVID FAX	02/13/98	DL
3	REV PER EN 10112	1/28/99	DL	02/19/98	DAVID FAX	02/19/98	DL

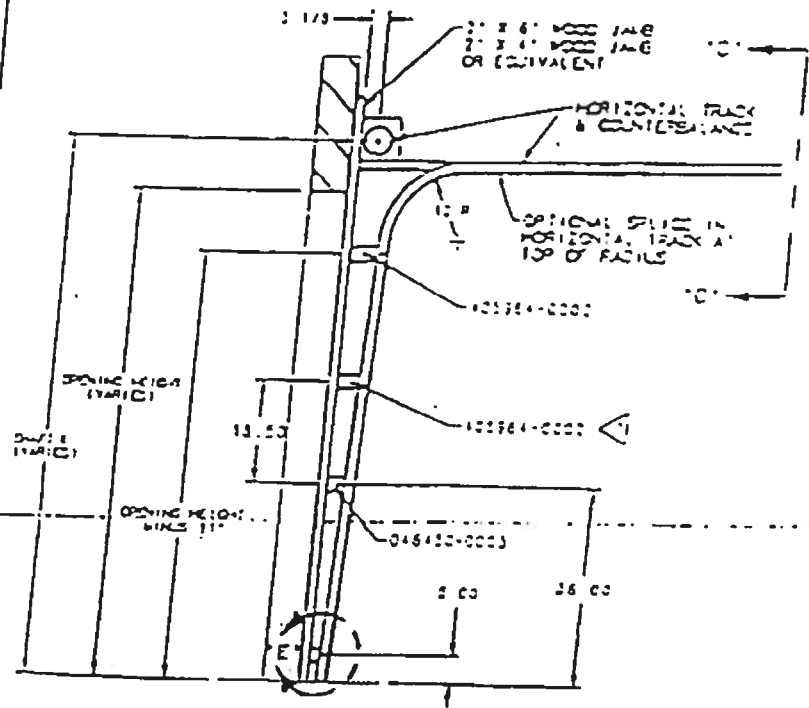
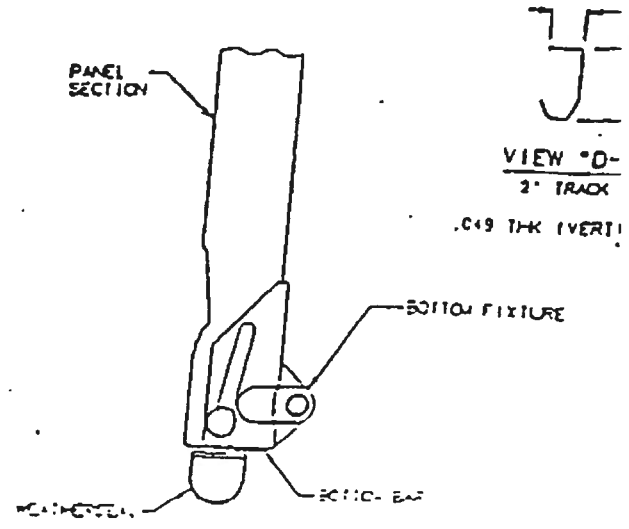
SERIES 280 & 380  
 RES. STL DR. 16'-0\"/>

1. TESTED IN ACCORDANCE WITH STANDARD BUILDING CODE, CHAPTER 17, TO A POSITIVE AND NEGATIVE 37.5 PSF.
2. DASH NUMBERS REPRESENT VARIOUS SECTION HEIGHTS.
3. FOUR SECTION 7' HIGH DOOR SHOWN. 8' HIGH DOORS HAVE FIVE SECTIONS.
4. SECTION HEIGHT OF 20.812, 19.00 & 16.75 ARE AVAILABLE AND MAY BE USED IN COMBINATION TO ACHIEVE VARIOUS HEIGHT DOORS.
5. JOISTMENT PATTERN OF 14.50 X 20.375 SHOWN. ALTERNATE PATTERNS OF 12.50 X 43.375 AND 12.50 X 20.375 MAY BE USED.
6. TORSION SPRINGS SHOWN. EXTENSION SPRINGS AVAILABLE.
7. USE THIS BRACKET, REF. P/N 405964-0002, ON 8' HIGH DOORS ONLY.
8. WINDOW MAY BE INSTALLED IN THE TOP SECTION OR THE SECTION IMMEDIATELY BELOW THE TOP SECTION.

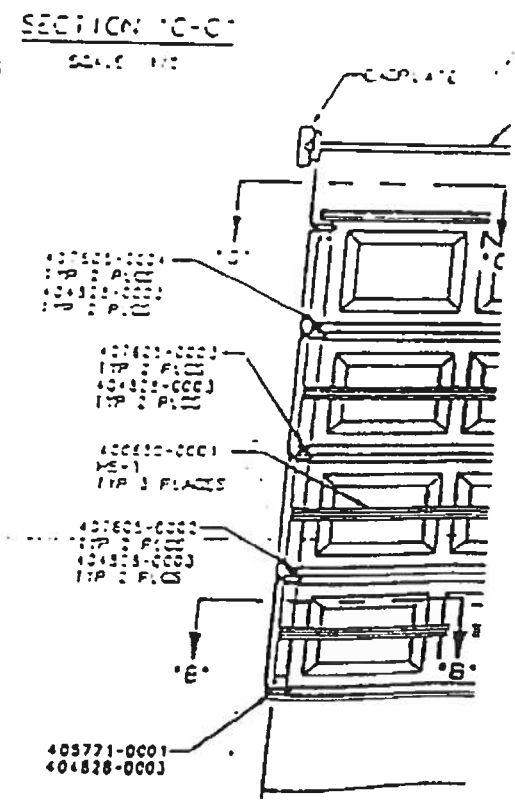
9. THE STRUT PLACEMENT ON E1 CONSISTENT WITH THE DOOR SECTIONS ARE TO BE PLACED
10. THE STRUT PLACEMENT DIMEN REDUCED BY THE DIFFERENCE
11. SCREW P/N 405911-0001 IS
12. POST TO BE INSTALLED ONLY
13. STRUT PLACEMENTS CAN VARY
14. QUANTITY FOR LOCKS CAN BE



DETAIL "E"  
SCALE: 1/8"



STANDARD TRACK DETAIL FOR 16'  
SCALE: 1/16" = 1"



SERIES 280 THRU 289 ARE EQUIVALENT CONSTRUCTION 25GA STEEL  
 SERIES 180 ARE SAME CONSTRUCTION AS SERIES 280 ONLY 24GA STEEL  
 AND END CAPS  
 DOOR TESTED WAS 281 SERIES.

DOOR WIDTH	CENTER STILE	END STILE	ROLLER SHUNT BRACKET	STRUTS/SECT.	ROLLER	VERTICAL TRACK GAGE	JAMB LEAD (1\"/>
------------	--------------	-----------	----------------------	--------------	--------	---------------------	------------------

# TAMKO

## ROOFING PRODUCTS

(CONTINUED from Pg. 2)

### • Glass-Seal • Glass-Seal AR

### • Elite Glass-Seal® • Elite Glass-Seal® AR

## THREE-TAB ASPHALT SHINGLES

With quick setting asphalt adhesive cement immediately upon installation. Spots of cement must be equivalent in size to a 5.25 place 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 re-fasten in a new location. Remove all drip edge metal and replace with new.

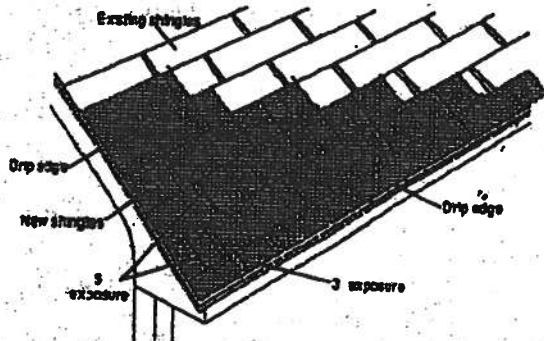
If re-roofing over an existing roof where new flashing is required to protect against ice dams (freeze/thaw cycle of water and/or the backup of water in frozen or clogged gutters), remove the old roofing to a point at least 24 in. beyond the interior wall line and apply TAMKO's Moisture Guard Plus® waterproofing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

**Final 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



take 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.**

- 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.
- Do not trim if the shingle length exceeds 12 in. Lengths should vary.
- Press the shingles tightly into the valley.
- 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 extending it over previously applied shingles and trim a minimum of 2 in. back from the centerline of the valley.

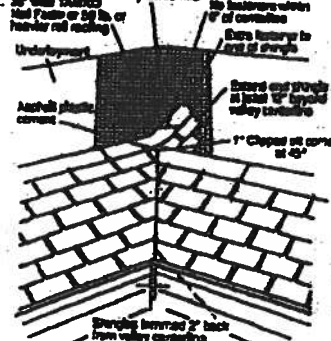
Note: For a neater installation, snap a chalkline over the shingles for guidance.

- Clip the upper corner of each shingle at a 45-degree angle and embed the end of the shingle in a 3 in. wide strip of asphalt plastic cement. This will prevent water from penetrating between the courses by directing it into the valley.

**CAUTION:**  
Adhesive must be applied in smooth, thin, even layers.

Excessive use of adhesive will cause blistering to this product.

TAMKO assumes no responsibility for blistering.



(Continued)

Visit Our Web Site at  
[www.tamko.com](http://www.tamko.com)

Central District	220 West 4th St., Joplin, MO 64801	800-841-4691
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

07/01



FEB - 4 REC'D

January 31, 2002

**TO: OUR FLORIDA CUSTOMERS:**

Effective February 1, 2002, the following TAMKO shingles, as manufactured at TAMKO's Tuscaloosa, Alabama, facility, comply with ASTM D-3161, Type I modified to 110 mph. Testing was conducted using four nails per shingle. These shingles also comply with Florida Building Code TAS 100 for wind driven rain.

- Glass-Seal AR
- Elite Glass-Seal AR
- ASTM Heritage 30 AR (formerly ASTM Heritage 25 AR)
- Heritage 40 AR (formerly Heritage 30 AR)
- Heritage 50 AR (formerly Heritage 40 AR)

All testing was performed by Florida State certified independent labs.

Please direct all questions to TAMKO's Technical Services Department at 1-800-641-4691.

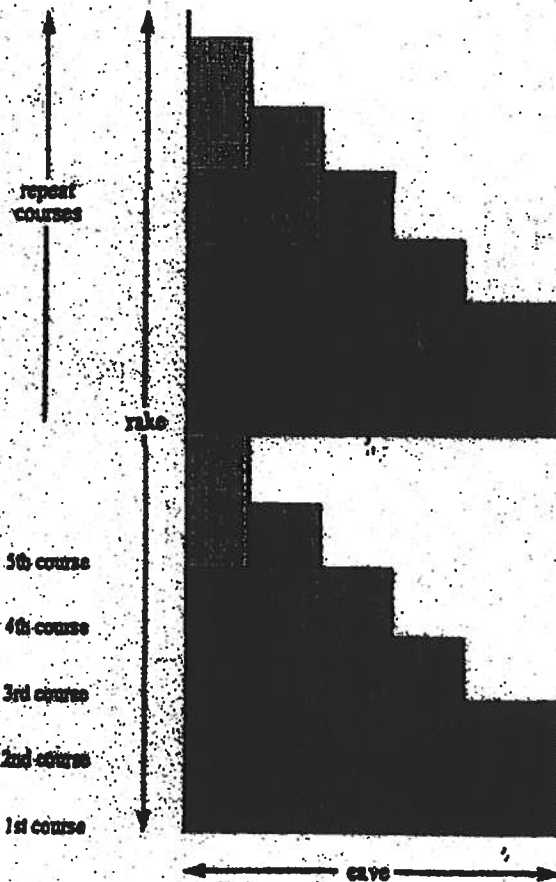
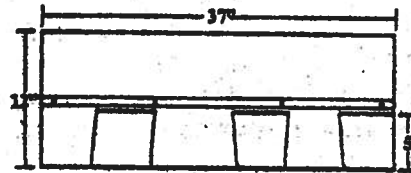
TAMKO Roofing Products, Inc.



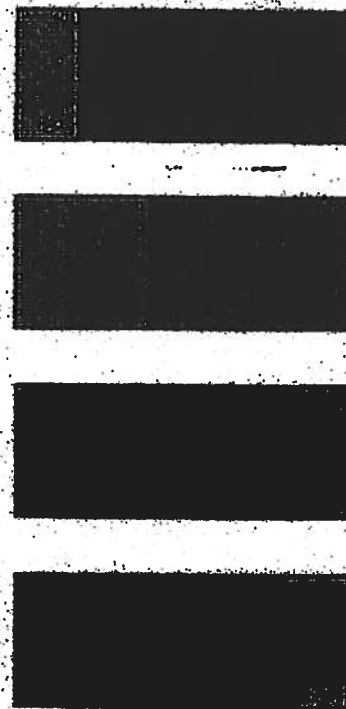


## Application Instructions For Heritage® 25 Series Shingles

SPECIFICATIONS (APPROX.)	
Length	37"
Width	12"
Bundles per Sq.	3
Shingles per Sq.	78
Shingles per Bundle	26
Coverage per Sq. (Sq. Ft.)	100
Exposure	5"



The 4 cuts in the first 10 courses:



In the first 10 courses, there are 4 cuts and no waste.

When you reach the other side of the roof, whatever has to be trimmed off can be used in the field of roofing.

For additional application information consult the application instructions printed on the product package.

**NOTE:** These application instructions apply only to Heritage 25 and Heritage 25 AR shingles.





## Application Instructions for

- Glass-Seal
  - Elite Glass-Seal®
  - Glass-Seal AR
  - Elite Glass-Seal® AR
- ### THREE-TAB ASPHALT SHINGLES

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. thick, 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 #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. FASTENING

**NAILS:** TAMKO recommends the use of nails as the preferred method of application.

**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.

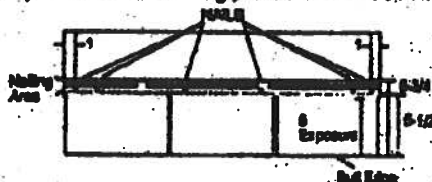
Correct placement of the fasteners is critical to the performance of the shingle. If the fasteners are not placed as shown in the diagram and described below, TAMKO will not be responsible for any shingles blown off or displaced. TAMKO will not be responsible for damage to shingles caused by winds or gusts exceeding gale force. Gale force shall be the standard as defined by the U.S. Weather Bureau.

**FASTENING PATTERNS:** Fasteners must be placed above or below the factory applied sealant in an area between 5-1/2" and 6-3/4" from the butt edge of the shingle. Fasteners should be located horizontally according to the diagram below. Do not nail into the sealant. TAMKO recommends nailing below the sealant whenever possible for greater wind resistance.

- 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) Marginal or High Wind 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 Marginal fastening pattern illustrated below.)



**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.

(Continued)

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800-641-4691  
800-368-2066  
800-228-2856  
800-443-1834  
800-530-8888

07/01



# Cal-Tech Testing, Inc.

• Engineering  
• Geotechnical  
• Environmental  
Laboratories

P.O. Box 1625 • Lake City, FL 32056-1625 • Tel(386)755-3633 • Fax(386)752-5456  
4784 Rosselle St., Jacksonville, FL 32254 • Tel(904)381-8901 • Fax(904)381-8902  
2230 Greensboro Hwy • Quincy, FL 32351 • Tel(850)442-3495 • Fax(850)442-4008

# 25976

## REPORT OF IN-PLACE DENSITY TEST

JOB NO.: 07-350  
DATE TESTED: 7/30/07  
DATE REPORTED: 7/30/07

PROJECT:	Roberts Residence, Lake City, FL
CLIENT:	Mike Roberts, 657 SW Catherine Lane, Lake City, FL 32025
GENERAL CONTRACTOR:	Mike Roberts
EARTHWORK CONTRACTOR:	Mike Roberts
INSPECTOR:	Joe Janosh
ASTM METHOD	SOIL USE
(D-2922) Nuclear ▼	BUILDING FILL ▼
SPECIFICATION REQUIREMENTS: 95%	

TEST NO.	TEST LOCATION	TEST DEPTH	WET DENSITY (lb/ft <sup>3</sup> )	MOISTURE PERCENT	DRY DENSITY (lb/ft <sup>3</sup> )	PROCTOR TEST NO.	PROCTOR VALUE	% MAXIMUM DENSITY
1	8' South x 8' East of NW Corner	12"	116.7	7.3	108.8	1	111.0	98%
2	7' South x 12' West of NE Corner	12"	115.0	7.7	106.8	1	111.0	96%
3	10' North x 12' West of SE Corner	12"	115.1	6.4	108.2	1	111.0	97%
4	9' North x 11' East of SW Corner	12"	117.2	7.5	109.0	1	111.0	98%

REMARKS: The Above Tests Meet Specification Requirements. ▼

PROCTORS					
PROCTOR NO.	SOIL DESCRIPTION	MAXIMUM DRY UNIT WEIGHT (lb/ft <sup>3</sup> )	OPT. MOIST.	TYPE	
1	Light Brown Fine Sand (Register Pit)	111.0	11.5	MODIFIED (ASTM D-1557)	▼

Respectfully Submitted,  
CAL-TECH TESTING, INC.

*Linda Creamer, CEO, DBE*

Linda M. Creamer  
President - CEO

Reviewed By:

*[Signature]*  
Date: 7/31/07  
Licensed, Florida No: 57842

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

# New Construction Subterranean Termite Soil Treatment Record

OMB Approval No. 2502-0525

This form is completed by the licensed Pest Control Company.

**Public reporting burden** for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This information is mandatory and is required to obtain benefits. HUD may not collect this information, and you are not required to complete this form, unless it displays a currently valid OMB control number.

Section 24 CFR 200.926d(b)(3) requires that the sites for HUD insured structures must be free of termite hazards. This information collection requires the builder to certify that an authorized Pest Control company performed all required treatment for termites, and that the builder guarantees the treated area against infestation for one year. Builders, pest control companies, mortgage lenders, homebuyers, and HUD as a record of treatment for specific homes will use the information collected. The information is not considered confidential.

This report is submitted for informational purposes to the builder on proposed (new) construction cases when soil treatment for prevention of subterranean termite infestation is specified by the builder, architect, or required by the lender, architect, FHA, or VA.

All contracts for services are between the Pest Control Operator and builder, unless stated otherwise.

# 25976

## Section 1: General Information (Treating Company Information)

Company Name: Aspen Pest Control, Inc.  
Company Address: 321 N.W. Cole Terrace, Suite 107 City Lake City State FL Zip 32055  
Company Business License No. JB109476 Company Phone No. 386-755-3611 • 352-494-5751  
FHA/VA Case No. (if any) \_\_\_\_\_

## Section 2: Builder Information

Company Name: Mike Roberts Company Phone No. \_\_\_\_\_

## Section 3: Property Information

Location of Structure(s) Treated (Street Address or Legal Description, City, State and Zip) 114 SE Wildwood Dr  
Lake City, FL 32055

Type of Construction (More than one box may be checked) ☒ Slab ☐ Basement ☐ Crawl ☐ Other \_\_\_\_\_  
Approximate Depth of Footing: Outside \_\_\_\_\_ Inside \_\_\_\_\_ Type of Fill \_\_\_\_\_

## Section 4: Treatment Information

Date(s) of Treatment(s) 9-19-07  
Brand Name of Product(s) Used Para-Terms  
EPA Registration No. 64404-1  
Approximate Final Mix Solution % 1.23  
Approximate Size of Treatment Area: Sq. ft. 2137 Linear ft. \_\_\_\_\_ Linear ft. of Masonry Voids \_\_\_\_\_  
Approximate Total Gallons of Solution Applied 4 1/2  
Was treatment completed on exterior? ☒ Yes ☐ No  
Service Agreement Available? ☒ Yes ☐ No

Note: Some state laws require service agreements to be issued. This form does not preempt state law.

Attachments (List) \_\_\_\_\_

Comments \_\_\_\_\_

Name of Applicator(s) Steve Brunner Certification No. (if required by State law) \_\_\_\_\_

The applicator has used a product in accordance with the product label and state requirements. All treatment materials and methods used comply with state and federal regulations.

Authorized Signature [Signature] Date 9-19-07

**Warning:** HUD will prosecute false claims and statements. Conviction may result in criminal and/or civil penalties. (18 U.S.C. 1001, 1010, 1012; 31 U.S.C. 3729, 3802)

Form NPCA-99-B may still be used

form HUD-NPCA-99-B (04/2003)

# COLUMBIA COUNTY OFFICE OF CIVIL ENGINEERING

## 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 03-4S-17-07570-117

Building permit No. 000025976

Use Classification SFD, UTILITY

Fire: 64.20

Permit Holder MIKE ROBERTS

Waste: 167.50

Owner of Building MIKE ROBERTS

Total: 231.70

Location: 118 SE WILDERNESS DR, LAKE CITY, FL



Date: 12/19/2007

*Randy Jones*

by  
Building Inspector

POST IN A CONSPICUOUS PLACE  
(Business Places Only)

BEARING HEIGHT SCHEDULE

9'-0"

OVERHANG

2'-0"

ROOF PITCH(S)

6/12

NOTES:

- 1) REFER TO HB 91 RECOMMENDATIONS FOR HANGING INSTALLATION AND TEMPORARY BRACING. REFER TO ENGINEER DRAWINGS FOR PERMANENT BRACING REQUIRED.
- 2) ALL TRUSSES (INCLUDING TRUSSES UNDER VALLEY FRAMING) MUST BE COMPLETELY DECKED OR REFER TO DETAIL V05 FOR ALTERNATE BRACING REQUIREMENTS.
- 3) ALL VALLEYS ARE TO BE CONVENTIONALLY FRAMED BY BUILDER.
- 4) ALL TRUSSES ARE DESIGNED FOR 2' o.c. MAXIMUM SPACING, UNLESS OTHERWISE NOTED.
- 5) ALL WALLS SHOWN ON PLACEMENT PLAN ARE CONSIDERED TO BE LOUD BEARING, UNLESS OTHERWISE NOTED.
- 6) 5/162 TRUSSES MUST BE INSTALLED WITH THE TOP BEING UP.
- 7) ALL ROOF TRUSS HANGERS TO BE SHIPSON H526 UNLESS OTHERWISE NOTED. ALL FLOOR TRUSS HANGERS TO BE SHIPSON TH422 UNLESS OTHERWISE NOTED.
- 8) BEAM/ADDER LITE. (NOR) TO BE FURNISHED BY BUILDER.

SHOP DRAWING APPROVAL

THIS LAYOUT IS THE SOLE SOURCE FOR FABRICATION OF TRUSSES AND V005. ALL PREVIOUS ARCHITECTURAL OR OTHER TRUSS LAYOUTS, REVIEW AND APPROVAL OF THIS LAYOUT MUST BE RECEIVED BEFORE ANY TRUSSES WILL BE BUILT. VERIFY ALL CONDITIONS TO INSURE AGAINST GANNES THAT WILL RESULT IN EXTRA CHARGES TO YOU.

Expend Library Fee \_\_\_\_\_

Approved by \_\_\_\_\_ Date \_\_\_\_\_



PHONE: 904-437-3349 FAX: 904-437-3904  
Bumell  
Jacksonville  
PHONE: 904-772-6100 FAX: 904-772-1973  
Lake City  
PHONE: 904-755-6894 FAX: 904-755-7973  
Sanford  
PHONE: 407-322-0094 FAX: 407-322-9593

BUILDER:

CASH ACCOUNT - MIKE ROBERTS

LEGAL ADDRESS:

COLUMBIA, FL

MODEL:

CUSTOM

DATE: 03/02/07

DRAWN BY: A

MONDRAGON

HANGER SCHEDULE

TRUSS HANGER INFORMATION

Check TRUSS ENGINEERING For girth and uplift values. If the value exceeds the capacity of a hanger.

(2)HTU26 (1)HGUS26-2

