

DATE02/06/2006

Columbia County Building Permit

This Permit Expires One Year From the Date of Issue

PERMIT000024113

APPLICANTLINDA RODER

PHONE386.752.2281

ADDRESS387SW KEMP CT

LAKE CITYFL32024

OWNERSPARKS CONTRACTORS,INC.

PHONE386.623.0575

ADDRESS145SW MORNING GLORY DR

LAKE CITYFL32024

CONTRACTORJOSH SPARKS

PHONE386.623.057

LOCATION OF PROPERTY90-W TO C-341,TL TO HOPE HENRY RD,TR TO MORNING GLORY DR,TR AND IT'S THE 2ND LOT ON THE L.

TYPE DEVELOPMENTSF/UTILITY

ESTIMATED COST OF CONSTRUCTION109950.00

HEATED FLOOR AREA2199.00

TOTAL AREA2948.00

HEIGHT23.20

STORIES1

FOUNDATIONCONC

WALLSFRAMED

ROOF PITCH8'12

FLOORCONC

LAND USE & ZONINGRSF-2

MAX. HEIGHT35

Minimum Set Back Requirments:

STREET-FRONT25.00

REAR15.00

SIDE10.00

NO. EX.D.U.0

FLOOD ZONEX

DEVELOPMENT PERMIT NO.

PARCEL ID15-4S-16-03023-502

SUBDIVISIONROLLING MEADOWS

LOT2

BLOCK

PHASE

UNIT

TOTAL ACRES0.54

000000962

CBC1252260

Culvert Permit No.

Culvert Waiver

Contractor's License Number

Applicant/Owner/Contractor

18"X32'MITERED

05-1273-N

BLK

JTH

N

Driveway Connection

Septic Tank Number

LU & Zoning checked by

Approved for Issuance

New Resident

COMMENTS:MFE 101.0' PER PLAT. ELEVATION LETTER REQUIRED. NOC ON FILE.

Check # or Cash3171

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power

Foundation

Monolithic

date/app. by

date/app. by

date/app. by

Under slab rough-in plumbing

Slab

Sheathing/Nailing

date/app. by

date/app. by

date/app. by

Framing

Rough-in plumbing above slab and below wood floor

date/app. by

date/app. by

Electrical rough-in

Heat & Air Duct

Peri. beam (Lintel)

date/app. by

date/app. by

date/app. by

Permanent power

C.O. Final

Culvert

date/app. by

date/app. by

date/app. by

M/H tie downs, blocking, electricity and plumbing

Pool

date/app. by

date/app. by

Reconnection

Pump pole

Utility Pole

date/app. by

date/app. by

date/app. by

M/H Pole

Travel Trailer

Re-roof

date/app. by

date/app. by

date/app. by

BUILDING PERMIT FEE \$550.00

CERTIFICATION FEE \$14.74

SURCHARGE FEE \$14.74

MISC. FEES \$0.00

ZONING CERT. FEE \$50.00

FIRE FEE \$0.00

WASTE FEE \$

FLOOD DEVELOPMENT FEE \$

FLOOD ZONE FEE \$25.00

CULVERT FEE \$25.00

TOTAL FEE679.48

INSPECTORS OFFICE

CLERKS OFFICE

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

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

**This Permit Must Be Prominently Posted on Premises During Construction**

PLEASE NOTIFY THE COLUMBIA COUNTY BUILDING DEPARTMENT AT LEAST 24 HOURS IN ADVANCE OF EACH INSPECTION, IN ORDER THAT IT MAY BE MADE WITHOUT DELAY OR INCONVINCE, 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.

# Columbia County Building Permit Application

Revised 9-23-04

**For Office Use Only:** Application # 0512-58 Date Received 12-27-05 By LH Permit # 962/2413  
 Application Approved by - Zoning Official BWK Date 28-12-05 Plans Examiner OK-JTH Date 2-5-06  
 Flood Zone X Development Permit N/A Zoning RSE-2 Land Use Plan Map Category RES. Low Den.  
 Comments M.F.E. 101 Per PLAI Elevation letter Required

C#3191

Applicants Name Linda Roder / Melaine Roder Phone 752-2281  
 Address 387 S.W. Kemp Ct. Lake City FL 32024  
 Owners Name Sparks Contractors Inc. Phone 623-0575  
 911 Address 145 S.W. Morning Glory Dr. Lake City FL 32024  
 Contractors Name Sparks Contractors Inc. - Josh Sparks Phone 623-0575  
 Address P.O. Box 1479 Lake City FL 32056  
 Fee Simple Owner Name & Address NA  
 Bonding Co. Name & Address NA  
 Architect/Engineer Name & Address Ben Sparks / Mark Disosway  
 Mortgage Lenders Name & Address NA

Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy  
 Property ID Number 15-4S-16E 03023-502 Estimated Cost of Construction 171,000  
 Subdivision Name Rolling Meadows Lot 2 Block      Unit      Phase       
 Driving Directions 90 W, L on 341 (Sisters welcome) R at Hope Henry,  
R on S.W. Morning Glory Dr. 2nd Lot on L

Type of Construction SFD Number of Existing Dwellings on Property 0  
 Total Acreage      Lot Size .54 Do you need a Culvert Permit or Culvert Waiver or Have an Existing Drive  
 Actual Distance of Structure from Property Lines - Front 35' Side 23.5' Side 23.5' Rear 133'  
 Total Building Height 23'-2" Number of Stories 1 Heated Floor Area 2199 Roof Pitch 8-12  
Porch 257 Garage 492 TOTAL 2948

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.

Owner Builder or Agent (Including Contractor)

STATE OF FLORIDA  
COUNTY OF COLUMBIA



Linda R. Roder  
Commission #DD303275  
Expires: Mar 24, 2008  
Bonded Thru  
Atlantic Bonding Co., Inc.

Sworn to (or affirmed) and subscribed before me

this 5 day of December 2005

Personally known ✓ or Produced Identification     

Contractor Signature

Contractors License Number CBC 1252260

Competency Card Number     

NOTARY STAMP/SEAL

Linda R. Roder  
Notary Signature

\*24113

Inst:2006002352 Date:02/01/2006 Time:10:46

ML DC, P. DeWitt Cason, Columbia County B:1072 P:1679

Permit No.

Tax Folio No. 15-4S-16-03023-502 & 15-4S-16-03023-504

### NOTICE OF COMMENCEMENT

STATE OF FLORIDA  
COUNTY OF COLUMBIA

THE UNDERSIGNED hereby gives notice that improvements 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.

1. Description of property:  
Lots 2 and 4, ROLLING MEADOWS, a subdivision according to the plat thereof, as recorded in Plat Book 8, pages 45 and 46, public records of Columbia County, Florida.
2. General description of improvements: New Home Construction
3. Owner information:
  - a) Name and Address: Sparks Contractors, Inc.  
P.O. Box 1479  
Lake City, FL 32056
  - c) Interest in property: 100%
4. Contractor (name and address):  
Sparks Contractors, Inc.  
P.O. Box 1479  
Lake City, FL 32056
  - a) Phone number: 386-755-9314
  - b) Fax number: 386-755-7154
5. Surety Information:
  - a) Name and Address:
  - b) Phone number:
  - c) Amount of bond:
6. Lender (name and address):  
Peoples State Bank  
350 SW Main Blvd.  
Lake City, FL 32025
  - a) Phone number: 386-754-0002
  - b) Fax Number 386-754-0031
7. Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a)7., Florida Statutes:  
William J. Haley, Esquire  
Brannon, Brown, Haley & Bullock, P.A.  
P.O. Box 1029  
Lake City, FL 32056-1029
  - a) Phone number: 386-752-3213
8. Expiration date of Notice of Commencement: \_\_\_\_\_, 200\_\_.

Sparks Contractors, Inc.

By: [Signature]

Jacob D. Sparks, President  
P.O. Box 1479  
Lake City, FL 32056

STATE OF FLORIDA  
COUNTY OF COLUMBIA

Sworn to and subscribed before me this 30th day of January, 2006, A.D. by Jacob D. Sparks, as President of Sparks Contractors, Inc., a Florida corporation, on behalf of said corporation, who is personally known to me or whom produced FL Driver's License as identification.

[Signature]  
Notary Public - State of Florida



Debbie G. Moore  
Commission # DD400476  
Expires March 16, 2009  
Bonded Title Plus - Insurance, Inc. 800-388-7019

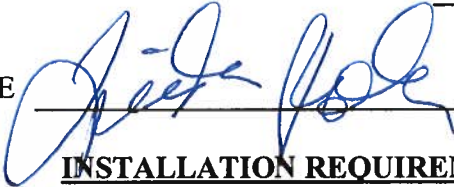
# Columbia County Building Department Culvert Permit

Culvert Permit No.  
**000000962**

DATE 02/06/2006 PARCEL ID # 15-4S-16-03023-502  
APPLICANT LINDA RODER PHONE 386.752.2281  
ADDRESS 387 SW KEMP CT LAKE CITY FL 32024  
OWNER SPARKS CONTRACTORS INC. PHONE 386.623.0575  
ADDRESS 145 SW MORNING GLORY DRIVE LAKE CITY FL 32024  
CONTRACTOR JOSH SPARKS PHONE 386.623.0575  
LOCATION OF PROPERTY 90-W TO C-341-TL TO HOPE HENRY RD,TR TO MORNING GLORY DR.  
2ND LOT ON L.

SUBDIVISION/LOT/BLOCK/PHASE/UNIT ROLLING MEADOWS 2

SIGNATURE



## INSTALLATION REQUIREMENTS



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

INSTALLATION NOTE: Turnouts will be required as follows:

- a) a majority of the current and existing driveway turnouts are paved, or;
- b) the driveway to be served will be paved or formed with concrete.

Turnouts shall be concrete or paved a minimum of 12 feet wide or the width of the concrete or paved driveway, whichever is greater. The width shall conform to the current and existing paved or concreted turnouts.



Culvert installation shall conform to the approved site plan standards.



Department of Transportation Permit installation approved standards.



Other \_\_\_\_\_

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

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

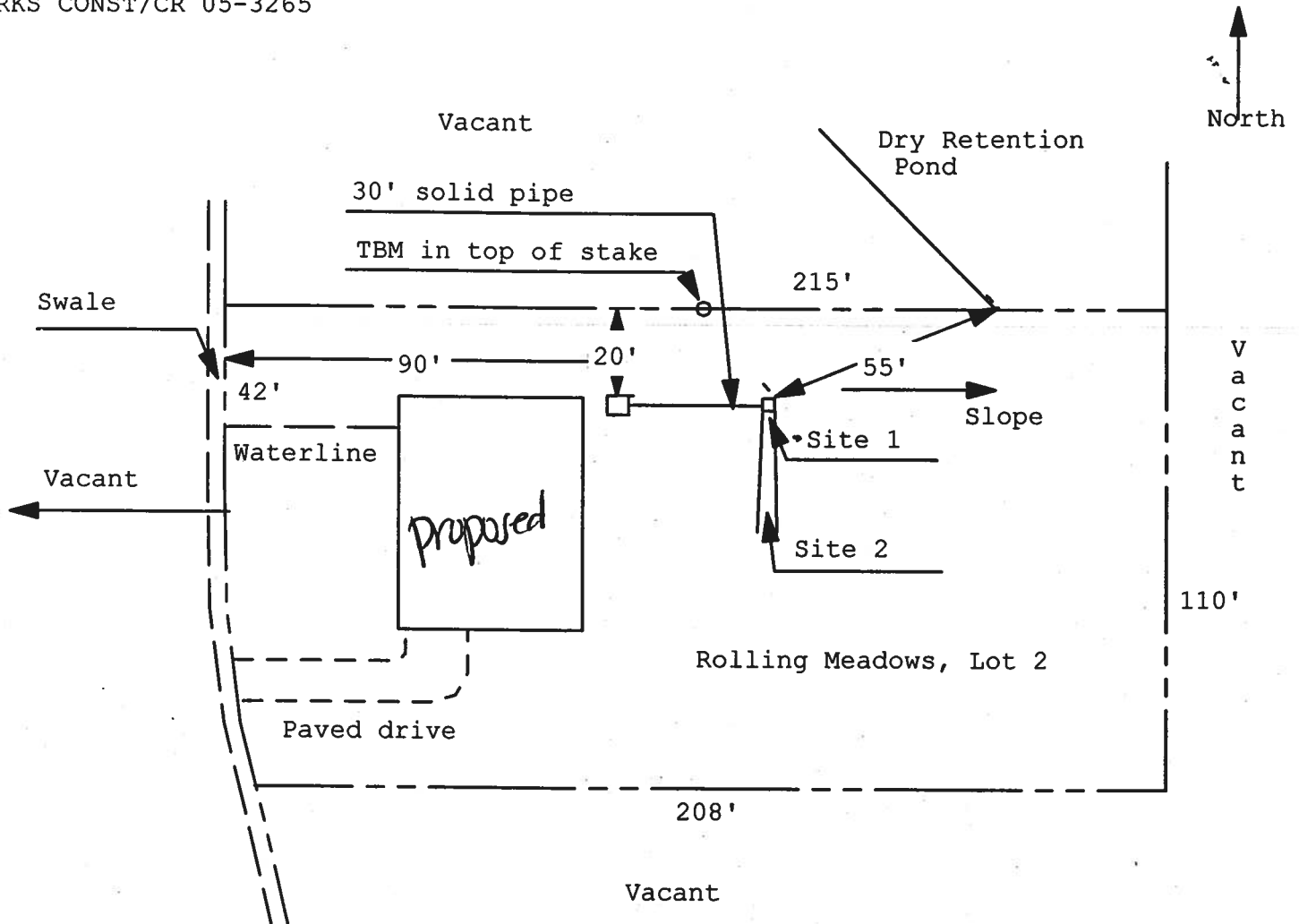
Amount Paid 25.00



**Application for Onsite Sewage Disposal System  
Construction Permit. Part II Site Plan**  
Permit Application Number: 05-1273N

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

SPARKS CONST/CR 05-3265



public  
water

1 inch = 40 feet

Site Plan Submitted By Paul Lloyd Date 12/9/05  
Plan Approved X Not Approved \_\_\_\_\_ Date 12-30-05

By Sallie Graddy, ESI-COLUMBIA CPHU

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

This instrument prepared by:  
William J. Haley, Esquire  
Brannon, Brown,  
Haley & Bullock, P. A.  
P. O. Box 1029  
Lake City, FL 32056-1029

Inst:2005031970 Date:12/27/2005 Time:11:48

Doc Stamp-Deed : 390.60

DC, P. DeWitt Cason, Columbia County B:1069 P:903

### **SPECIAL WARRANTY DEED**

**THIS INDENTURE**, made this 22 day of December, 2006, between **JERRY COOK**, a married man, who does not reside on the property, but who resides at 314 Cannon Creek Drive, Lake City, Florida 32055, hereinafter referred to as Grantor, and **SPARKS CONTRACTORS, INC**, a Florida corporation, having a mailing address of 162 SW Country Court, Lake City FL 32024, hereinafter referred to as Grantee.

**WITNESSETH:** That said Grantor, for and in consideration of the sum of \$10.00 and other good and valuable considerations to said Grantor in hand paid by said Grantee, the receipt and sufficiency of which are hereby acknowledged, have granted, bargained and sold to the said Grantee, and Grantee's successors and assigns forever, the following described land, situate, lying and being in **Columbia County, Florida**, to-wit:

Lot(s) 2 and 4, **ROLLING MEADOWS**, a subdivision according to the plat thereof, as recorded in Plat Book 8, pages 45 and 46, public records of Columbia County, Florida.

**PARCEL NO.** Part of 15-4S-16-03023-005

**SUBJECT TO:** Taxes and special assessments for the year 2006 and subsequent years; restrictions, reservations, rights of way for public roads, easements of record, if any; and zoning and any other governmental restrictions regulating the use of the lands.

**SUBJECT TO:** That certain Mortgage to Peoples State Bank dated November 16, 2005, recorded November 17, 2005 in Official Records Book 1065, page 1012, public records of Columbia County, Florida

and said Grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons claiming by, through or under said Grantor.

IN WITNESS WHEREOF, Grantor has hereunto set its hand and seal the day and year first above written.

Signed, sealed and delivered  
in the presence of:

Inst:2005031970 Date:12/27/2005 Time:11:48

Doc Stamp-Deed : 390.60

DC,P.Dewitt Cason,Columbia County B:1069 P:904

Print Name: Josh Sparks

Jerry Cook  
Jerry Cook

Print Name: \_\_\_\_\_

**STATE OF FLORIDA  
COUNTY OF COLUMBIA**

The foregoing instrument was acknowledged before me this 23 day of December, 2005, by Jerry Cook, who is personally known to me or whom produced \_\_\_\_\_, as identification.

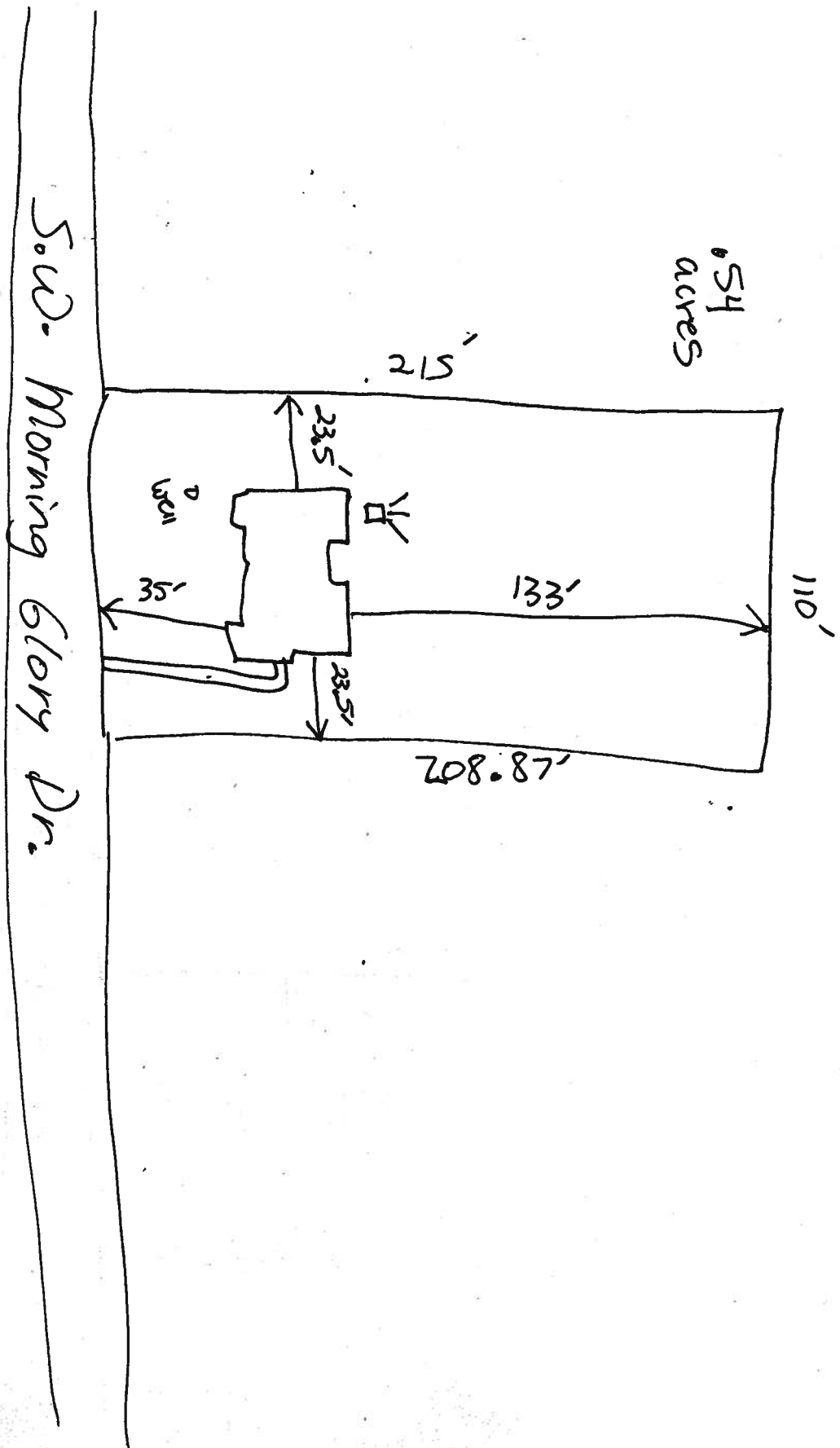


Linda R. Roder  
Commission #DD303275  
Expires: Mar 24, 2008  
Bonded Thru  
Atlantic Bonding Co., Inc.

Linda R. Roder  
Notary Public, State of Florida

# Site Plan

Lot 2 Rolling Meadows



# FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

## Florida Department of Community Affairs Residential Whole Building Performance Method A

Project Name:	<b>511234SparksConstruction</b>	Builder:	<b>Josh Sparks</b>
Address:	<b>Lot: 2, Sub: Rolling Meadows, Plat:</b>	Permitting Office:	<i>Columbia</i>
City, State:	<b>, FL</b>	Permit Number:	
Owner:	<b>Spec House</b>	Jurisdiction Number:	<b>221000</b>
Climate Zone:	<b>North</b>		

1. New construction or existing	New	12. Cooling systems	
2. Single family or multi-family	Single family	a. Central Unit	Cap: 48.0 kBtu/hr
3. Number of units, if multi-family	1		SEER: 12.00
4. Number of Bedrooms	4	b. N/A	
5. Is this a worst case?	Yes	c. N/A	
6. Conditioned floor area (ft²)	2199 ft²	13. Heating systems	
7. Glass type <sup>1</sup> and area: (Label reqd. by 13-104.4.5 if not default)		a. Electric Heat Pump	Cap: 48.0 kBtu/hr
a. U-factor:	Description Area		HSPF: 7.80
(or Single or Double DEFAULT) 7a. (Dble Default) 229.0 ft²		b. N/A	
b. SHGC:		c. N/A	
(or Clear or Tint DEFAULT) 7b. (Clear) 229.0 ft²		14. Hot water systems	
8. Floor types		a. Electric Resistance	Cap: 40.0 gallons
a. Slab-On-Grade Edge Insulation	R=0.0, 236.0(p) ft		EF: 0.92
b. N/A		b. N/A	
c. N/A		c. Conservation credits	
9. Wall types		(HR-Heat recovery, Solar	
a. Frame, Wood, Exterior	R=13.0, 1428.0 ft²	DHP-Dedicated heat pump)	
b. Frame, Wood, Adjacent	R=13.0, 318.0 ft²	15. HVAC credits	
c. N/A		(CF-Ceiling fan, CV-Cross ventilation,	
d. N/A		HF-Whole house fan,	
e. N/A		PT-Programmable Thermostat,	
10. Ceiling types		MZ-C-Multizone cooling,	
a. Under Attic	R=30.0, 2260.0 ft²	MZ-H-Multizone heating)	
b. N/A			
c. N/A			
11. Ducts			
a. Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 250.0 ft		
b. N/A			

Glass/Floor Area: 0.15

Total as-built points: 32844

Total base points: 34050

# PASS

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

PREPARED BY: *Ben Sparks*

DATE: *12-1-05*

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

OWNER/AGENT: *John H. Sparks*

DATE: *12-5-05*

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.

# SUMMER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 2, Sub: Rolling Meadows, Plat: , , FL,

PERMIT #:

BASE				AS-BUILT							
<b>GLASS TYPES</b>											
.18 X Conditioned X BSPM = Points Floor Area				Type/SC	Overhang Ornt Len Hgt		Area X SPM X SOF = Points				
.18	2199.0	20.04	7932.2	Double, Clear	W	1.5	8.0	15.0	38.52	0.96	553.6
				Double, Clear	W	1.5	4.0	4.0	38.52	0.82	126.0
				Double, Clear	N	99.0	9.5	10.0	19.20	0.59	113.9
				Double, Clear	W	13.5	9.5	30.0	38.52	0.46	529.2
				Double, Clear	SW	12.0	8.0	14.0	40.16	0.42	238.8
				Double, Clear	W	8.8	8.0	28.0	38.52	0.51	545.2
				Double, Clear	S	99.0	9.5	20.0	35.87	0.43	309.8
				Double, Clear	W	1.5	8.0	36.0	38.52	0.96	1328.7
				Double, Clear	N	1.5	4.5	16.0	19.20	0.90	276.5
				Double, Clear	E	1.5	8.0	56.0	42.06	0.96	2255.5
				Double, Clear	E	7.5	9.5	20.0	42.06	0.58	485.9
				Double, Clear	E	7.5	4.0	12.0	42.06	0.40	201.0
				Double, Clear	NE	1.5	5.5	10.0	29.56	0.91	267.6
				Double, Clear	E	1.5	5.5	15.0	42.06	0.90	565.5
				Double, Clear	SE	1.5	5.5	10.0	42.75	0.86	368.1
				Double, Clear	S	1.5	1.5	4.0	35.87	0.52	74.7
				Double, Clear	S	1.5	5.5	30.0	35.87	0.83	895.4
				<b>As-Built Total:</b>		<b>330.0</b>			<b>9135.6</b>		
<b>WALL TYPES</b>				<b>Type</b>		<b>R-Value</b>		<b>Area X SPM = Points</b>			
Adjacent	318.0	0.70	222.6	Frame, Wood, Exterior		13.0		1428.0		1.50 2142.0	
Exterior	1428.0	1.70	2427.6	Frame, Wood, Adjacent		13.0		318.0		0.60 190.8	
<b>Base Total:</b>		<b>1746.0</b>	<b>2650.2</b>	<b>As-Built Total:</b>		<b>1746.0</b>		<b>2332.8</b>			
<b>DOOR TYPES</b>				<b>Type</b>				<b>Area X SPM = Points</b>			
Adjacent	20.0	2.40	48.0	Exterior Insulated				80.0		4.10 328.0	
Exterior	80.0	6.10	488.0	Adjacent Insulated				20.0		1.60 32.0	
<b>Base Total:</b>		<b>100.0</b>	<b>536.0</b>	<b>As-Built Total:</b>		<b>100.0</b>		<b>360.0</b>			
<b>CEILING TYPES</b>				<b>Type</b>		<b>R-Value</b>		<b>Area X SPM X SCM = Points</b>			
Under Attic	2199.0	1.73	3804.3	Under Attic		30.0		2260.0		1.73 X 1.00 3909.8	
<b>Base Total:</b>		<b>2199.0</b>	<b>3804.3</b>	<b>As-Built Total:</b>		<b>2260.0</b>		<b>3909.8</b>			

# SUMMER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 2, Sub: Rolling Meadows, Plat: , , FL,

PERMIT #:

BASE				AS-BUILT			
FLOOR TYPES Area X BSPM = Points				Type	R-Value	Area X SPM = Points	
Slab	236.0(p)	-37.0	-8732.0	Slab-On-Grade Edge Insulation	0.0	236.0(p)	-41.20
Raised	0.0	0.00	0.0				
Base Total: -8732.0				As-Built Total: 236.0 -9723.2			
INFILTRATION Area X BSPM = Points				Area X SPM = Points			
	2199.0	10.21	22451.8			2199.0	10.21
Summer Base Points: 28642.5				Summer As-Built Points: 28466.8			
Total Summer Points	X	System Multiplier	= Cooling Points	Total Component (System - Points)	X Cap Ratio (DM x DSM x AHU)	X Duct Multiplier	X System Multiplier
							X Credit Multiplier
							= Cooling Points
28642.5		0.4266	12218.9	(sys 1: Central Unit 48000 btuh ,SEER/EFF(12.0) Ducts:Unc(S),Unc(R),Gar(AH),R6.0(INS)			
				28467	1.00	(1.09 x 1.147 x 1.00)	0.284
				28466.8	1.00	1.250	0.284
							1.000
							10122.4
							10122.4

# WINTER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 2, Sub: Rolling Meadows, Plat: , , FL,

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	2199.0	12.74	5042.7	Double, Clear	W	1.5	8.0	15.0	20.73	1.01	314.4
				Double, Clear	W	1.5	4.0	4.0	20.73	1.05	87.3
				Double, Clear	N	99.0	9.5	10.0	24.58	1.03	252.5
				Double, Clear	W	13.5	9.5	30.0	20.73	1.20	746.2
				Double, Clear	SW	12.0	8.0	14.0	16.74	1.81	424.4
				Double, Clear	W	8.8	8.0	28.0	20.73	1.18	683.8
				Double, Clear	S	99.0	9.5	20.0	13.30	3.66	973.4
				Double, Clear	W	1.5	8.0	36.0	20.73	1.01	754.5
				Double, Clear	N	1.5	4.5	16.0	24.58	1.00	395.1
				Double, Clear	E	1.5	8.0	56.0	18.79	1.02	1073.3
				Double, Clear	E	7.5	9.5	20.0	18.79	1.22	460.3
				Double, Clear	E	7.5	4.0	12.0	18.79	1.44	324.7
				Double, Clear	NE	1.5	5.5	10.0	23.57	1.01	237.6
				Double, Clear	E	1.5	5.5	15.0	18.79	1.04	293.5
				Double, Clear	SE	1.5	5.5	10.0	14.71	1.11	163.8
				Double, Clear	S	1.5	1.5	4.0	13.30	2.73	145.3
				Double, Clear	S	1.5	5.5	30.0	13.30	1.15	457.6
				<b>As-Built Total:</b>		<b>330.0</b>			<b>7787.7</b>		
<b>WALL TYPES</b>				<b>Type</b>		<b>R-Value</b>		<b>Area X WPM = Points</b>			
Adjacent	318.0	3.60	1144.8	Frame, Wood, Exterior		13.0		1428.0		3.40 4855.2	
Exterior	1428.0	3.70	5283.6	Frame, Wood, Adjacent		13.0		318.0		3.30 1049.4	
<b>Base Total:</b>		<b>1746.0</b>	<b>6428.4</b>	<b>As-Built Total:</b>		<b>1746.0</b>		<b>5904.6</b>			
<b>DOOR TYPES</b>				<b>Type</b>		<b>R-Value</b>		<b>Area X WPM = Points</b>			
Adjacent	20.0	11.50	230.0	Exterior Insulated				80.0		8.40 672.0	
Exterior	80.0	12.30	984.0	Adjacent Insulated				20.0		8.00 160.0	
<b>Base Total:</b>		<b>100.0</b>	<b>1214.0</b>	<b>As-Built Total:</b>		<b>100.0</b>		<b>832.0</b>			
<b>CEILING TYPES</b>				<b>Type</b>		<b>R-Value</b>		<b>Area X WPM X WCM = Points</b>			
Under Attic	2199.0	2.05	4507.9	Under Attic		30.0		2260.0		2.05 X 1.00 4633.0	
<b>Base Total:</b>		<b>2199.0</b>	<b>4507.9</b>	<b>As-Built Total:</b>		<b>2260.0</b>		<b>4633.0</b>			

# WINTER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 2, Sub: Rolling Meadows, Plat: , , FL,

PERMIT #:

BASE				AS-BUILT				
FLOOR TYPES Area X BWPM = Points				Type	R-Value	Area X	WPM	= Points
Slab	236.0(p)	8.9	2100.4	Slab-On-Grade Edge Insulation	0.0	236.0(p)	18.80	4436.8
Raised	0.0	0.00	0.0					
Base Total:			2100.4	As-Built Total:		236.0		4436.8
INFILTRATION Area X BWPM = Points				Area X WPM = Points				
			2199.0			2199.0		-0.59 -1297.4
Winter Base Points:			17996.1	Winter As-Built Points:			22296.7	
Total Winter Points	X	System Multiplier	= Heating Points	Total Component (System - Points)	X Cap Ratio (DM x DSM x AHU)	X Duct Multiplier	X System Multiplier	X Credit Multiplier = Heating Points
17996.1		0.6274	11290.7	(sys 1: Electric Heat Pump 48000 btuh ,EFF(7.8) Ducts:Unc(S),Unc(R),Gar(AH),R6.0 22296.7 1.000 (1.069 x 1.169 x 1.00) 0.437 1.000 12181.3 22296.7 1.00 1.250 0.437 1.000 12181.3				

# WATER HEATING & CODE COMPLIANCE STATUS

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 2, Sub: Rolling Meadows, Plat: , , FL,

PERMIT #:

BASE					AS-BUILT					
WATER HEATING										
Number of Bedrooms	X	Multiplier	=	Total	Tank Volume	EF	Number of Bedrooms	X	Tank X Ratio	Credit X Multiplier = Total
4		2635.00		10540.0	40.0	0.92	4		1.00	2635.00
					As-Built Total:					10540.0

CODE COMPLIANCE STATUS													
BASE					AS-BUILT								
Cooling Points	+	Heating Points	+	Hot Water Points	=	Total Points	Cooling Points	+	Heating Points	+	Hot Water Points	=	Total Points
12219		11291		10540		34050	10122		12181		10540		32844

# Code Compliance Checklist

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 2, Sub: Rolling Meadows, Plat: , , FL,

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\* = 83.3**

**The higher the score, the more efficient the home.**

Spec House, Lot: 2, Sub: Rolling Meadows, Plat: , , FL,

1. New construction or existing	New	___	12. Cooling systems	
2. Single family or multi-family	Single family	___	a. Central Unit	Cap: 48.0 kBtu/hr
3. Number of units, if multi-family	1	___		SEER: 12.00
4. Number of Bedrooms	4	___	b. N/A	___
5. Is this a worst case?	Yes	___	c. N/A	___
6. Conditioned floor area (ft <sup>2</sup> )	2199 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: 48.0 kBtu/hr
(or Single or Double DEFAULT)	7a. (Dble Default) 229.0 ft <sup>2</sup>	___		HSPF: 7.80
b. SHGC:		___	b. N/A	___
(or Clear or Tint DEFAULT)	7b. (Clear) 229.0 ft <sup>2</sup>	___	c. N/A	___
8. Floor types		___	14. Hot water systems	
a. Slab-On-Grade Edge Insulation	R=0.0, 236.0(p) ft	___	a. Electric Resistance	Cap: 40.0 gallons
b. N/A	___	___		EF: 0.92
c. N/A	___	___	b. N/A	___
9. Wall types		___	c. Conservation credits	___
a. Frame, Wood, Exterior	R=13.0, 1428.0 ft <sup>2</sup>	___	(HR-Heat recovery, Solar	___
b. Frame, Wood, Adjacent	R=13.0, 318.0 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, 2260.0 ft <sup>2</sup>	___	MZ-C-Multizone cooling,	___
b. N/A	___	___	MZ-H-Multizone heating)	___
c. N/A	___	___		___
11. Ducts		___		___
a. Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 250.0 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 v4.0)

# BUILDING INPUT SUMMARY REPORT

<b>PROJECT</b>	<b>Title:</b> 511234SparksConstruction		<b>Family Type:</b> Single		<b>Address Type:</b> Lot Information			
	<b>Owner:</b> Spec House		<b>New/Existing:</b> New		<b>Lot #:</b> 2			
	<b># of Units:</b> 1		<b>Bedrooms:</b> 4		<b>Subdivision:</b> Rolling Meadows			
	<b>Builder Name:</b> Josh Sparks		<b>Conditioned Area:</b> 2199		<b>Platbook:</b> (blank)			
	<b>Climate:</b> North		<b>Total Stories:</b> 1		<b>Street:</b> N/A			
	<b>Permit Office:</b> (blank)		<b>Worst Case:</b> Yes		<b>County:</b> Columbia			
	<b>Jurisdiction #:</b> (blank)		<b>Rotate Angle:</b> (blank)		<b>City, St, Zip:</b> , FL,			
<b>FLOORS</b>	#	Floor Type	R-Val	Area/Perimeter	Units			
	1	Slab-On-Grade Edge Insulation	0.0	236.0(p) ft	1			
<b>CEILINGS</b>	#	Ceiling Type	R-Val	Area	Base Area	Units		
	1	Under Attic	30.0	2260.0 ft²	2199.0 ft²	1		
	Credit Multipliers: None							
<b>WALLS</b>	#	Wall Type	Location	R-Val	Area	Units		
	1	Frame - Wood	Exterior	13.0	1428.0 ft²	1		
	2	Frame - Wood	Adjacent	13.0	318.0 ft²	1		
<b>DUCTS</b>	#	System Type	Efficiency	Capacity				
	1	Central Unit	SEER: 12.00	48.0 kBtu/hr				
	Credit Multipliers: None							
<b>WATER</b>	#	Supply Location	Return Location	Air Handler Location	Supply R-Val	Supply Length		
	1	Uncond.	Uncond.	Garage	6.0	250.0 ft		
	Credit Multipliers: None							
<b>REFR.</b>	#	System Type	EF	Cap.	Conservation Type	Con. EF		
	1	Electric Resistance	0.92	40.0	None	0.00		
<b>WINDOWS</b>	#	Panes	Tint	Ornt	Area	OH Length	OH Hght	Units
	1	Double	Clear	N	15.0 ft²	1.5 ft	8.0 ft	1
	2	Double	Clear	N	4.0 ft²	1.5 ft	4.0 ft	1
<b>REFR.</b>	3	Double	Clear	E	10.0 ft²	99.0 ft	9.5 ft	1
	4	Double	Clear	N	10.0 ft²	13.5 ft	9.5 ft	3
	5	Double	Clear	NW	14.0 ft²	12.0 ft	8.0 ft	1
	6	Double	Clear	N	28.0 ft²	8.8 ft	8.0 ft	1
	7	Double	Clear	W	10.0 ft²	99.0 ft	9.5 ft	2
	8	Double	Clear	N	18.0 ft²	1.5 ft	8.0 ft	2
	9	Double	Clear	E	16.0 ft²	1.5 ft	4.5 ft	1
	10	Double	Clear	S	28.0 ft²	1.5 ft	8.0 ft	2
	11	Double	Clear	S	10.0 ft²	7.5 ft	9.5 ft	2
	12	Double	Clear	S	12.0 ft²	7.5 ft	4.0 ft	1
	13	Double	Clear	SE	10.0 ft²	1.5 ft	5.5 ft	1
	14	Double	Clear	S	15.0 ft²	1.5 ft	5.5 ft	1
	15	Double	Clear	SW	10.0 ft²	1.5 ft	5.5 ft	1
	16	Double	Clear	W	4.0 ft²	1.5 ft	1.5 ft	1
	17	Double	Clear	W	15.0 ft²	1.5 ft	5.5 ft	2

# Residential System Sizing Calculation

## Summary

Spec House

Project Title:  
511234 Sparks Construction

Class 3 Rating  
Registration No. 0  
Climate: North

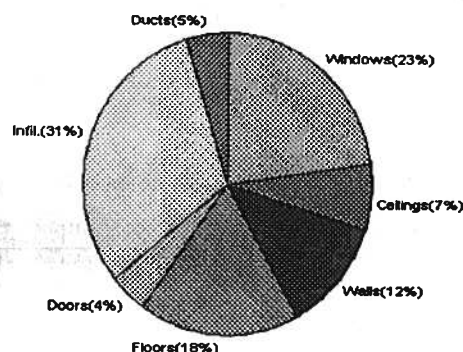
12/1/2005

Location for weather data: Gainesville - Defaults: Latitude(29) Temp Range(M)			
Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(51gr.)			
Winter design temperature	31 F	Summer design temperature	93 F
Winter setpoint	70 F	Summer setpoint	75 F
Winter temperature difference	39 F	Summer temperature difference	18 F
<b>Total heating load calculation</b>	<b>40874 Btuh</b>	<b>Total cooling load calculation</b>	<b>39337 Btuh</b>
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	117.4 48000	Sensible (SHR = 0.75)	126.0 36000
Heat Pump + Auxiliary(0.0kW)	117.4 48000	Latent	111.6 12000
		Total (Electric Heat Pump)	122.0 48000

## WINTER CALCULATIONS

Winter Heating Load (for 2199 sqft)

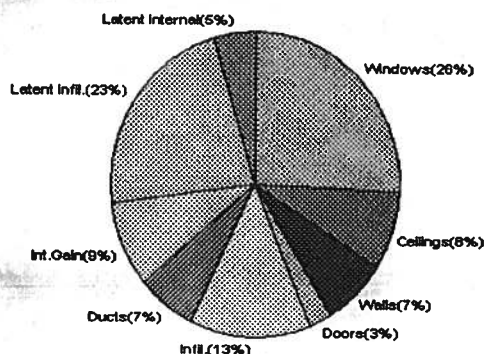
Load component		Load
Window total	330 sqft	9339 Btuh
Wall total	1746 sqft	4936 Btuh
Door total	100 sqft	1654 Btuh
Ceiling total	2260 sqft	2938 Btuh
Floor total	236 ft	7458 Btuh
Infiltration	294 cfm	12603 Btuh
<b>Subtotal</b>		<b>38928 Btuh</b>
Duct loss		1946 Btuh
<b>TOTAL HEAT LOSS</b>		<b>40874 Btuh</b>



## SUMMER CALCULATIONS

Summer Cooling Load (for 2199 sqft)

Load component		Load
Window total	330 sqft	10255 Btuh
Wall total	1746 sqft	2815 Btuh
Door total	100 sqft	1014 Btuh
Ceiling total	2260 sqft	3209 Btuh
Floor total		0 Btuh
Infiltration	257 cfm	5090 Btuh
Internal gain		3600 Btuh
<b>Subtotal(sensible)</b>		<b>25984 Btuh</b>
Duct gain		2598 Btuh
<b>Total sensible gain</b>		<b>28582 Btuh</b>
Latent gain(infiltration)		8915 Btuh
Latent gain(internal)		1840 Btuh
<b>Total latent gain</b>		<b>10755 Btuh</b>
<b>TOTAL HEAT GAIN</b>		<b>39337 Btuh</b>



EnergyGauge® System Sizing based on ACCA Manual J.

PREPARED BY: *Ben Green*

DATE: 12-1-05

# System Sizing Calculations - Winter

## Residential Load - Component Details

Spec House

, FL

Project Title:  
511234SparksConstruction

Class 3 Rating  
Registration No. 0  
Climate: North

Reference City: Gainesville (Defaults) Winter Temperature Difference: 39.0 F

12/1/2005

Window	Panes/SHGC/Frame/U	Orientation	Area X	HTM=	Load
1	2, Clear, Metal, DEF	N	15.0	28.3	424 Btuh
2	2, Clear, Metal, DEF	N	4.0	28.3	113 Btuh
3	2, Clear, Metal, DEF	E	10.0	28.3	283 Btuh
4	2, Clear, Metal, DEF	N	30.0	28.3	849 Btuh
5	2, Clear, Metal, DEF	NW	14.0	28.3	396 Btuh
6	2, Clear, Metal, DEF	N	28.0	28.3	792 Btuh
7	2, Clear, Metal, DEF	W	20.0	28.3	566 Btuh
8	2, Clear, Metal, DEF	N	36.0	28.3	1019 Btuh
9	2, Clear, Metal, DEF	E	16.0	28.3	453 Btuh
10	2, Clear, Metal, DEF	S	56.0	28.3	1585 Btuh
11	2, Clear, Metal, DEF	S	20.0	28.3	566 Btuh
12	2, Clear, Metal, DEF	S	12.0	28.3	340 Btuh
13	2, Clear, Metal, DEF	SE	10.0	28.3	283 Btuh
14	2, Clear, Metal, DEF	S	15.0	28.3	424 Btuh
15	2, Clear, Metal, DEF	SW	10.0	28.3	283 Btuh
16	2, Clear, Metal, DEF	W	4.0	28.3	113 Btuh
17	2, Clear, Metal, DEF	W	30.0	28.3	849 Btuh
Window Total			330		9339 Btuh
<b>Walls</b>	Type	R-Value	Area X	HTM=	Load
1	Frame - Exterior	13.0	1428	3.1	4427 Btuh
2	Frame - Adjacent	13.0	318	1.6	509 Btuh
Wall Total			1746		4936 Btuh
<b>Doors</b>	Type		Area X	HTM=	Load
1	Insulated - Exter		80	18.3	1466 Btuh
2	Insulated - Adjac		20	9.4	188 Btuh
Door Total			100		1654 Btuh
<b>Ceilings</b>	Type	R-Value	Area X	HTM=	Load
1	Under Attic	30.0	2260	1.3	2938 Btuh
Ceiling Total			2260		2938 Btuh
<b>Floors</b>	Type	R-Value	Size X	HTM=	Load
1	Slab-On-Grade Edge Insul	0	236.0 ft(p)	31.6	7458 Btuh
Floor Total			236		7458 Btuh
<b>Infiltration</b>	Type	ACH X	Building Volume	CFM=	Load
	Natural	0.80	21990(sqft)	294	12603 Btuh
	Mechanical	13.0		0	0 Btuh
Infiltration Total				294	12603 Btuh

<b>Totals for Heating</b>	<b>Subtotal</b>	<b>38928 Btuh</b>
	<b>Duct Loss(using duct multiplier of 0.05)</b>	<b>1946 Btuh</b>
	<b>Total Heating Load</b>	<b>40874 Btuh</b>

# Manual J Winter Calculations

## Residential Load - Component Details (continued)

Spec House

, FL

Project Title:  
511234SparksConstruction

Class 3 Rating  
Registration No. 0  
Climate: North

12/1/2005

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

(Frame types - metal, wood or insulated metal)

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

(HTM - ManualJ Heat Transfer Multiplier)

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

# System Sizing Calculations - Summer

## Residential Load - Component Details

Spec House

Project Title:  
511234SparksConstruction

Class 3 Rating  
Registration No. 0  
Climate: North

, FL

Reference City: Gainesville (Defaults)

Summer Temperature Difference: 18.0 F

12/1/2005

Window	Type	Ornt	Overhang		Window Area(sqft)			HTM		Load	
	Panes/SHGC/U/InSh/ExSh		Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2, Clear, DEF, N, N	N	1.5	8	15.0	0.0	15.0	22	22	330	Btuh
2	2, Clear, DEF, N, N	N	1.5	4	4.0	0.0	4.0	22	22	88	Btuh
3	2, Clear, DEF, N, N	E	99	9.5	10.0	10.0	0.0	22	72	220	Btuh
4	2, Clear, DEF, N, N	N	13.5	9.5	30.0	0.0	30.0	22	22	660	Btuh
5	2, Clear, DEF, N, N	NW	12	8	14.0	0.0	14.0	22	50	700	Btuh
6	2, Clear, DEF, N, N	N	8.83	8	28.0	0.0	28.0	22	22	616	Btuh
7	2, Clear, DEF, N, N	W	99	9.5	20.0	20.0	0.0	22	72	440	Btuh
8	2, Clear, DEF, N, N	N	1.5	8	36.0	0.0	36.0	22	22	792	Btuh
9	2, Clear, DEF, N, N	E	1.5	4.5	18.0	3.0	13.0	22	72	1003	Btuh
10	2, Clear, DEF, N, N	S	1.5	8	56.0	56.0	0.0	22	37	1232	Btuh
11	2, Clear, DEF, N, N	S	7.5	9.5	20.0	20.0	0.0	22	37	440	Btuh
12	2, Clear, DEF, N, N	S	7.5	4	12.0	12.0	0.0	22	37	264	Btuh
13	2, Clear, DEF, N, N	SE	1.5	5.5	10.0	0.6	9.4	22	62	597	Btuh
14	2, Clear, DEF, N, N	S	1.5	5.5	15.0	15.0	0.0	22	37	330	Btuh
15	2, Clear, DEF, N, N	SW	1.5	5.5	10.0	0.6	9.4	22	62	597	Btuh
16	2, Clear, DEF, N, N	W	1.5	1.5	4.0	3.3	0.7	22	72	122	Btuh
17	2, Clear, DEF, N, N	W	1.5	5.5	30.0	6.7	23.3	22	72	1825	Btuh
Window Total					330					10255	Btuh
Walls	Type		R-Value		Area			HTM		Load	
	1	Frame - Exterior	13.0		1428.0			1.7		2485 Btuh	
	2	Frame - Adjacent	13.0		318.0			1.0		331 Btuh	
Wall Total					1746.0					2815 Btuh	
Doors	Type		R-Value		Area			HTM		Load	
	1	Insulated - Exter	1.5		80.0			10.1		811 Btuh	
	2	Insulated - Adjac	1.5		20.0			10.1		203 Btuh	
Door Total					100.0					1014 Btuh	
Ceilings	Type/Color		R-Value		Area			HTM		Load	
	1	Under Attic/Dark	30.0		2260.0			1.4		3209 Btuh	
Ceiling Total					2260.0					3209 Btuh	
Floors	Type		R-Value		Size			HTM		Load	
	1	Slab-On-Grade Edge Insulation	0.0		236.0 ft(p)			0.0		0 Btuh	
Floor Total					236.0					0 Btuh	
Infiltration	Type		ACH		Volume			CFM=		Load	
	Natural		0.70		21990			257.1		5090 Btuh	
	Mechanical							0		0 Btuh	
Infiltration Total								257		5090 Btuh	

Internal gain	Occupants		Btuh/occupant		Appliance	Load
	8	X 300 +				
					1200	3600 Btuh

# Manual J Summer Calculations

## Residential Load - Component Details (continued)

Spec House  
, FL

Project Title:  
511234SparksConstruction

Class 3 Rating  
Registration No. 0  
Climate: North

12/1/2005

<b>Totals for Cooling</b>	<b>Subtotal</b>	<b>25984 Btuh</b>
	<b>Duct gain(using duct multiplier of 0.10)</b>	<b>2598 Btuh</b>
	<b>Total sensible gain</b>	<b>28582 Btuh</b>
	<b>Latent infiltration gain (for 51 gr. humidity difference)</b>	<b>8915 Btuh</b>
	<b>Latent occupant gain (8 people @ 230 Btuh per person)</b>	<b>1840 Btuh</b>
	<b>Latent other gain</b>	<b>0 Btuh</b>
	<b>TOTAL GAIN</b>	<b>39337 Btuh</b>

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

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

Reference to: Build permit application Number: **0512-58**

**Sparks Construction Owner Sparks Construction lot 2 Rolling Meadows**

On the date of December 27, 2005 application 0512-58 and plans for construction of a single family dwelling were 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 0512-58 when making reference to this application.**

1. Please submit an approved copy of the Columbia County Environmental Health Department site plan application for an on site waste water septic system.
2. Please submit a recorded (with the Columbia County Clerk Office) a notice of commencement before any inspections can be preformed by the Columbia County Building Department.
3. On the dwelling elevation drawing show the height of the chimney flue above the roof peak and the distance from the nearest roof line intersection.

Thank you,

A handwritten signature in red ink, appearing to read "Joe Haltiwanger", is written over the printed name.

Joe Haltiwanger  
Plan Examiner  
Columbia County Building Department

<b>Project Information for:</b>		L141740	
Builder:	SPARKS CONSTRUCTION	Date:	11/30/2005
Lot:	LOT 2 ROLLING MEADOWS	Start Number:	1416
Subdivision:	N/A		
County or City:	COLUMBIA COUNTY		
Truss Page Count:	38		

<b>Truss Design Load Information (UNO)</b>		Design Program: MiTek 5.2 / 6.2	
<b>Gravity</b>		<b>Wind</b>	<b>Building Code:</b> FBC2004
Roof (psf): 42	Wind Standard: ASCE 7-02		
Floor (psf): 55	Wind Speed (mph): 110		

Note: See individual truss drawings for special loading conditions

<b>Building Designer, responsible for Structural Engineering: (See attached)</b>	
SPARKS, JOSHUA D. CBC 1252260	
Address: 130 S W COUNTRY CT	Designer: 115
LIVE OAK FL 32060	

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

Notes:

1. Truss Design Engineer is responsible for the individual trusses as components only.
2. Determination as to the suitability and use of these truss components for the structure is the responsibility of the Building Designer of Record, as defined in ANSI/TPI
3. The seal date shown on the individual truss component drawings must match the seal date on this index sheet.
4. Trusses designed for vertical loads only, unless noted otherwise.

#	Truss ID	Dwg. #	Seal Date	#	Truss ID	Dwg. #	Seal Date
1	EJ7	1130051416	11/30/2005				
2	EJ7A	1130051417	11/30/2005				
3	PB01	1130051418	11/30/2005				
4	PB02	1130051419	11/30/2005				
5	PB03	1130051420	11/30/2005				
6	PB04	1130051421	11/30/2005				
7	PB05	1130051422	11/30/2005				
8	PB06	1130051423	11/30/2005				
9	PB07	1130051424	11/30/2005				
10	T01	1130051425	11/30/2005				
11	T01G	1130051426	11/30/2005				
12	T02	1130051427	11/30/2005				
13	T03	1130051428	11/30/2005				
14	T03G	1130051429	11/30/2005				
15	T04G	1130051430	11/30/2005				
16	T05	1130051431	11/30/2005				
17	T05A	1130051432	11/30/2005				
18	T05G	1130051433	11/30/2005				
19	T06	1130051434	11/30/2005				
20	T07	1130051435	11/30/2005				
21	T08	1130051436	11/30/2005				
22	T09	1130051437	11/30/2005				
23	T10	1130051438	11/30/2005				
24	T11	1130051439	11/30/2005				
25	T12	1130051440	11/30/2005				
26	T13	1130051441	11/30/2005				
27	T14	1130051442	11/30/2005				
28	T15	1130051443	11/30/2005				
29	T16	1130051444	11/30/2005				
30	T17	1130051445	11/30/2005				
31	T18	1130051446	11/30/2005				
32	T19	1130051447	11/30/2005				
33	T20	1130051448	11/30/2005				
34	T21	1130051449	11/30/2005				
35	T22	1130051450	11/30/2005				
36	T23	1130051451	11/30/2005				
37	T24	1130051452	11/30/2005				
38	V01	1130051453	11/30/2005				

NOV 30 2005

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**Search Results**

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License Type	Name	Name Type	License Number/ Rank	Status/ Expires
Certified Building Contractor	SPARKS, JOSHUA DAVID	Primary	CBC1252260 Cert Building	Current, Active 08/31/2006

New

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Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	EJ7	MONO TRUSS	27	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 MiTek Industries, Inc. Wed Nov 30 08:48:05 2005 Page 1		

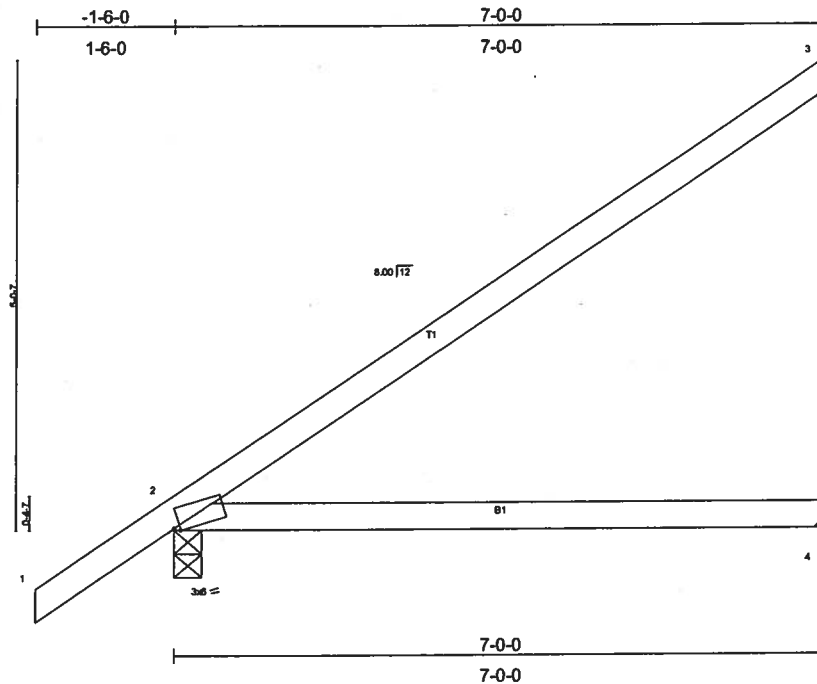


Plate Offsets (X,Y): [2'-0"-0'-12',Edge]

LOADING (psf)	SPACING	2'-0"-0'-12',Edge	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.46	Vert(LL)	-0.14	2-4	>592	240	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.38	Vert(TL)	-0.23	2-4	>357	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: 26 lb	

**LUMBER**

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

**BRACING**

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

**REACTIONS**

(lb/size) 3=165/Mechanical, 2=385/0-3-8, 4=110/Mechanical  
Max Horz 2=277(load case 5)  
Max Uplift 3=-165(load case 5), 2=-141(load case 5), 4=-1(load case 5)

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

TOP CHORD 1-2=0/44, 2-3=-133/73  
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; 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 165 lb uplift at joint 3, 141 lb uplift at joint 2 and 1 lb uplift at joint 4.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	EJ7A	MONO HIP	2	1	Job Reference (optional)
Builders FirstSource, Lake City, Fl 32055					6.200 s Jul 13 2005 MiTek Industries, Inc. Wed Nov 30 08:48:06 2005 Page 1

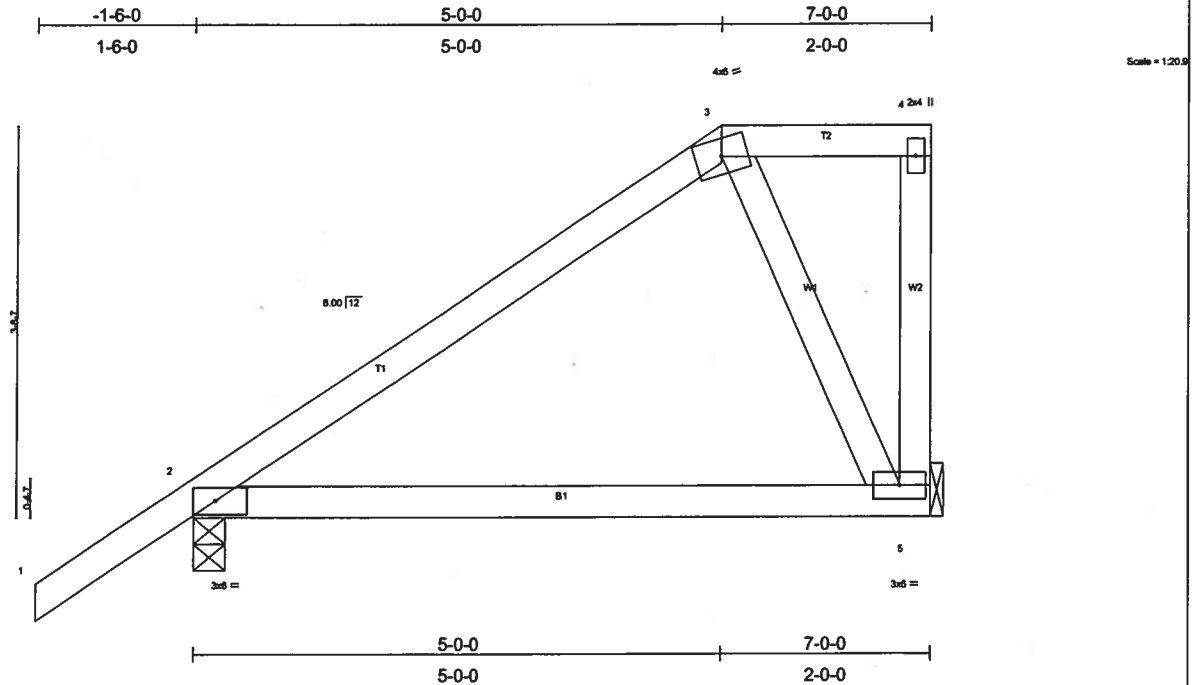


Plate Offsets (X,Y): [2-0-3-9,0-1-8]													
<b>LOADING</b> (psf)		<b>SPACING</b> 2-0-0		<b>CSI</b>		<b>DEFL</b>		in (loc)		L/def	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	20.0	Plates Increase	1.25	TC	0.35	Vert(LL)	-0.05	2-5	>999	240		MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.15	Vert(TL)	-0.09	2-5	>894	180			
BCLL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(TL)	0.00	5	n/a	n/a			
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)									
											Weight: 35 lb		

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

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

**REACTIONS** (lb/size) 5=271/Mechanical, 2=382/0-3-8  
Max Horz 2=219(load case 5)  
Max Uplift 5=-108(load case 5), 2=-171(load case 5)

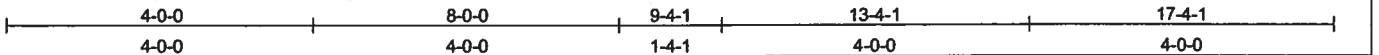
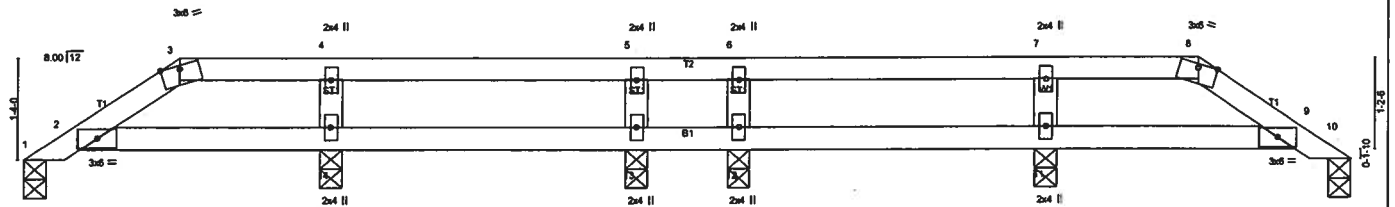
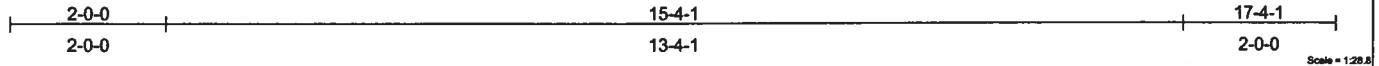
**FORCES (lb) - Maximum Compression/Maximum Tension**  
**TOP CHORD** 1-2=0/44, 2-3=-200/33, 3-4=-35/0, 4-5=-32/61  
**BOT CHORD** 2-5=-98/123  
**WEBS** 3-5=-185/219

## NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDF=4.2psf, BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.80 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) Provide adequate drainage to prevent water ponding.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 108 lb uplift at joint 5 and 171 lb uplift at joint 2.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	PB01	HIP PIGGYBACK	1	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 MiTek Industries, Inc. Wed Nov 30 08:50:45 2005 Page 1		



<b>LOADING</b> (psf)	<b>SPACING</b> 2-0-0	<b>CSI</b>	<b>DEFL</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plates Increase 1.25	TC 0.15	Vert(LL) 0.01 2-14 >999 240	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.12	Vert(TL) -0.01 9-11 >999 180		
BCLL 10.0	Rep Stress Incr YES	WB 0.05	Horz(TL) 0.01 10 n/a n/a		
BCDL 5.0	Code FBC2004/TP12002	(Matrix)			Weight: 54 lb

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

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

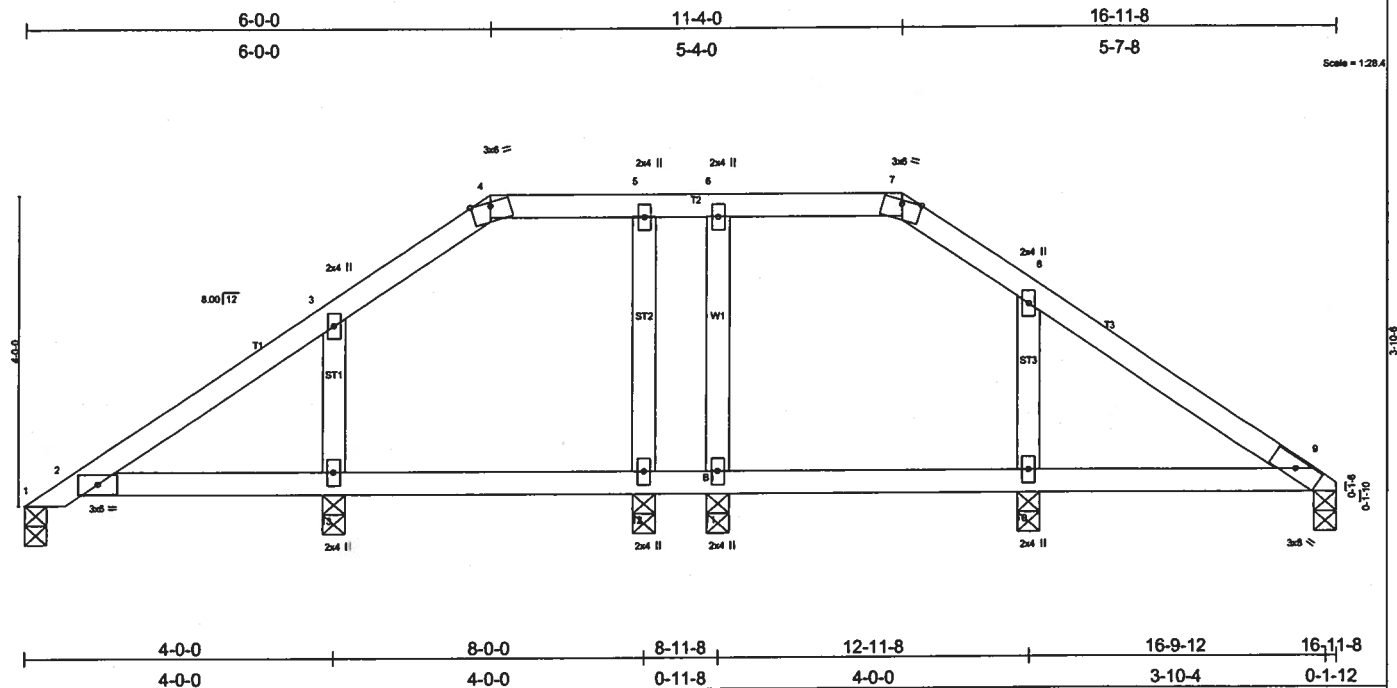
**REACTIONS** (lb/size) 1=134/0-3-8, 13=208/0-3-8, 14=363/0-3-8, 12=208/0-3-8, 11=363/0-3-8, 10=134/0-3-8  
 Max Horz 1=44(load case 3)  
 Max Uplift 1=50(load case 5), 13=116(load case 3), 14=172(load case 4), 12=114(load case 4), 11=163(load case 3), 10=52(load case 6)  
 Max Grav 1=134(load case 1), 13=219(load case 10), 14=368(load case 9), 12=219(load case 9), 11=368(load case 10), 10=134(load case 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=68/40, 2-3=97/54, 3-4=72/60, 4-5=72/60, 5-6=72/60, 6-7=72/60, 7-8=72/60, 8-9=97/54, 9-10=68/34  
 BOT CHORD 2-14=25/72, 13-14=25/72, 12-13=25/72, 11-12=25/72, 9-11=25/72  
 WEBS 5-13=143/126, 4-14=223/184, 6-12=143/125, 7-11=223/179

**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 and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.  
 3) Provide adequate drainage to prevent water ponding.  
 4) Bearing at joint(s) 1, 10 considers parallel to grain value using ANSI/TP1 angle to grain formula. Building designer should verify capacity of bearing surface.  
 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 1, 116 lb uplift at joint 13, 172 lb uplift at joint 14, 114 lb uplift at joint 12, 163 lb uplift at joint 11 and 52 lb uplift at joint 10.  
 6) SEE MITek STANDARD PIGGYBACK TRUSS CONNECTION DETAIL FOR CONNECTION TO BASE TRUSS

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	PB02	VALLEY	1	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mittek Industries, Inc. Wed Nov 30 08:52:16 2005 Page 1		



LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2'-0"	TC 0.14	In (loc) I/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.14	Vert(LL) 0.01 2-13 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.05	Vert(TL) -0.02 2-13 >999 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.01 9 n/a n/a		
	Code FBC2004/TP12002			Weight: 68 lb	

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

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

**REACTIONS** (lb/size) 1=141/0-3-8, 9=155/0-3-8, 12=170/0-3-8, 13=375/0-3-8, 10=367/0-3-8, 11=182/0-3-8  
 Max Horz 1=135(load case 4)  
 Max Uplift 1=38(load case 3), 9=28(load case 3), 12=58(load case 4), 13=195(load case 5), 10=183(load case 6), 11=86(load case 4)  
 Max Grav 1=141(load case 1), 9=157(load case 10), 12=170(load case 1), 13=376(load case 9), 10=367(load case 1), 11=187(load case 10)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-119/131, 2-3=-80/123, 3-4=-110/97, 4-5=-47/88, 5-6=-47/88, 6-7=-47/88, 7-8=-112/98, 8-9=-104/82  
 BOT CHORD 2-13=-66/94, 12-13=-66/94, 11-12=-66/94, 10-11=-66/94, 9-10=-66/94  
 WEBS 5-12=-110/85, 3-13=-221/198, 8-10=-220/190, 6-11=-124/101

**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 Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.  
 3) Provide adequate drainage to prevent water ponding.  
 4) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TP1 1 angle to grain formula. Building designer should verify capacity of bearing surface.  
 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 1, 28 lb uplift at joint 9, 58 lb uplift at joint 12, 195 lb uplift at joint 13, 183 lb uplift at joint 10 and 86 lb uplift at joint 11.  
 6) SEE MITTEK STANDARD PIGGYBACK TRUSS CONNECTION DETAIL FOR CONNECTION TO BASE TRUSS

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	PB03	VALLEY	1	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 30 08:54:07 2005 Page 1		

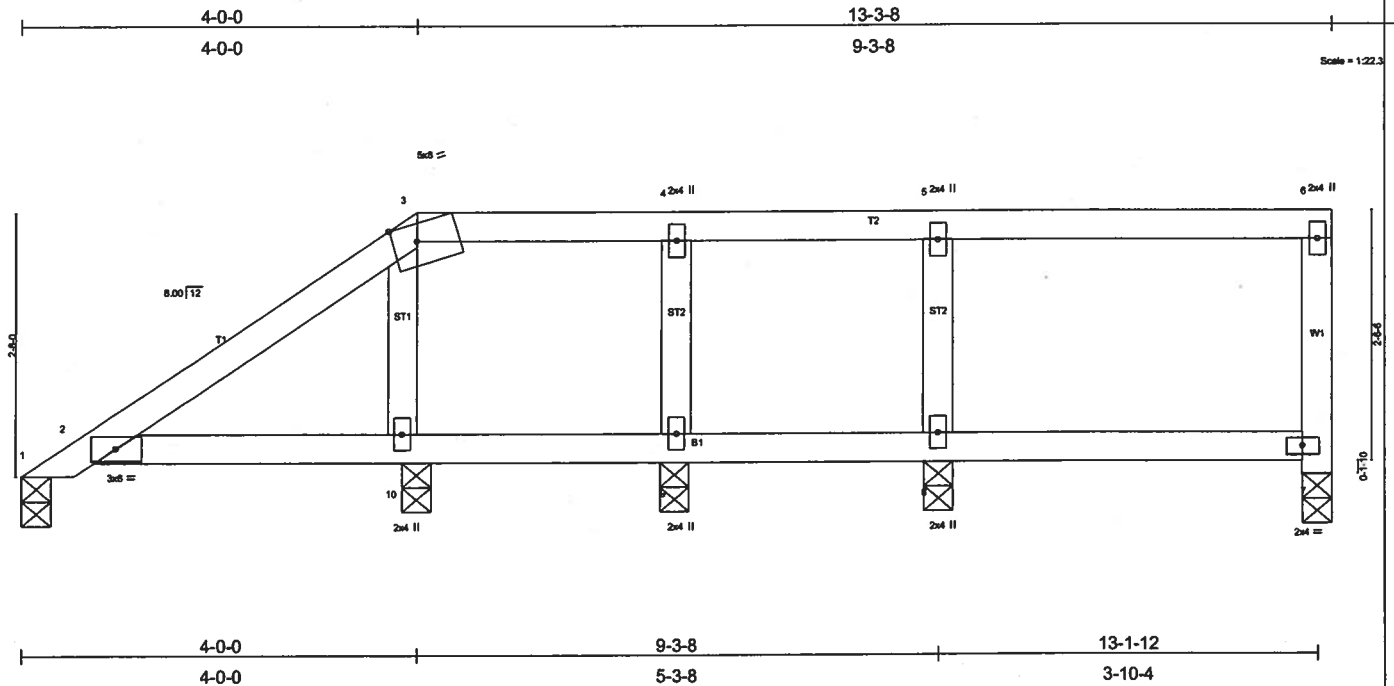


Plate Offsets (X,Y): [3:0-3:0 Edge]									
LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in	(loc)	L/defl	L/d	PLATES
TCLL 20.0	Plates Increase	1.25	TC 0.15	Vert(LL)	0.01	2-10	>999	240	MT20
TCDL 7.0	Lumber Increase	1.25	BC 0.12	Vert(TL)	-0.02	2-10	>999	180	GRIP
BCLL 10.0	Rep Stress Incr	YES	WB 0.05	Horz(TL)	0.01	7	n/a	n/a	244/190
BCDL 5.0	Code FBC2004/TPI2002		(Matrix)						Weight: 51 lb

**LUMBER**

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

**BRACING**

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

**REACTIONS** (lb/size) 1=127/0-3-8, 7=153/0-3-8, 9=158/0-3-8, 10=332/0-3-8, 8=311/0-3-8

Max Horz 1=120(load case 5)

Max Uplift 7=78(load case 3), 9=116(load case 3), 10=174(load case 5), 8=133(load case 3)

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

TOP CHORD 1-2=102/3, 2-3=84/44, 3-4=29/19, 4-5=29/19, 5-6=29/19, 6-7=98/85

BOT CHORD 2-10=18/16, 9-10=19/29, 8-9=19/29, 7-8=19/29

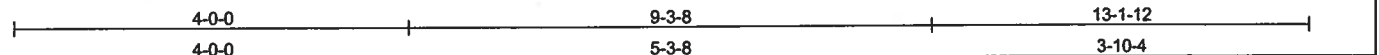
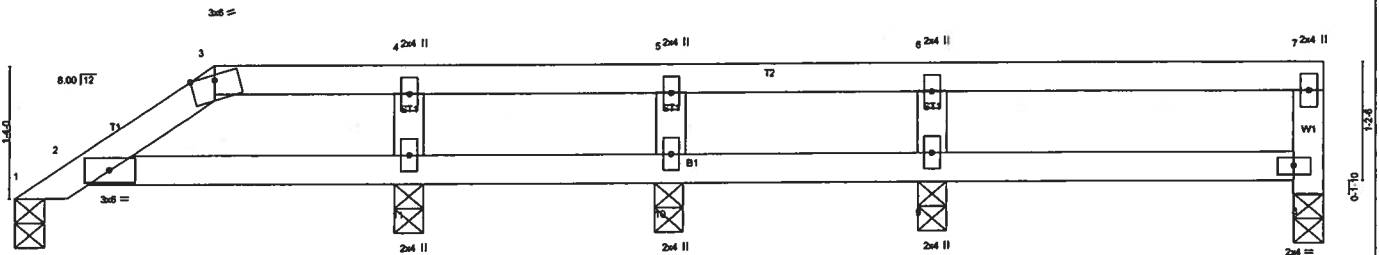
WEBS 4-9=104/123, 3-10=193/185, 5-8=200/171

**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; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) Provide adequate drainage to prevent water ponding.
- 3) Bearing at joint(s) 1, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 78 lb uplift at joint 7, 116 lb uplift at joint 9, 174 lb uplift at joint 10 and 133 lb uplift at joint 8.
- 5) SEE MITEK STANDARD PIGGYBACK TRUSS CONNECTION DETAIL FOR CONNECTION TO BASE TRUSS

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	PB04	VALLEY	1	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 MiTek Industries, Inc. Wed Nov 30 08:54:51 2005 Page 1		



<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 0.19	in (loc) l/def L/d	MT20	244/190
TCOL 7.0	Plates Increase 1.25	BC 0.11	Vert(LL) 0.01 2-11 >999 240		
BCCL 10.0	Lumber Increase 1.25	WB 0.04	Vert(TL) -0.01 2-11 >999 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.01 8 n/a n/a		
	Code FBC2004/TPI2002			Weight: 43 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, except end verticals.
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	
OTHERS 2 X 4 SYP No.3	

**REACTIONS** (lb/size) 1=149/0-3-8, 8=161/0-3-8, 10=169/0-3-8, 11=304/0-3-8, 9=298/0-3-8  
 Max Horz 1=58(load case 5)  
 Max Uplift 1=42(load case 5), 8=75(load case 3), 10=96(load case 3), 11=107(load case 4), 9=140(load case 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-76/9, 2-3=-126/53, 3-4=-98/55, 4-5=-98/55, 5-6=-98/55, 6-7=-98/55, 7-8=-103/89  
 BOT CHORD 2-11=-55/98, 10-11=-55/98, 9-10=-55/98, 8-9=-55/98  
 WEBS 5-10=-116/109, 4-11=-174/148, 6-9=-191/162

- 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; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
  - 2) Provide adequate drainage to prevent water ponding.
  - 3) Bearing at joint(s) 1, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 1, 75 lb uplift at joint 8, 96 lb uplift at joint 10, 107 lb uplift at joint 11 and 140 lb uplift at joint 9.
  - 5) SEE MITek STANDARD PIGGYBACK TRUSS CONNECTION DETAIL FOR CONNECTION TO BASE TRUSS

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	PB05	PIGGYBACK	8	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mittek Industries, Inc. Wed Nov 30 08:55:51 2005 Page 1		

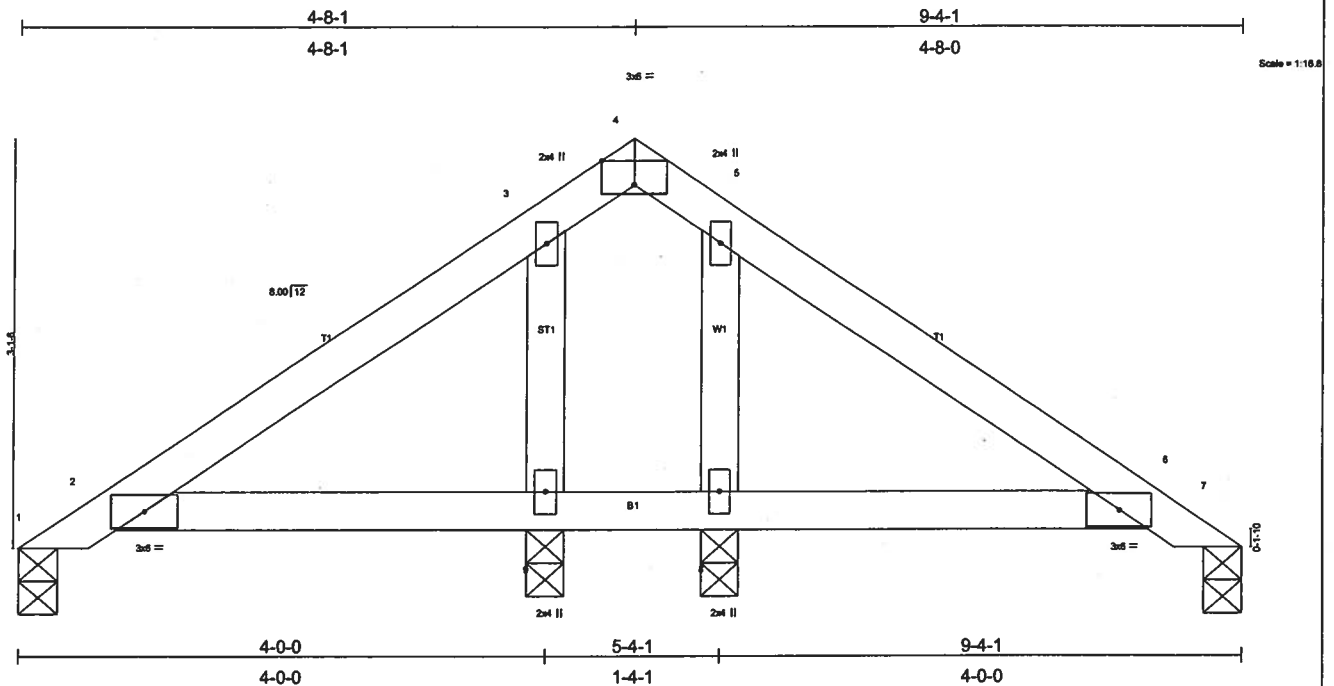


Plate Offsets (X,Y): [4:0-3:0,Edge]

LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	Vert(LL)	0.01	2-9	>999	240	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.09	Vert(TL)	-0.01	2-9	>999	180		
BCCL 10.0	Lumber Increase 1.25	WB 0.04	Horz(TL)	0.00	7	n/a	n/a		
BCDL 5.0	Rep Stress Incr YES	(Matrix)							
	Code FBC2004/TPI2002								
								Weight: 34 lb	

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

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

**REACTIONS** (lb/size) 1=31/0-3-8, 9=338/0-3-8, 8=338/0-3-8, 7=31/0-3-8  
 Max Horz 1=105(load case 4)  
 Max Uplift 1=10(load case 3), 9=176(load case 5), 8=160(load case 6), 7=17(load case 3)  
 Max Grav 1=53(load case 9), 9=355(load case 9), 8=355(load case 10), 7=53(load case 10)

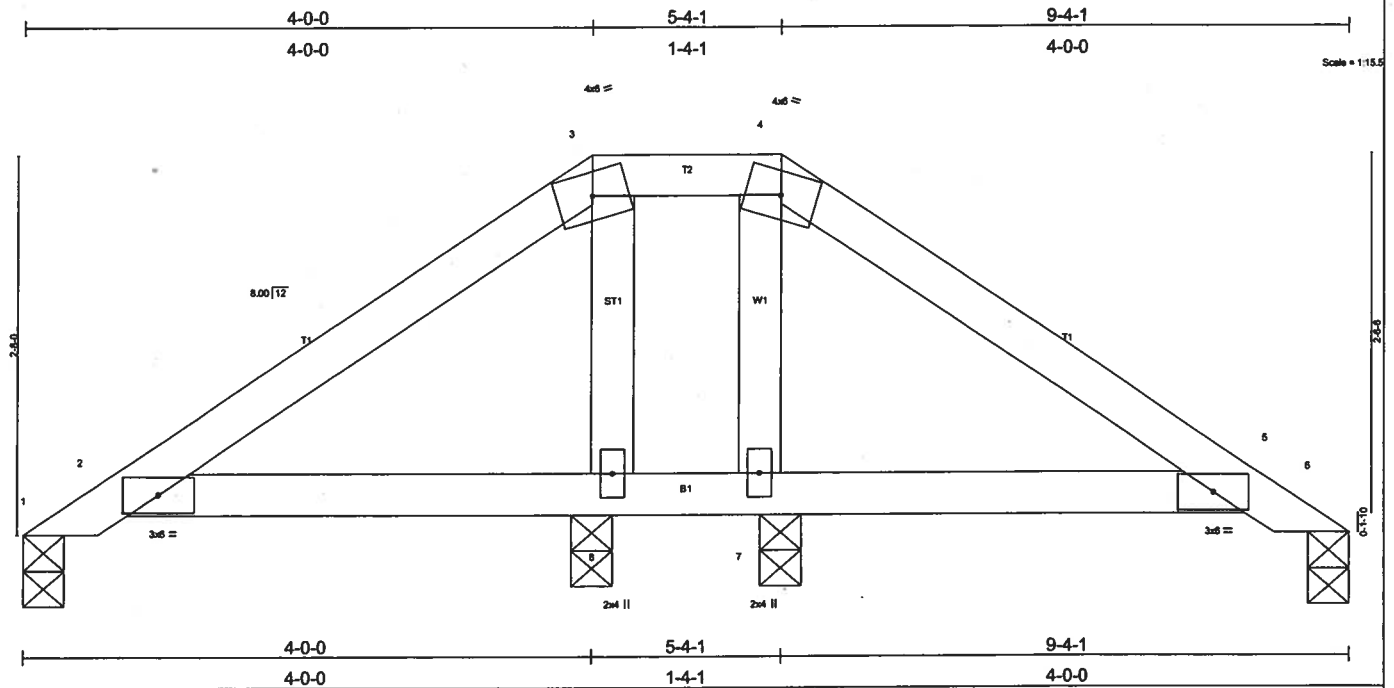
**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-101/99, 2-3=-133/260, 3-4=-27/139, 4-5=-33/139, 5-6=-133/260, 6-7=-26/14  
 BOT CHORD 2-9=-167/175, 8-9=-167/175, 6-8=-167/175  
 WEBS 3-9=-253/168, 5-8=-253/163

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- 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; 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.
- Bearing at joint(s) 1, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 1, 176 lb uplift at joint 9, 160 lb uplift at joint 8 and 17 lb uplift at joint 7.
- SEE MITTEK STANDARD PIGGYBACK TRUSS CONNECTION DETAIL FOR CONNECTION TO BASE TRUSS

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	PB06	HIP PIGGYBACK	2	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 MITek Industries, Inc. Wed Nov 30 08:58:41 2005 Page 1		



<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 0.13	In (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.10	Vert(LL) 0.01 2-8 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.05	Vert(TL) -0.01 2-8 >999 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.00 6 n/a n/a		
	Code FBC2004/TP12002			Weight: 34 lb	

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

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

**REACTIONS (lb/size)** 1=28/0-3-8, 8=341/0-3-8, 7=341/0-3-8, 6=28/0-3-8  
 Max Horz 1=90(load case 4)  
 Max Uplift 1=13(load case 10), 8=164(load case 4), 7=142(load case 6), 6=31(load case 3)  
 Max Grav 1=53(load case 9), 8=369(load case 9), 7=369(load case 10), 6=53(load case 10)

**FORCES (lb) - Maximum Compression/Maximum Tension**  
 TOP CHORD 1-2=81/85, 2-3=98/271, 3-4=30/195, 4-5=98/271, 5-6=26/21  
 BOT CHORD 2-8=178/145, 7-8=195/155, 5-7=178/145  
 WEBS 3-8=261/156, 4-7=261/156

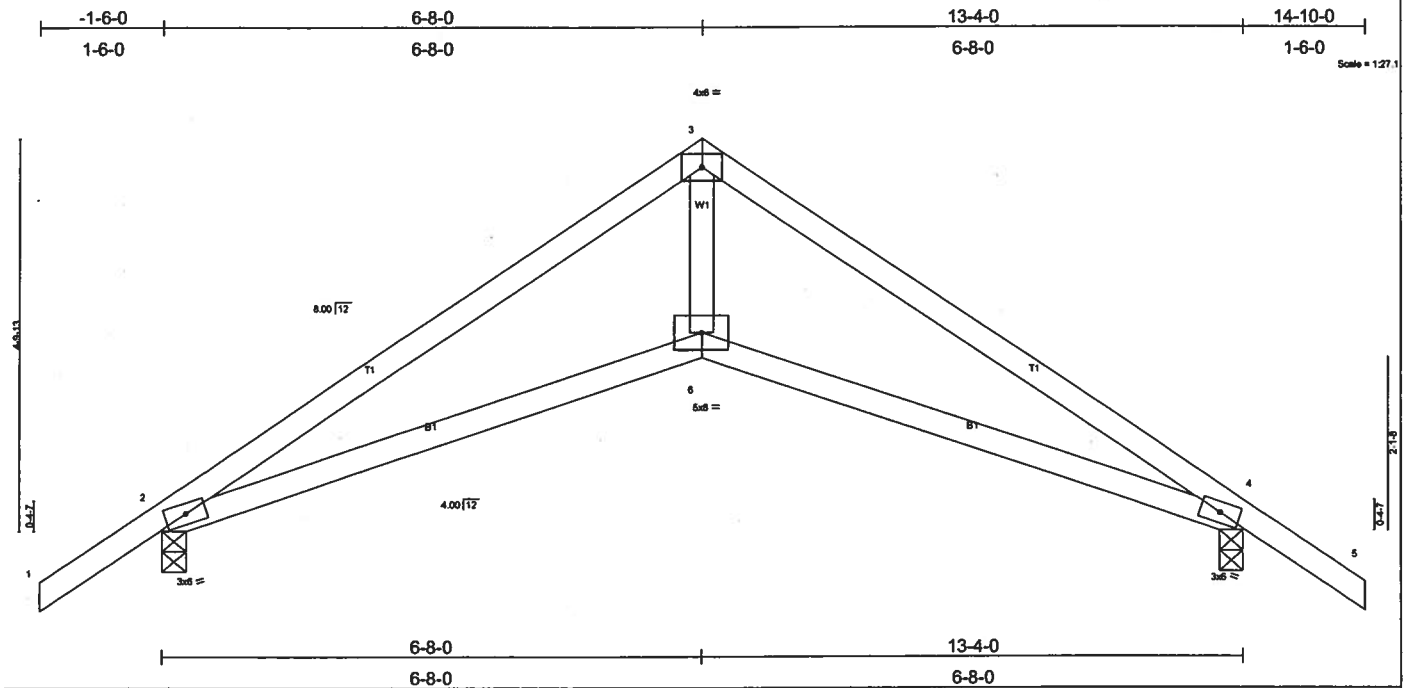
#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable and zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- Provide adequate drainage to prevent water ponding.
- Bearing at joint(s) 1, 6 considers parallel to grain value using ANSI/TP1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 1, 164 lb uplift at joint 8, 142 lb uplift at joint 7 and 31 lb uplift at joint 6.
- SEE MITek STANDARD PIGGYBACK TRUSS CONNECTION DETAIL FOR CONNECTION TO BASE TRUSS

**LOAD CASE(S)** Standard



Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T01	SCISSOR	5	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 MiTek Industries, Inc. Wed Nov 30 08:48:12 2005 Page 1		



LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.30	Vert(LL)	-0.09	2-6	>999	240	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.43	Vert(TL)	-0.14	2-6	>999	180		
BCLL 10.0	Rep Stress Incr	YES	WB 0.27	Horz(TL)	0.08	4	n/a	n/a		
BCDL 5.0	Code FBC2004/TPI2002		(Matrix)							
									Weight: 54 lb	

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

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 5-6-6 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 2=637/0-3-8, 4=637/0-3-8  
 Max Horz 2=-162(load case 3)  
 Max Uplift 2=-271(load case 5), 4=-271(load case 6)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/43, 2-3=-1160/239, 3-4=-1160/270, 4-5=0/43  
 BOT CHORD 2-6=-136/966, 4-6=-134/966  
 WEBS 3-6=-61/828

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- 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; 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.
- Bearing at joint(s) 2, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 271 lb uplift at joint 2 and 271 lb uplift at joint 4.

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T01G	SCISSOR	1	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 MiTek Industries, Inc. Wed Nov 30 08:48:13 2005 Page 1		

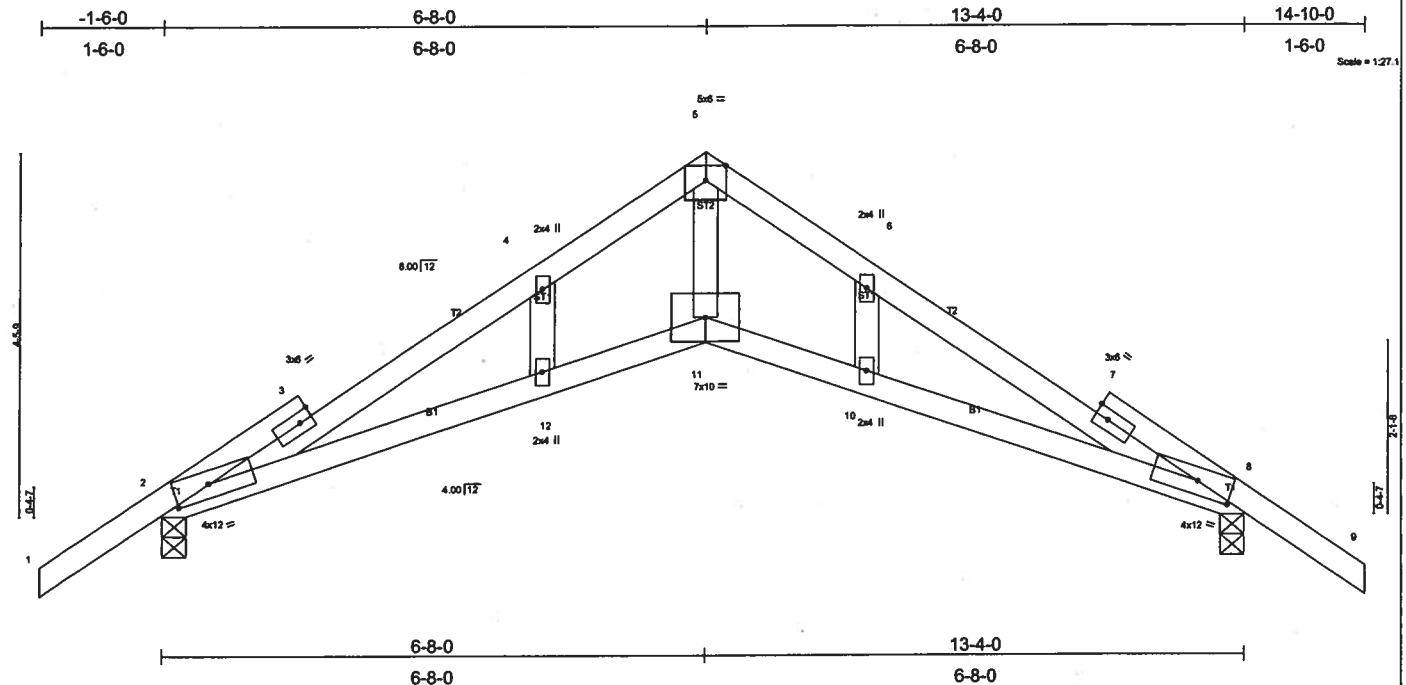


Plate Offsets (X,Y): [2-0-5-4,0-2-0], [8-0-5-4,0-2-0]					
LOADING (psf)	SPACING	2-0-0	CSI	DEFL	PLATES
TCLL 20.0	Plates Increase	1.25	TC 0.84	in (loc) l/def L/d	MT20
TCDL 7.0	Lumber Increase	1.25	BC 0.86	Vert(LL) -0.20 2-12 >793 240	GRIP
BCLL 10.0	Rep Stress Incr	NO	WB 0.59	Vert(TL) -0.32 2-12 >496 180	244/190
BCDL 5.0	Code FBC2004/TP12002		(Matrix)	Horz(TL) 0.19 8 n/a n/a	
					Weight: 61 lb

LUMBER	BRACING
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 2-9-7 oc purlins.
BOT CHORD 2 X 4 SYP No.1D	BOT CHORD Rigid ceiling directly applied or 8-11-3 oc bracing.
OTHERS 2 X 4 SYP No.3	

**REACTIONS** (lb/size) 2=1127/0-3-8, 8=1127/0-3-8  
 Max Horz 2=150(load case 3)  
 Max Uplift 2=457(load case 5), 8=457(load case 6)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-11/91, 2-3=-2258/580, 3-4=-2142/566, 4-5=-2117/650, 5-6=-2117/666, 6-7=-2142/604, 7-8=-2258/618, 8-9=-11/91  
 BOT CHORD 2-12=457/1885, 11-12=505/1980, 10-11=498/1980, 8-10=461/1885  
 WEBS 5-11=537/1829, 4-12=-228/179, 6-10=-228/177

**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 Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.  
 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see MiTek "Standard Gable End Detail"  
 4) Gable studs spaced at 2-0-0 oc.  
 5) Bearing at joint(s) 2, 8 considers parallel to grain value using ANSI/TP1 1 angle to grain formula. Building designer should verify capacity of bearing surface.  
 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 457 lb uplift at joint 2 and 457 lb uplift at joint 8.  
 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: 1-5=-114(F=-60), 5-9=-114(F=-60), 2-11=-30, 8-11=-30

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T02	COMMON	1	2	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 MITek Industries, Inc. Wed Nov 30 08:48:13 2005 Page 1		

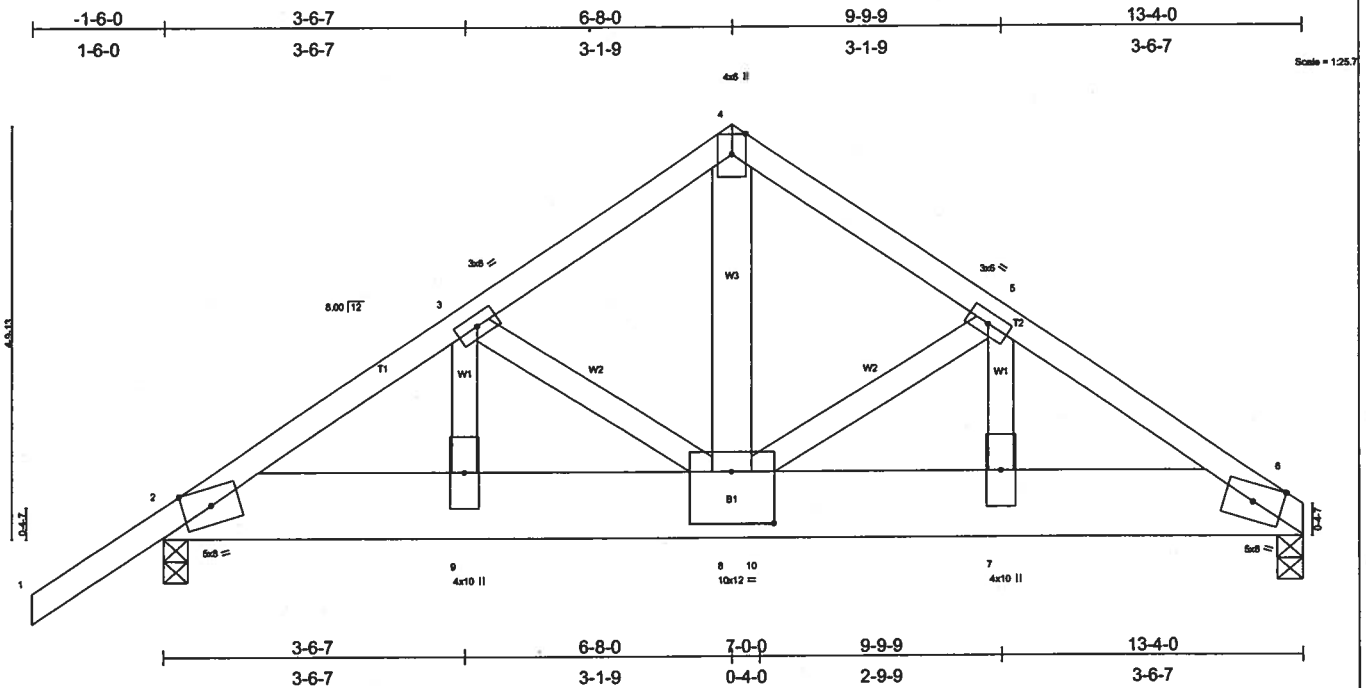


Plate Offsets (X,Y): [8:0-6:0,0-7:4]

LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	I/def	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	Vert(LL)	-0.06	7-8	>999	240	MT20	244/190
TCOL 7.0	Plates Increase 1.25	BC 0.60	Vert(TL)	-0.10	7-8	>999	180		
BCCL 10.0	Lumber Increase 1.25	WB 0.31	Horz(TL)	0.02	6	n/a	n/a		
BCDL 5.0	Rep Stress Incr NO	(Matrix)							
	Code FBC2004/TP12002								
								Weight: 206 lb	

**LUMBER**  
 TOP CHORD 2 X 4 SYP No.2  
 BOT CHORD 2 X 10 SYP No.2  
 WEBS 2 X 4 SYP No.3 \*Except\*  
 W3 2 X 6 SYP No.1D

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 5-0-3 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 6=5180/0-3-8, 2=3016/0-3-8  
 Max Horz 2=175(load case 3)  
 Max Uplift 6=1965(load case 5), 2=1186(load case 4)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/52, 2-3=4705/1728, 3-4=5056/1943, 4-5=5053/1931, 5-6=6921/2608  
 BOT CHORD 2-9=1432/3914, 8-9=1432/3914, 8-10=2140/5794, 7-10=2140/5794, 6-7=2140/5794  
 WEBS 3-9=609/311, 3-8=220/427, 4-8=2027/5352, 5-8=1967/834, 5-7=698/1912

**NOTES**

- 2-ply truss to be connected together with 0.131"x3" Nails as follows:  
 Top chords connected as follows: 2 X 4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2 X 10 - 2 rows at 0-7-0 oc.  
 Webs connected as follows: 2 X 4 - 1 row at 0-9-0 oc, 2 X 6 - 2 rows at 0-9-0 oc.
- All loads are considered equally applied to all piles, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; Lumber DOL=1.60 plate grip DOL=1.60.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1965 lb uplift at joint 6 and 1186 lb uplift at joint 2.
- Girder carries tie-in span(s): 33-2-8 from 7-0-0 to 13-4-0
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2995 lb down and 1131 lb up at 7-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- Regular: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-4=54, 4-6=54, 2-10=30, 6-10=679(F=649)  
 Concentrated Loads (lb)  
 Vert: 10=2995(F)

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T03	COMMON	3	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 30 08:48:14 2005 Page 1		

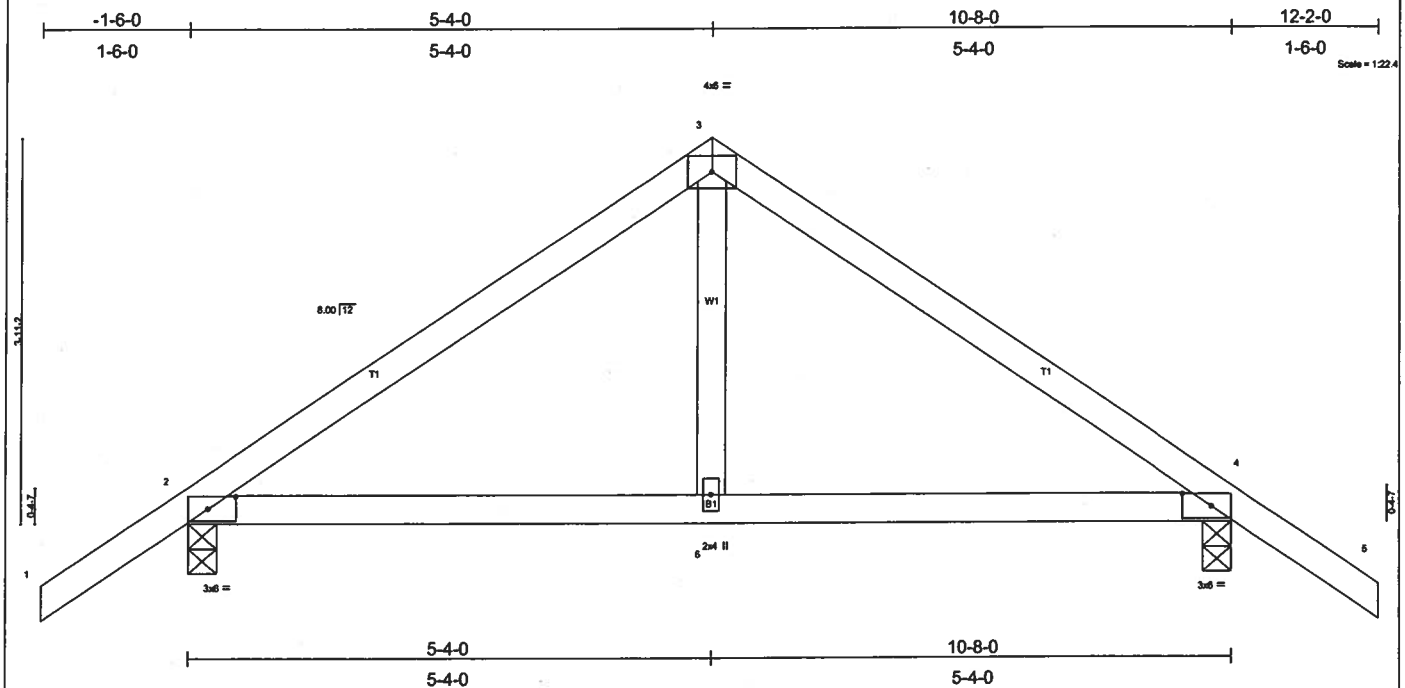


Plate Offsets (X,Y): [2:0-3-9,0-1-8], [4:0-3-9,0-1-8]

LOADING (psf)	SPACING	CSI	DEFL	In	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.23	Vert(LL)	0.05	4-6	>999	240	MT20	244/190
TCCL 7.0	Plates Increase 1.25	BC 0.21	Vert(TL)	0.04	4-6	>999	180		
BCCL 10.0	Lumber Increase 1.25	WB 0.08	Horz(TL)	0.01	4	n/a	n/a		
BCDL 5.0	Rep Stress Incr YES	(Matrix)							
	Code FBC2004/TP12002								
								Weight: 46 lb	

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

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

**REACTIONS** (lb/size) 2=525/0-3-8, 4=525/0-3-8  
 Max Horz 2=130(load case 4)  
 Max Uplift 2=367(load case 5), 4=367(load case 6)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/44, 2-3=-508/493, 3-4=-508/493, 4-5=0/44  
 BOT CHORD 2-6=-254/359, 4-6=-254/359  
 WEBS 3-6=-325/189

#### 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 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.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 367 lb uplift at joint 2 and 367 lb uplift at joint 4.

**LOAD CASE(S)** Standard



Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T04G	COMMON	1	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055					6.200 s Jul 13 2005 MiTek Industries, Inc. Wed Nov 30 08:48:16 2005 Page 1

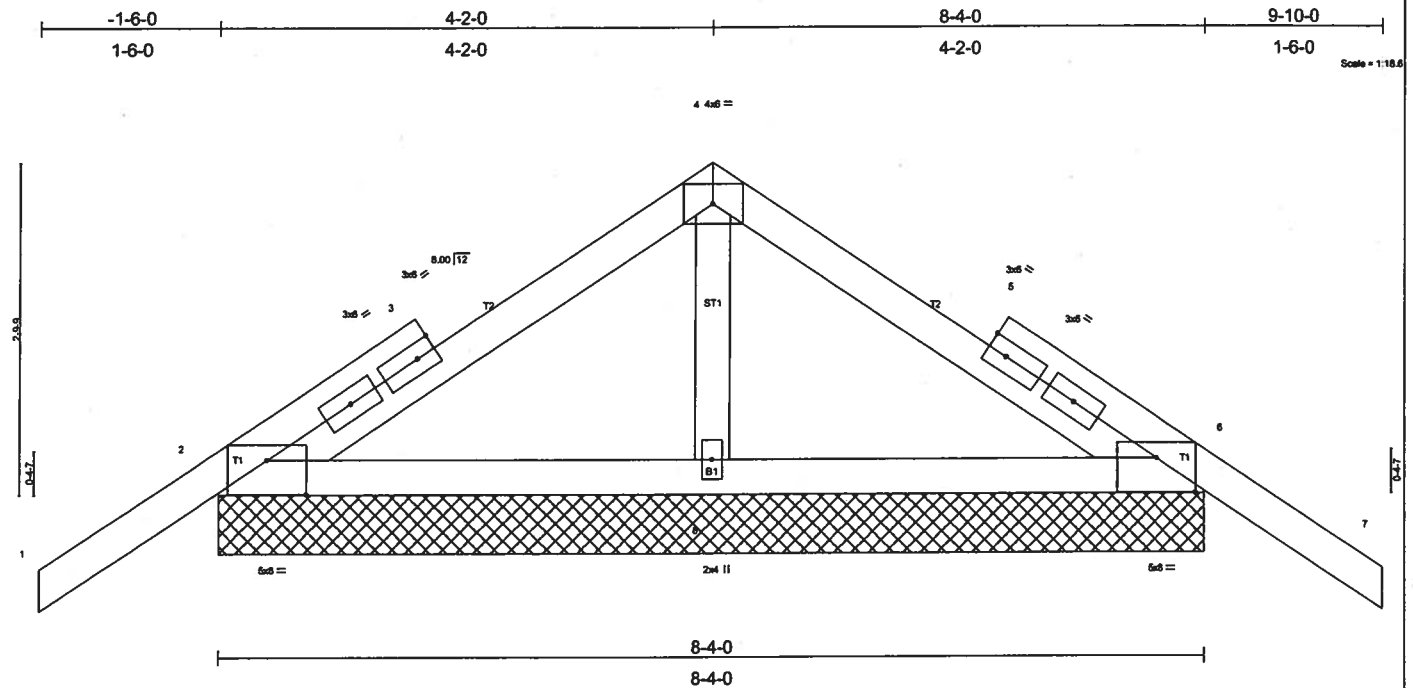


Plate Offsets (X,Y): [2-0-4-0,0-3-7], [6-0-4-0,0-3-7]									
<b>LOADING</b> (psf)	<b>SPACING</b> 2-0-0	<b>CSI</b>	<b>DEFL</b>	In	(loc)	I/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plates Increase 1.25	TC 0.28	Vert(LL)	0.00	6-7	n/r	120	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.14	Vert(TL)	0.00	6-7	n/r	90		
BCLL 10.0	Rep Stress Incr NO	WB 0.11	Horz(TL)	0.00	6	n/a	n/a		
BCDL 5.0	Code FBC2004/TP12002	(Matrix)						Weight: 41 lb	

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

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 8-4-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (lb/size) 2=394/8-4-0, 6=394/8-4-0, 8=754/8-4-0  
 Max Horz 2=91(load case 3)  
 Max Uplift 2=217(load case 5), 6=230(load case 6), 8=231(load case 5)  
 Max Grav 2=409(load case 9), 6=409(load case 10), 8=754(load case 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=13/91, 2-3=41/100, 3-4=60/242, 4-5=46/242, 5-6=29/100, 6-7=13/91  
 BOT CHORD 2-8=91/136, 6-8=91/136  
 WEBS 4-8=597/252

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- 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; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see MiTek "Standard Gable End Detail"
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 217 lb uplift at joint 2, 230 lb uplift at joint 6 and 231 lb uplift at joint 8.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Regular: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-4=114(F=60), 4-7=114(F=60), 2-6=30

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T05	COMMON	9	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055					
6.200 s Jul 13 2005 MITek Industries, Inc. Wed Nov 30 08:48:16 2005 Page 1					

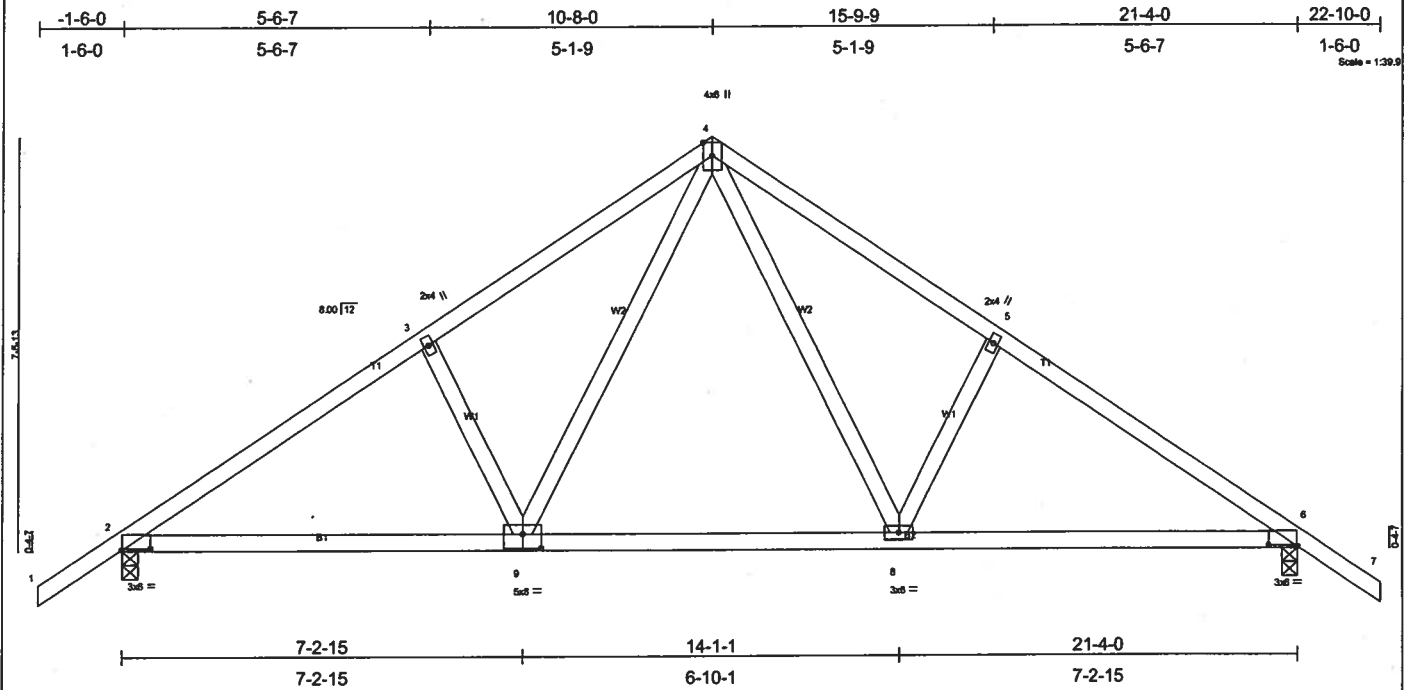


Plate Offsets (X,Y): [2:0-6-3,0-0-6], [6:0-6-3,0-0-6], [9:0-4-0,0-3-0]

LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.24	Vert(LL)	-0.17	8-9	>999	240	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.75	Vert(TL)	-0.28	8-9	>918	180		
BCLL 10.0	Lumber Increase 1.25	WB 0.32	Horz(TL)	0.04	6	n/a	n/a		
BCDL 5.0	Rep Stress Incr NO	(Matrix)							
	Code FBC2004/TP12002								
								Weight: 110 lb	

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

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 4-10-7 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 2=1144/0-3-8, 6=1144/0-3-8  
 Max Horz 2=254(load case 3)  
 Max Uplift 2=440(load case 5), 6=440(load case 6)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/44, 2-3=-1566/534, 3-4=-1435/592, 4-5=-1435/592, 5-6=-1566/534, 6-7=0/44  
 BOT CHORD 2-9=-386/1224, 8-9=-155/836, 6-8=-303/1224  
 WEBS 3-9=-235/251, 4-8=-285/694, 4-8=-285/694, 5-8=-235/251

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- 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; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 440 lb uplift at joint 2 and 440 lb uplift at joint 6.
- 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 1-4=-54, 4-7=-54, 2-9=-30, 8-9=-80(F=50), 6-8=-30

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T05A	COMMON	1	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 30 08:48:17 2005 Page 1		

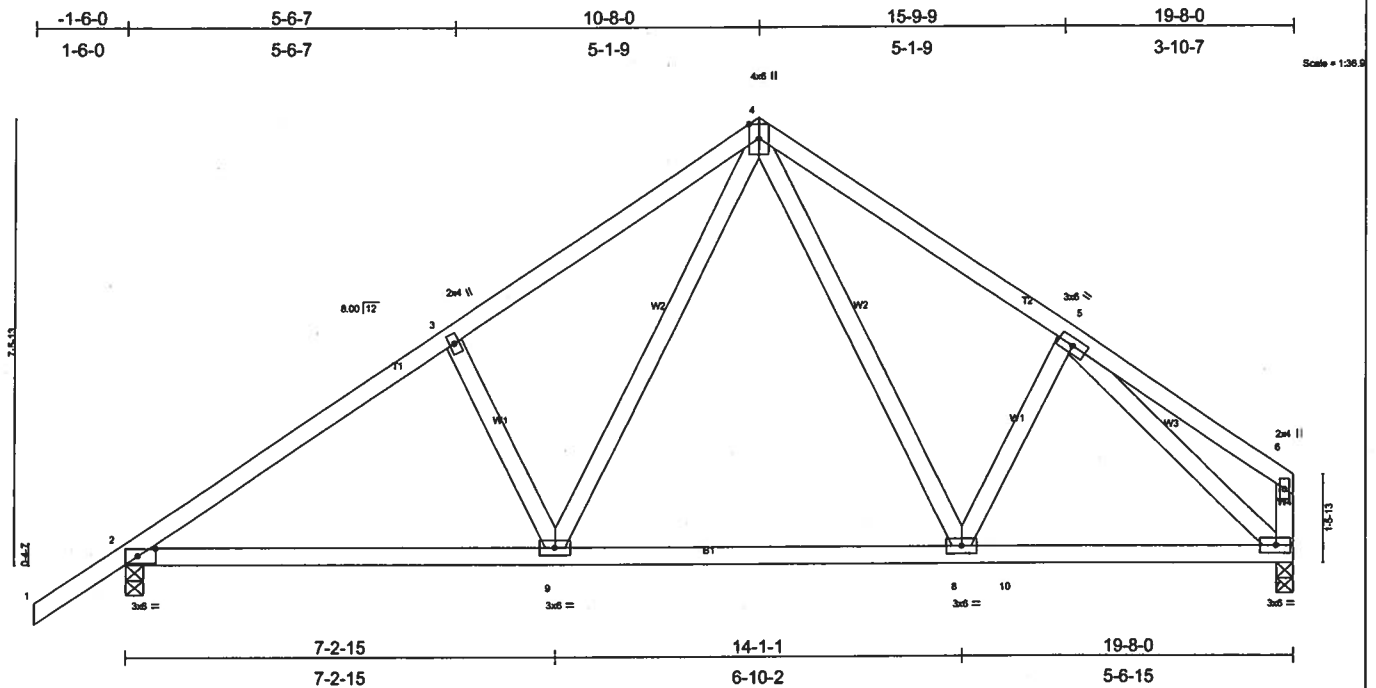


Plate Offsets (X,Y): [2-0-3-9,0-1-8]					
LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc) l/defl L/d
TCLL 20.0	Plates Increase	1.25	TC 0.26	Vert(LL)	-0.16 8-9 >999 240
TCDL 7.0	Lumber Increase	1.25	BC 0.75	Vert(TL)	-0.26 8-9 >889 180
BCLL 10.0	Rep Stress Incr	NO	WB 0.55	Horz(TL)	0.03 7 n/a n/a
BCDL 5.0	Code FBC2004/TP2002		(Matrix)		
					PLATES GRIP
					MT20 244/190
					Weight: 110 lb

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

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 5-0-15 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 9-7-14 oc bracing.

**REACTIONS** (lb/size) 2=1073/0-3-8, 7=1025/0-3-8  
 Max Horz 2=266(load case 4)  
 Max Uplift 2=420(load case 5), 7=330(load case 6)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/44, 2-3=1443/495, 3-4=1312/553, 4-5=1174/513, 5-6=147/86, 6-7=149/98  
 BOT CHORD 2-9=421/1123, 8-9=190/733, 8-10=294/898, 7-10=294/898  
 WEBS 3-9=235/250, 4-9=283/698, 4-8=214/472, 5-8=88/158, 5-7=1166/392

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- 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; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 420 lb uplift at joint 2 and 330 lb uplift at joint 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

- Regular: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-4=54, 4-6=54, 2-9=30, 9-10=80(F=-50), 7-10=30

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T05G	COMMON	1	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 MiTek Industries, Inc. Wed Nov 30 08:48:18 2005 Page 1		

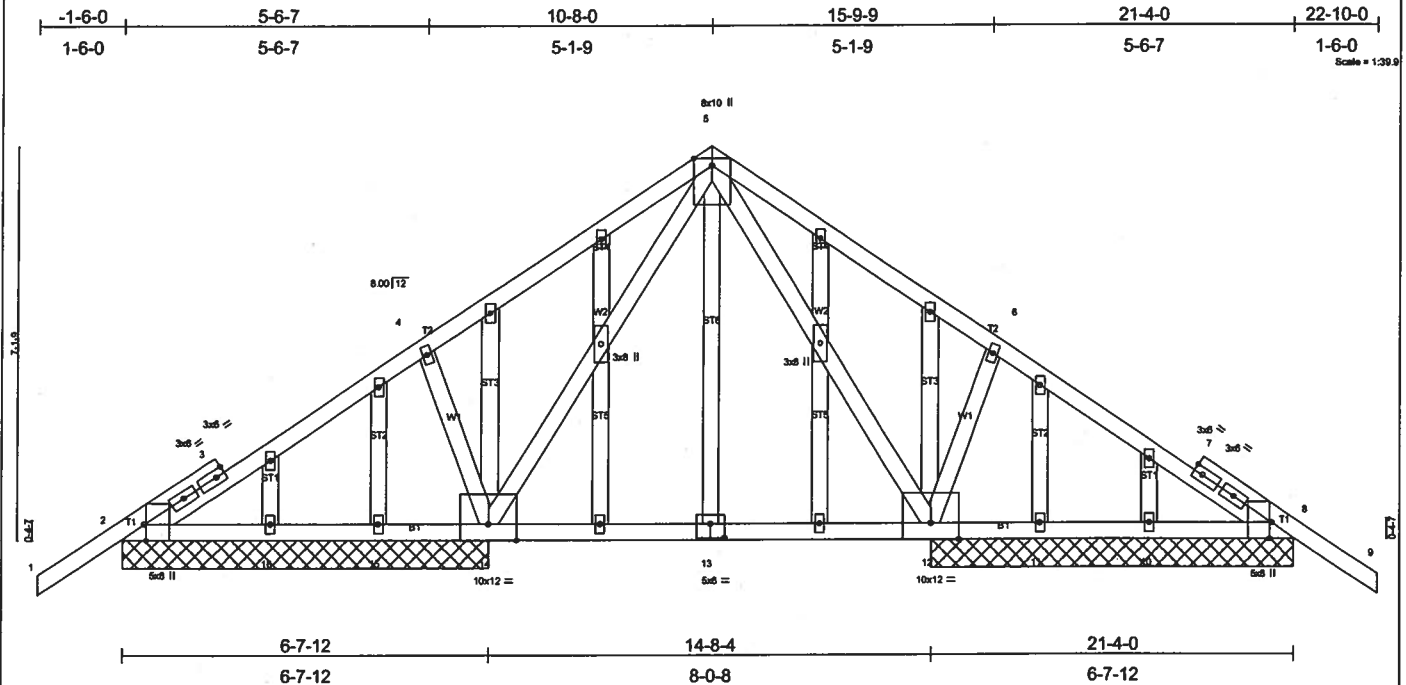


Plate Offsets (X,Y): [2:0-3-8,Edge], [8:0-3-8,Edge], [13:0-3-0-0-3-0], [25:0-0-0-0-0-0]

<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 0.46	in (loc) l/def l/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.30	Vert(LL) -0.06 12-14 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.57	Vert(TL) -0.11 12-14 >867 180		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL) 0.01 8 n/a n/a		
	Code FBC2004/TP12002			Weight: 159 lb	

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

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:  
 10-0-0 oc bracing: 12-14.

**REACTIONS** (lb/size) 2=412/6-7-12, 8=412/6-7-12, 14=1175/6-7-12, 15=-88/6-7-12, 16=208/6-7-12, 12=1175/6-7-12, 11=-88/6-7-12, 10=208/6-7-12  
 Max Horz 2=241(load case 3)  
 Max Uplift 2=187(load case 5), 8=208(load case 6), 14=464(load case 5), 15=-88(load case 1), 16=38(load case 6), 12=442(load case 6), 11=-88(load case 1), 10=36(load case 5)  
 Max Grav 2=422(load case 9), 8=422(load case 10), 14=1175(load case 1), 15=10(load case 6), 16=208(load case 1), 12=1175(load case 1), 11=9(load case 5), 10=208(load case 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-11/91, 2-3=-129/102, 3-4=-134/230, 4-5=-86/425, 5-6=-56/425, 6-7=-87/230, 7-8=-105/26, 8-9=-11/91  
 BOT CHORD 2-16=-64/224, 15-16=-64/224, 14-15=-64/224, 13-14=-40/229, 12-13=-40/229, 11-12=-50/190, 10-11=-50/190, 8-10=-50/190  
 WEBS 4-14=-537/366, 5-14=-507/188, 5-12=-507/191, 6-12=-537/368

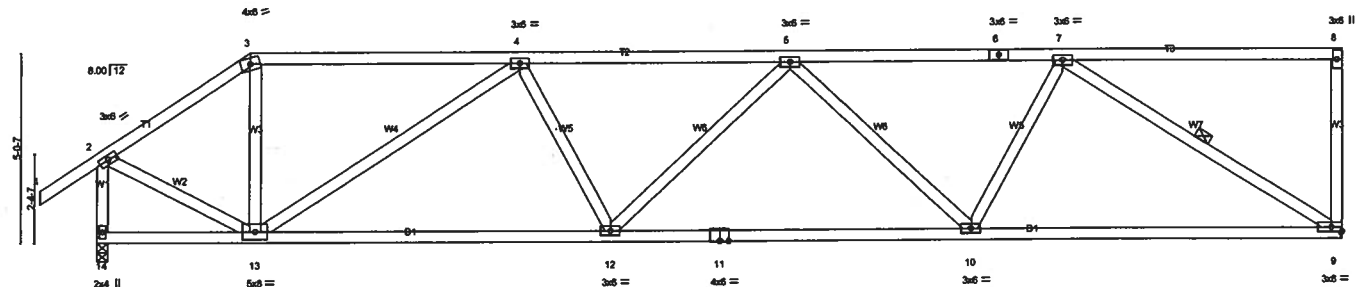
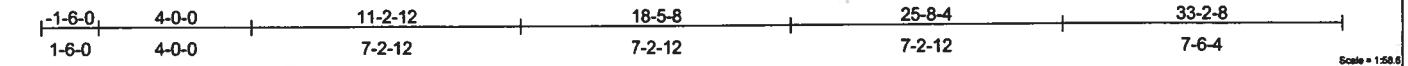
#### NOTES

- Unbalanced roof live loads have been considered for this design.
- 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; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see MiTek "Standard Gable End Detail"
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 187 lb uplift at joint 2, 208 lb uplift at joint 8, 464 lb uplift at joint 14, 88 lb uplift at joint 15, 38 lb uplift at joint 16, 442 lb uplift at joint 12, 88 lb uplift at joint 11 and 36 lb uplift at joint 10.
- 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

- Regular: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-5=-114(F=-60), 5-9=-114(F=-60), 2-8=-30

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T06	MONO HIP	1	2	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6,200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 30 08:48:19 2005 Page 1		



<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 0.78	In (loc) l/def l/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.86	Vert(LL) -0.27 10-12 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.81	Vert(TL) -0.43 10-12 >908 180		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL) 0.11 9 n/a n/a		
	Code FBC2004/TPI2002			Weight: 369 lb	

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

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 5-7-3 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 7-9

**REACTIONS** (lb/size) 9=2995/Mechanical, 14=3111/0-3-8  
 Max Horz 14=240(load case 4)  
 Max Uplift 9=1407(load case 2), 14=1239(load case 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/49, 2-3=2825/1189, 3-4=-2370/1019, 4-5=-5091/2320, 5-6=-4412/2023, 6-7=-4412/2023, 7-8=-175/69, 8-9=-415/261, 2-14=-2932/1165  
 BOT CHORD 13-14=-209/41, 12-13=-2208/4732, 11-12=-2442/5173, 10-11=-2442/5173, 9-10=-1764/3705  
 WEBS 3-13=-380/974, 4-13=-2844/1431, 4-12=-249/794, 5-12=-114/171, 5-10=-1067/588, 7-10=-573/1562, 7-9=-4198/2016, 2-13=-1189/2663

#### NOTES

- 2-ply truss to be connected together with 0.131"x3" Nails as follows:  
 Top chords connected as follows: 2 X 4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2 X 4 - 1 row at 0-9-0 oc.  
 Webs connected as follows: 2 X 4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60.
- Provide adequate drainage to prevent water ponding.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1407 lb uplift at joint 9 and 1239 lb uplift at joint 14.
- Girder carries tie-in span(s): 7-0-0 from 0-0-0 to 4-0-0

#### LOAD CASE(S) Standard

- Regular: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-2=-54, 2-3=-54, 3-8=-117(F=63), 13-14=-132(F=-102), 9-13=-65(F=-35)

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T07	MONO HIP	1	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 30 08:48:19 2005 Page 1		

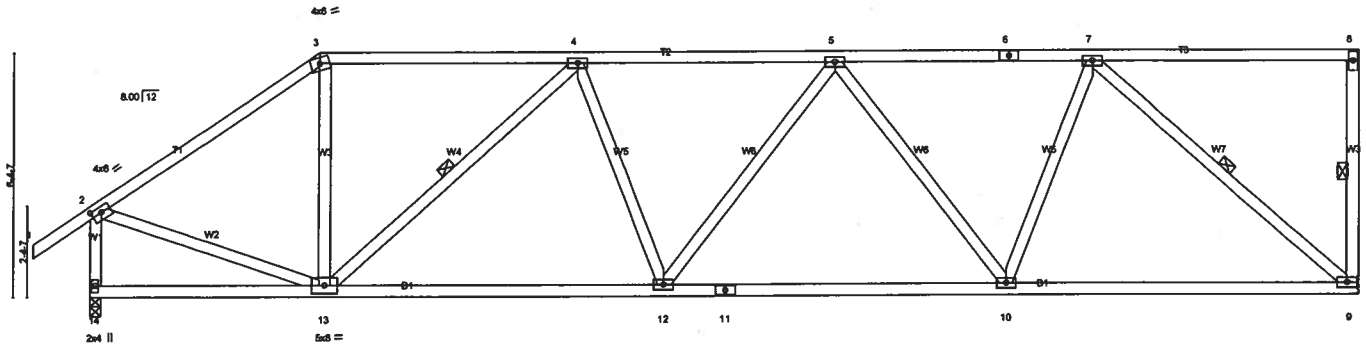
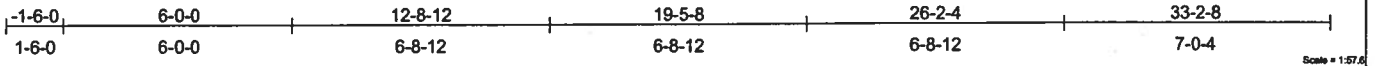


Plate Offsets (X,Y): [2-0-3-0,0-1-12]

<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 0.57	In (loc) l/defl L/d	MT20	244/190
TCCL 7.0	Plates Increase 1.25	BC 0.59	Vert(LL) -0.18 12-13 >999 240		
BCCL 10.0	Lumber Increase 1.25	WB 0.67	Vert(TL) -0.30 12-13 >999 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.07 9 n/a n/a		
	Code FBC2004/TP12002			Weight: 199 lb	

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

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 4-4-15 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-11-8 oc bracing.  
 WEBS 1 Row at midpt 8-9, 4-13, 7-9

**REACTIONS** (lb/size) 9=1380/Mechanical, 14=1474/0-3-8  
 Max Horz 14=302(load case 5)  
 Max Uplift 9=-623(load case 3), 14=-433(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/49, 2-3=-1468/577, 3-4=-1159/556, 4-5=-1867/778, 5-6=-1520/845, 6-7=-1520/845, 7-8=-49/14, 8-9=-175/141, 2-14=-1398/604  
 BOT CHORD 13-14=-300/64, 12-13=-793/1788, 11-12=-815/1825, 10-11=-815/1825, 9-10=-583/1265  
 WEBS 3-13=-140/422, 4-13=-856/512, 4-12=-13/229, 5-12=-4/81, 5-10=-514/304, 7-10=-195/738, 7-9=-1622/759, 2-13=-475/1157

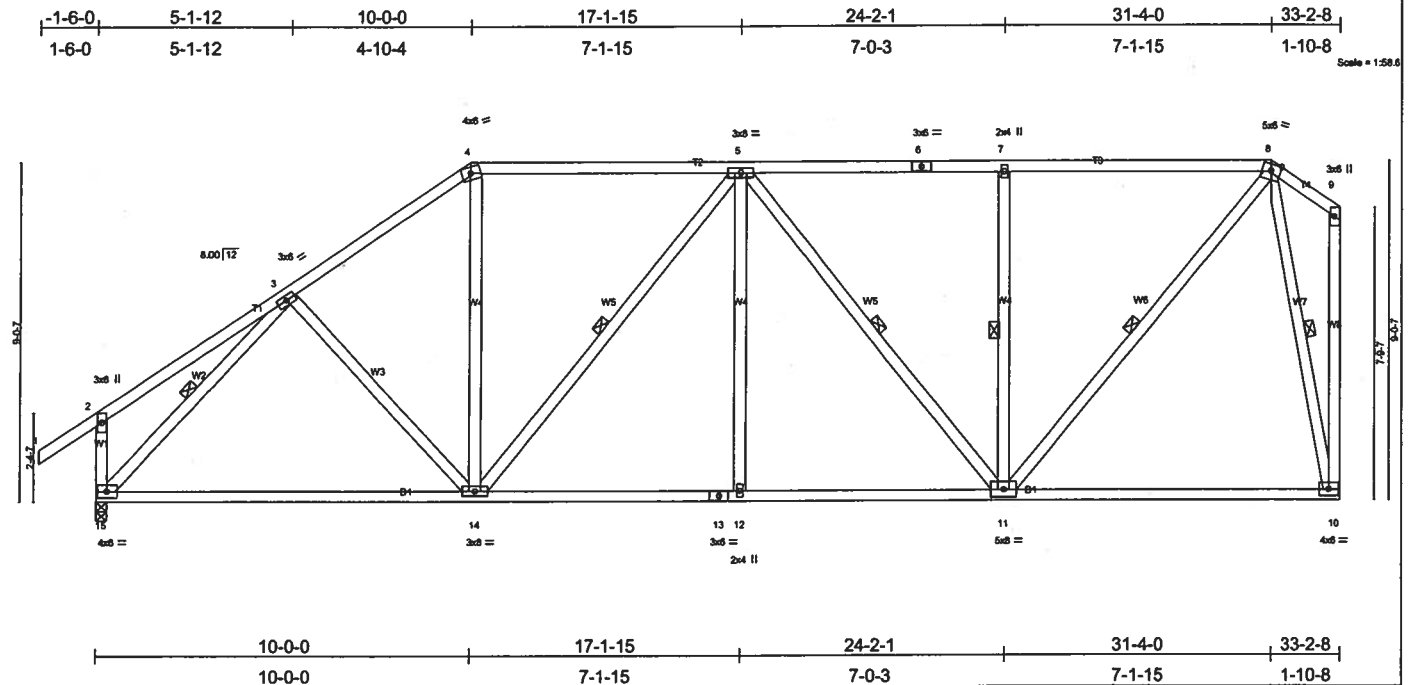
**NOTES**

- 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; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 3x6 MT20 unless otherwise indicated.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 623 lb uplift at joint 9 and 433 lb uplift at joint 14.

LOAD CASE(S) Standard



Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T09	HIP	1	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 30 08:48:21 2005 Page 1		



LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.88	In (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.62	Vert(LL) -0.19 14-15 >999 240	Weight: 239 lb	
BCCL 10.0	Lumber Increase 1.25	WB 0.49	Vert(TL) -0.32 14-15 >999 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.05 10 n/a n/a		
	Code FBC2004/TP12002				

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

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 4-11-3 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 7-10-7 oc bracing.  
 WEBS 1 Row at midpt 5-14, 5-11, 7-11, 8-11, 3-15, 8-10

**REACTIONS** (lb/size) 15=1474/0-3-8, 10=1380/Mechanical  
 Max Horz 15=387(load case 5)  
 Max Uplift 15=457(load case 5), 10=561(load case 4)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/49, 2-3=267/210, 3-4=1423/608, 4-5=1139/575, 5-6=1072/496, 6-7=1072/496, 7-8=1072/496, 8-9=62/35, 2-15=342/295, 9-10=105/37  
 BOT CHORD 14-15=600/1037, 13-14=637/1330, 12-13=637/1330, 11-12=637/1330, 10-11=132/272  
 WEBS 3-14=183/239, 4-14=100/409, 5-14=389/307, 5-12=0/176, 5-11=415/219, 7-11=392/331, 8-11=580/1284, 3-15=1320/431, 8-10=1281/703

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- 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; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- Provide adequate drainage to prevent water ponding.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 457 lb uplift at joint 15 and 561 lb uplift at joint 10.

**LOAD CASE(S)** Standard

Job L141740	Truss T10	Truss Type SPECIAL	Qty 2	Ply 1	SPARKS CONST. LOT 2 ROLLING MEADOWS
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 30 08:48:22 2005 Page 1		

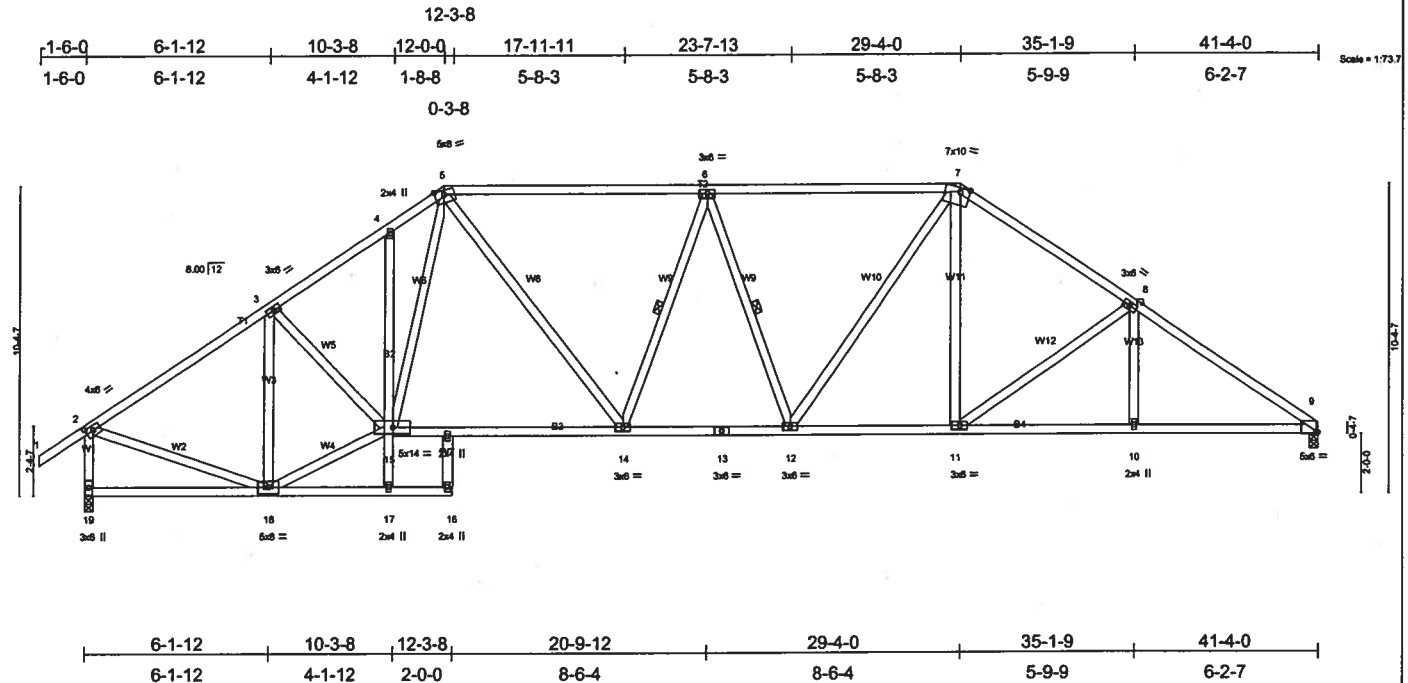


Plate Offsets (X,Y): [2-0-2-14,0-2-0], [17-0-4-0,Edge], [19-0-0-14,Edge]						
LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	l/defl
TCLL 20.0	Plates Increase	1.25	TC 0.55	Vert(LL)	-0.23 14-15	>999 240
TCDL 7.0	Lumber Increase	1.25	BC 0.63	Vert(TL)	-0.38 14-15	>999 180
BCLL 10.0	Rep Stress Incr	YES	WB 0.76	Horz(TL)	0.16 9	n/a n/a
BCDL 5.0	Code FBC2004/TP12002		(Matrix)			
			PLATES			GRIP
			MT20			244/190
			Weight: 279 lb			

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

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 3-5-1 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 6-14, 6-12

**REACTIONS** (lb/size) 9=1739/0-3-8, 19=1861/0-3-8  
 Max Horz 19=362(load case 4)  
 Max Uplift 9=487(load case 6), 19=570(load case 5)

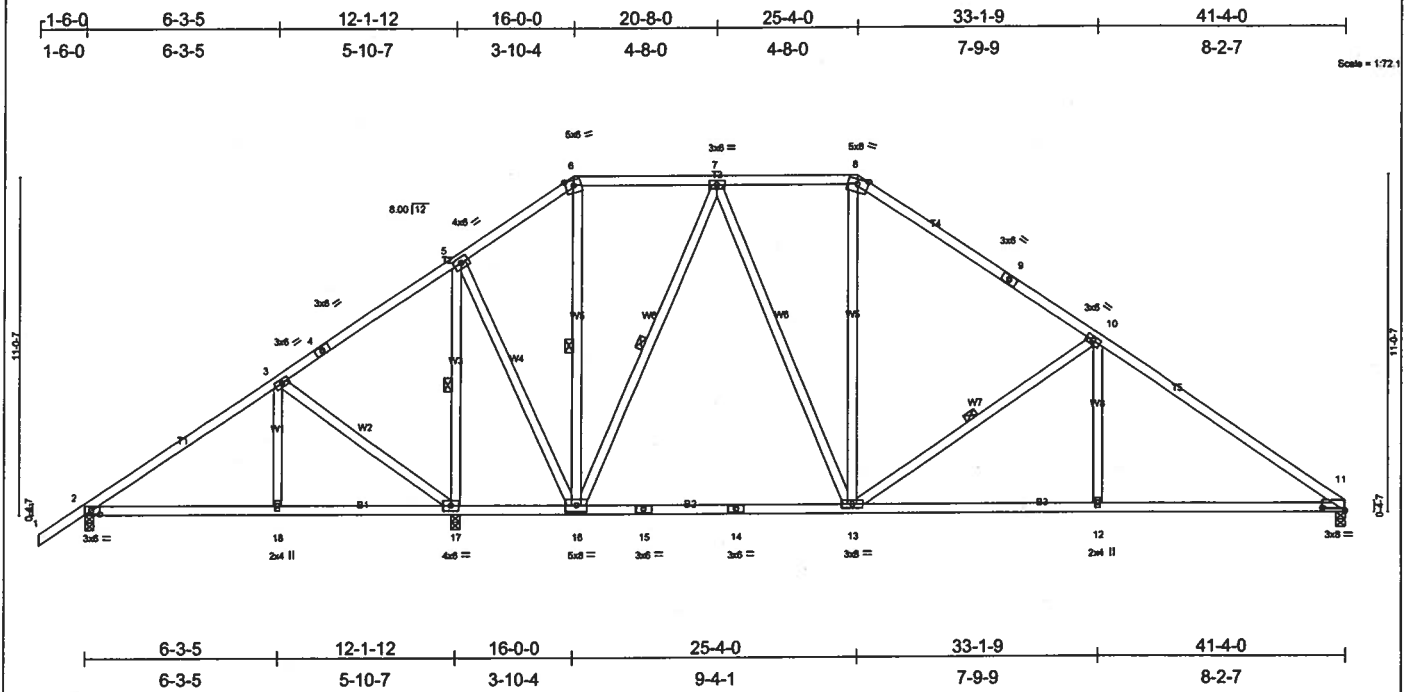
**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/49, 2-3=1900/722, 3-4=2475/979, 4-5=2338/990, 5-6=2200/969, 6-7=2172/969, 7-8=2314/950, 8-9=2770/1007, 2-19=1763/728  
 BOT CHORD 18-19=359/313, 17-18=54/0, 16-17=0/0, 15-17=0/122, 4-15=187/140, 14-15=750/1888, 13-14=841/2271, 12-13=841/2271,  
 11-12=524/1866, 10-11=730/2210, 9-10=730/2210  
 WEBS 3-18=1134/440, 3-15=198/705, 5-14=337/808, 6-14=288/333, 6-12=380/341, 7-12=353/623, 7-11=135/420, 8-11=433/305,  
 8-10=0/212, 2-18=389/1492, 15-18=677/1733, 5-15=235/484

#### 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 Exterior(2) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 3) Provide adequate drainage to prevent water ponding.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 487 lb uplift at joint 9 and 570 lb uplift at joint 19.

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T11	HIP	4	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 30 08:48:47 2005 Page 1		



LOADING (psf)		SPACING		CS		DEFL				PLATES		GRIP	
TCDL	20.0	Plates Increase	1.25	CS1	0.47	Vert(LL)	-0.20	11-12	l/defl	l/d	MT20	244/190	
TCDL	7.0	Lumber Increase	1.25	BC	0.60	Vert(TL)	-0.32	11-12	>999	180			
BCLL	10.0	Rep Stress Incr	YES	WB	0.53	Horz(TL)	0.04	11	n/a	n/a			
BCDL	5.0	Code FBC2004/TPI2002		(Matbr)							Weight: 263 lb		

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

<b>BRACING</b>	
<b>TOP CHORD</b>	Structural wood sheathing directly applied or 4-1-9 oc purlins.
<b>BOT CHORD</b>	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 16-17.
<b>WEBS</b>	1 Row at midpt                      5-17, 6-16, 7-16, 10-13

**REACTIONS** (lb/size) 2=438/0-3-8, 17=1946/0-3-8, 11=1153/0-3-8  
Max Horiz 2=394(load case 4)  
Max Uplift2=308(load case 5), 17=801(load case 5), 11=368(load case 6)  
Max Grav 2=481(load case 9), 17=1946(load case 1), 11=1153(load case 10)

**FORCES (lb) - Maximum Compression/Maximum Tension**  
**TOP CHORD** 1-2=0/44, 2-3=390/231, 3-4=159/209, 4-5=144/341, 5-6=372/264, 6-7=256/263, 7-8=751/469, 8-9=901/456, 9-10=1028/423,  
 10-11=467/553  
**BOT CHORD** 2-18=352/252, 17-18=352/252, 16-17=217/347, 15-16=169/551, 14-15=169/551, 13-14=169/551, 12-13=330/1290, 11-12=330/1290  
**WEBS** 3-18=240/212, 3-17=502/529, 5-17=1540/617, 5-16=297/1076, 6-16=54/100, 7-16=762/343, 7-13=220/516, 8-13=7/200,  
 10-13=659/433, 10-12=0/277

## NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDF=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 3) Provide adequate drainage to prevent water ponding.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 308 lb uplift at joint 2, 801 lb uplift at joint 17 and 368 lb uplift at joint 11.

LOAD CASE(S) Standard

Job L141740	Truss T12	Truss Type SPECIAL	Qty 1	Ply 1	SPARKS CONST. LOT 2 ROLLING MEADOWS
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 30 08:48:23 2005 Page 1		

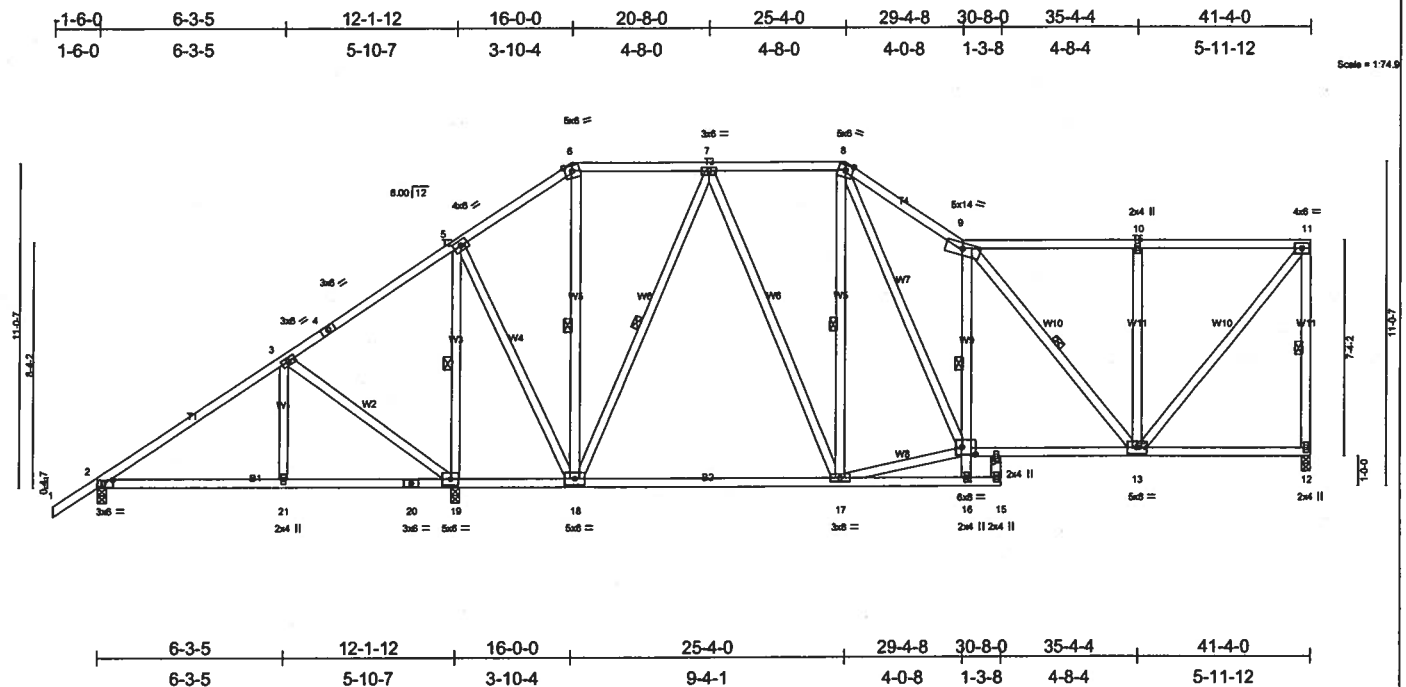


Plate Offsets (X,Y): [2:0-3-9,0-1-8], [14:0-5-8,0-3-0]									
LOADING (psf)	SPACING	2-0-0	CSI	DEFL	In (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.38	Vert(LL)	-0.17 17-18	>999	240	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.39	Vert(TL)	-0.29 17-18	>999	180		
BCLL 10.0	Rep Stress Incr	YES	WB 0.83	Horz(TL)	0.04 12	n/a	n/a		
BCDL 5.0	Code	FBC2004/TP2002	(Matrix)					Weight: 319 lb	

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

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 5-1-14 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
 6-0-0 oc bracing: 18-19  
 9-11-5 oc bracing: 13-14.  
 WEBS 1 Row at midpt 11-12, 5-19, 6-18, 7-18, 8-17, 9-16, 9-13

**REACTIONS** (lb/size) 12=1172/0-3-8, 2=431/0-3-8, 19=1968/0-3-8  
 Max Horz 2=470(load case 5)  
 Max Uplift 12=435(load case 4), 2=242(load case 5), 19=856(load case 5)  
 Max Grav 12=1172(load case 10), 2=478(load case 9), 19=1968(load case 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/44, 2-3=384/81, 3-4=249/220, 4-5=234/352, 5-6=371/138, 6-7=255/156, 7-8=752/351, 8-9=1465/569, 9-10=808/285,  
 10-11=807/285, 11-12=1091/444  
 BOT CHORD 2-21=317/247, 20-21=317/247, 19-20=317/247, 18-19=227/121, 17-18=215/559, 16-17=10/24, 15-16=0/0, 13-14=401/1158,  
 12-13=9/20  
 WEBS 3-21=239/213, 3-19=502/530, 5-19=1563/701, 5-18=365/1093, 6-18=51/96, 7-18=788/352, 7-17=152/498, 8-17=398/239,  
 14-17=235/755, 14-16=0/64, 9-14=626/357, 9-13=541/178, 10-13=350/312, 11-13=435/1235, 8-14=425/1032

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- 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 exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- Provide adequate drainage to prevent water ponding.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 435 lb uplift at joint 12, 242 lb uplift at joint 2 and 856 lb uplift at joint 19.

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T13	SPECIAL	1	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 30 08:48:24 2005 Page 1		

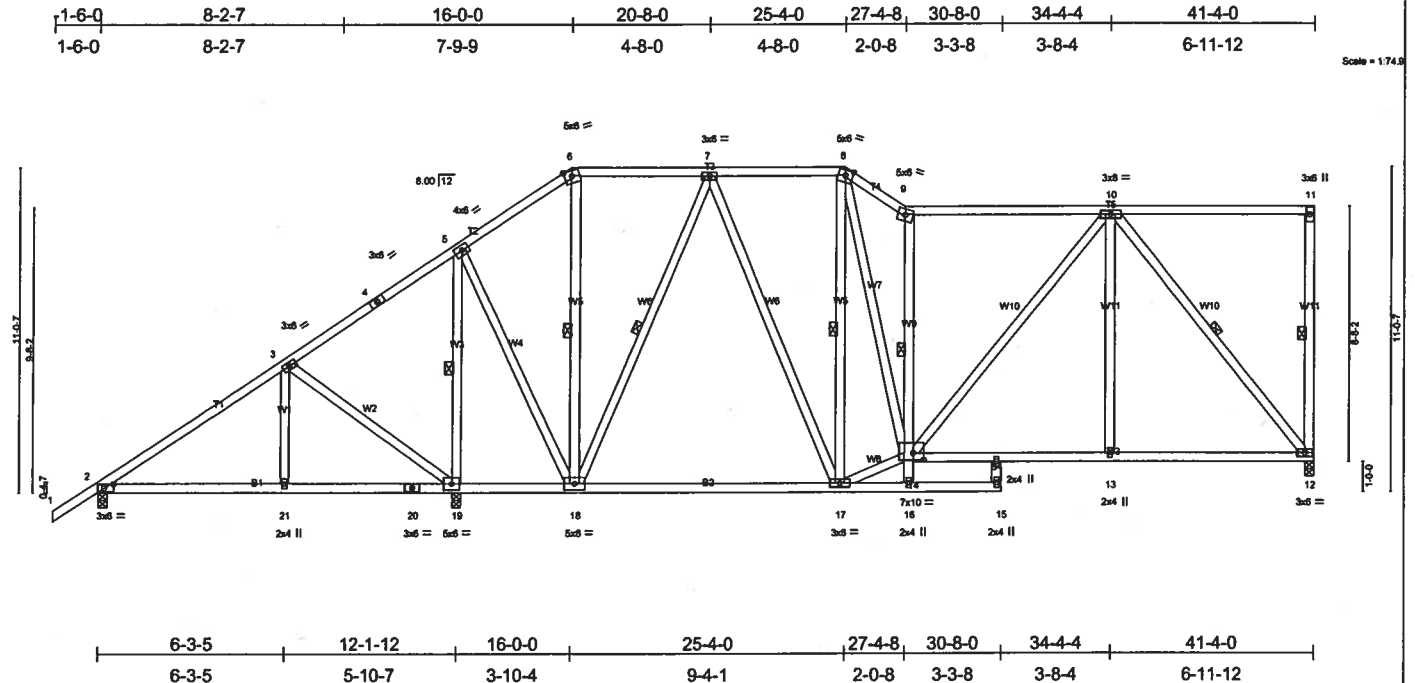


Plate Offsets (X,Y): [2:0-3-9,0-1-8], [14:0-4-8,0-2-12]					
LOADING (psf)	SPACING	2-0-0	CSI	DEFL	PLATES
TCLL 20.0	Plates Increase	1.25	TC 0.38	in (loc) l/defl l/d	MT20
TCDL 7.0	Lumber Increase	1.25	BC 0.41	Vert(LL) -0.23 15 >999 240	GRIP
BCLL 10.0	Rep Stress Incr	YES	WB 0.74	Vert(TL) -0.39 15 >903 180	244/190
BCDL 5.0	Code FBC2004/TP12002		(Matrix)	Horz(TL) 0.05 12 n/a n/a	
Weight: 329 lb					

<b>LUMBER</b>	<b>BRACING</b>
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 5-3-1 oc purlins, except end verticals.
BOT CHORD 2 X 4 SYP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2 X 4 SYP No.3	WEBS 6-0-0 oc bracing: 18-19.
	1 Row at midpt 11-12, 5-19, 6-18, 7-18, 8-17, 9-16, 10-12

**REACTIONS** (lb/size) 12=1208/0-3-8, 2=443/0-3-8, 19=1975/0-3-8  
 Max Horz 2=513(load case 5)  
 Max Uplift 12=492(load case 4), 2=232(load case 5), 19=895(load case 4)  
 Max Grav 12=1208(load case 10), 2=486(load case 9), 19=1975(load case 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/44, 2-3=399/65, 3-4=272/199, 4-5=257/331, 5-6=395/114, 6-7=275/136, 7-8=789/319, 8-9=1325/486, 9-10=1041/366,  
 10-11=21/10, 11-12=160/133  
 BOT CHORD 2-21=348/259, 20-21=348/259, 19-20=348/259, 18-19=209/82, 17-18=247/588, 16-17=6/44, 15-16=0/0, 13-14=312/800,  
 12-13=312/800  
 WEBS 3-19=501/530, 5-19=1569/700, 5-18=369/1098, 6-18=41/86, 7-18=810/340, 7-17=131/518, 8-17=593/253, 14-17=297/812,  
 14-16=0/121, 9-14=949/438, 10-14=109/386, 10-13=0/240, 10-12=1233/479, 8-14=425/1177, 3-21=239/213

#### 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 Exterior(2) zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 3) Provide adequate drainage to prevent water ponding.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 492 lb uplift at joint 12, 232 lb uplift at joint 2 and 895 lb uplift at joint 19.

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T14	SPECIAL	1	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 MiTek Industries, Inc. Wed Nov 30 08:46:25 2005 Page 1		

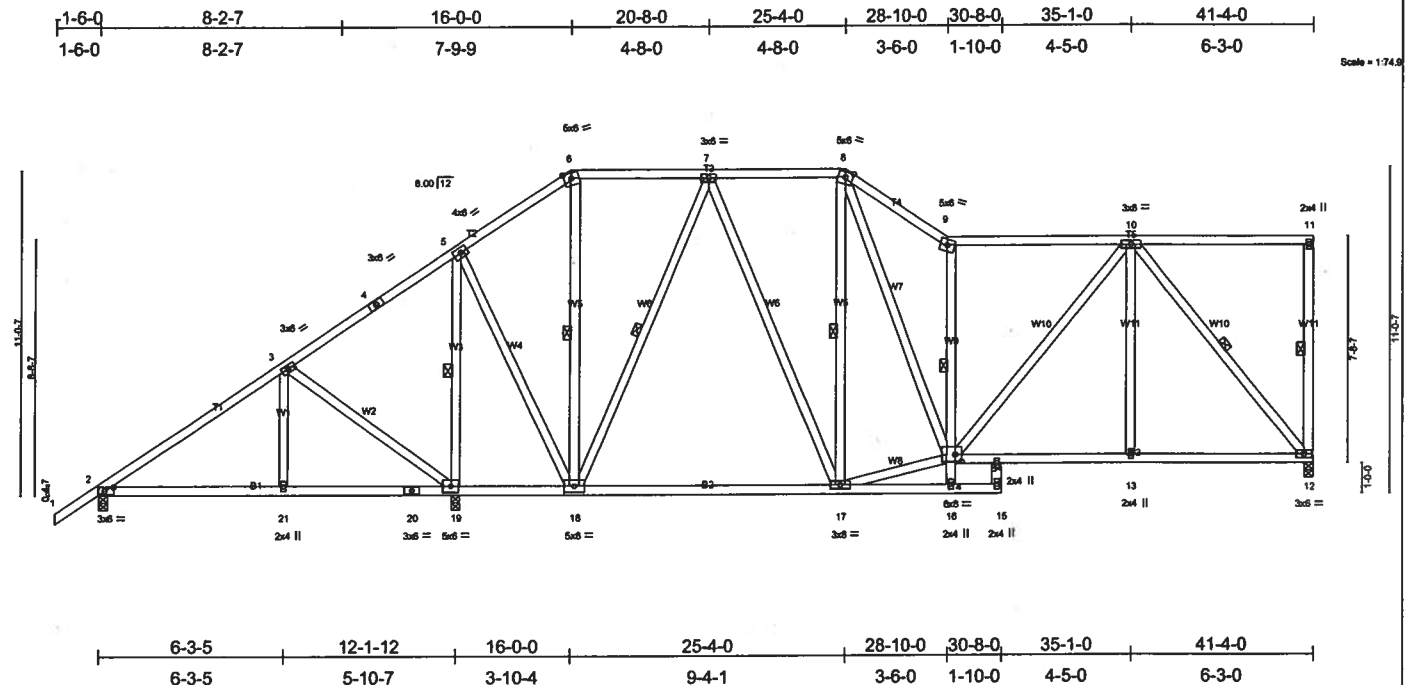


Plate Offsets (X,Y): [2-0-3-9,0-1-8], [14-0-2-8,0-2-12]					
<b>LOADING (psf)</b>	<b>SPACING</b>	<b>CSI</b>	<b>DEFL</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.31	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.35	Vert(LL) -0.17 17-18 >999 240	Weight: 322 lb	
BCLL 10.0	Lumber Increase 1.25	WB 0.78	Vert(TL) -0.30 17-18 >999 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.04 12 n/a n/a		
Code FBC2004/TPI2002					

<b>LUMBER</b>	<b>BRACING</b>
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 5-2-0 oc purlins, except end verticals.
BOT CHORD 2 X 4 SYP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except
WEBS 2 X 4 SYP No.3	WEBS 6-0-0 oc bracing: 18-19. 1 Row at midpt 11-12, 5-19, 6-18, 7-18, 8-17, 9-16, 10-12

**REACTIONS** (lb/size) 12=1182/0-3-8, 2=440/0-3-8, 19=1960/0-3-8  
 Max Horz 2=482(load case 5)  
 Max Uplift 12=452(load case 4), 2=240(load case 5), 19=855(load case 4)  
 Max Grav 12=1182(load case 10), 2=484(load case 9), 19=1960(load case 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/44, 2-3=395/77, 3-4=254/204, 4-5=239/337, 5-6=383/133, 6-7=265/151, 7-8=763/343, 8-9=1429/548, 9-10=1108/379,  
 10-11=20/9, 11-12=143/118  
 BOT CHORD 2-21=325/256, 20-21=325/256, 19-20=325/256, 18-19=214/109, 17-18=226/570, 16-17=8/35, 15-16=0/0, 13-14=294/807,  
 12-13=294/807  
 WEBS 3-19=501/530, 5-19=1556/700, 5-18=364/1087, 6-18=46/91, 7-18=789/349, 7-17=146/497, 8-17=416/235, 14-17=245/756,  
 14-16=0/78, 9-14=1011/474, 10-14=150/480, 10-13=0/213, 10-12=1238/448, 8-14=417/1036, 3-21=239/213

**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 Exterior(2) zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.  
 3) Provide adequate drainage to prevent water ponding.  
 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 452 lb uplift at joint 12, 240 lb uplift at joint 2 and 855 lb uplift at joint 19.

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T15	HIP	1	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 MITek Industries, Inc. Wed Nov 30 08:48:26 2005 Page 1		

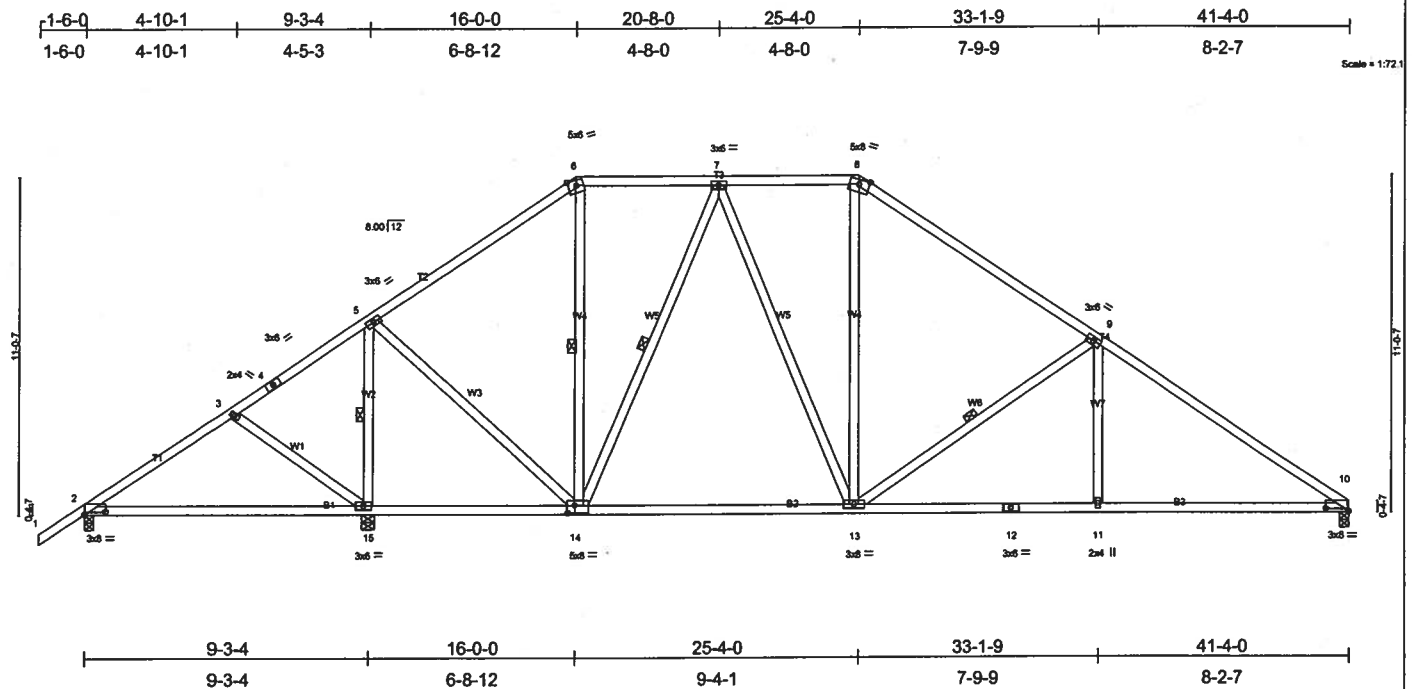


Plate Offsets (X,Y): [2-0-8-3,0-1-2], [10-0-8-7,0-1-2], [14-0-2-12,0-3-0]												
LOADING (psf)		SPACING 2-0-0		CSI		DEFL		In (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.52	Vert(LL)	0.31	2-15	>350	240	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.63	Vert(TL)	0.25	2-15	>437	180		
BCLL	10.0	Rep Stress Incr	YES	WB	0.44	Horz(TL)	0.05	10	n/a	n/a		
BCDL	5.0	Code FBC2004/TP12002		(Matrbx)							Weight: 252 lb	

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

<b>BRACING</b>	
<b>TOP CHORD</b>	Structural wood sheathing directly applied or 3-9-10 oc purlins.
<b>BOT CHORD</b>	Rigid ceiling directly applied or 6-0-0 oc bracing.
<b>WEBS</b>	1 Row at midpt                      5-15, 6-14, 7-14, 9-13

**REACTIONS** (lb/size) 10=1283/0-3-8, 2=277/0-3-8, 15=1977/0-4-15  
 Max Horiz 2=394(load case 4)  
 Max Uplift 10=-412(load case 6), 2=-237(load case 5), 15=-751(load case 5)  
 Max Grav 10=1283(load case 1), 2=330(load case 9), 15=1977(load case 1)

**FORCES (lb) - Maximum Compression/Maximum Tension**  
**TOP CHORD** 1-2=0/44, 2-3=122/230, 3-4=166/271, 4-5=147/363, 5-6=772/393, 6-7=560/413, 7-8=945/564, 8-9=1259/568, 9-10=1895/662  
**BOT CHORD** 1-5=248/275, 5-15=241/283, 13-14=231/794, 12-13=420/1477, 11-12=420/1477, 10-11=420/1477  
**WEBS** 1-15=248/254, 14-15=1586/622, 5-14=263/1091, 6-14=93/144, 7-14=646/329, 7-13=182/405, 8-13=48/300, 9-13=655/430, 9-11=0/276

## NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCFL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C exterior(2) zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 3) Provide adequate drainage to prevent water ponding.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 412 lb uplift at joint 10, 237 lb uplift at joint 2 and 751 lb uplift at joint 15.

LOAD CASE(S) Standard

Job L141740	Truss T16	Truss Type HIP	Qty 4	Ply 1	SPARKS CONST. LOT 2 ROLLING MEADOWS
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 30 08:48:27 2005 Page 1		

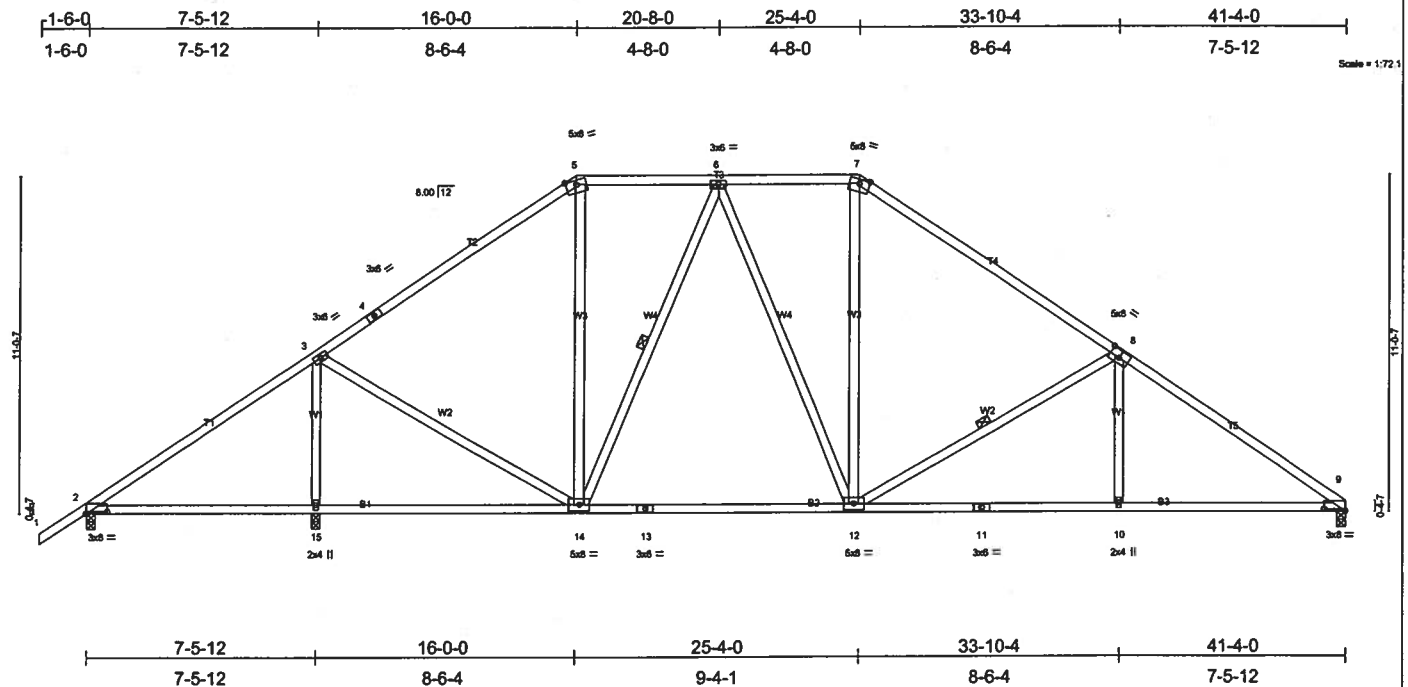


Plate Offsets (X,Y): [2:0-8-3,0-0-14], [8:0-4-0,0-3-0], [9:0-8-3,0-0-14]					
LOADING (psf)	SPACING	2:0-0	CSI	DEFL	PLATES
TCLL 20.0	Plates Increase 1.25	TC 0.50	in (loc)	in (loc)	MT20
TCDL 7.0	Lumber Increase 1.25	BC 0.64	l/defl	l/d	GRIP
BCLL 10.0	Rep Stress Incr YES	WB 0.76	2-15 >448	240	244/190
BCDL 5.0	Code FBC2004/TP12002	(Matrix)	2-15 >525	180	
			Horz(TL) 0.05 9 n/a n/a		Weight: 244 lb

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

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 3-10-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 6-14, 8-12

**REACTIONS** (lb/size) 9=1376/0-3-8, 2=223/0-3-8, 15=1937/0-3-8  
 Max Horz 2=394(load case 4)  
 Max Uplift 9=440(load case 6), 2=-208(load case 5), 15=-703(load case 5)  
 Max Grav 9=1376(load case 1), 2=271(load case 9), 15=1937(load case 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/44, 2-3=-200/323, 3-4=-1088/464, 4-5=-956/500, 5-6=-797/518, 6-7=-1091/631, 7-8=-1440/632, 8-9=-2105/750  
 BOT CHORD 2-15=-202/253, 14-15=-202/253, 13-14=-274/972, 12-13=-274/972, 11-12=-509/1666, 10-11=-509/1666, 9-10=-510/1662  
 WEBS 3-15=-1664/728, 3-14=-224/1102, 5-14=-134/257, 6-14=-547/321, 6-12=-177/339, 7-12=-67/361, 8-12=-670/435, 8-10=0/272

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - 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 exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
  - Provide adequate drainage to prevent water ponding.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 440 lb uplift at joint 9, 208 lb uplift at joint 2 and 703 lb uplift at joint 15.

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T17	SPECIAL	1	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 30 08:48:27 2005 Page 1		

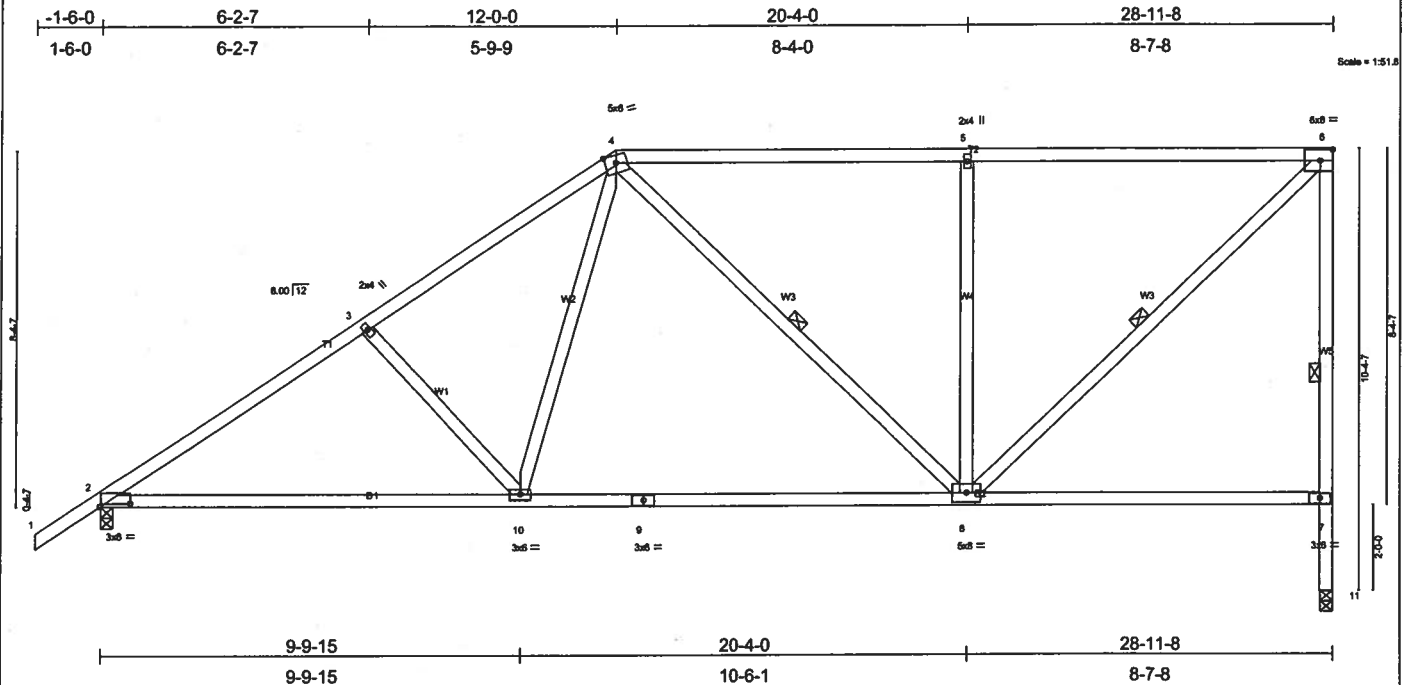


Plate Offsets (X,Y): [2-0-8-3,0-0-14]

<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 1.00	ln (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.63	Vert(LL) -0.22 8-10 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.57	Vert(TL) -0.37 8-10 >934 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.11 11 n/a n/a		
	Code FBC2004/TPI2002			Weight: 172 lb	

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 4-2-10 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 7-5-11 oc bracing.  
 WEBS 1 Row at midpt 6-11, 4-8, 6-8

**REACTIONS** (lb/size) 11=1201/0-3-8, 2=1295/0-3-8

Max Horz 2=434(load case 5)  
 Max Uplift 11=435(load case 4), 2=429(load case 5)

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

TOP CHORD 1-2=0/44, 2-3=-1731/565, 3-4=-1531/557, 4-5=-962/411, 5-6=-962/412, 7-11=1201/507, 6-7=-1087/523  
 BOT CHORD 2-10=-714/1378, 9-10=-505/1062, 8-9=-505/1062, 7-8=-18/38  
 WEBS 3-10=-261/292, 4-10=-163/543, 4-8=-144/172, 5-8=-492/438, 6-8=-546/1276

**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; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) Provide adequate drainage to prevent water ponding.
- 3) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 435 lb uplift at joint 11 and 429 lb uplift at joint 2.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T18	SPECIAL	1	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 30 08:48:28 2005 Page 1		

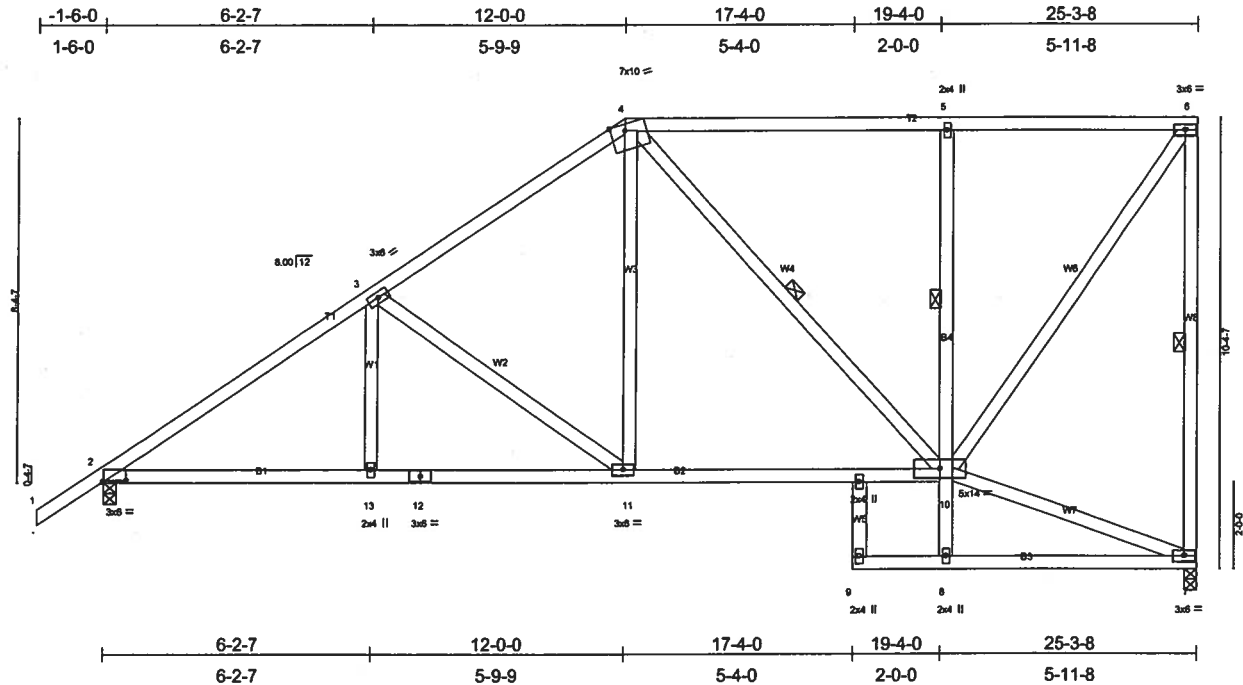


Plate Offsets (X,Y): [2:0-6-3,0-0-6], [4:0-4-0,Edge]					
LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc) l/defl L/d
TCLL 20.0	Plates Increase	1.25	TC 0.51	Vert(LL)	-0.10 10-11 >999 240
TCDL 7.0	Lumber Increase	1.25	BC 0.40	Vert(TL)	-0.16 10-11 >999 180
BCLL 10.0	Rep Stress Incr	YES	WB 0.75	Horz(TL)	0.06 7 n/a n/a
BCDL 5.0	Code FBC2004/TP12002		(Matrix)		
Weight: 182 lb					

LUMBER	BRACING
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 4-9-2 oc purlins, except end verticals.
BOT CHORD 2 X 4 SYP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
B4 2 X 4 SYP No.3	1 Row at midpt 5-10
WEBS 2 X 4 SYP No.3	1 Row at midpt 6-7, 4-10

**REACTIONS** (lb/size) 7=1094/0-3-8, 2=1159/0-3-8  
 Max Horiz 2=434(load case 5)  
 Max Uplift 7=364(load case 4), 2=381(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/44, 2-3=1573/434, 3-4=1124/387, 4-5=654/262, 5-6=642/260, 6-7=1027/453  
 BOT CHORD 2-13=606/1223, 12-13=606/1223, 11-12=606/1223, 10-11=398/874, 8-10=0/154, 5-10=387/351, 8-9=0/0, 7-8=25/0  
 WEBS 3-13=0/194, 3-11=437/291, 4-11=125/455, 4-10=323/216, 7-10=0/37, 6-10=448/1099

**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; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.  
 2) Provide adequate drainage to prevent water ponding.  
 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 364 lb uplift at joint 7 and 381 lb uplift at joint 2.

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T19	SPECIAL	2	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 30 08:48:29 2005 Page 1		

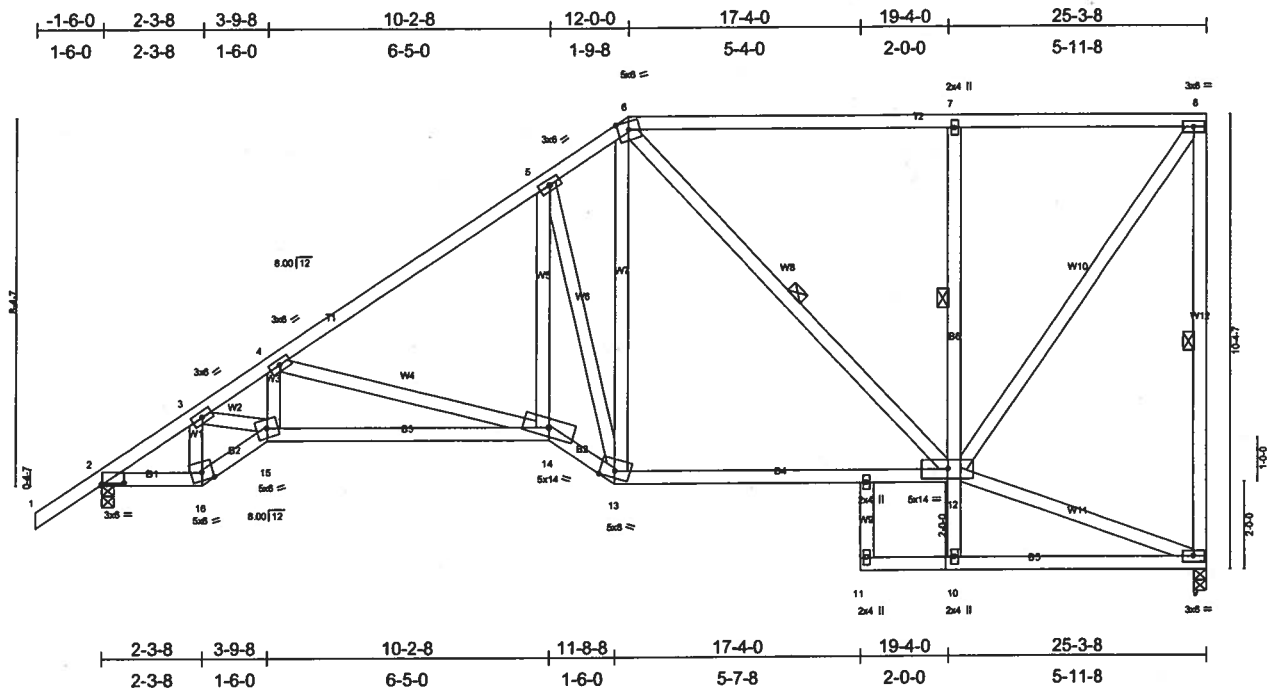


Plate Offsets (X,Y): [2:0-6-3,0-0-6]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	In (loc)	I/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plates Increase	1.25	TC 0.51	Vert(LL)	-0.16	14-15	>999	240	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.51	Vert(TL)	-0.26	14-15	>999	180		
BCLL 10.0	Rep Stress Incr	YES	WB 0.97	Horz(TL)	0.14	9	n/a	n/a		
BCDL 5.0	Code FBC2004/TP12002		(Matrix)						Weight: 201 lb	

**LUMBER**

TOP CHORD 2 X 4 SYP No.2  
 BOT CHORD 2 X 4 SYP No.2 "Except"  
 B6 2 X 4 SYP No.3  
 WEBS 2 X 4 SYP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 3-8-5 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:  
 1 Row at midpt 7-12  
 WEBS 1 Row at midpt 8-9, 6-12

**REACTIONS**

(lb/size) 9=1094/0-3-8, 2=1159/0-3-8  
 Max Horz 2=434(load case 5)  
 Max Uplift 9=364(load case 4), 2=381(load case 5)

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

TOP CHORD 1-2=0/44, 2-3=-1605/408, 3-4=-2608/949, 4-5=-1455/488, 5-6=-1073/454, 6-7=-655/262, 7-8=-643/259, 8-9=-1027/451  
 BOT CHORD 2-16=-615/1240, 15-16=-684/1438, 14-15=-1078/2136, 13-14=-659/1364, 12-13=-397/873, 10-12=0/154, 7-12=-388/336, 10-11=0/0,  
 9-10=-27/0  
 WEBS 3-16=-791/391, 3-15=-538/1073, 4-15=-193/658, 4-14=-1038/567, 5-14=-478/1083, 5-13=-1129/631, 6-13=-271/542, 6-12=-321/209,  
 9-12=0/40, 8-12=-446/1100

**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; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) Provide adequate drainage to prevent water ponding.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 364 lb uplift at joint 9 and 381 lb uplift at joint 2.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T20	SPECIAL	1	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

6.200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 30 08:48:29 2005 Page 1

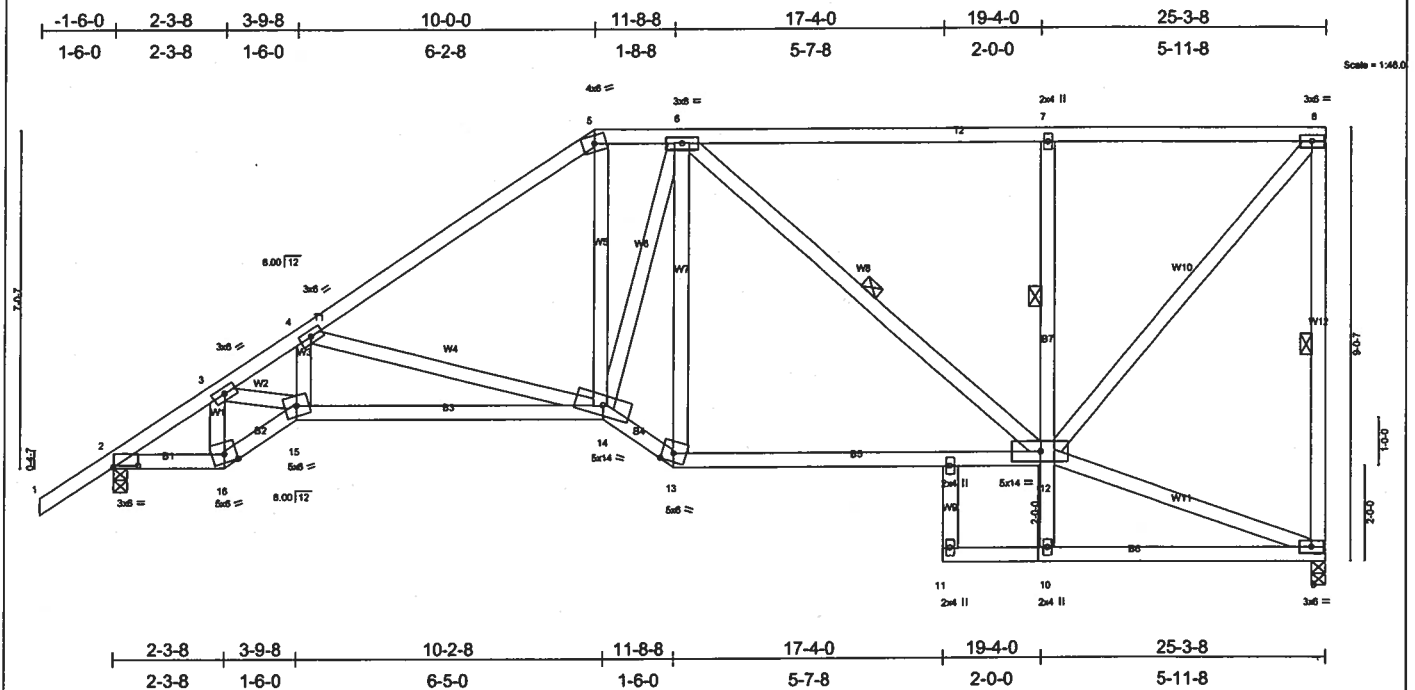


Plate Offsets (X,Y): [2:0-6:3,0-0-6]

<b>LOADING (psf)</b>	<b>SPACING</b>	<b>2-0-0</b>	<b>CSI</b>	<b>DEFL</b>	<b>in</b>	<b>(loc)</b>	<b>l/defl</b>	<b>L/d</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plates Increase 1.25		TC 0.39	Vert(LL) -0.14	14-15	>999	240		MT20	244/190
TCDL 7.0	Lumber Increase 1.25		BC 0.49	Vert(TL) -0.23	14-15	>999	180			
BCLL 10.0	Rep Stress Incr YES		WB 0.74	Horz(TL) 0.12	9	n/a	n/a			
BCDL 5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 190 lb

**LUMBER**  
 TOP CHORD 2 X 4 SYP No.2  
 BOT CHORD 2 X 4 SYP No.2 "Except"  
 B7 2 X 4 SYP No.3  
 WEBS 2 X 4 SYP No.3

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 3-8-15 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:  
 WEBS 1 Row at midpt 7-12  
 1 Row at midpt 8-9, 6-12

**REACTIONS (lb/size)** 9=1094/0-3-8, 2=1159/0-3-8  
 Max Horz 2=372(load case 5)  
 Max Uplift 9=372(load case 3), 2=383(load case 5)

**FORCES (lb) - Maximum Compression/Maximum Tension**  
 TOP CHORD 1-2=0/44, 2-3=-1609/445, 3-4=-2595/958, 4-5=-1457/522, 5-6=-1162/517, 6-7=-787/304, 7-8=-769/299, 8-9=-1027/437  
 BOT CHORD 2-16=-588/1244, 15-16=-651/1439, 14-15=-1026/2120, 13-14=-535/1230, 12-13=-447/1042, 10-12=0/154, 7-12=-395/336, 10-11=0/0, 9-10=-25/0  
 WEBS 3-16=-786/371, 3-15=-510/1051, 4-15=-180/658, 4-14=-1016/532, 6-14=-318/490, 6-13=-512/325, 6-12=-340/192, 9-12=0/40, 8-12=-459/1175, 5-14=-259/562

**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; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.  
 2) Provide adequate drainage to prevent water ponding.  
 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 372 lb uplift at joint 9 and 383 lb uplift at joint 2.

LOAD CASE(S) Standard



Job L141740	Truss T22	Truss Type SPECIAL	Qty 1	Ply 1	SPARKS CONST. LOT 2 ROLLING MEADOWS
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.200 s Jul 13 2005 Mittek Industries, Inc. Wed Nov 30 08:48:31 2005 Page 1		

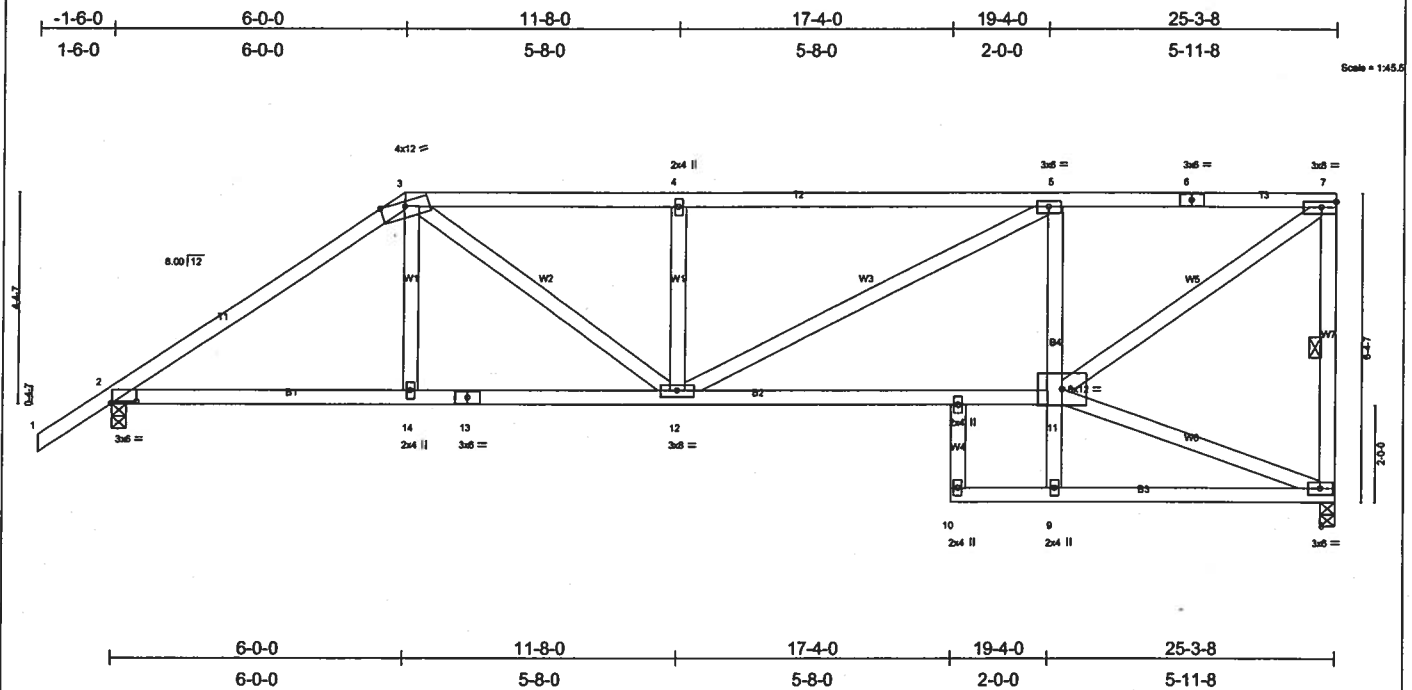


Plate Offsets (X,Y): [2-0-6-3,0-0-6]

<b>LOADING</b> (psf)	<b>SPACING</b> 2-0-0	<b>CSI</b>	<b>DEFL</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plates Increase 1.25	TC 0.39	Vert(LL) -0.15 11-12 >999 240	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.41	Vert(TL) -0.25 11-12 >999 180		
BCLL 10.0	Rep Stress Incr YES	WB 0.50	Horz(TL) 0.08 8 n/a n/a		
BCDL 5.0	Code FBC2004/TP12002	(Matrix)			Weight: 154 lb

**LUMBER**  
 TOP CHORD 2 X 4 SYP No.2  
 BOT CHORD 2 X 4 SYP No.2 \*Except\*  
 B4 2 X 4 SYP No.3  
 WEBS 2 X 4 SYP No.3

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 4-4-14 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 7-8

**REACTIONS** (lb/size) 8=1094/0-3-8, 2=1159/0-3-8  
 Max Horz 2=249(load case 5)  
 Max Uplift 8=447(load case 3), 2=372(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/44, 2-3=-1574/532, 3-4=-1714/668, 4-5=-1714/668, 5-6=-1285/504, 6-7=-1285/504, 7-8=-1025/456  
 BOT CHORD 2-14=-512/1225, 13-14=-511/1232, 12-13=-511/1232, 11-12=-518/1334, 9-11=0/152, 5-11=-593/406, 9-10=0/0, 8-9=-17/0  
 WEBS 3-14=0/185, 3-12=-386/594, 4-12=-358/341, 5-12=-205/430, 8-11=0/40, 7-11=-606/1545

**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; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) Provide adequate drainage to prevent water ponding.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 447 lb uplift at joint 8 and 372 lb uplift at joint 2.

LOAD CASE(S) Standard

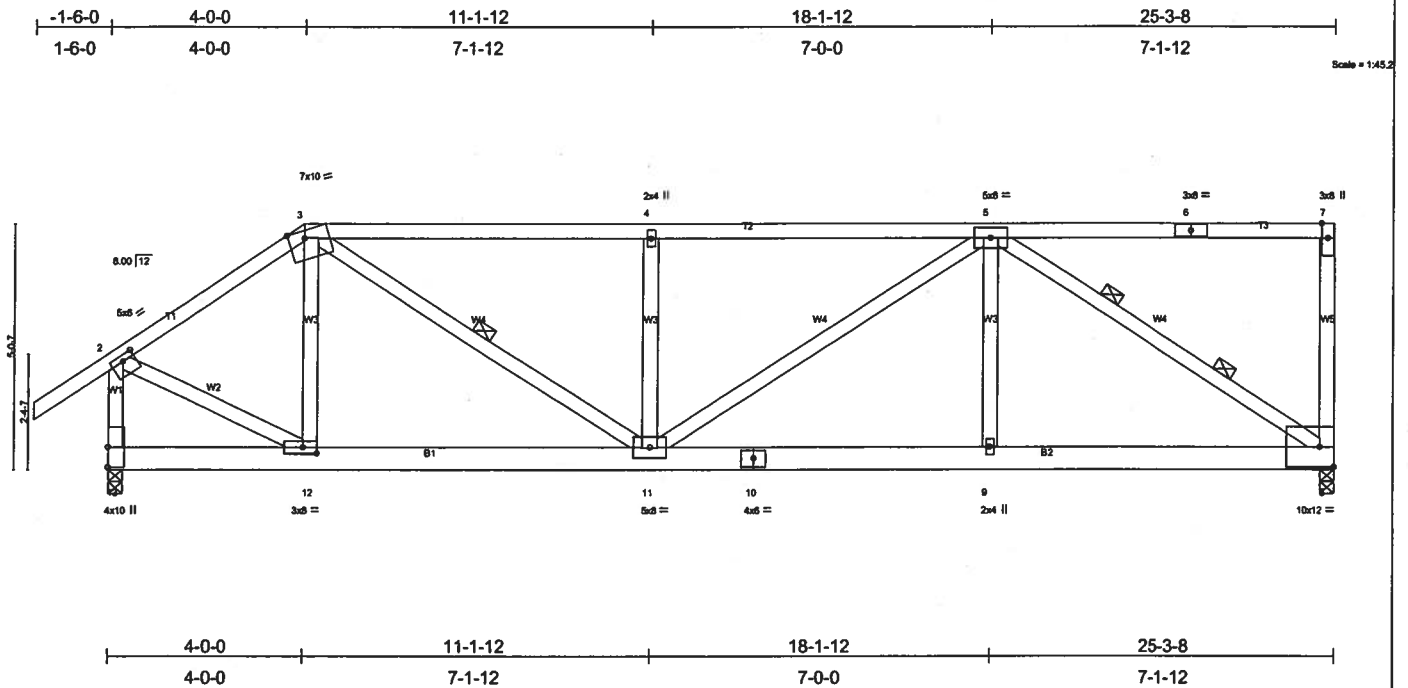


Plate Offsets (X,Y): [2:0-3-0,0-1-8], [3:0-4-0,Edge], [12:0-3-8,0-1-8]										
LOADING (psf)		SPACING 2-0-0		CSI		DEFL in (loc) l/defl L/d			PLATES	GRIP
TCLL	20.0	Plates Increase 1.25		TC	0.93	Vert(LL)	0.16	9-11	>999	240
TCDL	7.0	Lumber Increase 1.25		BC	0.39	Vert(TL)	-0.24	9-11	>999	180
BCLL	10.0	Rep Stress Incr NO		WB	0.82	Horz(TL)	0.05	8	n/a	n/a
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)						
									Weight: 171 lb	

**LUMBER**  
**TOP CHORD** 2 X 4 SYP No.2  
**BOT CHORD** 2 X 6 SYP No.1D  
**WEBS** 2 X 4 SYP No.3 \*Except\*  
W5 2 X 4 SYP No.2

<b>BRACING</b>	
<b>TOP CHORD</b>	Structural wood sheathing directly applied or 2-5-1 oc purlins, except end verticals.
<b>BOT CHORD</b>	Rigid ceiling directly applied or 6-0-0 oc bracing.
<b>WEBS</b>	1 Row at midpt 3-11
	2 Rows at 1/3 pts 5-8

**REACTIONS** (lb/size) 8=2284/0-3-8, 13=2386/0-3-8  
Max Horz 13=240(load case 4)  
Max Uplift8=1413(load case 2), 13=1191(load case 4)

**FORCES (lb) - Maximum Compression/Maximum Tension**  
**TOP CHORD** 1-2=0/49, 2-3=2109/1138, 3-4=3162/1916, 4-5=3161/1917, 5-6=122/102, 6-7=122/102, 7-8=390/419, 2-13=2179/1110  
**BOT CHORD** 12-13=168/75, 11-12=1007/1733, 10-11=1607/2623, 9-10=1607/2623, 8-9=1607/2623  
**WEBS** 3-12=355/488, 3-11=1139/1703, 4-11=848/936, 5-11=387/646, 5-9=0/464, 5-8=3006/1806, 2-12=1184/1972

## 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; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60.
- 2) Provide adequate drainage to prevent water ponding.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1413 lb uplift at joint 8 and 1191 lb uplift at joint 13.
- 4) Girder carries tie-in span(s): 7-0-0 from 0-0-0 to 4-0-0
- 5) Girder carries hip end with 0-0-0 right side setback, 4-0-0 left side setback, and 7-0-0 end setback.
- 6) 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=54, 3-7=118(F=64), 12-13=129(F=99), 8-12=65(F=35)

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	T24	MONO HIP	2	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mittek Industries, Inc. Wed Nov 30 08:48:32 2005 Page 1		

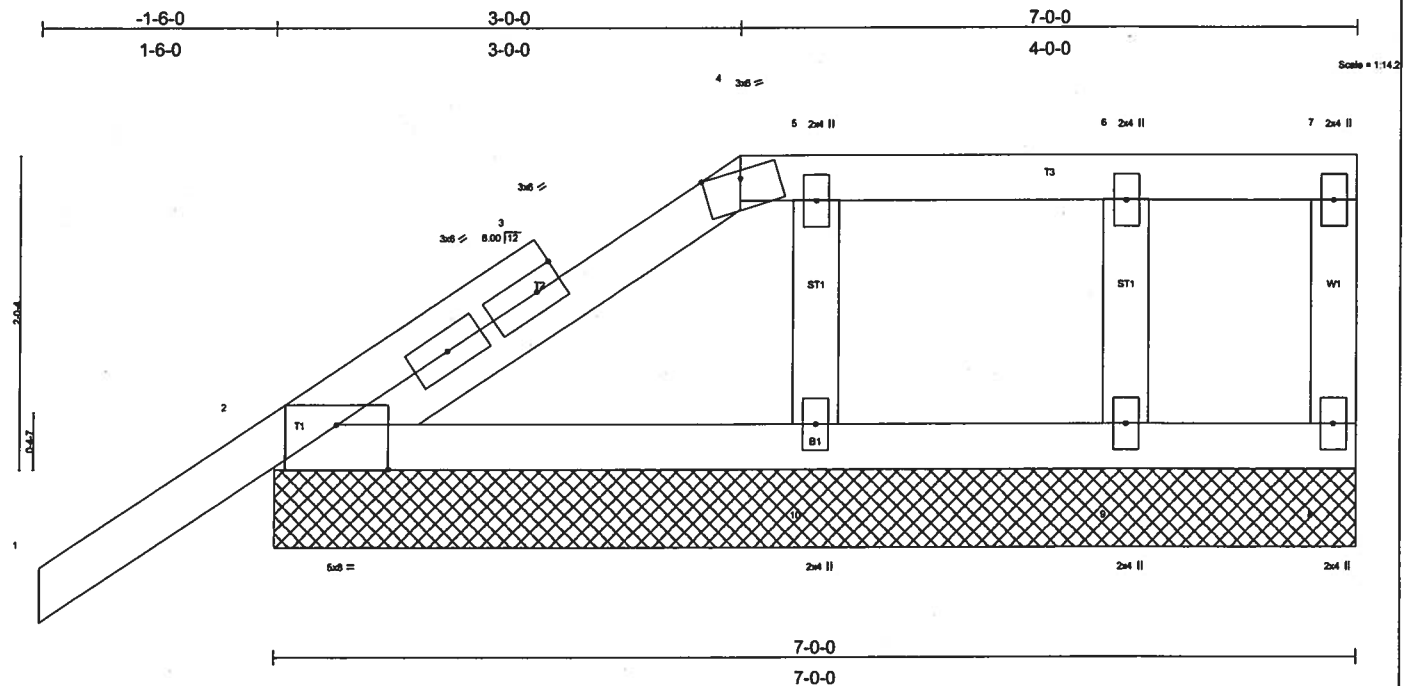


Plate Offsets (X,Y): [2-0-4-0,0-3-7]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.28	Vert(LL)	-0.01	1	n/r	120	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.07	Vert(TL)	-0.01	1	n/r	90		
BCLL 10.0	Rep Stress Incr	NO	WB 0.06	Horz(TL)	0.00	8	n/a	n/a		
BCDL 5.0	Code FBC2004/TP12002		(Matrix)						Weight: 33 lb	

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

**BRACING**

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

**REACTIONS** (lb/size) 2=434/7-0-0, 8=102/7-0-0, 10=433/7-0-0, 9=189/7-0-0  
 Max Horz 2=141(load case 5)  
 Max Uplift 2=220(load case 5), 8=37(load case 4), 10=140(load case 4), 9=136(load case 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-24/91, 2-3=-110/27, 3-4=-37/42, 4-5=-14/9, 5-6=-14/9, 6-7=-14/9, 7-8=-75/59  
 BOT CHORD 2-10=-9/14, 9-10=-9/14, 8-9=-9/14  
 WEBS 5-10=-330/251, 6-9=-161/150

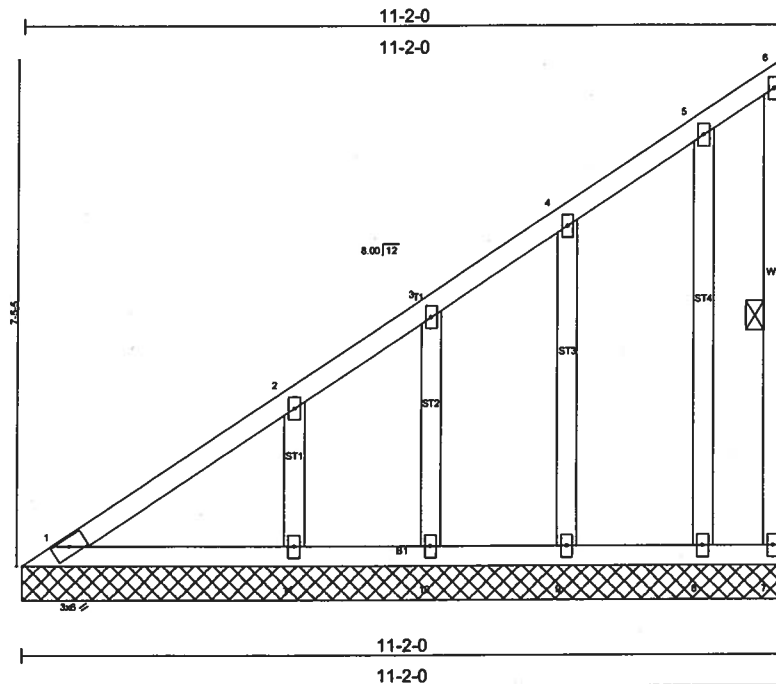
**NOTES**

- 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; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Mittek "Standard Gable End Detail"
- 3) Provide adequate drainage to prevent water ponding.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 220 lb uplift at joint 2, 37 lb uplift at joint 8, 140 lb uplift at joint 10 and 136 lb uplift at joint 9.
- 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 1-4=-114(F=-60), 4-7=-114(F=-60), 2-8=-30

Job	Truss	Truss Type	Qty	Ply	SPARKS CONST. LOT 2 ROLLING MEADOWS
L141740	V01	VALLEY	2	1	Job Reference (optional)
Builders FirstSource, Lake City, FL 32055			6.200 s Jul 13 2005 Mitek Industries, Inc. Wed Nov 30 08:48:33 2005 Page 1		



LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	l/defl	U/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.14	Vert(TL)	n/a	-	n/a	999		
BCLL 10.0	Lumber Increase 1.25	WB 0.13	Horz(TL)	-0.00	7	n/a	n/a		
BCDL 5.0	Rep Stress Incr NO	(Matrix)							
	Code FBC2004/TPI2002							Weight: 70 lb	

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

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 6-7

**REACTIONS** (lb/size) 1=207/11-2-0, 7=50/11-2-0, 11=516/11-2-0, 10=196/11-2-0, 9=322/11-2-0, 8=225/11-2-0  
 Max Horz 1=324(load case 5)  
 Max Uplift 7=31(load case 5), 11=268(load case 5), 10=103(load case 5), 9=168(load case 5), 8=110(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-341/118, 2-3=-215/38, 3-4=-160/69, 4-5=-77/56, 5-6=-43/21, 6-7=-39/29  
 BOT CHORD 1-11=-1/1, 10-11=-1/1, 9-10=-1/1, 8-9=-1/1, 7-8=-1/1  
 WEBS 2-11=-373/257, 3-10=-172/127, 4-9=-251/178, 5-8=-179/126

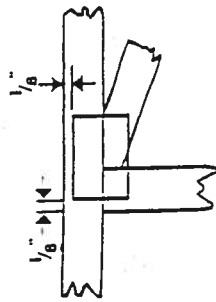
**NOTES**  
 1) Wind: ASCE 7-02: 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.  
 2) All plates are 2x4 MT20 unless otherwise indicated.  
 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 7, 268 lb uplift at joint 11, 103 lb uplift at joint 10, 168 lb uplift at joint 9 and 110 lb uplift at joint 8.  
 4) Non Standard bearing condition. Review required.  
 5) 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: 1-6=-114(F=-60), 1-7=-30

## 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 seal.



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

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



### PLATE SIZE

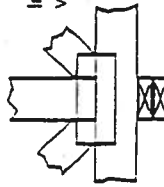
4 x 4  
The first dimension is the width perpendicular to slots. Second dimension is the length parallel to slots.

### LATERAL BRACING



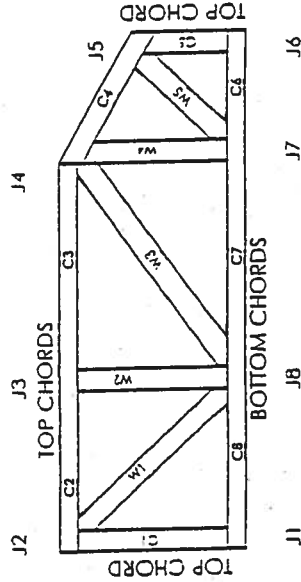
Indicates location of required continuous lateral bracing.

### BEARING



Indicates location of joints at which bearings (supports) occur.

## Numbering System



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

WEBS ARE NUMBERED FROM LEFT TO RIGHT

### CONNECTOR PLATE CODE APPROVALS

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



MITek Engineering Reference Sheet: MIT-7473

## General Safety Notes

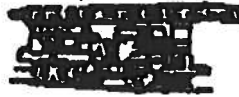
### Failure to Follow Could Cause Properly Damage or Personal Injury

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

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# HALL'S PUMP & WELL SERVICE, INC.

SPECIALIZING IN 4"-6" WELLS



DONALD AND MARY HALL  
OWNERS

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FAX (386) 758-7022  
904 NW MAIN BLVD.  
LAKE CITY, FLORIDA 32065

July 12, 2005

## NOTICE TO BUILDING DEPT

For Lot 2 Rolling Meadows

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

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

Thank you,

Donald D. Hall  
DDH/rb

**COLUMBIA COUNTY BUILDING DEPARTMENT**

# RESIDENTIAL MINIMUM PLAN REQUIREMENTS AND CHECKLIST FOR FLORIDA BUILDING CODE 2001

## ONE (1) AND TWO (2) FAMILY DWELLINGS

**ALL REQUIREMENTS ARE SUBJECT TO CHANGE**

**EFFECTIVE MARCH 1, 2002**

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

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

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

**APPLICANT - PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL**

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

**Applicant**

## Plans Examiner

2

□

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

1

□

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

7

□

**Site Plan including:**

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

買

□

**Wind-load Engineering Summary, calculations and any details required**

- a) Plans or specifications must state compliance with FBC Section 1606
- b) The following information must be shown as per section 1606.1.7 FBC
  - a. Basic wind speed (MPH)
  - b. Wind importance factor (I) and building category
  - c. Wind exposure – if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated
  - d. The applicable internal pressure coefficient
  - e. Components and Cladding. The design wind pressure in terms of psf (kN/m<sup>2</sup>), to be used for the design of exterior component and cladding materials not specifically designed by the registered design professional

[illegible]

□ □ □ □ □ □ □

**Elevations including:**

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

- |                                     |             |                          |
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| <input checked="" type="checkbox"/> | was burning | <input type="checkbox"/> |
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**Floor Plan including:**

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

**Foundation Plan including:**

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

**Roof System:**

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

**Wall Sections including:**

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

☒☐**b) Wood frame wall**

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

☐☐**c) Metal frame wall and roof (designed, signed and sealed by Florida Prof. Engineer or Architect)****Floor Framing System:**

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

**Plumbing Fixture Layout****Electrical layout including:**

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

**HVAC information**

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

**Energy Calculations (dimensions shall match plans)****Gas System Type (LP or Natural) Location and BTU demand of equipment****Disclosure Statement for Owner Builders****Notice Of Commencement****Private Potable Water**

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

☒☐☒☐☒☐☒☐☒☐☒☐☒☐☒☐☒☐☒☐☒☐☒☐☒☐☒☐☒☐☒☐☐☐

# 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.

# 24113

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

Company Name: Aspen Pest Control, Inc.  
Company Address: 301 NW Cole Terrace City Lake City State FL Zip 32055  
Company Business License No. JB109476 Company Phone No. 386-765-3611  
FHA/VA Case No. (if any) \_\_\_\_\_

## Section 2: Builder Information

Company Name: Sparks construction Company Phone No. 623-0575

## Section 3: Property Information

Location of Structure(s) Treated (Street Address or Legal Description, City, State and Zip) 145 SW Morning glory dr  
lake city FL 32024

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

## Section 4: Treatment Information

Date(s) of Treatment(s) 4-11-06  
Brand Name of Product(s) Used Bora care  
EPA Registration No. 64405-1  
Approximate Final Mix Solution % 25%  
Approximate Size of Treatment Area: Sq. ft. 2948 Linear ft. 0 Linear ft. of Masonry Voids 0  
Approximate Total Gallons of Solution Applied 69.15  
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) Josh Wood Certification No. (if required by State law) JF104376

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 Josh Wood Date \_\_\_\_\_

**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)



# BAILEY BISHOP & LANE, INC.

Engineers

Surveyors

Planners

July 21, 2006

Mr. Anthony & Jessica Smith  
145 SW Morning Glory Drive  
Lake City, FL 32024

**RE: Finish Flood Elevation Letter**

Dear Mr. Smith:

We have performed a vertical survey on the structure located on Lot 2, Rolling Meadows, Columbia County, Florida and have determined the following:

- That subdivision plat requires that the minimum finish floor elevation be 101.00'.
- That the field located finish floor elevation is 106.3', being 5.3' above the required elevation.

Should you have any questions, please do not hesitate to give me a call.

Sincerely,

Brian Scott Daniel, PSM  
Director of Surveying  
BAILEY, BISHOP & LANE, INC.



P. O. Box 3717

Lake City, FL 32056-3717

Ph. (386) 752-5640

FAX (386) 755-7771

P. O. Box 814

Port St. Joe, FL 32457

Ph. (850) 227-9449

FAX (850) 227-9650

# COLUMBIA COUNTY OFFICE CALVIN

## 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 15-4S-16-03023-502

Building permit No. 000024113

Use Classification SF/UTILITY

Fire: 17.76

Permit Holder JOSH SPARKS

Waste: 36.75

Owner of Building SPARKS CONTRACTORS, INC.

Total: 54.51

Location: 145 SW MORNING GLORY DR(ROLLING MEADOWS, LOT 2)

Date: 07/21/2006

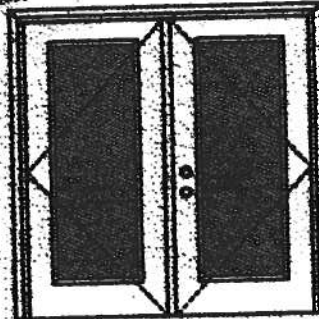
*Handy Jones*  
Building Inspector



POST IN A CONSPICUOUS PLACE  
(Business Places Only)

**XX****Glazed Outswing Unit**

309-WL-MA0012-02

**WOOD-EDGE STEEL DOORS****APPROVED ARRANGEMENT:**

**Note:**  
Units of other sizes are covered by this report as long as the panels used do not exceed 5'0" x 6'6".

**Double Door**  
Maximum unit size - 6'0" x 6'6"

**Design Pressure**  
**+40.5/-40.5**

Limited water unless special threshold design is used.\*

**Large Glazable Impact Resistance**

**Hurricane protective system (shutters) is REQUIRED.**

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

**MINIMUM ASSEMBLY DETAIL:**

Compliance requires that minimum assembly details have been followed - see MAD-WL-MA0012-02 and MAD-WL-MA0041-02.

**MINIMUM INSTALLATION DETAIL:**

Compliance requires that minimum installation details have been followed - see MID-WL-MA0002-02.

**APPROVED DOOR STYLES:****1/4 GLASS:**

100 Series



125, 125 Series



125 Series



200 Series



202 Series

**1/2 GLASS:**

100 Series



100, 100 Series



125 Series



200 Series



12, 24, 24, 24, 24 Series



107 Series



105 Series



204 Series

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

**Johnson**  
**Entry Systems**

March 29, 2002  
Our continuing program of product improvement and innovation, design and product  
detail subject to change without notice.



Exclusively from  
**Masonite**  
Masonite International Corporation

**XX**

Glazed Outswing Unit

COP WL JN 4162-02

**WOOD-EDGE STEEL DOORS****APPROVED DOOR STYLES:****3/4 GLASS:**

404 Series



405 Series



406 Series

**FULL GLASS:**

100 Series



114, 120, 122 Series



102 Series



140 Series



500 Series

**CERTIFIED TEST REPORTS:**

NCTL 210-1897-7, 8, 9, 10, 11, 12; NCTL 210-1894-5, 6, 7, 8; NCTL 210-2178-1, 2, 3

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

Unit Tested in Accordance with Miami-Dade BCCO PA202.

Evaluation report NCTL-210-2794-1

Door panels constructed from 26-gauge 0.017" thick steel skins. Both skins constructed from wood. Top and rails constructed of 0.041" steel. Bottom end rails constructed of 0.021" steel. Interior cavity of slab filled with rigid polyurethane foam core. Slab glazed with insulated glass mounted in a rigid plastic lip life surround.

Frame constructed of wood with an extruded aluminum bumper threshold.

**PRODUCT COMPLIANCE LABELING:**

TESTED IN  
ACCORDANCE WITH  
MIAMI-DADE BCCO PA202  
COMPANY NAME  
CITY, STATE

To the best of my knowledge and ability the above side-tinged exterior door unit conforms to the requirements of the 2004 Florida Building Code, Chapter 17 (Structural Tests and Inspections).

*Kurt L. Balthazor*

State of Florida, Professional Engineer  
Kurt Balthazor, P.E. - License Number 66633

**Johnson**  
EntrySystems

March 28, 2002

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

**PREMIER**  
Premium Quality Doors

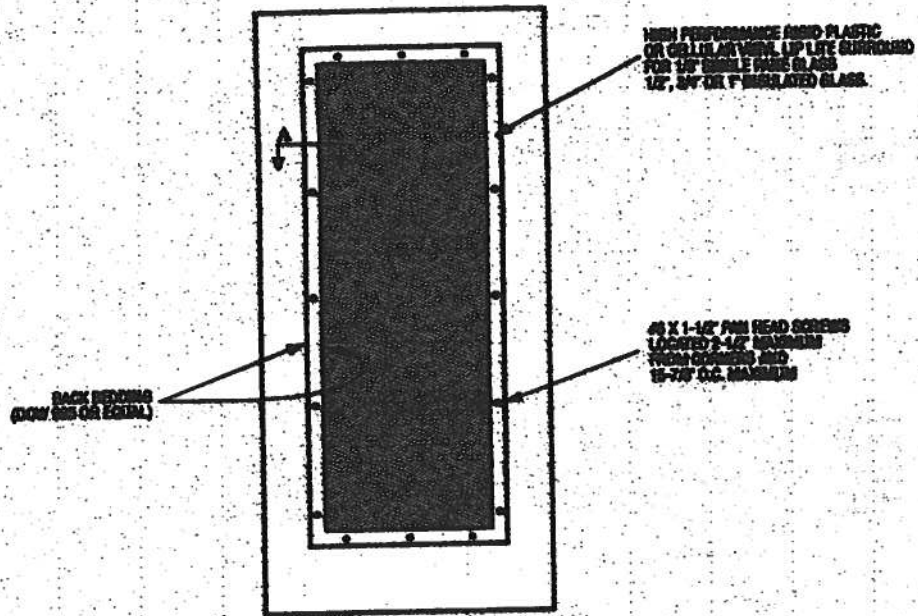


Exclusively from

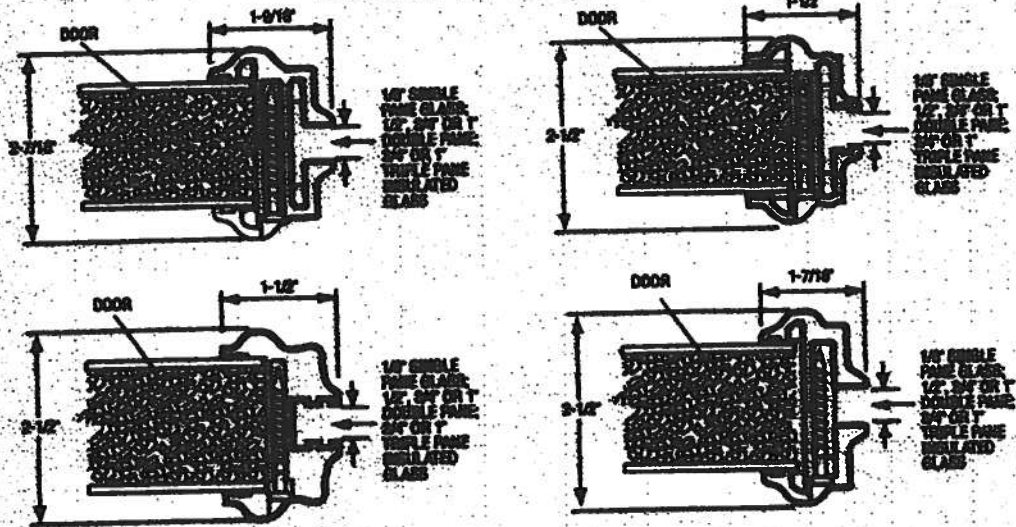
**Masonite**

Masonite International Corporation

# GLASS INSERT IN DOOR OR SIDELITE PANEL



## SECTION A-A TYPICAL RIGID PLASTIC LIP LITE SURROUND

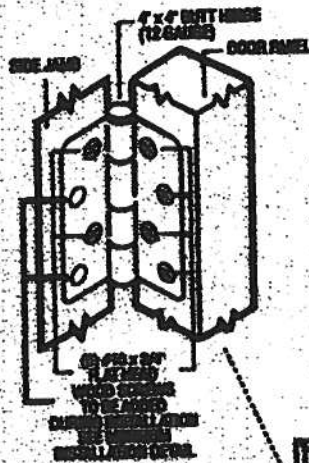


March 28, 2002  
Our continuing program of product improvement makes specifications, design and product detail subject to change without notice.

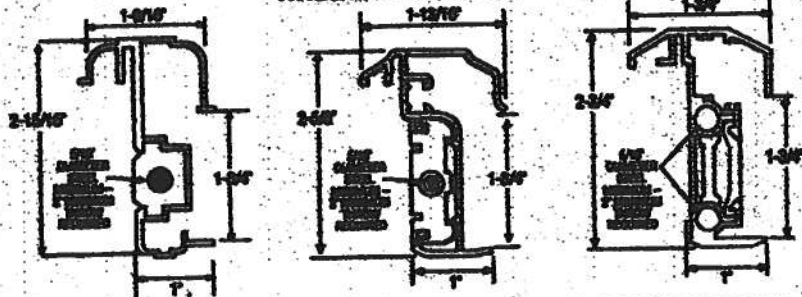
**XX**  
Unit

# **OUTSWING UNITS WITH DOUBLE DOOR**

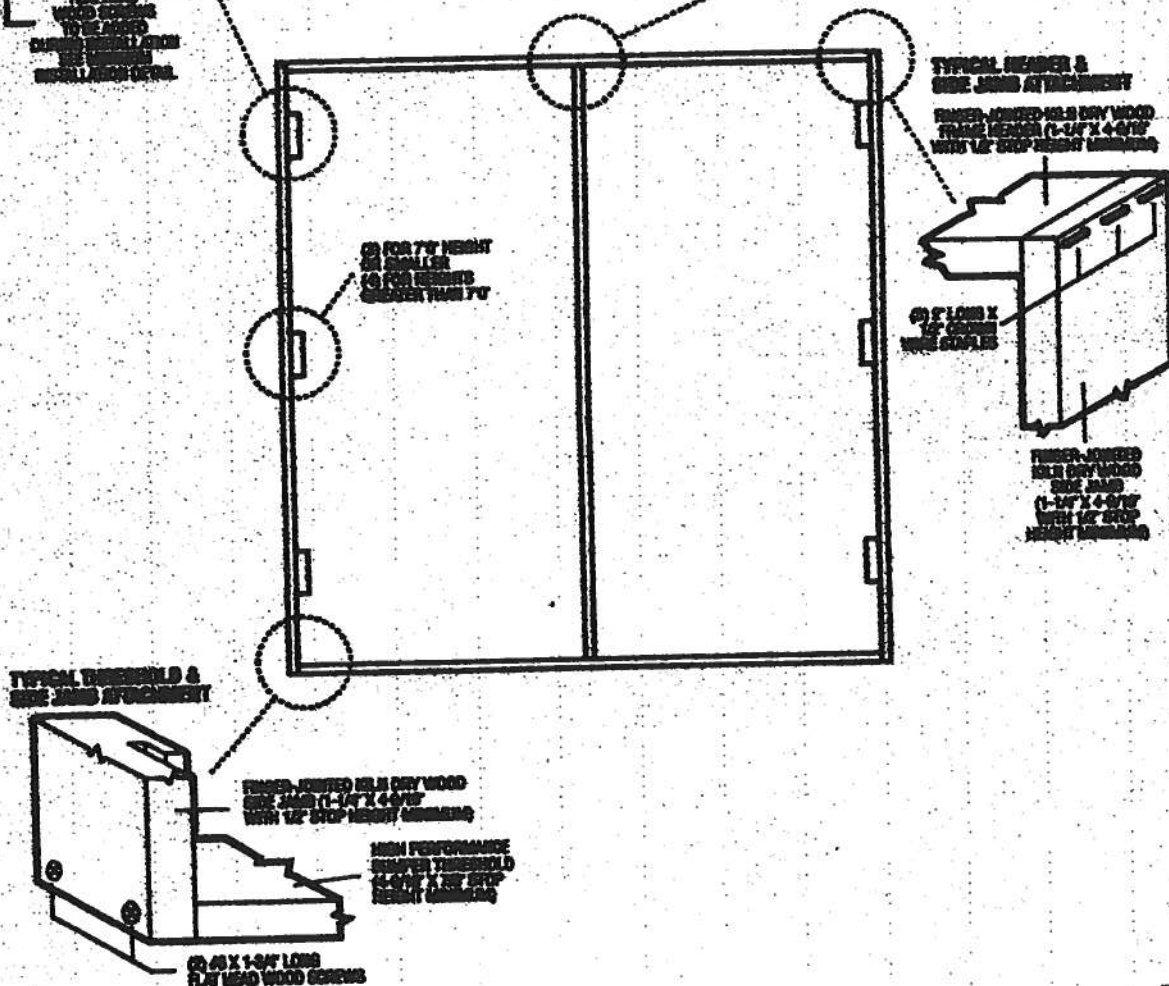
**TYPICAL HINGE ATTACHMENT**



**TYPICAL ASTRAGAL PROFILES**



ALUMINUM EXTRUDED ASTRAGAL GLASS MINIMUM WALL THICKNESS WITH ADDED PERFORMANCE INSERTS AT TOP EXTENSION BOLT, BOTTOM EXTENSION BOLT AND CYLINDRICAL HEADS ONLY PLACEMENT LOCATIONS. ATTACH WITH 40 X 1" FLAT HEAD SCREWS - LOCATE 1" FROM EACH END MINIMUM AND 12" O.C. MAXIMUM.



March 20, 2002  
Our continuing program of product improvement makes specifications, designs and product details subject to change without notice.

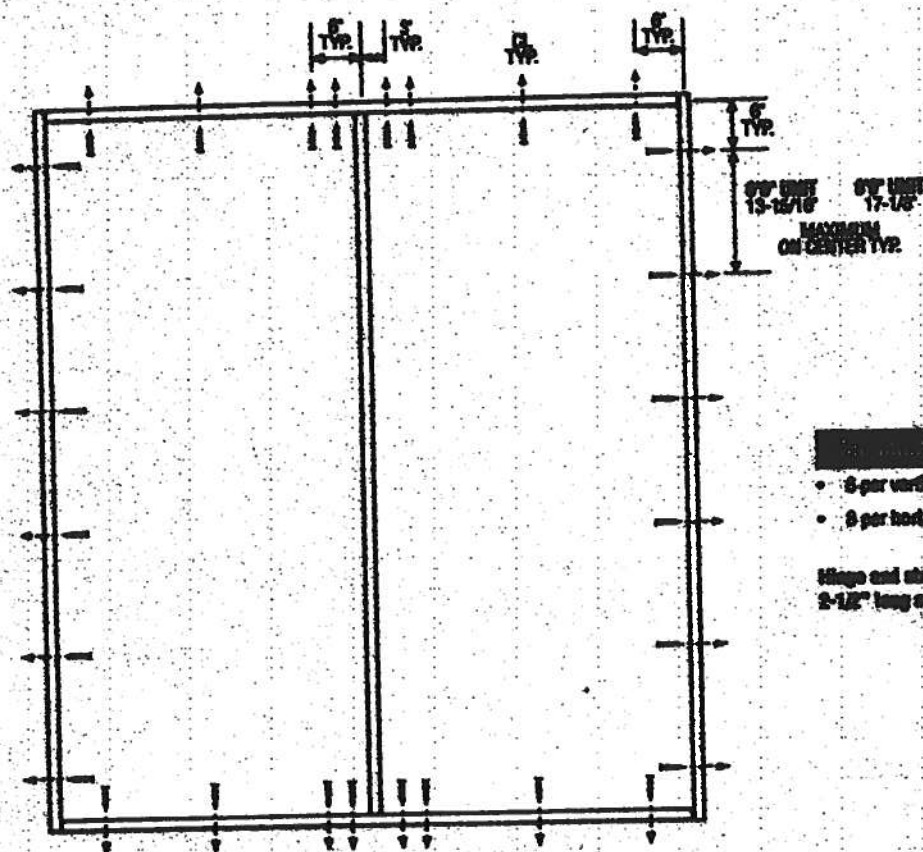


Exclusively from  
Masonite International Corporation

**XX**  
Unit

MD-01 MA0002-02

## DOUBLE DOOR



- Fastener Schedule:**
- 6 per vertical framing member.
  - 6 per horizontal framing member.

Hinge and stile plates require two 2-1/2" long screws per location.

### Latching Hardware:

- Compliance requires that GRADE 2 or better (ANSI/BHMA A156.2) cylindrical and deadlock hardware be installed.

### Notes:

1. Anchor calculations have been carried out with the lowest (least) fastener rating from the different fasteners being considered for use. Fasteners analyzed for this unit include #8 and #10 wood screws or 3/16" Tapcons.
2. The wood screw single shear design values come from Table 11.3A of ANSI/APA & PA NDS for southern pine lumber with a side member thickness of 1-1/4" and achievement of minimum embedment. The 3/16" Tapcon single shear design values come from the ITW and EICO Ode County approvals respectively, each with minimum 1-1/4" embedment.
3. Wood bucks by others, must be anchored properly to transfer loads to the structure.

March 29, 2002

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

**PREMIER**  
Premium Quality Doors



Exclusively from

**Masonite**

Masonite International Corporation

FROM : Columbia Door Company

FAX NO. : 386-754-9993

Jun. 28 2004 07:37AM P1

Florida Building Code Office

Organization: General American Door - Product Manufacturer  
Type: Approved (ALI)  
Status: Approved  
Note: General American Door - Product Manufacturer

Cancel

Branch

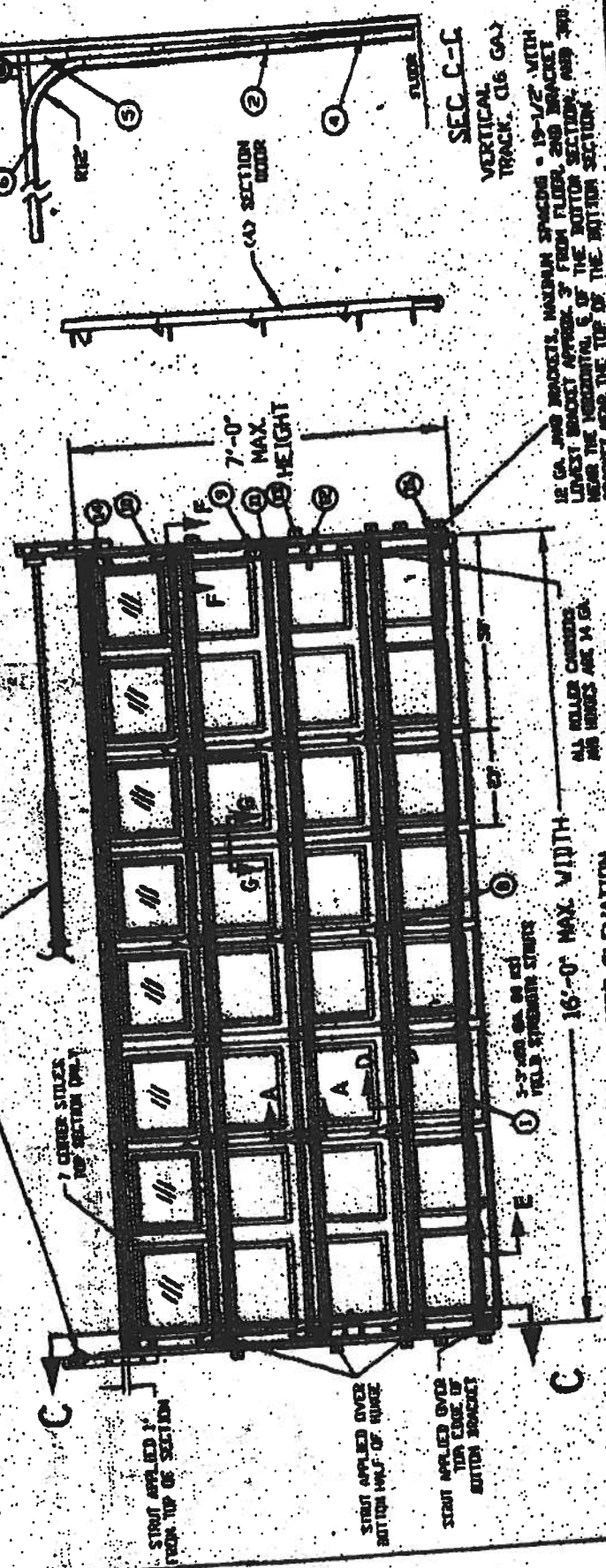
Florida List for Organizations

Organization Name	City	County	Address	Phone	Type	Expires	Approved
General American Door	Daytona Beach	Wayne	1000 W. Highway 1A	386-255-5555	Product Manufacturer	01/01/2005	Approved

<http://www.floridabuilding.org/Cosmos/cosmos.asp>

6/21/2004

- [illegible]



# INSIDE ELEVATION



The seal on this drawing only certifies that the product(s) illustrated are described herein and represent the configuration(s), dimension(s) and installation(s) of the door as tested.

[illegible]

TEST REPORTS ON FILE VIDEO REVIEW CASE

DESIGN LOAD	+200 PSF	-200 PSF
TEST LOAD	+300 PSF	-300 PSF

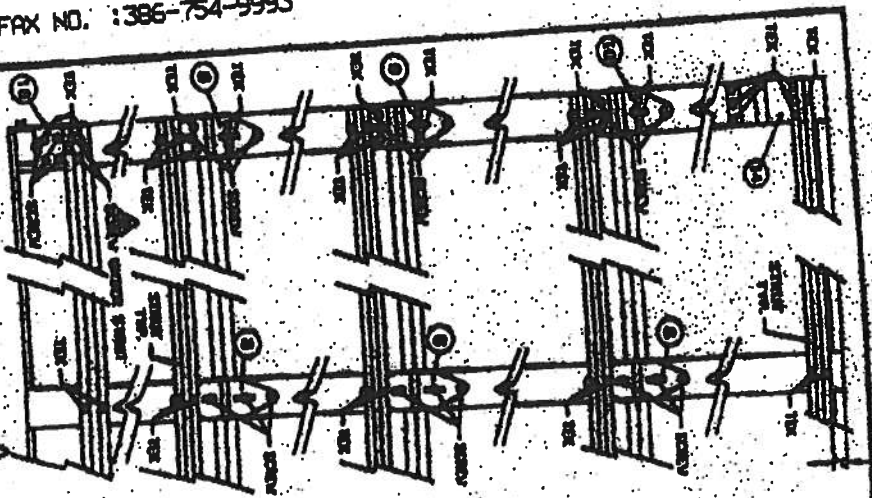
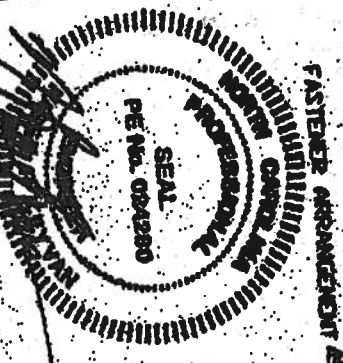
[illegible]

FROM : Columbia Door Company

FAX NO. : 386-754-9993

Jun. 28 2004 07:38AM P3

On site, drawing only  
indicates that the product  
illustrated and described herein  
represents the configuration of  
components and installation of  
the door is needed.



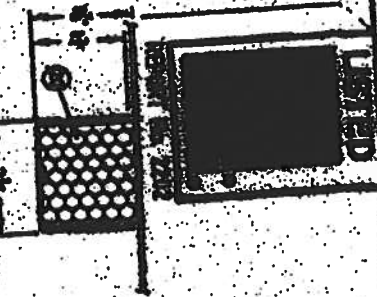
SEC. D-D  
FOR ATTACHMENT  
TO STILE  
(AS SHOWN)  
FOR ATTACHMENT  
TO STILE  
(AS SHOWN)



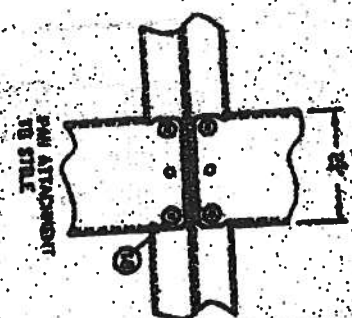
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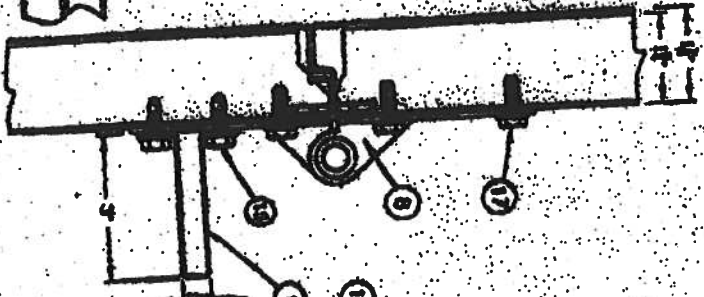
SEC. E-E  
FOR ATTACHMENT  
TO STILE  
(AS SHOWN)



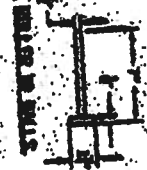
THIS DRAWING INDICATES THE  
LOCATION OF THE FASTENERS FOR THE  
DOOR TO BE ATTACHED TO THE  
FRAME.



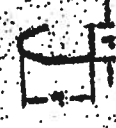
SEC. A-A



3-1/2\"/>



1-1/2\"/>



1-1/2\"/>



1-1/2\"/>



COLUMBIA DOOR COMPANY	
1000 N. W. 10th Ave., Suite 100 Fort Lauderdale, FL 33304	
Tel: (954) 571-1100	
Fax: (954) 571-1101	
E-mail: sales@coldoor.com	
Web: www.coldoor.com	
Drawing No. V10000-2	

# 2x6 JAMB TO SUPPORTING STRUCTURE ATTACHMENT

2x6 PRESSURE TREATED GRADE 12 OR BETTER SOUTHERN PINE VJOID JAMB SHALL BE ANCHORED TO BUILDING VJOID FRAME, GROUTED AND REINFORCED CONCRETE MASONRY UNIT (CMU) WALLS OR COLUMNS OR REINFORCED CONCRETE COLUMNS.

NOTES:

- 1) ALL JAMB OPENING SURROUNDING STRUCTURE TO BE DESIGNED BY REGISTERED ENGINEER OR ARCHITECT WITH THE CONSIDERATION GIVEN TO INSTALLATION USING CENTER "HURRICANE" RESISTANT.
- 2) ALL JAMB OPENING STRUCTURE AND FASTENERS TO COMPLY WITH ALL APPLICABLE CODES INCLUDING SPEC "STANDARDS FOR HURRICANE RESISTANT REINFORCED CONSTRUCTION" SETS 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
- 3) ALL FASTENERS TO BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS, INSTRUCTIONS AND RECOMMENDATIONS.
- 4) VJOID FRAME, INCLUDING STUDS AT EACH SIDE OF JAMB OPENING SHALL BE PROPERLY DESIGNER, CONNECTED, ANCHORED AND SHALL CONSIST OF A MINIMUM OF THREE (3) LAMINATIONS OF 2x6 PRESSURE TREATED SOUTHERN PINE (12 GRADE OR BETTER) VALL STUDS CONTINUOUS FROM FINISHING TO DOUBLE TOP GRADE OR BETTER VALL STUDS CONTINUOUS FROM FINISHING TO DOUBLE TOP GRADE.
- 5) REINFORCED CONCRETE COLUMNS, 2x6 VJOID JAMB SHALL BE ANCHORED TO REINFORCED CONCRETE COLUMNS USING ANCHOR SPACING AND EMBEDMENT AS SHOWN ON REINFORCED CONCRETE COLUMNS. ANCHOR SPACING AND EMBEDMENT SHALL BE AS SHOWN ON REINFORCED CONCRETE COLUMNS. ANCHOR SPACING AND EMBEDMENT SHALL BE AS SHOWN ON REINFORCED CONCRETE COLUMNS. ANCHOR SPACING AND EMBEDMENT SHALL BE AS SHOWN ON REINFORCED CONCRETE COLUMNS.
- 6) EMBEDMENTS LISTED ARE THE MINIMUM ALLOWABLE EMBEDMENTS.
- 7) ANCHORS FOR CONCRETE AND CONCRETE MASONRY UNITS (CMU) SHALL HAVE A MINIMUM OF THREE (3) INCHES FROM ALL SIDES OF CONCRETE OR CONCRETE MASONRY UNIT. ANCHORS FOR CONCRETE AND CMU SHALL HAVE A MINIMUM EMBEDMENT OF 3-4 INCHES.
- 8) LAG SCREWS SHALL BE CENTERED IN ONE OF THE 1-1/2 INCH DIMENSION FACES OF THE DOUBLE OR WALL STUDS.
- 9) WASHERS ARE REQUIRED ON ALL FASTENERS.
- 10) THE VJOID LAMB VS. ANCHOR SPACING CHART IS FOR A MAXIMUM JAMB SIZE OF 10' X 8' AT A SPACING OF 16" BETWEEN VJOID LAMB.
- 11) FOR THE UPPER THREE SERVING STEEL JAMB BRACKETS, BRACKETS SHALL BE CENTERED BETWEEN THE TWO CLOSEST 2x6 VJOID JAMB ANCHORS. IF THE STEEL BRACKET IS NOT CENTERED BETWEEN THE TWO CLOSEST 2x6 VJOID JAMB ANCHORS, AND AN ADDITIONAL 2x6 VJOID JAMB ANCHOR NEAR THAT STEEL BRACKET TO INSURE THAT THE LAMB FROM THE STEEL BRACKET IS EQUALLY TRANSFERRED TO TWO VJOID JAMB ANCHORS.

CONCRETE MASONRY UNIT (CMU) WALLS SHALL BE ANCHORED TO BUILDING VJOID FRAME, GROUTED AND REINFORCED CONCRETE MASONRY UNIT (CMU) WALLS OR COLUMNS OR REINFORCED CONCRETE COLUMNS.

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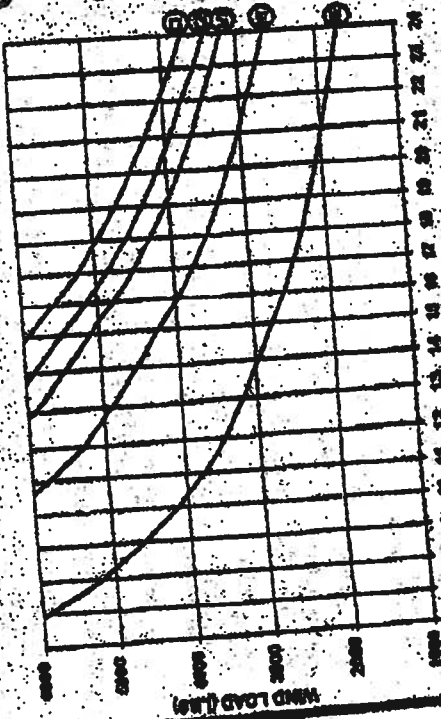
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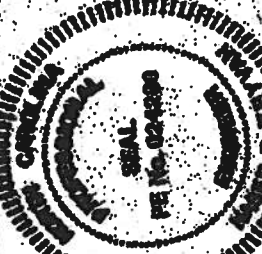
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DESIGN (LBS) X GARGE DOOR AREA (WIDTH-FT X HEIGHT-FT) = VJOID LOAD (LBS)

WIND LOAD VS ANCHOR SPACING

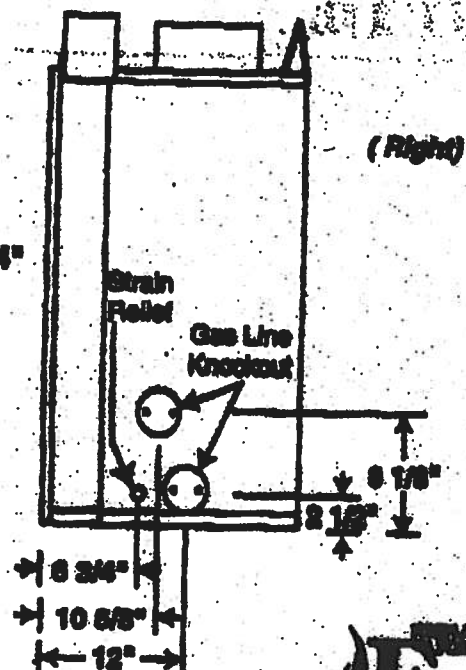
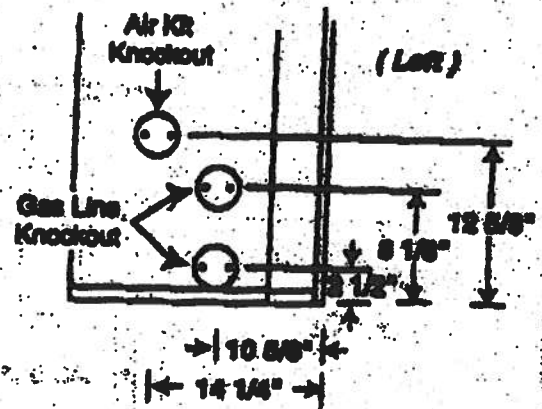
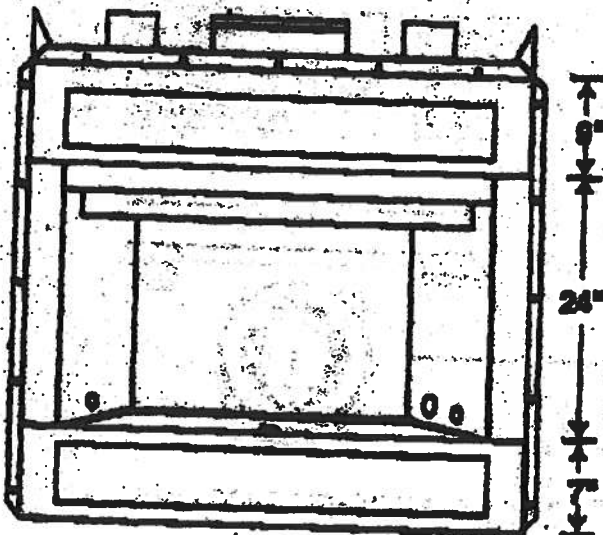
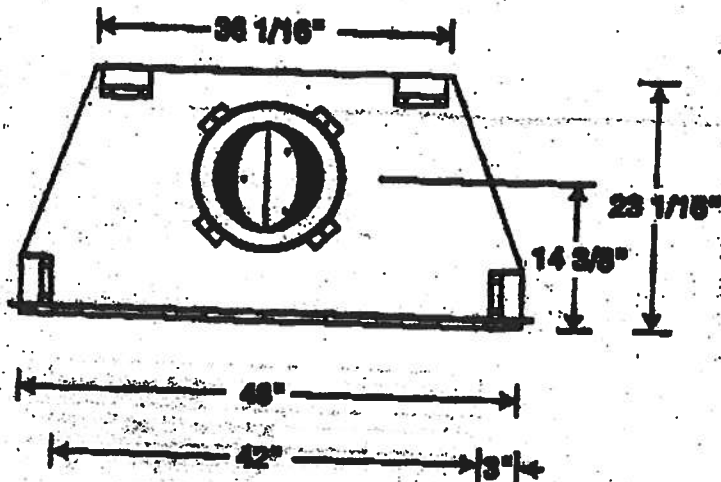


GENERAL AMERICAN DOOR COMPANY	
DATE: 6/28/04	PROJECT: 04-0000
DESIGNER: E. GOSSEL	ENGINEER: E. GOSSEL
DOORS TO STRUCTURE ATTACHMENT FOR VJOID LOADED GARGE DOORS	
AL-554	

# Craftsman

## 42" Woodburning Fireplace

Vent Pipe Size	10"
Min. Pipe Clearance	1"
Min. System Height	14' 6"
- w/ Single Offset	14' 6"
- w/ Two Offsets	22' 0"
Max. Dist. Between Elbows	6' 0"
Max. System Height	60' 0"



**Fmi**



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.

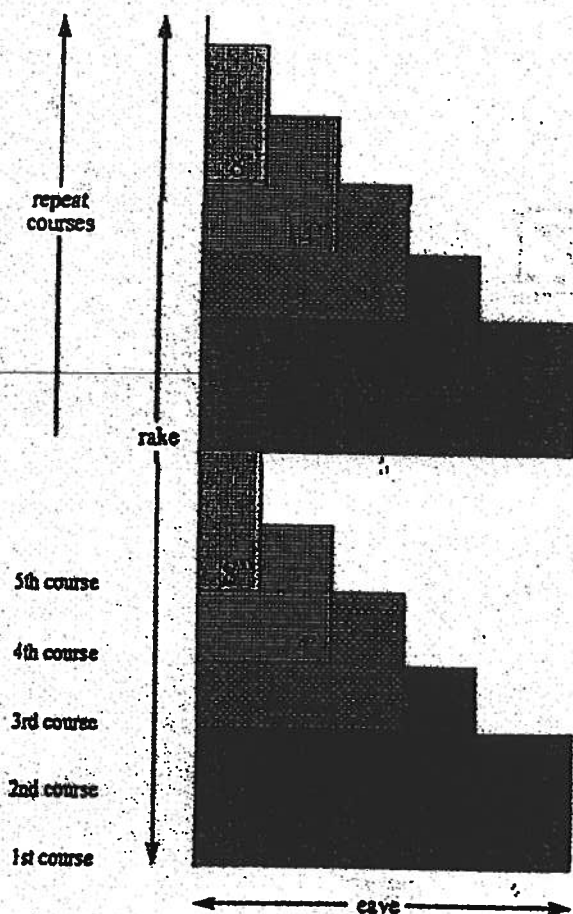
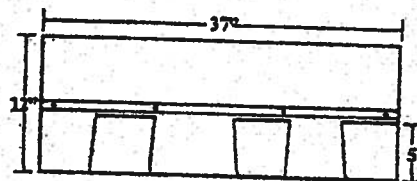
Please direct all questions to TAMKO's Technical Services Department at 1-800-641-4691.

**TAMKO Roofing Products, Inc.**

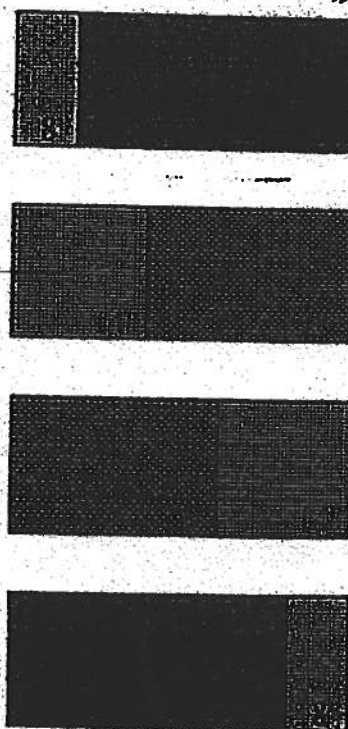


## Application Instructions For Heritage® 25 Series Shingles

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
  - Glass-Seal AR
  - Elite Glass-Seal®
  - 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. thickness and applied in accordance with the recommendations of the American Plywood Association.

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

#### 2. VENTILATION

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

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

To insure adequate ventilation and circulation of air, place louvers of sufficient size high in the gable ends and/or install continuous ridge and soffit vents.

FHA minimum property standards require one square foot of net free ventilation area to each 150 square feet of space to be vented, or one square foot per 300 square feet if a vapor barrier is installed on the warm side of the ceiling or if at least one half of the ventilation is provided near the ridge. If the ventilation openings are screened, the total area should be doubled.

**IT IS PARTICULARLY IMPORTANT TO PROVIDE ADEQUATE VENTILATION.**

#### 3. FASTENING

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

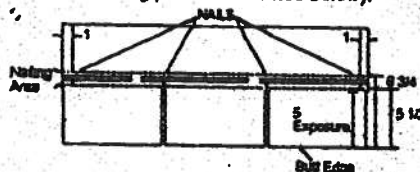
**WIND CAUTION:** Extreme wind velocities can damage these shingles after application when proper sealing of the shingles does not occur. This can especially be a problem if the shingles are applied in cooler months or in areas on the roof that do not receive direct sunlight. These

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.

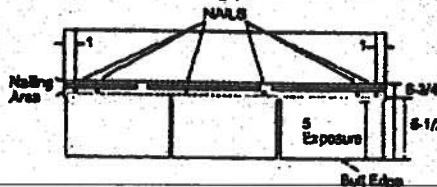
Correct placement of the fasteners is critical to the performance of the shingle. If the fasteners are not placed as shown in the diagram and described below, TAMKO will not be responsible for any shingles blown off or displaced. TAMKO will not be responsible for damage to shingles caused by winds or 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) Mansard 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 Mansard 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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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 80218	800-530-8868

07/01

# 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 \$25 piece and applied to shingles with a 5 in. exposure, use 5 fasteners per shingle. See Section 3 for the Mansard Fastening Pattern.

#### 5. 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.

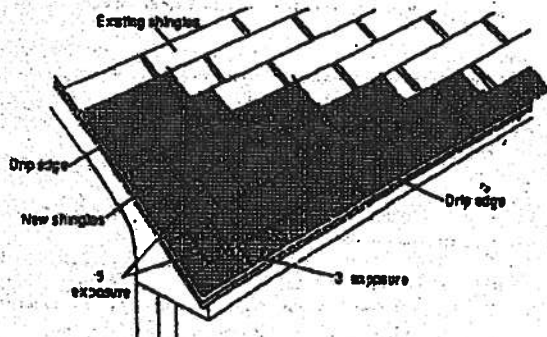
If re-roofing over an existing roof where new flashing is required to protect against ice dams (freeze/thaw cycle of water and/or the backup of water in frozen or clogged gutters), remove the old roofing to a point at least 24 in. beyond the interior wall line and apply TAMKO's Moisture Guard Plus® waterproofing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

The fastening 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.

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

**Second and Succeeding Courses:** According to the off-set application method you choose to use, remove the appropriate length from the



rake end of the first shingle in each succeeding course. Place the top edge of the new shingle against the butt edge of the old shingles in the courses above. The full width shingle used on the second course will reduce the exposure of the first course to 3 in. The remaining courses will automatically have a 5 in. exposure.

#### 6. 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.

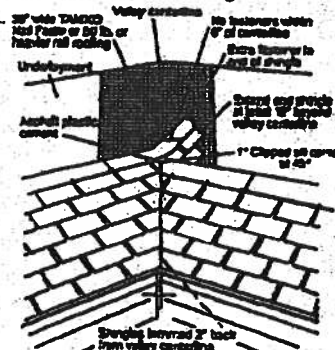
- Clip the upper corner of each shingle at a 45-degree angle and embed the end of the shingle in a 3 in. wide strip of asphalt plastic cement. This will prevent water from penetrating between the courses by directing it into the valley.

#### 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)

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800-443-1834  
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07/01



(CONTINUED from Pg. 3)

• Glass-Seal  
• Glass-Seal AR

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

### THREE-TAB ASPHALT SHINGLES

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

#### 16. HIP AND RIDGE FASTENING DETAIL.

Apply the shingles with a 5 in. exposure beginning at the bottom of the hip or from the end of the ridge opposite the direction of the prevailing winds. Secure each shingle with one fastener 5-1/2 in. back from the exposed end and 1 in. up from the edge. Do not nail directly into the sealant.

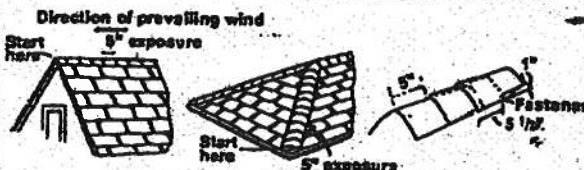
TAMKO recommends the use of TAMKO Hip & Ridge shingle products. Where matching colors are available, it is acceptable to use TAMKO's Glass-Seal or Elite Glass-Seal shingles cut down to 12 in. pieces.

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

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

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

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.

#### IMPORTANT - READ CAREFULLY BEFORE OPENING BUNDLE

In this paragraph "You" and "Your" refer to the installer of the shingles and the owner of the building on which these shingles will be installed. This is a legally binding agreement between You and TAMKO Roofing Products, Inc. ("TAMKO"). By opening this bundle You agree: (a) to install the shingles strictly in accordance with the instructions printed on this wrapper; or (b) that shingles which are not installed strictly in accordance with the instructions printed on this wrapper are sold "AS IS" and are not covered by the limited warranty that is also printed on this wrapper, or any other warranty, including, but not limited to (except where prohibited by law) implied warranties of MERCHANTABILITY and FITNESS FOR USE.

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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

**AAMA/NWDA 101/LS-2-97  
TEST REPORT SUMMARY**

Rendered to:

**MI HOME PRODUCTS, INC.**

**SERIES/MODEL: 650 Fin**

**TYPE: Aluminum Single Hung Window**

Title of Test	Results
Rating	H-R40 52" x 72"
Overall Design Pressure	+43.0 psf -47.2 psf
Operating Force	11 lb max.
Air Infiltration	0.13 cfm/ft <sup>2</sup>
Water Resistance	6.00 psf
Structural Test Pressure	+67.5 psf -70.8 psf
De-glazing	Passed
Forced Entry Resistance	Grade 10

Reference should be made to Report No. 01-41134.01 dated 03/26/02 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.

*Mark A. Hess*  
Mark A. Hess, Technician

MAH:nb

*Allen P. Reeves*  
1 APRIL 2002



II

  
Architectural Testing

**AAMA/NWDA 101/LS-2-97 TEST REPORT**

Rendered to

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

Report No: 01-41134-01  
Test Date: 03/07/02  
Report Date: 03/26/02  
Expiration Date: 03/07/06

**Project Summary:** Architectural Testing, Inc. (ATI) was contracted by MI Home Products, Inc. to perform tests on Series/Model 650 Fin, aluminum single hung window at their facility located in Elizabethville, Pennsylvania. The samples tested successfully met the performance requirements for a H-R40 52 x 72 rating.

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

**Test Specimen Description:**

**Series/Model:** 650 Fin

**Type:** Aluminum Single Hung Window

**Overall Size:** 4' 4-1/4" wide by 6' 0-3/8" high

**Active Sash Size:** 4' 1-3/4" wide by 3' 0-5/8" high

**Daylight Opening Size:** 3' 11-3/8" wide by 2' 9-1/2" high

**Screen Size:** 4' 0-1/4" wide by 2' 11-1/8" high

**Finish:** All aluminum was white.

**Glazing Details:** The active and fixed lites utilized 3/8" thick, sealed insulating glass constructed from two sheets of 1/8" thick, clear annealed glass and a metal reinforced butyl spacer system. The active sash was channel glazed utilizing a flexible vinyl wrap-around gasket. The fixed lite was interior glazed against double-sided adhesive foam tape and secured with PVC snap-in glazing beads.

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

*Allan P. Reeves*  
1 APRIL 2002



III

**Test Specimen Description: (Continued)**

**Weatherstripping:**

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
0.230" high by 0.270" backed polypropylene with center fin	1 Row	Fixed meeting rail
0.250" high by 0.187" backed polypropylene with center fin	2 Rows	Active sash stiles
1/2" x 1/2" dust plug	4 Pieces	Active sash, top and bottom of stiles
1/4" foam-filled vinyl bulb seal	1 Row	Active sash, bottom rail

**Frame Construction:** The frame was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1" screws through the head and sill into each jamb screw boss. End caps were utilized on the ends of the fixed meeting rail and secured with two 1-1/4" screws per cap. Meeting rail was secured to the frame utilizing two 1-1/4" screws.

**Sash Construction:** The sash was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1-1/2" screws through the rails into each jamb screw boss.

**Screen Construction:** The screen was constructed from roll-formed aluminum with keyed corners. The fiberglass mesh was secured with a flexible spline.

**Hardware:**

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Metal cam lock with keeper		Midspan, active meeting rail with keeper adjacent on fixed meeting rail
Plastic tilt latch	2	Active sash, meeting rail ends
Metal tilt pin	2	Active sash, bottom rail ends
Balance assembly	2	One in each jamb
Screen plunger	2	4" from rail ends on top rail

Allen H. Reeves  
1 APRIL 2002



IV

**Test Specimen Description: (Continued)**

**Drainage:** Sloped sill

**Reinforcement:** No reinforcement was utilized.

**Installation:** The test specimen was installed into a 2 x 8 #2 Spruce-Pine-Fir wood test buck with #8 x 1-5/8" drywall screws every 8" on center around the nail fin. Polyurethane was used as a sealant under the nail fin and around the exterior perimeter.

**Test Results:**

The results are tabulated as follows:

Paragraph	Title of Test - Test Method	Results	Allowed
2.2.1.6.1	Operating Force	11 lbs	30 lbs max
	Air Infiltration (ASTM E 283-91) @ 1.57 psf (25 mph)	0.13 cfm/ft <sup>2</sup>	0.3 cfm/ft <sup>2</sup> max

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

	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 2.86 psf	No leakage	No leakage
2.1.4.1	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 33 seconds) @ 25.9 psf (positive) @ 34.7 psf (negative)	0.42" 0.43"	0.26" max. 0.26" max.

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

2.1.4.2	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 10 seconds) @ 38.9 psf (positive) @ 52.1 psf (negative)	0.02" 0.02"	0.18" max. 0.18" max.
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*Allen H. Reeves*  
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**Test Specimen Description: (Continued)**

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
2.2.1.6.2	Deglazing Test (ASTM E 987) In operating direction at 70 lbs		
	Meeting rail	0.12"/25%	0.50"/100%
	Bottom rail	0.12"/25%	0.50"/100%
	In remaining direction at 50 lbs		
	Left stile	0.06"/12%	0.50"/100%
	Right stile	0.06"/12%	0.50"/100%
	Forced Entry Resistance (ASTM F 588-97)		
	Type: A		
	Grade: 10		
	Lock Manipulation Test	No entry	No entry
	Tests A1 through A5	No entry	No entry
	Test A7	No entry	No entry
	Lock Manipulation Test	No entry	No entry

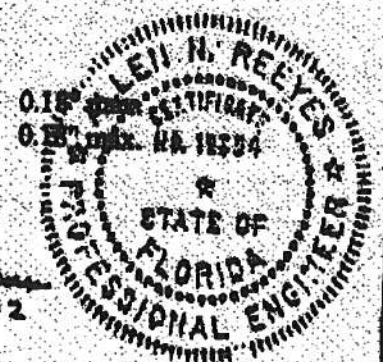
**Optional Performance**

4.3	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 6.00 psf	No leakage	No leakage
	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 33 seconds)		
	@ 45.0 psf (positive)	0.47"	0.26" max.
	@ 47.2 psf (negative)	0.46"	0.26" max.

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

Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 10 seconds)	
@ 67.5 psf (positive)	0.05"
@ 70.8 psf (negative)	0.05"

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

For ARCHITECTURAL TESTING, INC.:

  
Mark A. Hens  
Technician

MAH:nb  
01-41134.01

  
Allen N. Reeves, P.E.  
Director - Engineering Services  
1 APRIL 2002

