

DATE05/31/2007

Columbia County Building Permit

This Permit Expires One Year From the Date of Issue

PERMIT000025869

APPLICANTJACKIE NORRIS

PHONE758-3663

ADDRESS351NW CORWIN GLEN

LAKE CITYFL32055

OWNERIMAGE DEVELOPMENT GROUP

PHONE352 538-9697

ADDRESS201SW THISTLEWOOD LANE

FT. WHITEFL32038

CONTRACTORJOHN NORRIS

PHONE758-3663

LOCATION OF PROPERTY

47S, TL ON 27, TL ON CR 18, TL ON GREENWOOD TERR, TL
ON THISTLEWOOD LANE, 3RD LOT ON RIGHT

TYPE DEVELOPMENTSFD,UTILITY

ESTIMATED COST OF CONSTRUCTION73650.00

HEATED FLOOR AREA1473.00

TOTAL AREA2235.00

HEIGHT

STORIES

FOUNDATION

WALLS

ROOF PITCH

FLOOR

LAND USE & ZONINGFT WHITE

MAX. HEIGHT

Minimum Set Back Requirments:

STREET-FRONT

REAR

SIDE

NO. EX.D.U.

FLOOD ZONEFW

DEVELOPMENT PERMIT NO.

PARCEL ID34-6S-16-04056-116

SUBDIVISIONTHORNWOOD

LOT16

BLOCK

PHASE

UNIT

TOTAL ACRES

Culvert Permit No.

Culvert Waiver

Contractor's License NumberRG0066597

Applicant/Owner/Contractor

FT WHITE

07-416

BK

JH

Y

Driveway Connection

Septic Tank Number

LU & Zoning checked by

Approved for Issuance

New Resident

COMMENTS:

FT. WHITE LETTER ON FILE, NOC ON FILE

Check # or Cash4037

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 \$370.00

CERTIFICATION FEE \$11.18

SURCHARGE FEE \$11.18

MISC. FEES \$0.00

ZONING CERT. FEE \$

FIRE FEE \$0.00

WASTE FEE \$

FLOOD DEVELOPMENT FEE \$

FLOOD ZONE FEE \$

CULVERT FEE \$

TOTAL FEE392.36

INSPECTORS OFFICE

CLERKS OFFICE

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

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

This Permit Must Be Prominently Posted on Premises During Construction

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

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

Return to
Ameris Bank
PO Box 797
Trenton, FL 32693

NOTICE OF COMMENCEMENT

To Whom It May Concern:

The undersigned hereby informs you that improvements will be made to certain real property, and in accordance with Section 713.13 of the Florida Statutes, the following information is stated in this NOTICE OF COMMENCEMENT.

Description of Property: Lot 16 of THORNWOOD, a subdivision, according to the Plat thereof as recorded in Plat Book 7, Page(s) 202, of the Public Records of Columbia County Florida.

General Description of Improvements: CONSTRUCTION

Owner and Address: Image Development Group, LLC (Richard C. Parker)
341 SW Thistle Lane
Fort White, FL 32038

Owner's Interest in Site of the Improvement: Fee Simple

Contractor and Address: Image Development Group, LLC	John Norris Corporation, Inc
20074 NW 258 th Drive	Lake City, FL 32055
High Springs, FL 32643	

Surety (if any): NA

Address: _____ Amount of Bond \$ _____

Name and address of person within the State of Florida designated by owner upon who notices or other documents may be served:

In addition to himself, owner designated the following person to receive a copy of Lienor's Notice as provided in Section 713.06 (2) (b) Florida Statutes:

Name and Address: Ameris Bank
530 E Wade Street
Trenton, FL 32693

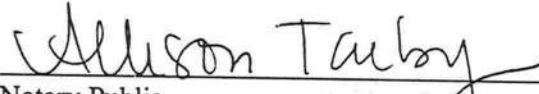


Richard C. Parker, MGRM

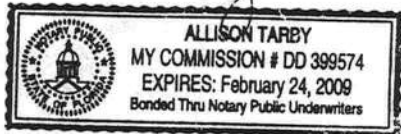
State of Florida	Inst: 2007009691 Date: 05/01/2007 Time: 10:09
County of Alachua	<u>J. P.</u> DC, P. Dewitt Cason, Columbia County B: 1117 P: 2532

I hereby certify that on this day, before me, an officer duly authorized to administer oaths and take acknowledgements, personally appeared Richard C. Parker known to me to be the person(s) described in and who executed the foregoing instrument, who acknowledged before me that they executed the same.

Witness my hand and official seal in the County and State aforesaid this 1st day of May, 2007.



Notary Public



Columbia County Building Permit Application

Revised 9-23-04

For Office Use Only Application # 0705-61 Date Received 5/23/07 Permit # 25869
 Application Approved by - Zoning Official _____ Date _____ Plans Examiner OK JH Date 5-24-07
 Flood Zone _____ Development Permit _____ Zoning _____ Land Use Plan Map Category _____
 Comments TOWN OF FORT WHITE
SEA, well letter, SEA only water

Applicants Name John Norris Phone 758-3663
 Address 351 NW Corwin Gln
 Owners Name Image Development Group LLC Phone 352-538-9697
 911 Address 201 SW Thistlewood Lane, F.W. 32038
 Contractors Name John Norris Phone 758-3663
 Address 351 NW Corwin Gln
 Fee Simple Owner Name & Address Image Development Group
 Bonding Co. Name & Address _____
 Architect/Engineer Name & Address Bill Freeman
 Mortgage Lenders Name & Address N/A
 Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy
 Property ID Number 34-65-16-04036-116 Estimated Cost of Construction 150,000
 Subdivision Name Thornwood Lot 16 Block _____ Unit _____ Phase _____
 Driving Directions 47 to ft white left on 27 left on 18
1/2 mile on left TL Greenwood Terr, TL Thistlewood
Lane, 3rd on right
 Type of Construction New Home Number of Existing Dwellings on Property 1
 Total Acreage 1.35 Lot Size _____ Do you need a Culvert Permit or Culvert Waiver or Have an Existing Drive
 Actual Distance of Structure from Property Lines - Front 50 Side 25 Side 25 Rear _____
 Total Building Height _____ Number of Stories 1 Heated Floor Area 14735.5 Roof Pitch 6'12"
TOTAL 2235

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

Sworn to (or affirmed) and subscribed before me
this 23rd day of MAY 2007.
Personally known _____ or Produced Identification _____

Contractor Signature _____
Contractors License Number RB-0066597
Competency Card Number 5556
NOTARY STAMP/SEAL



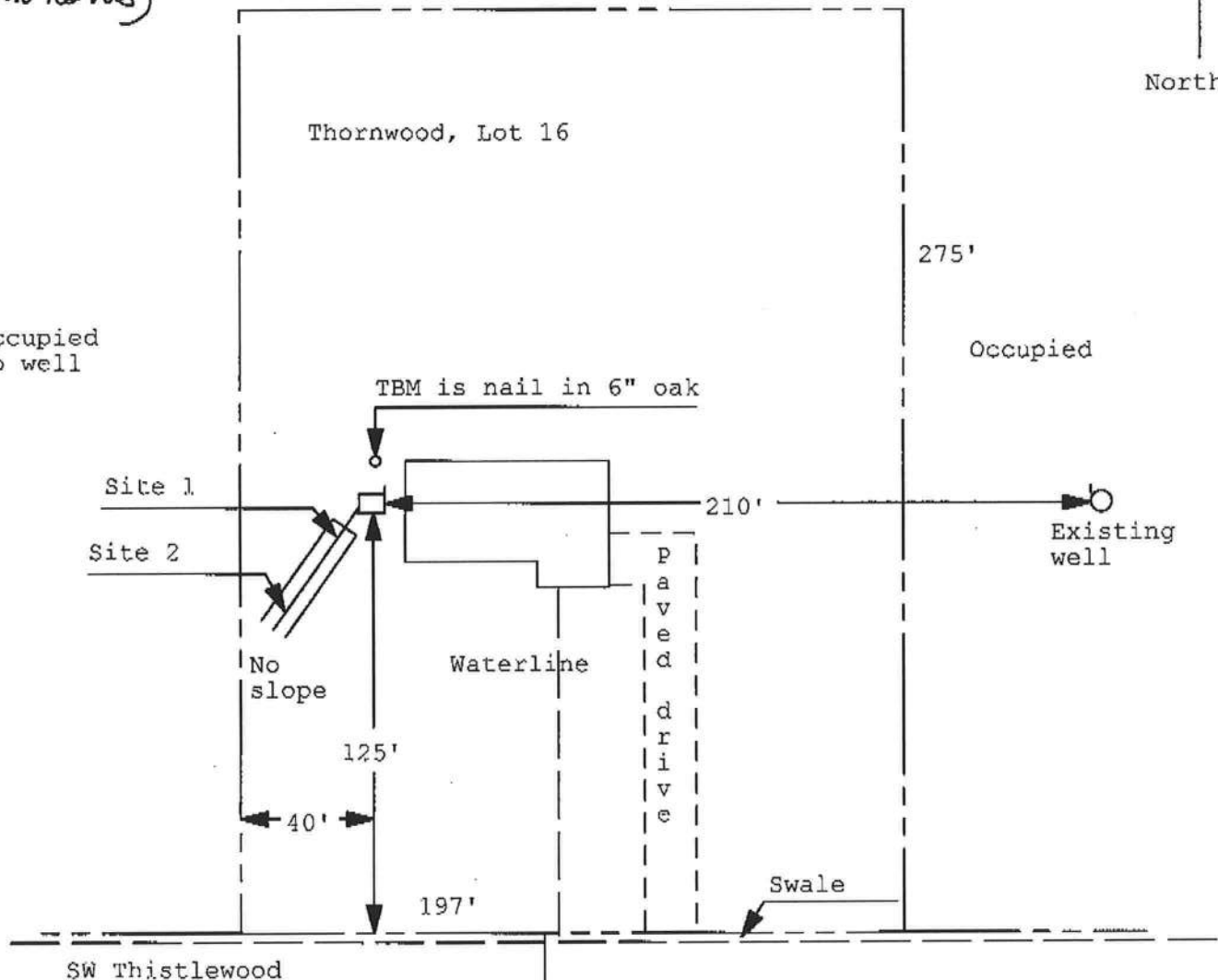
**Application for Onsite Sewage Disposal System
Construction Permit. Part II Site Plan**
Permit Application Number: 07-416

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT

IMAGE DVLP/CR 06-3959

Vacant

North



SW Thistlewood

Vacant

1 inch = 50 feet

Site Plan Submitted By Paul Lloyd Date 4/19/07
 Plan Approved ☒ Not Approved ☐ Date 5/25/07
 By M. O. L. Columbia CPHU

Notes: _____

@ CAM112M01 S CamaUSA Appraisal System
5/23/2007 8:04 Legal Description Maintenance
Year T Property Sel
2007 R 34-6S-16-04056-116

Columbia County
40500 Land 001
AG 000
Bldg 000
Xfea 000
40500 TOTAL B*

IMAGE DEVELOPMENT GROUP LLC

1	LOT 16 THORNWOOD S/D	WD 1030-2804	2
3			4
5			6
7			8
9			10
11			12
13			14
15			16
17			18
19			20
21			22
23			24
25			26
27			28

Mnt 12/03/2004 LARRY

F1=Task F3=Exit F4=Prompt F10=GoTo PgUp/PgDn F24=More

TOWN OF FORT WHITE

Home of the Ichetucknee River

Post Office Box 129 Fort White, FL 32038

Email: townofftwhite@alltel.net Web: townoffortwhitefl.com

Tel: (386) 497-2321/(386) 497-3345 Fax: (386) 497-4946

Office Hours: Monday through Friday 9:00 a.m. to 1:00 p.m.

CERTIFICATE OF COMPLIANCE & REQUEST FOR ISSUANCE OF BUILDING PERMIT

The undersigned hereby certify the following property is in compliance with the Town of Fort White's Comprehensive Plan and Land Development Regulations for the stated development purposes:

OWNER'S NAME: Rick Parker / IMAGE DEVELOPMENT GROUP

ADDRESS: P.O. Box 305 Newberry, FL 32669

PROPERTY DESCRIPTION: 1.25 ac @201 SW Thistlewood Lane
w/ parcel number Lot #16 Thornwood Subdivision parcel #4056-116

DEVELOPMENT: Single Family Dwelling

You are hereby authorized to issue the appropriate permits

April 20, 2007
DATE

Janice Revels
LDR ADMINISTRATOR
Town of Fort White

Mayor
Truett George
497-4741

District 1
Donald Cook
497-1086

District 2
Henry Maini
497-2992

District 3
Warren Barnes
497-3112

District 4
Demetric Jackson
497-2078

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs Residential Whole Building Performance Method A

Project Name:	Sierra Model - Thornwood Estates	Builder:	<i>John Norris</i>
Address:		Permitting Office:	<i>Columbia</i>
City, State:		Permit Number:	<i>25869</i>
Owner:	John Norris	Jurisdiction Number:	<i>221000</i>
Climate Zone:	North		

1. New construction or existing	New	12. Cooling systems	
2. Single family or multi-family	Single family	a. Central Unit/Split	Cap: 32.0 kBtu/hr SEER: 13.00
3. Number of units, if multi-family	1	b. N/A	
4. Number of Bedrooms	3	c. N/A	
5. Is this a worst case?	Yes	13. Heating systems	
6. Conditioned floor area (ft²)	1473 ft²	a. Electric Heat Pump/Split	Cap: 32.0 kBtu/hr HSPF: 8.50
7. Glass type ¹ and area: (Label reqd. by 13-104.4.5 if not default)		b. N/A	
a. U-factor:	Description Area	c. N/A	
(or Single or Double DEFAULT)	7a. (Dble Default) 127.0 ft²	14. Hot water systems	
b. SHGC:		a. Electric Resistance	Cap: 20.0 gallons EF: 0.94
(or Clear or Tint DEFAULT)	7b. (Clear) 127.0 ft²	b. N/A	
8. Floor types		c. N/A	
a. Slab-On-Grade Edge Insulation	R=0.0, 201.0(p) ft	15. HVAC credits	PT, CF, _____
b. N/A		(CF-Ceiling fan, CV-Cross ventilation,	
c. N/A		HF-Whole house fan,	
9. Wall types		PT-Programmable Thermostat,	
a. Frame, Wood, Exterior	R=13.0, 1425.0 ft²	MZ-C-Multizone cooling,	
b. N/A		MZ-H-Multizone heating)	
c. N/A			
d. N/A			
e. N/A			
10. Ceiling types			
a. Under Attic	R=30.0, 1600.0 ft²		
b. N/A			
c. N/A			
11. Ducts			
a. Sup: Unc. Ret: Unc. AH: Attic	Sup. R=6.0, 42.0 ft		
b. N/A			

Glass/Floor Area: 0.09

Total as-built points: 20538

Total base points: 22082

PASS

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

PREPARED BY: *Debbie D. Motes*

DATE: *5-29-07*

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

OWNER/AGENT: _____

DATE: _____

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



BUILDING OFFICIAL: _____

DATE: _____

1 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: , , ,

PERMIT #:

BASE				AS-BUILT							
GLASS TYPES											
.18 X Conditioned X BSPM = Points Floor Area				Type/SC	Overhang Ornt Len Hgt			Area X SPM X SOF = Points			
.18	1473.0	18.59	4929.0	1.Double, Clear	W	1.0	6.0	18.0	38.52	0.97	672.0
				2.Double, Clear	W	1.0	6.0	25.0	38.52	0.97	934.0
				3.Double, Clear	W	1.0	6.0	9.0	38.52	0.97	336.0
				4.Double, Clear	E	1.0	6.0	45.0	42.06	0.97	1835.0
				5.Double, Clear	E	1.0	6.0	30.0	42.06	0.97	1223.0
				As-Built Total:			127.0			5000.0	
WALL TYPES Area X BSPM = Points				Type	R-Value			Area X SPM = Points			
Adjacent	0.0	0.00	0.0	1. Frame, Wood, Exterior	13.0			1425.0	1.50	2137.5	
Exterior	1425.0	1.70	2422.5								
Base Total:				As-Built Total:			1425.0			2137.5	
DOOR TYPES Area X BSPM = Points				Type				Area X SPM = Points			
Adjacent	0.0	0.00	0.0	1.Exterior Insulated				48.0	4.10	196.8	
Exterior	48.0	6.10	292.8								
Base Total:				As-Built Total:			48.0			196.8	
CEILING TYPES Area X BSPM = Points				Type	R-Value			Area X SPM X SCM = Points			
Under Attic	1473.0	1.73	2548.3	1. Under Attic	30.0			1600.0	1.73 X 1.00	2768.0	
Base Total:				As-Built Total:			1600.0			2768.0	
FLOOR TYPES Area X BSPM = Points				Type	R-Value			Area X SPM = Points			
Slab	201.0(p)	-37.0	-7437.0	1. Slab-On-Grade Edge Insulation	0.0			201.0(p)	-41.20	-8281.2	
Raised	0.0	0.00	0.0								
Base Total:				As-Built Total:			201.0			-8281.2	
INFILTRATION Area X BSPM = Points							Area X SPM = Points				
1473.0 10.21 15039.3							1473.0 10.21 15039.3				

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

ADDRESS: , , ,

PERMIT #:

BASE			AS-BUILT					
Summer Base Points: 17794.9			Summer As-Built Points: 16860.4					
Total Summer Points	X System Multiplier	= Cooling Points	Total Component (System - Points)	X Cap Ratio (DM x DSM x AHU)	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Cooling Points
17794.9	0.3250	5783.3	(sys 1: Central Unit 32000btuh ,SEER/EFF(13.0) Ducts:Unc(S),Unc(R),Att(AH),R6.0(INS) 16860 1.00 (1.09 x 1.147 x 1.11) 0.260 0.902 5490.4 16860.4 1.00 1.388 0.260 0.902 5490.4					

Residential Whole Building Performance Method A - Details

PERMIT #:EnergyGauge®/FlaRES'2004R FLRCPB v4.5.2

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

ADDRESS: , , ,

PERMIT #:

BASE			AS-BUILT						
Winter Base Points: 15150.4			Winter As-Built Points: 13953.9						
Total Winter Points	X System Multiplier	= Heating Points	Total Component (System - Points)	X Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Heating Points	
15150.4	0.5540	8393.3	(sys 1: Electric Heat Pump 32000 btuh ,EFF(8.5) Ducts:Unc(S),Unc(R),Att(AH),R6.0 13953.9 1.000 (1.069 x 1.169 x 1.10)0.401 0.950 7310.4						
15150.4	0.5540	8393.3	13953.9	1.00	1.375	0.401	0.950	7310.4	

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

BASE				AS-BUILT					
WATER HEATING				Tank	EF	Number of	X	Tank	X
Number of	X	Multiplier	=	Volume		Bedrooms		Ratio	Multiplier
Bedrooms			Total						Credit = Total
									Multiplier
3		2635.00	7905.0	20.0	0.94	3		1.00	2578.94
									1.00
									7736.8
				As-Built Total:					7736.8

CODE COMPLIANCE STATUS

BASE					AS-BUILT				
Cooling	+	Heating	+	Hot Water	=	Total	Cooling	+	Heating
Points		Points		Points		Points	Points		Points
5783		8393		7905		22082	5490		7310
									7737
									20538

PASS

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST

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

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

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	612.1	Comply with efficiency requirements in Table 612.1.ABC.3.2. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	612.1	Spas & heated pools must have covers (except solar heated). Non-commercial pools must have a pump timer. Gas spa & pool heaters must have a minimum thermal efficiency of 78%.	
Shower heads	612.1	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distribution Systems	610.1	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated, and installed in accordance with the criteria of Section 610. Ducts in unconditioned attics: R-6 min. insulation.	
HVAC Controls	607.1	Separate readily accessible manual or automatic thermostat for each system.	
Insulation	604.1, 602.1	Ceilings-Min. R-19. Common walls-Frame R-11 or CBS R-3 both sides. Common ceiling & floors R-11.	

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE SCORE* = 85.6

The higher the score, the more efficient the home.

John Norris, , , ,

1. New construction or existing	New	___	12. Cooling systems	
2. Single family or multi-family	Single family	___	a. Central Unit/Split	Cap: 32.0 kBtu/hr
3. Number of units, if multi-family	1	___		SEER: 13.00
4. Number of Bedrooms	3	___	b. N/A	___
5. Is this a worst case?	Yes	___	c. N/A	___
6. Conditioned floor area (ft ²)	1473 ft ²	___		___
7. Glass type ¹ and area: (Label reqd. by 13-104.4.5 if not default)		___	13. Heating systems	
a. U-factor:	Description Area		a. Electric Heat Pump/Split	Cap: 32.0 kBtu/hr
(or Single or Double DEFAULT)	7a. (Dble Default) 127.0 ft ²	___		HSPF: 8.50
b. SHGC:		___	b. N/A	___
(or Clear or Tint DEFAULT)	7b. (Clear) 127.0 ft ²	___	c. N/A	___
8. Floor types		___	14. Hot water systems	
a. Slab-On-Grade Edge Insulation	R=0.0, 201.0(p) ft	___	a. Electric Resistance	Cap: 20.0 gallons
b. N/A		___		EF: 0.94
c. N/A		___	b. N/A	___
9. Wall types		___	c. Conservation credits	___
a. Frame, Wood, Exterior	R=13.0, 1425.0 ft ²	___	(HR-Heat recovery, Solar	
b. N/A		___	DHP-Dedicated heat pump)	
c. N/A		___	15. HVAC credits	PT, CF, ___
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, 1600.0 ft ²	___	MZ-C-Multizone cooling,	
b. N/A		___	MZ-H-Multizone heating)	
c. N/A		___		
11. Ducts		___		
a. Sup: Unc. Ret: Unc. AH: Attic	Sup. R=6.0, 42.0 ft	___		
b. N/A		___		

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

Builder Signature: _____ Date: _____

Address of New Home: _____ City/FL Zip: _____



**NOTE: The home's estimated energy performance score is only available through the FLA/RES computer program. This is not a Building Energy Rating. If your score is 80 or greater (or 86 for a US EPA/DOE EnergyStarTM designation), your home may qualify for energy efficiency mortgage (EEM) incentives if you obtain a Florida Energy Gauge Rating. Contact the Energy Gauge Hotline at 321/638-1492 or see the Energy Gauge web site at www.fsec.ucf.edu for information and a list of certified Raters. For information about Florida's Energy Efficiency Code For Building Construction, contact the Department of Community Affairs at 850/487-1824.*

¹ Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.
EnergyGauge® (Version: FLRCPB v4.5.2)

BUILDING INPUT SUMMARY REPORT

PROJECT	Title: Sierra Model - Thornwood Es		Family Type: Single		Address Type: Street Address			
	Owner: John Norris		New/Existing: New		Lot #: N/A			
	# of Units: 1		Bedrooms: 3		Subdivision: N/A			
	Builder Name: (blank)		Conditioned Area: 1473		Platbook: N/A			
	Climate: North		Total Stories: 1		Street: (blank)			
	Permit Office: (blank)		Worst Case: Yes		County: (blank)			
	Jurisdiction #: (blank)		Rotate Angle: 270		City, St, Zip: , ,			
FLOORS	#	Floor Type	R-Val	Area/Perimeter	Units			
	1	Slab-On-Grade Edge Insulation	0.0	201.0(p) ft	1			
CEILINGS	#	Ceiling Type	R-Val	Area	Base Area	Units		
	1	Under Attic	30.0	1600.0 ft²	1473.0 ft²	1		
WALLS	#	Wall Type	Location	R-Val	Area	Units		
	1	Frame - Wood	Exterior	13.0	1425.0 ft²	1		
WINDOWS	#	Panes	Tint	Ornt	Area	OH Length	OH Hght	Units
	1	Double	Clear	N	18.0 ft²	1.0 ft	6.0 ft	1
	2	Double	Clear	N	12.5 ft²	1.0 ft	6.0 ft	2
	3	Double	Clear	N	9.0 ft²	1.0 ft	6.0 ft	1
	4	Double	Clear	S	15.0 ft²	1.0 ft	6.0 ft	3
	5	Double	Clear	S	30.0 ft²	1.0 ft	6.0 ft	1
DOORS	#	Door Type	Orientation	Area	Units			
	1	Insulated	Exterior	16.0 ft²	3			
COOLING	#	System Type	Efficiency	Capacity				
	1	Central Unit/Split	SEER: 13.00	32.0 kBtu/hr				
HEATING	#	System Type	Efficiency	Capacity				
	1	Electric Heat Pump/Split	HSPF: 8.50	32.0 kBtu/hr				
DUCTS	#	Supply Location	Return Location	Air Handler Location	Supply R-Val	Supply Length		
	1	Uncond.	Uncond.	Attic	6.0	42.0 ft		
WATER	#	System Type	EF	Cap.	Conservation Type	Con. EF		
	1	Electric Resistance	0.94	20.0	None	0.00		
REFR.	#	Use Default?	Annual Operating Cost	Electric Rate				
	1	Yes	N/A	N/A				
MISC	Rater Name:	CodeOnlyPro	Class #:	3	Pool Size:	0		
	Rater Certification #:	CodeOnlyPro	Duct Leakage Type:	N/A	Pump Size:	0.00 hp		
	Area Under Fluorescent:	0.0	Visible Duct Disconnects:	N/A	Dryer Type:	Electric		
	Area Under Incandescent:	1473.0	Leak Free Duct System Proposed:	No	Stove Type:	Electric		
	NOTE: Not all Rating info shown	HRV/ERV System Present?:	No	Avg Ceil Hgt:				

Residential System Sizing Calculation

Summary

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

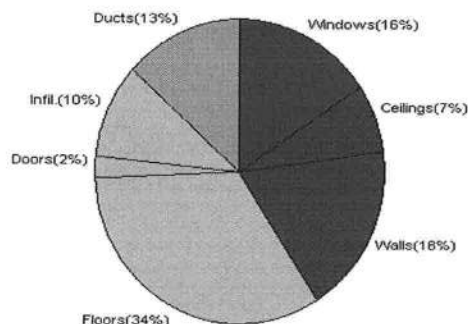
5/29/2007

Location for weather data: Gainesville - Defaults: Latitude(29) Altitude(152 ft.) Temp Range(M)			
Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(54gr.)			
Winter design temperature	33 F	Summer design temperature	92 F
Winter setpoint	70 F	Summer setpoint	75 F
Winter temperature difference	37 F	Summer temperature difference	17 F
Total heating load calculation	26100 Btuh	Total cooling load calculation	23694 Btuh
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	122.6 32000	Sensible (SHR = 0.75)	118.4 24000
Heat Pump + Auxiliary(0.0kW)	122.6 32000	Latent	233.5 8000
		Total (Electric Heat Pump)	135.1 32000

WINTER CALCULATIONS

Winter Heating Load (for 1473 sqft)

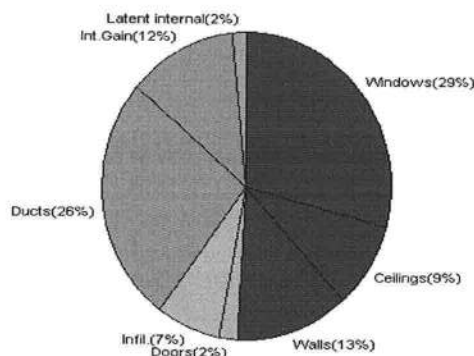
Load component		Load	
Window total	127 sqft	4088	Btuh
Wall total	1425 sqft	4680	Btuh
Door total	48 sqft	622	Btuh
Ceiling total	1600 sqft	1885	Btuh
Floor total	201 sqft	8776	Btuh
Infiltration	63 cfm	2546	Btuh
Duct loss		3504	Btuh
Subtotal		26100	Btuh
Ventilation	0 cfm	0	Btuh
TOTAL HEAT LOSS		26100	Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 1473 sqft)

Load component		Load	
Window total	127 sqft	6949	Btuh
Wall total	1425 sqft	2972	Btuh
Door total	48 sqft	470	Btuh
Ceiling total	1600 sqft	2140	Btuh
Floor total		0	Btuh
Infiltration	31 cfm	585	Btuh
Internal gain		2860	Btuh
Duct gain		4291	Btuh
Sens. Ventilation	0 cfm	0	Btuh
Total sensible gain		20268	Btuh
Latent gain(ducts)		1878	Btuh
Latent gain(infiltration)		1148	Btuh
Latent gain(ventilation)		0	Btuh
Latent gain(internal/occupants/other)		400	Btuh
Total latent gain		3426	Btuh
TOTAL HEAT GAIN		23694	Btuh



Version 8
For Florida residences only

EnergyGauge® System Sizing

PREPARED BY: Debra J. Moles

DATE: 5-29-07

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F

5/29/2007

This calculation is for Worst Case. The house has been rotated 90 degrees.

Component Loads for Whole House

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft)	X	HTM=	Load
1	2, Clear, Metal, 0.87	E	18.0		32.2	579 Btuh
2	2, Clear, Metal, 0.87	E	25.0		32.2	805 Btuh
3	2, Clear, Metal, 0.87	E	9.0		32.2	290 Btuh
4	2, Clear, Metal, 0.87	W	45.0		32.2	1449 Btuh
5	2, Clear, Metal, 0.87	W	30.0		32.2	966 Btuh
Window Total			127(sqft)			4088 Btuh
Walls	Type	R-Value	Area	X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1425		3.3	4680 Btuh
Wall Total			1425			4680 Btuh
Doors	Type		Area	X	HTM=	Load
1	Insulated - Exterior		48		12.9	622 Btuh
Door Total			48			622Btuh
Ceilings	Type/Color/Surface	R-Value	Area	X	HTM=	Load
1	Vented Attic/L/Shin	30.0	1600		1.2	1885 Btuh
Ceiling Total			1600			1885Btuh
Floors	Type	R-Value	Size	X	HTM=	Load
1	Slab On Grade	0	201.0 ft(p)		43.7	8776 Btuh
Floor Total			201			8776 Btuh
Envelope Subtotal:						20051 Btuh
Infiltration	Type	ACH	X	Volume(cuft)	walls(sqft)	CFM=
	Natural	0.32		11784	1425	62.8
						2546 Btuh
Ductload	(DLM of 0.155)					3504 Btuh
All Zones	Sensible Subtotal All Zones					26100 Btuh

WHOLE HOUSE TOTALS

	Subtotal Sensible	26100 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	26100 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

5/29/2007

EQUIPMENT

1. Electric Heat Pump/Split	#(Outside) #(Inside)	32000 Btuh
-----------------------------	----------------------	------------

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)
(Frame types - metal, wood or insulated metal)
(U - Window U-Factor or 'DEF' for default)
(HTM - ManualJ Heat Transfer Multiplier)

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



Version 8
For Florida residences only

System Sizing Calculations - Winter

Residential Load - Room by Room Component Details

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F
This calculation is for Worst Case. The house has been rotated 90 degrees.

5/29/2007

Component Loads for Zone #1: Main

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft)	X	HTM=	Load
1	2, Clear, Metal, 0.87	E	18.0		32.2	579 Btuh
2	2, Clear, Metal, 0.87	E	25.0		32.2	805 Btuh
3	2, Clear, Metal, 0.87	E	9.0		32.2	290 Btuh
4	2, Clear, Metal, 0.87	W	45.0		32.2	1449 Btuh
5	2, Clear, Metal, 0.87	W	30.0		32.2	966 Btuh
Window Total			127(sqft)			4088 Btuh
Walls	Type	R-Value	Area	X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1425		3.3	4680 Btuh
Wall Total			1425			4680 Btuh
Doors	Type		Area	X	HTM=	Load
1	Insulated - Exterior		48		12.9	622 Btuh
Door Total			48			622 Btuh
Ceilings	Type/Color/Surface	R-Value	Area	X	HTM=	Load
1	Vented Attic/L/Shin	30.0	1600		1.2	1885 Btuh
Ceiling Total			1600			1885 Btuh
Floors	Type	R-Value	Size	X	HTM=	Load
1	Slab On Grade	0	201.0 ft(p)		43.7	8776 Btuh
Floor Total			201			8776 Btuh
Zone Envelope Subtotal:						20051 Btuh
Infiltration	Type	ACH X Volume(cuft)	walls(sqft)	CFM=		
	Natural	0.32	11784	1425	62.8	2546 Btuh
Ductload	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic) (DLM of 0.155)					3504 Btuh
Zone #1	Sensible Zone Subtotal					26100 Btuh

WHOLE HOUSE TOTALS

	Subtotal Sensible	26100 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	26100 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

5/29/2007

EQUIPMENT

1. Electric Heat Pump/Split	#(Outside) #(Inside)	32000 Btuh
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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)



Version 8
For Florida residences only

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F
This calculation is for Worst Case. The house has been rotated 90 degrees.

5/29/2007

Component Loads for Whole House

Window	Type*	Ornt	Overhang		Window Area(sqft)			HTM		Load
	Pn/SHGC/U/InSh/ExSh/IS		Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded	
1	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	18.0	2.5	15.5	19	55	906 Btuh
2	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	25.0	0.0	25.0	19	55	1386 Btuh
3	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	9.0	0.0	9.0	19	55	499 Btuh
4	2, Clear, 0.87, B-D, N,F	W	1ft.	6ft.	45.0	0.0	45.0	19	55	2495 Btuh
5	2, Clear, 0.87, B-D, N,F	W	1ft.	6ft.	30.0	0.0	30.0	19	55	1663 Btuh
Window Total					127 (sqft)					6949 Btuh
Walls	Type		R-Value/U-Value		Area(sqft)			HTM		Load
1	Frame - Wood - Ext		13.0/0.09		1425.0			2.1		2972 Btuh
Wall Total					1425 (sqft)					2972 Btuh
Doors	Type				Area (sqft)			HTM		Load
1	Insulated - Exterior				48.0			9.8		470 Btuh
Door Total					48 (sqft)					470 Btuh
Ceilings	Type/Color/Surface		R-Value		Area(sqft)			HTM		Load
1	Vented Attic/Light/Shingle		30.0		1600.0			1.3		2140 Btuh
Ceiling Total					1600 (sqft)					2140 Btuh
Floors	Type		R-Value		Size			HTM		Load
1	Slab On Grade		0.0		201 (ft(p))			0.0		0 Btuh
Floor Total					201.0 (sqft)					0 Btuh
Envelope Subtotal:										12532 Btuh
Infiltration	Type		ACH		Volume(cuft) wall area(sqft)			CFM=		Load
	SensibleNatural		0.16		11784 1425			62.8		585 Btuh
Internal gain			Occupants		Btuh/occupant			Appliance		Load
			2		X 230 +			2400		2860 Btuh
Sensible Envelope Load:										15977 Btuh
Duct load	(DGM of 0.269)									4291 Btuh
Sensible Load All Zones										20268 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

5/29/2007

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	15977 Btuh
	Sensible Duct Load	4291 Btuh
	Total Sensible Zone Loads	20268 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	20268 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	1148 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	1878 Btuh
	Latent occupant gain (2 people @ 200 Btuh per person)	400 Btuh
	Latent other gain	0 Btuh
	Latent total gain	3426 Btuh
	TOTAL GAIN	23694 Btuh

EQUIPMENT

1. Central Unit/Split	#(Outside) #(Inside)	32000 Btuh
-----------------------	----------------------	------------

*Key: Window types (Pn - Number of panes of glass)

(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(B), Draperies(D) or Roller Shades(R))

(ExSh - Exterior shading device: none(N) or numerical value)

(BS - Insect screen: none(N), Full(F) or Half(H))

(Ornt - compass orientation)



Version 8
For Florida residences only

System Sizing Calculations - Summer

Residential Load - Room by Room Component Details

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F
This calculation is for Worst Case. The house has been rotated 90 degrees.

5/29/2007

Component Loads for Zone #1: Main

Window	Type*	Ornt	Overhang		Window Area(sqft)			HTM		Load
	Pn/SHGC/U/InSh/ExSh/IS		Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded	
1	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	18.0	2.5	15.5	19	55	906 Btuh
2	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	25.0	0.0	25.0	19	55	1386 Btuh
3	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	9.0	0.0	9.0	19	55	499 Btuh
4	2, Clear, 0.87, B-D, N,F	W	1ft.	6ft.	45.0	0.0	45.0	19	55	2495 Btuh
5	2, Clear, 0.87, B-D, N,F	W	1ft.	6ft.	30.0	0.0	30.0	19	55	1663 Btuh
Window Total					127 (sqft)					6949 Btuh
Walls	Type	R-Value/U-Value			Area(sqft)		HTM		Load	
1	Frame - Wood - Ext	13.0/0.09			1425.0		2.1		2972 Btuh	
Wall Total					1425 (sqft)				2972 Btuh	
Doors	Type				Area (sqft)		HTM		Load	
1	Insulated - Exterior				48.0		9.8		470 Btuh	
Door Total					48 (sqft)				470 Btuh	
Ceilings	Type/Color/Surface	R-Value			Area(sqft)		HTM		Load	
1	Vented Attic/Light/Shingle	30.0			1600.0		1.3		2140 Btuh	
Ceiling Total					1600 (sqft)				2140 Btuh	
Floors	Type	R-Value			Size		HTM		Load	
1	Slab On Grade	0.0			201 (ft(p))		0.0		0 Btuh	
Floor Total					201.0 (sqft)				0 Btuh	
Zone Envelope Subtotal:									12532 Btuh	
Infiltration	Type	ACH		Volume(cuft)		wall area(sqft)		CFM=	Load	
	SensibleNatural	0.16		11784		1425		31.4	585 Btuh	
Internal gain	Occupants			Btuh/occupant			Appliance		Load	
	2			X 230			+ 2400		2860 Btuh	
Sensible Envelope Load:									15977 Btuh	
Duct load	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic) (DGM of 0.269)							4291 Btuh		
Sensible Zone Load									20268 Btuh	

Manual J Summer Calculations

Residential Load - Component Details (continued)

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

5/29/2007

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	15977 Btuh
	Sensible Duct Load	4291 Btuh
	Total Sensible Zone Loads	20268 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	20268 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	1148 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	1878 Btuh
	Latent occupant gain (2 people @ 200 Btuh per person)	400 Btuh
	Latent other gain	0 Btuh
	Latent total gain	3426 Btuh
	TOTAL GAIN	23694 Btuh

EQUIPMENT

1. Central Unit/Split	#(Outside) #(Inside)	32000 Btuh
-----------------------	----------------------	------------

*Key: Window types (Pn - Number of panes of glass)

(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(B), Draperies(D) or Roller Shades(R))

(ExSh - Exterior shading device: none(N) or numerical value)

(BS - Insect screen: none(N), Full(F) or Half(H))

(Ornt - compass orientation)



Version 8
For Florida residences only

Residential Window Diversity

MidSummer

John Norris

Project Title:
Sierra Model - Thornwood Estates

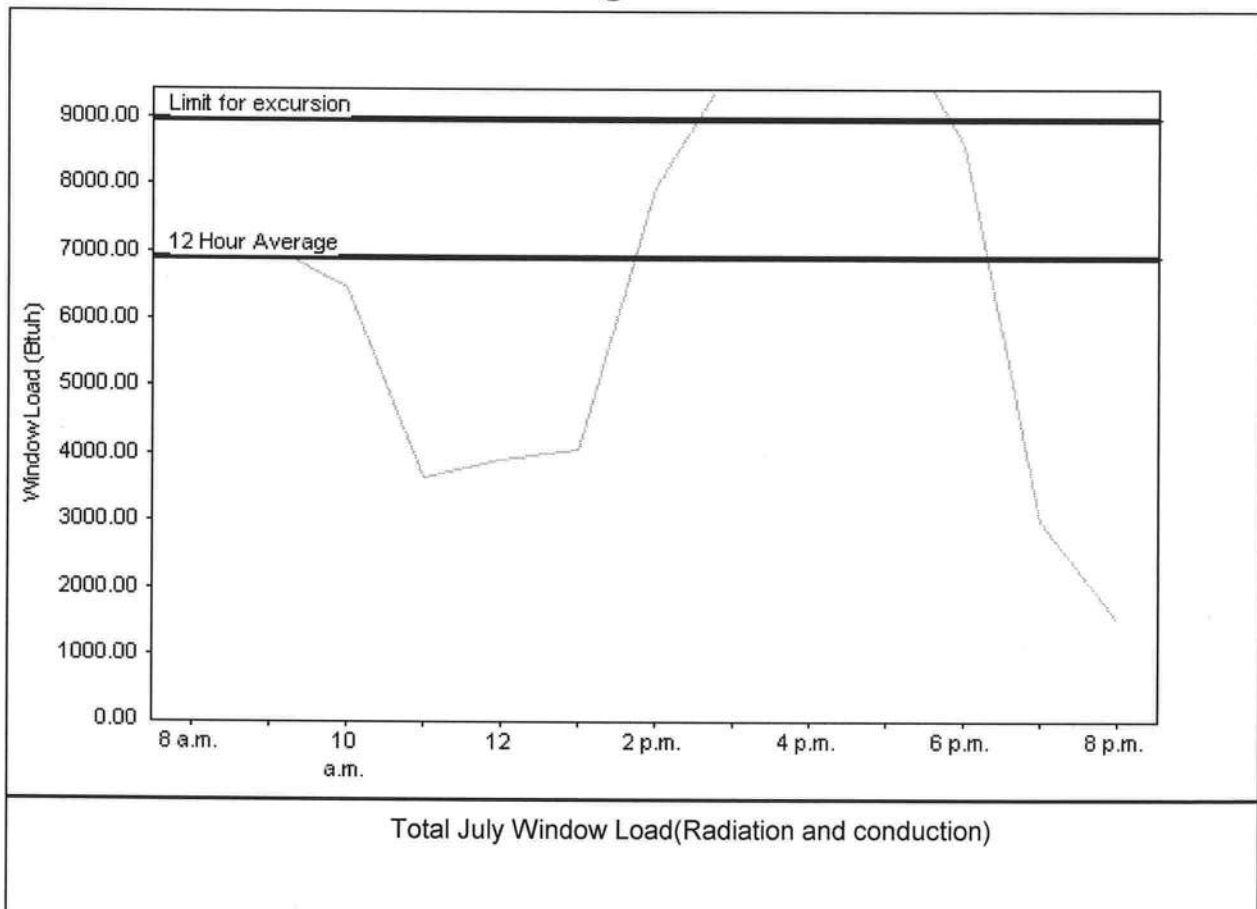
Code Only
Professional Version
Climate: North

5/29/2007

Weather data for: Gainesville - Defaults

Summer design temperature	92 F	Average window load for July	6900 Btuh
Summer setpoint	75 F	Peak window load for July	10769 Btu
Summer temperature difference	17 F	Excursion limit(130% of Ave.)	8970 Btuh
Latitude	29 North	Window excursion (July)	1799 Btuh

WINDOW Average and Peak Loads



This application has glass areas that produce large heat gains for part of the day. Variable air volume devices are required to overcome spikes in solar gain for one or more rooms. Install a zoned system or provide zone control for problem rooms. Single speed equipment may not be suitable for the application.

EnergyGauge® System Sizing for Florida residences only

PREPARED BY: Debra L. Moles

DATE: 5-29-07



Summary Energy Code Results

Residential Whole Building Performance Method A

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

5/29/2007

Building Loads			
Base		As-Built	
Summer:	17795 points	Summer:	16860 points
Winter:	15150 points	Winter:	13954 points
Hot Water:	7273 points	Hot Water:	7273 points
Total:	40218 points	Total:	38087 points

Energy Use			
Base		As-Built	
Cooling:	5783 points	Cooling:	5490 points
Heating:	8393 points	Heating:	7310 points
Hot Water:	7905 points	Hot Water:	7737 points
Total:	22082 points	Total:	20538 points

PASS
e-Ratio: 0.93

COLUMBIA COUNTY BUILDING DEPARTMENT

Revised 10-01-05

RESIDENTIAL MINIMUM PLAN REQUIREMENTS AND CHECKLIST FOR
FLORIDA BUILDING CODE 2004 and FLORIDA RESIDENTIAL CODE 2004
WITH AMENDMENTS ONE (1) AND TWO (2) FAMILY DWELLINGSALL REQUIREMENTS ARE SUBJECT TO CHANGE
EFFECTIVE OCTOBER 1, 2003

ALL BUILDING PLANS MUST INDICATE THE FOLLOWING ITEMS AND INDICATE COMPLIANCE WITH CHAPTER 16 OF THE FLORIDA BUILDING CODE 2004 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 1609 SHALL BE USED.

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

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

APPLICANT - PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL

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

Applicant

Plans Examiner

☒☐

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

☒☐

Designers name and signature on document (FBC 106.1). If licensed architect or engineer, official seal shall be affixed.

☒☐Site Plan including:

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

☒☐Wind-load Engineering Summary, calculations and any details required
Plans or specifications must state compliance with FBC Section 1609.

The following information must be shown as per section 1603.1.4 FBC

- a. Basic wind speed (3-second gust), miles per hour (km/hr).
- b. Wind importance factor, I_w , and building classification from Table 1604.5 or Table 6-1, ASCE 7 and building classification in Table 1-1, ASCE 7.
- c. Wind exposure, if more than one wind exposure is utilized, the wind exposure and applicable wind direction shall be indicated.
- d. The applicable enclosure classifications and, if designed with ASCE 7, internal pressure coefficient.
- e. Components and Cladding. The design wind pressures in terms of psf (kN/m²) to be used for the design of exterior component and cladding materials not specifically designed by the registered design professional.

Elevations including:

- a) All sides
- b) Roof pitch
- c) Overhang dimensions and detail with attic ventilation

☒☐☒☐☒☐

- 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) shall be designed by a Windload engineer using the engineered roof truss plans.
7. Roof assembly shown here or on roof system detail (FBC 106.1.1.2) Roofing system, materials, manufacturer, fastening requirements and product evaluation with wind resistance rating
8. Fire resistant construction (if applicable)
9. Fireproofing requirements
10. Show type of termite treatment (termicide or alternative method)
11. Slab on grade
 - a. Vapor 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 Systems:

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

Plumbing Fixture Layout

Electrical Layout Including:

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

HVAC Information

- a) Energy Calculations (dimensions shall match plans)
- b) Manual J sizing equipment or equivalent computation
- c) Gas System Type (LP or Natural) Location and BTU demand of equipment

Disclosure Statement for Owner/Builder

*** Notice Of Commencement Required Before Any Inspections Will Be Done
Private Potable Water

✓

□

✓

□

✓

□

✓

□

✓

□

- [illegible]

- d) Location, size and height above roof of chimneys.**

- e) Location and size of skylights

- ### f) Building height

- e) Number of stories

Floor Plan including:

- a) Rooms labeled and dimensioned.

- b) Shear walls identified.**

- c) Show product approval specification as required by Fla. Statute 553.842 and Fla. Administrative Code 9B-72 (see attach forms).

- d) Show safety glazing of glass, where required by code.

- c) Identify egress windows in bedrooms, and size.

- f) Fireplace (gas vented), (gas non-vented) or wood burning with hearth, (Please circle applicable type).

- g) Stairs with dimensions (width, tread and riser) and details of guardrails and handrails.

- h) 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 Systems:

- a) Truss package including:

1. Truss layout and truss details signed and sealed by Fl. Pro. Eng.

2. **Roof assembly (FBC 106.1.1.2) 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 106.1.1.2) 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 shall be designed by a Windload engineer using the engineered roof truss plans.

6. Roof assembly shown here or on roof system detail (FBC 106.1.1.2) 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 (termiticide 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:

PRODUCT APPROVAL SPECIFICATION SHEET

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and approval numbers on the building components listed below if they will be utilized on the construction project for which you are applying for a building permit. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. Statewide approved products are listed online @ www.floridabuilding.org

Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
1. EXTERIOR DOORS			
A. SWINGING			
B. SLIDING			
C. SECTIONAL/ROLL UP			
D. OTHER			
2. WINDOWS			
A. SINGLE/DOUBLE HUNG			
B. HORIZONTAL SLIDER			
C. CASEMENT			
D. FIXED			
E. MULLION			
F. SKYLIGHTS			
G. OTHER			
3. PANEL WALL			
A. SIDING			
B. SOFFITS			
C. STOREFRONTS			
D. GLASS BLOCK			
E. OTHER			
4. ROOFING PRODUCTS			
A. ASPHALT SHINGLES			
B. NON-STRUCT METAL			
C. ROOFING TILES			
D. SINGLE PLY ROOF			
E. OTHER			
5. STRUCT COMPONENTS			
A. WOOD CONNECTORS			
B. WOOD ANCHORS			
C. TRUSS PLATES			
D. INSULATION FORMS			
E. LINTELS			
F. OTHERS			
6. NEW EXTERIOR ENVELOPE PRODUCTS			
A.			

The products listed below did not demonstrate product approval at plan review. I understand that at the time of inspection of these products, the following information must be available to the inspector on the jobsite; 1) copy of the product approval, 2) performance characteristics which the product was tested and certified to comply with, 3) copy of the applicable manufacturers installation requirements. Further, I understand these products may have to be removed if approval cannot be demonstrated during inspection.

APPLICANT SIGNATURE

DATE

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[Term Glossary](#)[Online Help](#)**Licensee Details****Licensee Information**

Name: **NORRIS, JOHN DAVID (Primary Name)**
INDIVIDUAL (DBA Name)
Main Address: **351 NW CORWIN GLN**
LAKE CITY Florida 32055
County: **COLUMBIA**

License Mailing:

License Location: **WOODGLEN DRIVE**
LAKE CITY FL 32055
County: **COLUMBIA**

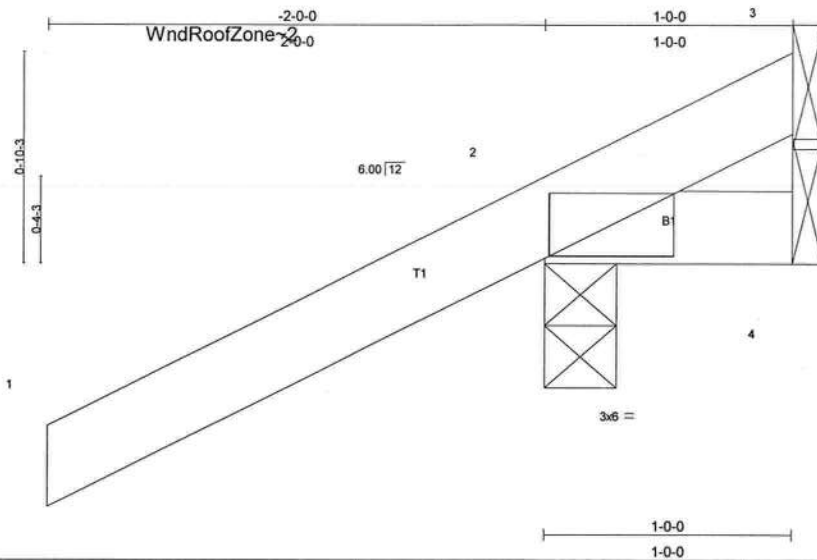
License Information

License Type: **Registered General Contractor**
Rank: **Reg General**
License Number: **RG0066597**
Status: **Current,Active**
Licensure Date: **06/20/1996**
Expires: **08/31/2007**

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

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Job L240090	Truss CJ1	Truss Type MONO TRUSS	Qty 18	Ply 1	JOHN NORRIS - LOT 16 TW
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.300 s Apr 19 2006 MiTek Industries, Inc. Tue May 15 17:32:05 2007 Page 1		



Scale = 1/8"

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.28	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.01	Vert(LL) -0.00 2 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.00	Vert(TL) -0.00 2 >999 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.00 3 n/a n/a		
	Code FBC2004/TPI2002			Weight: 7 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 1-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=266/0-3-8, 4=14/Mechanical, 3=-90/Mechanical
Max Horz 2=87(load case 5)
Max Uplift 2=-286(load case 5), 4=-9(load case 3), 3=-90(load case 1)
Max Grav 2=266(load case 1), 4=14(load case 1), 3=127(load case 5)

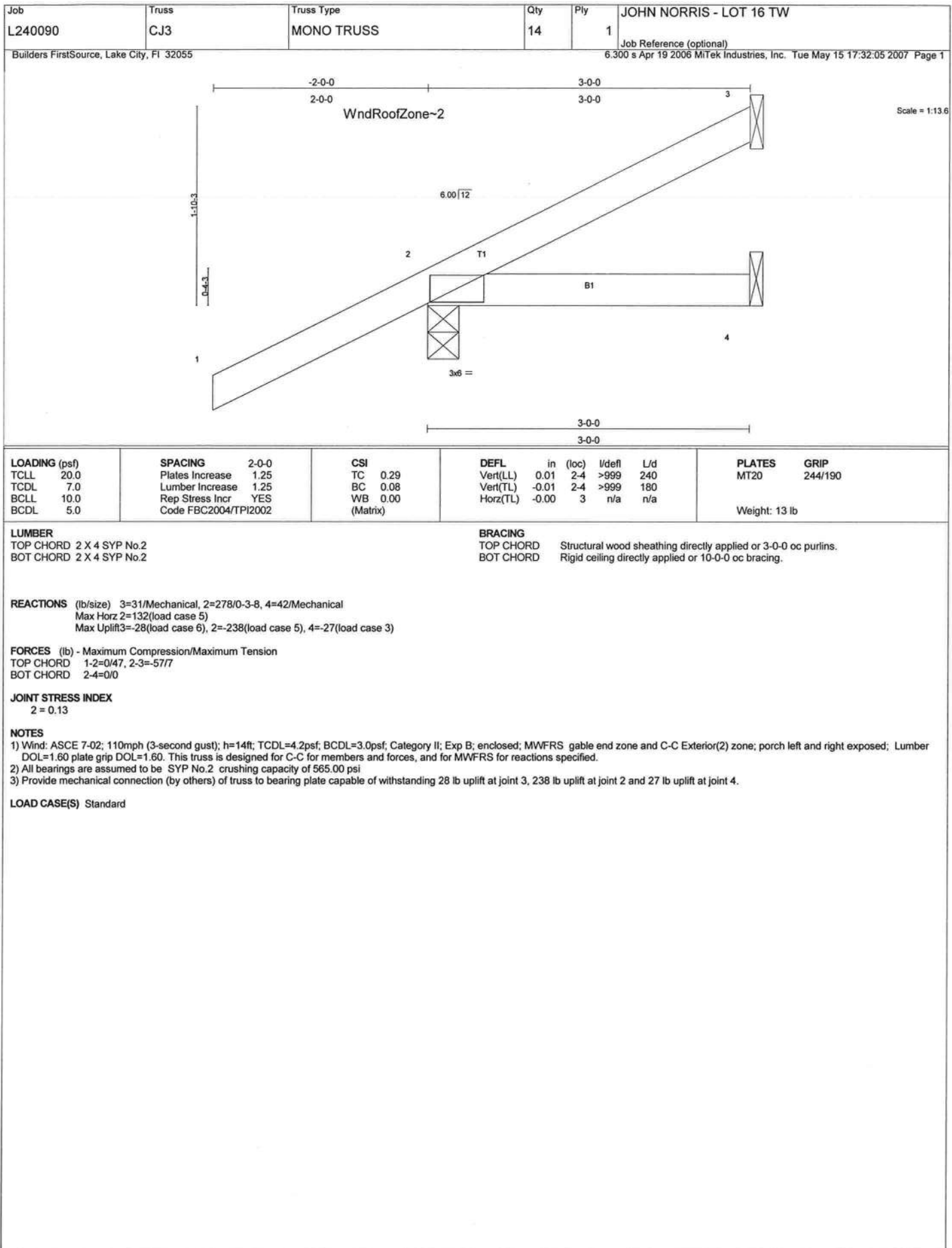
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/47, 2-3=-69/75
BOT CHORD 2-4=0/0

JOINT STRESS INDEX
2 = 0.14

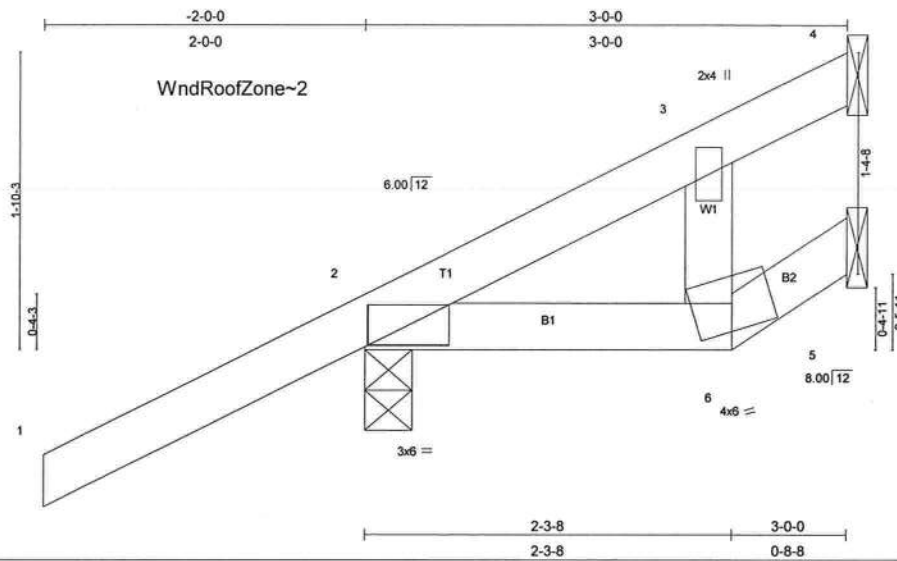
NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 286 lb uplift at joint 2, 9 lb uplift at joint 4 and 90 lb uplift at joint 3.

LOAD CASE(S) Standard



Job L240090	Truss CJ3T	Truss Type SPECIAL	Qty 4	Ply 1	JOHN NORRIS - LOT 16 TW
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.300 s Apr 19 2006 MiTek Industries, Inc. Tue May 15 17:32:06 2007 Page 1		



Scale = 1:13.6

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.03	Vert(LL) -0.01 6 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.01	Vert(TL) -0.01 6 >999 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) -0.00 5 n/a n/a		
	Code FBC2004/TPI2002			Weight: 15 lb	

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

BRACING
 TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 4=63/Mechanical, 2=278/0-3-8, 5=10/Mechanical
 Max Horz 2=132(load case 5)
 Max Uplift 4=-21(load case 6), 2=-203(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/47, 2-3=-58/2, 3-4=-18/26
 BOT CHORD 2-6=-6/0, 5-6=-4/4
 WEBS 3-6=0/42

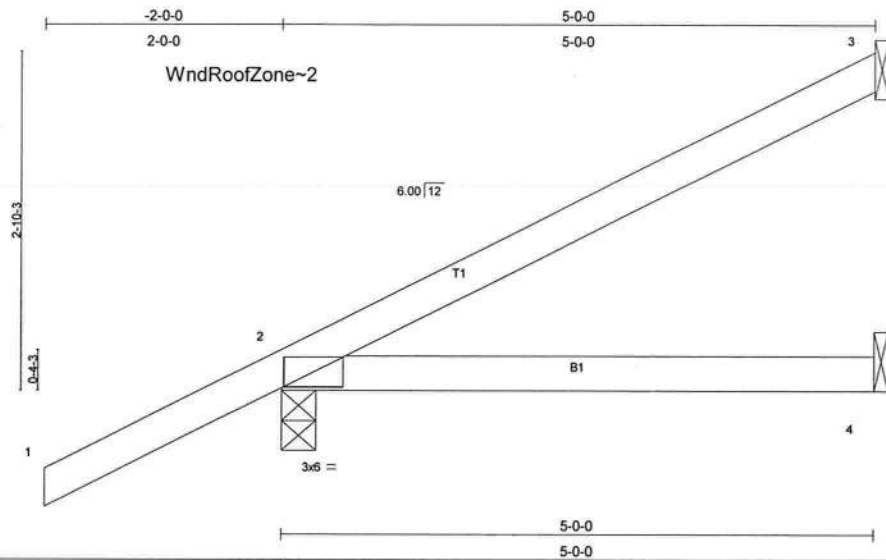
JOINT STRESS INDEX
 2 = 0.13, 3 = 0.03 and 6 = 0.02

NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 4 and 203 lb uplift at joint 2.

LOAD CASE(S) Standard

Job L240090	Truss CJ5	Truss Type MONO TRUSS	Qty 12	Ply 1	JOHN NORRIS - LOT 16 TW
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.300 s Apr 19 2006 MiTek Industries, Inc. Tue May 15 17:32:06 2007 Page 1		



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

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

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

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

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/47, 2-3=-88/36
BOT CHORD 2-4=0/0

JOINT STRESS INDEX
2 = 0.15

NOTES

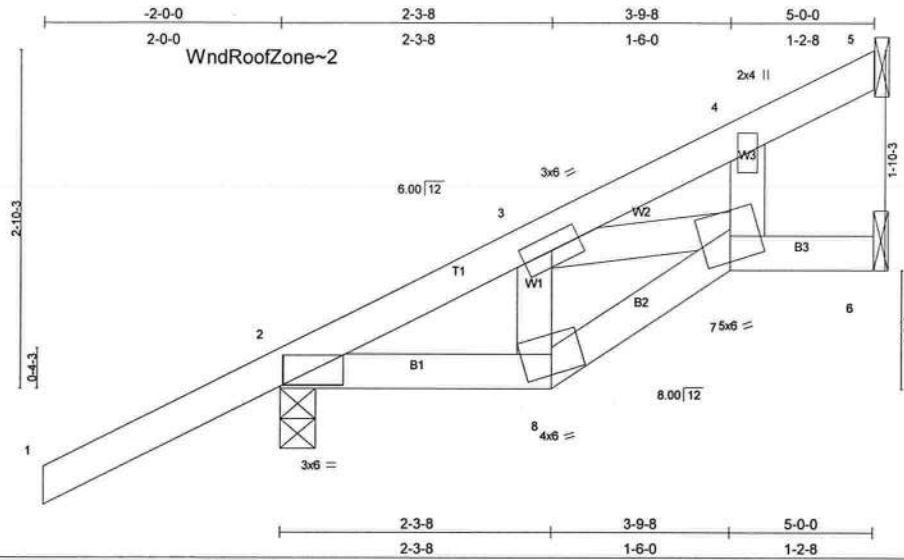
- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 3, 260 lb uplift at joint 2 and 46 lb uplift at joint 4.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	JOHN NORRIS - LOT 16 TW
L240090	CJ5T	SPECIAL	4	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

6.300 s Apr 19 2006 MiTek Industries, Inc. Tue May 15 17:32:07 2007 Page 1



LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.06	Vert(LL) -0.02 7 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.05	Vert(TL) -0.03 7 >999 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.01 6 n/a n/a		
	Code FBC2004/TPI2002			Weight: 25 lb	

LUMBER

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

BRACING

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

REACTIONS (lb/size) 5=158/Mechanical, 2=343/0-3-8, 6=17/Mechanical
 Max Horz 2=178(load case 5)
 Max Uplift 5=-76(load case 5), 2=-199(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/47, 2-3=-233/2, 3-4=-83/0, 4-5=-65/68
 BOT CHORD 2-8=-88/158, 7-8=-98/192, 6-7=-0/0
 WEBS 3-8=-46/64, 4-7=-50/150, 3-7=-130/73

JOINT STRESS INDEX

2 = 0.16, 3 = 0.04, 4 = 0.10, 7 = 0.06 and 8 = 0.05

NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 5 and 199 lb uplift at joint 2.

LOAD CASE(S) Standard

Job L240090	Truss EJ4	Truss Type JACK	Qty 7	Ply 1	JOHN NORRIS - LOT 16 TW
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.300 s Apr 19 2006 MiTek Industries, Inc. Tue May 15 17:32:08 2007 Page 1		

Scale: 3/4"=1'

LOADING (psf)	SPACING 2-0-0	CSI	DEFL	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.29	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.15	Vert(LL) 0.03 2-4 >999 240		
BCLL 10.0	Rep Stress Incr YES	WB 0.00	Vert(TL) 0.03 2-4 >999 180		
BCDL 5.0	Code FBC2004/TPI2002	(Matrix)	Horz(TL) -0.00 3 n/a n/a		
				Weight: 16 lb	

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

REACTIONS (lb/size) 3=70/Mechanical, 2=308/0-3-8, 4=57/Mechanical
 Max Horz 2=155(load case 5)
 Max Uplift 3=-54(load case 5), 2=-246(load case 5), 4=-36(load case 3)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/47, 2-3=-63/23
 BOT CHORD 2-4=0/0

JOINT STRESS INDEX
 2 = 0.14

NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 3, 246 lb uplift at joint 2 and 36 lb uplift at joint 4.

LOAD CASE(S) Standard

Job L240090	Truss EJ7	Truss Type MONO TRUSS	Qty 18	Ply 1	JOHN NORRIS - LOT 16 TW
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.300 s Apr 19 2006 Mitek Industries, Inc. Tue May 15 17:32:08 2007 Page 1		

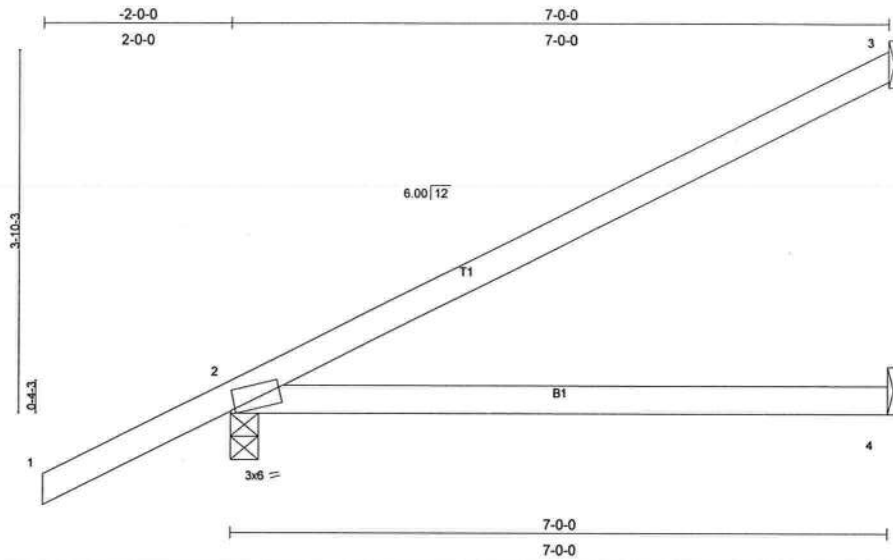


Plate Offsets (X,Y): [2-0-0-10,Edge]

LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.44	Vert(LL)	0.27	2-4	>305	240	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.38	Vert(TL)	0.22	2-4	>374	180		
BCLL 10.0	Lumber Increase 1.25	WB 0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL 5.0	Rep Stress Incr YES	(Matrix)							
	Code FBC2004/TPI2002								
								Weight: 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=162/Mechanical, 2=419/0-3-8, 4=104/Mechanical
Max Horz 2=224(load case 5)
Max Uplift 3=144(load case 5), 2=295(load case 5), 4=68(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/47, 2-3=-94/58
BOT CHORD 2-4=0/0

JOINT STRESS INDEX

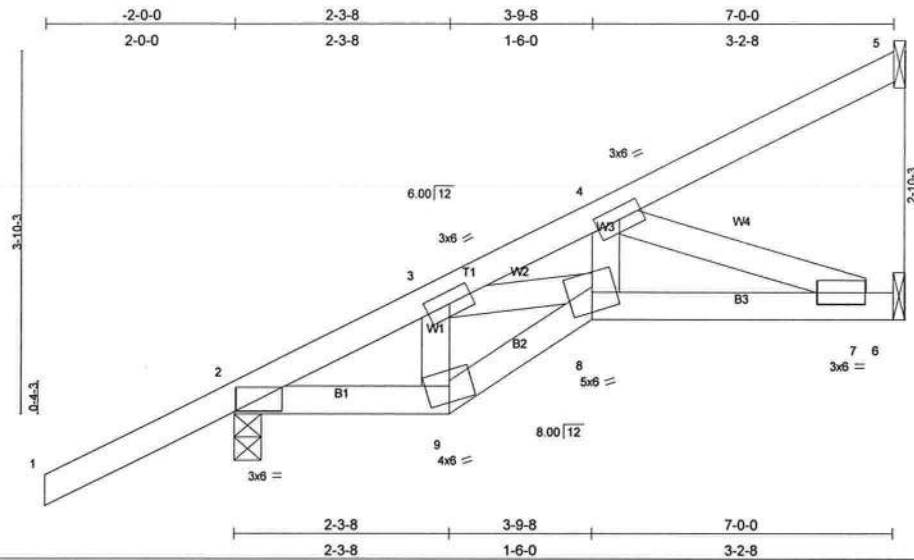
2 = 0.78

NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Interior(1) 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 MVFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 144 lb uplift at joint 3, 295 lb uplift at joint 2 and 68 lb uplift at joint 4.

LOAD CASE(S) Standard

Job L240090	Truss EJ7T	Truss Type SPECIAL	Qty 2	Ply 1	JOHN NORRIS - LOT 16 TW
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.300 s Apr 19 2006 MiTek Industries, Inc. Tue May 15 17:32:09 2007 Page 1		



LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.18	Vert(LL) -0.01 7-8 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.10	Vert(TL) -0.02 7-8 >999 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.01 6 n/a n/a		
	Code FBC2004/TPI2002			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

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) 5=72/Mechanical, 2=419/0-3-8, 6=195/Mechanical
 Max Horz 2=224(load case 5)
 Max Uplift 5=62(load case 5), 2=-210(load case 5), 6=-64(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/47, 2-3=-351/0, 3-4=-563/137, 4-5=-40/25
 BOT CHORD 2-9=-83/268, 8-9=-91/319, 7-8=-215/459, 6-7=0/0
 WEBS 3-9=-160/103, 4-8=-33/259, 3-8=-156/250, 4-7=-488/229

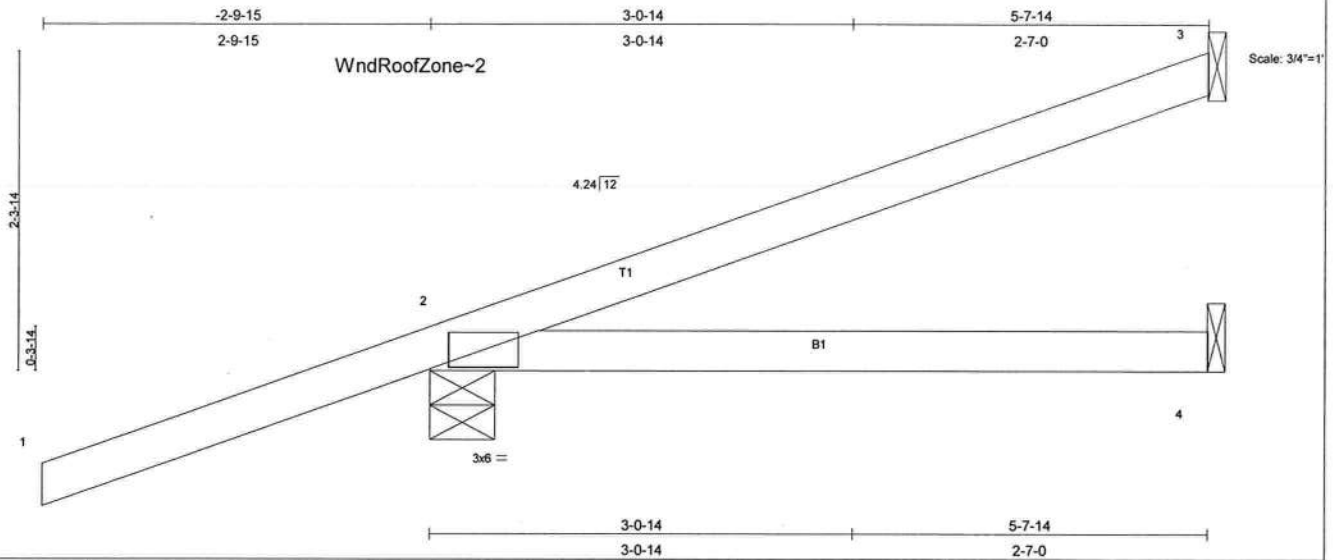
JOINT STRESS INDEX
 2 = 0.55, 3 = 0.12, 4 = 0.19, 7 = 0.14, 8 = 0.17 and 9 = 0.12

NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Interior(1) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 5, 210 lb uplift at joint 2 and 64 lb uplift at joint 6.

LOAD CASE(S) Standard

Job L240090	Truss HJ5	Truss Type JACK	Qty 1	Ply 1	JOHN NORRIS - LOT 16 TW
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.300 s Apr 19 2006 Mitek Industries, Inc. Tue May 15 17:32:10 2007 Page 1		



LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.54	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.16	Vert(LL) 0.05 2-4 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.00	Vert(TL) -0.05 2-4 >999 180		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL) -0.00 3 n/a n/a		
	Code FBC2004/TPI2002			Weight: 22 lb	

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-7-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=92/Mechanical, 2=325/0-5-11, 4=76/Mechanical
Max Horz 2=128(load case 2)
Max Uplift 3=58(load case 2), 2=-314(load case 2), 4=-52(load case 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/50, 2-3=-42/19
BOT CHORD 2-4=0/0

JOINT STRESS INDEX
2 = 0.12

NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 3, 314 lb uplift at joint 2 and 52 lb uplift at joint 4.
- 4) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Regular: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)

Vert: 1-2=-54

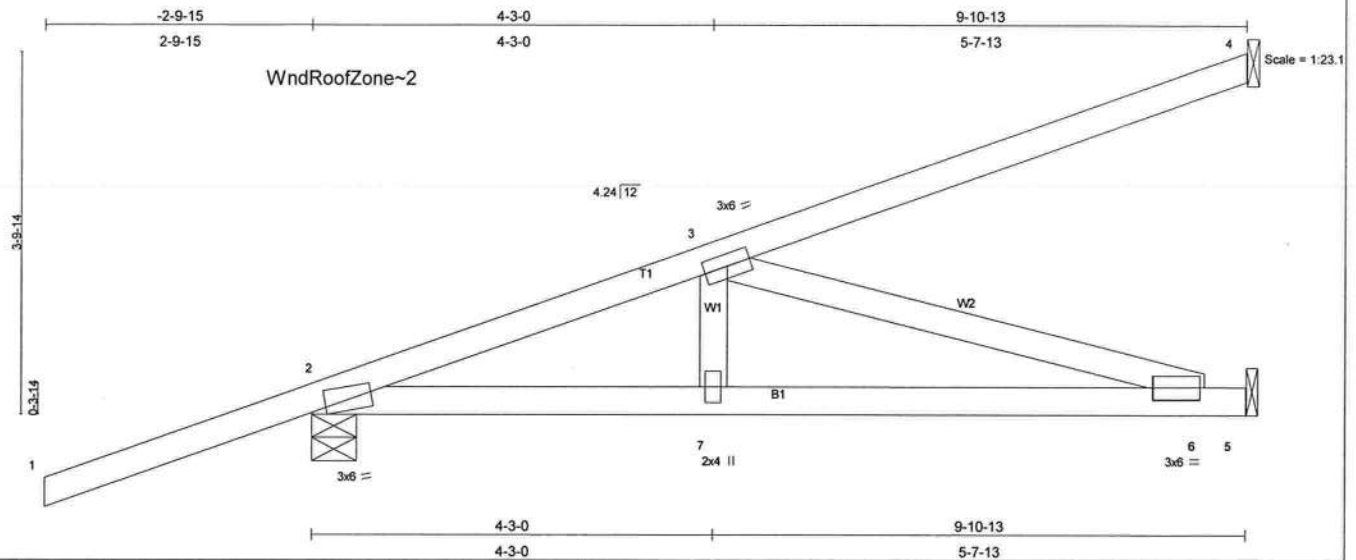
Trapezoidal Loads (plf)

Vert: 2=-3(F=25, B=25)-to-3=-76(F=-11, B=-11), 2=-0(F=15, B=15)-to-4=-42(F=-6, B=6)

Job	Truss	Truss Type	Qty	Ply	JOHN NORRIS - LOT 16 TW
L240090	HJ9	MONO TRUSS	6	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

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LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.62	Vert(LL)	-0.11	6-7	>999	240	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.61	Vert(TL)	-0.19	6-7	>623	180		
BCLL 10.0	Rep Stress Incr	NO	WB 0.47	Horz(TL)	0.01	5	n/a	n/a		
BCDL 5.0	Code FBC2004/TPI2002		(Matrix)							
									Weight: 45 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 7-11-9 oc bracing.

REACTIONS (lb/size) 4=270/Mechanical, 2=535/0-5-11, 5=374/Mechanical

Max Horz 2=269(load case 2)

Max Uplift 4=-233(load case 2), 2=-401(load case 2), 5=-181(load case 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/50, 2-3=-883/363, 3-4=-105/66

BOT CHORD 2-7=-535/817, 6-7=-535/817, 5-6=0/0

WEBS 3-7=-94/188, 3-6=-851/557

JOINT STRESS INDEX

2 = 0.76, 3 = 0.23, 6 = 0.24 and 7 = 0.14

NOTES

1) Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60.

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

3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 233 lb uplift at joint 4, 401 lb uplift at joint 2 and 181 lb uplift at joint 5.

4) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

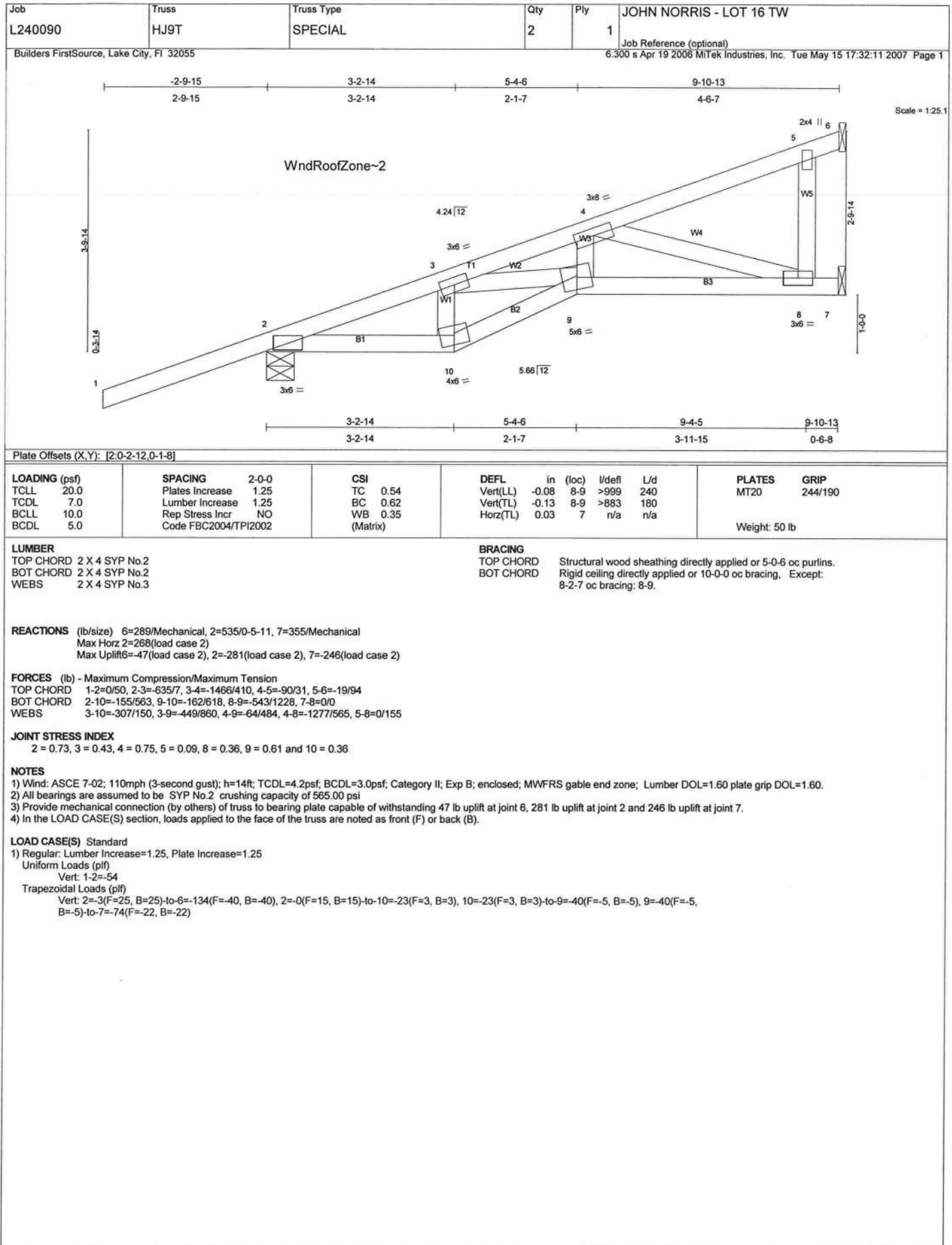
1) Regular: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-2=-54

Trapezoidal Loads (plf)

Vert: 2=-3(F=25, B=25)-to-4=-134(F=-40, B=-40), 2=-0(F=15, B=15)-to-5=-74(F=-22, B=-22)



Job L240090	Truss T01	Truss Type HIP	Qty 1	Ply 1	JOHN NORRIS - LOT 16 TW
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.300 s Apr 19 2006 MiTek Industries, Inc. Tue May 15 17:32:12 2007 Page 1		

Plate Offsets (X,Y): [2:0-1-11,Edge], [6:0-1-11,Edge]

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.53	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.82	Vert(LL) -0.29 8-10 >899 240	MT18H	244/190
BCLL 10.0	Lumber Increase 1.25	WB 0.39	Vert(TL) -0.48 8-10 >539 180		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL) 0.10 6 n/a n/a		
	Code FBC2004/TPI2002			Weight: 99 lb	

LUMBER TOP CHORD 2 X 4 SYP No.2 BOT CHORD 2 X 4 SYP No.1D WEBS 2 X 4 SYP No.3	BRACING TOP CHORD Structural wood sheathing directly applied or 2-11-10 oc purlins. BOT CHORD Rigid ceiling directly applied or 5-8-2 oc bracing.
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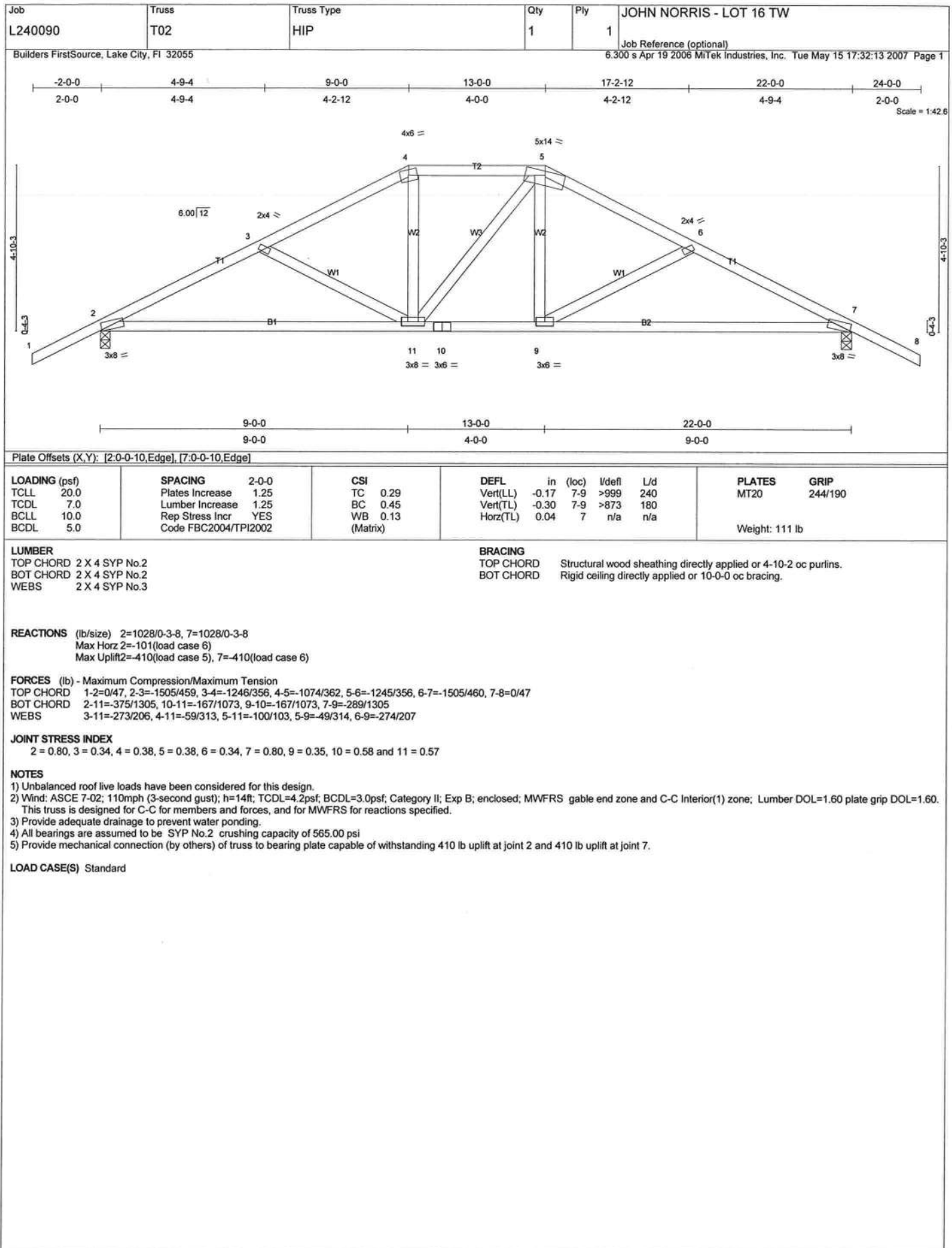
REACTIONS (lb/size) 2=1957/0-3-8, 6=1957/0-3-8
 Max Horz 2=877(load case 4)
 Max Uplift2=-877(load case 4), 6=-877(load case 5)

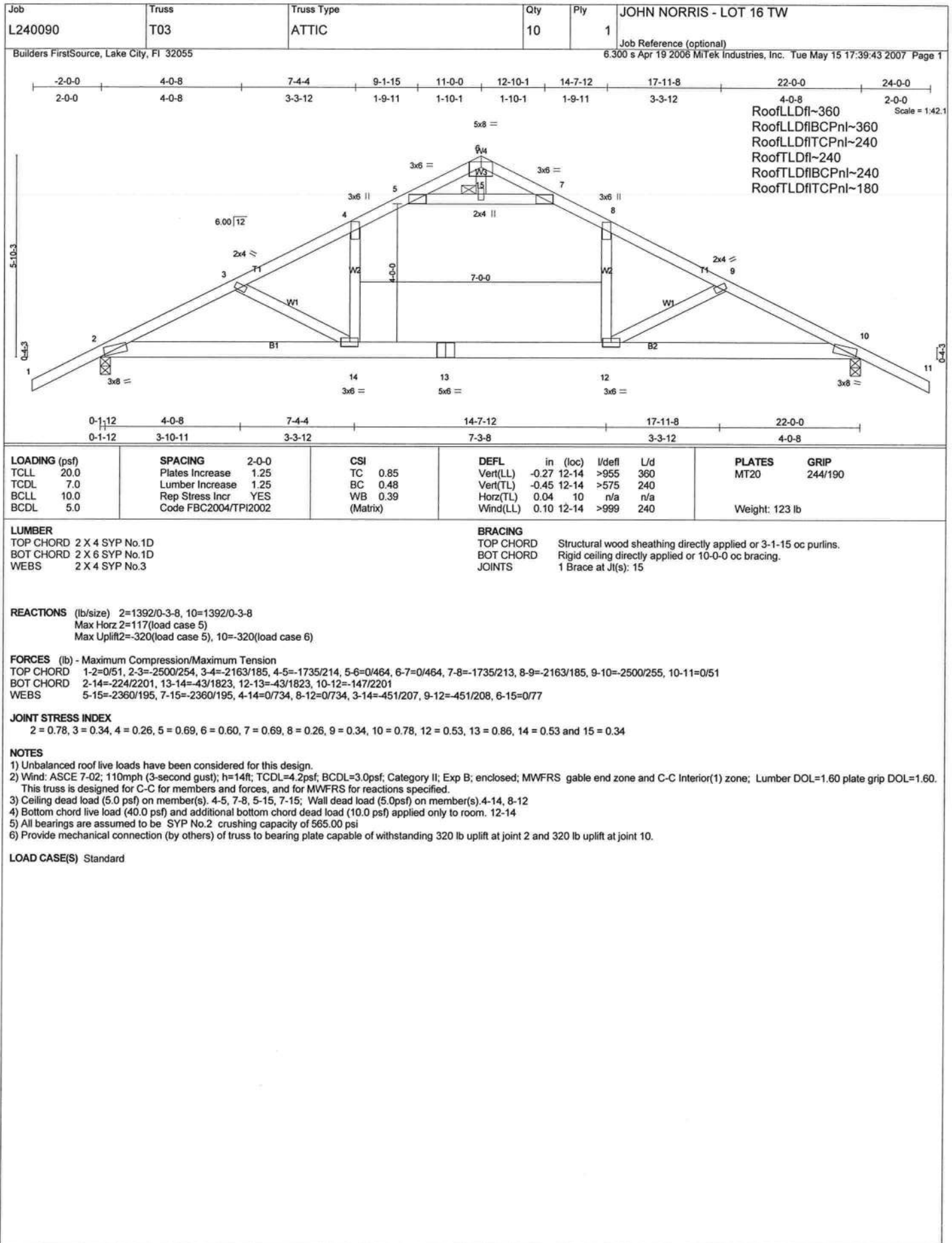
FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/47, 2-3=-3557/1407, 3-4=-3134/1332, 4-5=-3134/1332, 5-6=-3557/1407, 6-7=0/47
 BOT CHORD 2-10=-1204/3086, 9-10=-1405/3357, 8-9=-1405/3357, 6-8=-1163/3086
 WEBS 3-10=-423/1207, 4-10=-417/344, 4-8=-417/344, 5-8=-423/1207

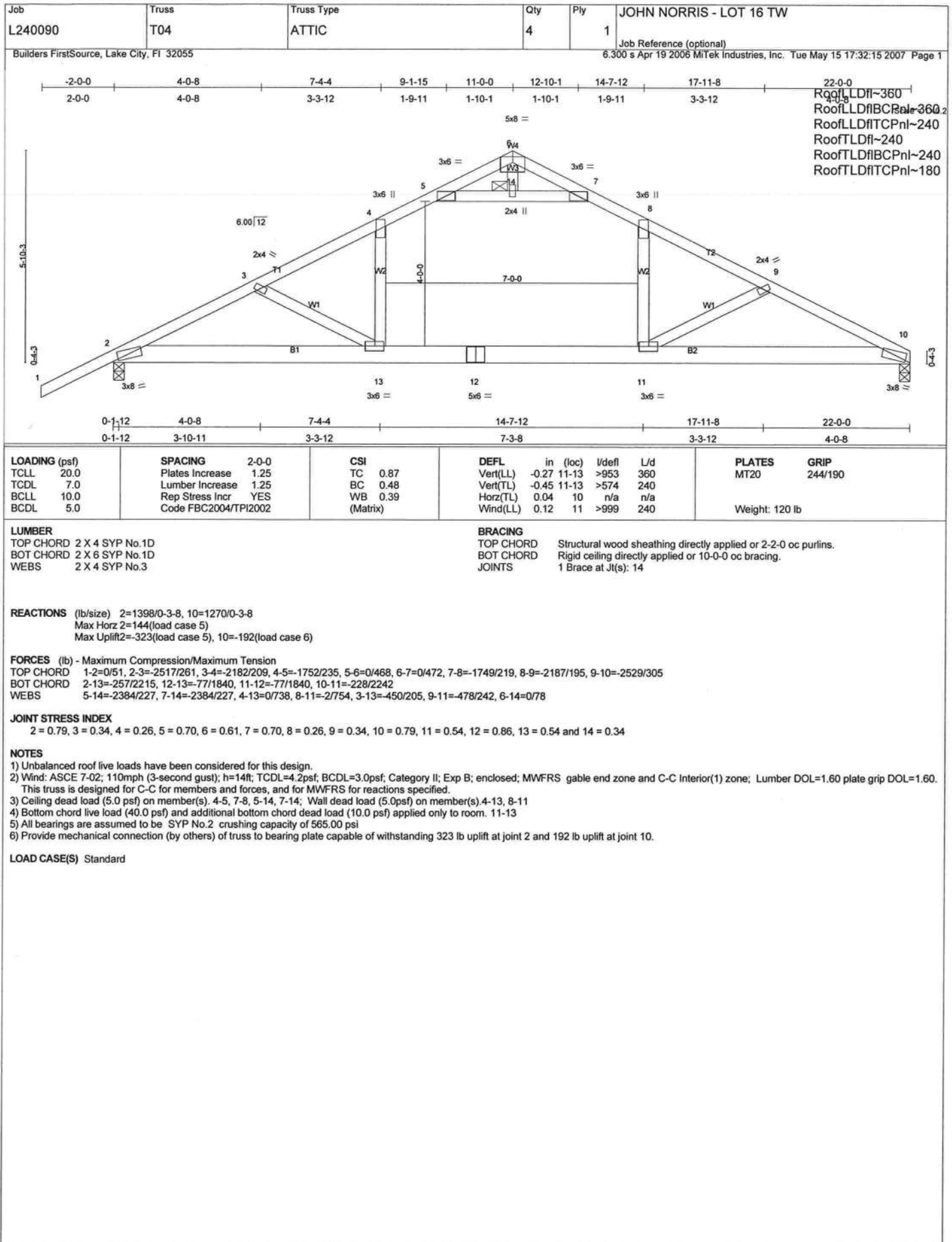
JOINT STRESS INDEX
 2 = 0.81, 3 = 0.77, 4 = 0.36, 5 = 0.77, 6 = 0.81, 8 = 0.42, 9 = 0.89 and 10 = 0.42

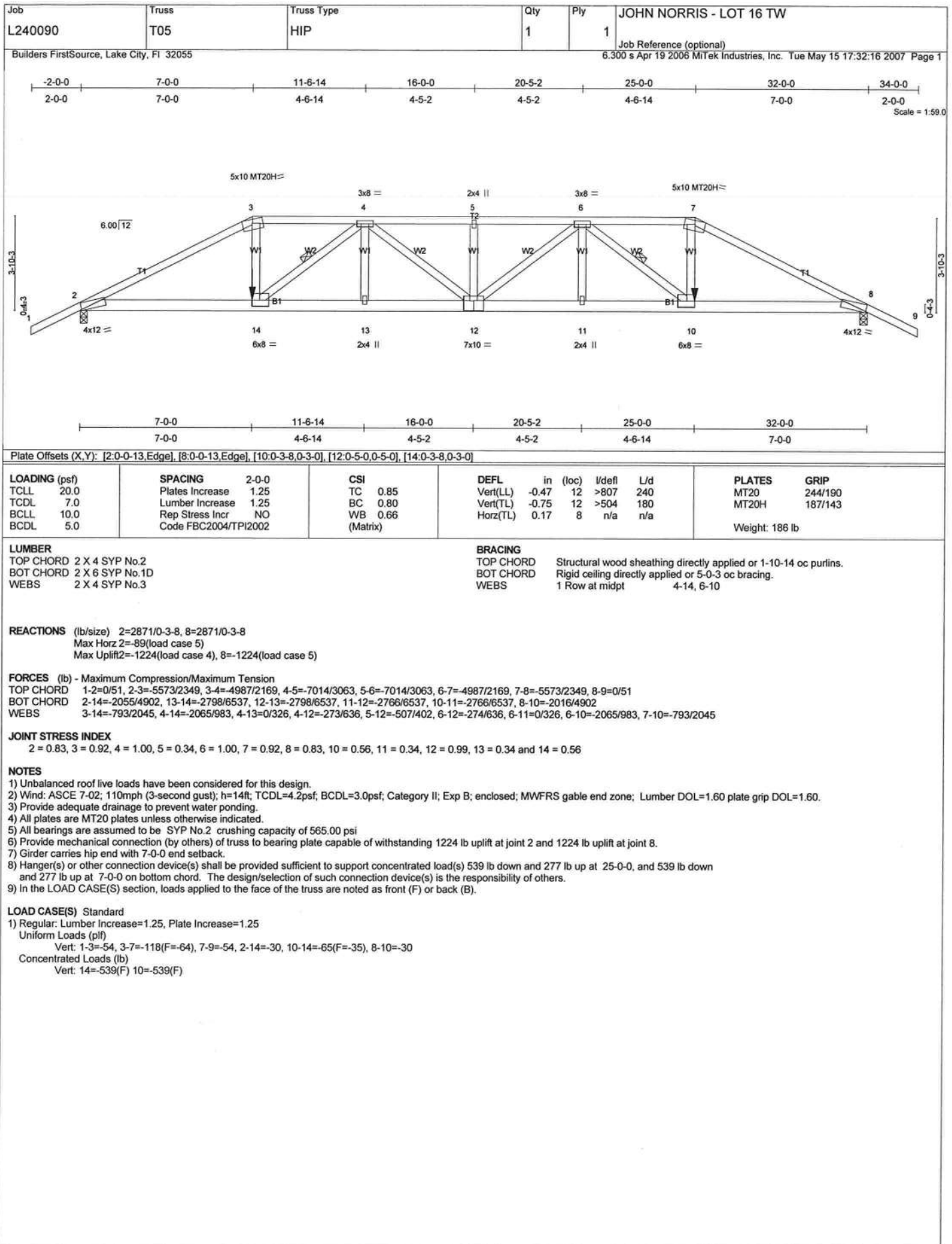
NOTES
 1) Unbalanced roof live loads have been considered for this design.
 2) Wind: ASCE 7-02: 110mph (3-second gust); h=14ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; Lumber DOL=1.60 plate grip DOL=1.60.
 3) Provide adequate drainage to prevent water ponding.
 4) All plates are MT20 plates unless otherwise indicated.
 5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 877 lb uplift at joint 2 and 877 lb uplift at joint 6.
 7) Girder carries hip end with 7'-0-0 end setback.
 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 539 lb down and 277 lb up at 15'-0-0, and 539 lb down and 277 lb up at 7'-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
 1) Regular: Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 1-3=-54, 3-5=-118(F=-64), 5-7=-54, 2-10=-30, 8-10=-65(F=-35), 6-8=-30
 Concentrated Loads (lb)
 Vert: 10=-539(F) 8=-539(F)









Job L240090	Truss T06	Truss Type HIP	Qty 1	Ply 1	JOHN NORRIS - LOT 16 TW
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.300 s Apr 19 2006 MiTek Industries, Inc. Tue May 15 17:32:17 2007 Page 1		

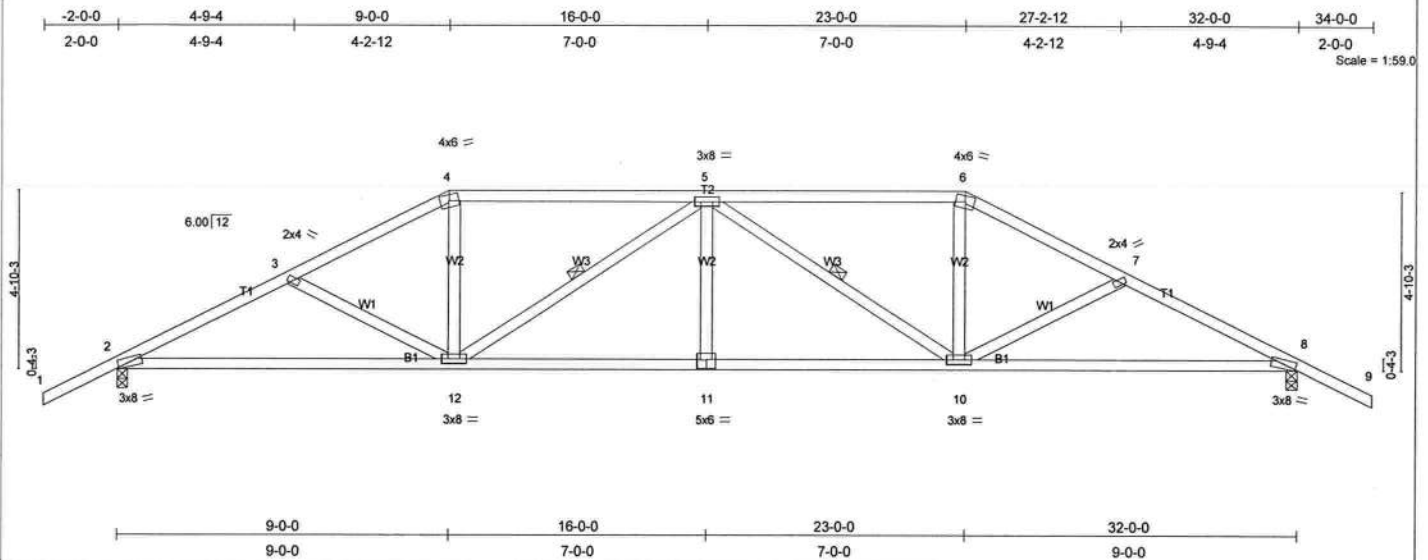


Plate Offsets (X,Y): [2:0-0-10,Edge], [8:0-0-10,Edge], [11:0-3-0,0-3-0]

LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.34	Vert(LL)	-0.21	8-10	>999	240	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.72	Vert(TL)	-0.35	8-10	>999	180		
BCLL 10.0	Lumber Increase 1.25	WB 0.20	Horz(TL)	0.11	8	n/a	n/a		
BCDL 5.0	Rep Stress Incr YES	(Matrix)							
	Code FBC2004/TPI2002								
								Weight: 162 lb	

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-9-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-10-10 oc bracing.
WEBS 1 Row at midpt 5-12, 5-10

REACTIONS (lb/size) 2=1448/0-3-8, 8=1448/0-3-8
Max Horz 2=101(load case 5)
Max Uplift2=-507(load case 5), 8=-507(load case 6)

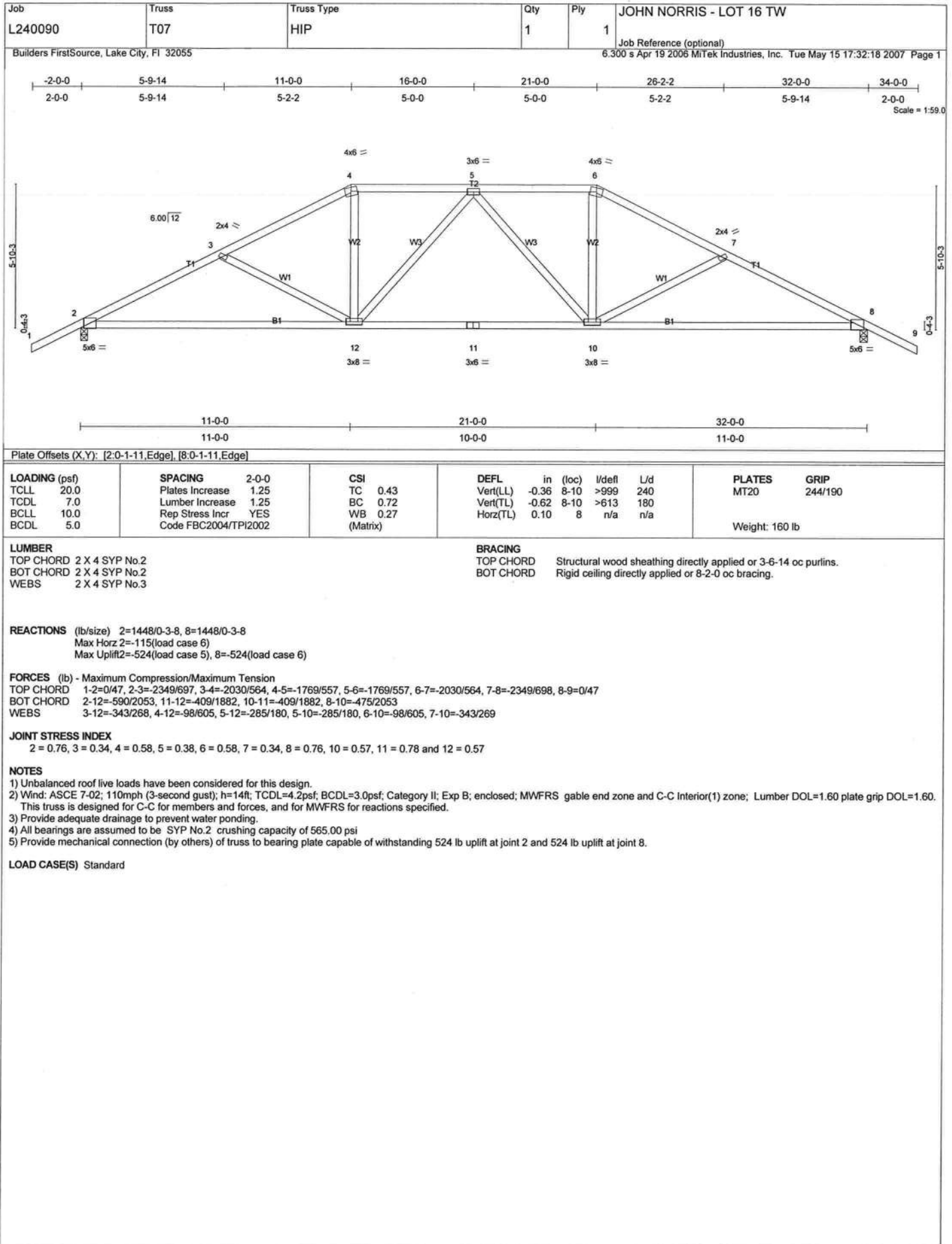
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/47, 2-3=-2399/662, 3-4=-2180/608, 4-5=-1930/585, 5-6=-1930/585, 6-7=-2180/608, 7-8=-2399/663, 8-9=0/47
BOT CHORD 2-12=-553/2092, 11-12=-635/2357, 10-11=-635/2357, 8-10=-497/2092
WEBS 3-12=-209/188, 4-12=-89/636, 5-12=-605/270, 5-11=0/174, 5-10=-605/269, 6-10=-88/636, 7-10=-209/189

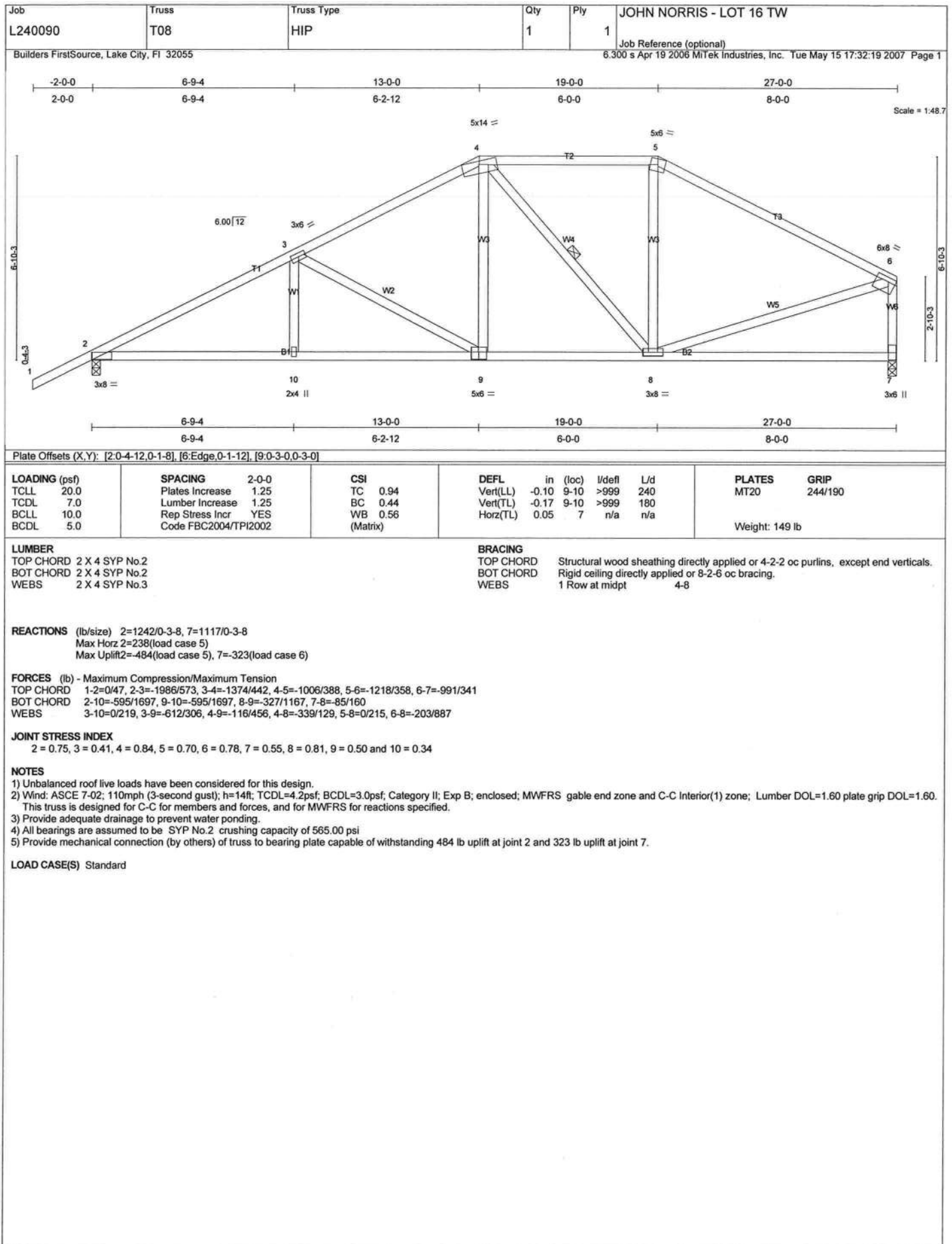
JOINT STRESS INDEX
2 = 0.84, 3 = 0.34, 4 = 0.77, 5 = 0.57, 6 = 0.77, 7 = 0.34, 8 = 0.84, 10 = 0.57, 11 = 0.59 and 12 = 0.57

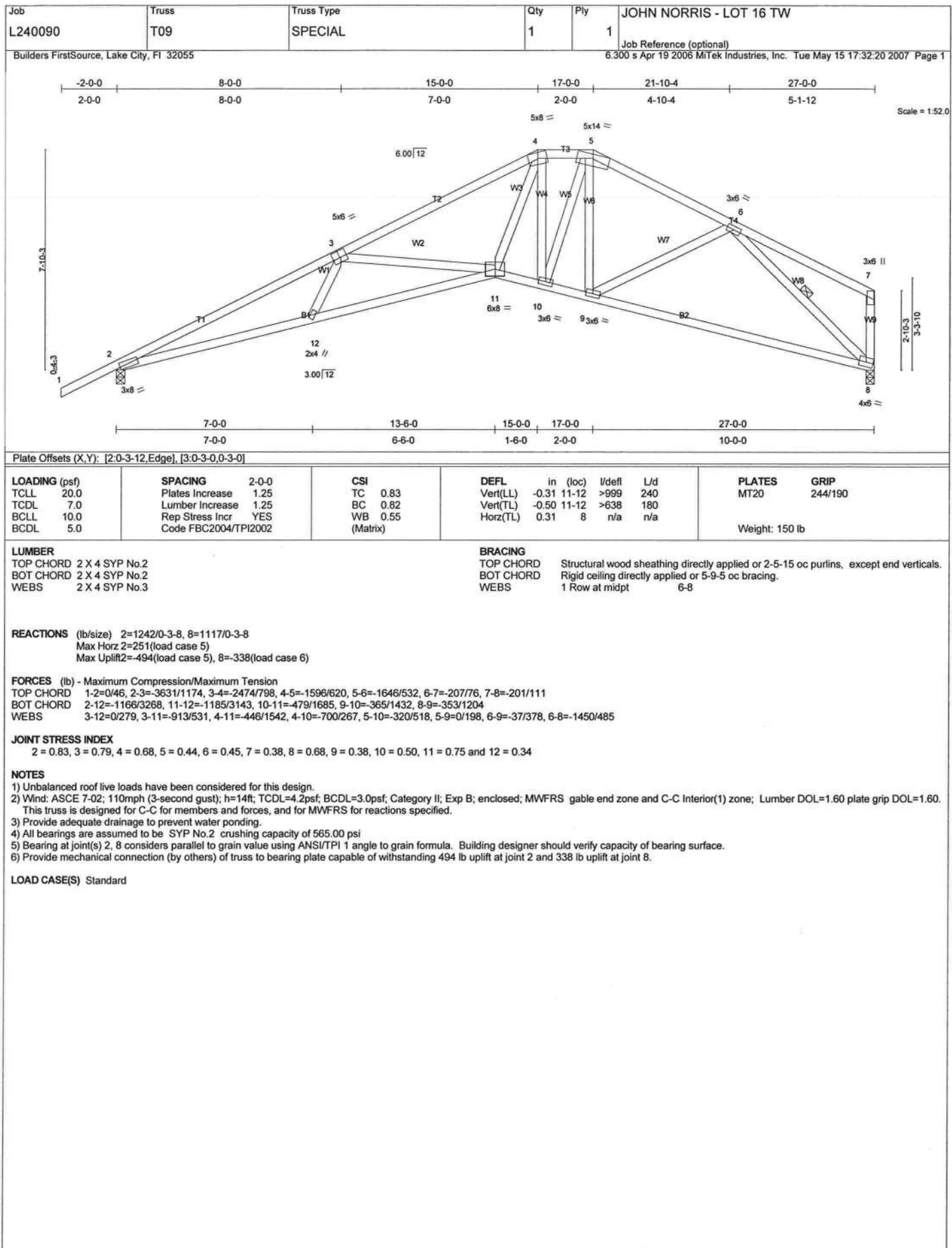
NOTES

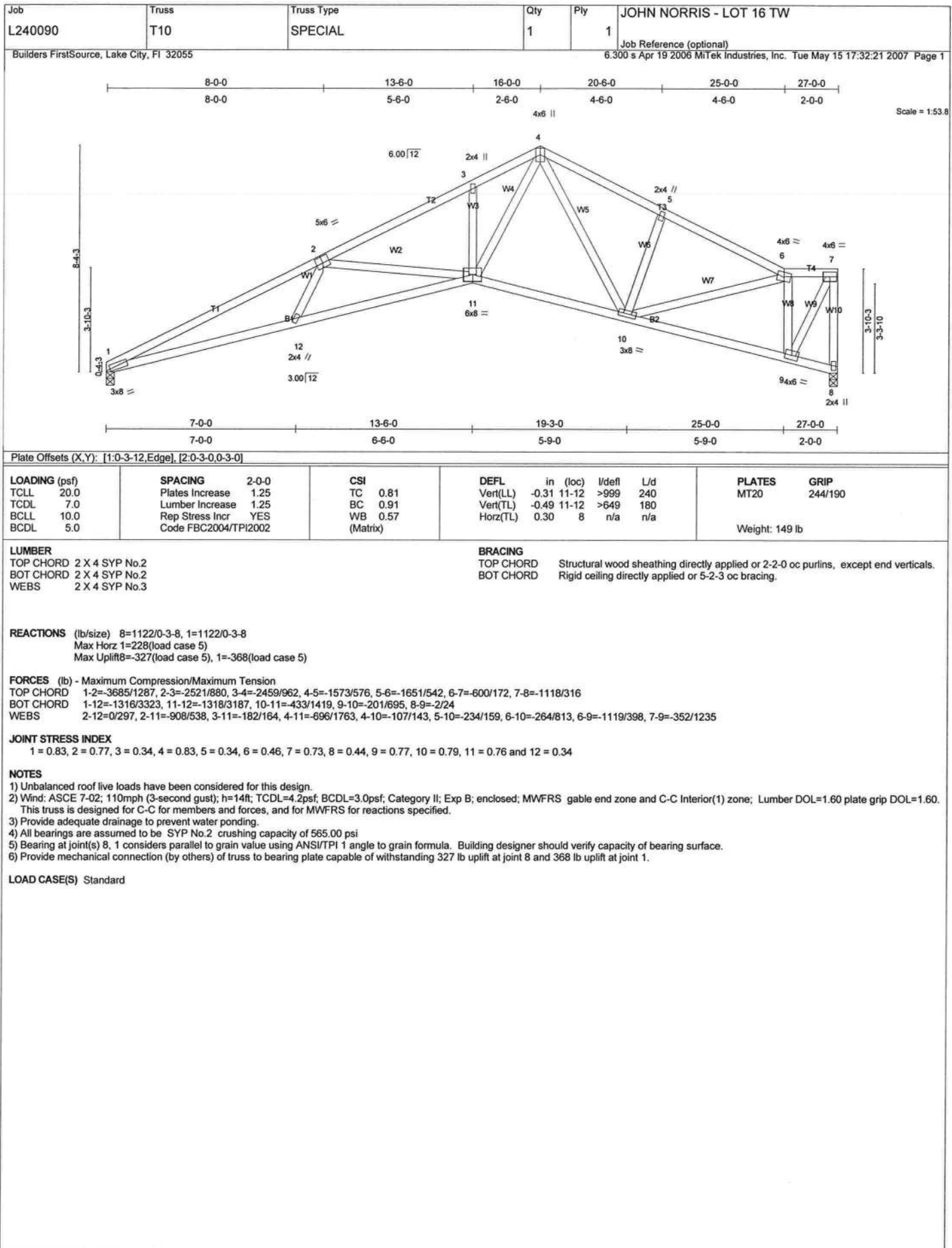
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Interior(1) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- Provide adequate drainage to prevent water ponding.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 507 lb uplift at joint 2 and 507 lb uplift at joint 8.

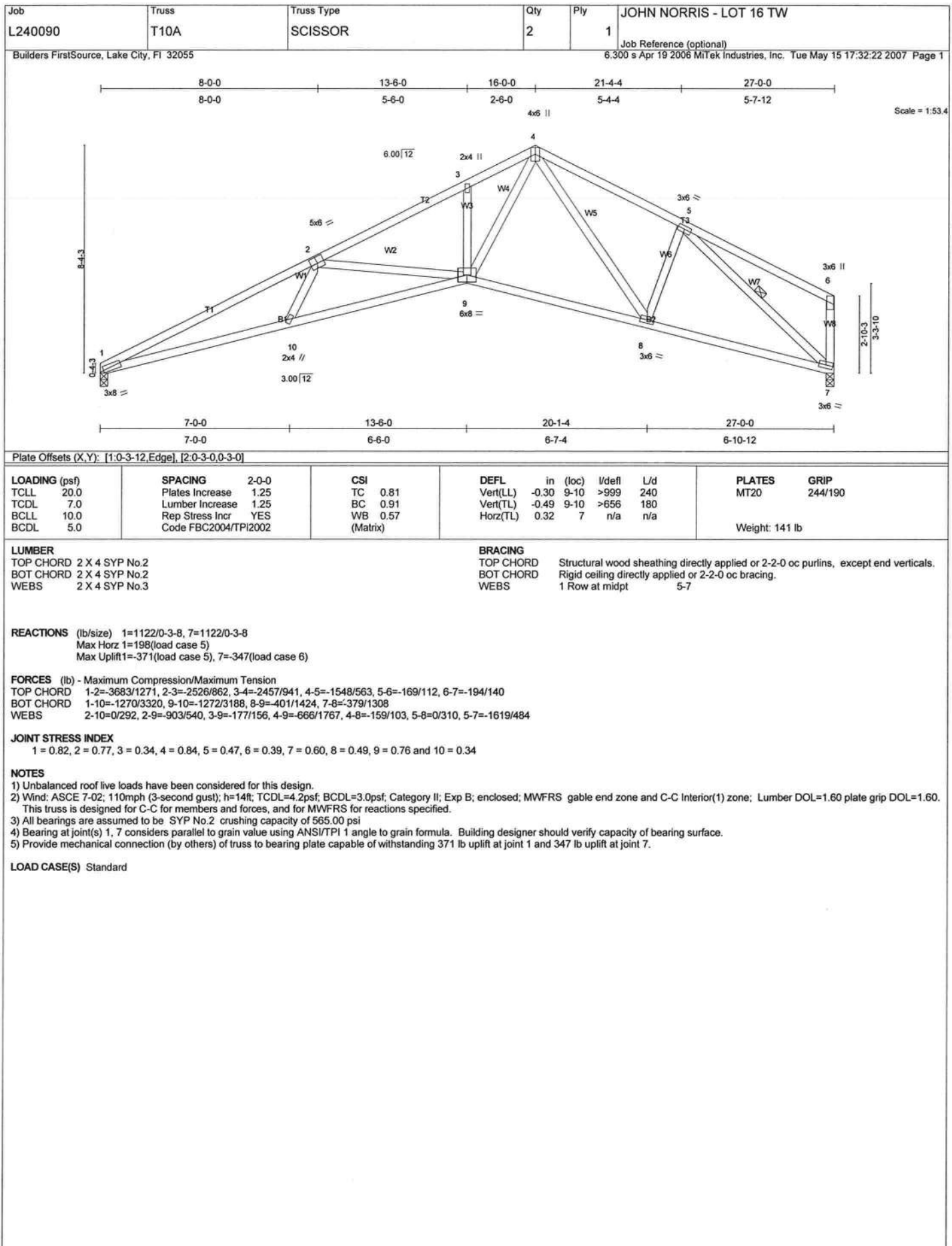
LOAD CASE(S) Standard











Job L240090	Truss T12	Truss Type SPECIAL	Qty 1	Ply 1	JOHN NORRIS - LOT 16 TW
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Builders FirstSource, Lake City, FL 32055

Job Reference (optional)

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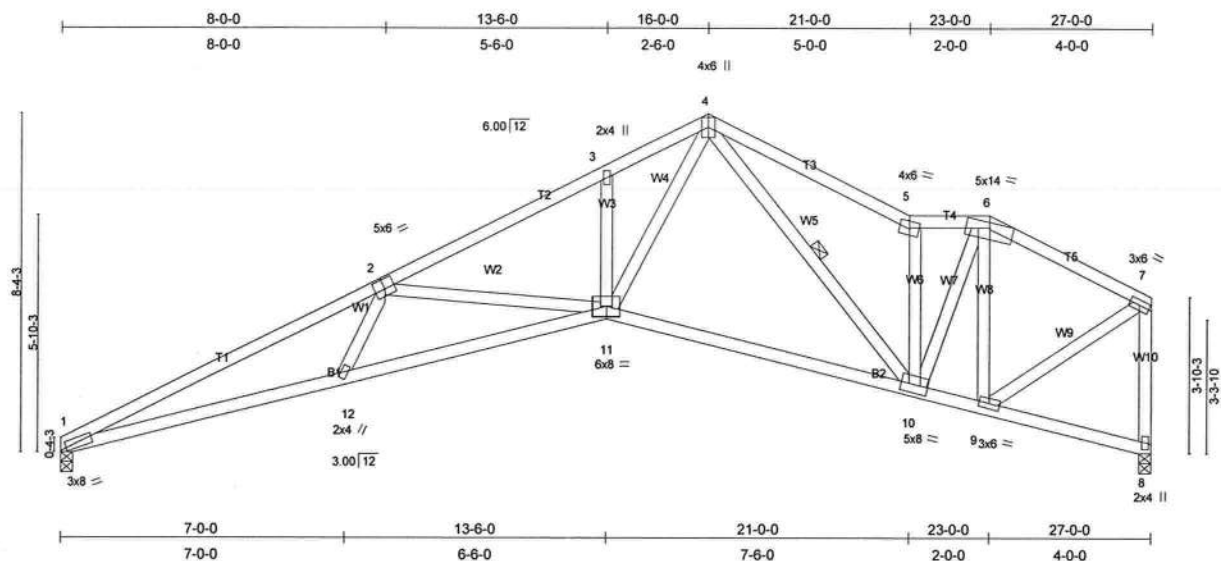


Plate Offsets (X,Y): [1:0-3-12,Edge], [2:0-3-0,0-3-0]

LOADING (psf)	SPACING 2-0-0	CSI	DEFL in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.81	Vert(LL) -0.29 11-12 >999 240	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.91	Vert(TL) -0.47 11-12 >681 180		
BCLL 10.0	Rep Stress Incr YES	WB 0.57	Horz(TL) 0.30 8 n/a n/a		
BCDL 5.0	Code FBC2004/TPI2002	(Matrix)			
				Weight: 153 lb	

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-10

REACTIONS (lb/size) 1=1122/0-3-8, 8=1122/0-3-8
Max Horz 1=230(load case 5)
Max Uplift 1=368(load case 5), 8=352(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-3678/1289, 2-3=-2535/878, 3-4=-2465/957, 4-5=-1485/573, 5-6=-1252/435, 6-7=-986/325, 7-8=-1062/364
BOT CHORD 1-12=-1319/3316, 11-12=-1321/3189, 10-11=-441/1427, 9-10=-243/862, 8-9=-14/41
WEBS 2-12=0/283, 2-11=-894/541, 3-11=-175/155, 4-11=-682/1789, 4-10=-235/71, 5-10=-815/390, 6-10=-320/1066, 6-9=-710/221, 7-9=-285/974

JOINT STRESS INDEX
1 = 0.82, 2 = 0.77, 3 = 0.34, 4 = 0.85, 5 = 0.60, 6 = 0.58, 7 = 0.65, 8 = 0.61, 9 = 0.59, 10 = 0.62, 11 = 0.79 and 12 = 0.34

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Interior(1) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- Provide adequate drainage to prevent water ponding.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 368 lb uplift at joint 1 and 352 lb uplift at joint 8.

LOAD CASE(S) Standard

Job L240090	Truss T13	Truss Type SPECIAL	Qty 1	Ply 1	JOHN NORRIS - LOT 16 TW
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Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

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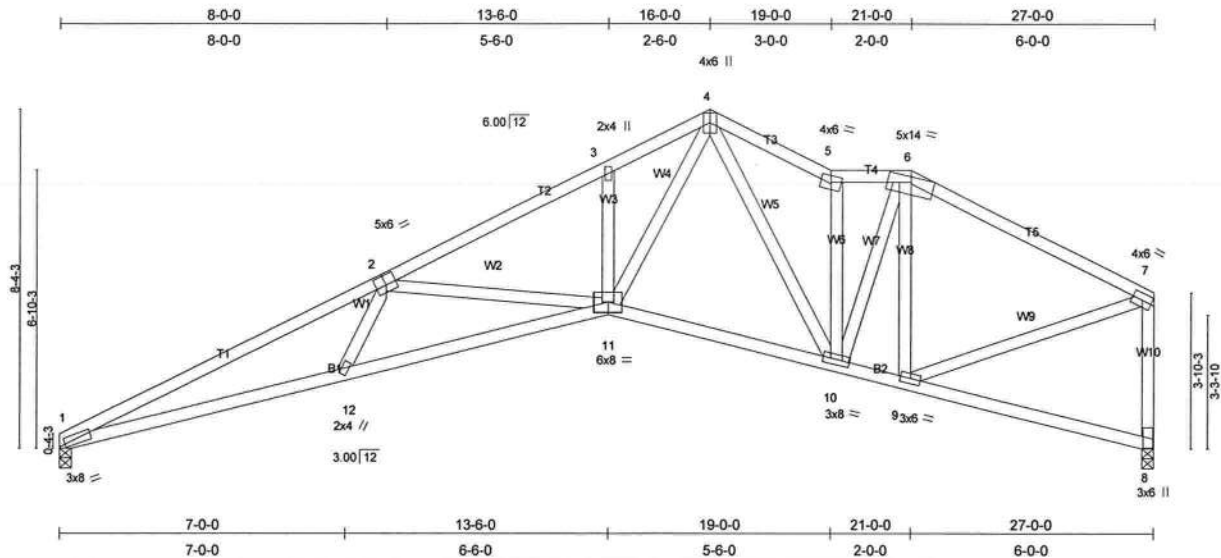


Plate Offsets (X,Y): [1:0-3-12,Edge], [2:0-3-0,0-3-0]

LOADING (psf)	SPACING	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.81	Vert(LL)	-0.30	11-12	>999	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.91	Vert(TL)	-0.49	11-12	>657		
BCLL 10.0	Rep Stress Incr YES	WB 0.57	Horz(TL)	0.30	8	n/a		
BCDL 5.0	Code FBC2004/TPI2002	(Matrix)						
							Weight: 155 lb	

LUMBER

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

BRACING

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

REACTIONS (lb/size) 1=1122/0-3-8, 8=1122/0-3-8
 Max Horz 1=230(load case 5)
 Max Uplift 1=-368(load case 5), 8=-352(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-3683/1288, 2-3=-2525/880, 3-4=-2464/965, 4-5=-1516/581, 5-6=-1325/490, 6-7=-1253/405, 7-8=-1043/371
 BOT CHORD 1-12=-1318/3321, 11-12=-1321/3187, 10-11=-434/1417, 9-10=-313/1079, 8-9=-31/80
 WEBS 2-12=0/294, 2-11=-905/538, 3-11=-177/167, 4-11=-699/1778, 4-10=-140/134, 5-10=-678/259, 6-10=-256/756, 6-9=-477/209, 7-9=-308/1064

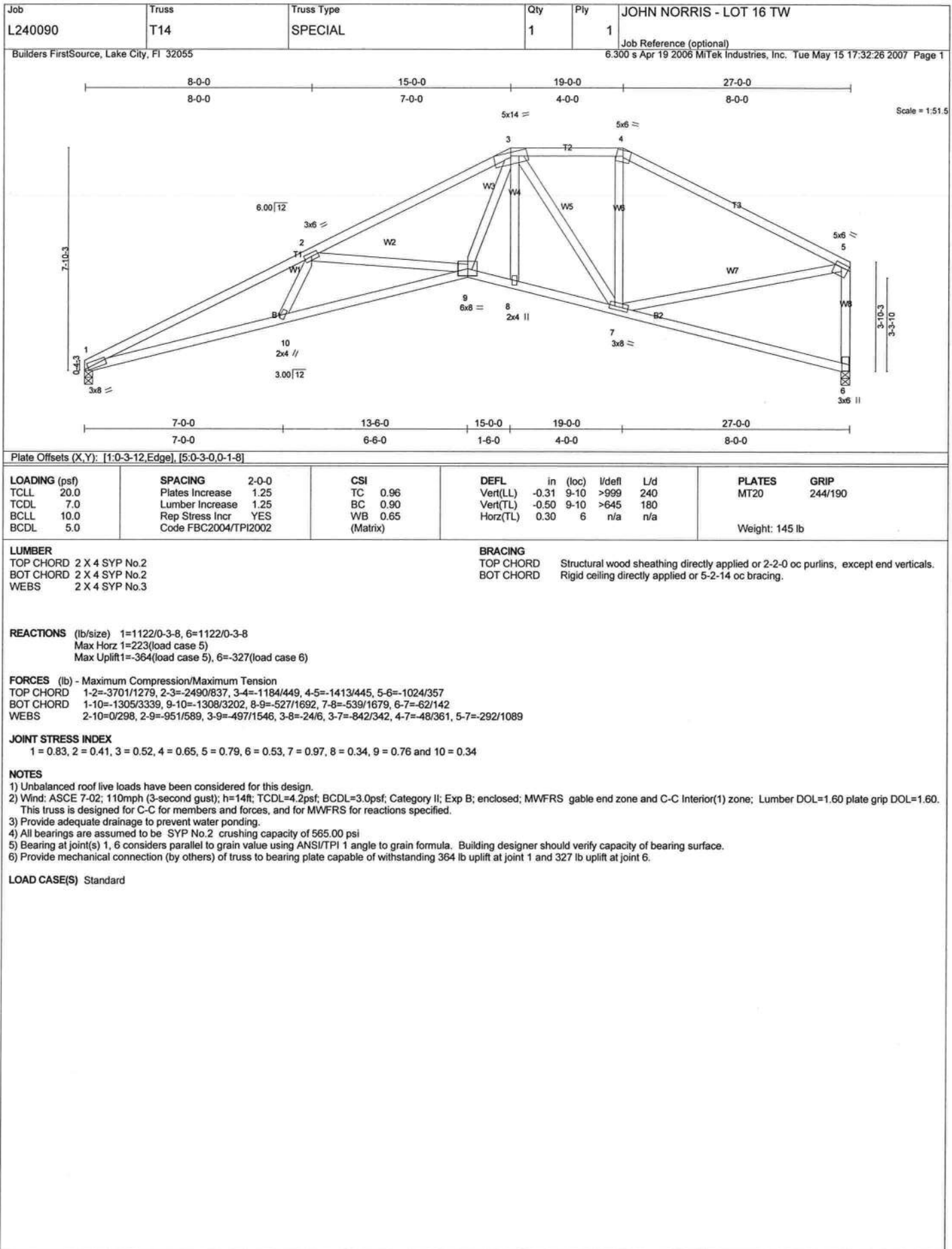
JOINT STRESS INDEX

1 = 0.83, 2 = 0.77, 3 = 0.34, 4 = 0.84, 5 = 0.52, 6 = 0.69, 7 = 0.73, 8 = 0.33, 9 = 0.58, 10 = 0.95, 11 = 0.76 and 12 = 0.34

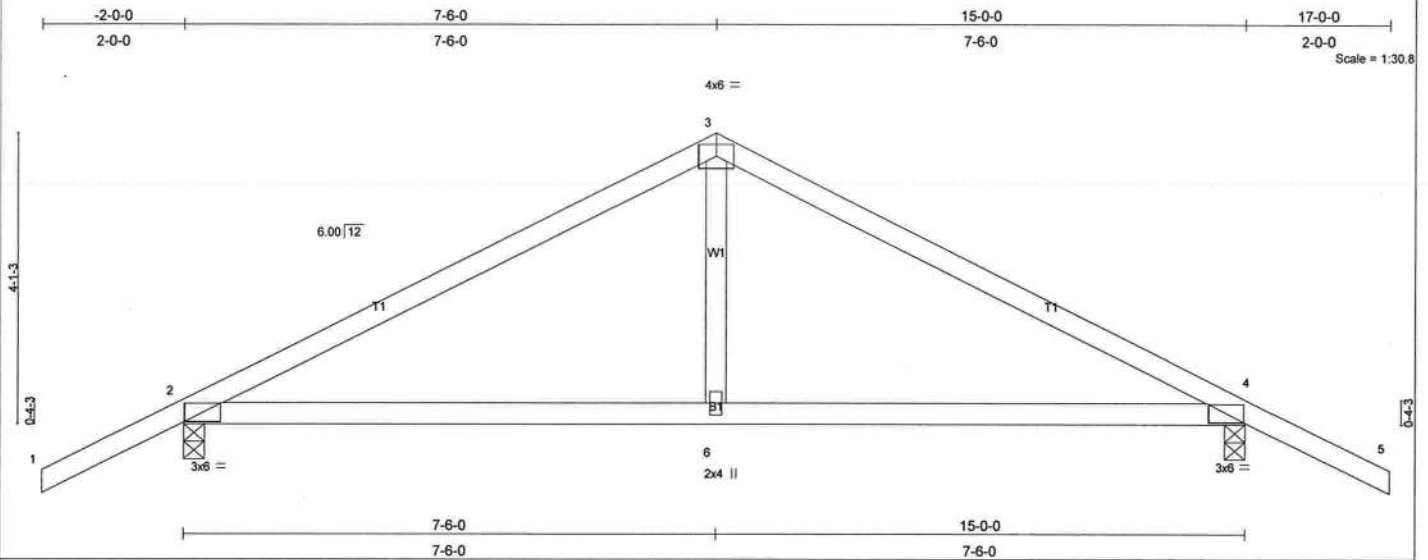
NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Interior(1) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- Provide adequate drainage to prevent water ponding.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 368 lb uplift at joint 1 and 352 lb uplift at joint 8.

LOAD CASE(S) Standard



Job L240090	Truss T15	Truss Type COMMON	Qty 1	Ply 1	JOHN NORRIS - LOT 16 TW
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.300 s Apr 19 2006 MiTek Industries, Inc. Tue May 15 17:32:26 2007 Page 1		



LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.39	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.44	Vert(LL) -0.10 4-6 >999 240		
BCLL 10.0	Lumber Increase 1.25	WB 0.09	Vert(TL) -0.15 4-6 >999 180		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.02 4 n/a n/a		
	Code FBC2004/TPI2002			Weight: 59 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=734/0-3-8, 4=734/0-3-8
 Max Horz 2=-91(load case 6)
 Max Uplift 2=-328(load case 5), 4=-328(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/47, 2-3=-862/244, 3-4=-862/244, 4-5=0/47
 BOT CHORD 2-6=-124/695, 4-6=-124/695
 WEBS 3-6=0/272

JOINT STRESS INDEX
 2 = 0.57, 3 = 0.82, 4 = 0.57 and 6 = 0.20

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Interior(1) zone; Lumber DOL=1.60 plate grip DOL=1.60.
This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 328 lb uplift at joint 2 and 328 lb uplift at joint 4.

LOAD CASE(S) Standard

Job L240090	Truss T15H	Truss Type SPECIAL	Qty 1	Ply 1	JOHN NORRIS - LOT 16 TW
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 6.300 s Apr 19 2006 Mitek Industries, Inc. Tue May 15 17:32:27 2007 Page 1		

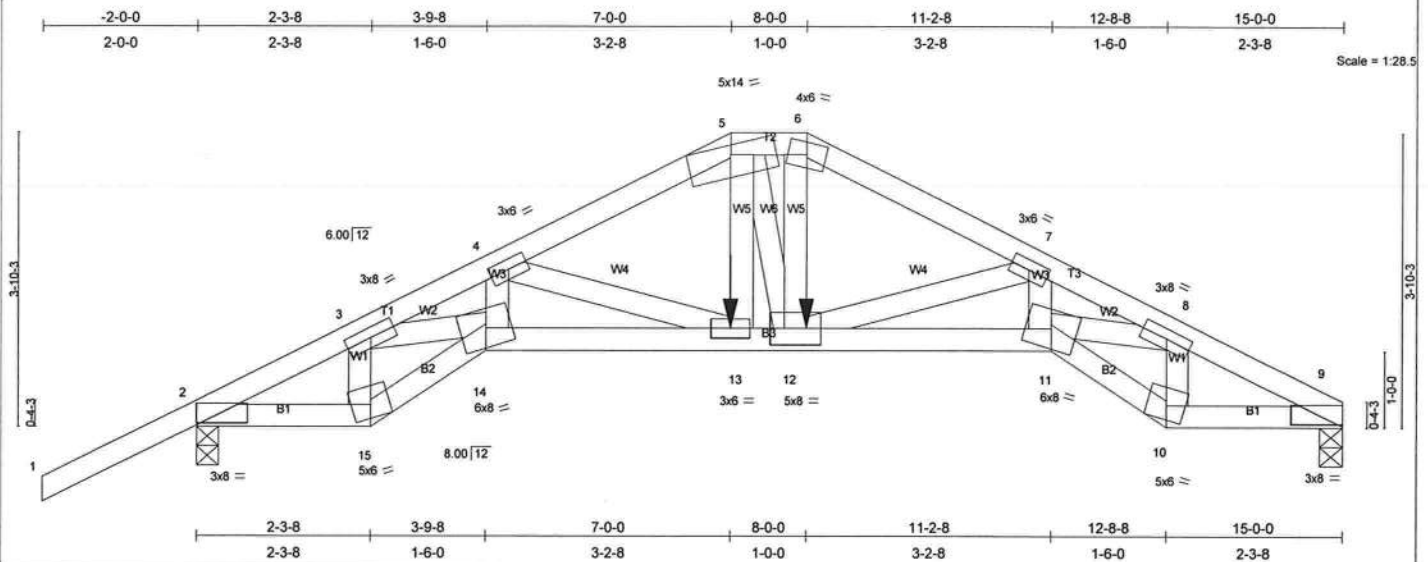


Plate Offsets (X,Y): [2-0-8-0,0-0-6], [9-0-8-0,0-0-6]

LOADING (psf)	SPACING	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.37	Vert(LL)	-0.18 13-14	>990	240	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.98	Vert(TL)	-0.29 13-14	>617	180		
BCLL 10.0	Lumber Increase 1.25	WB 0.66	Horz(TL)	0.19 9	n/a	n/a		
BCDL 5.0	Rep Stress Incr NO	(Matrix)						
	Code FBC2004/TPI2002						Weight: 81 lb	

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-9-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-2-3 oc bracing.

REACTIONS (lb/size) 9=1184/0-3-8, 2=1317/0-3-8
Max Horz 2=112(load case 4)
Max Uplift 9=485(load case 5), 2=620(load case 4)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/47, 2-3=-2203/850, 3-4=-4270/1707, 4-5=-2719/1150, 5-6=-2514/1105, 6-7=-2751/1167, 7-8=-4316/1763, 8-9=-2309/951
BOT CHORD 2-15=-701/1879, 14-15=-758/2061, 13-14=-1456/3646, 12-13=-975/2477, 11-12=-1445/3676, 10-11=-864/2176, 9-10=-798/1987
WEBS 3-15=-1052/450, 3-14=-864/2057, 4-14=-328/1013, 4-13=-1285/530, 5-13=-417/980, 6-12=-450/1025, 7-12=-1280/551, 7-11=-370/1044, 8-11=-760/1984, 8-10=-1059/447, 5-12=-93/203

JOINT STRESS INDEX

2 = 0.70, 3 = 0.84, 4 = 0.75, 5 = 0.62, 6 = 0.58, 7 = 0.77, 8 = 0.81, 9 = 0.70, 10 = 0.60, 11 = 0.84, 12 = 0.31, 13 = 0.64, 14 = 0.79 and 15 = 0.57

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-02; 110mph (3-second gust); h=14ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; Lumber DOL=1.60 plate grip DOL=1.60.
- 3) Provide adequate drainage to prevent water ponding.
- 4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 485 lb uplift at joint 9 and 620 lb uplift at joint 2.
- 6) Girder carries tie-in span(s): 2-8-2 from 7-0-0 to 8-0-0; 6-2-2 from 7-0-0 to 8-0-0
- 7) Girder carries hip end with 7-0-0 end setback.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 539 lb down and 277 lb up at 8-0-0, and 539 lb down and 277 lb up at 7-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) 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

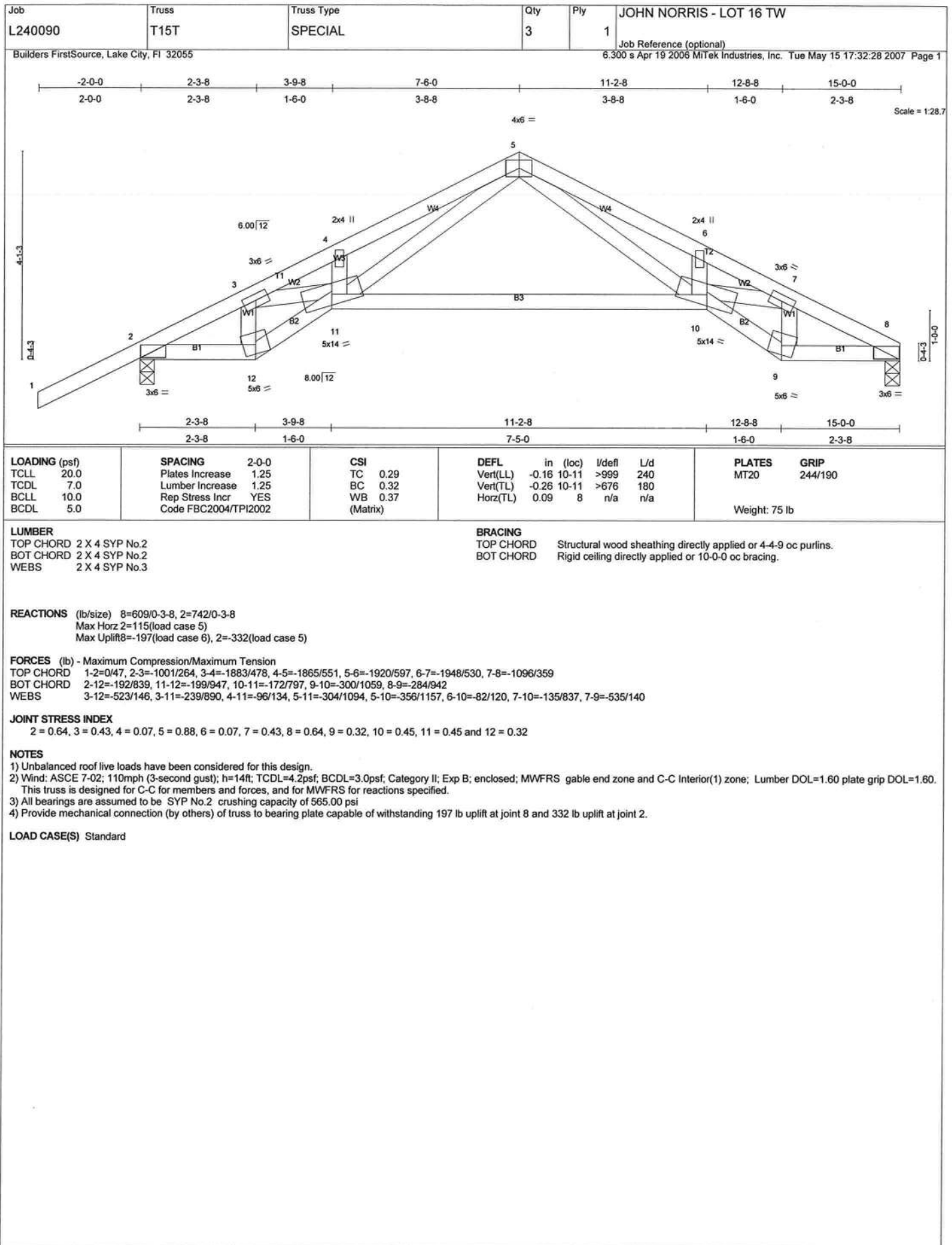
1) Regular: Lumber Increase=1.25, Plate Increase=1.25

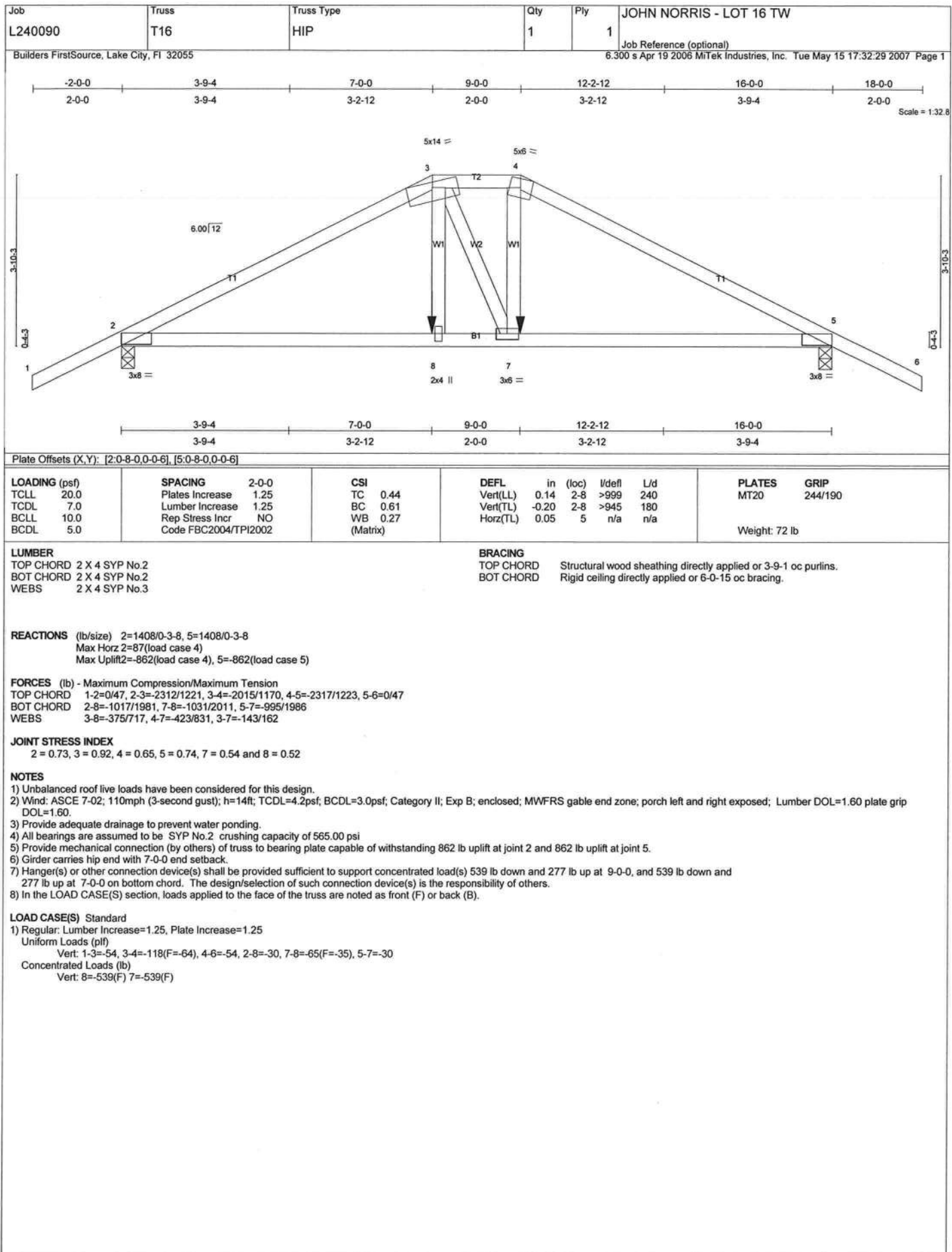
Uniform Loads (plf)

Vert: 1-5=-54, 5-6=-68(F=-14), 6-9=-54, 2-15=-30, 14-15=-30, 13-14=-30, 12-13=-112(F=82), 11-12=-30, 10-11=-30, 9-10=-30

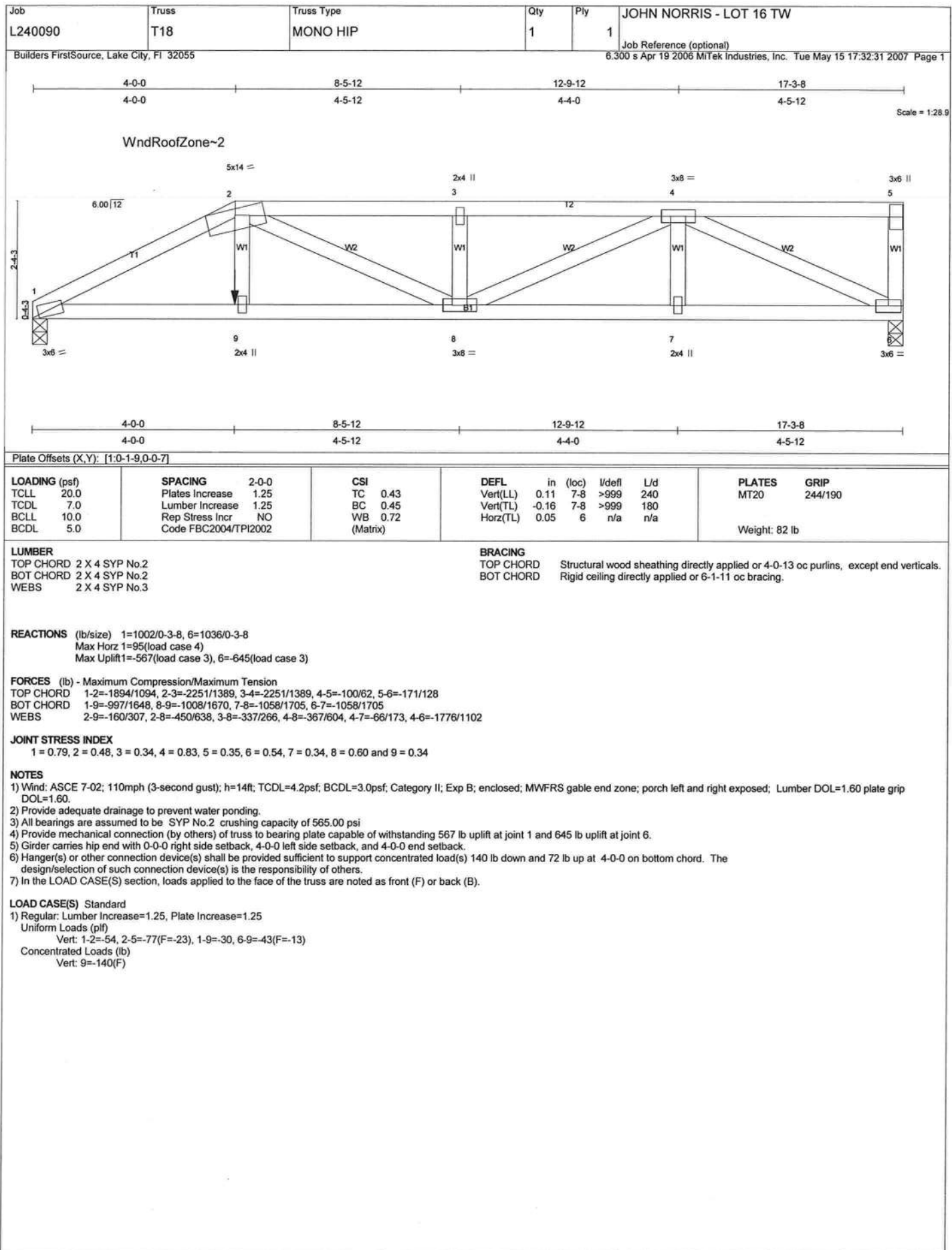
Concentrated Loads (lb)

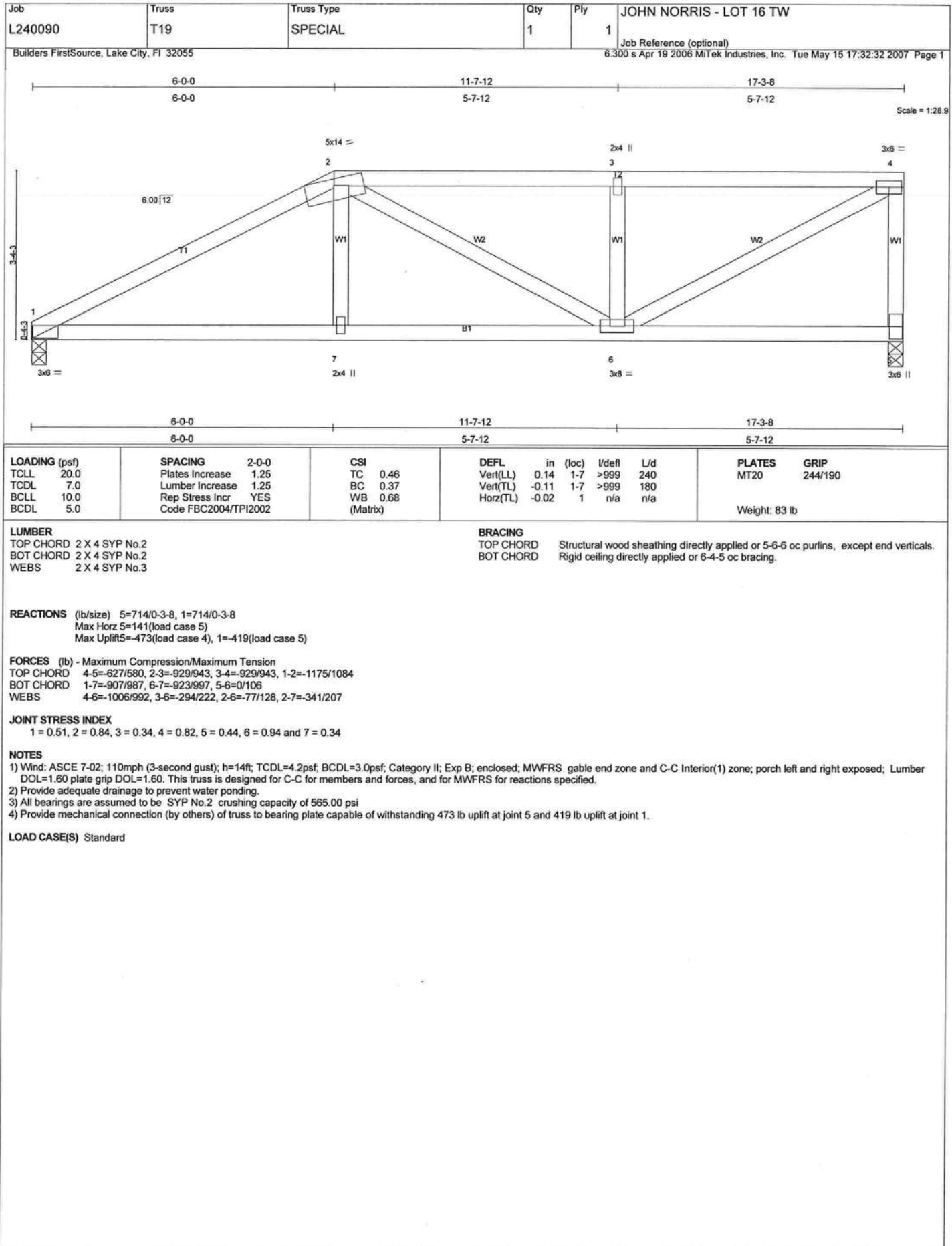
Vert: 13=-539(F) 12=-539(F)





MAY 15, 2007, TRUSS DESIGN ENGINEER:
THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987
STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196
16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549



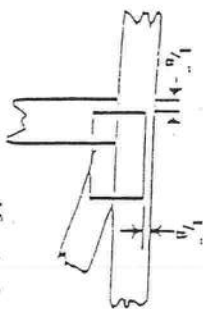


Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless dimensions indicate otherwise. Dimensions are in inches. Apply plates to both sides of truss and secure with bolts.



For 1 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



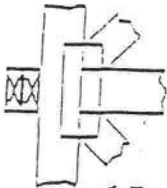
The first dimension is the width perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING



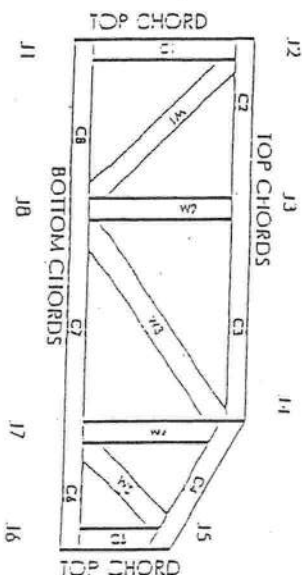
Indicates location of required continuous lateral bracing.

BEARINGS



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

Numbering System

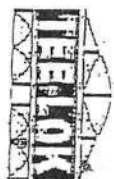


JOINTS AND CHORDS ARE NUMBERED CLOCKWISE AROUND THE TRUSS STARTING AT THE LOWEST JOINT FARTHEST TO THE LEFT.

WEBS ARE NUMBERED FROM LEFT TO RIGHT

CONNECTOR PLATE CODE APPROVALS

BOCA	96-31, 96-67
ICBO	3907, 4922
SACCI	9667, 9432A
WISC/DIIIIR	960022-W, 970036-11
IIR	561



Mittek Engineering Reference Sheet: H11-7473

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
2. Cut members to bear tightly against each other.
3. Place plates on each face of truss at each joint and embed fully. Avoid knots and wane at joint locations.
4. Unless otherwise noted, locate chord splices at 1/2 panel length (1.5' 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 the rebar and 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 lusses are the responsibility of others unless shown.
13. Do not overload roof or floor lusses with loads of construction materials.
14. Do not cut or alter truss member or plate without prior approval of a professional engineer.
15. Care should be exercised in handling, erection and installation of lusses.

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs
Residential Whole Building Performance Method A

Project Name: **Sierra Model - Thornwood Estates**
Address:
City, State: ,
Owner: **John Norris**
Climate Zone: **North**

Builder:
Permitting Office:
Permit Number:
Jurisdiction Number:

1. New construction or existing New ☐
2. Single family or multi-family Single family ☐
3. Number of units, if multi-family 1 ☐
4. Number of Bedrooms 3 ☐
5. Is this a worst case? Yes ☐
6. Conditioned floor area (ft²) 1536 ft² ☐
7. Glass type¹ and area: (Label reqd. by 13-104.4.5 if not default)
 - a. U-factor: Description Area
(or Single or Double DEFAULT) 7a. (Dble Default) 127.0 ft² ☐
 - b. SHGC:
(or Clear or Tint DEFAULT) 7b. (Clear) 127.0 ft² ☐
8. Floor types
 - a. Slab-On-Grade Edge Insulation R=0.0, 201.0(p) ft ☐
 - b. N/A ☐
 - c. N/A ☐
9. Wall types
 - a. Frame, Wood, Exterior R=13.0, 1425.0 ft² ☐
 - b. N/A ☐
 - c. N/A ☐
 - d. N/A ☐
 - e. N/A ☐
10. Ceiling types
 - a. Under Attic R=30.0, 1600.0 ft² ☐
 - b. N/A ☐
 - c. N/A ☐
11. Ducts
 - a. Sup: Unc. Ret: Unc. AH: Attic Sup. R=6.0, 42.0 ft ☐
 - b. N/A ☐

12. Cooling systems
 - a. Central Unit/Split Cap: 32.0 kBtu/hr
SEER: 13.00 ☐
 - b. N/A ☐
 - c. N/A ☐
13. Heating systems
 - a. Electric Heat Pump/Split Cap: 32.0 kBtu/hr
HSPF: 8.50 ☐
 - b. N/A ☐
 - c. N/A ☐
14. Hot water systems
 - a. N/A ☐
 - b. N/A ☐
 - c. Conservation credits
(HR-Heat recovery, Solar
DHP-Dedicated heat pump) ☐
15. HVAC credits PT, CF, ☐
(CF-Ceiling fan, CV-Cross ventilation,
HF-Whole house fan,
PT-Programmable Thermostat,
MZ-C-Multizone cooling,
MZ-H-Multizone heating)

Glass/Floor Area: 0.08

Total as-built points: 20896

Total base points: 22573

PASS

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

PREPARED BY: W. J. H. Lee

DATE: 5/2/07

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

OWNER/AGENT: _____

DATE: _____

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



BUILDING OFFICIAL: _____

DATE: _____

¹ 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: , , ,

PERMIT #:

BASE				AS-BUILT							
GLASS TYPES											
.18 X Conditioned X BSPM = Points Floor Area				Type/SC	Overhang Ornt Len Hgt			Area X SPM X SOF = Points			
.18	1536.0	18.59	5140.0	1.Double, Clear	W	1.0	6.0	18.0	38.52	0.97	672.0
				2.Double, Clear	W	1.0	6.0	25.0	38.52	0.97	934.0
				3.Double, Clear	W	1.0	6.0	9.0	38.52	0.97	336.0
				4.Double, Clear	E	1.0	6.0	45.0	42.06	0.97	1835.0
				5.Double, Clear	E	1.0	6.0	30.0	42.06	0.97	1223.0
				As-Built Total:			127.0			5000.0	
WALL TYPES				Area X BSPM = Points		Type	R-Value		Area X SPM = Points		
Adjacent	0.0	0.00	0.0	1. Frame, Wood, Exterior		13.0		1425.0	1.50	2137.5	
Exterior	1425.0	1.70	2422.5								
Base Total:		1425.0	2422.5	As-Built Total:				1425.0	2137.5		
DOOR TYPES				Area X BSPM = Points		Type			Area X SPM = Points		
Adjacent	0.0	0.00	0.0	1.Exterior Insulated				48.0	4.10	196.8	
Exterior	48.0	6.10	292.8								
Base Total:		48.0	292.8	As-Built Total:				48.0	196.8		
CEILING TYPES				Area X BSPM = Points		Type	R-Value		Area X SPM X SCM = Points		
Under Attic	1536.0	1.73	2657.3	1. Under Attic		30.0		1600.0	1.73 X 1.00	2768.0	
Base Total:		1536.0	2657.3	As-Built Total:				1600.0	2768.0		
FLOOR TYPES				Area X BSPM = Points		Type	R-Value		Area X SPM = Points		
Slab	201.0(p)	-37.0	-7437.0	1. Slab-On-Grade Edge Insulation		0.0		201.0(p)	-41.20	-8281.2	
Raised	0.0	0.00	0.0								
Base Total:			-7437.0	As-Built Total:				201.0	-8281.2		
INFILTRATION				Area X BSPM = Points				Area X SPM = Points			
		1536.0	10.21	15682.6				1536.0	10.21	15682.6	

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

ADDRESS: , , ,

PERMIT #:

BASE				AS-BUILT						
Summer Base Points: 18758.1				Summer As-Built Points: 17503.7						
Total Summer Points	X System Multiplier	=	Cooling Points	Total Component (System - Points)	X Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	=	Cooling Points
18758.1	0.3250		6096.4	(sys 1: Central Unit 32000btuh ,SEER/EFF(13.0) Ducts:Unc(S),Unc(R),Att(AH),R6.0(INS) 17504 1.00 (1.09 x 1.147 x 1.11) 0.260 0.902 5699.8 17503.7 1.00 1.388 0.260 0.902 5699.8						

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

BASE				AS-BUILT						
GLASS TYPES										
.18 X	Conditioned	X BWPM =	Points	Type/SC	Overhang Ornt Len Hgt	Area X	WPM X	WOF =	Points	
Floor Area										
.18	1536.0	20.17	5577.0	1.Double, Clear	W 1.0 6.0	18.0	20.73	1.01	376.0	
				2.Double, Clear	W 1.0 6.0	25.0	20.73	1.01	522.0	
				3.Double, Clear	W 1.0 6.0	9.0	20.73	1.01	188.0	
				4.Double, Clear	E 1.0 6.0	45.0	18.79	1.02	858.0	
				5.Double, Clear	E 1.0 6.0	30.0	18.79	1.02	572.0	
				As-Built Total:		127.0			2516.0	
WALL TYPES				Type	R-Value	Area X	WPM =	Points		
Adjacent	0.0	0.00	0.0	1. Frame, Wood, Exterior	13.0	1425.0	3.40		4845.0	
Exterior	1425.0	3.70	5272.5							
Base Total:	1425.0		5272.5	As-Built Total:		1425.0			4845.0	
DOOR TYPES				Type		Area X	WPM =	Points		
Adjacent	0.0	0.00	0.0	1.Exterior Insulated		48.0	8.40		403.2	
Exterior	48.0	12.30	590.4							
Base Total:	48.0		590.4	As-Built Total:		48.0			403.2	
CEILING TYPES				Type	R-Value	Area X	WPM X WCM =	Points		
Under Attic	1536.0	2.05	3148.8	1. Under Attic	30.0	1600.0	2.05 X 1.00		3280.0	
Base Total:	1536.0		3148.8	As-Built Total:		1600.0			3280.0	
FLOOR TYPES				Type	R-Value	Area X	WPM =	Points		
Slab	201.0(p)	8.9	1788.9	1. Slab-On-Grade Edge Insulation	0.0	201.0(p)	18.80		3778.8	
Raised	0.0	0.00	0.0							
Base Total:			1788.9	As-Built Total:		201.0			3778.8	
INFILTRATION						Area X	WPM =	Points		
	1536.0	-0.59	-906.2			1536.0	-0.59		-906.2	

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

BASE			AS-BUILT						
Winter Base Points: 15471.4			Winter As-Built Points: 13916.8						
Total Winter Points	X System Multiplier	= Heating Points	Total Component (System - Points)	X Cap Ratio (DM x DSM x AHU)	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Heating Points	
15471.4	0.5540	8571.1	(sys 1: Electric Heat Pump 32000 btuh ,EFF(8.5) Ducts:Unc(S),Unc(R),Att(AH),R6.0 13916.8 1.000 (1.069 x 1.169 x 1.10) 0.401 0.950 7290.9						
15471.4	0.5540	8571.1	13916.8	1.00	1.375	0.401	0.950	7290.9	

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

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

CODE COMPLIANCE STATUS											
BASE						AS-BUILT					
Cooling Points	+	Heating Points	+	Hot Water Points	= Total Points	Cooling Points	+	Heating Points	+	Hot Water Points	= Total Points
6096		8571		7905	22573	5700		7291		7905	20896

PASS

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: , , ,

PERMIT #:

6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST

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

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

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	612.1	Comply with efficiency requirements in Table 612.1.ABC.3.2. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	612.1	Spas & heated pools must have covers (except solar heated). Non-commercial pools must have a pump timer. Gas spa & pool heaters must have a minimum thermal efficiency of 78%.	
Shower heads	612.1	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distribution Systems	610.1	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated, and installed in accordance with the criteria of Section 610. Ducts in unconditioned attics: R-6 min. insulation.	
HVAC Controls	607.1	Separate readily accessible manual or automatic thermostat for each system.	
Insulation	604.1, 602.1	Ceilings-Min. R-19. Common walls-Frame R-11 or CBS R-3 both sides. Common ceiling & floors R-11.	

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE SCORE* = 85.7

The higher the score, the more efficient the home.

John Norris, , , ,

1. New construction or existing	New	___	12. Cooling systems	
2. Single family or multi-family	Single family	___	a. Central Unit/Split	Cap: 32.0 kBtu/hr
3. Number of units, if multi-family	1	___		SEER: 13.00
4. Number of Bedrooms	3	___	b. N/A	___
5. Is this a worst case?	Yes	___	c. N/A	___
6. Conditioned floor area (ft ²)	1536 ft ²	___		___
7. Glass type ¹ and area: (Label reqd. by 13-104.4.5 if not default)			13. Heating systems	
a. U-factor:	Description	Area	a. Electric Heat Pump/Split	Cap: 32.0 kBtu/hr
(or Single or Double DEFAULT)	7a. (Dble Default)	127.0 ft ²		HSPF: 8.50
b. SHGC:			b. N/A	___
(or Clear or Tint DEFAULT)	7b. (Clear)	127.0 ft ²	c. N/A	___
8. Floor types				___
a. Slab-On-Grade Edge Insulation	R=0.0, 201.0(p) ft	___	14. Hot water systems	
b. N/A	___		a. N/A	___
c. N/A	___		b. N/A	___
9. Wall types			c. Conservation credits	
a. Frame, Wood, Exterior	R=13.0, 1425.0 ft ²	___	(HR-Heat recovery, Solar	
b. N/A	___		DHP-Dedicated heat pump)	
c. N/A	___		15. HVAC credits	PT, CF, ___
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, 1600.0 ft ²	___	MZ-C-Multizone cooling,	
b. N/A	___		MZ-H-Multizone heating)	
c. N/A	___			
11. Ducts				
a. Sup: Unc. Ret: Unc. AH: Attic	Sup. R=6.0, 42.0 ft	___		
b. N/A	___			

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

Builder Signature: _____ Date: _____

Address of New Home: _____ City/FL Zip: _____



**NOTE: The home's estimated energy performance score is only available through the FLA/RES computer program. This is not a Building Energy Rating. If your score is 80 or greater (or 86 for a US EPA/DOE EnergyStarTM designation), your home may qualify for energy efficiency mortgage (EEM) incentives if you obtain a Florida Energy Gauge Rating. Contact the Energy Gauge Hotline at 321/638-1492 or see the Energy Gauge web site at www.fsec.ucf.edu for information and a list of certified Raters. For information about Florida's Energy Efficiency Code For Building Construction, contact the Department of Community Affairs at 850/487-1824.*

¹ Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.
EnergyGauge® (Version: FLRCPB v4.5.2)

BUILDING INPUT SUMMARY REPORT

PROJECT	Title: Sierra Model - Thornwood Es		Family Type: Single		Address Type: Street Address			
	Owner: John Norris		New/Existing: New		Lot #: N/A			
	# of Units: 1		Bedrooms: 3		Subdivision: N/A			
	Builder Name: (blank)		Conditioned Area: 1536		Platbook: N/A			
	Climate: North		Total Stories: 1		Street: (blank)			
	Permit Office: (blank)		Worst Case: Yes		County: (blank)			
	Jurisdiction #: (blank)		Rotate Angle: 270		City, St, Zip: , ,			
FLOORS	#	Floor Type	R-Val	Area/Perimeter	Units			
	1	Slab-On-Grade Edge Insulation	0.0	201.0(p) ft	1			
DOORS	#	Door Type	Orientation	Area	Units			
	1	Insulated	Exterior	16.0 ft²	3			
CEILINGS	#	Ceiling Type	R-Val	Area	Base Area	Units		
	1	Under Attic	30.0	1600.0 ft²	1536.0 ft²	1		
Credit Multipliers: None								
COOLING	#	System Type	Efficiency	Capacity				
	1	Central Unit/Split	SEER: 13.00	32.0 kBtu/hr				
Credit Multipliers: Ceil Fn, PT								
WALLS	#	Wall Type	Location	R-Val	Area	Units		
	1	Frame - Wood	Exterior	13.0	1425.0 ft²	1		
HEATING	#	System Type	Efficiency	Capacity				
	1	Electric Heat Pump/Split	HSPF: 8.50	32.0 kBtu/hr				
Credit Multipliers: PT								
DUCTS	#	Supply Location	Return Location	Air Handler Location	Supply R-Val	Supply Length		
	1	Uncond.	Uncond.	Attic	6.0	42.0 ft		
Credit Multipliers: None								
WATER	#	System Type	EF	Cap.	Conservation Type	Con. EF		
REFR.	#	Use Default?	Annual Operating Cost	Electric Rate				
	1	Yes	N/A	N/A				
WINDOWS	#	Panes	Tint	Ornt	Area	OH Length	OH Hght	Units
	1	Double	Clear	N	18.0 ft²	1.0 ft	6.0 ft	1
	2	Double	Clear	N	12.5 ft²	1.0 ft	6.0 ft	2
	3	Double	Clear	N	9.0 ft²	1.0 ft	6.0 ft	1
	4	Double	Clear	S	15.0 ft²	1.0 ft	6.0 ft	3
	5	Double	Clear	S	30.0 ft²	1.0 ft	6.0 ft	1
MISC	Rater Name: CodeOnlyPro		Class #: 3		Pool Size: 0			
	Rater Certification #: CodeOnlyPro		Duct Leakage Type: N/A		Pump Size: 0.00 hp			
	Area Under Fluorescent: 0.0		Visible Duct Disconnects: N/A		Dryer Type: Electric			
	Area Under Incandescent: 1536.0		Leak Free Duct System Proposed: No		Stove Type: Electric			
NOTE: Not all Rating info shown		HRV/ERV System Present?: No		Avg Ceil Hgt:				

Residential System Sizing Calculation

Summary

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

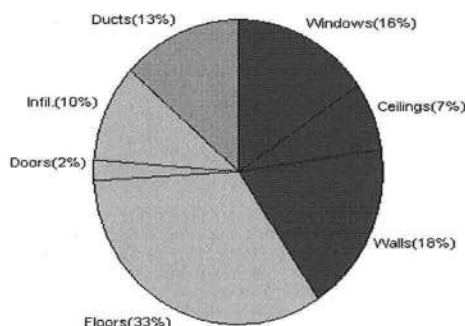
5/7/2007

Location for weather data: Gainesville - Defaults: Latitude(29) Altitude(152 ft.) Temp Range(M)					
Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(54gr.)					
Winter design temperature	33	F	Summer design temperature	92	F
Winter setpoint	70	F	Summer setpoint	75	F
Winter temperature difference	37	F	Summer temperature difference	17	F
Total heating load calculation	26206	Btuh	Total cooling load calculation	23761	Btuh
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	122.1	32000	Sensible (SHR = 0.75)	118.3	24000
Heat Pump + Auxiliary(0.0kW)	122.1	32000	Latent	230.5	8000
			Total (Electric Heat Pump)	134.7	32000

WINTER CALCULATIONS

Winter Heating Load (for 1536 sqft)

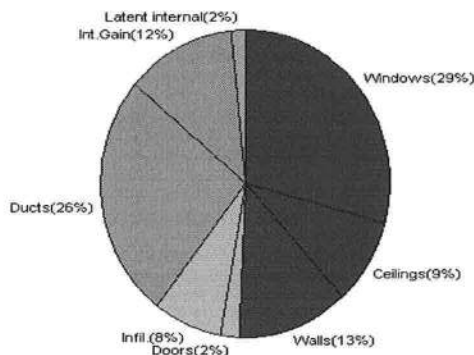
Load component		Load	
Window total	127 sqft	4088	Btuh
Wall total	1425 sqft	4680	Btuh
Door total	48 sqft	622	Btuh
Ceiling total	1600 sqft	1885	Btuh
Floor total	201 sqft	8776	Btuh
Infiltration	66 cfm	2655	Btuh
Duct loss		3501	Btuh
Subtotal		26206	Btuh
Ventilation	0 cfm	0	Btuh
TOTAL HEAT LOSS		26206	Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 1536 sqft)

Load component		Load	
Window total	127 sqft	6949	Btuh
Wall total	1425 sqft	2972	Btuh
Door total	48 sqft	470	Btuh
Ceiling total	1600 sqft	2140	Btuh
Floor total		0	Btuh
Infiltration	33 cfm	610	Btuh
Internal gain		2860	Btuh
Duct gain		4289	Btuh
Sens. Ventilation	0 cfm	0	Btuh
Total sensible gain		20291	Btuh
Latent gain(ducts)		1873	Btuh
Latent gain(infiltration)		1198	Btuh
Latent gain(ventilation)		0	Btuh
Latent gain(internal/occupants/other)		400	Btuh
Total latent gain		3470	Btuh
TOTAL HEAT GAIN		23761	Btuh



Version 8
For Florida residences only

EnergyGauge® System Sizing

PREPARED BY: John Norris

DATE: 5/7/07

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F
This calculation is for Worst Case. The house has been rotated 90 degrees.

5/7/2007

Component Loads for Whole House					
Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load
1	2, Clear, Metal, 0.87	E	18.0	32.2	579 Btuh
2	2, Clear, Metal, 0.87	E	25.0	32.2	805 Btuh
3	2, Clear, Metal, 0.87	E	9.0	32.2	290 Btuh
4	2, Clear, Metal, 0.87	W	45.0	32.2	1449 Btuh
5	2, Clear, Metal, 0.87	W	30.0	32.2	966 Btuh
	Window Total		127(sqft)		4088 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1425	3.3	4680 Btuh
	Wall Total		1425		4680 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Exterior		48	12.9	622 Btuh
	Door Total		48		622Btuh
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Vented Attic/L/Shin	30.0	1600	1.2	1885 Btuh
	Ceiling Total		1600		1885Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab On Grade	0	201.0 ft(p)	43.7	8776 Btuh
	Floor Total		201		8776 Btuh
	Envelope Subtotal:				20051 Btuh
Infiltration	Type	ACH X Volume(cuft)	walls(sqft)	CFM=	
	Natural	0.32	12288	1425	65.5
					2655 Btuh
Ductload				(DLM of 0.154)	3501 Btuh
All Zones				Sensible Subtotal All Zones	26206 Btuh

WHOLE HOUSE TOTALS

	Subtotal Sensible	26206 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	26206 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

5/7/2007

EQUIPMENT

1. Electric Heat Pump/Split	#(Outside) #(Inside)	32000 Btuh
-----------------------------	----------------------	------------

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)
(Frame types - metal, wood or insulated metal)
(U - Window U-Factor or 'DEF' for default)
(HTM - ManualJ Heat Transfer Multiplier)

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



Version 8
For Florida residences only

System Sizing Calculations - Winter

Residential Load - Room by Room Component Details

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F
This calculation is for Worst Case. The house has been rotated 90 degrees.

5/7/2007

Component Loads for Zone #1: Main

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft)	X	HTM=	Load
1	2, Clear, Metal, 0.87	E	18.0		32.2	579 Btuh
2	2, Clear, Metal, 0.87	E	25.0		32.2	805 Btuh
3	2, Clear, Metal, 0.87	E	9.0		32.2	290 Btuh
4	2, Clear, Metal, 0.87	W	45.0		32.2	1449 Btuh
5	2, Clear, Metal, 0.87	W	30.0		32.2	966 Btuh
	Window Total		127(sqft)			4088 Btuh
Walls	Type	R-Value	Area	X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1425		3.3	4680 Btuh
	Wall Total		1425			4680 Btuh
Doors	Type		Area	X	HTM=	Load
1	Insulated - Exterior		48		12.9	622 Btuh
	Door Total		48			622Btuh
Ceilings	Type/Color/Surface	R-Value	Area	X	HTM=	Load
1	Vented Attic/L/Shin	30.0	1600		1.2	1885 Btuh
	Ceiling Total		1600			1885Btuh
Floors	Type	R-Value	Size	X	HTM=	Load
1	Slab On Grade	0	201.0 ft(p)		43.7	8776 Btuh
	Floor Total		201			8776 Btuh
	Zone Envelope Subtotal:					20051 Btuh
Infiltration	Type	ACH X Volume(cuft)	walls(sqft)	CFM=		
	Natural	0.32	12288	1425	65.5	2655 Btuh
Ductload	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic) (DLM of 0.154)					3501 Btuh
Zone #1	Sensible Zone Subtotal					26206 Btuh

WHOLE HOUSE TOTALS

	Subtotal Sensible	26206 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	26206 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

5/7/2007

EQUIPMENT

1. Electric Heat Pump/Split	#(Outside) #(Inside)	32000 Btuh
-----------------------------	----------------------	------------

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)
(Frame types - metal, wood or insulated metal)
(U - Window U-Factor or 'DEF' for default)
(HTM - ManualJ Heat Transfer Multiplier)

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



Version 8
For Florida residences only

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F
This calculation is for Worst Case. The house has been rotated 90 degrees.

5/7/2007

Component Loads for Whole House												
Window	Type*		Overhang		Window Area(sqft)			HTM		Load		
	Pn/SHGC/U/InSh/ExSh/IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded			
1	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	18.0	2.5	15.5	19	55	906	Btuh	
2	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	25.0	0.0	25.0	19	55	1386	Btuh	
3	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	9.0	0.0	9.0	19	55	499	Btuh	
4	2, Clear, 0.87, B-D, N,F	W	1ft.	6ft.	45.0	0.0	45.0	19	55	2495	Btuh	
5	2, Clear, 0.87, B-D, N,F	W	1ft.	6ft.	30.0	0.0	30.0	19	55	1663	Btuh	
Window Total					127 (sqft)					6949 Btuh		
Walls	Type	R-Value/U-Value			Area(sqft)		HTM		Load			
1	Frame - Wood - Ext	13.0/0.09			1425.0		2.1		2972 Btuh			
Wall Total					1425 (sqft)				2972 Btuh			
Doors	Type				Area (sqft)		HTM		Load			
1	Insulated - Exterior				48.0		9.8		470 Btuh			
Door Total					48 (sqft)				470 Btuh			
Ceilings	Type/Color/Surface	R-Value			Area(sqft)		HTM		Load			
1	Vented Attic/Light/Shingle	30.0			1600.0		1.3		2140 Btuh			
Ceiling Total					1600 (sqft)				2140 Btuh			
Floors	Type	R-Value			Size		HTM		Load			
1	Slab On Grade	0.0			201 (ft(p))		0.0		0 Btuh			
Floor Total					201.0 (sqft)				0 Btuh			
Envelope Subtotal:										12532 Btuh		
Infiltration	Type	ACH			Volume(cuft) wall area(sqft)		CFM=		Load			
	SensibleNatural	0.16			12288 1425		65.5		610 Btuh			
Internal gain	Occupants			Btuh/occupant			Appliance		Load			
	2			X 230 +			2400		2860 Btuh			
Sensible Envelope Load:										16002 Btuh		
Duct load	(DGM of 0.268)										4289 Btuh	
Sensible Load All Zones										20291 Btuh		

Manual J Summer Calculations

Residential Load - Component Details (continued)

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

5/7/2007

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	16002 Btuh
	Sensible Duct Load	4289 Btuh
	Total Sensible Zone Loads	20291 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	20291 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	1198 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	1873 Btuh
	Latent occupant gain (2 people @ 200 Btuh per person)	400 Btuh
	Latent other gain	0 Btuh
	Latent total gain	3470 Btuh
	TOTAL GAIN	23761 Btuh

EQUIPMENT

1. Central Unit/Split	#(Outside) #(Inside)	32000 Btuh
-----------------------	----------------------	------------

*Key: Window types (Pn - Number of panes of glass)

(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(B), Draperies(D) or Roller Shades(R))

(ExSh - Exterior shading device: none(N) or numerical value)

(BS - Insect screen: none(N), Full(F) or Half(H))

(Ornt - compass orientation)



Version 8
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System Sizing Calculations - Summer

Residential Load - Room by Room Component Details

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F
This calculation is for Worst Case. The house has been rotated 90 degrees.

5/7/2007

Component Loads for Zone #1: Main

Window	Type*	Ornt	Overhang		Window Area(sqft)			HTM		Load	
	Pn/SHGC/U/InSh/ExSh/IS		Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	18.0	2.5	15.5	19	55	906	Btuh
2	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	25.0	0.0	25.0	19	55	1386	Btuh
3	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	9.0	0.0	9.0	19	55	499	Btuh
4	2, Clear, 0.87, B-D, N,F	W	1ft.	6ft.	45.0	0.0	45.0	19	55	2495	Btuh
5	2, Clear, 0.87, B-D, N,F	W	1ft.	6ft.	30.0	0.0	30.0	19	55	1663	Btuh
Window Total					127 (sqft)					6949 Btuh	
Walls	Type	R-Value/U-Value			Area(sqft)		HTM		Load		
1	Frame - Wood - Ext	13.0/0.09			1425.0		2.1		2972 Btuh		
Wall Total					1425 (sqft)				2972 Btuh		
Doors	Type				Area (sqft)		HTM		Load		
1	Insulated - Exterior				48.0		9.8		470 Btuh		
Door Total					48 (sqft)				470 Btuh		
Ceilings	Type/Color/Surface	R-Value			Area(sqft)		HTM		Load		
1	Vented Attic/Light/Shingle	30.0			1600.0		1.3		2140 Btuh		
Ceiling Total					1600 (sqft)				2140 Btuh		
Floors	Type	R-Value			Size		HTM		Load		
1	Slab On Grade	0.0			201 (ft(p))		0.0		0 Btuh		
Floor Total					201.0 (sqft)				0 Btuh		
Zone Envelope Subtotal:										12532 Btuh	
Infiltration	Type	ACH			Volume(cuft)		wall area(sqft)		CFM=		Load
	SensibleNatural	0.16			12288		1425		32.8		610 Btuh
Internal gain	Occupants			Btuh/occupant			Appliance		Load		
	2			X 230			+		2400		2860 Btuh
Sensible Envelope Load:										16002 Btuh	
Duct load	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic)							(DGM of 0.268)		4289 Btuh	
Sensible Zone Load										20291 Btuh	

Manual J Summer Calculations

Residential Load - Component Details (continued)

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

5/7/2007

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	16002 Btuh
	Sensible Duct Load	4289 Btuh
	Total Sensible Zone Loads	20291 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	20291 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	1198 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	1873 Btuh
	Latent occupant gain (2 people @ 200 Btuh per person)	400 Btuh
	Latent other gain	0 Btuh
	Latent total gain	3470 Btuh
	TOTAL GAIN	23761 Btuh

EQUIPMENT

1. Central Unit/Split	#(Outside) #(Inside)	32000 Btuh
-----------------------	----------------------	------------

*Key: Window types (Pn - Number of panes of glass)

(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(B), Draperies(D) or Roller Shades(R))

(ExSh - Exterior shading device: none(N) or numerical value)

(BS - Insect screen: none(N), Full(F) or Half(H))

(Ornt - compass orientation)



Version 8
For Florida residences only

Residential Window Diversity

MidSummer

John Norris

Project Title:
Sierra Model - Thornwood Estates

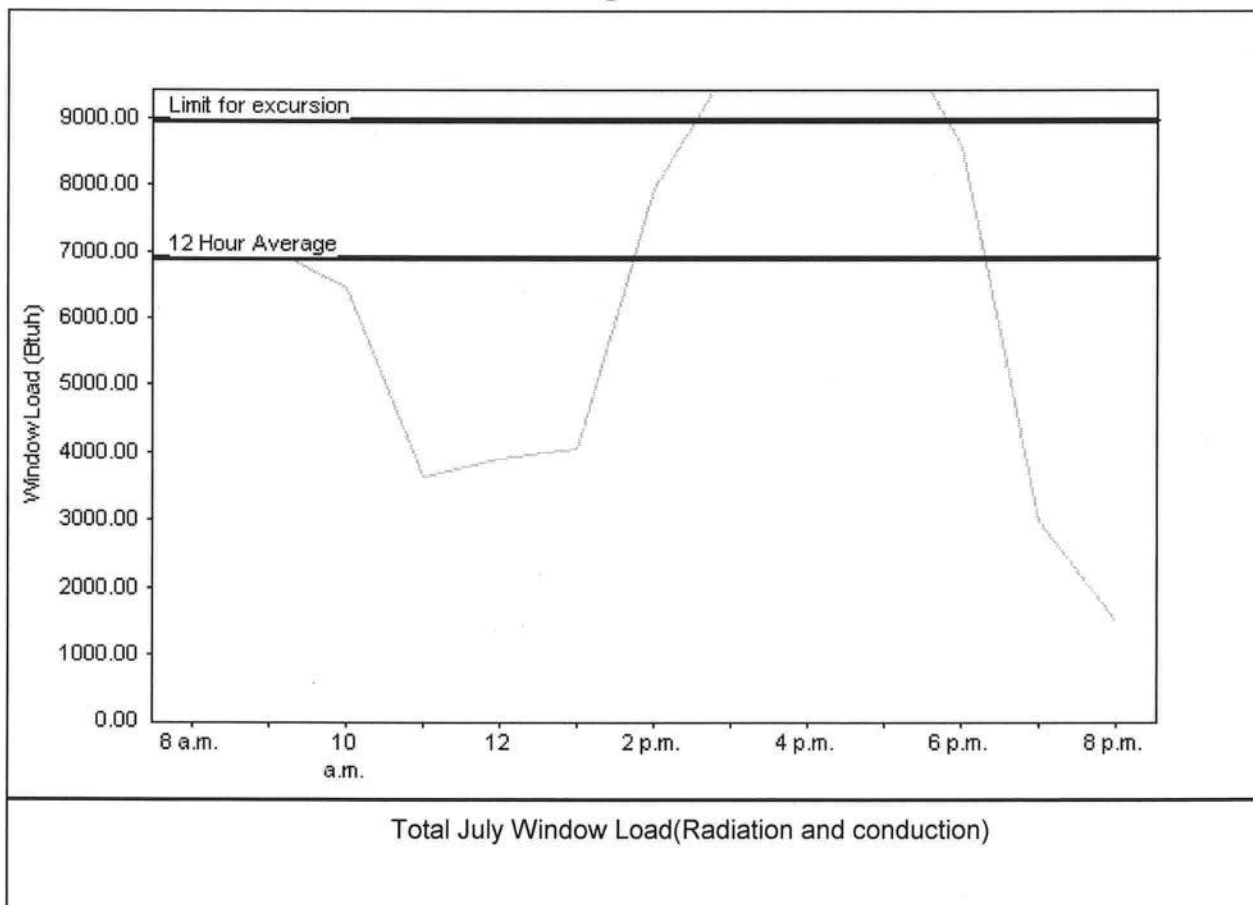
Code Only
Professional Version
Climate: North

5/7/2007

Weather data for: Gainesville - Defaults

Summer design temperature	92 F	Average window load for July	6900 Btuh
Summer setpoint	75 F	Peak window load for July	10769 Btu
Summer temperature difference	17 F	Excursion limit(130% of Ave.)	8970 Btuh
Latitude	29 North	Window excursion (July)	1799 Btuh

WINDOW Average and Peak Loads



This application has glass areas that produce large heat gains for part of the day. Variable air volume devices are required to overcome spikes in solar gain for one or more rooms. Install a zoned system or provide zone control for problem rooms. Single speed equipment may not be suitable for the application.

EnergyGauge® System Sizing for Florida residences only

PREPARED BY: _____

DATE: _____

EnergyGauge® FLRCPB v4.5.2



Residential System Sizing Calculation

Summary

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

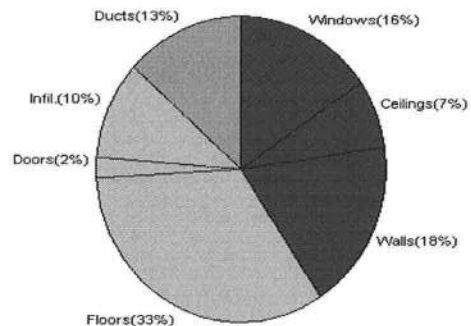
5/7/2007

Location for weather data: Gainesville - Defaults: Latitude(29) Altitude(152 ft.) Temp Range(M)			
Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(54gr.)			
Winter design temperature	33 F	Summer design temperature	92 F
Winter setpoint	70 F	Summer setpoint	75 F
Winter temperature difference	37 F	Summer temperature difference	17 F
Total heating load calculation	26206 Btuh	Total cooling load calculation	23761 Btuh
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	122.1 32000	Sensible (SHR = 0.75)	118.3 24000
Heat Pump + Auxiliary(0.0kW)	122.1 32000	Latent	230.5 8000
		Total (Electric Heat Pump)	134.7 32000

WINTER CALCULATIONS

Winter Heating Load (for 1536 sqft)

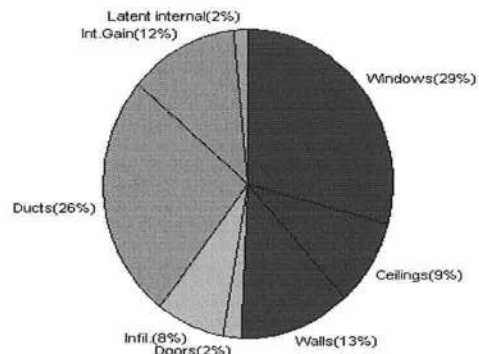
Load component		Load	
Window total	127 sqft	4088	Btuh
Wall total	1425 sqft	4680	Btuh
Door total	48 sqft	622	Btuh
Ceiling total	1600 sqft	1885	Btuh
Floor total	201 sqft	8776	Btuh
Infiltration	66 cfm	2655	Btuh
Duct loss		3501	Btuh
Subtotal		26206	Btuh
Ventilation	0 cfm	0	Btuh
TOTAL HEAT LOSS		26206	Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 1536 sqft)

Load component		Load	
Window total	127 sqft	6949	Btuh
Wall total	1425 sqft	2972	Btuh
Door total	48 sqft	470	Btuh
Ceiling total	1600 sqft	2140	Btuh
Floor total		0	Btuh
Infiltration	33 cfm	610	Btuh
Internal gain		2860	Btuh
Duct gain		4289	Btuh
Sens. Ventilation	0 cfm	0	Btuh
Total sensible gain		20291	Btuh
Latent gain(ducts)		1873	Btuh
Latent gain(infiltration)		1198	Btuh
Latent gain(ventilation)		0	Btuh
Latent gain(internal/occupants/other)		400	Btuh
Total latent gain		3470	Btuh
TOTAL HEAT GAIN		23761	Btuh



Version 8
For Florida residences only

EnergyGauge® System Sizing

PREPARED BY: _____

DATE: _____

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F

5/7/2007

This calculation is for Worst Case. The house has been rotated 90 degrees.

Component Loads for Whole House

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft)	X	HTM=	Load
1	2, Clear, Metal, 0.87	E	18.0		32.2	579 Btuh
2	2, Clear, Metal, 0.87	E	25.0		32.2	805 Btuh
3	2, Clear, Metal, 0.87	E	9.0		32.2	290 Btuh
4	2, Clear, Metal, 0.87	W	45.0		32.2	1449 Btuh
5	2, Clear, Metal, 0.87	W	30.0		32.2	966 Btuh
Window Total			127(sqft)			4088 Btuh
Walls	Type	R-Value	Area	X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1425		3.3	4680 Btuh
Wall Total			1425			4680 Btuh
Doors	Type		Area	X	HTM=	Load
1	Insulated - Exterior		48		12.9	622 Btuh
Door Total			48			622Btuh
Ceilings	Type/Color/Surface	R-Value	Area	X	HTM=	Load
1	Vented Attic/L/Shin	30.0	1600		1.2	1885 Btuh
Ceiling Total			1600			1885Btuh
Floors	Type	R-Value	Size	X	HTM=	Load
1	Slab On Grade	0	201.0 ft(p)		43.7	8776 Btuh
Floor Total			201			8776 Btuh
Envelope Subtotal:						20051 Btuh
Infiltration	Type	ACH X Volume(cuft)	walls(sqft)	CFM=		
	Natural	0.32 12288	1425	65.5		2655 Btuh
Ductload					(DLM of 0.154)	3501 Btuh
All Zones	Sensible Subtotal All Zones					26206 Btuh

WHOLE HOUSE TOTALS

	Subtotal Sensible	26206 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	26206 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

5/7/2007

EQUIPMENT

1. Electric Heat Pump/Split	#(Outside) #(Inside)	32000 Btuh
-----------------------------	----------------------	------------

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)
(Frame types - metal, wood or insulated metal)
(U - Window U-Factor or 'DEF' for default)
(HTM - ManualJ Heat Transfer Multiplier)

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



Version 8
For Florida residences only

System Sizing Calculations - Winter

Residential Load - Room by Room Component Details

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F
This calculation is for Worst Case. The house has been rotated 90 degrees.

5/7/2007

Component Loads for Zone #1: Main

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft)	X	HTM=	Load
1	2, Clear, Metal, 0.87	E	18.0		32.2	579 Btuh
2	2, Clear, Metal, 0.87	E	25.0		32.2	805 Btuh
3	2, Clear, Metal, 0.87	E	9.0		32.2	290 Btuh
4	2, Clear, Metal, 0.87	W	45.0		32.2	1449 Btuh
5	2, Clear, Metal, 0.87	W	30.0		32.2	966 Btuh
	Window Total		127(sqft)			4088 Btuh
Walls	Type	R-Value	Area	X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1425		3.3	4680 Btuh
	Wall Total		1425			4680 Btuh
Doors	Type		Area	X	HTM=	Load
1	Insulated - Exterior		48		12.9	622 Btuh
	Door Total		48			622Btuh
Ceilings	Type/Color/Surface	R-Value	Area	X	HTM=	Load
1	Vented Attic/L/Shin	30.0	1600		1.2	1885 Btuh
	Ceiling Total		1600			1885Btuh
Floors	Type	R-Value	Size	X	HTM=	Load
1	Slab On Grade	0	201.0 ft(p)		43.7	8776 Btuh
	Floor Total		201			8776 Btuh
	Zone Envelope Subtotal:					20051 Btuh
Infiltration	Type	ACH X	Volume(cuft)	walls(sqft)	CFM=	Load
	Natural	0.32	12288	1425	65.5	2655 Btuh
Ductload	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic) (DLM of 0.154)					3501 Btuh
Zone #1	Sensible Zone Subtotal					26206 Btuh

WHOLE HOUSE TOTALS

	Subtotal Sensible	26206 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	26206 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

5/7/2007

EQUIPMENT

1. Electric Heat Pump/Split	#(Outside) #(Inside)	32000 Btuh
-----------------------------	----------------------	------------

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)
(Frame types - metal, wood or insulated metal)
(U - Window U-Factor or 'DEF' for default)
(HTM - ManualJ Heat Transfer Multiplier)

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



Version 8
For Florida residences only

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F
This calculation is for Worst Case. The house has been rotated 90 degrees.

5/7/2007

Component Loads for Whole House

Window	Type*	Ornt	Overhang		Window Area(sqft)			HTM		Load		
	Pn/SHGC/U/InSh/ExSh/IS		Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded			
1	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	18.0	2.5	15.5	19	55	906	Btuh	
2	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	25.0	0.0	25.0	19	55	1386	Btuh	
3	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	9.0	0.0	9.0	19	55	499	Btuh	
4	2, Clear, 0.87, B-D, N,F	W	1ft.	6ft.	45.0	0.0	45.0	19	55	2495	Btuh	
5	2, Clear, 0.87, B-D, N,F	W	1ft.	6ft.	30.0	0.0	30.0	19	55	1663	Btuh	
Window Total					127 (sqft)					6949 Btuh		
Walls	Type	R-Value/U-Value			Area(sqft)			HTM		Load		
1	Frame - Wood - Ext	13.0/0.09			1425.0			2.1		2972 Btuh		
Wall Total					1425 (sqft)					2972 Btuh		
Doors	Type				Area (sqft)			HTM		Load		
1	Insulated - Exterior				48.0			9.8		470 Btuh		
Door Total					48 (sqft)					470 Btuh		
Ceilings	Type/Color/Surface	R-Value			Area(sqft)			HTM		Load		
1	Vented Attic/Light/Shingle	30.0			1600.0			1.3		2140 Btuh		
Ceiling Total					1600 (sqft)					2140 Btuh		
Floors	Type	R-Value			Size			HTM		Load		
1	Slab On Grade	0.0			201 (ft(p))			0.0		0 Btuh		
Floor Total					201.0 (sqft)					0 Btuh		
Envelope Subtotal:										12532 Btuh		
Infiltration	Type	ACH			Volume(cuft) wall area(sqft)			CFM=		Load		
	SensibleNatural	0.16			12288 1425			65.5		610 Btuh		
Internal gain	Occupants			Btuh/occupant			Appliance		Load			
	2			X 230 +			2400		2860 Btuh			
Sensible Envelope Load:										16002 Btuh		
Duct load	(DGM of 0.268)										4289 Btuh	
Sensible Load All Zones										20291 Btuh		

Manual J Summer Calculations

Residential Load - Component Details (continued)

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

5/7/2007

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	16002 Btuh
	Sensible Duct Load	4289 Btuh
	Total Sensible Zone Loads	20291 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	20291 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	1198 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	1873 Btuh
	Latent occupant gain (2 people @ 200 Btuh per person)	400 Btuh
	Latent other gain	0 Btuh
	Latent total gain	3470 Btuh
	TOTAL GAIN	23761 Btuh

EQUIPMENT

1. Central Unit/Split	#(Outside) #(Inside)	32000 Btuh
-----------------------	----------------------	------------

*Key: Window types (Pn - Number of panes of glass)

(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(B), Draperies(D) or Roller Shades(R))

(ExSh - Exterior shading device: none(N) or numerical value)

(BS - Insect screen: none(N), Full(F) or Half(H))

(Ornt - compass orientation)



Version 8
For Florida residences only

System Sizing Calculations - Summer

Residential Load - Room by Room Component Details

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F
This calculation is for Worst Case. The house has been rotated 90 degrees.

5/7/2007

Component Loads for Zone #1: Main

Window	Type*	Ornt	Overhang		Window Area(sqft)			HTM		Load	
	Pn/SHGC/U/InSh/ExSh/IS		Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	18.0	2.5	15.5	19	55	906	Btuh
2	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	25.0	0.0	25.0	19	55	1386	Btuh
3	2, Clear, 0.87, B-D, N,F	E	1ft.	6ft.	9.0	0.0	9.0	19	55	499	Btuh
4	2, Clear, 0.87, B-D, N,F	W	1ft.	6ft.	45.0	0.0	45.0	19	55	2495	Btuh
5	2, Clear, 0.87, B-D, N,F	W	1ft.	6ft.	30.0	0.0	30.0	19	55	1663	Btuh
	Window Total				127 (sqft)					6949 Btuh	
Walls	Type		R-Value/U-Value		Area(sqft)		HTM		Load		
1	Frame - Wood - Ext		13.0/0.09		1425.0		2.1		2972 Btuh		
	Wall Total				1425 (sqft)				2972 Btuh		
Doors	Type				Area (sqft)		HTM		Load		
1	Insulated - Exterior				48.0		9.8		470 Btuh		
	Door Total				48 (sqft)				470 Btuh		
Ceilings	Type/Color/Surface		R-Value		Area(sqft)		HTM		Load		
1	Vented Attic/Light/Shingle		30.0		1600.0		1.3		2140 Btuh		
	Ceiling Total				1600 (sqft)				2140 Btuh		
Floors	Type		R-Value		Size		HTM		Load		
1	Slab On Grade		0.0		201 (ft(p))		0.0		0 Btuh		
	Floor Total				201.0 (sqft)				0 Btuh		
	Zone Envelope Subtotal:									12532 Btuh	
Infiltration	Type		ACH		Volume(cuft)		wall area(sqft)		CFM=		Load
	SensibleNatural		0.16		12288		1425		32.8		610 Btuh
Internal gain			Occupants		Btuh/occupant		Appliance		Load		
			2		X 230		+		2400		2860 Btuh
	Sensible Envelope Load:									16002 Btuh	
Duct load	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic)							(DGM of 0.268)		4289 Btuh	
	Sensible Zone Load									20291 Btuh	

Manual J Summer Calculations

Residential Load - Component Details (continued)

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

5/7/2007

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	16002 Btuh
	Sensible Duct Load	4289 Btuh
	Total Sensible Zone Loads	20291 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	20291 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	1198 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	1873 Btuh
	Latent occupant gain (2 people @ 200 Btuh per person)	400 Btuh
	Latent other gain	0 Btuh
	Latent total gain	3470 Btuh
	TOTAL GAIN	23761 Btuh

EQUIPMENT

1. Central Unit/Split	#(Outside) #(Inside)	32000 Btuh
-----------------------	----------------------	------------

*Key: Window types (Pn - Number of panes of glass)

(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(B), Draperies(D) or Roller Shades(R))

(ExSh - Exterior shading device: none(N) or numerical value)

(BS - Insect screen: none(N), Full(F) or Half(H))

(Ornt - compass orientation)



Version 8
For Florida residences only

Residential Window Diversity

MidSummer

John Norris

Project Title:
Sierra Model - Thornwood Estates

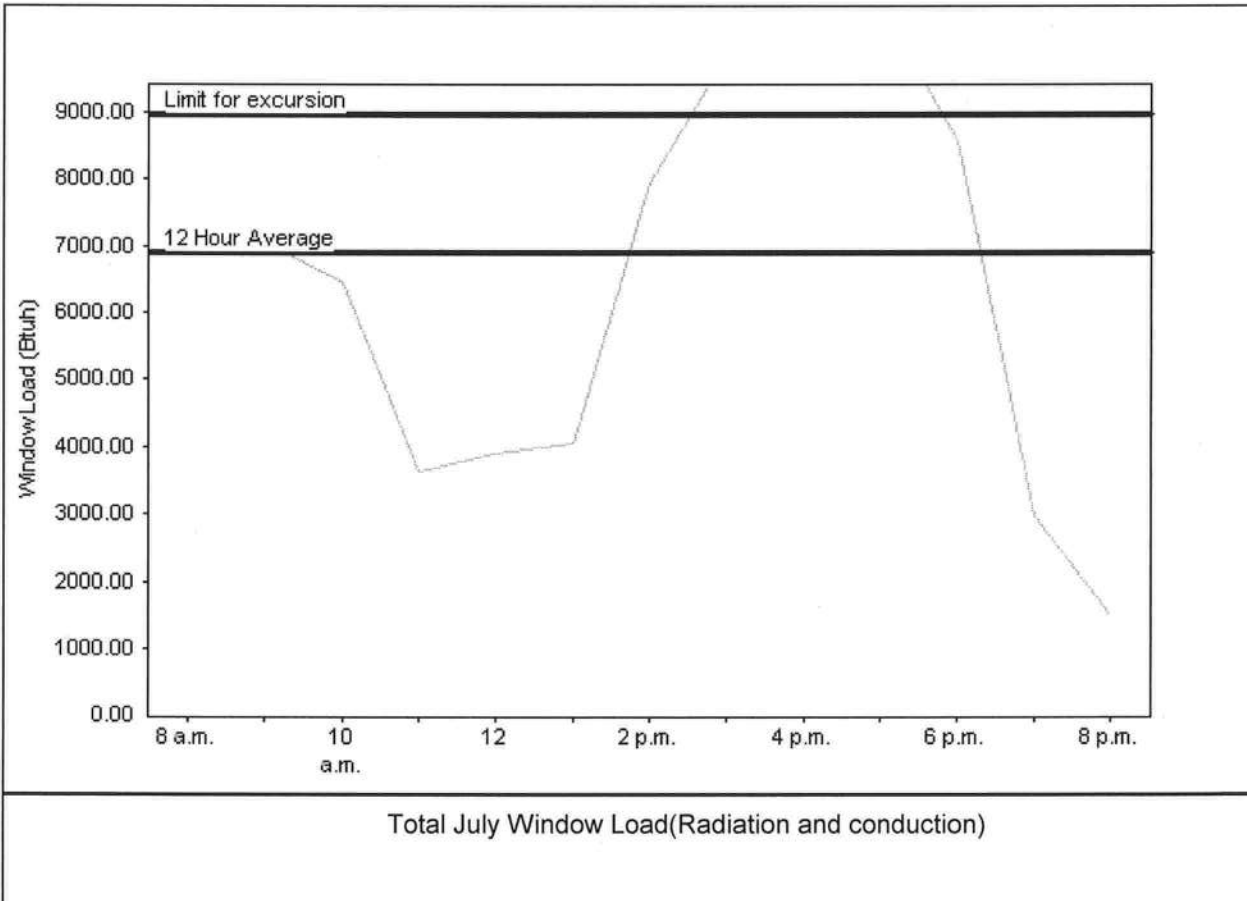
Code Only
Professional Version
Climate: North

5/7/2007

Weather data for: Gainesville - Defaults

Summer design temperature	92 F	Average window load for July	6900 Btuh
Summer setpoint	75 F	Peak window load for July	10769 Btu
Summer temperature difference	17 F	Excursion limit(130% of Ave.)	8970 Btuh
Latitude	29 North	Window excursion (July)	1799 Btuh

WINDOW Average and Peak Loads



This application has glass areas that produce large heat gains for part of the day. Variable air volume devices are required to overcome spikes in solar gain for one or more rooms. Install a zoned system or provide zone control for problem rooms. Single speed equipment may not be suitable for the application.

EnergyGauge® System Sizing for Florida residences only

PREPARED BY: *John Norris*

DATE: *5/7/05*

EnergyGauge® FLRCPB v4.5.2



Summary Energy Code Results

Residential Whole Building Performance Method A

John Norris

Project Title:
Sierra Model - Thornwood Estates

Code Only
Professional Version
Climate: North

5/7/2007

Building Loads			
Base		As-Built	
Summer:	18758 points	Summer:	17504 points
Winter:	15471 points	Winter:	13917 points
Hot Water:	7273 points	Hot Water:	7273 points
Total:	41502 points	Total:	38693 points

Energy Use			
Base		As-Built	
Cooling:	6096 points	Cooling:	5700 points
Heating:	8571 points	Heating:	7291 points
Hot Water:	7905 points	Hot Water:	7905 points
Total:	22573 points	Total:	20896 points

PASS
e-Ratio: 0.93



BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

NOTICE OF ACCEPTANCE (NOA)

MI Home Products, Inc.
650 West Market Street
Gratz, PA 17030

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "BetterBilt D185SH/D3185SH" Aluminum Single Hung Window

APPROVAL DOCUMENT: Drawing No. S-2422, titled "Non-Impact Single Hung Window Rectangle Circle Top & Oriel", sheets 1 through 5 of 5, prepared by RW Building Consultants, inc, dated 10/27/03 with revision "2", dated 02/10/04, signed and sealed by Wendell Haney, P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: None

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by **Theodore Berman, P.E.**

NOA No 03-1215.02

Expiration Date: March 04, 2009

Approval Date: March 04, 2004

Page 1



NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. S-2422, titled "Non-Impact Single Hung Window Rectangle Circle Top & Oriel", sheets 1 through 5 of 5, prepared by RW Building Consultants, inc, dated 10/27/03 with revision "2", dated 02/10/04, signed and sealed by Wendell Haney, P.E.

B. TESTS

1. Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Forced Entry Test, per FBC 2411.3.2.1 and TAS 202-94
along with marked-up drawings and installation diagram of an aluminum single hung window, prepared by Architectural Testing, Inc., Test Report No. ATI 03056, dated 11/11/03, signed by Joseph A. Reed, P.E.

C. CALCULATIONS

1. Anchor Calculations, ASTM-E1300-98, and structural analysis, prepared by R.W. Building Consultants, Inc., dated 12/11/03, signed and sealed by Lyndon F. Schmidt, P.E.
2. Revised Anchor Calculations, and structural analysis, prepared by R.W. Building Consultants, Inc., dated 02/10/04, signed and sealed by Lyndon F. Schmidt, P.E.

D. QUALITY ASSURANCE

1. Miami Dade Building Code Compliance Office (BCCO).

E. MATERIAL CERTIFICATIONS

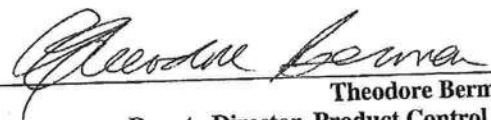
1. None.

F. STATEMENTS

1. Statement letter of conformance and no financial interest, dated December 09, 2003, signed and sealed by Lyndon F. Schmidt, P.E.
2. Statement letter of no financial interest with the laboratory that performed the Test Report No. ATI 03056, dated November 08, 2003, signed by Stu White, Design Engineering Manager.

G. OTHER

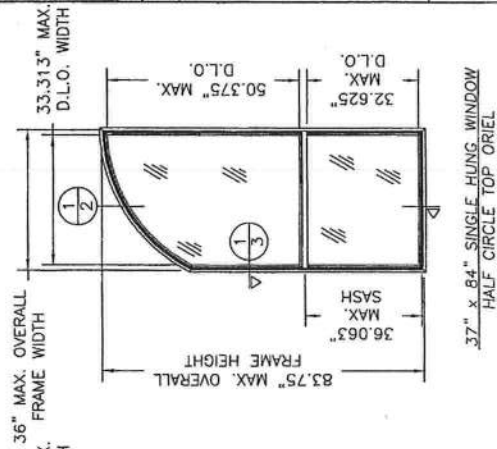
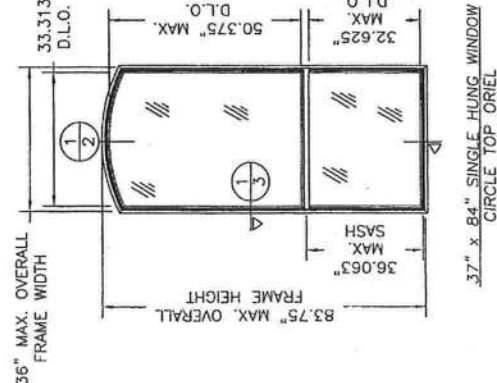
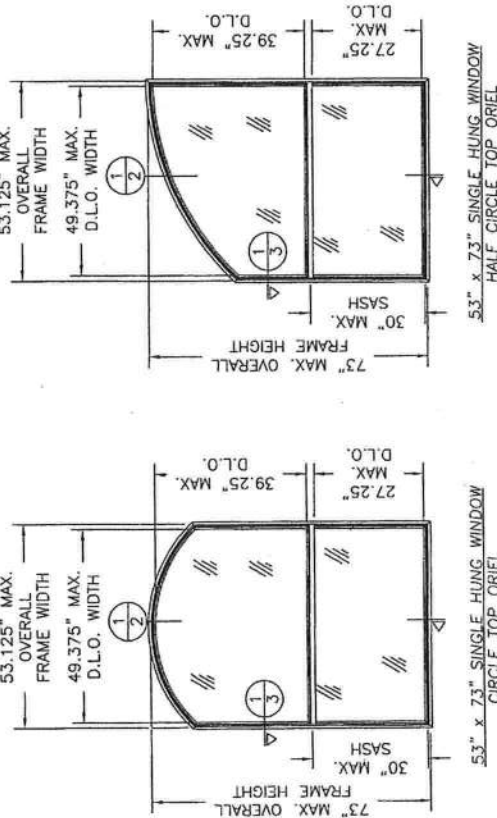
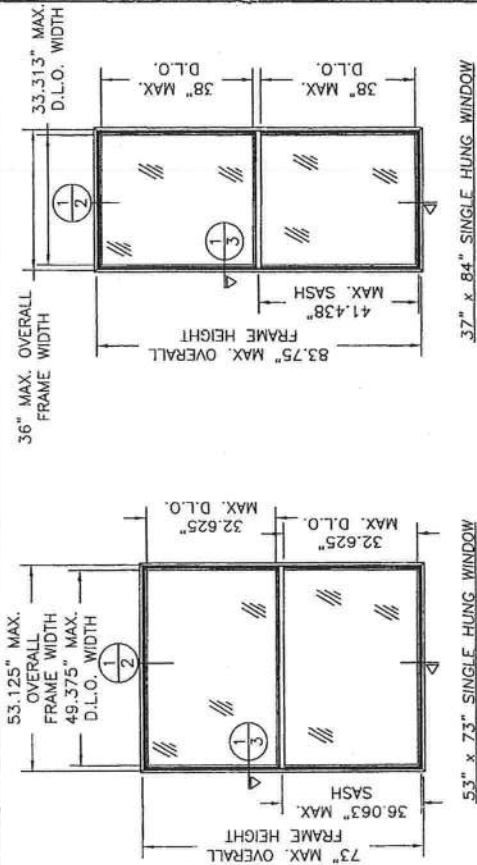
1. Letter from the consultant stating that the product is in compliance with the Florida Building Code (FBC).



Theodore Berman, P.E.
Deputy Director, Product Control Division
NOA No 03-1215.02
Expiration Date: March 04, 2009
Approval Date: March 04, 2004

MI HOME PRODUCTS
650 WEST MARKET STREET • GRATZ, PA • 17030-0370
SERIES BETTERBILT D185SH/D318SSH
ALUMINUM SINGLE HUNG WINDOW

- GENERAL NOTES:**
1. THIS PRODUCT IS DESIGNED TO COMPLY WITH THE "HVHZ" OF THE FLORIDA BUILDING CODE.
 2. WOOD BUCKS MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO STRUCTURE AND TO BE REVIEWED BY BUILDING OFFICIAL.
 3. PRODUCT ANCHORS SHALL BE AS LISTED AND SPACED AS SHOWN ON DETAILS. ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
 4. FOR DESIGN PRESSURE RATING SEE TABLE THIS SHEET.
 5. INSTALLATION OF THIS SYSTEM IN HVHZ AREA REQUIRES THE USE OF APPROVED SHUTTER/EXTERNAL PROTECTION DEVICE COMPLYING WITH HVHZ REQUIREMENTS. INSTALLATION OF THIS SYSTEM OUTSIDE OF HVHZ SHALL MEET THE APPLICABLE CODE REQUIREMENTS FOR WINDBORNE DEBRIS PROTECTION.
 6. THIS PRODUCT MEETS WATER REQUIREMENTS FOR HIGH VELOCITY HURRICANE ZONES.



SHEET #	DESCRIPTION
1	GENERAL NOTES & TYPICAL ELEVATIONS
2	VERTICAL CROSS SECTIONS
3	HORIZONTAL CROSS SECTIONS & GLAZING DETAIL
4	ANCHORING LOCATIONS
5	COMPONENTS, BILL OF MATERIALS

DESIGN PRESSURE RATINGS (PSF)			
GLASS	MAX. SIZE	DP POS.	DP NEG.
1/8" Temp.	OA 53" x 73"	+56.7	-69.3
1/8" Temp.	OA 37" x 84"	+56.7	-69.3
3/16" Ann.	OA 53" x 73"	+42.0	-42.0
3/16" Ann.	OA 37" x 84"	+56.7	-58.0

ALL ELEVATIONS ARE VIEWED FROM EXTERIOR

Approved as existing with the
Product Engineering Co.
Date: 10/27/03
NOM: 03-185-02
Miami Insole Product Control
By: [Signature]

DATE: 10/27/03	SCALE: N.T.S.
DWG. BY: TJH	CHK. BY: RW
DRAWING NO.: S-2422	SHEET 1 of 5

REVISIONS			
NO.	DATE	CORRECT DP TABLE	REVISED PER DATE LETTER
2	10/04		
1	01/04		
GENERAL NOTES & TYPICAL ELEVATIONS			
PRODUCT:	NON-IMPACT SINGLE HUNG WINDOW RECTANGLE	PART OR ASSEMBLY:	
BY:	RW	WH:	

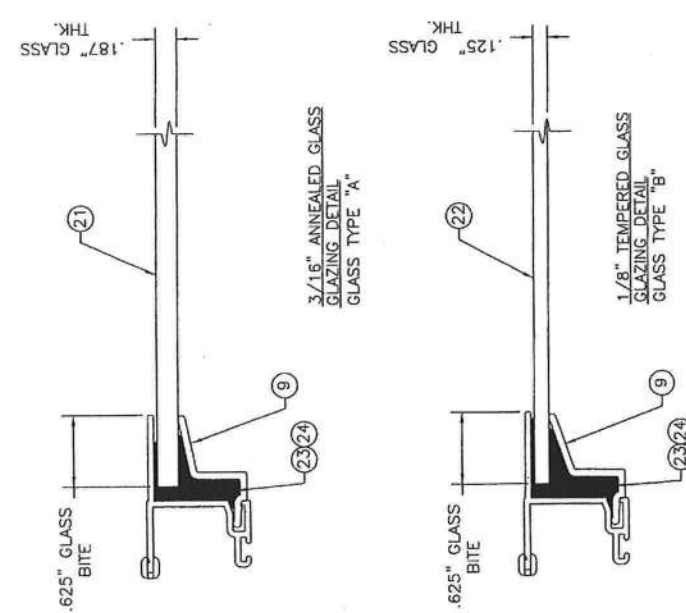
Product Approval Documents Prepared By:
BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL 33595
Phone No.: 813.809.9197
Florida Board of Professional Engineers
Certificate of Authorization No. 9813
Wendell Harris, P.E. NO. 124158
2/10/04

Product Approval Documents Prepared By:
 BUILDING CONSULTANTS, INC.
 P.O. Box 230 Venice, FL 33595
 Phone No.: 813.599.9197
 Florida Board of Professional Engineers
 Certificate of Authorization No. 9813
 2/10/04

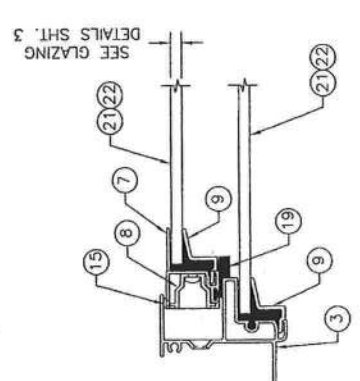
PRODUCT:	NON-IMPACT SINGLE HUNG WINDOW RECTANGLE, CIRCLE TOP & ORFIAL
PART OR ASSEMBLY:	HORIZONTAL CROSS SECTIONS & GLAZING DETAILS
BY:	WH
BY:	RW

NO.	DATE	REVISIONS
1	01/04	REVISED PER PADE LETTER
2	2/10/04	CORRECT DP TABLE

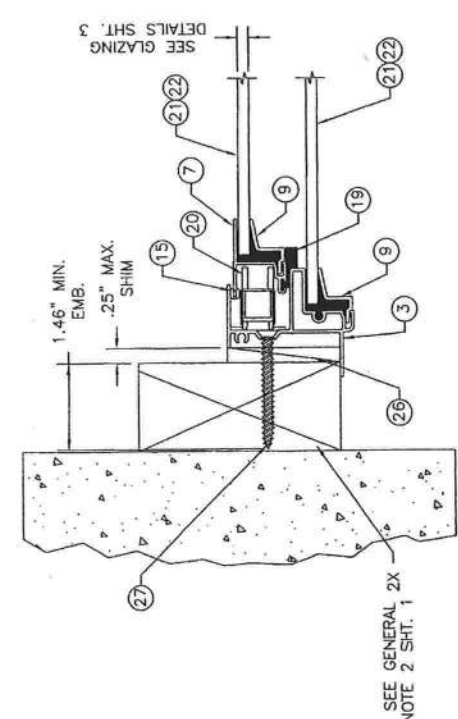
DATE: 10/27/03
 SCALE: N.T.S.
 DWG. BY: TJH
 CHK. BY: RW
 DRAWING NO.: S-2422
 SHEET 3 OF 5



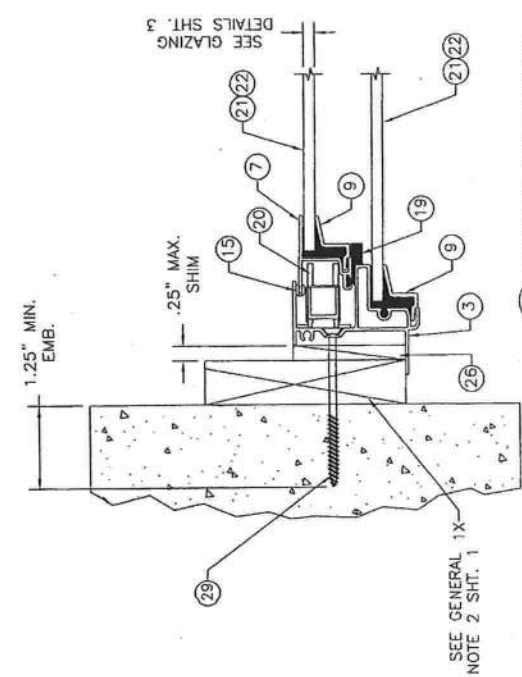
NOTES:
 1. THE MAIN FRAME HEAD, SIDES AND SILL ARE CONNECTED TOGETHER AT EACH CORNER WITH (2) ITEM #11, A #8 x 3/4" PHILLIPS PAN HEAD SCREW. THE SCREWS RUN FROM THE HEAD DOWN INTO THE SIDES AND FROM THE SILL UP INTO THE SIDES.
 2. THE FIXED MEETING RAIL IS SECURED TO THE SIDES WITH (2) EACH SIDE ITEM #12, A #8 x 1 1/4" PHILLIPS PAN HEAD SCREW.
 3. THE SASH CORNERS ARE CONNECTED TOGETHER WITH (2) EACH CORNER ITEM #13, A #6 x 3/4" PHILLIPS PAN HEAD SCREW.



1 HORIZONTAL CROSS SECTION
 3 SHOWING SASH CAM
 MASONRY & BUCK NOT SHOWN



1 HORIZONTAL CROSS SECTION
 3 W/2X BUCK

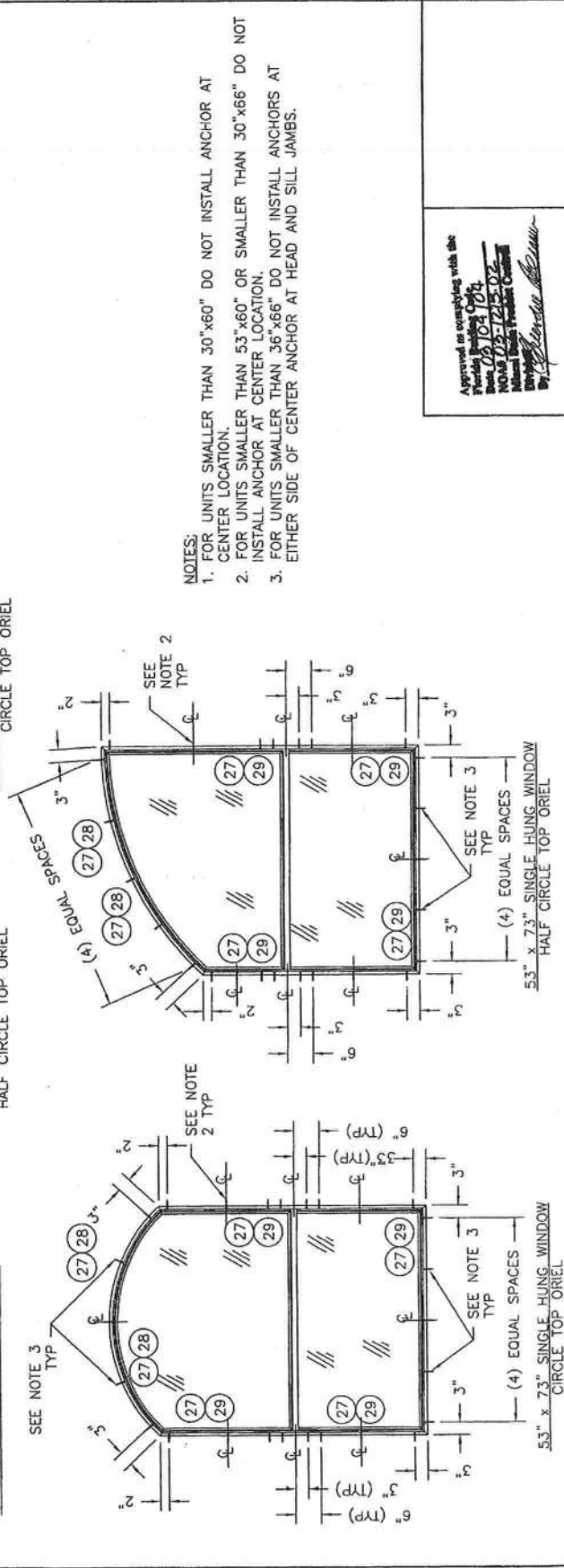


1 HORIZONTAL CROSS SECTION
 3 W/1X BUCK

Approved as complying with the Florida Building Code
 Date: 06/04/04
 NO. 06-125-02-02
 Michael Dean Product Control
 By: [Signature]

PRODUCT:	NON-IMPACT SINGLE HUNG WINDOW RECTANGLE CIRCLE TOP & ORIEL
PART OR ASSEMBLY:	ANCHORING LOCATIONS

DATE: 10/27/03
SCALE: N.T.S.
DWG. BY: TJH
CHK. BY: RW
DRAWING NO.: S-2422
SHEET 4 OF 5





**BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908**

NOTICE OF ACCEPTANCE (NOA)

**Tamko Roofing Products, Inc.
P.O. Box 1404
Joplin, MO 64802**

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: TAMKO Heritage Declaration & Heritage XL Roof Shingles

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This consists of pages 1 through 4.

The submitted documentation was reviewed by Frank Zuloaga, RRC



**NOA No.: 03-0620.01
Expiration Date: 09/04/08
Approval Date: 09/04/03
Page 1 of 4**

ROOFING ASSEMBLY APPROVAL

Category: Roofing
Sub-Category: 07310 Composition Shingles
Materials Dimensional
Deck Type: Wood

1. SCOPE:

This approves **Tamko Heritage Declaration and Heritage XL** Asphalt Shingles, manufactured by **Tamko Roofing Products, Inc.** as described in this Notice of Acceptance.

2. PRODUCT DESCRIPTION

<u>Product</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
Heritage Declaration & Heritage XL	12" x 36"	TAS 110	A heavy weight dimensional asphalt shingle.

3. EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
PRI Asphalt Technologies, Inc.	TAS 100	TAP-066-02-01 TAP-073-02-01	01/09/03 05/20/03
Underwriters Laboratories, Inc.	ASTM D 3462	R2919	06/12/03
Underwriters Laboratories, Inc.	TAS 107	03CA08442	06/12/03

4. LIMITATIONS

- 4.1 Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
- 4.2 Shall not be installed on roof mean heights in excess of 33 ft.
- 4.3 All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9B-72 of the Florida Administrative Code.

5. INSTALLATION

- 5.1 Shingles shall be installed in accordance with Roofing Application Standard RAS 115.
- 5.2 The manufacturer shall provide clearly written application instructions.
- 5.3 Exposure and course layout shall be in compliance with Detail 'A', attached.
- 5.4 Nailing shall be in compliance with Detail 'B', attached.

6. LABELING

- 5.1 Shingles shall be labeled with the Miami-Dade Logo or the wording "Miami-Dade County-Product Control Approved".

7. BUILDING PERMIT REQUIREMENTS

- 7.1 Application for building permit shall be accompanied by copies of the following:
 - 7.1.1 This Notice of Acceptance.
 - 7.1.2 Any other documents required by the Building Official or the applicable Building Code in order to properly evaluate the installation of this system.

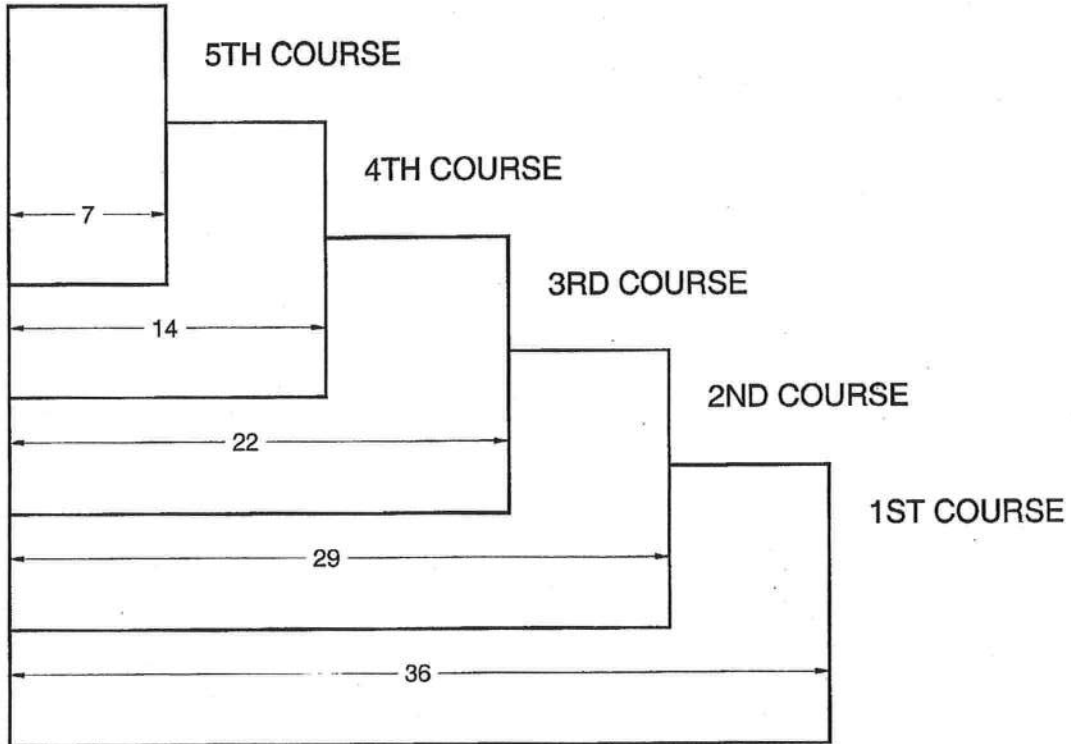


NOA No.: 03-0620.01
Expiration Date: 09/04/08
Approval Date: 09/04/03
Page 2 of 4

DETAIL A

HERITAGE DECLARATION & XL

All dimensions are in inches.

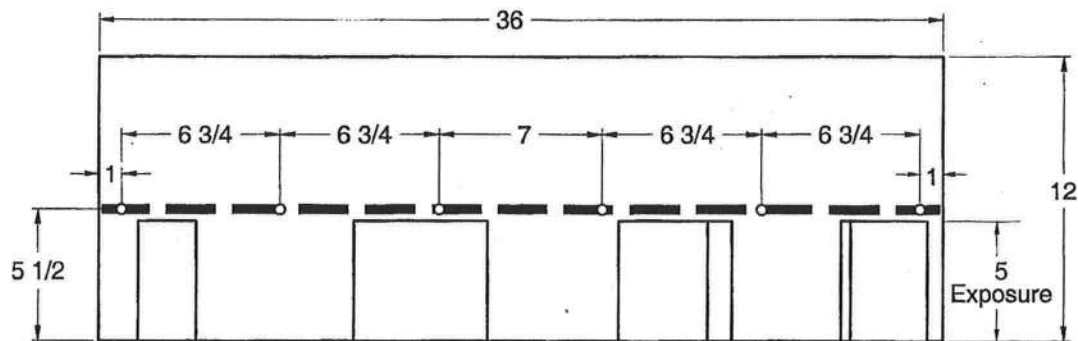


DETAIL B

HERITAGE DECLARATION

12" x 36" LAMINATED SHINGLE

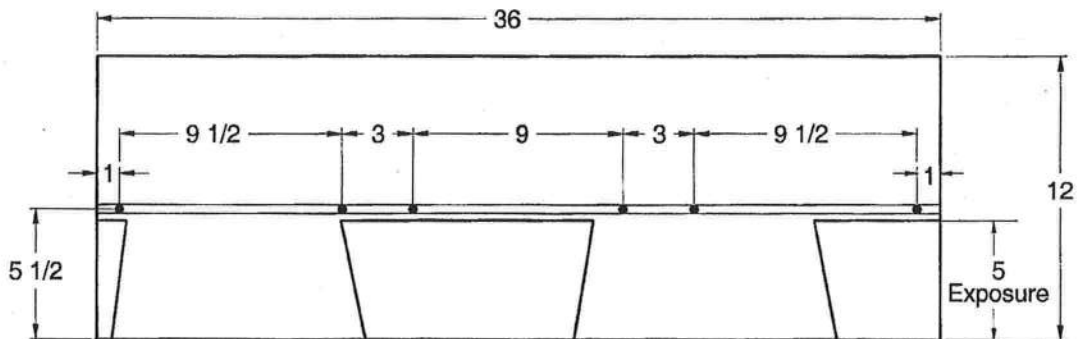
All dimensions are in inches.



HERITAGE XL

12" x 36" LAMINATED SHINGLE

All dimensions are in inches.



END OF THIS ACCEPTANCE





BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

NOTICE OF ACCEPTANCE (NOA)

Clopay Building Products Co.
8585 Duke Blvd.
Mason, OH 45040

SCOPE: This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone.

DESCRIPTION: Sectional Garage Door 16'- 2" Wide.

APPROVAL DOCUMENT: Drawing No. 101300, titled "Double Car Hurricane Pan Door", dated 02/15/95 with last revision on 01/06/04, sheets 1 and 2 of 2, prepared by Clopay Building Products Co, signed and sealed by M. W. Westerfield, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

LIMITATION: This approval requires the manufacturer to do testing of all coils used to fabricate door panels under this Notice of Acceptance. A minimum of 2 specimens shall be cut from each coil and tensile tested according to ASTM E-8 by a Dade County approved laboratory selected and paid by the manufacturer. Every 3 months, four times a year, the manufacturer shall mail to this office: a copy of the tested reports with confirmation that the specimen were selected from coils at the manufacturer production facilities. And a notarized statement from the manufacturer that only coils with yield strength of 38000 psi or more shall be used to make door panels for Dade County under this Notice of Acceptance

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews NOA # 03-0829.05 and consists of this page, evidence page as well as the approval document mentioned above.

The submitted documentation was reviewed by **Candido E. Font PE.**

[Signature]
03/23/06



NOA No 05-1212.02
Expiration Date: March 26, 2007
Approval Date: March 23, 2006
Page 1

Clopay Building Products Co.

NOTICE OF ACCEPTANCE: EVIDENCE PAGE

A. DRAWINGS

1. Drawing prepared by Clopay Building Products Co., titled "Double Car Hurricane Pan Door", Drawing No. 101300, dated 02/15/95, with last revision on 01/06/2004, sheets 1 through 2 of 2, signed and sealed by M.W. Westerfield, PE.

B. TESTS

1. Test report of large missile impact test per PA 201 and cyclic wind pressure test per PA 203 of "Garage Door", prepared by Hurricane Engineering & Testing, Inc., report No. HETI 95-408, dated 01/25/95, signed and sealed by H. M. Medina, PE.
2. Test report of Uniform Static Air Pressure Test Per PA 202 on "Garage Door", prepared by Hurricane Engineering & Testing, Inc., report No. HETI 95-407, dated 01/24/95, signed and sealed by H. M. Medina, PE.
3. Test report of Forced Entry Resistance per section 3603.2(b)5 on "Garage Door" prepared by Hurricane Engineering Testing, Inc. report No. HETI 95-407f, dated 01/25/95, signed and sealed by H. M. Medina, PE.

C. CALCULATIONS

1. Calculations dated 01/20/95; pages 1 and 2, prepared by M. W. Westerfield, PE, signed and sealed by M. W. Westerfield, PE.
2. Calculations dated 02/24/95, page 1, prepared M.W. Westerfield, PE, signed and sealed by M.W. Westerfield, PE.

D. MATERIAL CERTIFICATIONS

1. Test report of Tensile Test per ASTM E 8, report No. HETI 94-T59, prepared by Hurricane Engineering & Testing, Inc., dated 02/06/95, signed and sealed by H.M. Medina, PE.
2. Test report of Salt Spray Test per ASTM D1654 & ASTM B117, report No. 9EM-1144, prepared by Q.C. Metallurgical, Inc., dated 06/03/99, signed and sealed by K. Grate.

E. STATEMENTS.

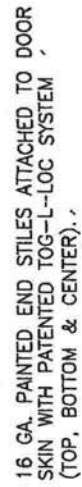
1. Affidavit of yield strength compliance prepared by R. D. Shifflett employed by Clopay Building Products Co., notarized on 01/11/2001 by B. H. Schuler.

F. QUALITY ASSURANCE.

1. Building Code Compliance Office.


03/23/06
Candido F. Font, PE.
Senior Product Control Division
NOA No 05-1212.02
Expiration Date: March 26, 2007
Approval Date: March 23, 2006

PAIENED 100-L-LUL SISIEM (10P & BUI)
IE ADHESIVE (ALONG CENTER) /



4 GA. DDS STEEL (MIN. YIELD STRENGTH:
38 KSI) EXTERIOR SKIN WITH G-40
GALVANIZING, BAKED-ON PRIMER AND A
BAKED-ON POLYESTER PAINTED TOP COAT
APPLIED TO BOTH SIDES OF STEEL SKIN.
(ASTM NO. A653).

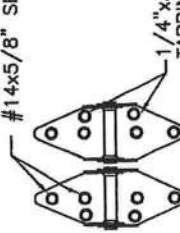
4 GA. GALV. ROLLER HINGE FASTENED TO STILES W/(4) #14x5/8" S AND (4) 1/4"x3/4" SELF SEE VIEW "B")

ONE 6" TALL C-CHANNEL P
C-CHANNEL ATTACHED AT E
(1) 1/4"x3/4" SELF TAPPIN

1-1/4" WIDE x 16 GA. GALV.
DOOR SECTION, EXCEPT (8)
SECTION (SEE INSIDE ELEVATION)
WITH (3) 1/4"x3/4" SELF-DRILLING
SCREWS TO DOOR. ONE SCREW

13 GA. GALV. STEEL BOTTOM BRACKET.
ATTACHED WITH (2) #14x5/8" SHEET N

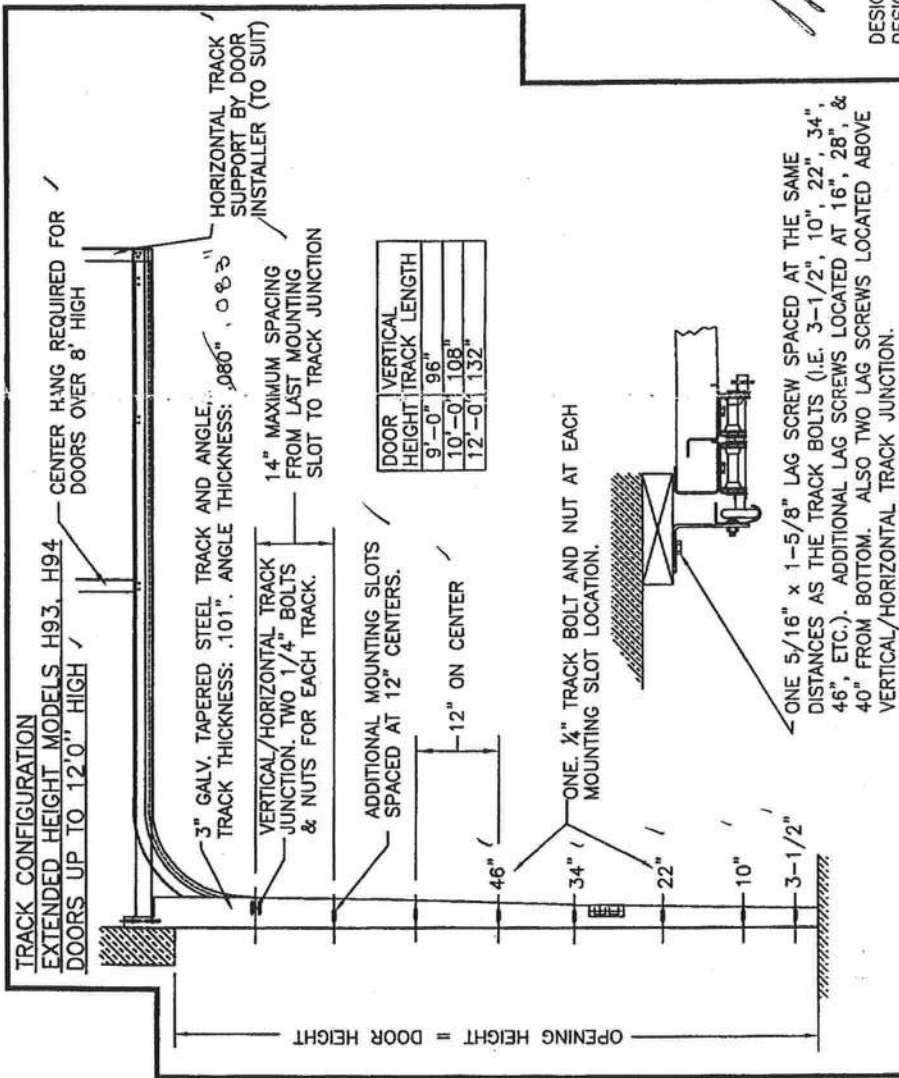
ALUMINUM EXTRUSION & VINYL WEATHER
SECTION A-A (SIDE VIEW)



14 GA. END HINGES

Wm. H. Hunt 1/6/04

DESIGN LOADS: +46.6 P.S.F. & -52.0 P.S.F. (MODELS 83, 84A, 93)
DESIGN LOADS: +46.8 P.S.F. & -51.7 P.S.F. (MODELS H93, H94)



DOOR HEIGHT	VERTICAL TRACK LENGTH
9'-0"	96"
10'-0"	108"
12'-0"	132"

DOOR HEIGHT	"L"
6'-6"	70"
7'-0"	76"
7'-6"	82"
8'-0"	88"

3. 84A. 93. 94
GH ONTAL TRACK SUPPORT BY
DOOR INSTALLER (TO SUIT)
ANCE SYSTEM

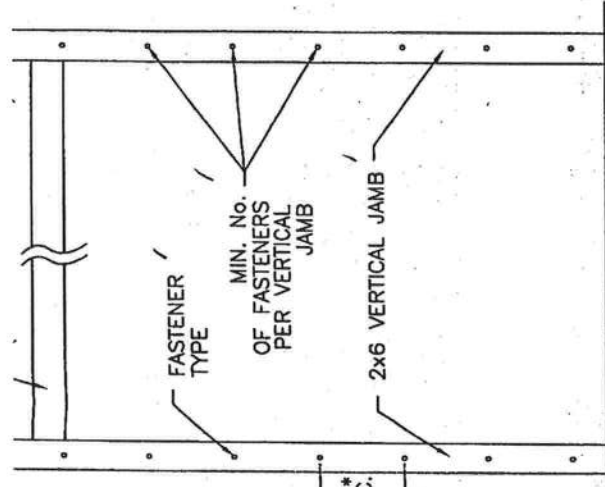
EL CONTINUOUS
ANGLE

COORS ONLY)

DURATION

ACK,

5	8/25/03	ADDED EXTENDED
6	1/6/04	JAMB ATTACHMENT



UM DESIGN LOAD OF +372.8 LB & -416 LB. PER LINEAR FOOT OF JAMB. (NOT REQUIRED) COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.

BE FRAMED SOLID BY NOT LESS THAN (3) 2x6 PRESSURE TREATED GRADE 55S GRADE NOT LESS THAN 1200 PSI NOMINAL EXTREME FIBER STRESS 3'0" HIGH. STUD WALLS TO BE CONTINUOUS FROM FOOTING TO TIE BEAMS A BUILDING CODE. (4) 2x6 PRESSURE TREATED GRADE #2 OR BETTER LESS THAN 1200 PSI NOMINAL EXTREME FIBER STRESS IN BENDING FOR

TO GROUT REINFORCED BLOCK WALL OR CONCRETE COLUMN. WITH CONCRETE AND REINFORCED WITH #5 BAR EXTENDING AS. ALL BARS SHALL BE CONTINUOUS FROM THE TIE BEAMS CONCRETE COLUMN. BLOCK WALLS AND CONCRETE COLUMNS TO BE OF RECORD AND IN ACCORDANCE WITH THE FLORIDA BUILDING CODE.

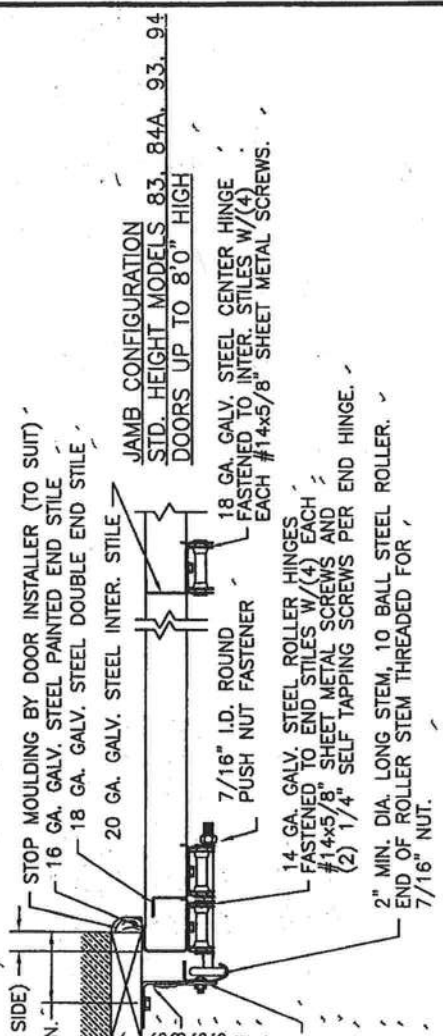
SUPPORTING STRUCTURE ATTACHMENT

MENT OF TRACK ANGLE TO 2x6 VERTICAL JAMBS OR SUPPORTING STRUCTURE)

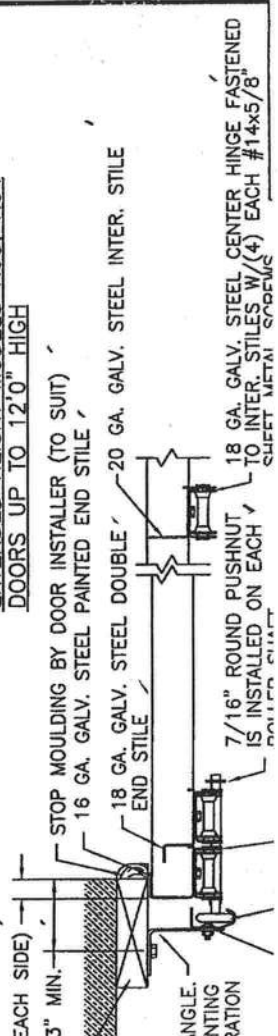
TYPE	MAXIMUM ON-CENTER DISTANCE BETWEEN FASTENERS*	STEEL WASHERS REQUIRED?
EMBED LAG SCREW (ASTM A307, GRADE A) 1-1/2" EMBED INTO STRUCTURE	16"	YES
3/4" MIN. EMBED ELCO TAPCON CONCRETE ANCHOR	10"	YES
3/4" MIN. EMBED POWER-STUD EXPANSION ANCHOR (7400 SERIES)	16"	NO
3/4" MIN. EMBED POWER LOK/BOLT ANCHOR BOLT (5000 SERIES)	14"	NO

ANCHOR AND EDGE OF CONCRETE BLOCK; 3", EXCLUDING STUCCO THICKNESS. NO MORE THAN HALF OF THE MAXIMUM ON-CENTER DISTANCE. HIGHEST ANCHOR INSTALLED AT LEAST AS HIGH AS THE DOOR OPENING.

AD HAS BEEN USED IN THE DESIGN OF CONCRETE ANCHORS & WOOD FASTENERS.



JAMB CONFIGURATION EXTENDED HEIGHT MODELS H93, H94 DOORS UP TO 12'0" HIGH



JAMB PREPARATION NOTE
EACH CONTINUOUS ANGLE TRACK SHALL BE FASTENED TO PINE WOOD JAMBS WITH 5/16"x1-5/8" LAG SCREWS (12" HIGH AND (13) LAG SCREWS PER SIDE UP TO 8'0" TO 9'0" HIGH, (15) LAG SCREWS PER SIDE UP TO 10'0" SIDE UP TO 11'0" HIGH, (17) LAG SCREWS PER SIDE U ATTACHMENT TO THE SUPPORTING STRUCTURE OF THE PRI SHALL BE APPROVED BY THE PROFESSIONAL OF RECORD ACCORDANCE WITH CURRENT BUILDING CODES FOR THE L PREPARATION OF JAMBS BY OTHERS.

ALL MOUNTING OF TRACK, ANGLES, HORIZONTAL TRACK SI DOOR HARDWARE TO BE INSTALLED PER CLOPAY INSTALLA SUPPLIED WITH DOOR SYSTEM UNLESS OTHERWISE NOTED

PRODUCT REVIEWED
as complying with the Florida
Building Code
Acceptance No. 05-12124
Registration Date 03/20/04

DESIGN ENGINEER
MARK W. WESTERFIELD, P.E.
FLORIDA REGISTRATION No. 48495

DESIGN LOADS: +46.6 P.S.F. & -52.0 P.S.F. (MODELS 83, 84)
DESIGN LOADS: +46.6 P.S.F. & -51.7 P.S.F. (MODEL H93, H94)



BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

NOTICE OF ACCEPTANCE (NOA)

Therma-Tru Corporation
108 Mutzfeld Rd.
Butler, IN 46721

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

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This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Premium Series 6'8 Opaque Steel Door w & wo sidelites (OS)

APPROVAL DOCUMENT: Drawing No. S-2149, titled "Premium Series" 6-8 Single & Double Out-swing Steel Door", sheets 1 through 8, prepared by RW Building Consultants, Inc., dated 3/28/02, bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact and Non-Impact

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

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INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

The submitted documentation was reviewed by **Raul Rodriguez**



NOA No 01-0828.08
Expiration Date: June 20, 2007
Approval Date: June 20, 2002
Page 1

THERMA-TRU®

"PREMIUM SERIES" OUTSWING 6-8 SINGLE AND DOUBLE
W/8 SIDELITES, INSULATED STEEL DOOR WITH WOOD FRAMES.

- GENERAL NOTES**
1. THIS PRODUCT IS DESIGNED TO MEET THE SOUTH FLORIDA BUILDING CODE 1994 EDITION FOR MIAMI-DADE COUNTY.
 2. WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.
 3. PRODUCT ANCHORS SHALL BE AS LISTED AND SPACED AS SHOWN ON DETAILS. ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
 4. DESIGNED PRESSURE RATING SEE TABLE PAGE 1.
 5. MIAMI-DADE APPROVED IMPACT RESISTANT SHUTTERS ARE REQUIRED FOR SIDELITES ONLY.
 6. SIDELITES ARE AN OPTION AND CAN BE USED IN A SINGLE OR DOUBLE CONFIGURATION.
 7. LOW PROFILE OUTSWING BUMP THRESHOLD RATED FOR +55.0 PSF & -55.0 PSF ON WATER FOR SINGLEUNITS.

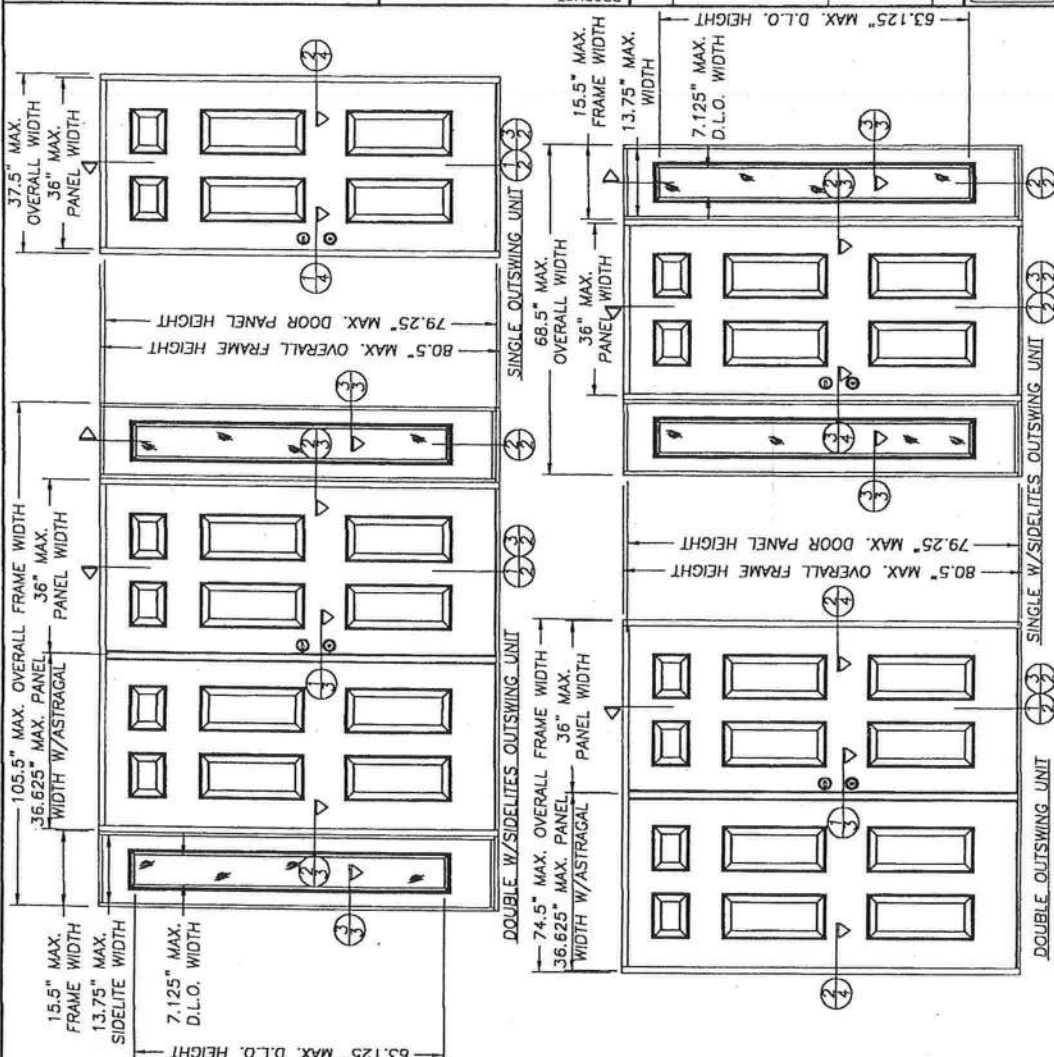
INSULATED STEEL DOOR (Common to all frame conditions)

Door & Sidelite Panel Construction:
Face sheets: 24 GA (0.022") minimum thickness.
Galvanized steel A-525 commercial quality AKDQ
per ASTM 620 with yield strength $F_y(\min.) = 36,438$ psi
Core design: Polyurethane foam core,
with 1.9 lbs. density by BASF.
Door Panel Construction: Flush or embossed type. The vertical edges of the skin, rolled formed to provide a mechanical interlock with finger jointed pine stiles. Wood end rails are butt jointed and pressure fitted with contact cement to the wood stiles at the corners.
Sidelite Panel Construction and Glazing: The vertical edges of the skin are rolled formed to provide a mechanical interlock with finger jointed pine stiles. Wood end rails are butt jointed to the wood stiles at the corners. The sidelite panels are sandwich glazed using a two piece lite frame.
Frame Construction: The frame is constructed from finger jointed Ponderosa Pine measuring 4.656" wide x 1.25" thick. The header is joined to the side jambs with (3) 16ga. 1 1/2" crown staples (2) 16ga. 1 1/2" long. The threshold is joined to the side jambs with (2) 16ga. 1 1/2" long. The side jambs are secured together with (6) screws per each mullion. The unit uses an Outswing Bumpface threshold, either Low Profile or High Water Dam.

TABLE OF CONTENTS

SHEET #	DESCRIPTION
1	TYPICAL ELEVATIONS & GENERAL NOTES
2	VERTICAL CROSS SECTIONS
3	HORIZONTAL CROSS SECTIONS
4	HORIZONTAL CROSS SECTIONS & NOTES
5	ANCHORING LOCATIONS & DETAILS
6	ANCHORING LOCATIONS & DETAILS
7	UNIT COMPONENTS
8	BILL OF MATERIALS & UNIT COMPONENTS

DESIGN PRESSURE RATING		
UNIT TYPE	W/LOW PROFILE BUMP THRESHOLD	W/HIGH DAM BUMP THRESHOLD
SINGLE	+ 55.0 PSF - 67.0 PSF	+ 75.0 PSF - 75.0 PSF
DOUBLE	NOT APPROVED FOR WATER	+ 65.0 PSF - 65.0 PSF
SINGLE W/SIDELITES	+ 55.0 PSF - 67.0 PSF	+ 65.0 PSF - 65.0 PSF
DOUBLE W/SIDELITES	NOT APPROVED FOR WATER	+ 65.0 PSF - 65.0 PSF



Approved as complying with the
Florida Building Code
Date: June 20, 2002
By: TJH
Division: Building
Drawing No.: S-2149

RW BUILDING
CONSULTANTS, INC.
813.864.3831

NO.	DATE	REVISIONS
1	3/28/02	GENERAL REVISION
BY	WLN	PART OR ASSEMBLY

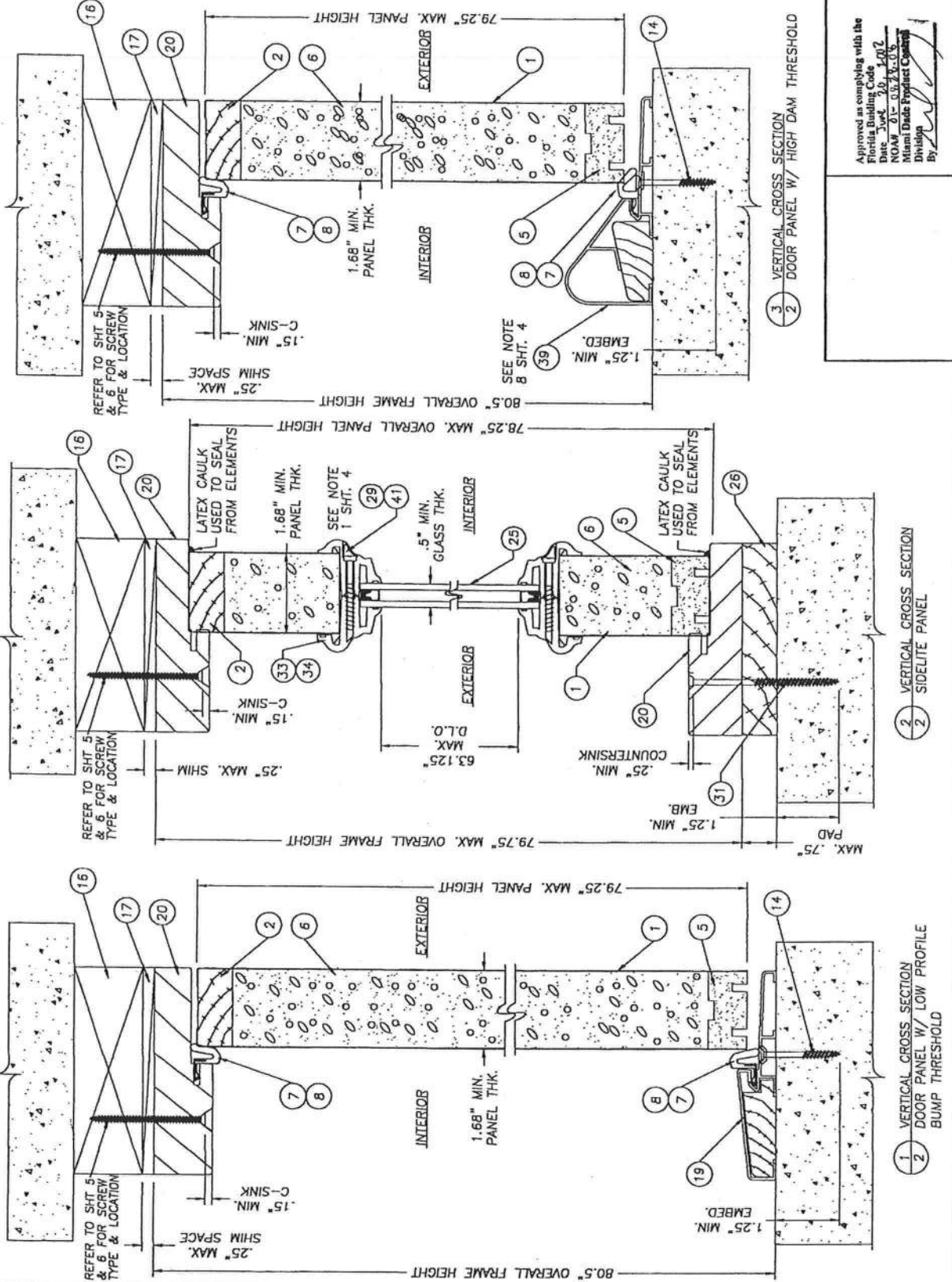
PRODUCT: "PREMIUM SERIES" 6-8
OUT-SWING STEEL DOOR
PART OR ASSEMBLY:
TYPICAL ELEVATIONS
& GENERAL NOTES

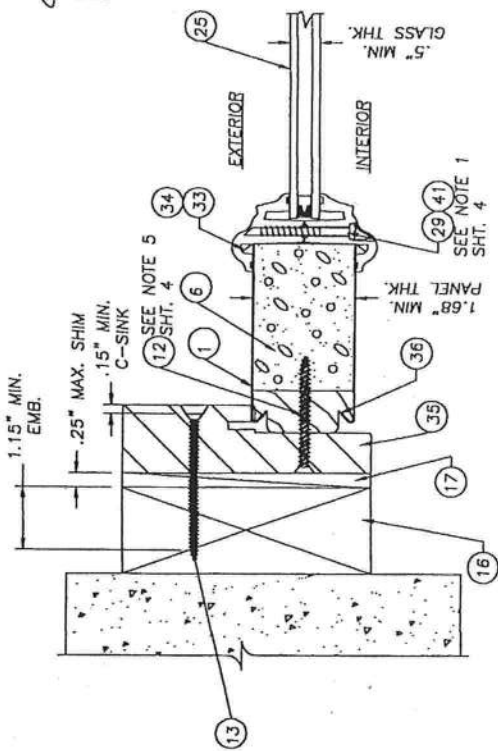
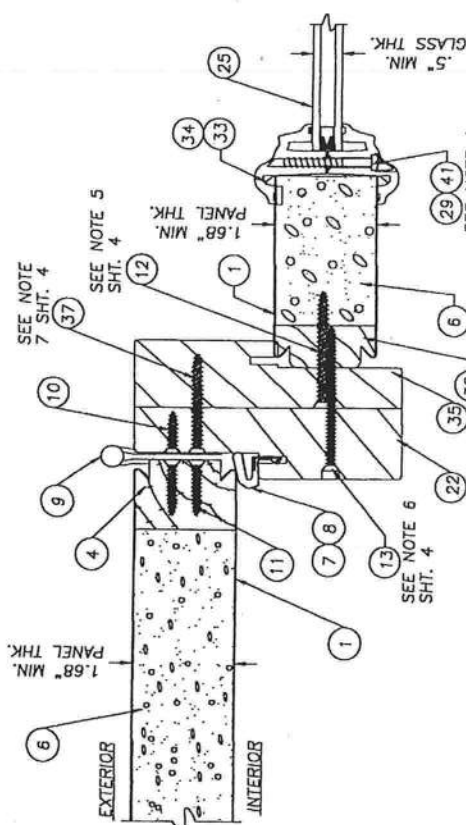
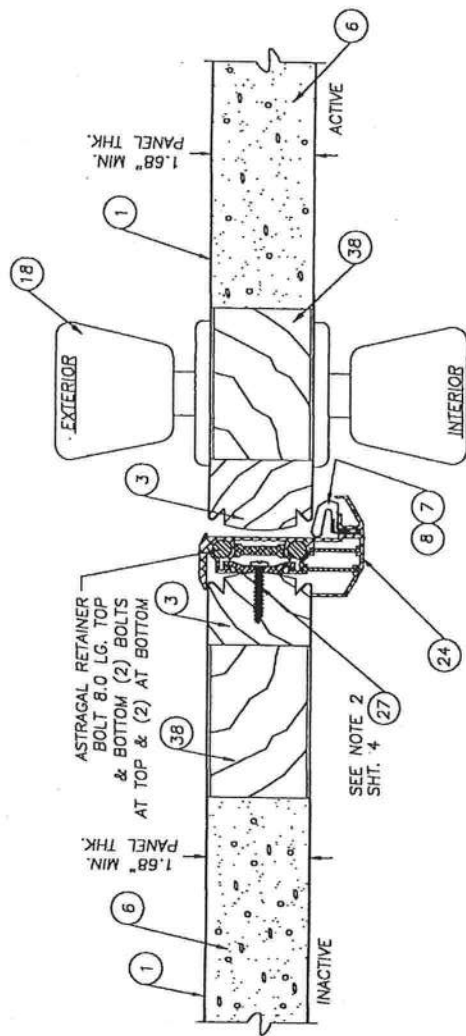
THERMA-TRU®
108 MUTZFELD RD.
BUTLER, IN 46721
PH. (219) 868-5811

DATE: 08/08/01
SCALE: N.T.S.
CHK. BY: TJH
DRAWING NO.: S-2149
SHEET 1 OF 8

DATE: 08/08/01
SCALE: $1/2" = 1'$
DWG. BY: TJH
CHK. BY: RW
DRAWING NO.: S-2149
SHEET 2 OF 8

VERTICAL CROSS
SECTIONS





2 HORIZONTAL CROSS SECTION
3 @ HINGE JAMB TO SIDE/LITE

3 HORIZONTAL CROSS SECTION
3 ④ SIDELITE TO BLUCK

NO	DATE	GENERAL REVISION	BY
1	3/28/02	WLN	

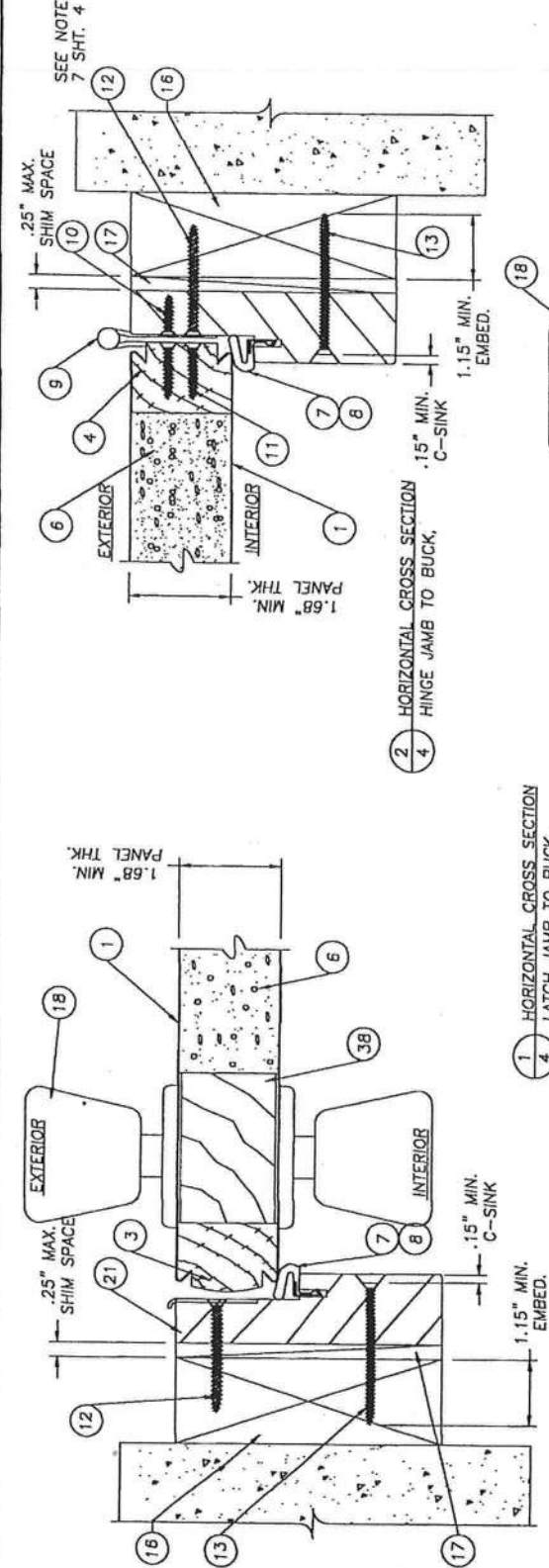
**RW BUILDING
CONSULTANTS, INC.**
813.684.3831

DATE: 08/08/01
SCALE: 1/2" = 1"
DWG. BY: TJH
CHK. BY: RW
DRAWING NO.: S-2149
SHEET 3 OF 8

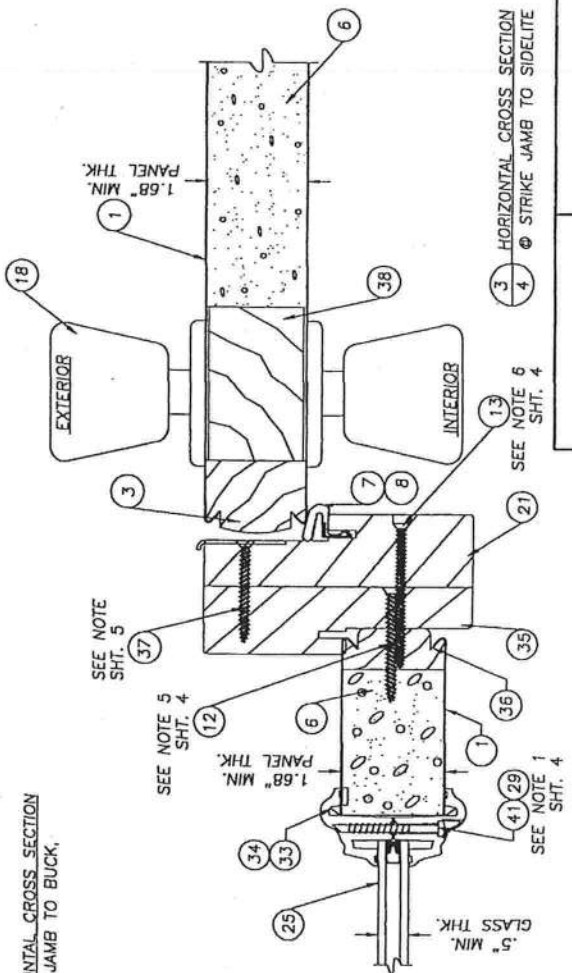
Approved as complying with the
Florida Building Code
Date June 20, 2002
NOAH 01-0528-08
Miami Dade Product Control
Division
By [Signature]

THERMASTRU®
108 MUTZFELD RD.
BUTLER, IN 46721
PH. (219) 868-5811

PRODUCT: "PREMIUM SERIES" 6-8
SINGLE & DOUBLE
OUT-SWING STEEL DOOR
PART OR ASSEMBLY:
HORIZONTAL
CROSS SECTIONS



- NOTES:
1. SPACING FOR ITEM #29 & #41 (LITE FRAME SCREWS) IS AS FOLLOWS: FROM THE TOP DOWN ON SIDES: 3", 14.75", 26.5", 38.25", 50.5" & 62.25". THERE IS (1) SCREW BOTH TOP AND BOTTOM AT 4.25" IN FROM CORNER.
 2. SPACING FOR ITEM #27 #8 x 1" PANHEAD SCREW FOLLOWING: FROM THE BOTTOM UP AND TOP DOWN 1", 3", 5", 26" AND (1) MORE 6" UP FROM THE STRIKE LOCATION.
 3. THE HEAD JAMB IS ATTACHED TO THE SIDE JAMBS WITH (3) 16GA. x 1/2" CROWN x 2" STAPLES AT BOTH SIDE.
 4. THE THRESHOLD IS ATTACHED TO THE SIDE JAMBS WITH (2) 16GA. x 1/2" CROWN x 2.5" STAPLES AT BOTH SIDE.
 5. THE SIDELITE IS DIRECT SET INTO THE JAMB WITH ITEM #12 #10 x 2" PH.F.H. WOOD SCREW AT 6" DOWN FROM EACH CORNER AND A MAX. OF 12" O.C. ON THE SIDE JAMBS ONLY.
 6. SPACING FOR ITEM #13, A #8 x 2 1/2" SCREW SECURING THE MULLIONS TOGETHER IS THE SAME AS THE PERIMETER ANCHORING SCREWS. 6" DOWN FROM THE TOP AND UP FROM THE BOTTOM WITH (4) MORE SPACED AT 13.7" O.C.
 7. WHEN ATTACHING THE HINGE TO THE JAMB AND THE BUCK USE ITEM #12 A #10 x 2" SCREW. WHEN ATTACHING THE HINGE TO THE JAMB AND THE SIDELITE AT THE MULLION USE ITEM #37 A #10 x 1 3/4" SCREW.
 8. ITEM #39, THE HIGH DAM THRESHOLD IS ONLY USED IN AN APPLICATION WHERE A HIGHER WATER PRESSURE MUST BE ACHIEVED.

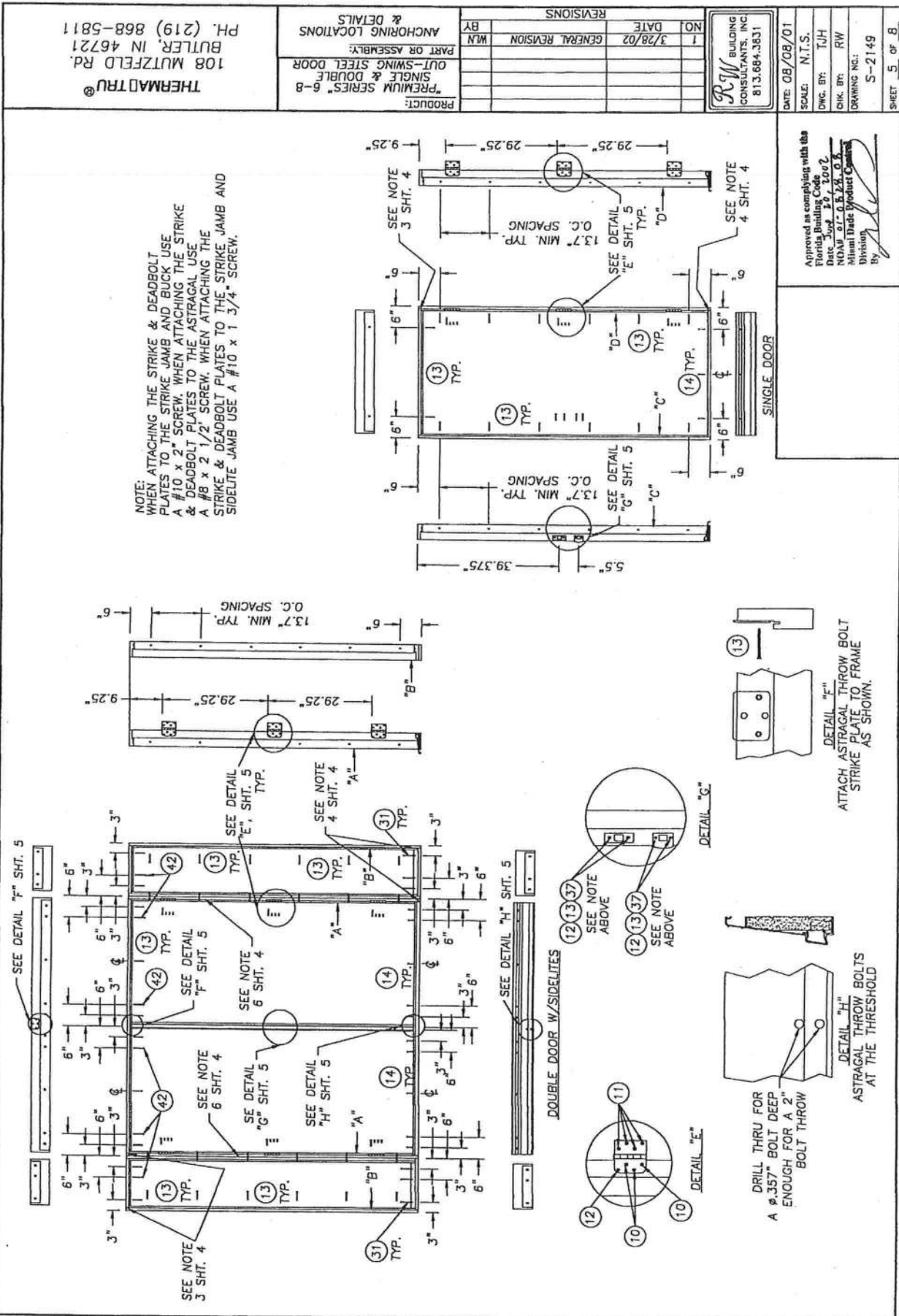


Approved as complying with the
Florida Building Code
Date: June 10, 2002
NOA# 01-05-18-06
Miami Trade Product Control
Division
By: [Signature]

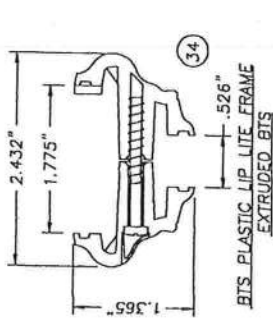
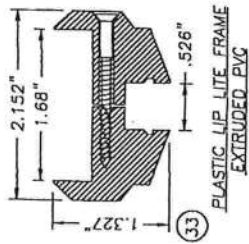
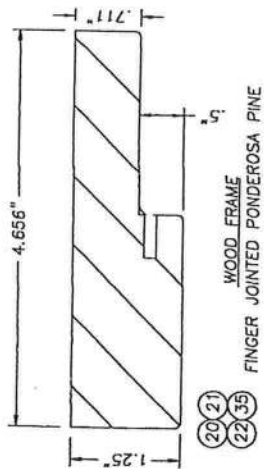
DATE: 08/08/01
SCALE: 1/2" = 1"
DWG. BY: TJH
CHK. BY: RW
DRAWING NO.: S-2149
SHEET 4 OF 8

REVISIONS		SECTIONS & NOTES	
NO.	DATE	GENERAL REVISION	BY
1	3/28/02		
		PART OR ASSEMBLY:	
		OUT-SWING STEEL DOOR	
		PREMIUM SERIES 6-8	
		SINGLE & DOUBLE	
		HORIZONTAL CROSS	

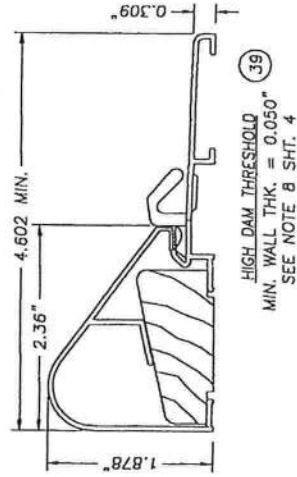
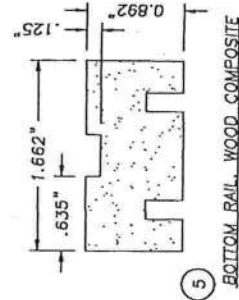
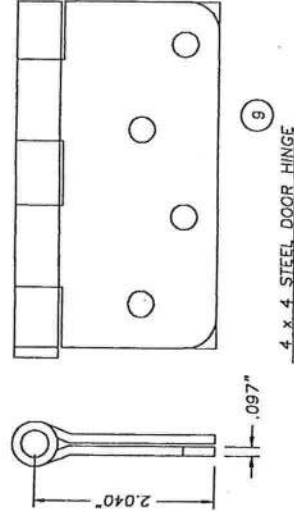
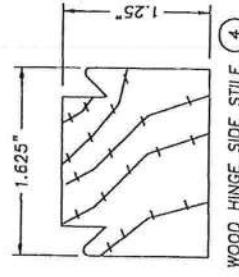
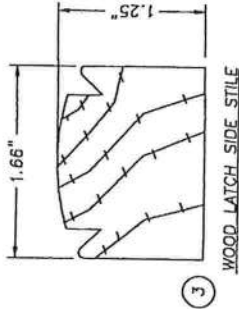
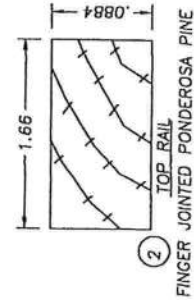
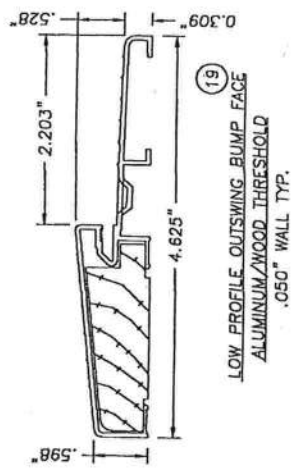
Product:
THERMATRU®
108 MUTZFELD RD.
BUTLER, IN 46721
PH. (219) 868-5811



Approved as complying with the
Florida Building Code
Date June 20, 2002
NOAH 0-0328-08
Miami Dade Product Control
Division
By [Signature]



THERMADTRU®
 108 MUTZFELD RD.
 BUTLER, IN 46721
 PH. (219) 868-5811



9
 4 X 4 STEEL DOOR HINGE

Approved as complying with the
 Florida Building Code, 2002
 Date 3-21-02
 NOAF 01-03-01
 Division Miami Dade Product Control
 By *[Signature]*

NOTE
 ALL DIMENSIONS ARE MINIMUM.
 DIMENSIONS ARE THE LARGEST TESTED.

DATE: 08/08/01
 SCALE: N.T.S.
 DWG. BY: TJH
 CHK. BY: RW
 DRAWING NO.: S-2149
 SHEET 7 OF 8

BUILDING
 CONSULTANTS, INC.
 813.684.3831

NO.	DATE	REVISION
1	3/28/02	GENERAL REVISION
BY	WLN	PART OR ASSEMBLY

PRODUCT:
 "PREMIUM SERIES" 6-8
 OUT-SWING STEEL DOOR
 UNIT COMPONENTS

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.

25869

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 32955
Company Business License No. JF104376 Company Phone No. 329-755-3511
FHA/VA Case No. (if any) _____

Section 2: Builder Information

Company Name: John Morris Const. Company Phone No. _____

Section 3: Property Information

Location of Structure(s) Treated (Street Address or Legal Description, City, State and Zip) 201 SW Thistlewood Lane
St. Cloud, FL 32076

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

Section 4: Treatment Information

Date(s) of Treatment(s) _____
Brand Name of Product(s) Used _____
EPA Registration No. _____

Approximate Final Mix Solution % _____

Approximate Size of Treatment Area: Sq. ft. 2235 Linear ft. 216 Linear ft. of Masonry Voids 216

Approximate Total Gallons of Solution Applied 356

Was treatment completed on exterior? ☐ Yes ☒ No

Service Agreement Available? ☒ Yes ☐ No upon completion

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

Attachments (List) _____

Comments _____

Name of Applicator(s) Steve Branner 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 Steve Branner Date 7-18-07

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

Form NPCA-99-B may still be used

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

COLUMBIA COUNTY OFFICE COLUMBIA

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 34-6S-16-04056-116

Building permit No. 000025869

Use Classification SFD, UTILITY

Fire: 32.10

Permit Holder JOHN NORRIS

Waste:

Owner of Building IMAGE DEVELOPMENT GROUP

Total: 32.10

Location: 201 SW THISTLEWOOD LANE, FT. WHITE, FL

Date: 05/27/2008

Tony Bick

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)



BEARING HEIGHT SCHEDULE

8'-0"

6/12 PITCH

2' OH

NOTES:

- 1) REFER TO HB 91 (RECOMMENDATIONS FOR HANDLING INSTALLATION AND TEMPORARY BRACING) REFER TO ENGINEERED DRAWINGS FOR PERMANENT BRACING REQUIRED.
- 2) ALL TRUSSES (INCLUDING TRUSSES UNDER VALLEY FRAMING) MUST BE COMPLETELY DECKED OR REFER TO DETAIL V05 FOR ALTERNATE BRACING REQUIREMENTS.
- 3) ALL VALLEYS ARE TO BE CONVENTIONALLY FRAMED BY BUILDER.
- 4) ALL TRUSSES ARE DESIGNED FOR 2 o.c. MAXIMUM SPACING, UNLESS OTHERWISE NOTED.
- 5) ALL WALLS SHOWN ON PLACEMENT PLAN ARE CONSIDERED TO BE LOUD BEARING, UNLESS OTHERWISE NOTED.
- 6) 5X42 TRUSSES MUST BE INSTALLED WITH THE TOP BEING UP.
- 7) ALL ROOF TRUSSES HANGERS TO BE SIMPSON HUS26 UNLESS OTHERWISE NOTED. ALL FLOOR TRUSSES HANGERS TO BE SIMPSON TH4422 UNLESS OTHERWISE NOTED.
- 8) DEAMHEDER/INTEL (HDX) TO BE FURNISHED BY BUILDER.

SHOP DRAWING APPROVAL

THIS LAYOUT IS THE SOLE SOURCE FOR FABRICATION OF TRUSSES AND V05S ALL REVISED ARCHITECTURAL OR OTHER TRUSS LAYOUTS, REVIEW AND APPROVAL OF THIS LAYOUT MUST BE OBTAINED BEFORE ANY TRUSSES WILL BE BUILT. VERIFY ALL CONDITIONS TO INSURE AGAINST CHANGES THAT WILL RESULT IN EXTRA CHARGES TO YOU.

Revised Drawing Date: _____

Approved By: _____ Date: _____



Bunnell
PHONE: 904-437-3349 FAX: 904-437-3994

Jacksonville
PHONE: 904-772-6100 FAX: 904-772-1973

Lake City
PHONE: 904-755-6844 FAX: 904-755-7473

Sanford
PHONE: 407-322-0094 FAX: 407-322-5953

JOHN NORRIS

LOT 16 THORNWOOD

SIERRA

5-15-07 KLH L240090