DATE 2/28/2007

# Columbia County Building Permit

**This Permit Expires One Year From the Date of Issue**

**PERMIT**
**000025576**

APPLICANT JANET BLANKENSHIP PHONE 386.454.2900

ADDRESS 3335 NW CR 236 #30 HIGH SPRINGS FL 32643

OWNER GEORGE EMANUEL PHONE 954.434.7567

ADDRESS 736 SW STERLING TERRACE HIGH SPRINGS FL 32643

CONTRACTOR LEE A. HOLLOWAY PHONE 386.454.2900

LOCATION OF PROPERTY 441-S TO C-778,TURN W TO STERLING TERRACE,TURN SOUTH GOTO THE END AND THE PARCEL IS ON THE R.

TYPE DEVELOPMENT SFD/UTILITY ESTIMATED COST OF CONSTRUCTION 88000.00

HEATED FLOOR AREA 1760.00 TOTAL AREA 2540.00 HEIGHT 19.10 STORIES 1

FOUNDATION CONC WALLS FRAMED ROOF PITCH 6'12 FLOOR CONC

LAND USE & ZONING A-3 MAX. HEIGHT 35

Minimum Set Back Requirments: STREET-FRONT 30.00 REAR 25.00 SIDE 25.00

NO. EX.D.U. 0 FLOOD ZONE XPS DEVELOPMENT PERMIT NO.

PARCEL ID 16-7S-17-10006-108 SUBDIVISION SUMMER ACRES

LOT 8 BLOCK PHASE UNIT TOTAL ACRES 10.45

| 000001339 | | CGC1510178 | Janet Blankenship | |
|---|---|---|---|---|
| Culvert Permit No. | Culvert Waiver | Contractor's License Number | Applicant/Owner/Contractor | |
| WAIVER | 07-00136N | BLK | JTH | N |
| Driveway Connection | Septic Tank Number | LU & Zoning checked by | Approved for Issuance | New Resident |

COMMENTS: NOC ON FILE. 1 FOOT ABOVE ROAD.

Check # or Cash 1090

## FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power _____ date/app. by

Foundation _____ date/app. by

Monolithic _____ date/app. by

Under slab rough-in plumbing _____ date/app. by

Slab _____ date/app. by

Sheathing/Nailing _____ date/app. by

Framing _____ date/app. by

Rough-in plumbing above slab and below wood floor _____ date/app. by

Electrical rough-in _____ date/app. by

Heat & Air Duct _____ date/app. by

Peri. beam (Lintel) _____ date/app. by

Permanent power _____ date/app. by

C.O. Final _____ date/app. by

Culvert _____ date/app. by

M/H tie downs, blocking, electricity and plumbing _____ date/app. by

Pool _____ date/app. by

Reconnection _____ date/app. by

Pump pole _____ date/app. by

Utility Pole _____ date/app. by

M/H Pole _____ date/app. by

Travel Trailer _____ date/app. by

Re-roof _____ date/app. by

BUILDING PERMIT FEE $ 440.00 CERTIFICATION FEE $ 12.70 SURCHARGE FEE $ 12.70

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

FLOOD DEVELOPMENT FEE $ FLOOD ZONE FEE $ 25.00 CULVERT FEE $ **TOTAL FEE** 540.40

INSPECTORS OFFICE CLERKS OFFICE CH

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

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

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

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

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

This Document Prepared By and Return to:
Darryl J. Tompkins, Esquire
Darryl J. Tompkins, P.A.
14420 NW 151st Blvd.
P.O. Box 519
Alachua, FL 32616

Parcel ID Number: R10006-108

# Warranty Deed

**This Indenture,** Made this 10th day of January , 2007 A.D., **Between**
Holly A. Queen, an unmarried woman

of the County of Alachua , State of Florida , **grantor,** and
George T. Emanuel

whose address is: 4851 SW 201 Terrace, Fort Lauderdale, FL 33332

of the County of Broward , State of Florida , **grantee.**

**Witnesseth** that the GRANTOR, for and in consideration of the sum of
----------TEN DOLLARS ($10)---------- DOLLARS,
and other good and valuable consideration to GRANTOR in hand paid by GRANTEE, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said GRANTEE and GRANTEE'S heirs, successors and assigns forever, the following described land, situate, lying and being in the County of Columbia State of Florida to wit:
See Exhibit "A" attached hereto.

SUBJECT TO THE FOLLOWING:

A. Zoning restrictions, prohibitions and other requirements imposed by governmental authority;
B. Restrictions and matters appearing on the plat and/or common to the subdivision;
C. Taxes for the year 2007 and subsequent years.

Grantor hereby warrants and represents that the subject property is not his Constitutional Homestead, nor of his spouse, nor is it contiguous thereto.

and the grantor does hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

**In Witness Whereof,** the grantor has hereunto set his hand and seal the day and year first above written.

**Signed, sealed and delivered in our presence:**

_____
Printed Name: _____
Witness

_____ (Seal)
Holly A. Queen
P.O. Address: 3521 NW 42nd Terrace, Gainesville, FL 32606

_____
Printed Name: _____
Witness

STATE OF Florida
COUNTY OF Alachua

The foregoing instrument was acknowledged before me this 10th day of January , 2007 by Holly A. Queen, an unmarried woman

he is personally known to me or he has produced his Florida driver's license as identification.

_____
Printed Name: _____
Notary Public
My Commission Expires:

EEN06-232

# Exhibit "A"

PARCEL 8 OF SUMMERS ACRES BEING MORE PARTICULARLY DESCRIBED AS:

A PARCEL OF LAND IN SECTION 16, TOWNSHIP 7 SOUTH, RANGE 17 EAST, COLUMBIA COUNTY, FLORIDA; BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A FOUND 4" X 4" CONCRETE MONUMENT "SRD" AT THE NORTHWEST CORNER OF SAID SECTION 16, TOWNSHIP 7 SOUTH, RANGE 17 EAST AND RUN THENCE SOUTH 00 DEG. 15 MIN. 48 SEC. EAST ALONG THE WEST LINE OF SAID SECTION 16, 80.15 FEET TO A FOUND 4" X 4" CONCRETE MONUMENT "SRD" ON THE SOUTH RIGHT OF WAY LINE OF COUNTY ROAD NO. 778 (80 FOOT RIGHT OF WAY); THENCE NORTH 89 DEG. 55 MIN. 25 SEC. EAST ALONG SAID SOUTH RIGHT OF WAY LINE, 698.08 FEET TO A SET ½" REBAR AND CAP "PLS 4789"; THENCE SOUTH 00 DEG. 15 MIN. 48 SEC. EAST, 3260.09 FEET TO A SET ½" REBAR AND CAP "PLS 4789" AND THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 00 DEG. 15 MIN. 48 SEC. EAST, 650.23 FEET TO A SET ½" REBAR AND CAP "PLS 4789" ON THE SOUTH LINE OF THE NORTH 1/2 OF THE SOUTHWEST 1/4 OF SAID SECTION 16; THENCE SOUTH 89 DEG. 38 MIN. 29 SEC. WEST ALONG SAID SOUTH LINE, 698.08 FEET TO A FOUND 4" X 4" CONCRETE MONUMENT "PLS 1519" AT THE SOUTHWEST CORNER OF THE NORTH 1/2 OF THE SOUTHWEST 1/4 OF SAID SECTION 16; THENCE NORTH 00 DEG. 15 MIN. 48 SEC. WEST, ALONG THE WEST LINE OF SAID SECTION 16, 653.67 FEET TO A SET 1/2" REBAR AND CAP "PLS 4789"; THENCE NORTH 89 DEG. 55 MIN. 25 SEC. EAST, 698.08 FEET TO THE POINT OF BEGINNING

SUBJECT TO AND TOGETHER WITH AN EASEMENT FOR INGRESS, EGRESS, DRAINAGE AND PUBLIC UTILITIES BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A FOUND 4" X 4" CONCRETE MONUMENT "SRD" AT THE NORTHWEST CORNER OF SAID SECTION 16, TOWNSHIP 7 SOUTH, RANGE 17 EAST AND RUN THENCE SOUTH 00 DEG. 15 MIN. 48 SEC. EAST ALONG THE WEST LINE OF SAID SECTION 16, 80.15 FEET TO A FOUND 4" X 4" CONCRETE MONUMENT "SRD" ON THE SOUTH RIGHT OF WAY LINE OF COUNTY ROAD NO. 778 (80 FOOT RIGHT OF WAY); THENCE NORTH 89 DEG. 55 MIN. 25 SEC. EAST, ALONG SAID SOUTH RIGHT OF WAY LINE, 668.08 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 00 DEG. 15 MIN. 48 SEC. EAST, 3910.47 FEET TO THE SOUTH LINE OF THE NORTH ½ OF THE SOUTHWEST 1/4 OF SAID SECTION 16; THENCE NORTH 89 DEG. 38 MIN. 29 SEC. EAST ALONG SAID SOUTH LINE, 60.00 FEET; THENCE NORTH 01 DEG. 15 MIN. 48 SEC. WEST, 3910.17 FEET TO THE SAID SOUTH RIGHT OF WAY LINE OF COUNTY ROAD NO. 778; THENCE SOUTH 89 DEG. 55 MIN. 25 SEC. WEST ALONG SAID SOUTH RIGHT OF WAY LINE, 60.00 FEET TO THE POINT OF BEGINNING.

COLLECTED - EDITED INFORMATION - COMMENTS: - 2.28.07

DATE 02/28/2007

# Columbia County Building Permit

**This Permit Expires One Year From the Date of Issue**

PERMIT 000025576 OVER Sight By BLK

APPLICANT JANET BLANKENSHIP PHONE 386.454.2900

ADDRESS 3335 NW CR 236 #30 HIGH SPRINGS FL 32643

OWNER GEORGE EMANUEL PHONE 954.434.7567

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| WAIVER | 07-00136N | BLK | JTH | N |
| Driveway Connection | Septic Tank Number | LU & Zoning checked by | Approved for Issuance | New Resident |

COMMENTS: NOC ON FILE. 1ST. FLOOR DETERMINATION LETTER ENCLOSED. 1ST. FLOOR CONFIRMATION LETTER REQUIRED. 6" ABOVE EXISTING GRADE. "KEEP W/ ORIGINAL SIGNED PERMIT"

Check # or Cash 1090

## FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power _____ date/app. by Foundation _____ date/app. by Monolithic _____ date/app. by

Under slab rough-in plumbing _____ date/app. by Slab _____ date/app. by Sheathing/Nailing _____ date/app. by

Framing _____ date/app. by Rough-in plumbing above slab and below wood floor _____ date/app. by

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M/H tie downs, blocking, electricity and plumbing _____ date/app. by Pool _____ date/app. by

Reconnection _____ date/app. by Pump pole _____ date/app. by Utility Pole _____ date/app. by

M/H Pole _____ date/app. by Travel Trailer _____ date/app. by Re-roof _____ date/app. by

BUILDING PERMIT FEE $ 440.00 CERTIFICATION FEE $ 12.70 SURCHARGE FEE $ 12.70

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INSPECTORS OFFICE CLERKS OFFICE

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

# Columbia County Building Permit Application

Revised 9-23-04

For Office Use Only Application # 0702-55 Date Received 2/20 By JW Permit # 13391/25576

Application Approved by - Zoning Official BLK Date 2.20.07 Plans Examiner OKSTH Date 2-23-07

Flood Zone X Survey Development Permit N/A Zoning A-3 Land Use Plan Map Category A-3

Comments 1st Floor determination letter enclosed, 1st Floor confirmation letter required 6" above existing grade

Applicants Name Janet Blankenship, Phone 386-454-2900

Address 23335 NW CR 236 #30 High Springs FL 32643

Owners Name George Emanuel Phone 954-434-7567

911 Address 736 SW Sterling Terr. High Springs FL 32643

Contractors Name LDM Construction Co. Inc. Phone 386-454-2900

Address 23335 NW CR 236 #30 High Springs FL 32643

Fee Simple Owner Name & Address same

Bonding Co. Name & Address N/A

Architect/Engineer Name & Address Juris Luzins, 9320 NW 13 Pl., Gainesville FL 32601

Mortgage Lenders Name & Address N/A

Circle the correct power company - FL Power & Light - (Clay Elec.) - Suwannee Valley Elec. - Progressive Energy

Property ID Number 16-7S-17-10006-108 Estimated Cost of Construction 150,000.-

Subdivision Name Summer's Acres Lot 8 Block ____ Unit ____ Phase ____

Driving Directions 441 to CR 778, Go West to SW Sterling Terr, go south to end - parcel on Right

Type of Construction New - SFD Number of Existing Dwellings on Property 0

Total Acreage 10.45 Lot Size 650'x698' Do you need a - Culvert Permit or (Culvert Waiver) or Have an Existing Drive ON SURVEY

Actual Distance of Structure from Property Lines - Front 144' Side 132' Side 450' Rear 475'

Total Building Height 19'-10" Number of Stories 1 Heated Floor Area 1760 TOTAL 2540 Roof Pitch 6/12

**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 COMMENCMENT 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)

Contractor Signature

Contractors License Number CGC1510178

Competency Card Number

NOTARY STAMP/SEAL

STATE OF FLORIDA
COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me this 20 day of February 2007.

Personally known ✓ or Produced Identification ____

Notary Signature Janet Blankenship

JANET BLANKENSHIP
MY COMMISSION #DD292061
EXPIRES: FEB 17, 2008
Bonded through 1st State Insurance

JW Advised Janet 2.2707

LDM Construction
Phone: 386.454.2900 Fax: 386.454.2929

February 20, 2007

Columbia County Building & Zoning
135 NE Hernando Avenue
Lake City, FL 32055

To Whom It May Concern:

This letter is to authorize my agent, Janet Blankenship, full rights to pull permits on my behalf.

If you have any questions, please do not hesitate to contact me at (352) 318-8507.

Sincerely,

Lee A. Holloway

STATE OF FLORIDA
COUNTY OF ALACHUA

Sworn to and subscribed before me this 20th day of February 2007.

Personally Known____ or Produced Identification____

Dolores C. Barnett

Notary Public, State of Florida
My Commission Expires:

DOLORES C. BARNETT
MY COMMISSION # DD 252749
EXPIRES: September 23, 2007
Bonded Thru Notary Public Underwriters

~~23335 NW CR 236 Suite #30~~
High Springs, Florida 32643

# COLUMBIA COUNTY 9-1-1 ADDRESSING

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

## Addressing Maintenance

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

**DATE REQUESTED:** 2/5/2007 **DATE ISSUED:** 2/7/2007

**ENHANCED 9-1-1 ADDRESS:**

736 SW STERLING TER

HIGH SPRINGS FL 32643

**PROPERTY APPRAISER PARCEL NUMBER:**

16-7S-17-10006-108

**Remarks:**

LOT 8 SUMMERS ACRES UNREC

**Address Issued By:** _____

Columbia County 9-1-1 Addressing / GIS Department

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

612

Approved Address

FEB 07 2007

911Addressing/GIS Dept

Thru WEEGIE

# Columbia County Building Department
# Culvert Waiver

**Culvert Waiver No. 000001339**

DATE: 02/28/2007 BUILDING PERMIT NO. 25576

APPLICANT JANET BLANKENSHIP PHONE 386.454.2900

ADDRESS 23335 NW CR 236 #30 HIGH SPRINGS FL 32643

OWNER GEORGE EMANUEL PHONE 954.434.7567

ADDRESS 736 SW STERLING TERRACE HIGH SPRINGS FL 32643

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LOCATION OF PROPERTY 441-S TO C-778,TURN W TO STERLING TERRACE,TURN SOUTH GOTO THE END AND THE PARCEL IS ON THE R.

SUBDIVISION/LOT/BLOCK/PHASE/UNIT SUMMER ACRES 8

PARCEL ID # 16-7S-17-10006-108

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

**SIGNATURE:** Janet Blankenship

**A SEPARATE CHECK IS REQUIRED**
**MAKE CHECKS PAYABLE TO BCC**

**Amount Paid 50.00**

---

**PUBLIC WORKS DEPARTMENT USE ONLY**

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

_____ APPROVED _____ NOT APPROVED - NEEDS A CULVERT PERMIT

COMMENTS: Privet Road

SIGNED: [signature] DATE: 3-5-07

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

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

RECEIVED
MAR 02 2007
BY:

COLUMBIA COUNTY GATEWAY TO FLORIDA

1905 S. Main Street
Gainesville, Florida 32601
(352) 378-1444 Fax (352) 372-2502

# George F. Young, Inc.

*Turning Vision Into Reality*

Since 1919

ARCHITECTURE ■ ENGINEERING ■ ENVIRONMENTAL ■ LANDSCAPE ARCHITECTURE ■ PLANNING ■ SURVEYING ■ UTILITIES

Mr. Lee Holloway
LDM Construction
23335 NW County Road 236, Suite 30
High Springs, Florida 32643

13 July 2007

RE: Emanuel Residence
Parcel 8 of Section 16, Township 7 South, Range 17 East, Columbia County, Florida, located on SW Sterling Terrace.
Finish Floor Elevation.

To Whom It May Concern:

Reviewing the lot and existing grades shows the property falling westerly from the existing access limerock drive. Based on Columbia County regulations the finish floor should be 1 foot above the access road. They do allow for an Engineer's certification that the finish floor can be set lower if no flooding problems are present.

It was constructed to be at the 6" above the existing grade and is at the same level as the lime rock roadway approximately 150 feet northeasterly of the residence. The lot grading has been maintained to gradual slope grade around the residence to allow flow to the west. The lot continues to fall in elevation westerly from where the residence is constructed, which will allow all drainage to flow away from the home and not present any flooding to occur.

If you have any questions please feel free to contact me at 352-378-1444.

Sincerely,
George F. Young, Inc.

John P. Bastow, PE
Florida Engineer Registration Number 37232
Vice President -- Gainesville Engineering



7.16.07
CFS
Extension
- 5576

# CERTIFICATE OF 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** 16-7S-17-10006-108 **Building permit No.** 000025576

**Use Classification** SFD/UTILITY **Fire:** 43.16

**Permit Holder** LEE A. HOLLOWAY **Waste:** 67.00

**Owner of Building** GEORGE EMANUEL **Total:** 110.16

**Location:** 736 SW STERLING TERR, HIGH SPRINGS, FL

**Date:** 06/21/2007

**Building Inspector**

**POST IN A CONSPICUOUS PLACE**
***(Business Places Only)***

1905 S. Main Street
Gainesville, Florida 32601
(352) 378-1444 Fax (352) 372-2502

Since 1919

# George F. Young, Inc.

*Turning Vision Into Reality*

ARCHITECTURE ■ ENGINEERING ■ ENVIRONMENTAL ■ LANDSCAPE ARCHITECTURE ■ PLANNING ■ SURVEYING ■ UTILITIES

Mr. Lee Holloway
LDM Construction
23335 NW County Road 236, Suite 30
High Springs, Florida 32643

9 February 2007

RE: Proposed Residence
Parcel 8 of Section 16, Township 7 South, Range 17 East, Columbia County, Florida, located on SW Sterling Terrace.
Finish Floor Elevation.

To Whom It May Concern:

Reviewing the proposed lot and existing grades shows the property falling westerly from the existing access limerock drive. Based on Columbia County regulations the finish floor should be 1 foot above the access road. They do allow for an Engineer's certification that the finish floor can be set lower if no flooding problems are present.

It is my recommendation that you set the finish floor at a minimum of 6" above the highest existing grade at the home site. Maintain a slope grade around the front of the residence to allow flow to the west. The lot continues to fall in elevation westerly from where you plan to construct the home and garage, which will allow all drainage to flow away from the home and garage and not present any flooding to occur.

If you have any questions please feel free to contact me at 352-378-1444.

Sincerely,
George F. Young, Inc.

John P. Bastow, PE
Florida Engineer Registration Number 37232
Vice President – Gainesville Engineering

# ACORD CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 02/19/2007

PRODUCER (352)377-2002 FAX (352)376-8393
Scarborough Company Insurance, Inc.
2811 NW 41st Street
P. O. Box 147050
Gainesville, FL 32614-7050

INSURED LDM Construction Co. Inc.
23335 NW CR 236 #30
High Springs, FL 32643

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

| INSURERS AFFORDING COVERAGE | NAIC # |
|---|---|
| INSURER A: Mid-Continent Casualty | |
| INSURER B: Star Insurance Co. | |
| INSURER C: | |
| INSURER D: | |
| INSURER E: | |

**COVERAGES**

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

| INSR LTR | ADD'L INSRD | TYPE OF INSURANCE | POLICY NUMBER | POLICY EFFECTIVE DATE (MM/DD/YY) | POLICY EXPIRATION DATE (MM/DD/YY) | LIMITS | |
|---|---|---|---|---|---|---|---|
| A | | GENERAL LIABILITY<br>X COMMERCIAL GENERAL LIABILITY<br>CLAIMS MADE OCCUR<br>GEN'L AGGREGATE LIMIT APPLIES PER:<br>X POLICY PRO-JECT LOC | 04-GL-000634443 | 06/10/2006 | 06/10/2007 | EACH OCCURRENCE<br>DAMAGE TO RENTED PREMISES (Ea occurrence)<br>MED EXP (Any one person)<br>PERSONAL & ADV INJURY<br>GENERAL AGGREGATE<br>PRODUCTS - COMP/OP AGG | $ 1,000,000<br>$ 100,000<br>$ Excluded<br>$ 1,000,000<br>$ 2,000,000<br>$ 2,000,000 |
| | | AUTOMOBILE LIABILITY<br>ANY AUTO<br>ALL OWNED AUTOS<br>SCHEDULED AUTOS<br>HIRED AUTOS<br>NON-OWNED AUTOS | | | | COMBINED SINGLE LIMIT (Ea accident)<br>BODILY INJURY (Per person)<br>BODILY INJURY (Per accident)<br>PROPERTY DAMAGE (Per accident) | $<br>$<br>$<br>$ |
| | | GARAGE LIABILITY<br>ANY AUTO | | | | AUTO ONLY - EA ACCIDENT<br>OTHER THAN AUTO ONLY: EA ACC<br>AGG | $<br>$<br>$ |
| | | EXCESS/UMBRELLA LIABILITY<br>OCCUR CLAIMS MADE<br>DEDUCTIBLE<br>RETENTION $ | | | | EACH OCCURRENCE<br>AGGREGATE | $<br>$ |
| B | | WORKERS COMPENSATION AND EMPLOYERS' LIABILITY<br>ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?<br>If yes, describe under SPECIAL PROVISIONS below | WC0290804 | 07/20/2006 | 07/20/2007 | X WC STATU-TORY LIMITS OTH-ER<br>E.L. EACH ACCIDENT<br>E.L. DISEASE - EA EMPLOYEE<br>E.L. DISEASE - POLICY LIMIT | $ 100,000<br>$ 100,000<br>$ 500,000 |
| | | OTHER | | | | | |

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

**CERTIFICATE HOLDER**

Columbia County Building Department
PO Drawer 1529
Lake City, FL 32056-1529

**CANCELLATION**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE
Donna Garrett/DWG

AC# 2342408

## STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
CONSTRUCTION INDUSTRY LICENSING BOARD

SEQ# L05113002002

| DATE | BATCH NUMBER | LICENSE NBR |
|---|---|---|
| 11/30/2005 | 050405137 | QB 32221 |

The BUSINESS ORGANIZATION
Named below IS QUALIFIED
Under the provisions of Chapter 489 FS.
Expiration date: AUG 31, 2007
(THIS IS NOT A LICENSE TO PERFORM WORK. THIS ALLOWS
COMPANY TO DO BUSINESS ONLY IF IT HAS A QUALIFIER.)

LDM CONSTRUCTION COMPANY INC
25399 OLD BELLAMY RD
HIGH SPRINGS FL 32643

JEB BUSH
GOVERNOR

SIMONE MARSTILLER
SECRETARY

DISPLAY AS REQUIRED BY LAW

AC# 2760837

## STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
CONSTRUCTION INDUSTRY LICENSING BOARD

SEQ# L06082902190

| DATE | BATCH NUMBER | LICENSE NBR |
|---|---|---|
| 08/29/2006 | 060146689 | CGC 1510178 |

The GENERAL CONTRACTOR
Named below IS CERTIFIED
Under the provisions of Chapter 489 FS.
Expiration date: AUG 31, 2008

HOLLOWAY, LEE ANTHONY
LDM CONSTRUCTION COMPANY INC
23335 NW COUNTY ROAD 236 #30
HIGH SPRINGS FL 32643

JEB BUSH
GOVERNOR

SIMONE MARSTILLER
SECRETARY

DISPLAY AS REQUIRED BY LAW

# UNIVERSAL
## ENGINEERING SCIENCES

Consultants In: Geotechnical Engineering • Environmental Sciences • Construction Materials Testing

4475 S.W. 35th Terrace • Gainesville, Florida 32608 • (352) 372-3392

# REPORT ON IN-PLACE DENSITY TESTS

Permit # none Packet # 25576

CLIENT: LDM Const.

PROJECT: George Emanuel Residence High Springs
736 S.W Sterling Terr.

AREA TESTED: Fill & prop Bldg Pad

COURSE: F/G DEPTH OF TEST: 0-1'

TYPE OF TEST: ASTM D-2922 DATE TESTED: 3-2-07

NOTE: The below tests (DO) / ~~DO NOT~~ meet the minimum 95 % compaction requirements of maximum density.

REMARKS:

| LOCATION OF TESTS | DRY DEN. | MAX. DEN. | % MAX. DEN. | % MOIST. | OPT. MOIST. |
|---|---|---|---|---|---|
| | | 106.5 | | | 12.5 |
| Approx 8' S.W From the N.E | | | | | |
| corner of Bldg Pad | 101.8 | | 95.6 | 11.1 | |
| | | | | | |
| Approx 12' N.W from the S.E | | | | | |
| corner of Bldg Pad. | 103.8 | | 97.5 | 9.2 | |
| | | | | | |
| Approx 10' N.E From the S.W | | | | | |
| corner of Bldg Pad. | 103.8 | | 97.5 | 11.4 | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
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| | | | | | |
| | | | | | |
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| | | | | | |
| | | | | | |
| | | | | | |

TECH. J.F

4404

# Notice of Treatment 41404

**Applicator: Florida Pest Control & Chemical Co. (www.flapest .com)**
Address: 116 NW 16 Ave
City Gville Phone 376-2661

**Site Location**: Subdivision River Rise
Lot # 80 Block# _____ Permit # 25576
Address 736 STERLING Terr

| Product used | Active Ingredient | % Concentration |
|---|---|---|
| ☐ Premise | Imidacloprid | 0.1% |
| ☐ Termidor | Fipronil | 0.12% |
| ☑ Bora-Care | Disodium Octaborate Tetrahydrate | 23.0% |

**Type treatment:** ☐ Soil ☑ Wood

| Area Treated | Square feet | Linear feet | Gallons Applied |
|---|---|---|---|
| New Exposed Wood | — | — | .75 |
| | | | |
| | | | |
| | | | |

As per Florida Building Code 104.2.6 – If soil chemical barrier method for termite prevention is used, final exterior treatment shall be completed prior to final building approval.

If this notice is for the final exterior treatment, initial this line _____.

4/10/07 Date | 8:50 Time | Mitch Print Technician's Name

Remarks: _____

Applicator - White Permit File - Canary Permit Holder - Pink

10/05 ©

# Notice of Treatment 41404

**Applicator: Florida Pest Control & Chemical Co. (www.flapest .com)**
Address: 116 NW 16 AVE
City Gville Phone 376-2661

**Site Location**: Subdivision LDM
Lot # _____ Block# _____ Permit # 25576
Address 736 STERLING TERR

| Product used | Active Ingredient | % Concentration |
|---|---|---|
| ☐ Premise | Imidacloprid | 0.1% |
| ☑ Termidor | Fipronil | 0.12% |
| ☑ Bora-Care | Disodium Octaborate Tetrahydrate | 23.0% |

**Type treatment:** ☐ Soil ☑ Wood

| Area Treated | Square feet | Linear feet | Gallons Applied |
|---|---|---|---|
| Boracare | — | 666 | 3.5 |
| Termidor | — | — | 2 |
| | | | |
| | | | |

As per Florida Building Code 104.2.6 – If soil chemical barrier method for termite prevention is used, final exterior treatment shall be completed prior to final building approval.

If this notice is for the final exterior treatment, initial this line _____.

3/22/07 Date | 12:45 Time | Mitch Print Technician's Name

Remarks: _____

Applicator - White Permit File - Canary Permit Holder - Pink
10/05 ©

# Notice of Treatment 41404

**Applicator:** Florida Pest Control & Chemical Co. (www.flapest.com)
Address: 116 NW 76 AVE
City GVILLE Phone 376-2661

**Site Location:** Subdivision
Lot # Block# Permit # 25576
Address 736 STERLING TERR (H. SPGS)

| Product used | Active Ingredient | % Concentration |
|---|---|---|
| ☐ Premise | Imidacloprid | 0.1% |
| ☐ Termidor | Fipronil | 0.12% |
| ☐ Bora-Care | Disodium Octaborate Tetrahydrate | 23.0% |

**Type treatment:** ☐ Soil ☐ Wood

| Area Treated | Square feet | Linear feet | Gallons Applied |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

As per Florida Building Code 104.2.6 – If soil chemical barrier method for termite prevention is used, final exterior treatment shall be completed prior to final building approval.

If this notice is for the final exterior treatment, initial this line _____.

6/20/07 Date

1131 Time

Bill E. Print Technician's Name

Remarks:

Applicator - White Permit File - Canary Permit Holder - Pink

10/05 ©

# ice of Intent for Preventative Treatment for Termites

(As required by Florida Building Code 104.2.6)

3-1-07

#25574

736 SW Sterling Terr LOT 8

Address of Treatment or Lot/Block of Treatment)

High Springs

City

## Florida Pest Control & Chemical Co.

www.flapest.com

luct to be used: Bora-Care Termiticide (Wood Treatment)

mical to be used: 23% Disodium Octaborate Tetrahydrate

cation will be performed onto structural wood at dried-in stage of construction.
Care Termiticide application shall be applied according to EPA registered label
ions as stated in the Florida Building Code Section 1861.1.8

rmation to be provided to local building code offices prior to concrete
dation installation.)

6/04

FORM 600A-2004R EnergyGauge® 4.5

# FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs

## Residential Whole Building Performance Method A

| | | | |
|---|---|---|---|
| Project Name: | WILLOW | Builder: | LDM CONST. |
| Address: | | Permitting Office: | COLUMBIA |
| City, State: | , | Permit Number: | 2557C |
| Owner: | | Jurisdiction Number: | 221000 |
| Climate Zone: | North | | |

| | | | |
|---|---|---|---|
| 1. New construction or existing | New | 12. Cooling systems | |
| 2. Single family or multi-family | Single family | a. Central Unit | Cap: 34.0 kBtu/hr |
| 3. Number of units, if multi-family | 1 | | SEER: 13.00 |
| 4. Number of Bedrooms | 4 | b. N/A | |
| 5. Is this a worst case? | Yes | | |
| 6. Conditioned floor area (ft²) | 1760 ft² | c. N/A | |
| 7. Glass type[1] and area: (Label reqd. by 13-104.4.5 if not default) | | | |
| a. U-factor: | Description Area | 13. Heating systems | |
| (or Single or Double DEFAULT) 7a. | (Dble Default) 198.0 ft² | a. Electric Heat Pump | Cap: 35.4 kBtu/hr |
| b. SHGC: | | | HSPF: 8.10 |
| (or Clear or Tint DEFAULT) 7b. | (Clear) 198.0 ft² | b. N/A | |
| 8. Floor types | | | |
| a. Slab-On-Grade Edge Insulation | R=0.0, 189.0(p) ft | c. N/A | |
| b. N/A | | | |
| c. N/A | | 14. Hot water systems | |
| 9. Wall types | | a. Electric Resistance | Cap: 50.0 gallons |
| a. Frame, Wood, Exterior | R=13.0, 1086.0 ft² | | EF: 0.92 |
| b. Frame, Wood, Adjacent | R=13.0, 174.0 ft² | b. N/A | |
| c. N/A | | | |
| d. N/A | | c. Conservation credits | |
| e. N/A | | (HR-Heat recovery, Solar | |
| 10. Ceiling types | | DHP-Dedicated heat pump) | |
| a. Under Attic | R=30.0, 1760.0 ft² | 15. HVAC credits | |
| b. Under Attic | R=19.0, 122.0 ft² | (CF-Ceiling fan, CV-Cross ventilation, | |
| c. N/A | | HF-Whole house fan, | |
| 11. Ducts | | PT-Programmable Thermostat, | |
| a. Sup: Unc. Ret: Unc. AH: Garage | Sup. R=6.0, 255.0 ft | MZ-C-Multizone cooling, | |
| b. N/A | | MZ-H-Multizone heating) | |

Glass/Floor Area: 0.11 Total as-built points: 25539 Total base points: 26564 **PASS**

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

**PREPARED BY:** _____

**DATE:** 2/14/07

SUNCOAST INSULATORS
825 NW 253rd Terrace
Newberry, FL 32669
(352) 472-0995
Fax (352) 472-2033

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

**OWNER/AGENT:** _____

**DATE:** 2-16-07

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.

GREAT SEAL OF THE STATE OF FLORIDA * IN GOD WE TRUST

**BUILDING OFFICIAL:** _____

**DATE:** _____

1 Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.

# 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. | |

# 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 Ratio | X Multiplier | X Credit Multiplier | = Total |
| 4 | | 2635.00 | 10540.0 | 50.0 | 0.92 | 4 | | 1.00 | 2635.00 | 1.00 | 10540.0 |
| | | | | **As-Built Total:** | | | | | | | **10540.0** |

## CODE COMPLIANCE STATUS

| BASE | | | | AS-BUILT | | | |
|---|---|---|---|---|---|---|---|
| Cooling Points + | Heating Points + | Hot Water Points = | Total Points | Cooling Points + | Heating Points + | Hot Water Points = | Total Points |
| **7196** | **8829** | **10540** | **26564** | **6909** | **8090** | **10540** | **25539** |

# PASS

# WINTER CALCULATIONS

## Residential Whole Building Performance Method A - Details

| ADDRESS: , , , | PERMIT #: |
|---|---|

| BASE | | | AS-BUILT | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Winter Base Points:** | | **15936.1** | **Winter As-Built Points:** | | | | | **15377.2** |
| 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 |
| | | | (sys 1: Electric Heat Pump 35400 btuh ,EFF(8.1) Ducts:Unc(S),Unc(R),Gar(AH),R6.0 | | | | | |
| 15936.1 | 0.5540 | 8828.6 | 15377.2 | 1.000 | (1.069 x 1.169 x 1.00) | 0.421 | 1.000 | 8089.8 |
| | | | **15377.2** | **1.00** | **1.250** | **0.421** | **1.000** | **8089.8** |

# WINTER CALCULATIONS

## Residential Whole Building Performance Method A - Details

| ADDRESS: , , , | PERMIT #: |
|---|---|

| BASE | | | | AS-BUILT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GLASS TYPES** .18 X Conditioned Floor Area | X BWPM | = Points | | Type/SC | Overhang Ornt | Len | Hgt | Area X | WPM X | WOF | = Points | |
| .18 | 1760.0 | 20.17 | 6390.0 | 1.Double, Clear | S | 2.0 | 6.0 | 19.0 | 13.30 | 1.26 | 317.0 | |
| | | | | 2.Double, Clear | W | 2.0 | 6.0 | 54.0 | 20.73 | 1.04 | 1167.0 | |
| | | | | 3.Double, Clear | N | 2.0 | 6.0 | 50.0 | 24.58 | 1.00 | 1234.0 | |
| | | | | 4.Double, Clear | E | 2.0 | 6.0 | 75.0 | 18.79 | 1.06 | 1494.0 | |
| | | | | **As-Built Total:** | | | | **198.0** | | | **4212.0** | |
| **WALL TYPES** | Area X | BWPM = | Points | Type | | | R-Value | Area X | WPM = | | Points | |
| Adjacent | 174.0 | 3.60 | 626.4 | 1. Frame, Wood, Exterior | | | 13.0 | 1086.0 | 3.40 | | 3692.4 | |
| Exterior | 1086.0 | 3.70 | 4018.2 | 2. Frame, Wood, Adjacent | | | 13.0 | 174.0 | 3.30 | | 574.2 | |
| **Base Total:** | **1260.0** | | **4644.6** | **As-Built Total:** | | | | **1260.0** | | | **4266.6** | |
| **DOOR TYPES** | Area X | BWPM = | Points | Type | | | | Area X | WPM = | | Points | |
| Adjacent | 18.0 | 11.50 | 207.0 | 1.Exterior Insulated | | | | 36.0 | 8.40 | | 302.4 | |
| Exterior | 36.0 | 12.30 | 442.8 | 2.Adjacent Insulated | | | | 18.0 | 8.00 | | 144.0 | |
| **Base Total:** | **54.0** | | **649.8** | **As-Built Total:** | | | | **54.0** | | | **446.4** | |
| **CEILING TYPES** | Area X | BWPM = | Points | Type | | | R-Value | Area X | WPM X | WCM = | Points | |
| Under Attic | 1760.0 | 2.05 | 3608.0 | 1. Under Attic | | | 30.0 | 1760.0 | 2.05 X | 1.00 | 3608.0 | |
| | | | | 2. Under Attic | | | 19.0 | 122.0 | 2.70 X | 1.00 | 329.4 | |
| **Base Total:** | **1760.0** | | **3608.0** | **As-Built Total:** | | | | **1882.0** | | | **3937.4** | |
| **FLOOR TYPES** | Area X | BWPM = | Points | Type | | | R-Value | Area X | WPM = | | Points | |
| Slab | 189.0(p) | 8.9 | 1682.1 | 1. Slab-On-Grade Edge Insulation | | | 0.0 | 189.0(p | 18.80 | | 3553.2 | |
| Raised | 0.0 | 0.00 | 0.0 | | | | | | | | | |
| **Base Total:** | | | **1682.1** | **As-Built Total:** | | | | **189.0** | | | **3553.2** | |
| **INFILTRATION** | Area X | BWPM = | Points | | | | | Area X | WPM = | | Points | |
| | 1760.0 | -0.59 | -1038.4 | | | | | 1760.0 | -0.59 | | -1038.4 | |

# SUMMER CALCULATIONS

## Residential Whole Building Performance Method A - Details

| ADDRESS: , , , | PERMIT #: |
|---|---|

| BASE | | | AS-BUILT | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Summer Base Points: 22141.2** | | | **Summer As-Built Points: 21255.9** | | | | | |
| 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 |
| | | | (sys 1: Central Unit 34000btuh ,SEER/EFF(13.0) Ducts:Unc(S),Unc(R),Gar(AH),R6.0(INS) | | | | | |
| | | | 21256 | 1.00 | (1.09 x 1.147 x 1.00) | 0.260 | 1.000 | 6909.4 |
| **22141.2** | **0.3250** | **7195.9** | **21255.9** | **1.00** | **1.250** | **0.260** | **1.000** | **6909.4** |

# SUMMER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: , , , PERMIT #:

| BASE | | | | AS-BUILT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GLASS TYPES** .18 X Conditioned Floor Area | X BSPM | = Points | | Type/SC | Overhang Ornt | Len | Hgt | Area X | SPM X | SOF | = Points | |
| .18 | 1760.0 | 18.59 | 5889.0 | 1.Double, Clear | S | 2.0 | 6.0 | 19.0 | 35.87 | 0.78 | 528.0 | |
| | | | | 2.Double, Clear | W | 2.0 | 6.0 | 54.0 | 38.52 | 0.85 | 1766.0 | |
| | | | | 3.Double, Clear | N | 2.0 | 6.0 | 50.0 | 19.20 | 0.90 | 864.0 | |
| | | | | 4.Double, Clear | E | 2.0 | 6.0 | 75.0 | 42.06 | 0.85 | 2675.0 | |
| | | | | **As-Built Total:** | | | | **198.0** | | | **5833.0** | |
| **WALL TYPES** | Area X | BSPM = | Points | Type | | | R-Value | Area X | SPM = | | Points | |
| Adjacent | 174.0 | 0.70 | 121.8 | 1. Frame, Wood, Exterior | | | 13.0 | 1086.0 | 1.50 | | 1629.0 | |
| Exterior | 1086.0 | 1.70 | 1846.2 | 2. Frame, Wood, Adjacent | | | 13.0 | 174.0 | 0.60 | | 104.4 | |
| **Base Total:** | **1260.0** | | **1968.0** | **As-Built Total:** | | | | **1260.0** | | | **1733.4** | |
| **DOOR TYPES** | Area X | BSPM = | Points | Type | | | | Area X | SPM = | | Points | |
| Adjacent | 18.0 | 2.40 | 43.2 | 1.Exterior Insulated | | | | 36.0 | 4.10 | | 147.6 | |
| Exterior | 36.0 | 6.10 | 219.6 | 2.Adjacent Insulated | | | | 18.0 | 1.60 | | 28.8 | |
| **Base Total:** | **54.0** | | **262.8** | **As-Built Total:** | | | | **54.0** | | | **176.4** | |
| **CEILING TYPES** | Area X | BSPM = | Points | Type | | | R-Value | Area X | SPM X SCM = | | Points | |
| Under Attic | 1760.0 | 1.73 | 3044.8 | 1. Under Attic | | | 30.0 | 1760.0 | 1.73 X 1.00 | | 3044.8 | |
| | | | | 2. Under Attic | | | 19.0 | 122.0 | 2.34 X 1.00 | | 285.5 | |
| **Base Total:** | **1760.0** | | **3044.8** | **As-Built Total:** | | | | **1882.0** | | | **3330.3** | |
| **FLOOR TYPES** | Area X | BSPM = | Points | Type | | | R-Value | Area X | SPM = | | Points | |
| Slab | 189.0(p) | -37.0 | -6993.0 | 1. Slab-On-Grade Edge Insulation | | | 0.0 | 189.0(p | -41.20 | | -7786.8 | |
| Raised | 0.0 | 0.00 | 0.0 | | | | | | | | | |
| **Base Total:** | | | **-6993.0** | **As-Built Total:** | | | | **189.0** | | | **-7786.8** | |
| **INFILTRATION** | Area X | BSPM = | Points | | | | | Area X | SPM = | | Points | |
| | 1760.0 | 10.21 | 17969.6 | | | | | 1760.0 | 10.21 | | 17969.6 | |

# ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

**ESTIMATED ENERGY PERFORMANCE SCORE* = 85.0**

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

| | | | | | |
|---|---|---|---|---|---|
| 1. | New construction or existing | New | | 12. Cooling systems | |
| 2. | Single family or multi-family | Single family | | a. Central Unit | Cap: 34.0 kBtu/hr |
| 3. | Number of units, if multi-family | 1 | | | SEER: 13.00 |
| 4. | Number of Bedrooms | 4 | | b. N/A | |
| 5. | Is this a worst case? | Yes | | | |
| 6. | Conditioned floor area (ft²) | 1760 ft² | | c. N/A | |
| 7. | Glass type[1] and area: (Label reqd. by 13-104.4.5 if not default) | | | | |
| a. | U-factor: | Description Area | | 13. Heating systems | |
| | (or Single or Double DEFAULT) 7a. | (Dble Default) 198.0 ft² | | a. Electric Heat Pump | Cap: 35.4 kBtu/hr |
| b. | SHGC: | | | | HSPF: 8.10 |
| | (or Clear or Tint DEFAULT) 7b. | (Clear) 198.0 ft² | | b. N/A | |
| 8. | Floor types | | | | |
| a. | Slab-On-Grade Edge Insulation | R=0.0, 189.0(p) ft | | c. N/A | |
| b. | N/A | | | | |
| c. | N/A | | | 14. Hot water systems | |
| 9. | Wall types | | | a. Electric Resistance | Cap: 50.0 gallons |
| a. | Frame, Wood, Exterior | R=13.0, 1086.0 ft² | | | EF: 0.92 |
| b. | Frame, Wood, Adjacent | R=13.0, 174.0 ft² | | b. N/A | |
| c. | N/A | | | | |
| d. | N/A | | | c. Conservation credits | |
| e. | N/A | | | (HR-Heat recovery, Solar DHP-Dedicated heat pump) | |
| 10. | Ceiling types | | | 15. HVAC credits | |
| a. | Under Attic | R=30.0, 1760.0 ft² | | (CF-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, PT-Programmable Thermostat, MZ-C-Multizone cooling, MZ-H-Multizone heating) | |
| b. | Under Attic | R=19.0, 122.0 ft² | | | |
| c. | N/A | | | | |
| 11. | Ducts | | | | |
| a. | Sup: Unc. Ret: Unc. AH: Garage | Sup. R=6.0, 255.0 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: 2-16-07

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


**NOTE: The home's estimated energy performance score is only available through the FLA/RES computer program. This is not a Building Energy Rating. If your score is 80 or greater (or 86 for a US EPA/DOE EnergyStar™ 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.

STATE OF FLORIDA
DEPARTMENT OF HEALTH

APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 07-00136-N

PART II - SITE PLAN

Scale: Each block represents 5 feet and 1 inch = 50 feet.

SEE ATTACHED

Notes: _____

Site Plan submitted by: Jamer Blankenship
Signature

Title

Plan Approved APPROVED Not Approved

Date 2/21/17

By _____ Columbia CHD
County Health Department

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

**NOTICE OF COMMENCEMENT FORM**
**COLUMBIA COUNTY, FLORIDA**

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

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

**Tax Parcel ID Number** 16-7S-17-10006-108

1. **Description of property: (legal description of the property and street address or 911 address)**
   736 SW Sterling Terrace
   High Springs FL 32643

   Lot #8 Summers Acres

2. **General description of improvement:** Single Family Residents

3. **Owner Name & Address** George Emanuel 4851 SW 201 Terr. SW Ranches FL 33332 **Interest in Property** Owner

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

5. **Contractor Name** LDM Construction Co Inc **Phone Number** 386-454-2900
   **Address** 23335 NW CR 236 #30 High Springs FL 32643

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

   Inst:2007003541 Date:02/13/2007 Time:15:52
   DC,P.DeWitt Cason,Columbia County B:1110 P:1825

7. **Lender Name** N/A
   **Address** _____

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

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

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

**NOTICE AS PER CHAPTER 713, Florida Statutes:**
**The owner must sign the notice of commencement and no one else may be permitted to sign in his/her stead.**

_____
**Signature of Owner**

**Sworn to (or affirmed) and subscribed before day of** February 8, 2007

**NOTARY STAMP/SEAL**

JANET BLANKENSHIP
MY COMMISSION #DD292061
EXPIRES: FEB 17, 2008
Bonded through 1st State Insurance

Janet Blankenship
**Signature of Notary**

Ahlbrandt Ref. Inc.
Cooler By Design

# Short Form
## *Entire House*
## AHLBRANDT REF. INC.

Job:
Date:
By:

P O BOX 1945, ALACHUA, FL 32616 Phone: 352-225-1308

## Project Information

For: WILLOW MODEL
HIGH SPRINGS, FL

## Design Information

| | Htg | Clg |
|---|---|---|
| Outside db (°F) | 33 | 92 |
| Inside db (°F) | 70 | 75 |
| Design TD (°F) | 37 | 17 |
| Daily range | - | M |
| Inside humidity (%) | - | 50 |
| Moisture difference (gr/lb) | - | 52 |

**Infiltration**

| | |
|---|---|
| Method | Simplified |
| Construction quality | Average |
| Fireplaces | 0 |

### HEATING EQUIPMENT

Make York
Trade Guardain
Model HP036X1321

| | | |
|---|---|---|
| Efficiency | 8.1 | HSPF |
| Heating input | | |
| Heating output | 35400 | Btuh @ 47°F |
| Temperature rise | 24 | °F |
| Actual air flow | 1325 | cfm |
| Air flow factor | 0.041 | cfm/Btuh |
| Static pressure | 0.10 | in H2O |
| Space thermostat | | |

### COOLING EQUIPMENT

Make York
Trade Guardain
Cond HP036X1321
Coil F2FP042N06

| | | |
|---|---|---|
| Efficiency | 13 | SEER |
| Sensible cooling | 24220 | Btuh |
| Latent cooling | 10380 | Btuh |
| Total cooling | 34600 | Btuh |
| Actual air flow | 1325 | cfm |
| Air flow factor | 0.053 | cfm/Btuh |
| Static pressure | 0.10 | in H2O |
| Load sensible heat ratio | 0.67 | |

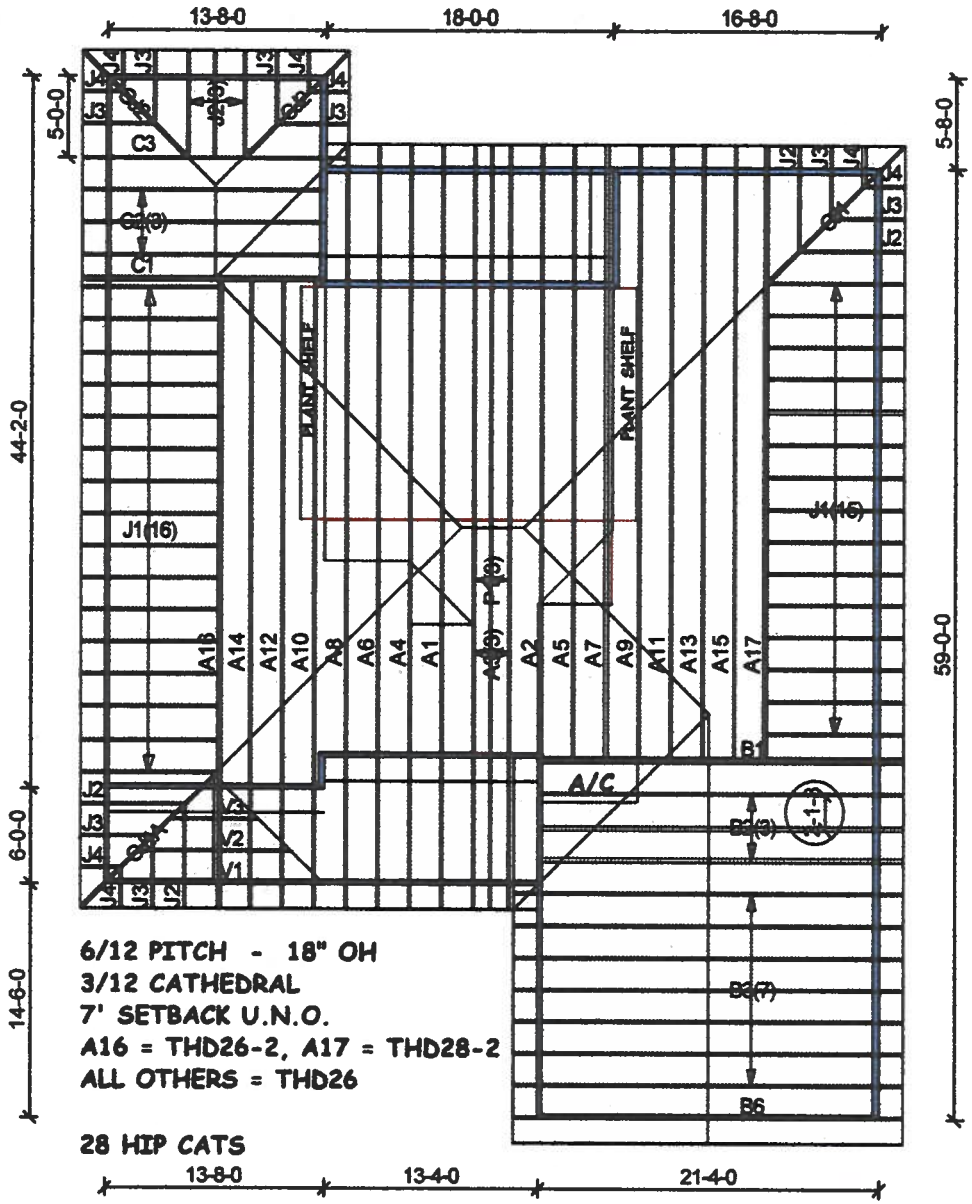
| ROOM NAME | Area (ft²) | Htg load (Btuh) | Clg load (Btuh) | Htg AVF (cfm) | Clg AVF (cfm) |
|---|---|---|---|---|---|
| BEDRM 2 | 162 | 4604 | 2745 | 188 | 146 |
| BEDRM 3 | 135 | 2355 | 2061 | 96 | 110 |
| BATH | 50 | 888 | 462 | 36 | 25 |
| BEDRM 4 | 162 | 4852 | 3375 | 198 | 179 |
| STUDY | 90 | 1873 | 1909 | 76 | 101 |
| FOYER | 43 | 751 | 426 | 31 | 23 |
| GREAT RM | 324 | 6429 | 4733 | 262 | 252 |
| MASTER BATH | 110 | 2554 | 1111 | 104 | 59 |
| W I C | 63 | 2177 | 743 | 89 | 39 |
| MASTER BEDRM | 256 | 3239 | 2970 | 132 | 158 |
| KITCHEN | 126 | 606 | 2375 | 25 | 126 |
| DINING RM | 100 | 1923 | 1648 | 78 | 88 |
| CORE | 140 | 213 | 364 | 9 | 19 |

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

| | | | | | | |
|---|---|---|---|---|---|---|
| Entire House<br>Other equip loads<br>Equip. @ 0.97 RSM<br>Latent cooling | | 1760 | 32463<br>9434 | 24921<br>4335<br>28378<br>14670 | 1325 | 1325 |
| TOTALS | | 1760 | 41897 | 43048 | 1325 | 1325 |

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

Willow Model Duck Layout





Mayo Truss Co. Inc.
302 NE CLYDE AVE.
MAYO, FL 32066
(386)294-3988
(877)-558-0262


LDM CONSTRUCTION, INC.

WILLOW MODEL - B

Roof Loading
TC Live: 20.00 psf
TC Dead: 10.00 psf
BC Live: 0.00 psf
BC Dead: 10.00 psf
TC Stress Inc: 25.00
BC Stress Inc: 25.00

Account: CONTRACTORS
Job: LDM\WILLOW_B
Designer: MMURRAY
Checker: MMURRAY
Date: 04-21-06

Permit Number:_____ Lot Number:_____

Miscellaneous:_____ Address:_____

The information in this box is for administrative purposes only and is not part of the engineering review.

Truss Fabricator:Mayo Truss Company, Inc

Job Reference:LDM-WILLOW_ - B WILLOW MODEL B

Standard Loading:

| | |
|---|---|
| T.C. Live | 20 psf |
| T.C Dead | 10 psf |
| B.C Live | 0 psf |
| B.C. Dead | 10 psf |
| Total | 40 psf |

ANSI/ASCE 7-02
Wind Speed - 110 mph
Mean Roof Ht. - 15 ft.
Exposure Catergory - B
Occupancy Factor - 1.00
MWFRS
Enclosed

ROBBINS ENGINEERING, INC.
P.O. Box 280055
Tampa, FL 33682-0055
Phone: (813) 972-1135

# Engineering Index Sheet

Index Page 1 of 1

| Job Number | Date | | Specification Quantity |
|---|---|---|---|
| T06032882 | 03/27/2006 | FBC - 2004 Chapter 16 and 23 | 35 |

A Professional Engineer's seal affixed to this Index Sheet indicates the acceptance of Professional Engineering responsibilities for individual truss components fabricated in accordance with the listed and attached Truss Specification Sheets. Determination as to the suitability of these individual truss components for any structure is the responsibilty of the Building Designer, as defined in ANSI/TPI 1-1995, Section 2.2. Permanent files of the original Truss Specificstion Sheet are maintained by Robbins Engineering, Inc. Questions regarding this Index Sheet and/or the attached Specification Sheets may be directed to the truss fabricator listed above or Robbins Engineering, Inc. (Sofware - Online Plus)

Notes: Refer to individual truss design drawings for special loading conditions.

| | Date | Mark | | Date | Mark | | Date | Mark | | Date | Mark |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 03/27/06 | A1 | 2 | 03/27/06 | A2 | 3 | 03/27/06 | A3 | 4 | 03/27/06 | A4 |
| 5 | 03/27/06 | A5 | 6 | 03/27/06 | A6 | 7 | 03/27/06 | A7 | 8 | 03/27/06 | A8 |
| 9 | 03/27/06 | A9 | 10 | 03/27/06 | A10 | 11 | 03/27/06 | A11 | 12 | 03/27/06 | A12 |
| 13 | 03/27/06 | A13 | 14 | 03/27/06 | A14 | 15 | 03/27/06 | A15 | 16 | 03/27/06 | A16 |
| 17 | 03/27/06 | A17 | 18 | 03/27/06 | B1 | 19 | 03/27/06 | B2 | 20 | 03/27/06 | B3 |
| 21 | 03/27/06 | B6 | 22 | 03/27/06 | C1 | 23 | 03/27/06 | C2 | 24 | 03/27/06 | C3 |
| 25 | 03/27/06 | CJ1 | 26 | 03/27/06 | CJ1A | 27 | 03/27/06 | CJ2 | 28 | 03/27/06 | J1 |
| 29 | 03/27/06 | J2 | 30 | 03/27/06 | J3 | 31 | 03/27/06 | J4 | 32 | 03/27/06 | P1 |
| 33 | 03/27/06 | V1 | 34 | 03/27/06 | V2 | 35 | 03/27/06 | V3 | | | |

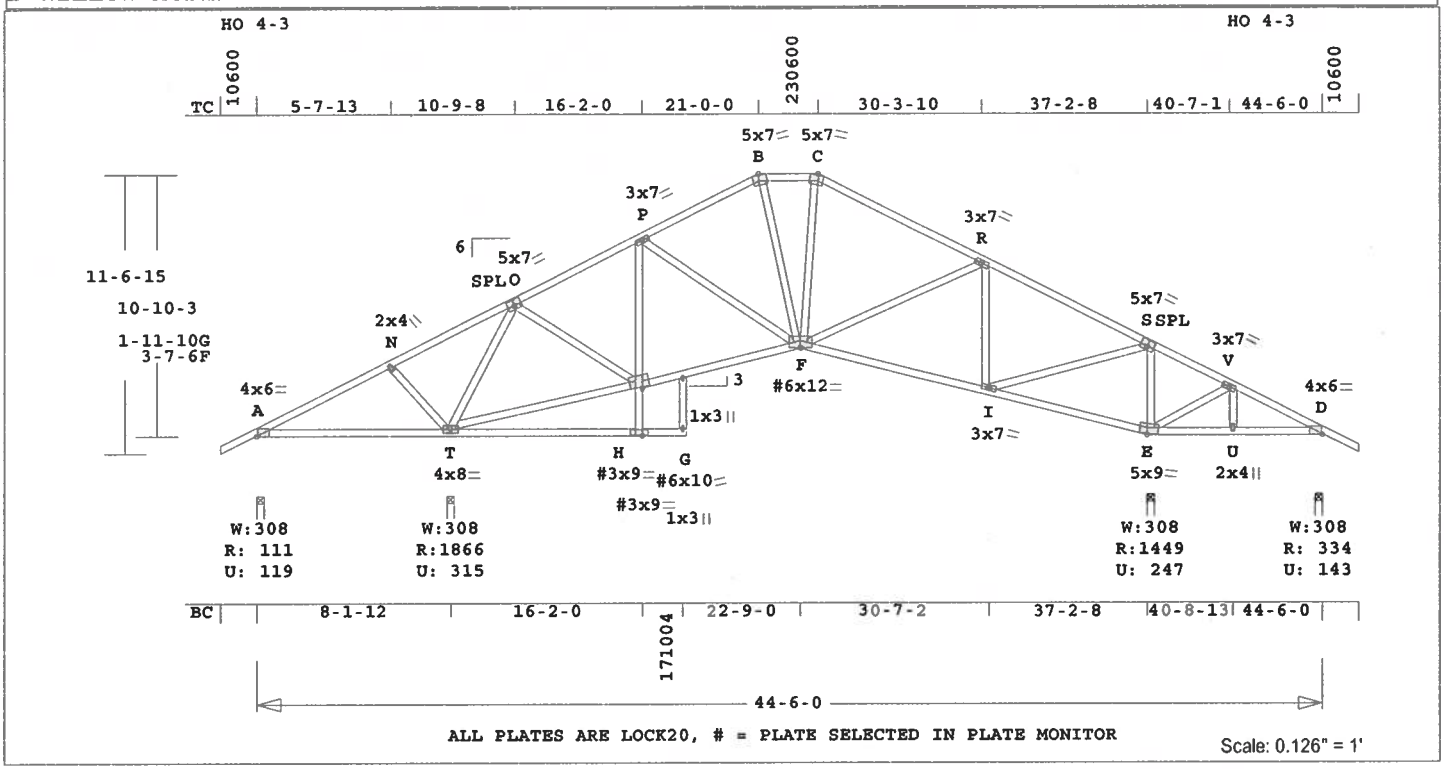
Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682

PHILIP J. O'REGAN LICENSE No. 58126 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A1 | 1 | SP | 440600 | 6 | 1- 6- 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 345.8 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.52 | 2x 4 | SP-#2 |
| BC | 0.46 | 2x 4 | SP-#2 |
| CW | 0.13 | 2x 4 | SP-#2 |
| WB | 0.76 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC | Cont. | 0- 0- 0 | 44- 6- 0 |
| BC | Cont. | 0- 0- 0 | 44- 6- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |

TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| A | 112 | 119 | 3- 8 | 1- 8 |
| | | | Hz = | -231 |
| T | 1866 | 316 | 3- 8 | 2- 0 |
| E | 1449 | 248 | 3- 8 | 1- 9 |
| D | 334 | 144 | 3- 8 | 1- 8 |
| | | | Hz = | 232 |

| Membr | CSI | P Lbs | Axl | CSI | Bnd |
|---|---|---|---|---|---|
| **Top Chords** | | | | | |
| A -N | 0.43 | 431 | T | 0.08 | 0.35 |
| N -O | 0.44 | 655 | T | 0.09 | 0.35 |
| O -P | 0.26 | 914 | C | 0.00 | 0.26 |
| P -B | 0.26 | 1077 | C | 0.00 | 0.26 |
| B -C | 0.13 | 1026 | C | 0.00 | 0.13 |
| C -R | 0.52 | 1137 | C | 0.01 | 0.51 |
| R -S | 0.51 | 1106 | C | 0.00 | 0.51 |
| S -V | 0.31 | 193 | T | 0.03 | 0.28 |
| V -D | 0.09 | 258 | C | 0.00 | 0.09 |
| **Bottom Chords** | | | | | |
| A -T | 0.41 | 366 | C | 0.00 | 0.41 |
| T -H | 0.41 | 34 | T | 0.00 | 0.41 |
| G -F | 0.29 | 847 | T | 0.08 | 0.21 |
| F -I | 0.36 | 1028 | T | 0.09 | 0.27 |
| I -E | 0.41 | 149 | C | 0.00 | 0.41 |
| E -U | 0.46 | 233 | T | 0.03 | 0.43 |
| U -D | 0.22 | 233 | T | 0.03 | 0.19 |
| **Chord-Webs** | | | | | |
| H -G | 0.13 | 73 | T | 0.01 | 0.12 |
| G -P | 0.11 | 481 | C | 0.05 | 0.06 |
| **Webs** | | | | | |
| N -T | 0.06 | 343 | C | | |
| T -O | 0.76 | 1626 | C | | |
| T -G | 0.04 | 136 | T | 0.01 | 0.03 |
| O -G | 0.14 | 803 | T | | |
| H -G | 0.27 | 73 | T | 0.01 | 0.26 |
| P -F | 0.02 | 157 | T | | |
| B -F | 0.05 | 300 | T | | |
| F -C | 0.04 | 277 | T | | |
| F -R | 0.04 | 124 | T | | |
| I -R | 0.17 | 466 | C | | |
| I -S | 0.21 | 1139 | T | | |
| E -S | 0.21 | 1195 | C | | |
| E -V | 0.08 | 423 | C | | |
| U -V | 0.03 | 234 | T | | |

TL Defl -0.13" in A -T L/713
LL Defl -0.06" in A -T L/999

| Hz Disp | LL | DL | TL |
|---|---|---|---|
| Jt D | 0.04" | 0.03" | 0.07" |

Shear // Grain in C -R 0.27

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.78 |
| N | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.50 |
| O | LOCK | 5.0x 7.0 | -0.2 | 0.5 | 0.82 |
| P | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.43 |
| B | LOCK | 5.0x 7.0 | 0.8 | -3.2 | 0.72 |
| C | LOCK | 5.0x 7.0 | -0.8 | -3.2 | 0.72 |
| R | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.43 |
| S | LOCK | 5.0x 7.0 | 0.2 | 0.5 | 0.82 |
| V | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.43 |
| D | LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.78 |
| T | LOCK | 4.0x 8.0 | Ctr | Ctr | 0.78 |
| H# | LOCK | 3.0x 9.0 | 1.8 | 0.1 | 0.42 |
| G# | LOCK | 6.0x10.0 | 1.2 | 13.6 | 0.39 |
| F# | LOCK | 6.0x12.0 | Ctr | -0.5 | 0.74 |
| I | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.43 |
| E | LOCK | 5.0x 9.0 | 0.9 | 3.0 | 0.77 |
| U | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.50 |

# = Plate Monitor used

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
NOTE: USER MODIFIED PLATES
This design may have plates selected through a plate monitor.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
User-defined wind-exposed BC regions

| --From-- | ---To--- |
|---|---|
| 0- 0- 0 | 8- 1-12 |
| 37- 2- 8 | 44- 6- 0 |

Max comp. force 1626 Lbs
Quality Control Factor 1.25

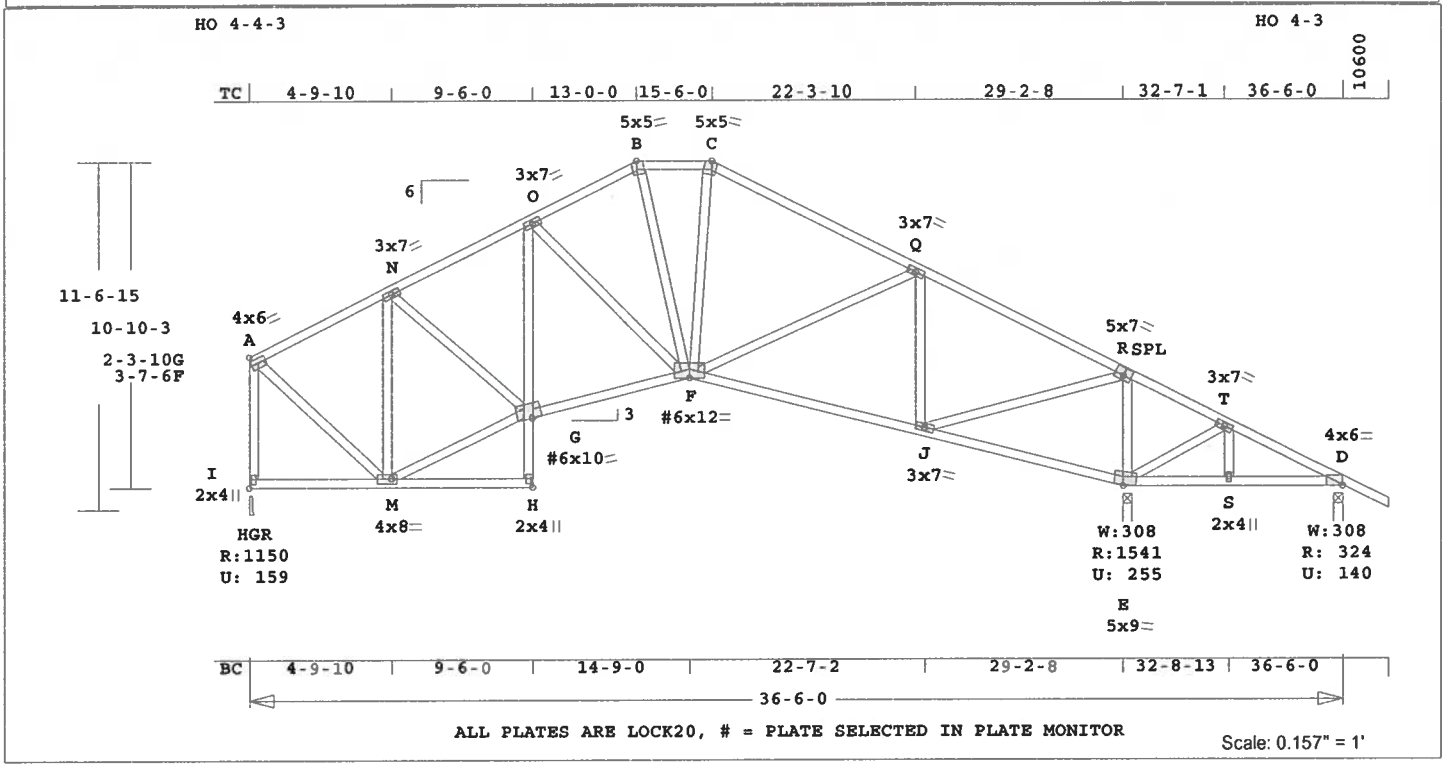
Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682




Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A2 | 1 | SP | 360600 | 6 | 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B




ALL PLATES ARE LOCK20, # = PLATE SELECTED IN PLATE MONITOR

Scale: 0.157" = 1'

Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 309.6 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | Size | Lumber |
|---|---|---|---|
| TC | 0.52 | 2x 4 | SP-#2 |
| BC | 0.49 | 2x 4 | SP-#2 |
| CW | 0.06 | 2x 4 | SP-#2 |
| WB | 0.45 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC Cont. | | 0- 0- 0 | 36- 6- 0 |
| BC Cont. | | 0- 0- 0 | 36- 6- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |

Lumber Duration Factor 1.25
Plate Duration Factor 1.25
TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | Size Req'd In-Sx |
|---|---|---|---|---|
| I | 1151 | 159 | 3- 8 | 1- 8 |
| | | | Hz = | -283 |
| E | 1541 | 256 | 3- 8 | 1-10 |
| D | 324 | 141 | 3- 8 | 1- 8 |
| | | | Hz = | 205 |

| Membr | CSI | P Lbs | Axl | CSI | Bnd |
|---|---|---|---|---|---|
| **Top Chords** | | | | | |
| A -N | 0.23 | 777 | C | 0.00 | 0.23 |
| N -O | 0.24 | 1249 | C | 0.01 | 0.23 |
| O -B | 0.15 | 1221 | C | 0.01 | 0.14 |
| B -C | 0.13 | 1183 | C | 0.00 | 0.13 |
| C -Q | 0.52 | 1306 | C | 0.01 | 0.51 |
| Q -R | 0.51 | 1205 | C | 0.00 | 0.51 |
| R -T | 0.32 | 206 | T | 0.04 | 0.28 |
| T -D | 0.09 | 242 | C | 0.00 | 0.09 |
| **Bottom Chords** | | | | | |
| I -M | 0.15 | 230 | T | 0.00 | 0.15 |
| M -H | 0.15 | 14 | C | 0.00 | 0.15 |
| G -F | 0.30 | 1151 | T | 0.19 | 0.11 |
| F -J | 0.37 | 1119 | T | 0.10 | 0.27 |
| J -E | 0.43 | 159 | C | 0.00 | 0.43 |
| E -S | 0.49 | 219 | T | 0.03 | 0.46 |
| S -D | 0.23 | 219 | T | 0.03 | 0.20 |
| **Chord-Webs** | | | | | |
| H -G | 0.06 | 72 | T | 0.01 | 0.05 |
| G -O | 0.05 | 209 | C | 0.01 | 0.04 |
| **Webs** | | | | | |
| I -A | 0.25 | 1113 | C | WindLd | |
| A -M | 0.17 | 956 | T | | |
| M -N | 0.45 | 873 | C | | |
| M -G | 0.14 | 785 | T | | |
| N -G | 0.09 | 538 | T | | |
| O -F | 0.06 | 99 | C | | |
| B -F | 0.07 | 409 | T | | |
| F -C | 0.05 | 329 | T | | |
| F -Q | 0.03 | 159 | T | | |
| J -Q | 0.19 | 524 | C | | |
| J -R | 0.23 | 1253 | T | | |
| E -R | 0.23 | 1282 | C | | |
| E -T | 0.08 | 435 | C | | |
| S -T | 0.04 | 241 | T | | |

TL Defl -0.24" in F -J L/999
LL Defl -0.10" in F -J L/999

| Hz Disp | LL | DL | TL |
|---|---|---|---|
| Jt D | 0.04" | 0.04" | 0.09" |

Shear // Grain in C -Q 0.27

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|
| A LOCK | 4.0x 6.0 | 0.1 | Ctr | 0.76 |
| N LOCK | 3.0x 7.0 | Ctr | Ctr | 0.42 |
| O LOCK | 3.0x 7.0 | Ctr | Ctr | 0.44 |
| B LOCK | 5.0x 5.0 | 0.7-3.0 | | 0.65 |
| C LOCK | 5.0x 5.0 | -0.7-3.0 | | 0.65 |
| Q LOCK | 3.0x 7.0 | Ctr | Ctr | 0.41 |
| R LOCK | 5.0x 7.0 | 0.2 | 0.5 | 0.74 |
| T LOCK | 3.0x 7.0 | Ctr | Ctr | 0.41 |
| D LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.70 |
| I LOCK | 2.0x 4.0 | Ctr | Ctr | 0.51 |
| M LOCK | 4.0x 8.0 | Ctr | Ctr | 0.47 |
| H LOCK | 2.0x 4.0 | Ctr | Ctr | 0.58 |
| G# LOCK | 6.0x10.0 | Ctr | 0.8 | 0.65 |
| F# LOCK | 6.0x12.0 | Ctr | -0.5 | 0.67 |
| J LOCK | 3.0x 7.0 | Ctr | Ctr | 0.40 |
| E LOCK | 5.0x 9.0 | 0.9 | 3.0 | 0.69 |
| S LOCK | 2.0x 4.0 | Ctr | Ctr | 0.45 |

# = Plate Monitor used

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

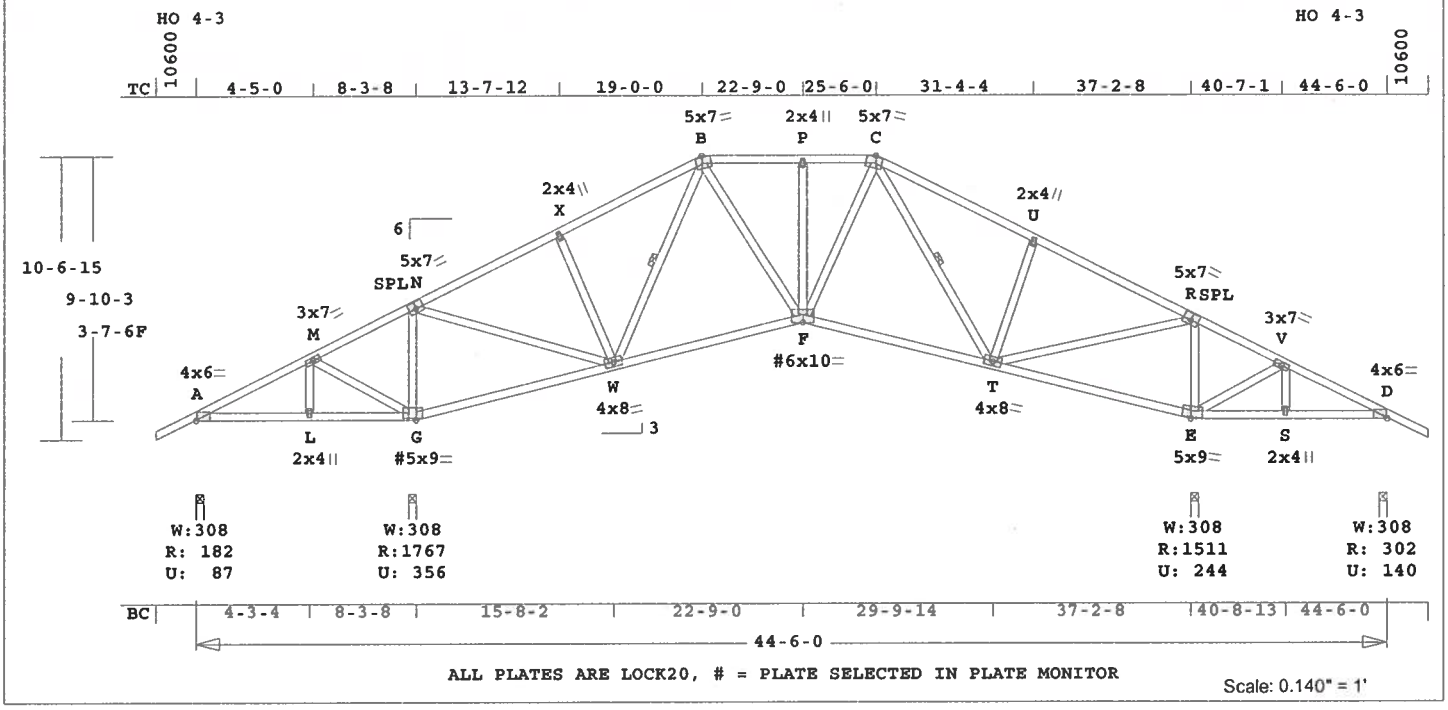
NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
NOTE: USER MODIFIED PLATES
This design may have plates selected through a plate monitor.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
User-defined wind-exposed BC regions --From-- ---To---
29- 2- 8 36- 6- 0
Max comp. force 1306 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Scaled: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A3 | 3 | SP | 440600 | 6 | 1- 6- 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B




ALL PLATES ARE LOCK20, # = PLATE SELECTED IN PLATE MONITOR

Scale: 0.140" = 1'

Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 333.4 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | Size | Lumber |
|---|---|---|---|
| TC | 0.38 | 2x 4 | SP-#2 |
| BC | 0.47 | 2x 4 | SP-#2 |
| WB | 0.33 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC | Cont. | 0- 0- 0 | 19- 0- 0 |
| TC | 2- 0- 0 | 19- 0- 0 | 25- 6- 0 |
| TC | Cont. | 25- 6- 0 | 44- 6- 0 |
| BC | Cont. | 0- 0- 0 | 44- 6- 0 |

WB 1 rows CLB on W -B
WB 1 rows CLB on C -T
Attach CLB with (2)-10d nails at each web.

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |

TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size In-Sx | Req'd In-Sx |
|---|---|---|---|---|
| A | 183 | 87 | 3- 8 | 1- 8 |
| | | Hz = | -209 | |
| G | 1767 | 356 | 3- 8 | 1- 8 |
| E | 1512 | 244 | 3- 8 | 1-10 |
| D | 303 | 141 | 3- 8 | 1- 8 |
| | | Hz = | 210 | |

| Membr | CSI | P Lbs | Axl | CSI-Bnd |
|---|---|---|---|---|
| **Top Chords** | | | | |
| A -M | 0.19 | 185 | T | 0.03 0.16 |
| M -N | 0.29 | 463 | T | 0.08 0.21 |
| N -X | 0.31 | 1090 | C | 0.00 0.31 |
| X -B | 0.31 | 962 | C | 0.00 0.31 |
| B -P | 0.23 | 1227 | C | 0.01 0.22 |
| P -C | 0.22 | 1227 | C | 0.01 0.21 |
| C -U | 0.38 | 1103 | C | 0.00 0.38 |
| U -R | 0.38 | 1216 | C | 0.00 0.38 |
| R -V | 0.25 | 265 | T | 0.04 0.21 |
| V -D | 0.11 | 197 | C | 0.00 0.11 |
| **Bottom Chords** | | | | |
| A -L | 0.12 | 154 | C | 0.00 0.12 |
| L -G | 0.40 | 154 | C | 0.00 0.40 |
| G -W | 0.37 | 380 | C | 0.00 0.37 |
| W -F | 0.46 | 986 | T | 0.09 0.37 |
| F -T | 0.37 | 1086 | T | 0.10 0.27 |
| T -E | 0.43 | 217 | C | 0.00 0.43 |
| E -S | 0.47 | 190 | T | 0.03 0.44 |
| S -D | 0.22 | 190 | T | 0.03 0.19 |
| **Webs** | | | | |
| L -M | 0.01 | 109 | T | |
| M -G | 0.07 | 296 | C | |
| G -N | 0.33 | 1369 | C | |
| N -W | 0.26 | 1411 | T | |
| X -W | 0.12 | 325 | C | |
| W -B | 0.06 | 278 | C | 1 Br |
| B -F | 0.08 | 475 | T | |
| F -P | 0.04 | 106 | C | |
| F -C | 0.07 | 387 | T | |
| C -T | 0.04 | 161 | C | 1 Br |
| T -U | 0.11 | 359 | C | |
| T -R | 0.24 | 1301 | T | |
| E -R | 0.22 | 1224 | C | |
| E -V | 0.08 | 448 | C | |
| S -V | 0.03 | 232 | T | |

TL Defl -0.22" in G -W L/999
LL Defl -0.10" in G -W L/999

| Hz Disp | LL | DL | TL |
|---|---|---|---|
| Jt E | 0.04" | 0.04" | 0.08" |

Shear // Grain in C -U 0.23

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.78 |
| M | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.43 |
| N | LOCK | 5.0x 7.0 | -0.2 | 0.5 | 0.82 |
| X | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.50 |
| B | LOCK | 5.0x 7.0 | 0.8 | -3.2 | 0.74 |
| P | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.50 |
| C | LOCK | 5.0x 7.0 | -0.8 | -3.2 | 0.75 |
| U | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.50 |
| R | LOCK | 5.0x 7.0 | 0.2 | 0.5 | 0.82 |
| V | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.43 |
| D | LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.78 |
| L | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.50 |
| G# | LOCK | 5.0x 9.0 | Ctr | 1.6 | 0.94 |
| W | LOCK | 4.0x 8.0 | Ctr | Ctr | 0.61 |
| F# | LOCK | 6.0x10.0 | Ctr | -0.6 | 0.72 |
| T | LOCK | 4.0x 8.0 | Ctr | Ctr | 0.53 |
| E | LOCK | 5.0x 9.0 | 0.9 | 3.0 | 0.77 |
| S | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.50 |

\# = Plate Monitor used

REVIEWED BY:
Robbins Engineering, Inc.

PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Run vertical thru bottom chord Joint G
Design checked for 10 psf non-concurrent LL on BC.
NOTE: USER MODIFIED PLATES
This design may have plates selected through a plate monitor.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
User-defined wind-exposed BC regions --From-- ---To---

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Scaled: 3/27/2006

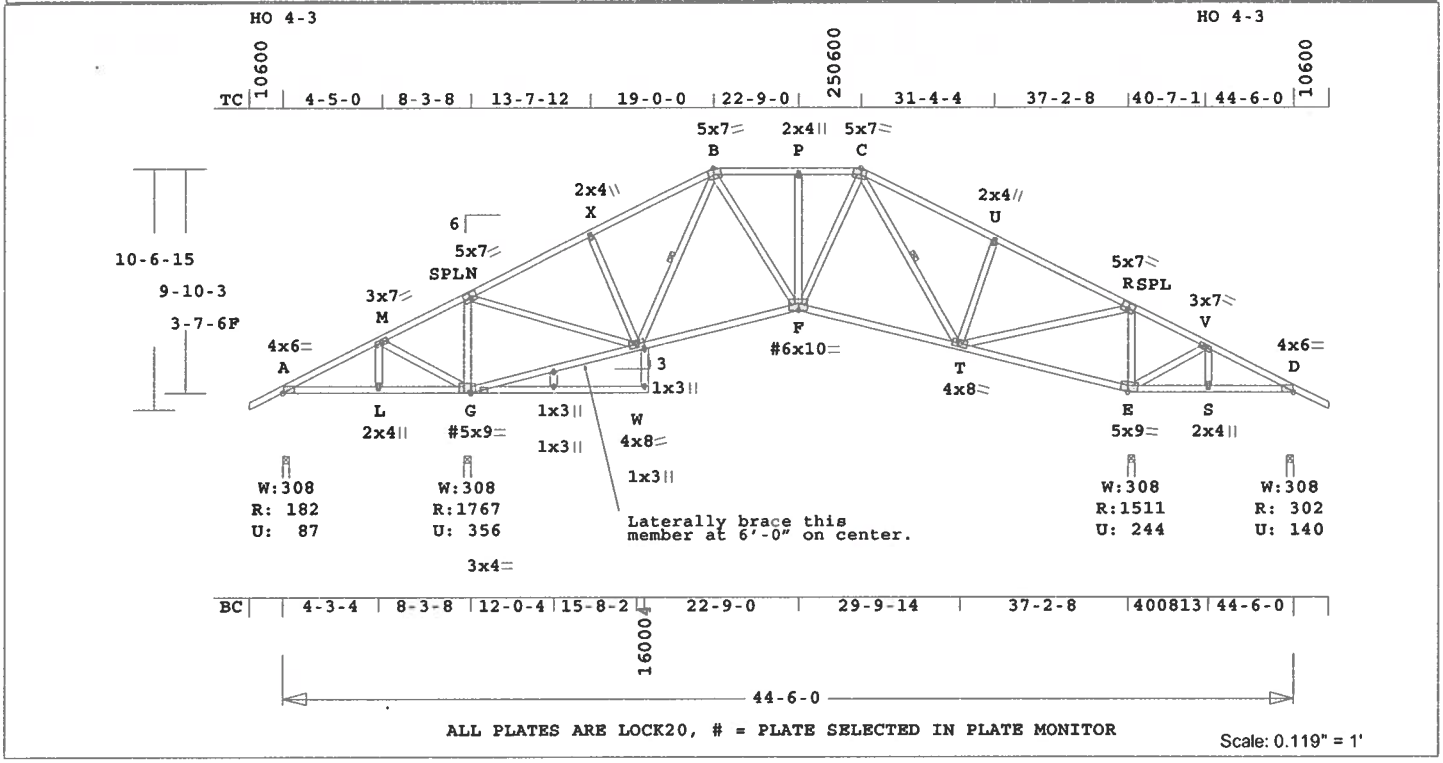
| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A3 | 3 | SP | 440600 | 6 | 1- 6- 0 | 1- 6- 0 | T06032882 |

'B WILLOW MODEL B

0- 0- 0 8- 3- 8
37- 2- 8 44- 6- 0
Max comp. force 1369 Lbs
Quality Control Factor 1.25

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A4 | 1 | SP | 440600 | 6 | 1- 6- 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B




ALL PLATES ARE LOCK20, # = PLATE SELECTED IN PLATE MONITOR

Scale: 0.119" = 1'

Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 352.7 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | Size | Lumber |
|---|---|---|---|
| TC | 0.38 | 2x 4 | SP-#2 |
| BC | 0.47 | 2x 4 | SP-#2 |
| WB | 0.33 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC Cont. | | 0- 0- 0 | 44- 6- 0 |
| BC Cont. | | 0- 0- 0 | 44- 6- 0 |
| WB 1 rows CLB on W -B | | | |
| WB 1 rows CLB on C -T | | | |

Attach CLB with (2)-10d nails at each web.

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |

TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | Size Req'd In-Sx |
|---|---|---|---|---|
| A | 183 | 87 | 3- 8 | 1- 8 |
| | | Hz = | -209 | |
| G | 1767 | 356 | 3- 8 | 1- 8 |
| E | 1512 | 244 | 3- 8 | 1-10 |
| D | 303 | 141 | 3- 8 | 1- 8 |
| | | Hz = | 210 | |

| Membr | CSI | P Lbs | Axl | CSI | Bnd |
|---|---|---|---|---|---|
| **Top Chords** | | | | | |
| A -M | 0.19 | 185 | T | 0.03 | 0.16 |
| M -N | 0.29 | 463 | T | 0.08 | 0.21 |
| N -X | 0.31 | 1090 | C | 0.00 | 0.31 |
| X -B | 0.31 | 962 | C | 0.00 | 0.31 |
| B -P | 0.23 | 1227 | C | 0.01 | 0.22 |
| P -C | 0.22 | 1227 | C | 0.01 | 0.21 |
| C -U | 0.38 | 1103 | C | 0.00 | 0.38 |
| U -R | 0.38 | 1216 | C | 0.00 | 0.38 |
| R -V | 0.25 | 265 | T | 0.04 | 0.21 |
| V -D | 0.11 | 197 | C | 0.00 | 0.11 |
| **Bottom Chords** | | | | | |
| A -L | 0.12 | 154 | C | 0.00 | 0.12 |
| L -G | 0.40 | 154 | C | 0.00 | 0.40 |
| G -W | 0.37 | 380 | C | 0.00 | 0.37 |
| W -F | 0.46 | 986 | T | 0.09 | 0.37 |
| F -T | 0.37 | 1086 | T | 0.10 | 0.27 |
| T -E | 0.43 | 217 | C | 0.00 | 0.43 |
| E -S | 0.47 | 190 | T | 0.03 | 0.44 |
| S -D | 0.22 | 190 | T | 0.03 | 0.19 |
| **Webs** | | | | | |
| L -M | 0.01 | 109 | T | | |
| M -G | 0.07 | 296 | C | | |
| G -N | 0.33 | 1369 | C | | |
| N -W | 0.26 | 1411 | T | | |
| X -W | 0.12 | 325 | C | | |
| W -B | 0.06 | 278 | C | | 1 Br |
| B -F | 0.08 | 475 | T | | |
| F -P | 0.04 | 106 | C | | |
| F -C | 0.07 | 387 | T | | |
| C -T | 0.04 | 161 | C | | 1 Br |
| T -U | 0.11 | 359 | C | | |
| T -R | 0.24 | 1301 | T | | |
| E -R | 0.22 | 1224 | C | | |
| E -V | 0.08 | 448 | C | | |
| S -V | 0.03 | 232 | T | | |

TL Defl -0.22" in G -W L/999
LL Defl -0.10" in G -W L/999

| Hz Disp | LL | DL | TL |
|---|---|---|---|
| Jt E | 0.04" | 0.04" | 0.08" |

Shear // Grain in C -U 0.23

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt | Size | X | Y | JSI |
|---|---|---|---|---|---|---|
| A | LOCK | 4.0x | 6.0 | Ctr | 0.1 | 0.78 |
| M | LOCK | 3.0x | 7.0 | Ctr | Ctr | 0.43 |
| N | LOCK | 5.0x | 7.0 | -0.2 | 0.5 | 0.82 |
| X | LOCK | 2.0x | 4.0 | Ctr | Ctr | 0.50 |
| B | LOCK | 5.0x | 7.0 | 0.8 | -3.2 | 0.74 |
| P | LOCK | 2.0x | 4.0 | Ctr | Ctr | 0.50 |
| C | LOCK | 5.0x | 7.0 | -0.8 | -3.2 | 0.75 |
| U | LOCK | 2.0x | 4.0 | Ctr | Ctr | 0.50 |
| R | LOCK | 5.0x | 7.0 | 0.2 | 0.5 | 0.82 |
| V | LOCK | 3.0x | 7.0 | Ctr | Ctr | 0.43 |
| D | LOCK | 4.0x | 6.0 | Ctr | 0.1 | 0.78 |
| L | LOCK | 2.0x | 4.0 | Ctr | Ctr | 0.50 |
| G# | LOCK | 5.0x | 9.0 | -0.1 | 0.9 | 0.76 |
| W | LOCK | 4.0x | 8.0 | Ctr | Ctr | 0.61 |
| F# | LOCK | 6.0x | 10.0 | Ctr | -0.6 | 0.72 |
| T | LOCK | 4.0x | 8.0 | Ctr | Ctr | 0.53 |
| E | LOCK | 5.0x | 9.0 | 0.9 | 3.0 | 0.77 |
| S | LOCK | 2.0x | 4.0 | Ctr | Ctr | 0.50 |

# = Plate Monitor used

REVIEWED BY:
Robbins Engineering, Inc.

PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Run vertical thru bottom chord
Joint G
Design checked for 10 psf non-concurrent LL on BC.
NOTE: USER MODIFIED PLATES
This design may have plates selected through a plate monitor.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
User-defined wind-exposed BC

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A4 | 1 | SP | 440600 | 6 | 1- 6- 0 | 1- 6- 0 | T06032882 |

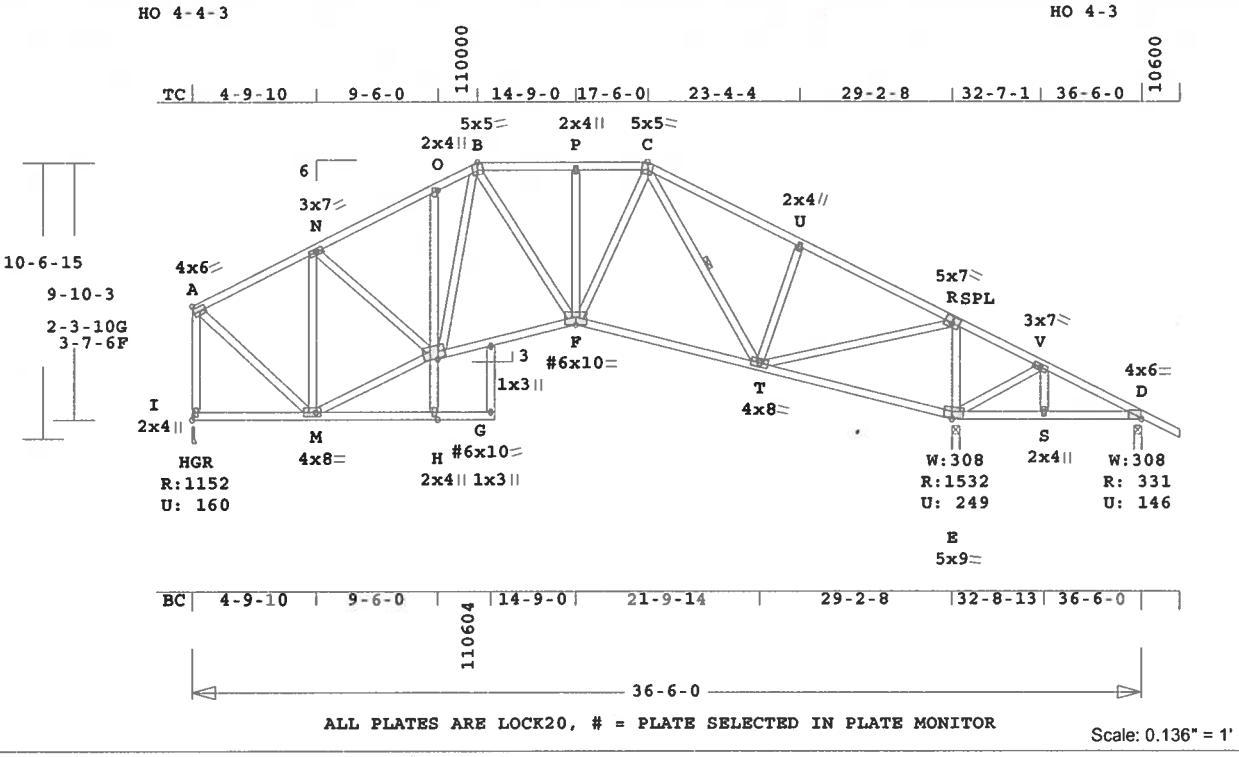
B WILLOW MODEL B

| regions | --From-- | ---To--- |
|---|---|---|
| | 0- 0- 0 | 8- 3- 8 |
| | 37- 2- 8 | 44- 6- 0 |

Max comp. force 1369 Lbs
Quality Control Factor 1.25

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A5 | 1 | SP | 360600 | 6 | 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B




ALL PLATES ARE LOCK20, # = PLATE SELECTED IN PLATE MONITOR

Scale: 0.136" = 1'

Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 328.4 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | Size | Lumber |
|---|---|---|---|
| TC | 0.39 | 2x 4 | SP-#2 |
| BC | 0.48 | 2x 4 | SP-#2 |
| CW | 0.08 | 2x 4 | SP-#2 |
| WB | 0.45 | 2x 4 | SP-#2 |

Brace truss as follows:

| O.C. | From | To |
|---|---|---|
| TC Cont. | 0- 0- 0 | 36- 6- 0 |
| BC Cont. | 0- 0- 0 | 36- 6- 0 |

WB 1 rows CLB on C -T
Attach CLB with (2)-10d nails at each web.

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |

Lumber Duration Factor 1.25
Plate Duration Factor 1.25
TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | Size Req'd In-Sx |
|---|---|---|---|---|
| I | 1152 | 161 | 3- 8 | 1- 8 |
| | | | Hz = | -262 |
| E | 1532 | 249 | 3- 8 | 1-10 |
| D | 331 | 146 | 3- 8 | 1- 8 |
| | | | Hz = | 183 |

| Membr | CSI | P Lbs | Axl | CSI | Bnd |
|---|---|---|---|---|---|
| **Top Chords** | | | | | |
| A -N | 0.24 | 778 | C | 0.00 | 0.24 |
| N -O | 0.25 | 1252 | C | 0.01 | 0.24 |
| O -B | 0.13 | 1276 | C | 0.01 | 0.12 |
| B -P | 0.14 | 1385 | C | 0.01 | 0.13 |
| P -C | 0.23 | 1385 | C | 0.01 | 0.22 |
| C -U | 0.39 | 1219 | C | 0.01 | 0.38 |
| U -R | 0.39 | 1331 | C | 0.01 | 0.38 |
| R -V | 0.24 | 225 | T | 0.03 | 0.21 |
| V -D | 0.11 | 258 | C | 0.00 | 0.11 |
| **Bottom Chords** | | | | | |
| I -M | 0.15 | 209 | T | 0.00 | 0.15 |
| M -H | 0.15 | 18 | C | 0.00 | 0.15 |
| G -F | 0.26 | 1144 | T | 0.19 | 0.07 |
| F -T | 0.38 | 1207 | T | 0.11 | 0.27 |
| T -E | 0.44 | 180 | C | 0.00 | 0.44 |
| E -S | 0.48 | 234 | T | 0.03 | 0.45 |
| S -D | 0.22 | 234 | T | 0.03 | 0.19 |
| **Chord-Webs** | | | | | |
| H -G | 0.08 | 72 | T | 0.01 | 0.07 |
| G -O | 0.05 | 233 | C | 0.00 | 0.05 |
| **Webs** | | | | | |
| I -A | 0.25 | 1114 | C | WindLd | |
| A -M | 0.17 | 958 | T | | |
| M -N | 0.45 | 877 | C | | |
| M -G | 0.14 | 790 | T | | |
| N -G | 0.09 | 539 | T | | |
| G -B | 0.05 | 105 | T | | |
| B -F | 0.08 | 484 | T | | |
| F -P | 0.05 | 126 | C | | |
| F -C | 0.08 | 477 | T | | |
| C -T | 0.04 | 190 | C | 1 Br | |
| T -U | 0.11 | 361 | C | | |
| T -R | 0.24 | 1350 | T | | |
| E -R | 0.22 | 1259 | C | | |
| E -V | 0.08 | 447 | C | | |
| S -V | 0.03 | 233 | T | | |

| | | | |
|---|---|---|---|
| TL Defl | -0.18" | in F -T | L/999 |
| LL Defl | -0.07" | in F -T | L/999 |
| Hz Disp | LL | DL | TL |
| Jt D | 0.05" | 0.04" | 0.09" |
| Shear // Grain | | in C -U | 0.24 |

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 4.0x 6.0 | 0.1 | Ctr | 0.76 |
| N | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.42 |
| O | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.24 |
| B | LOCK | 5.0x 5.0 | 0.3 | -3.2 | 0.98 |
| P | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.45 |
| C | LOCK | 5.0x 5.0 | -0.3 | -3.2 | 0.78 |
| U | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.45 |
| R | LOCK | 5.0x 7.0 | 0.2 | 0.5 | 0.74 |
| V | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.41 |
| D | LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.70 |
| I | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.51 |
| M | LOCK | 4.0x 8.0 | Ctr | Ctr | 0.47 |
| H | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.58 |
| G# | LOCK | 6.0x10.0 | Ctr | 1.4 | 0.76 |
| F# | LOCK | 6.0x10.0 | Ctr | -0.6 | 0.65 |
| T | LOCK | 4.0x 8.0 | Ctr | Ctr | 0.55 |
| E | LOCK | 5.0x 9.0 | 0.9 | 3.0 | 0.69 |
| S | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.45 |

# = Plate Monitor used

REVIEWED BY:
Robbins Engineering, Inc.

PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
NOTE: USER MODIFIED PLATES
This design may have plates selected through a plate monitor.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
User-defined wind-exposed BC regions

| --From-- | ---To--- |
|---|---|
| 29- 2- 8 | 36- 6- 0 |

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

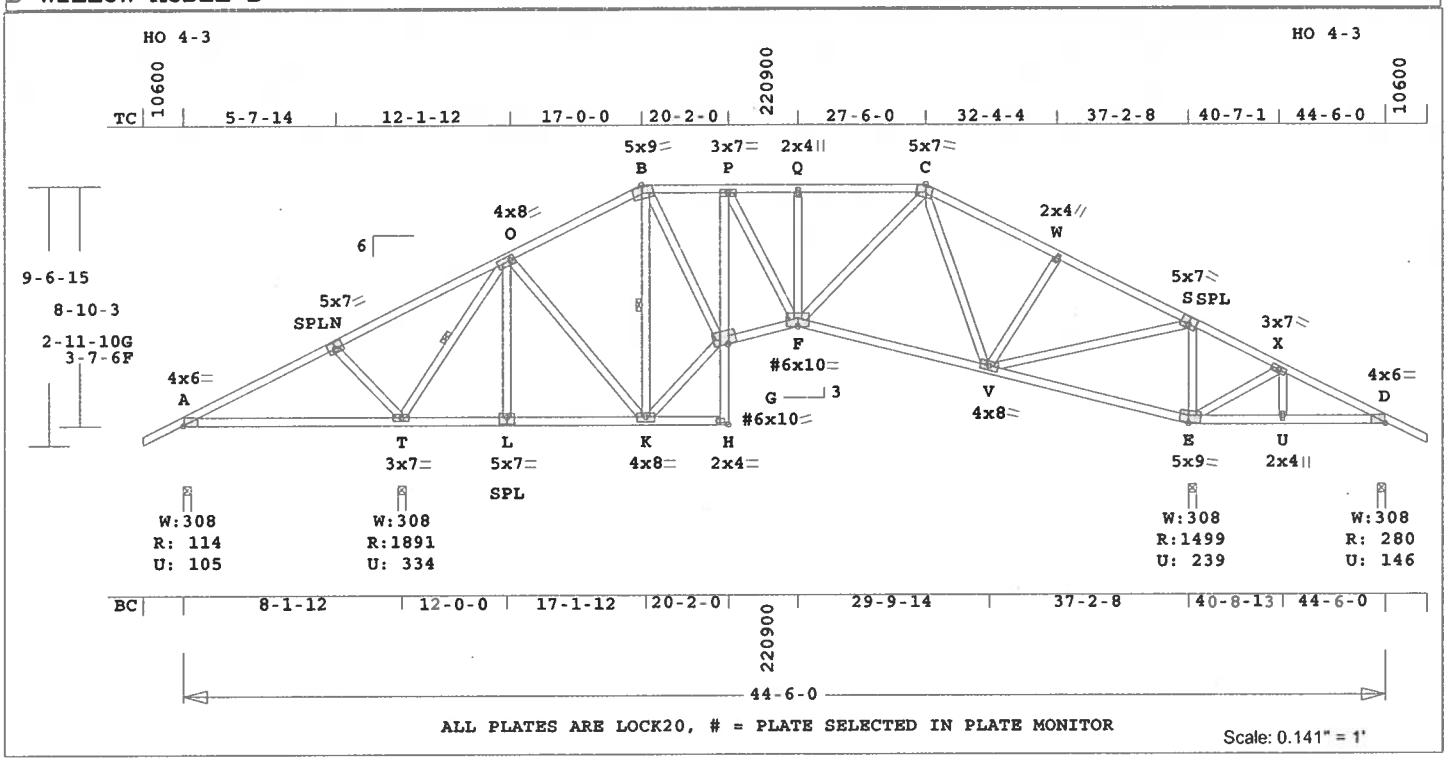
| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A5 | 1 | SP | 360600 | 6 | 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B

Max comp. force 1385 Lbs
Quality Control Factor 1.25

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A6 | 1 | SP | 440600 | 6 | 1- 6- 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B




ALL PLATES ARE LOCK20, # = PLATE SELECTED IN PLATE MONITOR

Scale: 0.141" = 1'

Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 361.5 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | Size | Lumber |
|---|---|---|---|
| TC | 0.53 | 2x 4 | SP-#2 |
| BC | 0.45 | 2x 4 | SP-#2 |
| CW | 0.11 | 2x 4 | SP-#2 |
| WB | 0.30 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC Cont. | | 0- 0- 0 | 44- 6- 0 |
| BC Cont. | | 0- 0- 0 | 44- 6- 0 |

WB 1 rows CLB on T -O
WB 1 rows CLB on K -B
Attach CLB with (2)-10d nails at each web.

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |

TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size In-Sx | Size In-Sx | Req'd |
|---|---|---|---|---|---|
| A | 115 | 105 | 3- 8 | 1- 8 | |
| | | | Hz = | -187 | |
| T | 1891 | 335 | 3- 8 | 2- 0 | |
| E | 1499 | 239 | 3- 8 | 1-10 | |
| D | 280 | 147 | 3- 8 | 1- 8 | |
| | | | Hz = | 188 | |

| Membr | CSI | P Lbs | Axl | CSI | Bnd |
|---|---|---|---|---|---|
| Top Chords | | | | | |
| A -N | 0.52 | 473 | T | 0.09 | 0.43 |
| N -O | 0.53 | 737 | T | 0.10 | 0.43 |
| O -B | 0.33 | 673 | C | 0.00 | 0.33 |
| B -P | 0.13 | 1075 | C | 0.00 | 0.13 |
| P -Q | 0.11 | 1356 | C | 0.01 | 0.10 |
| Q -C | 0.24 | 1356 | C | 0.01 | 0.23 |
| C -W | 0.26 | 1009 | C | 0.00 | 0.26 |
| W -S | 0.26 | 1173 | C | 0.00 | 0.26 |
| S -X | 0.20 | 297 | T | 0.05 | 0.15 |
| X -D | 0.13 | 180 | T | 0.00 | 0.13 |
| Bottom Chords | | | | | |
| A -T | 0.32 | 399 | C | 0.00 | 0.32 |
| T -L | 0.34 | 248 | T | 0.02 | 0.32 |
| L -K | 0.16 | 248 | T | 0.02 | 0.14 |
| K -H | 0.14 | 17 | T | 0.00 | 0.14 |
| G -F | 0.26 | 1119 | T | 0.18 | 0.08 |
| F -V | 0.38 | 992 | T | 0.09 | 0.29 |
| V -E | 0.42 | 242 | C | 0.00 | 0.42 |
| E -U | 0.45 | 163 | T | 0.02 | 0.43 |
| U -D | 0.21 | 163 | T | 0.02 | 0.19 |
| Chord-Webs | | | | | |
| H -G | 0.03 | 14 | T | 0.00 | 0.03 |
| G -P | 0.11 | 600 | C | 0.06 | 0.05 |
| Webs | | | | | |
| N -T | 0.07 | 386 | C | | |
| T -O | 0.30 | 1701 | C | | 1 Br |
| L -O | 0.01 | 123 | T | | |
| O -K | 0.09 | 523 | T | | |
| K -B | 0.22 | 884 | C | | 1 Br |
| K -G | 0.16 | 828 | T | 0.15 | 0.01 |
| B -G | 0.19 | 1047 | T | | |
| H -G | 0.04 | 14 | T | 0.00 | 0.04 |
| P -F | 0.10 | 559 | T | | |
| F -Q | 0.06 | 225 | C | | |
| F -C | 0.10 | 542 | T | | |
| C -V | 0.13 | 224 | C | | |
| V -W | 0.09 | 300 | C | | |
| V -S | 0.24 | 1313 | T | | |
| E -S | 0.21 | 1190 | C | | |
| E -X | 0.08 | 463 | C | | |
| U -X | 0.03 | 231 | T | | |

TL Defl -0.17" in A -T L/536
LL Defl -0.08" in A -T L/999

| Hz Disp | LL | DL | TL |
|---|---|---|---|
| Jt E | 0.05" | 0.05" | 0.10" |

Shear // Grain in A -N 0.24

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.78 |
| N | LOCK | 5.0x 7.0 | -0.2 | 0.5 | 0.82 |
| O | LOCK | 4.0x 8.0 | Ctr | Ctr | 0.88 |
| B | LOCK | 5.0x 9.0 | 0.8 | -3.5 | 0.74 |
| P | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.55 |
| Q | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.50 |
| C | LOCK | 5.0x 7.0 | -0.8 | -3.2 | 0.78 |
| W | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.50 |
| S | LOCK | 5.0x 7.0 | 0.2 | 0.5 | 0.82 |
| X | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.43 |
| D | LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.78 |
| T | LOCK | 3.0x 7.0 | -0.4 | Ctr | 0.60 |
| L | LOCK | 5.0x 7.0 | Ctr | -0.5 | 0.84 |
| K | LOCK | 4.0x 8.0 | Ctr | Ctr | 0.45 |
| H | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.63 |
| G# | LOCK | 6.0x10.0 | 9.2 | 28.5 | 0.41 |
| F# | LOCK | 6.0x10.0 | Ctr | -0.6 | 0.72 |
| V | LOCK | 4.0x 8.0 | Ctr | Ctr | 0.63 |
| E | LOCK | 5.0x 9.0 | 0.9 | 3.0 | 0.77 |
| U | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.50 |

# = Plate Monitor used

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
NOTE: USER MODIFIED PLATES
This design may have plates selected through a plate monitor.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

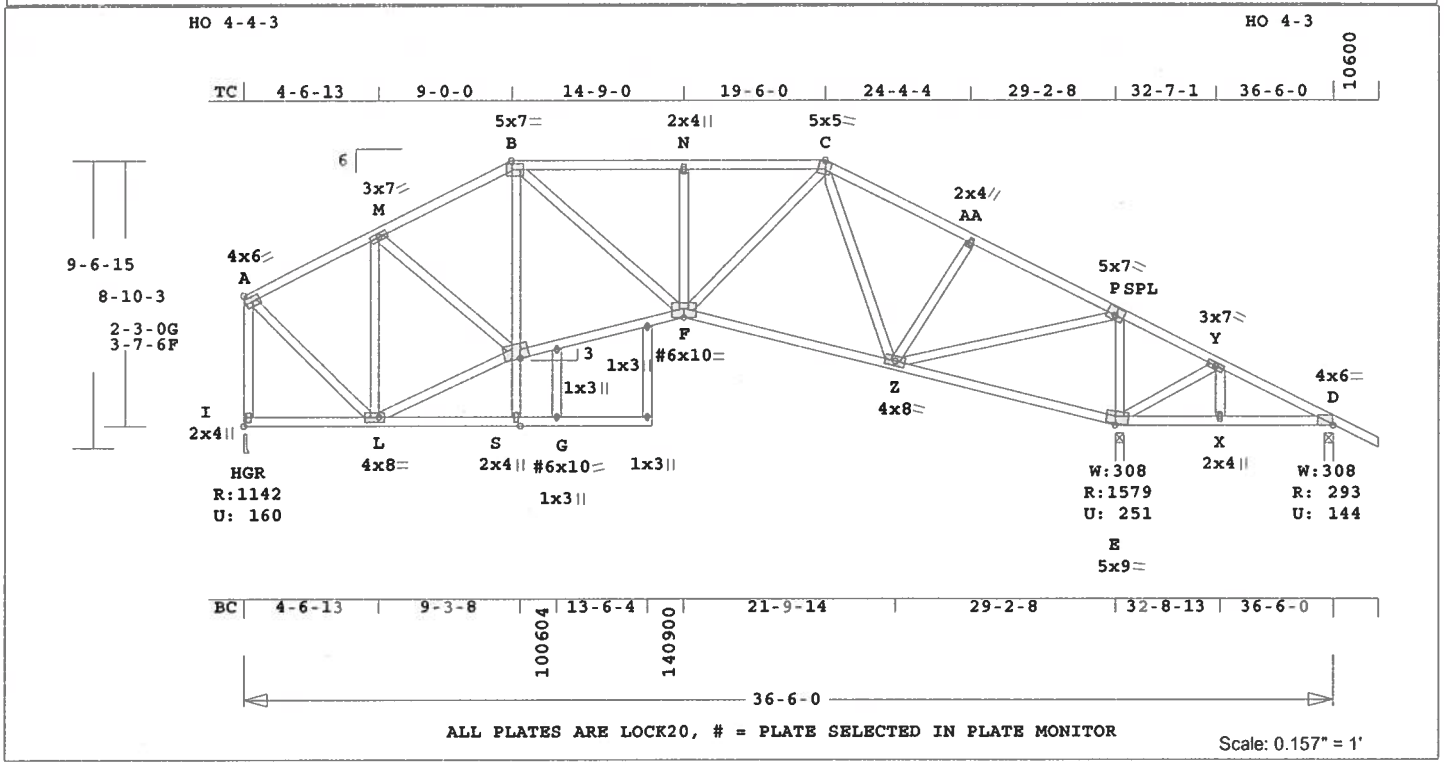
| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A6 | 1 | SP | 440600 | 6 | 1- 6- 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B

```
  Occupancy Factor  : 1.00
  Building Type: Enclosed
  Zone location: Exterior
  TC Dead Load :        5.0 psf
  BC Dead Load :        5.0 psf
User-defined wind-exposed BC
  regions  --From--    ---To---
            0- 0- 0     8- 1-12
           37- 2- 8    44- 6- 0
Max comp. force     1701 Lbs
Quality Control Factor 1.25
```

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A7 | 1 | SP | 360600 | 6 | 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B




ALL PLATES ARE LOCK20, # = PLATE SELECTED IN PLATE MONITOR

Scale: 0.157" = 1'

Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 318.7 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.28 | 2x 4 | SP-#2 |
| BC | 0.48 | 2x 4 | SP-#2 |
| CW | 0.09 | 2x 4 | SP-#2 |
| WB | 0.43 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC Cont. | | 0- 0- 0 | 36- 6- 0 |
| BC Cont. | | 0- 0- 0 | 36- 6- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |

Lumber Duration Factor 1.25
Plate Duration Factor 1.25
TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | Size Req'd In-Sx |
|---|---|---|---|---|
| I | 1143 | 160 | 3- 8 | 1- 8 |
| | | Hz = | -240 | |
| E | 1580 | 252 | 3- 8 | 1-11 |
| D | 294 | 144 | 3- 8 | 1- 8 |
| | | Hz = | 162 | |

| Membr | CSI | P Lbs | Axl | CSI | Bnd |
|---|---|---|---|---|---|
| **Top Chords** | | | | | |
| A -M | 0.21 | 751 | C | 0.00 | 0.21 |
| M -B | 0.22 | 1237 | C | 0.01 | 0.21 |
| B -N | 0.26 | 1667 | C | 0.02 | 0.24 |
| N -C | 0.27 | 1667 | C | 0.01 | 0.26 |
| C -AA | 0.28 | 1167 | C | 0.01 | 0.27 |
| AA-P | 0.28 | 1332 | C | 0.01 | 0.27 |
| P -Y | 0.19 | 283 | T | 0.05 | 0.14 |
| Y -D | 0.13 | 184 | C | 0.00 | 0.13 |
| **Bottom Chords** | | | | | |
| I -L | 0.15 | 187 | T | 0.00 | 0.15 |
| L -S | 0.15 | 21 | C | 0.00 | 0.15 |
| G -F | 0.26 | 1143 | T | 0.19 | 0.07 |
| F -Z | 0.38 | 1156 | T | 0.11 | 0.27 |
| Z -E | 0.44 | 235 | C | 0.00 | 0.44 |
| E -X | 0.48 | 170 | T | 0.02 | 0.46 |
| X -D | 0.22 | 170 | T | 0.02 | 0.20 |
| **Chord-Webs** | | | | | |
| S -G | 0.09 | 74 | T | 0.01 | 0.08 |
| G -B | 0.06 | 222 | C | 0.01 | 0.05 |
| **Webs** | | | | | |
| I -A | 0.24 | 1107 | C | WindLd | |
| A -L | 0.17 | 947 | T | | |
| L -M | 0.43 | 868 | C | | |
| L -G | 0.14 | 758 | T | | |
| M -G | 0.10 | 552 | T | | |
| B -F | 0.13 | 727 | T | | |
| F -N | 0.09 | 300 | C | | |
| F -C | 0.13 | 752 | T | | |
| C -Z | 0.17 | 287 | C | | |
| Z -AA | 0.09 | 309 | C | | |
| Z -P | 0.26 | 1437 | T | | |
| E -P | 0.23 | 1276 | C | | |
| E -Y | 0.09 | 472 | C | | |
| X -Y | 0.04 | 236 | T | | |

TL Defl -0.19" in F -Z L/999
LL Defl -0.07" in F -Z L/999

| Hz Disp | LL | DL | TL |
|---|---|---|---|
| Jt E | 0.05" | 0.05" | 0.10" |

Shear // Grain in B -N 0.22

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 4.0x 6.0 | 0.1 | Ctr | 0.76 |
| M | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.42 |
| B | LOCK | 5.0x 7.0 | -0.5 | -0.1 | 0.95 |
| N | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.45 |
| C | LOCK | 5.0x 5.0 | -0.3 | -3.2 | 0.79 |
| AA | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.45 |
| P | LOCK | 5.0x 7.0 | 0.2 | 0.5 | 0.74 |
| Y | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.41 |
| D | LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.70 |
| I | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.51 |
| L | LOCK | 4.0x 8.0 | Ctr | Ctr | 0.47 |
| S | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.58 |
| G# | LOCK | 6.0x10.0 | Ctr | 0.8 | 0.65 |
| F# | LOCK | 6.0x10.0 | Ctr | -0.6 | 0.65 |
| Z | LOCK | 4.0x 8.0 | Ctr | Ctr | 0.69 |
| E | LOCK | 5.0x 9.0 | 0.9 | 3.0 | 0.69 |
| X | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.45 |

# = Plate Monitor used

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

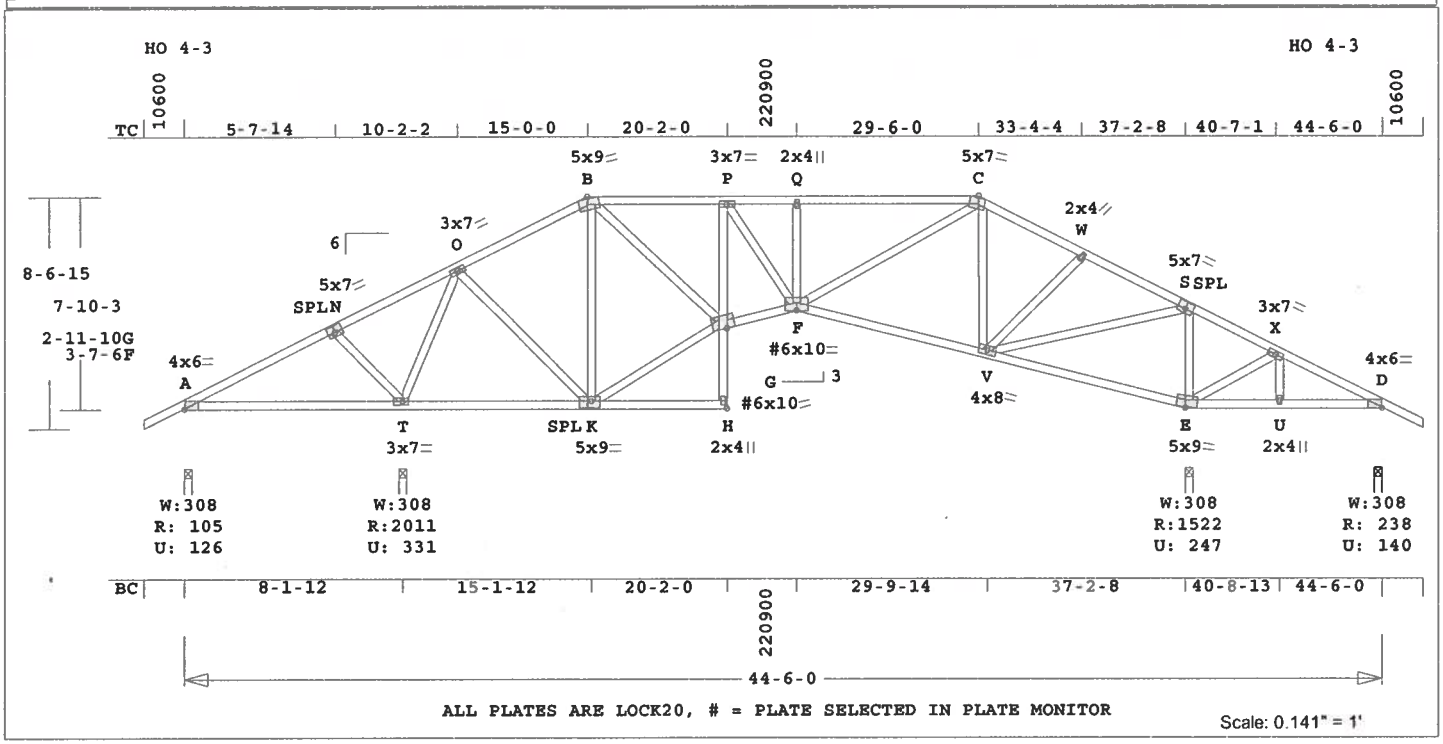
NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
NOTE: USER MODIFIED PLATES
This design may have plates selected through a plate monitor.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
User-defined wind-exposed BC regions --From-- ---To---
29- 2- 8 36- 6- 0
Max comp. force 1667 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A8 | 1 | SP | 440600 | 6 | 1- 6- 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 341.4 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.47 | 2x 4 | SP-#2 |
| BC | 0.44 | 2x 4 | SP-#2 |
| CW | 0.06 | 2x 4 | SP-#2 |
| WB | 0.64 | 2x 4 | SP-#2 |

Brace truss as follows:

| O.C. | From | To |
|---|---|---|
| TC Cont. | 0- 0- 0 | 44- 6- 0 |
| BC Cont. | 0- 0- 0 | 44- 6- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |

Lumber Duration Factor 1.25
Plate Duration Factor 1.25
TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | Size Req'd In-Sx |
|---|---|---|---|---|
| A | 106 | 127 | 3- 8 | 1- 8 |
| | | Hz = | -165 | |
| T | 2011 | 331 | 3- 8 | 2- 2 |
| E | 1522 | 247 | 3- 8 | 1-10 |
| D | 238 | 140 | 3- 8 | 1- 8 |
| | | Hz = | 165 | |

| Membr | CSI | P Lbs | Axl | CSI-Bnd |
|---|---|---|---|---|
| **Top Chords** | | | | |
| A -N | 0.46 | 707 | T | 0.13 0.33 |
| N -O | 0.47 | 931 | T | 0.14 0.33 |
| O -B | 0.22 | 477 | C | 0.00 0.22 |
| B -P | 0.22 | 1186 | C | 0.00 0.22 |
| P -Q | 0.29 | 1588 | C | 0.01 0.28 |
| Q -C | 0.38 | 1588 | C | 0.04 0.34 |
| C -W | 0.14 | 941 | C | 0.00 0.14 |
| W -S | 0.14 | 1124 | C | 0.00 0.14 |
| S -X | 0.19 | 392 | T | 0.05 0.14 |
| X -D | 0.14 | 169 | T | 0.00 0.14 |
| **Bottom Chords** | | | | |
| A -T | 0.38 | 612 | C | 0.00 0.38 |
| T -K | 0.38 | 227 | C | 0.00 0.38 |
| K -H | 0.19 | 9 | T | 0.00 0.19 |
| G -F | 0.31 | 1231 | T | 0.20 0.11 |
| F -V | 0.37 | 863 | T | 0.08 0.29 |
| V -E | 0.42 | 330 | C | 0.00 0.42 |
| E -U | 0.44 | 140 | C | 0.01 0.43 |
| U -D | 0.21 | 140 | C | 0.01 0.20 |

| Chord-Webs | | | | |
|---|---|---|---|---|
| H -G | 0.06 | 72 | T | 0.00 0.06 |
| G -P | 0.06 | 717 | C | 0.04 0.02 |
| **Webs** | | | | |
| N -T | 0.06 | 332 | C | |
| T -O | 0.64 | 1695 | C | |
| O -K | 0.17 | 924 | T | |
| K -B | 0.57 | 800 | C | |
| K -G | 0.09 | 487 | T | |
| B -G | 0.19 | 1036 | T | |
| P -F | 0.12 | 684 | T | |
| F -Q | 0.06 | 319 | C | |
| F -C | 0.15 | 845 | T | |
| C -V | 0.11 | 289 | C | |
| V -W | 0.08 | 241 | C | |
| V -S | 0.25 | 1354 | T | |
| E -S | 0.21 | 1186 | C | |
| E -X | 0.09 | 478 | C | |
| U -X | 0.03 | 233 | T | |

TL Defl -0.16" in A -T L/561
LL Defl -0.07" in A -T L/999

| Hz Disp | LL | DL | TL |
|---|---|---|---|
| Jt E | 0.05" | 0.05" | 0.09" |

Shear // Grain in Q -C 0.26

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.78 |
| N | LOCK | 5.0x 7.0 | -0.2 | 0.5 | 0.82 |
| O | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.59 |
| B | LOCK | 5.0x 9.0 | 0.8 | -3.5 | 0.72 |
| P | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.53 |
| Q | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.50 |
| C | LOCK | 5.0x 7.0 | -0.8 | -3.2 | 0.79 |
| W | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.50 |
| S | LOCK | 5.0x 7.0 | 0.2 | 0.5 | 0.82 |
| X | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.43 |
| D | LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.78 |
| T | LOCK | 3.0x 7.0 | -1.0 | Ctr | 0.64 |
| K | LOCK | 5.0x 9.0 | 1.0 | -0.5 | 0.84 |
| H | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.63 |
| G# | LOCK | 6.0x10.0 | Ctr | 0.8 | 0.72 |
| F# | LOCK | 6.0x10.0 | Ctr | -0.6 | 0.72 |
| V | LOCK | 4.0x 8.0 | Ctr | Ctr | 0.89 |
| E | LOCK | 5.0x 9.0 | 0.9 | 3.0 | 0.77 |
| U | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.50 |

# = Plate Monitor used

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Prevent truss rotation at all bearing locations.
NOTE: USER MODIFIED PLATES
This design may have plates selected through a plate monitor.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
User-defined wind-exposed BC regions

| --From-- | ---To--- |
|---|---|
| 0- 0- 0 | 8- 1-12 |

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682




Date Sealed: 3/27/2006

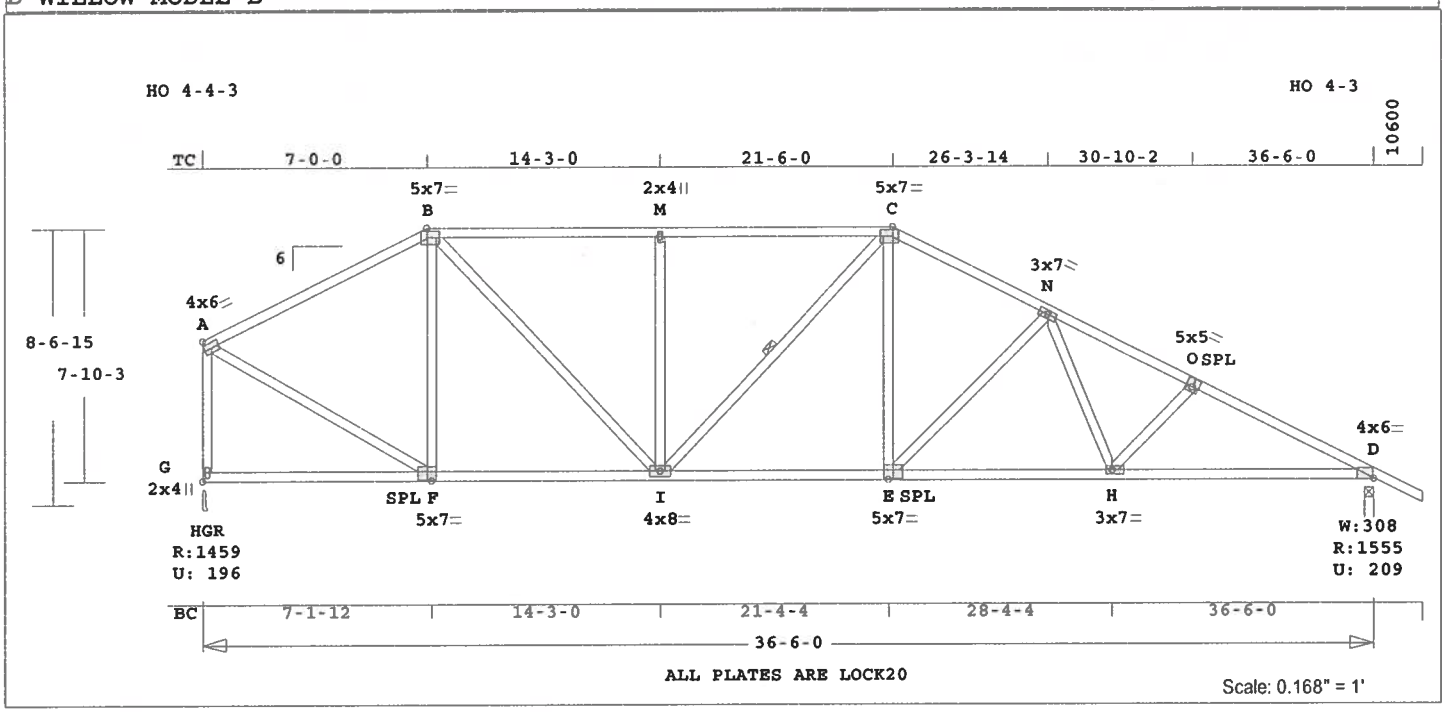
| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A8 | 1 | SP | 440600 | 6 | 1- 6- 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B

37- 2- 8 44- 6- 0
Max comp. force 1695 Lbs
Quality Control Factor 1.25

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A9 | 1 | HIPP | 360600 | 6 | 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 276.9 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.61 | 2x 4 | SP-#2 |
| BC | 0.53 | 2x 4 | SP-#2 |
| WB | 0.35 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC Cont. | | 0- 0- 0 | 36- 6- 0 |
| BC Cont. | | 0- 0- 0 | 36- 6- 0 |

WB 1 rows CLB on I -C
Attach CLB with (2)-10d nails at each web.

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |

Lumber Duration Factor 1.25
Plate Duration Factor 1.25
TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| G | 1460 | 196 | 3- 8 | 1-12 |
| | | | Hz = | -217 |
| D | 1556 | 210 | 3- 8 | 1-13 |
| | | | Hz = | 140 |

| Membr | CSI | P Lbs | Axl | CSI | Bnd |
|---|---|---|---|---|---|
| **Top Chords** | | | | | |
| A -B | 0.61 | 1235 | C | 0.03 | 0.58 |
| B -M | 0.54 | 1698 | C | 0.01 | 0.53 |
| M -C | 0.54 | 1698 | C | 0.01 | 0.53 |
| C -N | 0.33 | 1902 | C | 0.02 | 0.31 |
| N -O | 0.22 | 2454 | C | 0.04 | 0.18 |
| O -D | 0.26 | 2662 | C | 0.07 | 0.19 |
| **Bottom Chords** | | | | | |
| G -F | 0.32 | 164 | T | 0.00 | 0.32 |
| F -I | 0.43 | 1119 | T | 0.11 | 0.32 |
| I -E | 0.42 | 1703 | T | 0.28 | 0.14 |
| E -H | 0.49 | 2058 | T | 0.21 | 0.28 |
| H -D | 0.53 | 2380 | T | 0.39 | 0.14 |
| **Webs** | | | | | |
| G -A | 0.31 | 1401 | C | WindLd | |
| A -F | 0.23 | 1291 | T | | |
| F -B | 0.35 | 494 | C | | |
| B -I | 0.15 | 840 | T | | |
| I -M | 0.33 | 467 | C | | |
| I -C | 0.02 | 78 | C | | 1 Br |
| E -C | 0.09 | 527 | T | | |
| E -N | 0.31 | 500 | C | | |
| N -H | 0.06 | 407 | T | | |
| H -O | 0.05 | 275 | C | | |

TL Defl -0.24" in E -H L/999
LL Defl -0.11" in E -H L/999
Shear // Grain in M -C 0.31

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 4.0x 6.0 | 0.1 | Ctr | 0.76 |
| B | LOCK | 5.0x 7.0 | -0.5 | -0.1 | 0.95 |
| M | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.45 |
| C | LOCK | 5.0x 7.0 | 0.5 | -0.1 | 0.95 |
| N | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.53 |
| O | LOCK | 5.0x 5.0 | 0.2 | 0.5 | 0.74 |
| D | LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.70 |
| G | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.51 |
| F | LOCK | 5.0x 7.0 | Ctr | -0.5 | 0.76 |
| I | LOCK | 4.0x 8.0 | Ctr | Ctr | 0.43 |
| E | LOCK | 5.0x 7.0 | Ctr | -0.5 | 0.76 |
| H | LOCK | 3.0x 7.0 | 1.0 | Ctr | 0.55 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

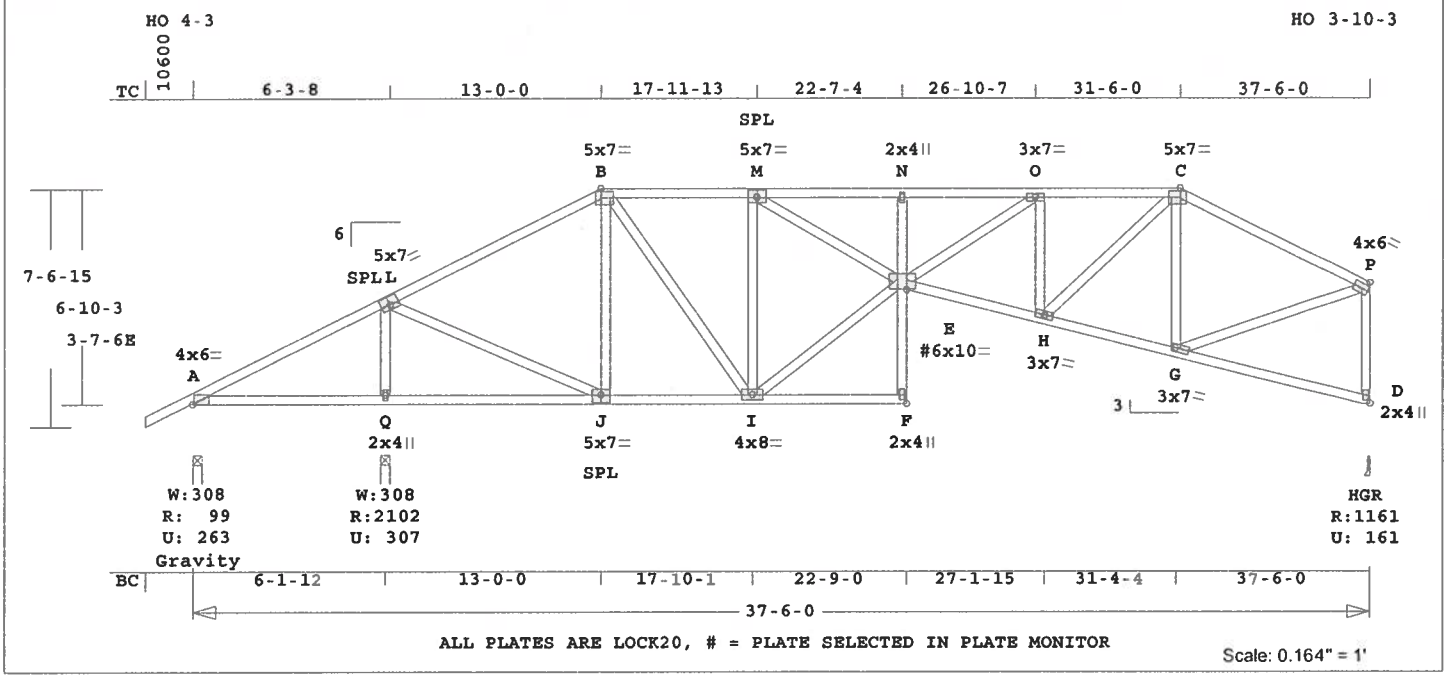
NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 2662 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A10 | 1 | SP | 370600 | 6 | 1- 6- 0 | 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 294.2 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | Size | Lumber |
|---|---|---|---|
| TC | 0.72 | 2x 4 | SP-#2 |
| BC | 0.42 | 2x 4 | SP-#2 |
| CW | 0.11 | 2x 4 | SP-#2 |
| WB | 0.71 | 2x 4 | SP-#2 |

Brace truss as follows:

| O.C. | From | To |
|---|---|---|
| TC Cont. | 0- 0- 0 | 37- 6- 0 |
| BC Cont. | 0- 0- 0 | 37- 6- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |

Lumber Duration Factor 1.25
Plate Duration Factor 1.25
TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size In-Sx | Req'd In-Sx |
|---|---|---|---|---|
| A | 100 | 263G | 3- 8 | 1- 8 |
| | | | Hz = -119 | |
| Q | 2102 | 308 | 3- 8 | 2- 4 |
| D | 1161 | 162 | 3- 8 | 1- 8 |
| | | | Hz = 190 | |

G = Gravity Uplift

| Membr | CSI | P Lbs | Axl | CSI | Bnd |
|---|---|---|---|---|---|
| **Top Chords** | | | | | |
| A -L | 0.72 | 976 | T | 0.17 | 0.55 |
| L -B | 0.55 | 782 | C | 0.00 | 0.55 |
| B -M | 0.20 | 1118 | C | 0.00 | 0.20 |
| M -N | 0.24 | 2852 | C | 0.07 | 0.17 |
| N -O | 0.22 | 2863 | C | 0.07 | 0.15 |
| O -C | 0.28 | 1920 | C | 0.02 | 0.26 |
| C -P | 0.45 | 1219 | C | 0.02 | 0.43 |
| **Bottom Chords** | | | | | |
| A -Q | 0.32 | 850 | C | 0.00 | 0.32 |
| Q -J | 0.32 | 850 | C | 0.00 | 0.32 |
| J -I | 0.24 | 693 | T | 0.07 | 0.17 |
| I -F | 0.12 | 14 | T | 0.00 | 0.12 |
| E -H | 0.42 | 1977 | T | 0.33 | 0.09 |
| H -G | 0.31 | 1138 | T | 0.11 | 0.20 |
| G -D | 0.20 | 148 | T | 0.00 | 0.20 |
| **Chord-Webs** | | | | | |
| F -E | 0.11 | 78 | T | 0.00 | 0.11 |
| E -N | 0.07 | 275 | C | 0.00 | 0.07 |
| **Webs** | | | | | |
| Q -L | 0.28 | 1916 | C | | |
| L -J | 0.31 | 1680 | T | | |
| J -B | 0.31 | 578 | C | | |
| B -I | 0.13 | 725 | T | | |
| I -M | 0.71 | 1333 | C | | |
| I -E | 0.25 | 1390 | T | | |
| M -E | 0.37 | 2030 | T | | |
| E -O | 0.20 | 1128 | T | | |
| H -O | 0.18 | 851 | C | | |
| H -C | 0.20 | 1097 | T | | |
| G -C | 0.18 | 544 | C | | |
| G -P | 0.21 | 1163 | T | | |
| D -P | 0.20 | 1108 | C | WindLd | |

TL Defl -0.06" in A -Q L/999
LL Defl -0.14" in F -E L/999

| Hz Disp | LL | DL | TL |
|---|---|---|---|
| Jt D | 0.07" | 0.07" | 0.15" |

Shear // Grain in L -B 0.27

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.71 |
| L | LOCK | 5.0x 7.0 | -0.2 | 0.5 | 0.75 |
| B | LOCK | 5.0x 7.0 | -0.5 | -0.1 | 0.97 |
| M | LOCK | 5.0x 7.0 | Ctr | 0.5 | 0.77 |
| N | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.40 |
| O | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.43 |
| C | LOCK | 5.0x 7.0 | 0.5 | -0.1 | 0.97 |
| P | LOCK | 4.0x 6.0 | -0.1 | Ctr | 0.78 |
| Q | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.46 |
| J | LOCK | 5.0x 7.0 | Ctr | -0.5 | 0.77 |
| I | LOCK | 4.0x 8.0 | Ctr | Ctr | 0.57 |
| F | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.58 |
| E# | LOCK | 6.0x10.0 | Ctr | 1.6 | 0.73 |
| H | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.53 |
| G | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.40 |
| D | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.52 |

# = Plate Monitor used

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

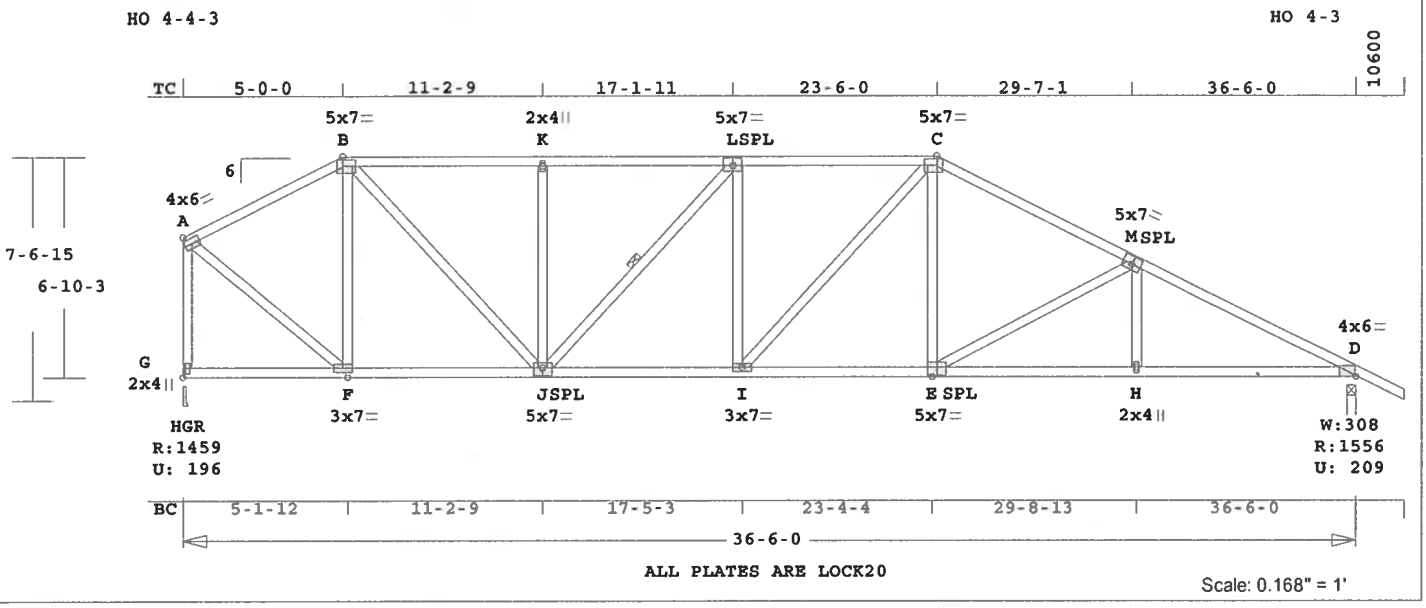
NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Prevent truss rotation at all bearing locations.
NOTE: USER MODIFIED PLATES
This design may have plates selected through a plate monitor.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
User-defined wind-exposed BC regions --From-- ---To---
0- 0- 0 6- 1-12
Max comp. force 2863 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A11 | 1 | HIPP | 360600 | 6 | 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 279.1 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.40 | 2x 4 | SP-#2 |
| BC | 0.50 | 2x 4 | SP-#2 |
| WB | 0.36 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC | Cont. | 0- 0- 0 | 36- 6- 0 |
| BC | Cont. | 0- 0- 0 | 36- 6- 0 |

WB 1 rows CLB on J -L
Attach CLB with (2)-10d nails at each web.

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |

TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| G | 1460 | 196 | 3- 8 | 1-12 |
| | | | Hz = | -195 |
| D | 1556 | 210 | 3- 8 | 1-13 |
| | | | Hz = | 119 |

| Membr | CSI | P Lbs | Axl | CSI | Bnd |
|---|---|---|---|---|---|
| **Top Chords** | | | | | |
| A -B | 0.28 | 1077 C | 0.01 | 0.27 | |
| B -K | 0.32 | 1731 C | 0.01 | 0.31 | |
| K -L | 0.38 | 1731 C | 0.01 | 0.37 | |
| L -C | 0.39 | 2033 C | 0.02 | 0.37 | |
| C -M | 0.36 | 2087 C | 0.03 | 0.33 | |
| M -D | 0.40 | 2633 C | 0.10 | 0.30 | |
| **Bottom Chords** | | | | | |
| G -F | 0.19 | 142 T | 0.00 | 0.19 | |
| F -J | 0.29 | 978 T | 0.10 | 0.19 | |
| J -I | 0.44 | 2033 T | 0.34 | 0.10 | |
| I -E | 0.42 | 1859 T | 0.31 | 0.11 | |
| E -H | 0.50 | 2357 T | 0.39 | 0.11 | |
| H -D | 0.50 | 2357 T | 0.39 | 0.11 | |
| **Webs** | | | | | |
| G -A | 0.31 | 1419 C | WindLd | | |
| A -F | 0.23 | 1253 T | | | |
| F -B | 0.36 | 672 C | | | |
| B -J | 0.20 | 1102 T | | | |
| J -K | 0.19 | 360 C | | | |
| J -L | 0.11 | 443 C | | | 1 Br |
| I -L | 0.03 | 118 T | | | |
| I -C | 0.07 | 254 T | | | |
| E -C | 0.07 | 444 T | | | |
| E -M | 0.35 | 558 C | | | |
| H -M | 0.03 | 258 T | | | |

TL Defl -0.24" in I -E L/999
LL Defl -0.11" in I -E L/999
Shear // Grain in L -C 0.26

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 4.0x 6.0 | 0.1 | Ctr | 0.76 |
| B | LOCK | 5.0x 7.0 | -0.5 | -0.1 | 0.95 |
| K | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.45 |
| L | LOCK | 5.0x 7.0 | Ctr | 0.5 | 0.76 |
| C | LOCK | 5.0x 7.0 | 0.5 | -0.1 | 0.95 |
| M | LOCK | 5.0x 7.0 | 0.2 | 0.5 | 0.74 |
| D | LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.70 |
| G | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.51 |
| F | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.46 |
| J | LOCK | 5.0x 7.0 | Ctr | -0.5 | 0.76 |
| I | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.46 |
| E | LOCK | 5.0x 7.0 | Ctr | -0.5 | 0.76 |
| H | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.45 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 2633 Lbs
Quality Control Factor 1.25

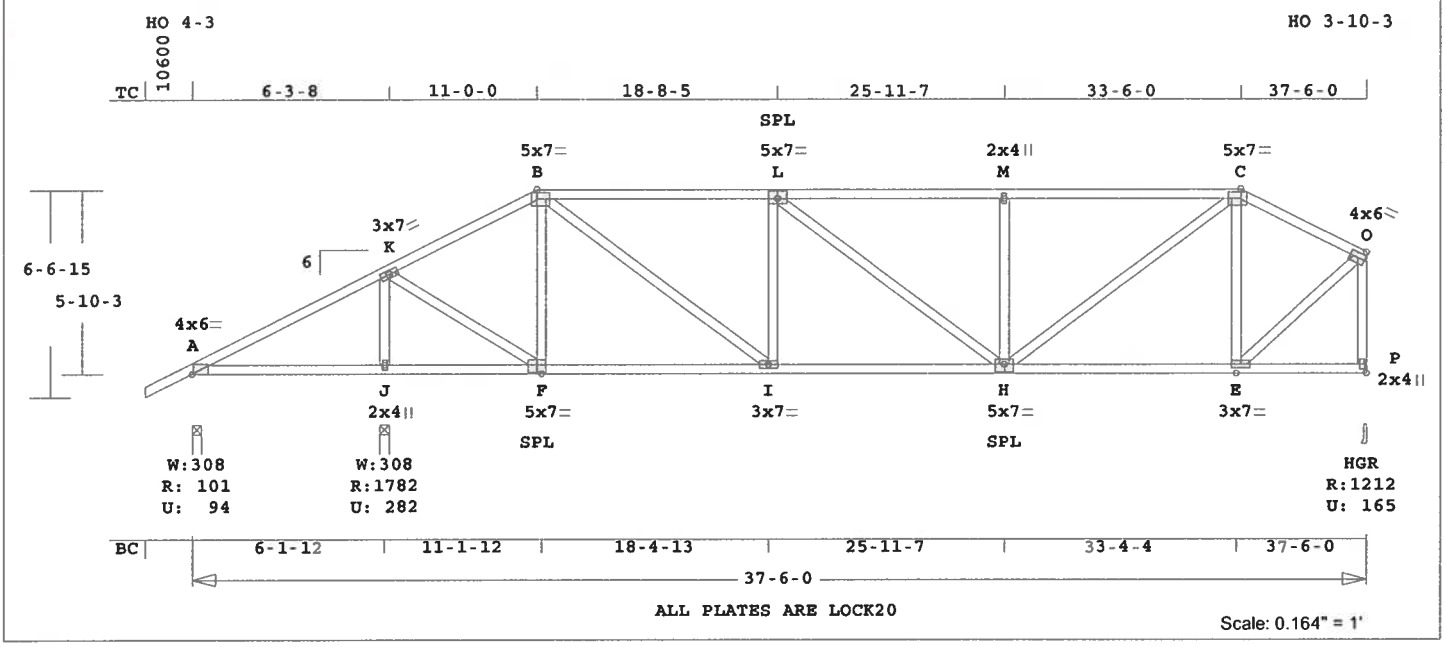
Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682

PHILIP J. O'REGAN LICENSE No. 58126 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A12 | 1 | HIPP | 370600 | 6 | 1- 6- 0 | 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 270.4 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.52 | 2x 4 | SP-#2 |
| BC | 0.45 | 2x 4 | SP-#2 |
| WB | 0.24 | 2x 4 | SP-#2 |

Brace truss as follows:

| O.C. | From | To |
|---|---|---|
| TC Cont. | 0- 0- 0 | 37- 6- 0 |
| BC Cont. | 0- 0- 0 | 37- 6- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |

Lumber Duration Factor 1.25
Plate Duration Factor 1.25
TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| A | 101 | 95 | 3- 8 | 1- 8 |
| | | | Hz = | -97 |
| J | 1782 | 283 | 3- 8 | 1-14 |
| P | 1213 | 166 | 3- 8 | 1- 8 |
| | | | Hz = | 168 |

| Membr | CSI | P Lbs | Axl | CSI | Bnd |
|---|---|---|---|---|---|
| **Top Chords** | | | | | |
| A -K | 0.45 | 434 T | 0.08 | | 0.37 |
| K -B | 0.37 | 838 C | 0.00 | | 0.37 |
| B -L | 0.52 | 1586 C | 0.01 | | 0.51 |
| L -M | 0.52 | 1594 C | 0.01 | | 0.51 |
| M -C | 0.52 | 1594 C | 0.01 | | 0.51 |
| C -O | 0.14 | 855 C | 0.00 | | 0.14 |
| **Bottom Chords** | | | | | |
| A -J | 0.22 | 374 C | 0.00 | | 0.22 |
| J -F | 0.21 | 374 C | 0.00 | | 0.21 |
| F -I | 0.36 | 747 T | 0.07 | | 0.29 |
| I -H | 0.45 | 1586 T | 0.16 | | 0.29 |
| H -E | 0.37 | 781 T | 0.08 | | 0.29 |
| E -P | 0.22 | 120 T | 0.00 | | 0.22 |
| **Webs** | | | | | |
| J -K | 0.23 | 1626 C | | | |
| K -F | 0.24 | 1309 T | | | |
| F -B | 0.22 | 584 C | | | |
| B -I | 0.19 | 1042 T | | | |
| I -L | 0.18 | 464 C | | | |
| L -H | 0.02 | 39 T | | | |
| H -M | 0.17 | 456 C | | | |
| H -C | 0.18 | 1010 T | | | |
| E -C | 0.21 | 566 C | | | |
| E -O | 0.19 | 1038 T | | | |
| P -O | 0.21 | 1187 C | WindLd | | |

TL Defl -0.07" in A -J L/998
LL Defl -0.03" in A -J L/999
Shear // Grain in B -L 0.30

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.71 |
| K | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.60 |
| B | LOCK | 5.0x 7.0 | -0.5 | -0.1 | 0.97 |
| L | LOCK | 5.0x 7.0 | Ctr | 0.5 | 0.77 |
| M | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.46 |
| C | LOCK | 5.0x 7.0 | 0.5 | -0.1 | 0.97 |
| O | LOCK | 4.0x 6.0 | -0.1 | Ctr | 0.78 |
| J | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.46 |
| F | LOCK | 5.0x 7.0 | Ctr | -0.5 | 0.77 |
| I | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.44 |
| H | LOCK | 5.0x 7.0 | Ctr | -0.5 | 0.77 |
| E | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.45 |
| P | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.52 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

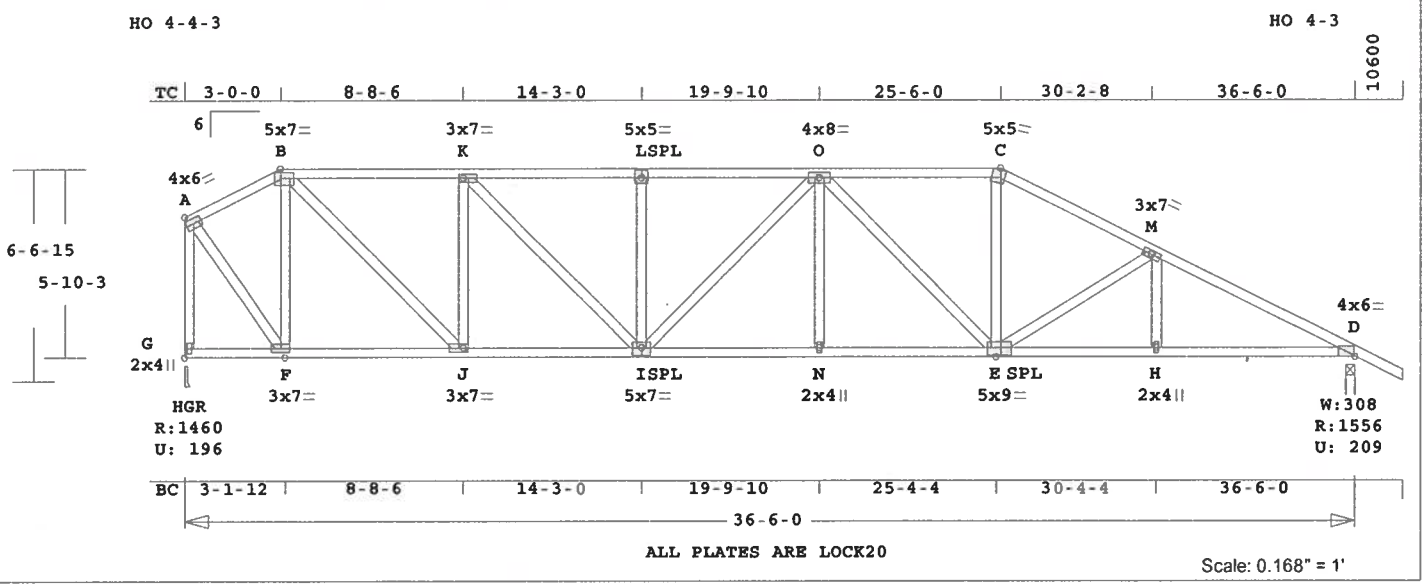
NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
User-defined wind-exposed BC regions --From-- ---To---
0- 0- 0 6- 1-12
Max comp. force 1626 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A13 | 1 | HIPP | 360600 | 6 | 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 282.8 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.35 | 2x 4 | SP-#2 |
| BC | 0.48 | 2x 4 | SP-#2 |
| WB | 0.38 | 2x 4 | SP-#2 |

Brace truss as follows:

| O.C. | From | To |
|---|---|---|
| TC Cont. | 0- 0- 0 | 36- 6- 0 |
| BC Cont. | 0- 0- 0 | 36- 6- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |

TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| G | 1460 | 196 | 3- 8 | 1-12 |
| | | | Hz = | -174 |
| D | 1556 | 210 | 3- 8 | 1-13 |
| | | | Hz = | 97 |

| Membr | CSI | P Lbs | Axl | CSI | Bnd |
|---|---|---|---|---|---|
| **Top Chords** | | | | | |
| A -B | 0.10 | 806 C | 0.00 | | 0.10 |
| B -K | 0.27 | 1737 C | 0.01 | | 0.26 |
| K -L | 0.29 | 2276 C | 0.03 | | 0.26 |
| L -O | 0.33 | 2276 C | 0.03 | | 0.30 |
| O -C | 0.32 | 2013 C | 0.02 | | 0.30 |
| C -M | 0.25 | 2249 C | 0.03 | | 0.22 |
| M -D | 0.35 | 2653 C | 0.09 | | 0.26 |
| **Bottom Chords** | | | | | |
| G -F | 0.12 | 124 T | 0.00 | | 0.12 |
| F -J | 0.23 | 737 T | 0.07 | | 0.16 |
| J -I | 0.37 | 1736 T | 0.29 | | 0.08 |
| I -N | 0.47 | 2379 T | 0.39 | | 0.08 |
| N -E | 0.47 | 2379 T | 0.39 | | 0.08 |
| E -H | 0.47 | 2370 T | 0.39 | | 0.08 |
| H -D | 0.48 | 2370 T | 0.39 | | 0.09 |
| **Webs** | | | | | |
| G -A | 0.32 | 1440 C | WindLd | | |
| A -F | 0.22 | 1223 T | | | |
| F -B | 0.34 | 891 C | | | |
| B -J | 0.25 | 1405 T | | | |
| J -K | 0.33 | 874 C | | | |
| K -I | 0.14 | 763 T | | | |
| I -L | 0.12 | 326 C | | | |
| I -O | 0.10 | 145 C | | | |
| N -O | 0.03 | 223 T | | | |
| O -E | 0.38 | 517 C | | | |
| E -C | 0.12 | 699 C | | | |
| E -M | 0.17 | 420 C | | | |
| H -M | 0.03 | 207 T | | | |

TL Defl -0.28" in I -N L/999
LL Defl -0.13" in I -N L/999
Shear // Grain in O -C 0.24

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 4.0x 6.0 | 0.1 | Ctr | 0.76 |
| B | LOCK | 5.0x 7.0 | -0.5 | -0.1 | 0.95 |
| K | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.46 |
| L | LOCK | 5.0x 5.0 | Ctr | 0.5 | 0.76 |
| O | LOCK | 4.0x 8.0 | Ctr | Ctr | 0.43 |
| C | LOCK | 5.0x 5.0 | -0.7 | -3.0 | 0.65 |
| M | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.41 |
| D | LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.70 |
| G | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.51 |
| F | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.61 |
| J | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.56 |
| I | LOCK | 5.0x 7.0 | Ctr | -0.5 | 0.76 |
| N | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.45 |
| E | LOCK | 5.0x 9.0 | -0.5 | -0.5 | 0.76 |
| H | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.45 |

REVIEWED BY:
Robbins Engineering, Inc.

PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 2653 Lbs
Quality Control Factor 1.25

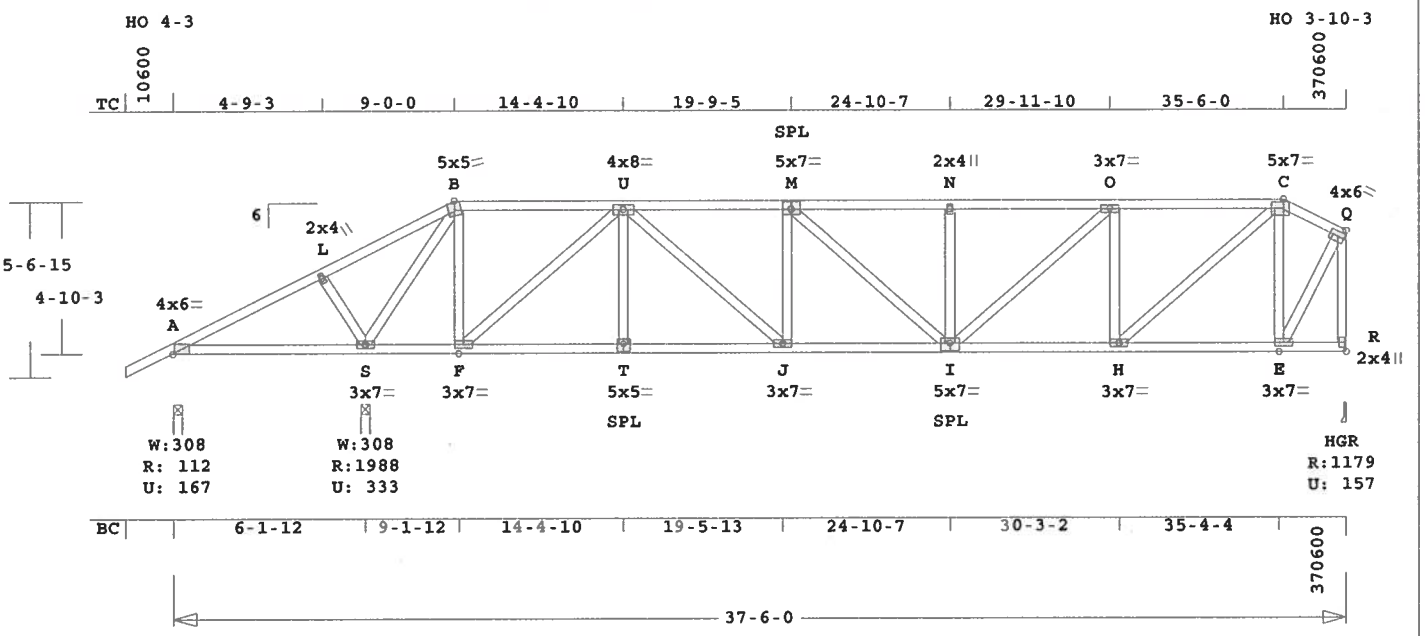
Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682




Date Scaled: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A14 | 1 | HIPP | 370600 | 6 | 1- 6- 0 | 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 285.9 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | Size | Lumber |
|---|---|---|---|
| TC | 0.46 | 2x 4 | SP-#2 |
| BC | 0.37 | 2x 4 | SP-#2 |
| WB | 0.78 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC Cont. | | 0- 0- 0 | 37- 6- 0 |
| BC Cont. | | 0- 0- 0 | 37- 6- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |

Lumber Duration Factor 1.25
Plate Duration Factor 1.25
TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| A | 113 | 168G | 3- 8 | 1- 8 |
| | | | Hz = | -76 |
| S | 1988 | 333 | 3- 8 | 2- 2 |
| R | 1179 | 157 | 3- 8 | 1- 8 |
| | | | Hz = | 146 |

G = Gravity Uplift

| Membr | CSI | P Lbs | Axl | CSI | Bnd |
|---|---|---|---|---|---|
| **Top Chords** | | | | | |
| A -L | 0.45 | 704 | T | 0.12 | 0.33 |
| L -B | 0.46 | 845 | T | 0.13 | 0.33 |
| B -U | 0.27 | 279 | C | 0.00 | 0.27 |
| U -M | 0.25 | 1821 | C | 0.02 | 0.23 |
| M -N | 0.25 | 1866 | C | 0.02 | 0.23 |
| N -O | 0.25 | 1866 | C | 0.02 | 0.23 |
| O -C | 0.24 | 1432 | C | 0.01 | 0.23 |
| C -Q | 0.05 | 538 | C | 0.00 | 0.05 |
| **Bottom Chords** | | | | | |
| A -S | 0.21 | 607 | C | 0.00 | 0.21 |
| S -F | 0.24 | 257 | T | 0.04 | 0.20 |
| F -T | 0.30 | 1293 | T | 0.21 | 0.09 |
| T -J | 0.30 | 1293 | T | 0.21 | 0.09 |
| J -I | 0.37 | 1821 | T | 0.30 | 0.07 |
| I -H | 0.31 | 1432 | T | 0.24 | 0.07 |
| H -E | 0.19 | 496 | T | 0.05 | 0.14 |
| E -R | 0.10 | 105 | T | 0.00 | 0.10 |
| **Webs** | | | | | |
| L -S | 0.04 | 331 | C | | |
| S -B | 0.68 | 1870 | C | | |
| F -B | 0.17 | 922 | T | | |
| F -U | 0.78 | 1342 | C | | |
| T -U | 0.03 | 222 | T | | |
| U -J | 0.12 | 700 | T | | |
| J -M | 0.09 | 356 | C | | |
| M -I | 0.02 | 60 | T | | |
| I -N | 0.08 | 313 | C | | |
| I -O | 0.10 | 575 | T | | |
| H -O | 0.18 | 691 | C | | |
| H -C | 0.22 | 1231 | T | | |
| E -C | 0.20 | 776 | C | | |
| E -Q | 0.18 | 987 | T | | |
| R -Q | 0.21 | 1173 | C | WindLd | |

TL Defl -0.05" in A -S L/999
LL Defl -0.09" in J -I L/999
Shear // Grain in A -L 0.21

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.71 |
| L | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.46 |
| B | LOCK | 5.0x 5.0 | 0.3 | -3.2 | 0.80 |
| U | LOCK | 4.0x 8.0 | Ctr | Ctr | 0.46 |
| M | LOCK | 5.0x 7.0 | Ctr | 0.5 | 0.77 |
| N | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.46 |
| O | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.45 |
| C | LOCK | 5.0x 7.0 | 0.5 | -0.1 | 0.97 |
| Q | LOCK | 4.0x 6.0 | -0.1 | Ctr | 0.78 |
| S | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.66 |
| F | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.45 |
| T | LOCK | 5.0x 5.0 | Ctr | -0.5 | 0.77 |
| J | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.45 |
| I | LOCK | 5.0x 7.0 | Ctr | -0.5 | 0.77 |
| H | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.46 |
| E | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.58 |
| R | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.52 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
User-defined wind-exposed BC regions --From-- ---To---
0- 0- 0 6- 1-12
Max comp. force 1870 Lbs
Quality Control Factor 1.25

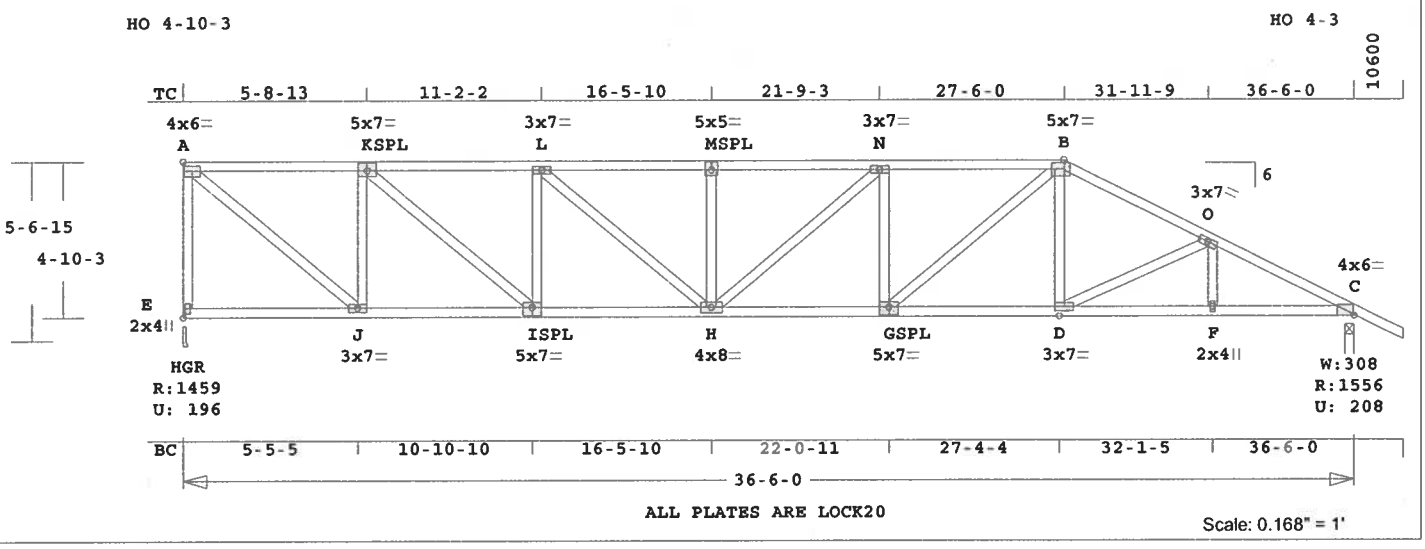
Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682

PHILIP J. O'REGAN LICENSE No. 58126 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A15 | 1 | HHIP | 360600 | 6 | 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 267.9 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.36 | 2x 4 | SP-#2 |
| BC | 0.54 | 2x 4 | SP-#2 |
| WB | 0.37 | 2x 4 | SP-#2 |

Brace truss as follows:

| O.C. | From | To |
|---|---|---|
| TC Cont. | 0- 0- 0 | 36- 6- 0 |
| BC Cont. | 0- 0- 0 | 36- 6- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |

TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| E | 1460 | 197 | 3- 8 | 1-12 |
| | | | Hz = -159 | |
| C | 1556 | 209 | 3- 8 | 1-13 |
| | | | Hz = 73 | |

| Membr | CSI | P Lbs | Axl | CSI | Bnd |
|---|---|---|---|---|---|
| **Top Chords** | | | | | |
| A -K | 0.33 | 1519 C | 0.01 | 0.32 | |
| K -L | 0.36 | 2455 C | 0.04 | 0.32 | |
| L -M | 0.29 | 2886 C | 0.05 | 0.24 | |
| M -N | 0.32 | 2886 C | 0.05 | 0.27 | |
| N -B | 0.32 | 2800 C | 0.05 | 0.27 | |
| B -O | 0.25 | 2417 C | 0.03 | 0.22 | |
| O -C | 0.21 | 2726 C | 0.05 | 0.16 | |
| **Bottom Chords** | | | | | |
| E -J | 0.18 | 125 T | 0.00 | 0.18 | |
| J -I | 0.35 | 1520 T | 0.25 | 0.10 | |
| I -H | 0.48 | 2455 T | 0.41 | 0.07 | |
| H -G | 0.54 | 2800 T | 0.47 | 0.07 | |
| G -D | 0.45 | 2164 T | 0.36 | 0.09 | |
| D -F | 0.49 | 2429 T | 0.40 | 0.09 | |
| F -C | 0.52 | 2429 T | 0.40 | 0.12 | |
| **Webs** | | | | | |
| E -A | 0.37 | 1412 C | WindLd | | |
| A -J | 0.36 | 1982 T | | | |
| J -K | 0.30 | 1151 C | | | |
| K -I | 0.22 | 1220 T | | | |
| I -L | 0.17 | 677 C | | | |
| L -H | 0.10 | 562 T | | | |
| H -M | 0.08 | 324 C | | | |
| H -N | 0.02 | 111 T | | | |
| G -N | 0.11 | 415 C | | | |
| G -B | 0.15 | 823 T | | | |
| D -B | 0.04 | 306 T | | | |
| D -O | 0.09 | 286 C | | | |
| F -O | 0.02 | 141 T | | | |

TL Defl -0.36" in H -G L/999
LL Defl -0.18" in H -G L/999
Shear // Grain in A -K 0.25

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.76 |
| K | LOCK | 5.0x 7.0 | Ctr | 0.5 | 0.76 |
| L | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.44 |
| M | LOCK | 5.0x 5.0 | Ctr | 0.5 | 0.76 |
| N | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.44 |
| B | LOCK | 5.0x 7.0 | 0.5 | -0.1 | 0.95 |
| O | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.41 |
| C | LOCK | 4.0x 6.0 | Ctr | 0.1 | 0.70 |
| E | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.51 |
| J | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.73 |
| I | LOCK | 5.0x 7.0 | Ctr | -0.5 | 0.76 |
| H | LOCK | 4.0x 8.0 | Ctr | Ctr | 0.43 |
| G | LOCK | 5.0x 7.0 | Ctr | -0.5 | 0.76 |
| D | LOCK | 3.0x 7.0 | Ctr | Ctr | 0.46 |
| F | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.45 |

REVIEWED BY:
Robbins Engineering, Inc.

PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

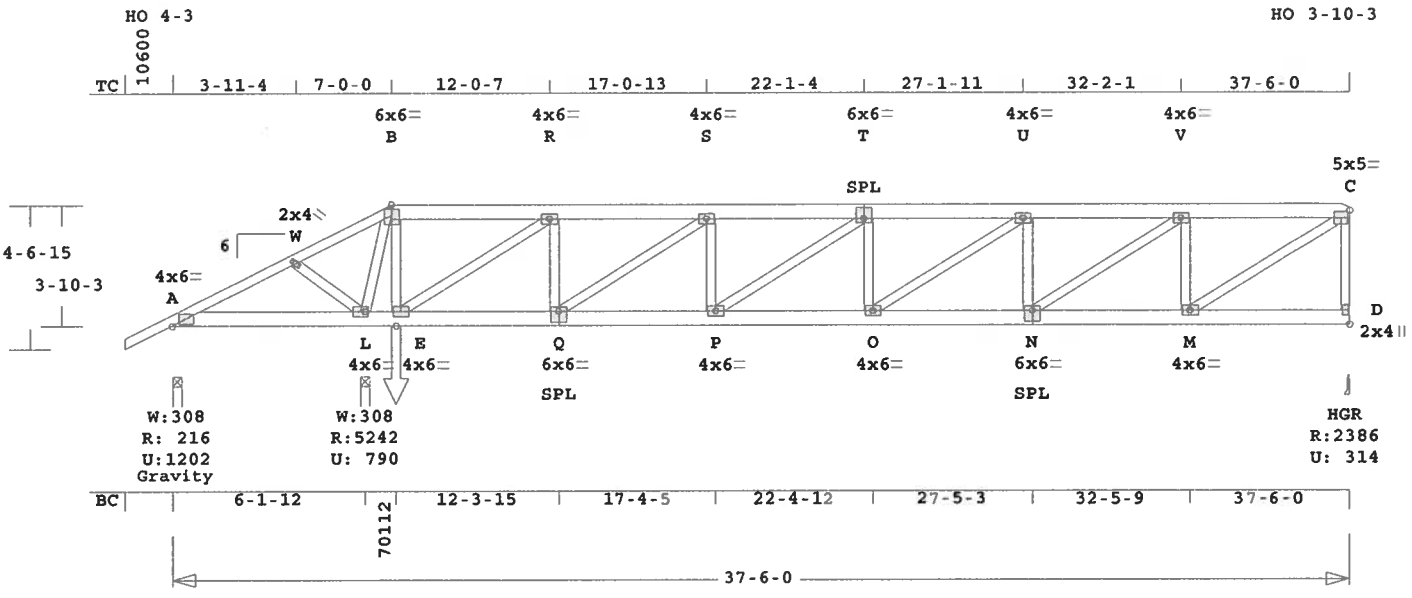
NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 2886 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A16 | 1*2P | HHIP | 370600 | 6 | 1- 6- 0 | 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 323.9 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06
**********
* 2-Ply Truss *
**********

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.22 | 2x 6 | SP-#2 |
| EX A -B | | 2x 4 | SP-#2 |
| BC | 0.41 | 2x 6 | SP-#2 |
| WB | 0.35 | 2x 4 | SP-#2 |

Brace truss as follows:

| O.C. | From | To |
|---|---|---|
| TC Cont. | 0- 0- 0 | 37- 6- 0 |
| BC Cont. | 0- 0- 0 | 37- 6- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |
| TC Fb=1.00 | Fc=1.00 | Ft=1.00 | |
| BC Fb=1.00 | Fc=1.00 | Ft=1.00 | |

Load Case # 1 Girder Loading
Lumber Duration Factor 1.25
Plate Duration Factor 1.25

| plf - | Live | Dead | From | To |
|---|---|---|---|---|
| TC V | 40 | 20 | 0.0' | 37.5' |
| BC V | 0 | 20 | 0.0' | 37.5' |
| TC V | 50 | 25 | 7.0' | 36.5' |
| TC V | -40 | -20 | 36.5' | 37.5' |
| BC V | 0 | 25 | 7.1' | 36.5' |
| BC V | 0 | -20 | 36.5' | 37.5' |
| BC V | 280 | 280 | 7.1' | CL-LB |

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | Size Req'd In-Sx |
|---|---|---|---|---|
| A | 217 | 1202G | 3- 8 | 1- 8 |
| | | | Hz = | -51 |
| L | 5243 | 791 | 3- 8 | 2-13 |
| D | 2386 | 315 | 3- 8 | 1- 8 |
| | | | Hz = | 118 |

G = Gravity Uplift

| Membr | CSI | P Lbs | Axl-CSI-Bnd | |
|---|---|---|---|---|
| ----------Top Chords---------- | | | | |
| A -W | 0.41 | 2819 T | 0.26 | 0.15 |
| W -B | 0.42 | 3037 T | 0.27 | 0.15 |
| B -R | 0.22 | 1554 T | 0.10 | 0.12 |
| R -S | 0.12 | 2110 C | 0.00 | 0.12 |
| S -T | 0.12 | 4369 C | 0.01 | 0.11 |
| T -U | 0.13 | 5305 C | 0.02 | 0.11 |
| U -V | 0.14 | 4895 C | 0.01 | 0.13 |
| V -C | 0.15 | 3174 C | 0.01 | 0.14 |
| --------Bottom Chords--------- | | | | |
| A -L | 0.25 | 2501 C | 0.00 | 0.25 |
| L -E | 0.25 | 1680 C | 0.00 | 0.25 |
| E -Q | 0.20 | 2110 T | 0.14 | 0.06 |
| Q -P | 0.33 | 4369 T | 0.29 | 0.04 |
| P -O | 0.41 | 5305 T | 0.35 | 0.06 |
| O -N | 0.38 | 4895 T | 0.32 | 0.06 |
| N -M | 0.26 | 3174 T | 0.21 | 0.05 |
| M -D | 0.07 | 92 T | 0.00 | 0.07 |
| ------------Webs------------ | | | | |
| W -L | 0.01 | 318 C | | |
| L -B | 0.22 | 4431 C | | |
| E -B | 0.23 | 2557 T | | |
| E -R | 0.31 | 4418 C | | |
| Q -R | 0.16 | 1780 T | | |
| Q -S | 0.19 | 2722 C | | |
| P -S | 0.07 | 911 T | | |
| P -T | 0.07 | 1129 C | | |
| O -T | 0.01 | 245 T | | |
| O -U | 0.04 | 493 T | | |
| N -U | 0.04 | 939 C | | |
| N -V | 0.19 | 2075 T | | |
| M -V | 0.09 | 1898 C | | |
| M -C | 0.35 | 3827 T | | |
| D -C | 0.11 | 2317 C | WindLd | |

TL Defl -0.21" in P -O L/999
LL Defl -0.10" in P -O L/999
Shear // Grain in L -E 0.24

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.74 |
| W | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.46 |
| B | LOCK | 6.0x 6.0 | Ctr | -0.6 | 0.67 |
| R | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.59 |
| S | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.43 |
| T | LOCK | 6.0x 6.0 | Ctr | 1.2 | 0.61 |
| U | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.43 |
| V | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.43 |
| C | LOCK | 5.0x 5.0 | Ctr | Ctr | 0.80 |
| L | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.47 |
| E | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.59 |
| Q | LOCK | 6.0x 6.0 | Ctr | -1.2 | 0.61 |
| P | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.43 |
| O | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.43 |
| N | LOCK | 6.0x 6.0 | Ctr | -1.2 | 0.61 |
| M | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.57 |
| D | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.85 |

REVIEWED BY:
Robbins Engineering, Inc.

PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
Girder Half Hip
Framing King Jacks
Jack Open Faced
Setback 7- 0- 0
2 COMPLETE TRUSSES REQUIRED.
Fasten together in staggered pattern. (1/2" bolts -OR- SDS3 screws -OR- 10d nails as each layer is applied.)

| | ----Spacing (In)---- | | |
|---|---|---|---|
| Rows | Nails | Screws | Bolts |
| TC 1 | 12 | 24 | 0 |
| BC 2 | 12 | 24 | 0 |
| WB 1 | 8 | 8 | |

Plus clusters of nails where shown.
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Prevent truss rotation at all bearing locations.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

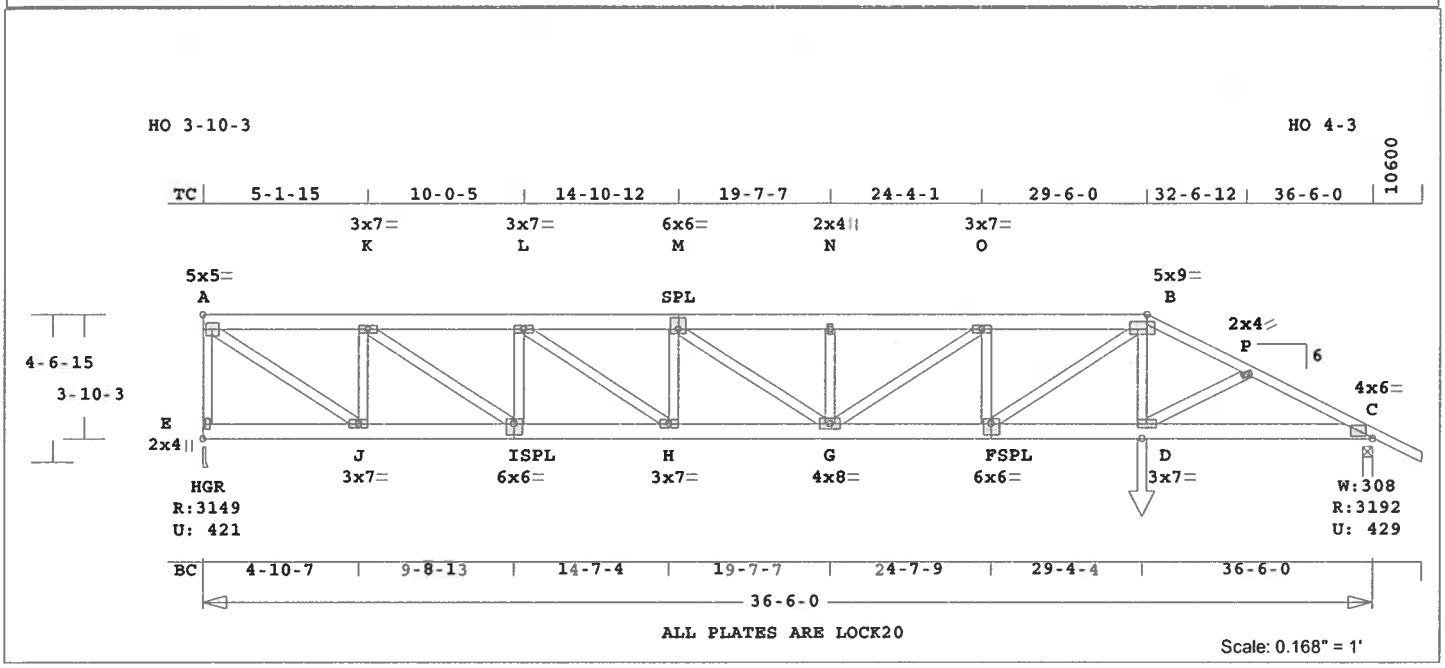
| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A16 | 1*2P | HHIP | 370600 | 6 | 1- 6- 0 | 0 | T06032882 |

B WILLOW MODEL B

```
  Wind Speed:          110 mph
  Mean Roof Height:  15-0
  Exposure  Category:     B
  Occupancy Factor  : 1.00
  Building Type: Enclosed
  Zone location: Exterior
  TC Dead Load :        5.0 psf
  BC Dead Load :        5.0 psf
User-defined wind-exposed BC
  regions  --From--    ---To---
           0- 0- 0     6- 1-12
Max comp. force     5305 Lbs
Quality Control Factor 1.25
```

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | A17 | 1*2P | HHIP | 360600 | 6 | 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 312.3 LBS

```
Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06
***************
* 2-Ply Truss *
***************

     CSI -Size- ----Lumber----
TC  0.24   2x 6   SP-#2
EX B -C    2x 4   SP-#2
BC  0.65   2x 6   SP-#2
WB  0.46   2x 4   SP-#2

Brace truss as follows:
       O.C.      From       To
 TC Cont.      0- 0- 0 36- 6- 0
 BC Cont.      0- 0- 0 36- 6- 0

Loading   Live   Dead  (psf)
TC         20.0   10.0
BC          0.0   10.0
Total      20.0   20.0    40.0
Spacing                   24.0"
Lumber Duration Factor    1.25
Plate  Duration Factor    1.25
TC Fb=1.00  Fc=1.00  Ft=1.00
BC Fb=1.00  Fc=1.00  Ft=1.00

Load Case # 1 Girder Loading
Lumber Duration Factor    1.25
Plate  Duration Factor    1.25
plf - Live  Dead  From     To
TC V    40    20   0.0'   36.5'
BC V     0    20   0.0'   36.5'
TC V    50    25   1.0'   29.5'
TC V   -40   -20   0.0'    1.0'
BC V     0    25   1.0'   29.4'
BC V     0   -20   0.0'    1.0'
BC V   280   280  29.4'   CL-LB


Plus  6 Wind Load Case(s)
Plus  1 UBC LL Load Case(s)

Jt  React Uplft  Size Req'd
      Lbs   Lbs In-Sx In-Sx
E    3149   422  3- 8  1-14
                Hz =  -117
C    3193   430  3- 8  1-14
                Hz =    55

Membr  CSI  P Lbs  Axl-CSI-Bnd
----------Top Chords----------
A -K  0.14  4175 C  0.01  0.13
K -L  0.16  6993 C  0.04  0.12
L -M  0.19  8589 C  0.07  0.12
M -N  0.20  8910 C  0.07  0.13
N -O  0.19  8910 C  0.07  0.12
O -B  0.24  8053 C  0.06  0.18
B -P  0.35  6239 C  0.07  0.28
P -C  0.23  6314 C  0.09  0.14
--------Bottom Chords---------
E -J  0.07    92 T  0.00  0.07
J -I  0.33  4175 T  0.27  0.06
I -H  0.53  6993 T  0.46  0.07
H -G  0.65  8590 T  0.57  0.08
G -F  0.60  8053 T  0.53  0.07
F -D  0.45  5608 T  0.37  0.08
D -C  0.46  5622 T  0.37  0.09
------------Webs-------------
E -A  0.15  3081 C WindLd
A -J  0.46  5088 T
J -K  0.13  2676 C
K -I  0.31  3434 T
I -L  0.08  1751 C
L -H  0.17  1945 T
H -M  0.04   888 C
M -G  0.03   390 T
G -N  0.03   626 C
G -O  0.09  1044 T
F -O  0.06  1345 C
F -B  0.27  2928 T
D -B  0.06   715 T
D -P  0.00    86 T

TL Defl  -0.45" in H -G  L/962
LL Defl  -0.22" in H -G  L/999
Shear // Grain  in O -B   0.16

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS  20 Ga, Gross Area
Jt Type  Plt Size  X   Y   JSI
A  LOCK  5.0x 5.0 Ctr Ctr 0.78
K  LOCK  3.0x 7.0 Ctr Ctr 0.59
L  LOCK  3.0x 7.0 Ctr Ctr 0.42
M  LOCK  6.0x 6.0 Ctr 1.2 0.60
N  LOCK  2.0x 4.0 Ctr Ctr 0.45
O  LOCK  3.0x 7.0 Ctr Ctr 0.42
B  LOCK  5.0x 9.0 Ctr 0.5 0.91
P  LOCK  2.0x 4.0 Ctr Ctr 0.45
C  LOCK  4.0x 6.0 Ctr Ctr 0.73
E  LOCK  2.0x 4.0 Ctr Ctr 0.83
J  LOCK  3.0x 7.0 Ctr Ctr 0.87
I  LOCK  6.0x 6.0 Ctr-1.2 0.61
H  LOCK  3.0x 7.0 Ctr Ctr 0.42
G  LOCK  4.0x 8.0 Ctr Ctr 0.44
F  LOCK  6.0x 6.0 Ctr-1.2 0.70
D  LOCK  3.0x 7.0 Ctr Ctr 0.44


REVIEWED BY:
 Robbins Engineering, Inc.
 PO Box 280055
 Tampa, FL  33682

REFER TO ROBBINS ENG. GENERAL
NOTES AND SYMBOLS SHEET FOR
ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
  Mayo Truss Co. Inc.
Analysis Conforms To:
  FBC2004
Girder    Half Hip
  Framing King Jacks
  Jack    Open Faced
  Setback  7- 0- 0
2 COMPLETE TRUSSES REQUIRED.
Fasten together in staggered
  pattern.  (1/2" bolts -OR-
  SDS3  screws -OR- 10d nails
  as each layer is applied.)
          ----Spacing (In)----
    Rows  Nails  Screws  Bolts
  TC  1     12      24       0
  BC  2     12      24       0
  WB  1      8       8
Plus clusters of nails where
  shown.
OH Loading
  Soffit psf 2.0
Design checked for 10 psf non-
  concurrent LL on BC.
Prevent truss rotation at all
  bearing locations.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main
 Wind-Force Resistance System.
  Wind Speed:          110 mph
  Mean Roof Height:  15-0
  Exposure  Category:    B
  Occupancy Factor  : 1.00
  Building Type: Enclosed
  Zone location: Exterior
  TC Dead Load :         5.0 psf
  BC Dead Load :         5.0 psf
Max comp. force      8910 Lbs
Quality Control Factor 1.25
```

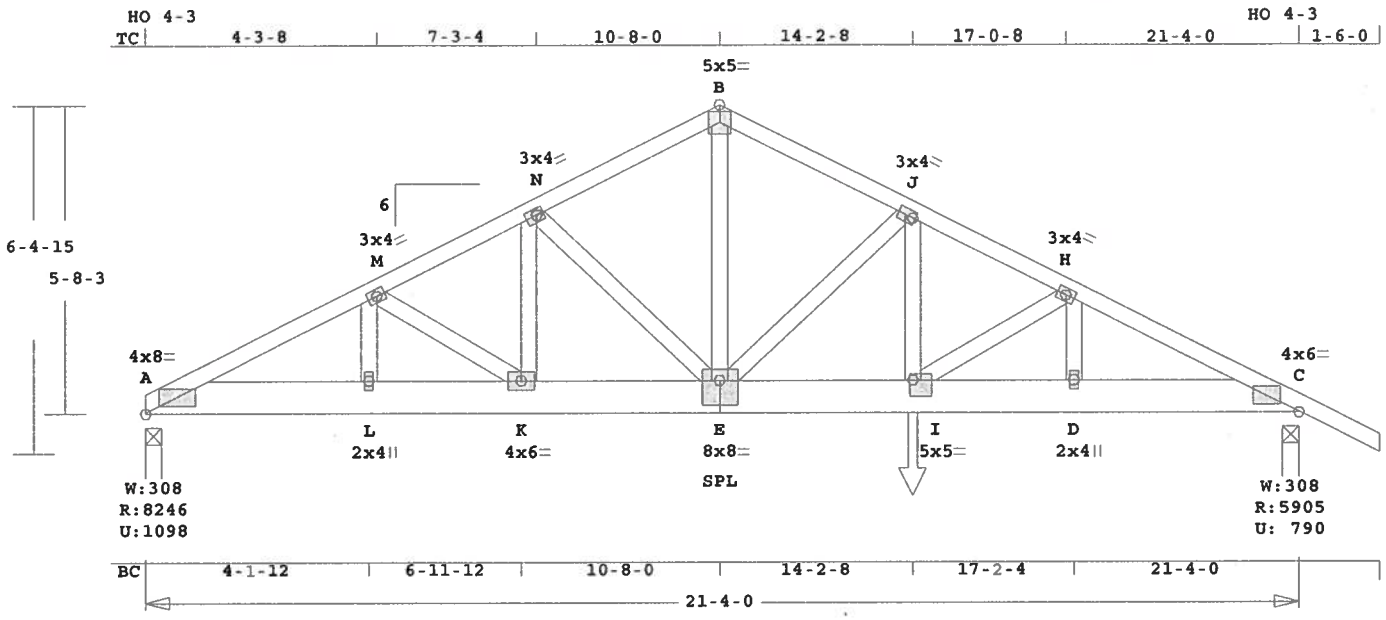
Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682




Date Scaled: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | B1 | 1*3P | TR | 210400 | 6 | 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 184.4 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06
**********
* 3-Ply Truss *
**********

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.36 | 2x 4 | SP-#2 |
| BC | 0.78 | 2x 8 | SP-#2 |
| WB | 0.49 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC Cont. | | 0- 0- 0 | 21- 4- 0 |
| BC Cont. | | 0- 0- 0 | 21- 4- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |

Lumber Duration Factor 1.25
Plate Duration Factor 1.25
TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Load Case # 1 Standard Loading
Lumber Duration Factor 1.25
Plate Duration Factor 1.25

| plf - | Live | Dead | From | To |
|---|---|---|---|---|
| TC V | 40 | 20 | 0.0' | 21.3' |
| BC V | 0 | 20 | 0.0' | 21.3' |
| BC V | 345 | 345 | 0.0' | 13.3' |
| BC V | 1575 | 1575 | 14.2' | CL-LB |

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| A | 8247 | 1099 | 3- 8 | 3- 4 |
| | | | Hz = | -97 |
| C | 5905 | 791 | 3- 8 | 2- 5 |
| | | | Hz = | 99 |

| Membr | CSI | P Lbs | Axl | CSI-Bnd |
|---|---|---|---|---|
| ----------Top Chords---------- | | | | |
| A -M | 0.36 | 14761 | C | 0.19 0.17 |
| M -N | 0.19 | 12345 | C | 0.13 0.06 |
| N -B | 0.15 | 9385 | C | 0.06 0.09 |
| B -J | 0.15 | 9384 | C | 0.06 0.09 |
| J -H | 0.20 | 12349 | C | 0.13 0.07 |
| H -C | 0.21 | 12346 | C | 0.13 0.08 |
| --------Bottom Chords--------- | | | | |
| A -L | 0.78 | 13235 | T | 0.45 0.33 |
| L -K | 0.63 | 13235 | T | 0.45 0.18 |
| K -E | 0.51 | 11038 | T | 0.37 0.14 |
| E -I | 0.52 | 11044 | T | 0.37 0.15 |
| I -D | 0.53 | 11046 | T | 0.37 0.16 |
| D -C | 0.53 | 11046 | T | 0.37 0.16 |
| ----------Webs---------- | | | | |
| L -M | 0.13 | 2323 | T | |
| M -K | 0.08 | 2627 | C | |
| K -N | 0.23 | 3766 | T | |
| N -E | 0.12 | 3654 | C | |
| E -B | 0.49 | 8073 | T | |
| E -J | 0.12 | 3662 | C | |
| I -J | 0.23 | 3770 | T | |
| I -H | 0.00 | 65 | T | |
| D -H | 0.00 | 191 | C | |

TL Defl -0.23" in K -E L/999
LL Defl -0.11" in K -E L/999
Shear // Grain in E -I 0.31

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 4.0x 8.0 | Ctr | -0.1 | 0.86 |
| M | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.64 |
| N | LOCK | 3.0x 4.0 | -0.4 | -0.2 | 0.89 |
| B | LOCK | 5.0x 5.0 | Ctr | Ctr | 0.87 |
| J | LOCK | 3.0x 4.0 | 0.4 | -0.2 | 0.89 |
| H | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.59 |
| C | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.92 |
| L | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.83 |
| K | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.49 |
| E | LOCK | 8.0x 8.0 | Ctr | -1.5 | 0.72 |
| I | LOCK | 5.0x 5.0 | Ctr | -1.1 | 0.85 |
| D | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.38 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
3 COMPLETE TRUSSES REQUIRED.
Fasten together in staggered pattern. (1/2" bolts -OR- SDS4.5 screws -OR- 16d nails as each layer is applied.)

| | Rows | Nails | Screws | Bolts |
|---|---|---|---|---|
| | | ----Spacing (In)---- | | |
| TC | 1 | 12 | 24 | 0 |
| BC | 2 | 9.5 | 15 | 0 |
| WB | 1 | 8 | 8 | |

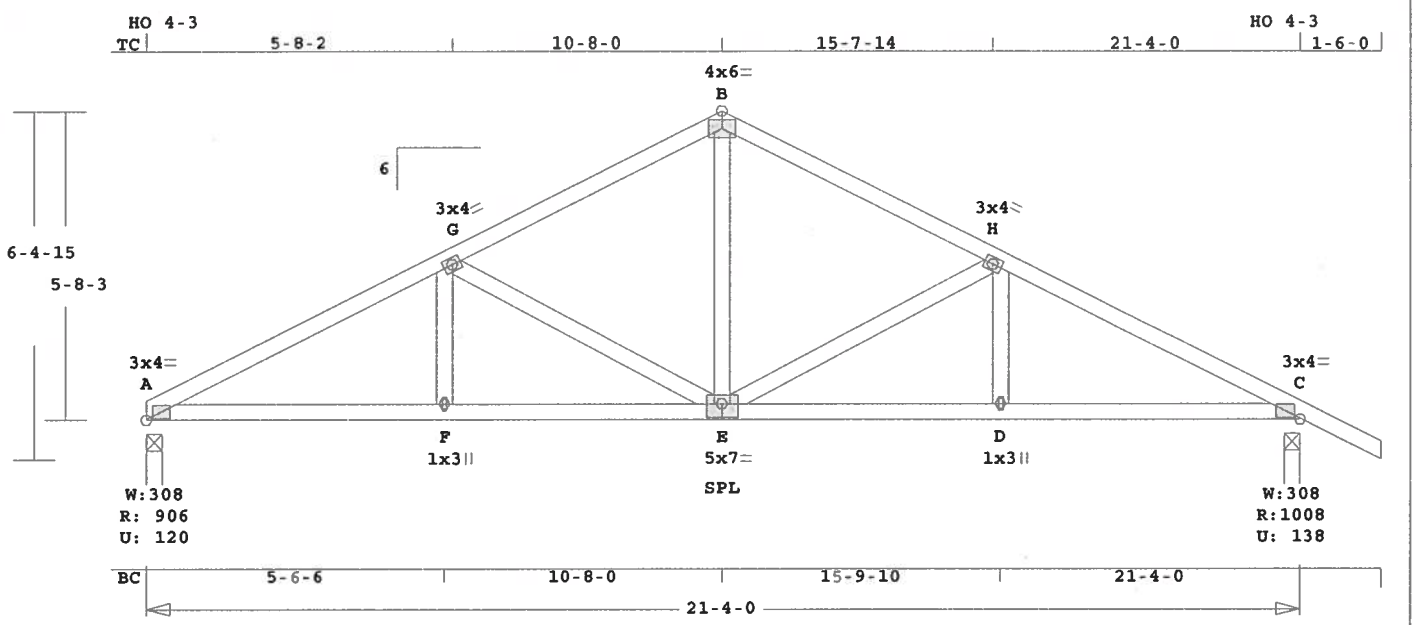
No bolts in 2x4s or smaller.
Plus clusters of nails where shown.
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Prevent truss rotation at all bearing locations.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 14761 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | B2 | 3 | TR | 210400 | 6 | 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 129.1 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.66 | 2x 4 | SP-#2 |
| BC | 0.34 | 2x 4 | SP-#2 |
| WB | 0.20 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC | 4- 0- 0 | 0- 0- 0 | 21- 4- 0 |
| BC | 10- 0- 0 | 0- 0- 0 | 21- 4- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 25.5" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |
| TC Fb=1.00 | Fc=1.00 | Ft=1.00 | |
| BC Fb=1.00 | Fc=1.00 | Ft=1.00 | |

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| A | 907 | 121 | 3- 8 | 1- 8 |
| | | | Hz = | -105 |
| C | 1009 | 139 | 3- 8 | 1- 8 |
| | | | Hz = | 106 |

| Membr | CSI | P Lbs | Axl | CSI | Bnd |
|---|---|---|---|---|---|
| Top Chords | | | | | |
| A -G | 0.66 | 1494 | C | 0.28 | 0.38 |
| G -B | 0.44 | 1014 | C | 0.13 | 0.31 |
| B -H | 0.44 | 1014 | C | 0.13 | 0.31 |
| H -C | 0.66 | 1494 | C | 0.27 | 0.39 |
| Bottom Chords | | | | | |
| A -F | 0.34 | 1341 | T | 0.24 | 0.10 |
| F -E | 0.33 | 1341 | T | 0.24 | 0.09 |
| E -D | 0.33 | 1341 | T | 0.24 | 0.09 |
| D -C | 0.34 | 1341 | T | 0.24 | 0.10 |

Webs

| | | | |
|---|---|---|---|
| F -G | 0.03 | 222 | T |
| G -E | 0.20 | 500 | C |
| E -B | 0.10 | 592 | T |
| E -H | 0.20 | 500 | C |
| D -H | 0.03 | 222 | T |

TL Defl -0.09" in E -D L/999
LL Defl -0.04" in E -D L/999
Shear // Grain in A -G 0.20

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.79 |
| G | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.59 |
| B | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.56 |
| H | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.59 |
| C | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.79 |
| F | LOCK | 1.0x 3.0 | Ctr | Ctr | 0.81 |
| E | LOCK | 5.0x 7.0 | Ctr-0.5 | | 0.59 |
| D | LOCK | 1.0x 3.0 | Ctr | Ctr | 0.81 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

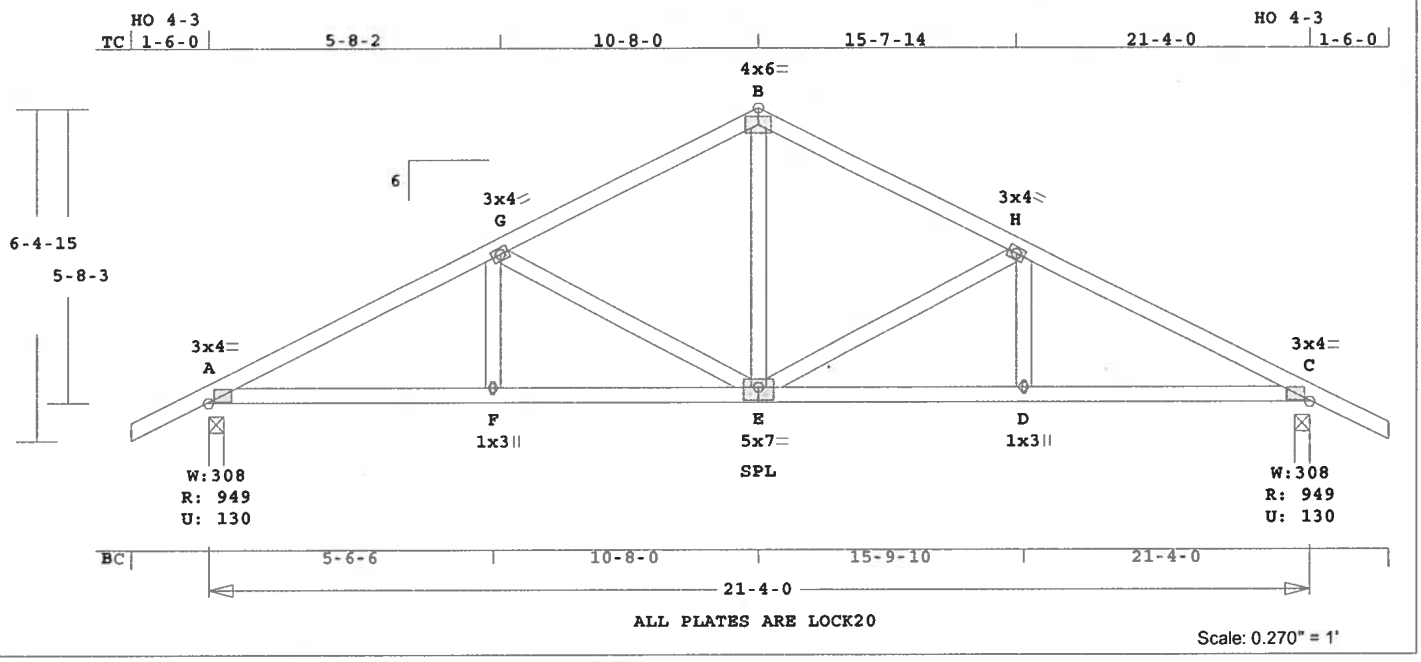
NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 1494 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | B3 | 7 | TR | 210400 | 6 | 1- 6- 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 132.2 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.25 | 2x 4 | SP-#2 |
| BC | 0.29 | 2x 4 | SP-#2 |
| WB | 0.19 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC | Cont. | 0- 0- 0 | 21- 4- 0 |
| BC | Cont. | 0- 0- 0 | 21- 4- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |

Lumber Duration Factor 1.25
Plate Duration Factor 1.25
TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| A | 949 | 130 | 3- 8 | 1- 8 |
| | | | Hz = | -99 |
| C | 949 | 130 | 3- 8 | 1- 8 |
| | | | Hz = | 100 |

| Membr | CSI | P Lbs | Axl-CSI-Bnd | |
|---|---|---|---|---|
| **Top Chords** | | | | |
| A -G | 0.25 | 1406 C | 0.01 | 0.24 |
| G -B | 0.24 | 955 C | 0.00 | 0.24 |
| B -H | 0.24 | 955 C | 0.00 | 0.24 |
| H -C | 0.25 | 1406 C | 0.01 | 0.24 |
| **Bottom Chords** | | | | |
| A -F | 0.29 | 1262 T | 0.21 | 0.08 |
| F -E | 0.29 | 1262 T | 0.21 | 0.08 |
| E -D | 0.29 | 1262 T | 0.21 | 0.08 |
| D -C | 0.29 | 1262 T | 0.21 | 0.08 |
| **Webs** | | | | |
| F -G | 0.03 | 209 T | | |
| G -E | 0.19 | 470 C | | |
| E -B | 0.10 | 557 T | | |
| E -H | 0.19 | 470 C | | |
| D -H | 0.03 | 209 T | | |

TL Defl -0.09" in E -D L/999
LL Defl -0.04" in E -D L/999
Shear // Grain in A -G 0.19

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.79 |
| G | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.59 |
| B | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.56 |
| H | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.59 |
| C | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.79 |
| F | LOCK | 1.0x 3.0 | Ctr | Ctr | 0.81 |
| E | LOCK | 5.0x 7.0 | Ctr | -0.5 | 0.59 |
| D | LOCK | 1.0x 3.0 | Ctr | Ctr | 0.81 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR

ADDITIONAL SPECIFICATIONS.

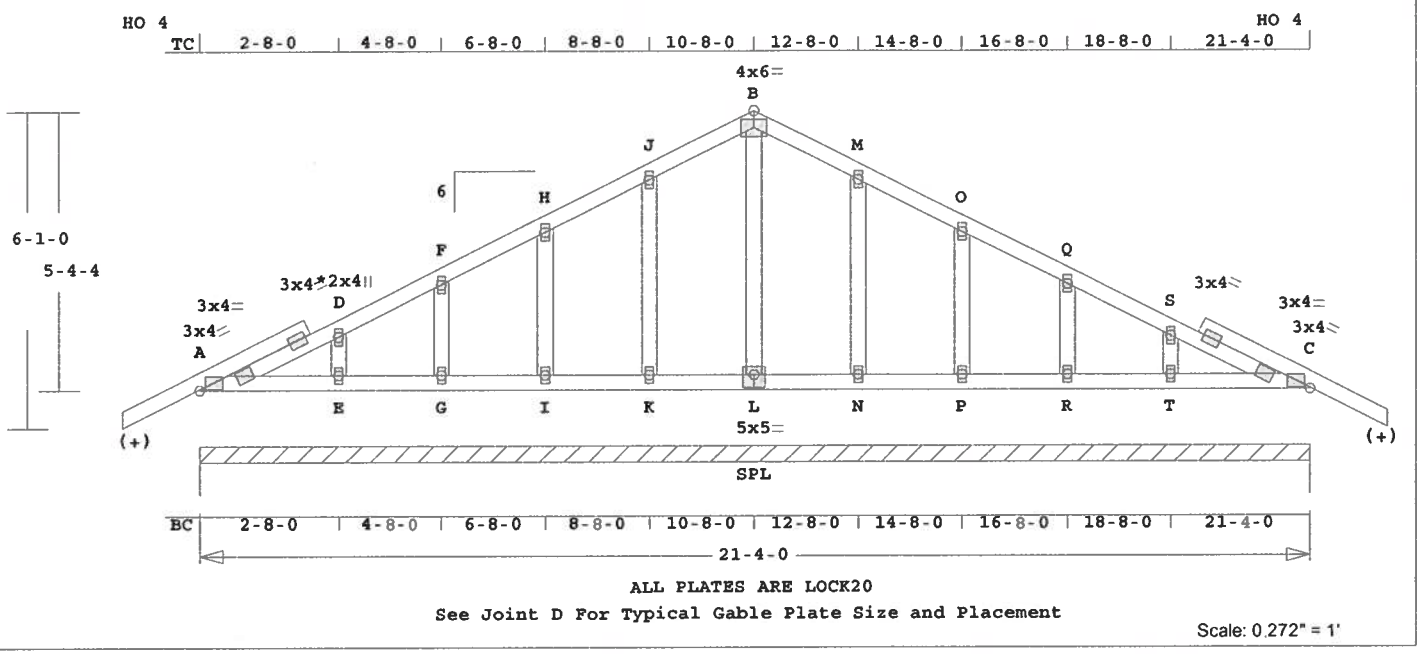
NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 1406 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | B6 | 1 | TR | 210400 | 6 | 0 | 0 | T06032882 |

B WILLOW MODEL B




ALL PLATES ARE LOCK20

See Joint D For Typical Gable Plate Size and Placement

Scale: 0.272" = 1'

Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 142.2 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | Size | Lumber |
|---|---|---|---|
| TC | 0.04 | 2x 4 | SP-#2 |
| BC | 0.03 | 2x 4 | SP-#2 |
| GW | 0.02 | 2x 4 | SP-#2 |

(+) 2x4 SP-#2

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC Cont. | | 0- 0- 0 | 21- 4- 0 |
| BC Cont. | | 0- 0- 0 | 21- 4- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |

Lumber Duration Factor 1.25
Plate Duration Factor 1.25
TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| Cont. Brg | 0- 0- 0 to 21- 4- 0 | | | |
| | 1707 | 227 | Hz = | 94 |

| Membr | CSI | P Lbs | Axl | CSI | Bnd |
|---|---|---|---|---|---|
| **Top Chords** | | | | | |
| A -D | 0.04 | 53 | C | 0.00 | 0.04 |
| D -F | 0.04 | 53 | C | 0.00 | 0.04 |
| F -H | 0.03 | 52 | C | 0.00 | 0.03 |
| H -J | 0.03 | 52 | C | 0.00 | 0.03 |
| J -B | 0.03 | 78 | T | 0.00 | 0.03 |
| B -M | 0.03 | 78 | T | 0.00 | 0.03 |
| M -O | 0.03 | 52 | C | 0.00 | 0.03 |
| O -Q | 0.03 | 52 | C | 0.00 | 0.03 |
| Q -S | 0.04 | 53 | C | 0.00 | 0.04 |
| S -C | 0.04 | 53 | C | 0.00 | 0.04 |
| **Bottom Chords** | | | | | |
| A -E | 0.03 | 7 | T | 0.00 | 0.03 |
| E -G | 0.02 | 0 | T | 0.00 | 0.02 |
| G -I | 0.02 | 0 | T | 0.00 | 0.02 |
| I -K | 0.02 | 0 | T | 0.00 | 0.02 |
| K -L | 0.02 | 0 | T | 0.00 | 0.02 |
| L -N | 0.02 | 0 | T | 0.00 | 0.02 |
| N -P | 0.02 | 0 | T | 0.00 | 0.02 |
| P -R | 0.02 | 0 | T | 0.00 | 0.02 |
| R -T | 0.02 | 0 | T | 0.00 | 0.02 |
| T -C | 0.03 | 7 | T | 0.00 | 0.03 |
| **Gable Webs** | | | | | |
| E -D | 0.01 | 139 | C | | |
| G -F | 0.01 | 117 | C | | |
| I -H | 0.01 | 120 | C | | |
| K -J | 0.02 | 123 | C | | |
| L -B | 0.02 | 65 | C | | |
| N -M | 0.02 | 123 | C | | |
| P -O | 0.01 | 120 | C | | |
| R -Q | 0.01 | 117 | C | | |
| T -S | 0.01 | 139 | C | | |

TL Defl 0.00" in A -E L/999
LL Defl 0.00" in A -E L/999
Shear // Grain in D -D 0.08

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.79 |
| D | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| F | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| H | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| J | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| B | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.56 |
| M | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| O | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| Q | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| S | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| C | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.79 |
| E | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| G | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| I | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| K | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| L | LOCK | 5.0x 5.0 | Ctr | -0.5 | 0.59 |
| N | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| P | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| R | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| T | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
WARNING Do Not Cut overframe member between outside of truss and first tie-plate to inside of heel plate.
Design checked for 10 psf non-concurrent LL on BC.
Refer to Gen Det 3 series for web bracing and plating.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 139 Lbs
Quality Control Factor 1.25

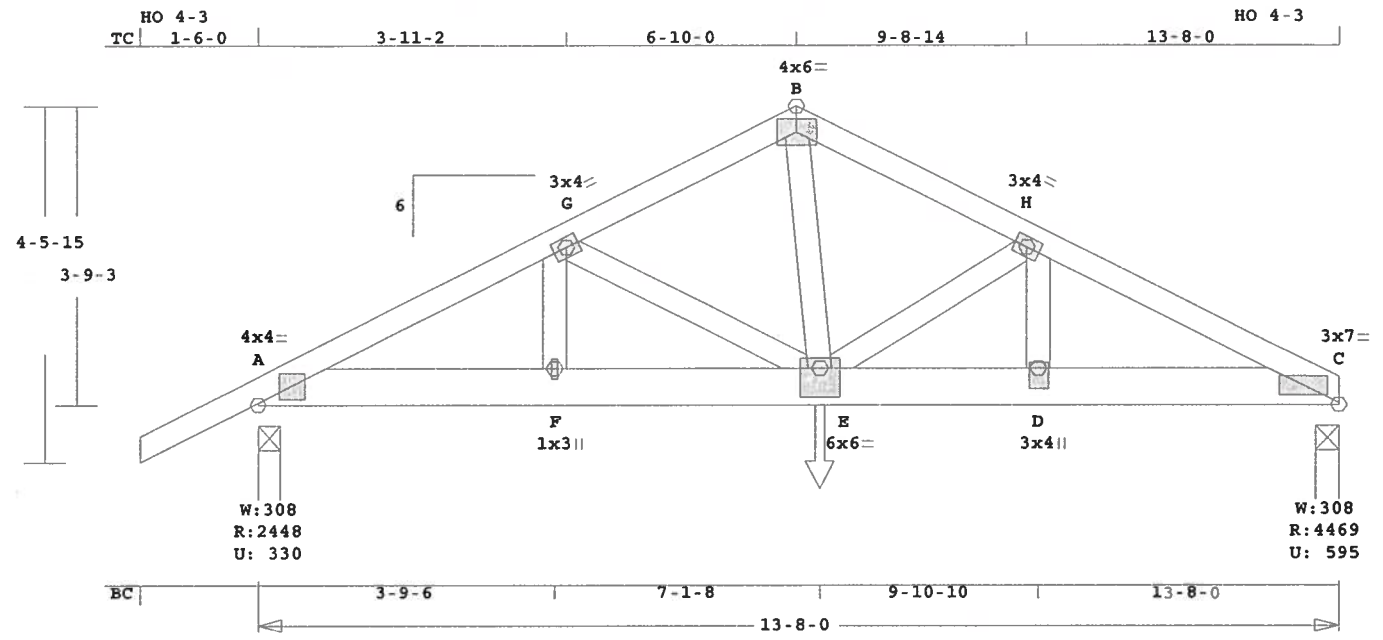
Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682




Date Scaled: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | C1 | 1*2P | TR | 130800 | 6 | 1- 6- 0 | 0 | T06032882 |

B WILLOW MODEL B




Scale: 0.414" = 1'

Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 94.7 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06
**********
* 2-Ply Truss *
**********

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.30 | 2x 4 | SP-#2 |
| BC | 0.79 | 2x 6 | SP-#2 |
| WB | 0.37 | 2x 4 | SP-#2 |

Brace truss as follows:

| O.C. | From | To |
|---|---|---|
| TC Cont. | 0- 0- 0 | 13- 8- 0 |
| BC Cont. | 0- 0- 0 | 13- 8- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |
| TC Fb=1.00 Fc=1.00 Ft=1.00 | | | |
| BC Fb=1.00 Fc=1.00 Ft=1.00 | | | |

Load Case # 1 Standard Loading
Lumber Duration Factor 1.25
Plate Duration Factor 1.25

| plf - Live | Dead | From | To |
|---|---|---|---|
| TC V 40 | 20 | 0.0' | 13.7' |
| BC V 0 | 20 | 0.0' | 13.7' |
| BC V 295 | 295 | 8.0' | 13.7' |
| BC V 1193 | 1193 | 7.1' | CL-LB |

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| A | 2449 | 330 | 3- 8 | 1- 8 |
| | | | Hz = | -56 |
| C | 4470 | 595 | 3- 8 | 2-10 |
| | | | Hz = | 55 |

| Membr | CSI | P Lbs | Axl-CSI-Bnd | |
|---|---|---|---|---|
| ----------Top Chords---------- | | | | |
| A -G | 0.12 | 4701 C | 0.05 | 0.07 |
| G -B | 0.10 | 4603 C | 0.04 | 0.06 |
| B -H | 0.16 | 5059 C | 0.05 | 0.11 |
| H -C | 0.30 | 7028 C | 0.11 | 0.19 |
| --------Bottom Chords--------- | | | | |
| A -F | 0.38 | 4198 T | 0.28 | 0.10 |
| F -E | 0.38 | 4198 T | 0.28 | 0.10 |
| E -D | 0.59 | 6304 T | 0.42 | 0.17 |
| D -C | 0.79 | 6304 T | 0.42 | 0.37 |
| ------------Webs------------ | | | | |
| F -G | 0.00 | 61 C | | |
| G -E | 0.00 | 81 C | | |
| B -E | 0.37 | 4096 T | | |
| E -H | 0.10 | 2126 C | | |
| D -H | 0.17 | 1951 T | | |

TL Defl -0.10" in E -D L/999
LL Defl -0.05" in E -D L/999
Shear // Grain in D -C 0.44

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|
| A | LOCK | 4.0x | 4.0 Ctr Ctr | 0.79 |
| G | LOCK | 3.0x | 4.0 Ctr Ctr | 0.50 |
| B | LOCK | 4.0x | 6.0 Ctr Ctr | 0.85 |
| H | LOCK | 3.0x | 4.0 Ctr Ctr | 0.80 |
| C | LOCK | 3.0x | 7.0 Ctr Ctr | 0.90 |
| F | LOCK | 1.0x | 3.0 Ctr Ctr | 0.75 |
| E | LOCK | 6.0x | 6.0 Ctr-1.3 | 0.80 |
| D | LOCK | 3.0x | 4.0 Ctr-1.1 | 0.70 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
2 COMPLETE TRUSSES REQUIRED.

Fasten together in staggered pattern. (1/2" bolts -OR- SDS3 screws -OR- 10d nails as each layer is applied.)

| | ----Spacing (In)---- Rows | Nails | Screws | Bolts |
|---|---|---|---|---|
| TC | 1 | 12 | 24 | 0 |
| BC | 2 | 12 | 23.5 | 0 |
| WB | 1 | 8 | 8 | |

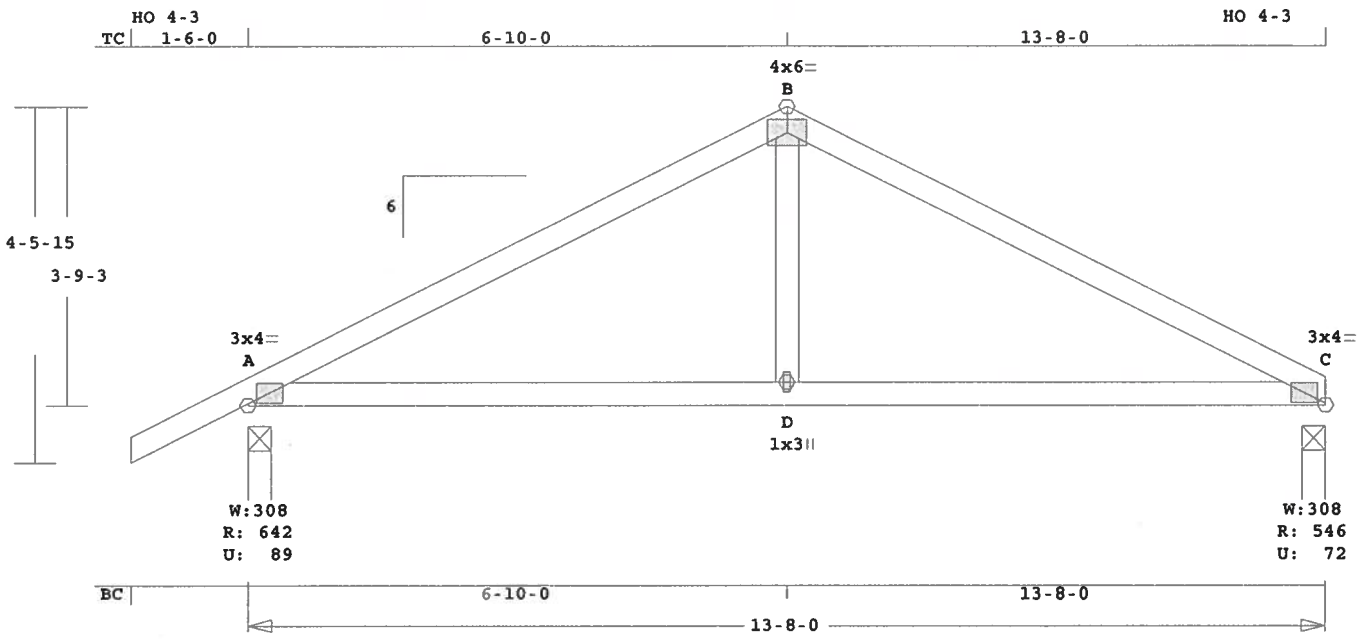
Plus clusters of nails where shown.
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Prevent truss rotation at all bearing locations.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 7028 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | C2 | 3 | TR | 130800 | 6 | 1- 6- 0 | 0 | T06032882 |

B WILLOW MODEL B




Scale: 0.414" = 1'

Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 64.3 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.32 | 2x 4 | SP-#2 |
| BC | 0.37 | 2x 4 | SP-#2 |
| WB | 0.04 | 2x 4 | SP-#2 |

Brace truss as follows:

| O.C. | From | To |
|---|---|---|
| TC Cont. | 0- 0- 0 | 13- 8- 0 |
| BC Cont. | 0- 0- 0 | 13- 8- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |

TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| A | 643 | 90 | 3- 8 | 1- 8 |
| | | | Hz = | -55 |
| C | 547 | 73 | 3- 8 | 1- 8 |
| | | | Hz = | 56 |

| Membr | CSI | P Lbs | Axl-CSI-Bnd |
|---|---|---|---|
| Top Chords | | | |
| A -B | 0.32 | 679 C | 0.00 0.32 |
| B -C | 0.32 | 679 C | 0.00 0.32 |
| Bottom Chords | | | |
| A -D | 0.37 | 612 T | 0.10 0.27 |
| D -C | 0.37 | 612 T | 0.10 0.27 |
| Webs | | | |
| D -B | 0.04 | 308 T | |

TL Defl -0.08" in D -C L/999
LL Defl -0.03" in D -C L/999
Shear // Grain in A -B 0.23

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.66 |
| B | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.47 |
| C | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.66 |
| D | LOCK | 1.0x 3.0 | Ctr | Ctr | 0.75 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 679 Lbs
Quality Control Factor 1.25

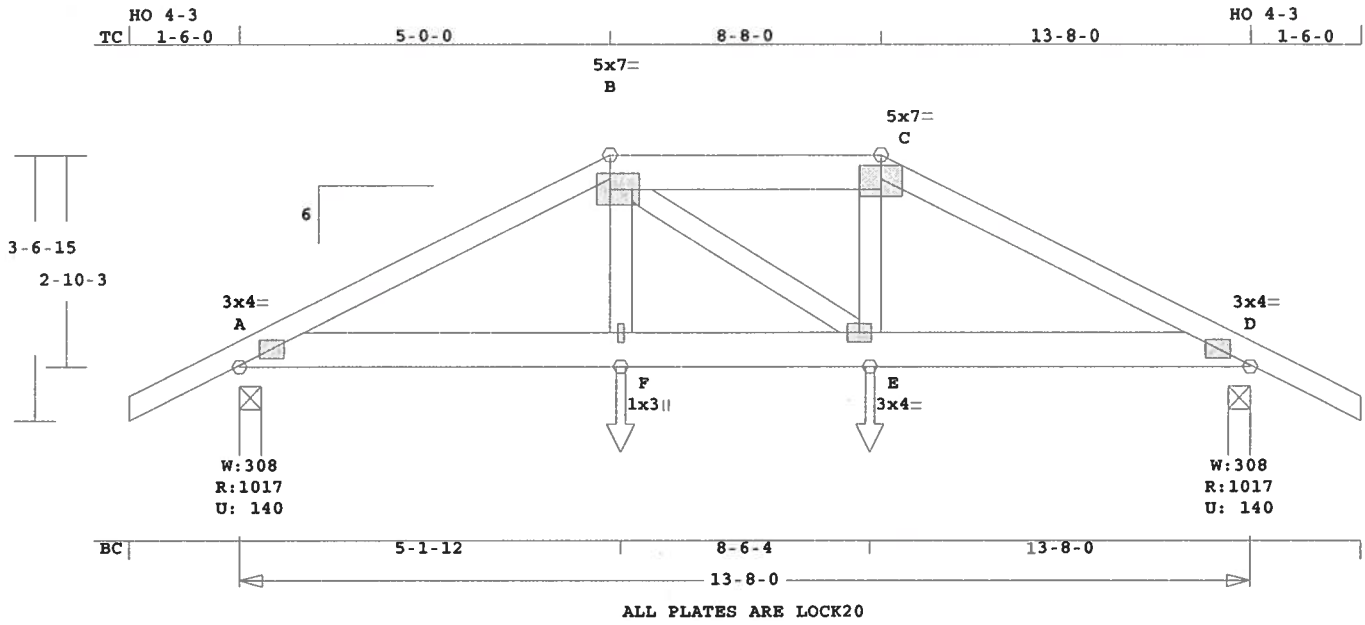
Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682




Date Scaled: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | C3 | 1 | HIPP | 130800 | 6 | 1- 6- 0 | 1- 6- 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 91.3 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.26 | 2x 4 | SP-#2 |
| EX B -C | | 2x 6 | SP-#2 |
| BC | 0.30 | 2x 6 | SP-#2 |
| WB | 0.07 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC Cont. | | 0- 0- 0 | 13- 8- 0 |
| BC Cont. | | 0- 0- 0 | 13- 8- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |

TC Fb=1.00 Fc=1.00 Ft=1.00
BC Fb=1.00 Fc=1.00 Ft=1.00

Load Case # 1 Girder Loading
Lumber Duration Factor 1.25
Plate Duration Factor 1.25

| plf - | Live | Dead | From | To |
|---|---|---|---|---|
| TC V | 40 | 20 | 0.0' | 13.7' |
| BC V | 0 | 20 | 0.0' | 13.7' |
| TC V | 30 | 15 | 5.0' | 8.7' |
| BC V | 0 | 15 | 5.1' | 8.5' |
| BC V | 133 | 133 | 5.1' | CL-LB |
| BC V | 133 | 133 | 8.5' | CL-LB |

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| A | 1017 | 141 | 3- 8 | 1- 8 |
| | | | Hz = | -39 |
| D | 1017 | 141 | 3- 8 | 1- 8 |
| | | | Hz = | 40 |

| Membr | CSI | P Lbs | Axl-CSI-Bnd | |
|---|---|---|---|---|
| | | ----------Top Chords---------- | | |
| A -B | 0.26 | 1601 C | 0.01 | 0.25 |
| B -C | 0.21 | 1473 C | 0.00 | 0.21 |
| C -D | 0.25 | 1637 C | 0.01 | 0.24 |
| | | --------Bottom Chords--------- | | |
| A -F | 0.30 | 1443 T | 0.19 | 0.11 |
| F -E | 0.26 | 1426 T | 0.19 | 0.07 |
| E -D | 0.27 | 1473 T | 0.19 | 0.08 |
| | | ------------Webs------------ | | |
| F -B | 0.06 | 383 T | | |
| B -E | 0.01 | 63 T | | |
| E -C | 0.07 | 414 T | | |

TL Defl -0.07" in F -E L/999
LL Defl -0.03" in F -E L/999
Shear // Grain in A -B 0.17

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.73 |
| B | LOCK | 5.0x 7.0 | -0.5 | Ctr | 0.81 |
| C | LOCK | 5.0x 7.0 | Ctr | -0.3 | 0.48 |
| D | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.73 |
| F | LOCK | 1.0x 3.0 | Ctr | Ctr | 0.82 |
| E | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.44 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.

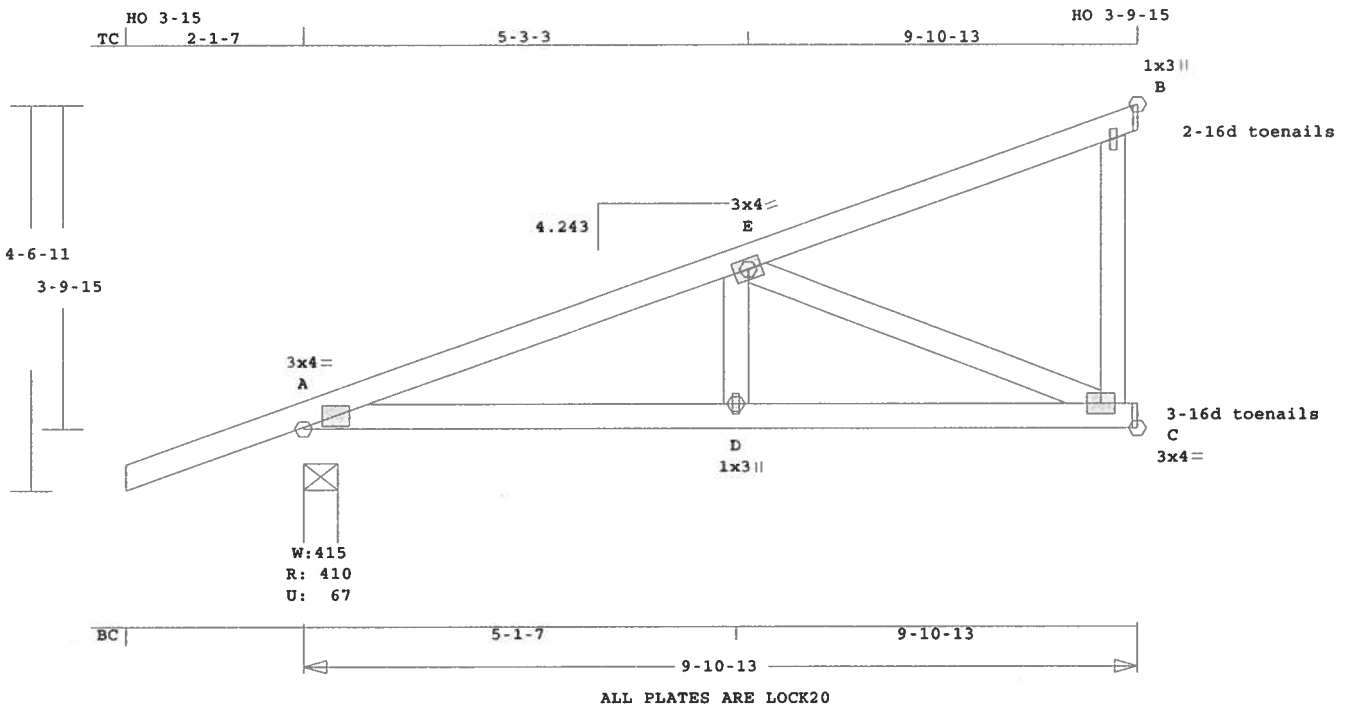
Analysis Conforms To:
FBC2004
Girder Step Down Hip
Framing King Jacks
Jack Open Faced
Setback 5- 0- 0
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 1637 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | CJ1 | 1 | MONO.DD | 91013 | 4.243 | 2- 1- 7 | 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 60.5 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.36 | 2x 4 | SP-#2 |
| BC | 0.27 | 2x 4 | SP-#2 |
| WB | 0.19 | 2x 4 | SP-#2 |

Brace truss as follows:

| O.C. | From | To |
|---|---|---|
| TC Cont. | 0- 0- 0 | 9-10-13 |
| BC Cont. | 0- 0- 0 | 9-10-13 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |

TC Fb=1.00 Fc=1.00 Ft=1.00
BC Fb=1.00 Fc=1.00 Ft=1.00

Load Case # 1 Girder Loading
Lumber Duration Factor 1.25
Plate Duration Factor 1.25

| plf - Live | Dead | From | To |
|---|---|---|---|
| TC V 40 | 20 | 0.0' | 9.9' |
| BC V 0 | 20 | 0.0' | 9.9' |
| TC V -40 | -20 | 0.0' | |
| 45 | 22 | | 9.9' |
| BC V 0 | -20 | 0.0' | |
| 0 | 22 | | 9.9' |

Plus 5 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| A | 411 | 68 | 4-15 | 1- 8 |
| | | | Hz = | -43 |
| C | 348 | 8 | 1- 8 | 1- 8 |
| B | 240 | 84 | 1- 8 | 1- 8 |
| | | | Hz = | 127 |

| Membr | CSI | P Lbs | Axl-CSI-Bnd |
|---|---|---|---|
| **Top Chords** | | | |
| A -E | 0.30 | 632 C | 0.00 0.30 |
| E -B | 0.36 | 77 T | 0.00 0.36 |
| **Bottom Chords** | | | |
| A -D | 0.23 | 612 T | 0.07 0.16 |
| D -C | 0.27 | 612 T | 0.07 0.20 |
| **Webs** | | | |
| D -E | 0.03 | 234 T | |
| E -C | 0.19 | 661 C | |
| C -B | 0.02 | 0 T | WindLd |

TL Defl -0.05" in D -C L/999
LL Defl -0.02" in D -C L/999
Shear // Grain in E -B 0.27

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.64 |
| E | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.43 |
| B | LOCK | 1.0x 3.0 | Ctr | Ctr | 0.75 |
| D | LOCK | 1.0x 3.0 | Ctr | Ctr | 0.75 |
| C | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.54 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

For proper installation of toe-nails, refer to the 2001 National Design Specification (NDS) for Wood Construction

NOTES:

Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
Girder King Jack
Loading TC and BC
Setback 7- 0- 0
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Use properly rated hangers for loads framing into girder truss.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 661 Lbs
Quality Control Factor 1.25

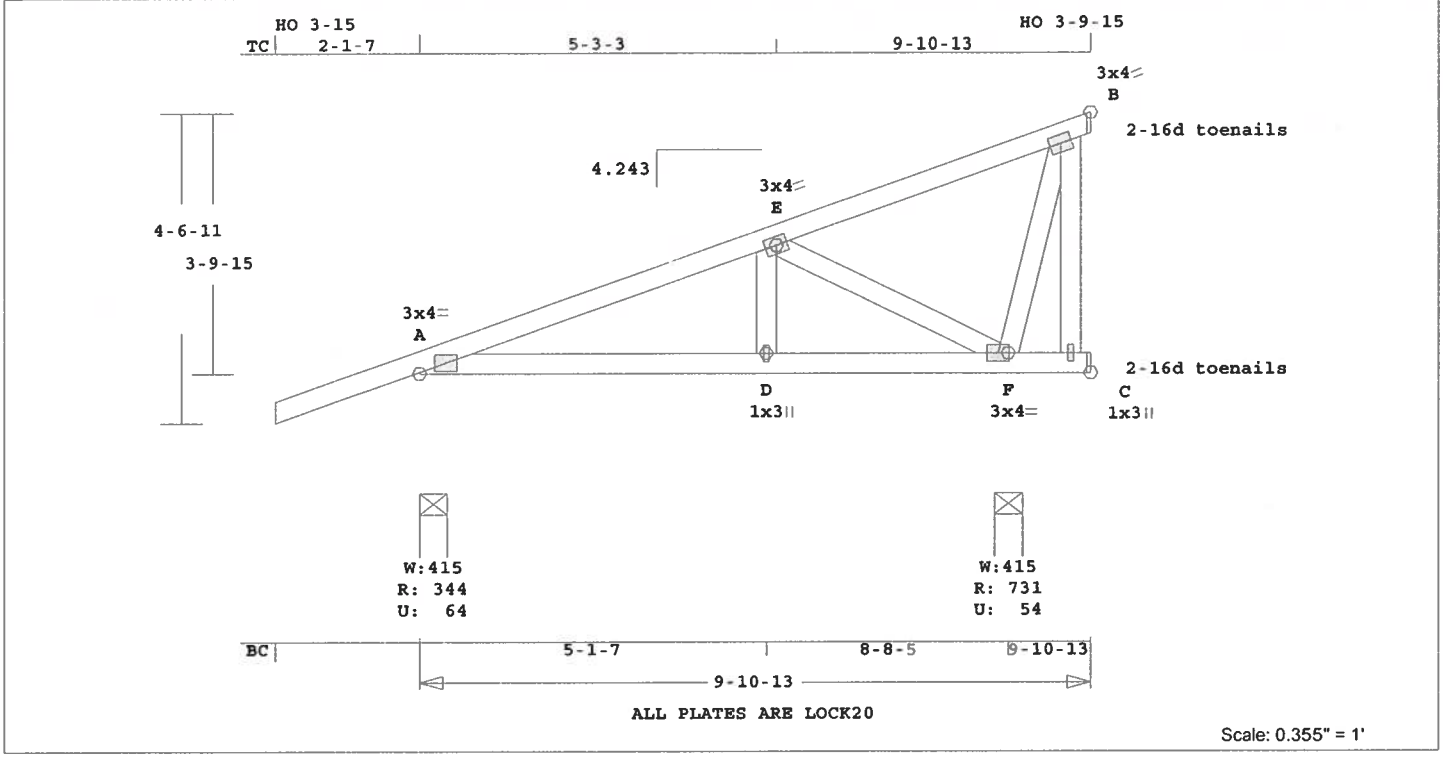
Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682




Date Scaled: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | CJ1A | 1 | MONO.DD | 91013 | 4.243 | 2- 1- 7 | 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 64.9 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.36 | 2x 4 | SP-#2 |
| BC | 0.15 | 2x 4 | SP-#2 |
| WB | 0.11 | 2x 4 | SP-#2 |

Brace truss as follows:

| O.C. | From | To |
|---|---|---|
| TC Cont. | 0- 0- 0 | 9-10-13 |
| BC Cont. | 0- 0- 0 | 9-10-13 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |
| TC Fb=1.00 | Fc=1.00 | Ft=1.00 | |
| BC Fb=1.00 | Fc=1.00 | Ft=1.00 | |

Load Case # 1 Girder Loading
Lumber Duration Factor 1.25
Plate Duration Factor 1.25

| plf - Live | Dead | From | To |
|---|---|---|---|
| TC V 40 | 20 | 0.0' | 9.9' |
| BC V 0 | 20 | 0.0' | 9.9' |
| TC V -40 | -20 | 0.0' | |
| 45 | 22 | | 9.9' |
| BC V 0 | -20 | 0.0' | |
| 0 | 22 | | 9.9' |

Plus 5 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size In-Sx | Req'd In-Sx |
|---|---|---|---|---|
| A | 344 | 64 | 4-15 | 1- 8 |
| | | | Hz = | -43 |
| F | 731 | 54 | 4-15 | 1- 8 |
| C | 3 | 17G | 1- 8 | 1- 8 |
| B | 44 | 126G | 1- 8 | 1- 8 |
| | | | Hz = | 127 |

G = Gravity Uplift

| Membr | CSI | P Lbs | Axl-CSI-Bnd | |
|---|---|---|---|---|
| ----------Top Chords---------- | | | | |
| A -E | 0.32 | 434 C | 0.00 | 0.32 |
| E -B | 0.36 | 87 T | 0.01 | 0.35 |
| --------Bottom Chords--------- | | | | |
| A -D | 0.13 | 427 T | 0.04 | 0.09 |
| D -F | 0.15 | 427 T | 0.07 | 0.08 |
| F -C | 0.10 | 40 T | 0.00 | 0.10 |
| ------------Webs------------ | | | | |
| D -E | 0.02 | 174 T | | |
| E -F | 0.11 | 575 C | | |
| F -B | 0.05 | 353 C | | |
| C -B | 0.02 | 0 T | WindLd | |

TL Defl -0.02" in A -D L/999
LL Defl -0.01" in A -D L/999
Shear // Grain in E -B 0.27

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.64 |
| E | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.43 |
| B | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.54 |
| D | LOCK | 1.0x 3.0 | Ctr | Ctr | 0.75 |
| F | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.42 |
| C | LOCK | 1.0x 3.0 | Ctr | Ctr | 0.75 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

For proper installation of toe-nails, refer to the 2001 National Design Specification (NDS) for Wood Construction

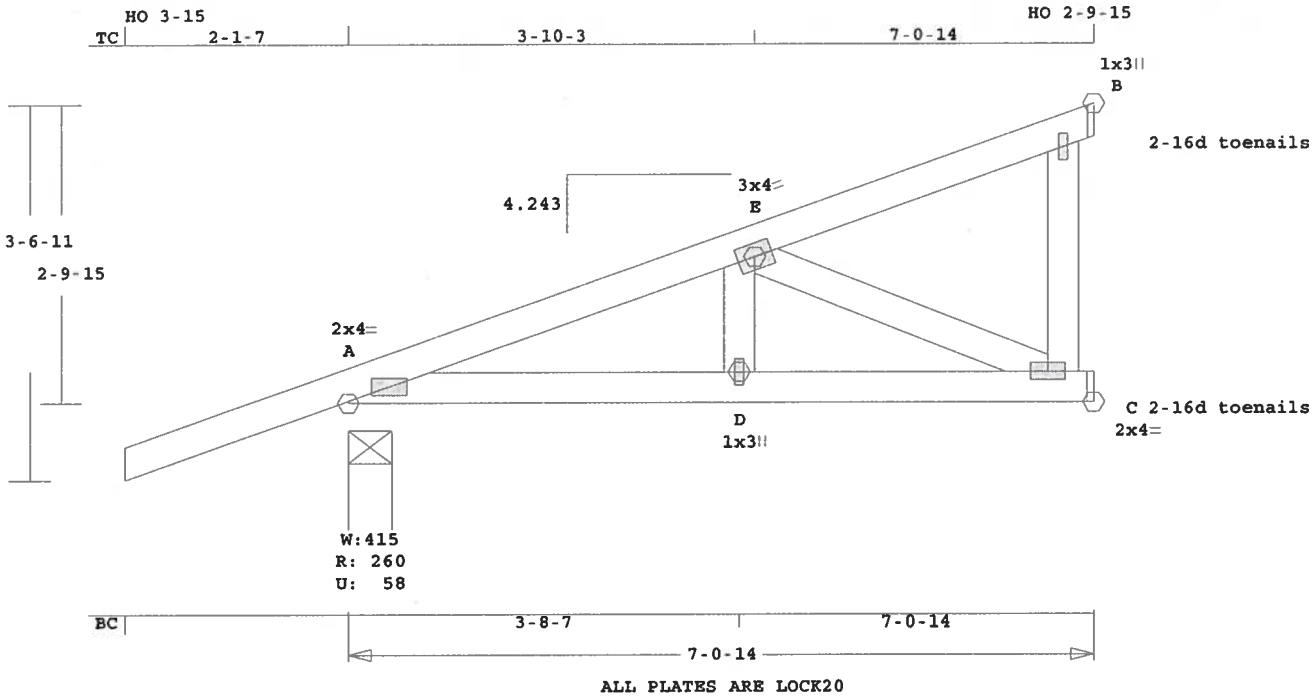
NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
Girder King Jack
Loading TC and BC
Setback 7- 0- 0
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Use properly rated hangers for loads framing into girder truss.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 575 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | CJ2 | 2 | MONO.DD | 70014 | 4.243 | 2- 1- 7 | 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 43.8 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.11 | 2x 4 | SP-#2 |
| BC | 0.09 | 2x 4 | SP-#2 |
| WB | 0.04 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC Cont. | | 0- 0- 0 | 7- 0-14 |
| BC Cont. | | 0- 0- 0 | 7- 0-14 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |

TC Fb=1.00 Fc=1.00 Ft=1.00
BC Fb=1.00 Fc=1.00 Ft=1.00

Load Case # 1 Girder Loading
Lumber Duration Factor 1.25
Plate Duration Factor 1.25

| plf - Live | Dead | From | To |
|---|---|---|---|
| TC V 40 | 20 | 0.0' | 7.1' |
| BC V 0 | 20 | 0.0' | 7.1' |
| TC V -40 | -20 | 0.0' | |
| 17 | 8 | | 7.1' |
| BC V 0 | -20 | 0.0' | |
| 0 | 8 | | 7.1' |

Plus 5 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | Req'd In-Sx |
|---|---|---|---|---|
| A | 260 | 59 | 4-15 | 1- 8 |
| | | | Hz = | -29 |
| C | 166 | 3 | 1- 8 | 1- 8 |
| B | 119 | 39 | 1- 8 | 1- 8 |
| | | | Hz = | 71 |

| Membr | CSI | P Lbs | Axl-CSI-Bnd |
|---|---|---|---|
| **Top Chords** | | | |
| A -E | 0.08 | 274 C | 0.00 0.08 |
| E -B | 0.11 | 42 T | 0.00 0.11 |
| **Bottom Chords** | | | |
| A -D | 0.07 | 265 T | 0.03 0.04 |
| D -C | 0.09 | 265 T | 0.03 0.06 |
| **Webs** | | | |
| D -E | 0.01 | 105 T | |
| E -C | 0.04 | 289 C | |
| C -B | 0.00 | 0 T | WindLd |

TL Defl -0.01" in D -C L/999
LL Defl 0.00" in D -C L/999
Shear // Grain in E -B 0.12

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.77 |
| E | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.40 |
| B | LOCK | 1.0x 3.0 | Ctr | Ctr | 0.75 |
| D | LOCK | 1.0x 3.0 | Ctr | Ctr | 0.75 |
| C | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.75 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

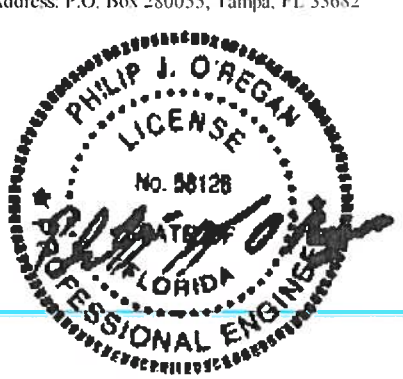
REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

For proper installation of toe-nails, refer to the 2001 National Design Specification (NDS) for Wood Construction

NOTES:

Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
Girder King Jack
Loading TC and BC
Setback 5- 0- 0
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Use properly rated hangers for loads framing into girder truss.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 289 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682

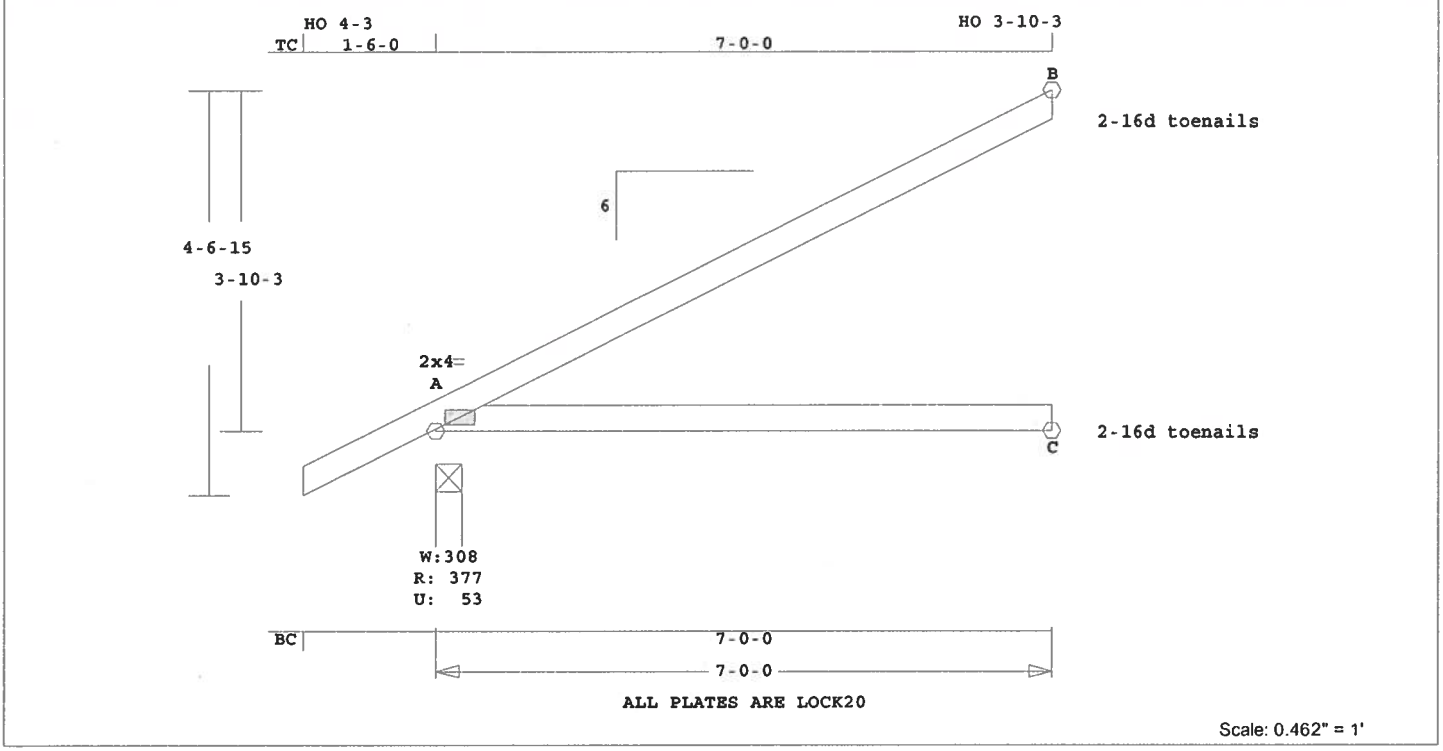





Date Scaled: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | J1 | 31 | MONO | 70000 | 6 | 1- 6- 0 | 0 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 31.5 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.50 | 2x 4 | SP-#2 |
| BC | 0.36 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC | Cont. | 0- 0- 0 | 7- 0- 0 |
| BC | Cont. | 0- 0- 0 | 7- 0- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |
| TC Fb=1.15 | Fc=1.10 | Ft=1.10 | |
| BC Fb=1.10 | Fc=1.10 | Ft=1.10 | |

Plus 5 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| A | 378 | 54 | 3- 8 | 1- 8 |
| | | | Hz = | 106 |
| C | 128 | 0 | 1- 8 | 1- 8 |
| B | 190 | 82 | 1- 8 | 1- 8 |
| | | | Hz = | 72 |

| Membr | CSI | P Lbs | Axl-CSI-Bnd |
|---|---|---|---|
| ----------Top Chords---------- | | | |
| A -B | 0.50 | 51 C | 0.00 0.50 |
| --------Bottom Chords--------- | | | |
| A -C | 0.36 | 0 T | 0.00 0.36 |

TL Defl -0.19" in A -C L/413
LL Defl -0.08" in A -C L/999
Shear // Grain in A -B 0.23

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.69 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

For proper installation of toe-nails, refer to the 2001 National Design Specification (NDS) for Wood Construction

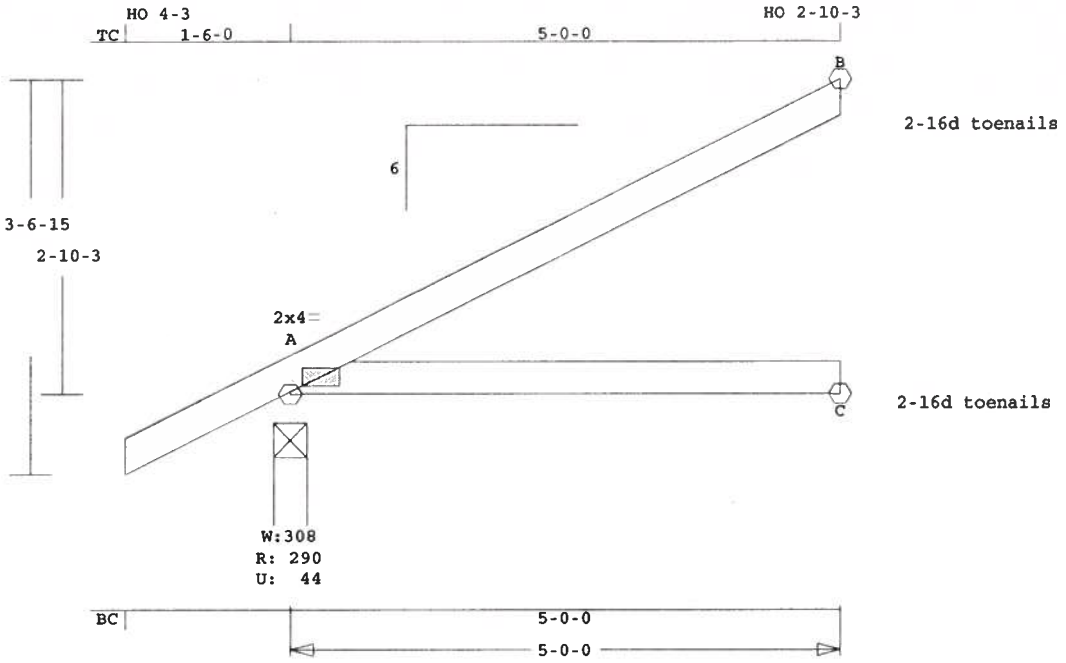
NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 51 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | J2 | 7 | JCA2 | 50000 | 6 | 1- 6- 0 | 0 | T06032882 |

B WILLOW MODEL B




Scale: 0.577" = 1'

Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 23.4 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.25 | 2x 4 | SP-#2 |
| BC | 0.18 | 2x 4 | SP-#2 |

Brace truss as follows:

| O.C. | From | To |
|---|---|---|
| TC Cont. | 0- 0- 0 | 5- 0- 0 |
| BC Cont. | 0- 0- 0 | 5- 0- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |

TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 5 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| A | 290 | 45 | 3- 8 | 1- 8 |
| | | | Hz = 74 | |
| C | 90 | 0 | 1- 8 | 1- 8 |
| B | 129 | 56 | 1- 8 | 1- 8 |
| | | | Hz = 51 | |

| Membr | CSI | P Lbs | Axl-CSI-Bnd |
|---|---|---|---|
| ----------Top Chords---------- | | | |
| A -B | 0.25 | 34 C | 0.00 0.25 |
| --------Bottom Chords--------- | | | |
| A -C | 0.18 | 0 T | 0.00 0.18 |

TL Defl -0.05" in A -C L/999
LL Defl -0.02" in A -C L/999
Shear // Grain in A -B 0.16

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.65 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

For proper installation of toe-nails, refer to the 2001 National Design Specification (NDS) for Wood Construction

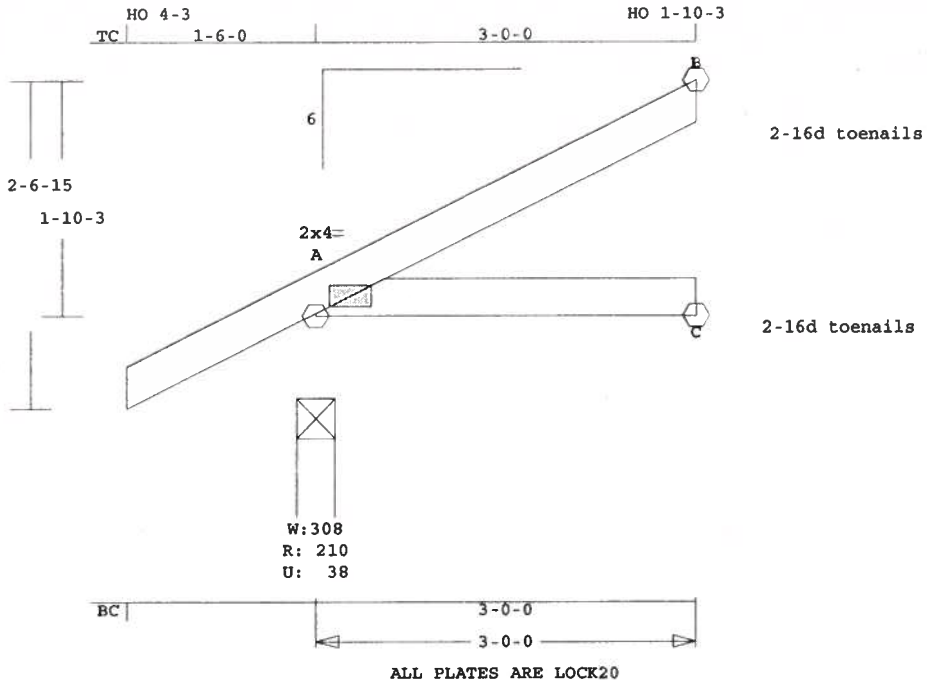
NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 34 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | J3 | 8 | JCA2 | 30000 | 6 | 1- 6- 0 | 0 | T06032882 |

B WILLOW MODEL B




Scale: 0.665" = 1'

Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 15.4 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.08 | 2x 4 | SP-#2 |
| BC | 0.06 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC | Cont. | 0- 0- 0 | 3- 0- 0 |
| BC | Cont. | 0- 0- 0 | 3- 0- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |

TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 5 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | Size Req'd In-Sx |
|---|---|---|---|---|
| A | 210 | 39 | 3- 8 | 1- 8 |
| | | | Hz = | 44 |
| C | 52 | 0 | 1- 8 | 1- 8 |
| B | 74 | 32 | 1- 8 | 1- 8 |
| | | | Hz = | 30 |

| Membr | CSI | P Lbs | Axl-CSI-Bnd |
|---|---|---|---|
| Top Chords | | | |
| A -B | 0.08 | 20 T | 0.00 0.08 |
| Bottom Chords | | | |
| A -C | 0.06 | 0 T | 0.00 0.06 |

TL Defl -0.01" in A -C L/999
LL Defl 0.00" in A -C L/999
Shear // Grain in A -B 0.08

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.65 |

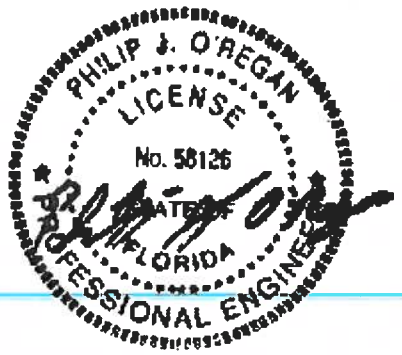
REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

For proper installation of toe-nails, refer to the 2001 National Design Specification (NDS) for Wood Construction

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 19 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682

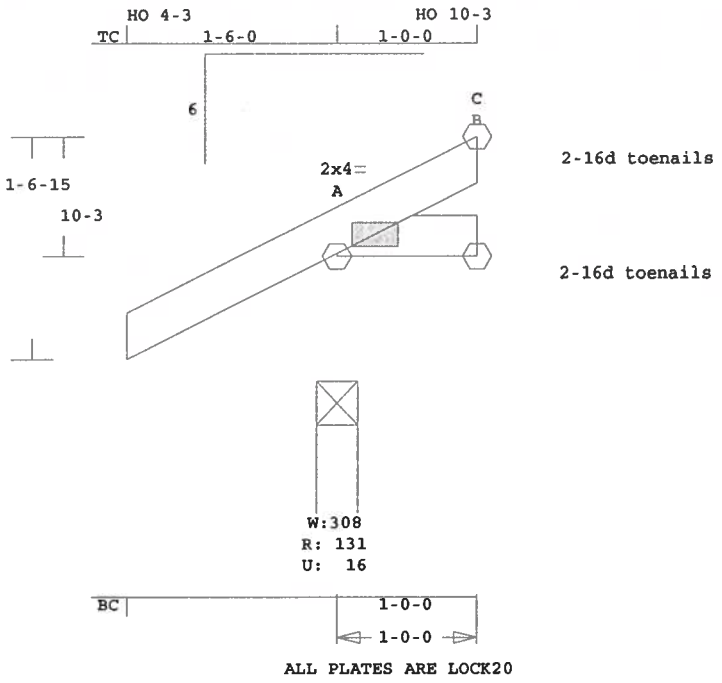





Date Scaled: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | J4 | 8 | JCA2 | 10000 | 6 | 1- 6- 0 | 0 | T06032882 |

B WILLOW MODEL B




ALL PLATES ARE LOCK20

Scale: 0.736" = 1'

Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 7.4 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.00 | 2x 4 | SP-#2 |
| BC | 0.00 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC | Cont. | 0- 0- 0 | 1- 0- 0 |
| BC | Cont. | 0- 0- 0 | 1- 0- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |

TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 5 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| A | 131 | 16 | 3- 8 | 1- 8 |
| | | | Hz = | 13 |
| B | 20 | 9 | 1- 8 | 1- 8 |
| C | 14 | 0 | 1- 8 | 1- 8 |

| Membr | CSI | P Lbs | Axl-CSI-Bnd |
|---|---|---|---|
| ----------Top Chords---------- | | | |
| A -B | 0.00 | 4 | C |
| --------Bottom Chords--------- | | | |
| A -C | 0.00 | 8 | T |

TL Defl 0.00" in A -C L/999
LL Defl 0.00" in A -C L/999
Shear // Grain in A -B 0.02

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.65 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

For proper installation of toe-nails, refer to the 2001 National Design Specification (NDS) for Wood Construction

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Wind Loads - ANSI / ASCE 7-02

Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 4 Lbs
Quality Control Factor 1.25

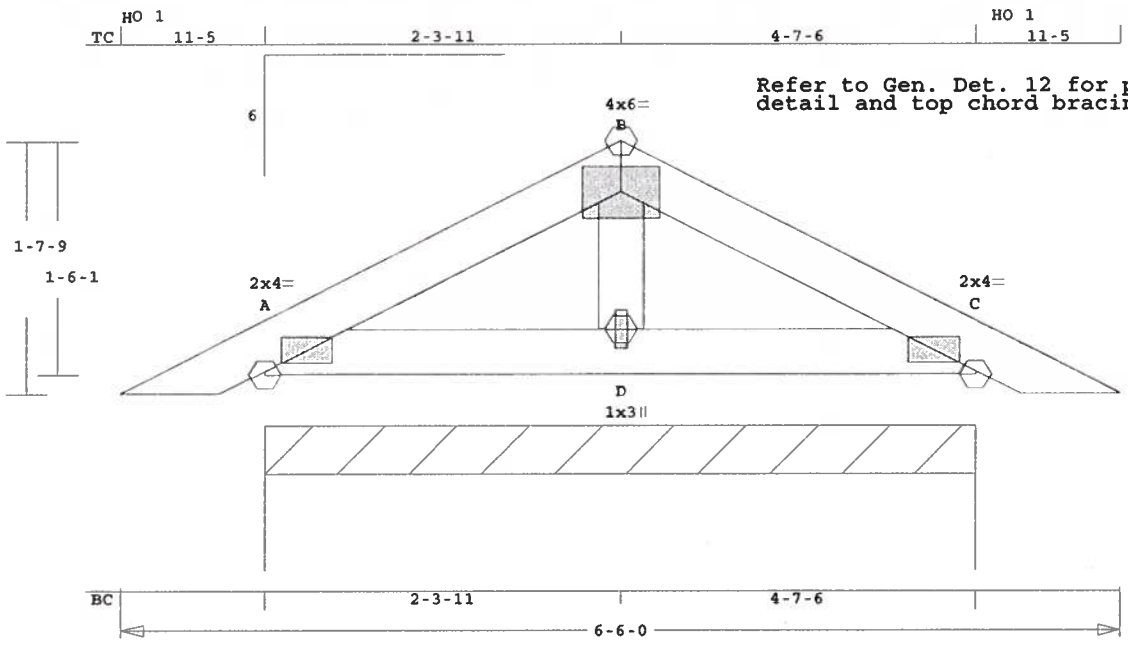
Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682




Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | P1 | 3 | TR | 60600 | 6 | 11- 5 | 11- 5 | T06032882 |

B WILLOW MODEL B




Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 24.1 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.03 | 2x 4 | SP-#2 |
| BC | 0.02 | 2x 4 | SP-#2 |
| WB | 0.00 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC | Cont. | 0- 0- 0 | 6- 6- 0 |
| BC | Cont. | 0- 0- 0 | 6- 6- 0 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |

Lumber Duration Factor 1.25
Plate Duration Factor 1.25
TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| Cont. | Brg 0- 0- 0 to 4- 7- 6 | | | |
| | 490 | 70 | Hz = | 18 |

| Membr | CSI | P Lbs | Axl-CSI-Bnd | |
|---|---|---|---|---|
| ----------Top Chords---------- | | | | |
| A -B | 0.03 | 83 C | 0.00 | 0.03 |
| B -C | 0.03 | 83 C | 0.00 | 0.03 |
| --------Bottom Chords--------- | | | | |
| A -D | 0.02 | 2 C | 0.00 | 0.02 |
| D -C | 0.02 | 2 C | 0.00 | 0.02 |
| ------------Webs------------ | | | | |
| D -B | 0.00 | 50 C | | |

TL Defl 0.00" in A -D L/999
LL Defl 0.00" in A -D L/999
Shear // Grain in A -B 0.06

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.65 |
| B | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.37 |
| C | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.65 |
| D | LOCK | 1.0x 3.0 | Ctr | Ctr | 0.75 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

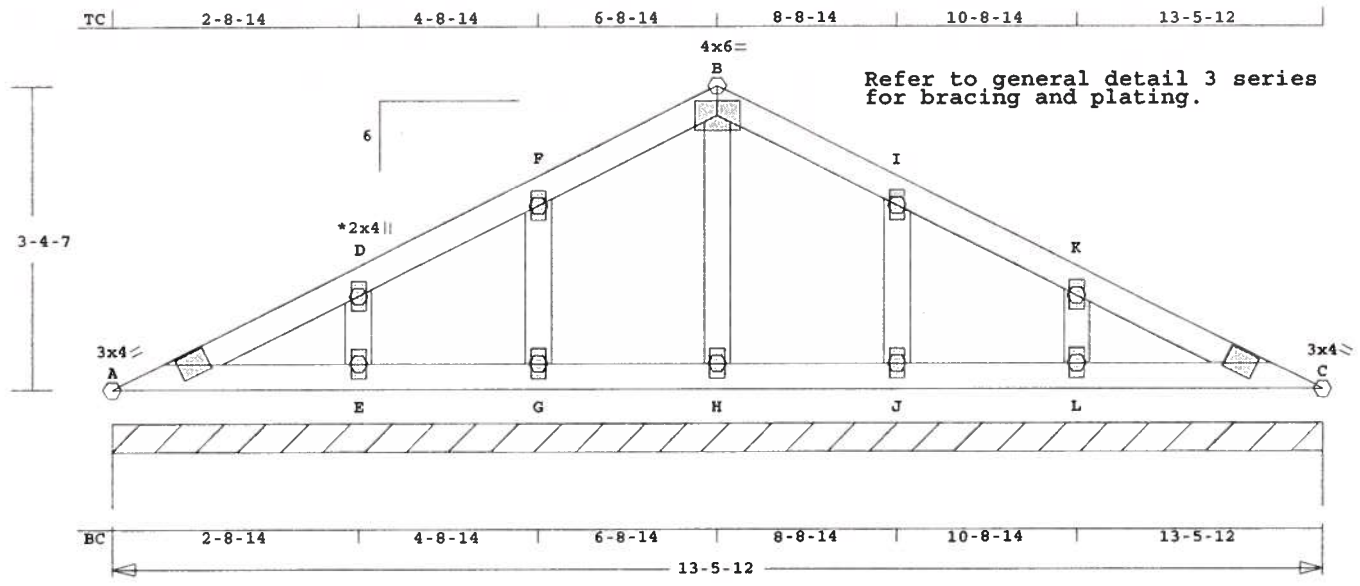
NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
OH Loading
Soffit psf 2.0
Design checked for 10 psf non-concurrent LL on BC.
Refer to Gen Det 3 series for web bracing and plating.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 83 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | V1 | 1 | VL.SB | 130512 | 6 | 0 | 0 | T06032882 |

B WILLOW MODEL B




ALL PLATES ARE LOCK20

See Joint D For Typical Gable Plate Size and Placement

Scale: 0.471" = 1'

Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 66.7 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.04 | 2x 4 | SP-#2 |
| BC | 0.02 | 2x 4 | SP-#2 |
| GW | 0.01 | 2x 4 | SP-#2 |

Brace truss as follows:

| O.C. | From | To |
|---|---|---|
| TC Cont. | 0- 0- 0 | 13- 5-12 |
| BC Cont. | 0- 0- 0 | 13- 5-12 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |
| Lumber Duration Factor | | | 1.25 |
| Plate Duration Factor | | | 1.25 |
| TC Fb=1.15 | Fc=1.10 | Ft=1.10 | |
| BC Fb=1.10 | Fc=1.10 | Ft=1.10 | |

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| Cont. Brg | 0- 0- 0 to | 13- 5-12 | | |
| | 1058 | 123 Hz = | 82 | |

| Membr | CSI | P Lbs | Axl | CSI | Bnd |
|---|---|---|---|---|---|
| ----------Top Chords---------- | | | | | |
| A -D | 0.04 | 31 | C | 0.00 | 0.04 |
| D -F | 0.04 | 23 | C | 0.00 | 0.04 |
| F -B | 0.03 | 37 | T | 0.00 | 0.03 |
| B -I | 0.03 | 37 | T | 0.00 | 0.03 |
| I -K | 0.04 | 23 | C | 0.00 | 0.04 |
| K -C | 0.04 | 31 | C | 0.00 | 0.04 |
| --------Bottom Chords--------- | | | | | |
| A -E | 0.02 | 1 | C | 0.00 | 0.02 |
| E -G | 0.02 | 0 | T | 0.00 | 0.02 |
| G -H | 0.02 | 0 | T | 0.00 | 0.02 |
| H -J | 0.02 | 0 | T | 0.00 | 0.02 |
| J -L | 0.02 | 0 | T | 0.00 | 0.02 |
| L -C | 0.02 | 1 | C | 0.00 | 0.02 |
| ----------Gable Webs---------- | | | | | |
| E -D | 0.01 | 129 | C | | |
| G -F | 0.01 | 122 | C | | |
| H -B | 0.01 | 91 | C | | |
| J -I | 0.01 | 122 | C | | |
| L -K | 0.01 | 129 | C | | |

TL Defl 0.00" in A -E L/999
LL Defl 0.00" in A -E L/999
Shear // Grain in A -D 0.07

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

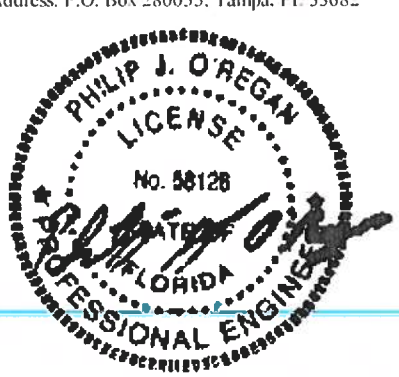
| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.66 |
| D | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| F | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| B | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.47 |
| I | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| K | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| C | LOCK | 3.0x 4.0 | Ctr | Ctr | 0.66 |
| E | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| G | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| H | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| J | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |
| L | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.00 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
Design checked for 10 psf non-concurrent LL on BC.
Wind Loads - ANSI / ASCE 7-02
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 129 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682

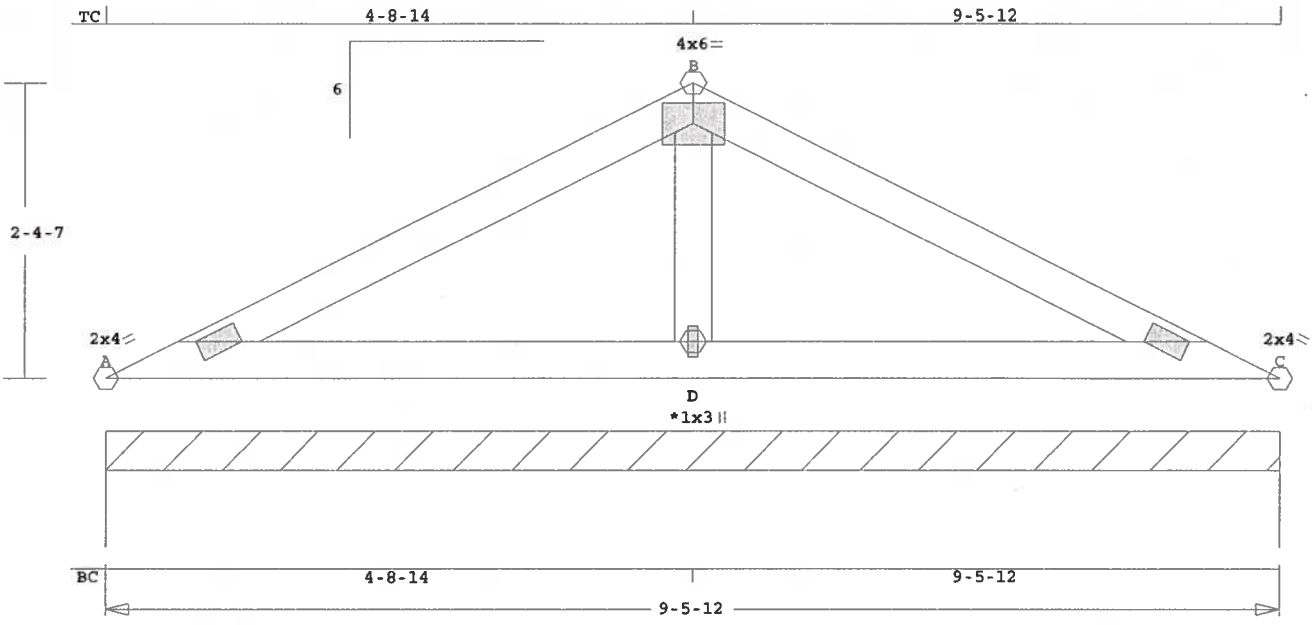





Date Scaled: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | V2 | 1 | VL.SB | 90512 | 6 | 0 | 0 | T06032882 |

B WILLOW MODEL B




ALL PLATES ARE LOCK20

See Joint D For Typical Gable Plate Size and Placement

Scale: 0.650" = 1'

Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 38.8 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.12 | 2x 4 | SP-#2 |
| BC | 0.12 | 2x 4 | SP-#2 |
| GW | 0.01 | 2x 4 | SP-#2 |

Brace truss as follows:

| | O.C. | From | To |
|---|---|---|---|
| TC | Cont. | 0- 0- 0 | 9- 5-12 |
| BC | Cont. | 0- 0- 0 | 9- 5-12 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |

Lumber Duration Factor 1.25
Plate Duration Factor 1.25
TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| Cont. | Brg 0- 0- 0 to 9- 5-12 | | | |
| | 828 | 115 | Hz = | 71 |

| Membr | CSI | P Lbs | Axl-CSI-Bnd |
|---|---|---|---|
| ----------Top Chords---------- | | | |
| A -B | 0.12 | 71 C | 0.00 0.12 |
| B -C | 0.12 | 71 C | 0.00 0.12 |
| --------Bottom Chords--------- | | | |
| A -D | 0.12 | 2 C | 0.00 0.12 |
| D -C | 0.12 | 2 C | 0.00 0.12 |
| ----------Gable Webs---------- | | | |
| D -B | 0.01 | 183 C | |

TL Defl -0.01" in D -C L/999
LL Defl 0.00" in D -C L/999
Shear // Grain in A -B 0.13

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.74 |
| B | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.42 |
| C | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.74 |
| D | LOCK | 1.0x 3.0 | Ctr | Ctr | 0.75 |

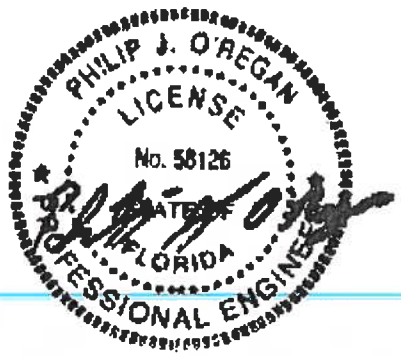
REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
Design checked for 10 psf non-concurrent LL on BC.
Wind Loads - ANSI / ASCE 7-02

Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 183 Lbs
Quality Control Factor 1.25

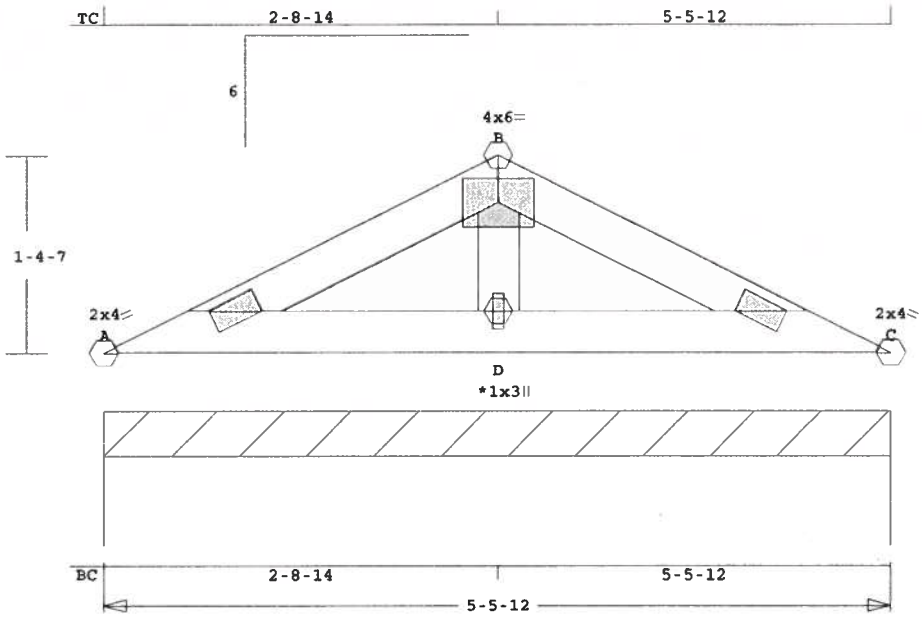
Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682




Date Sealed: 3/27/2006

| Job | Mark | Quan | Type | Span | P1-H1 | Left OH | Right OH | Engineering |
|---|---|---|---|---|---|---|---|---|
| LDM-WILLOW | V3 | 1 | VL.SB | 50512 | 6 | 0 | 0 | T06032882 |

B WILLOW MODEL B




ALL PLATES ARE LOCK20

See Joint D For Typical Gable Plate Size and Placement

Scale: 0.757" = 1'

Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 20.9 LBS

Online Plus -- Version 19.0.011
RUN DATE: 25-MAR-06

| | CSI | -Size- | ----Lumber---- |
|---|---|---|---|
| TC | 0.03 | 2x 4 | SP-#2 |
| BC | 0.03 | 2x 4 | SP-#2 |
| GW | 0.00 | 2x 4 | SP-#2 |

Brace truss as follows:

| O.C. | From | To |
|---|---|---|
| TC Cont. | 0- 0- 0 | 5- 5-12 |
| BC Cont. | 0- 0- 0 | 5- 5-12 |

| Loading | Live | Dead | (psf) |
|---|---|---|---|
| TC | 20.0 | 10.0 | |
| BC | 0.0 | 10.0 | |
| Total | 20.0 | 20.0 | 40.0 |
| Spacing | | | 24.0" |

Lumber Duration Factor 1.25
Plate Duration Factor 1.25
TC Fb=1.15 Fc=1.10 Ft=1.10
BC Fb=1.10 Fc=1.10 Ft=1.10

Plus 6 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

| Jt | React Lbs | Uplft Lbs | Size Req'd In-Sx | In-Sx |
|---|---|---|---|---|
| Cont. | Brg 0- 0- 0 | | to 5- 5-12 | |
| | 425 | 58 | Hz = | 32 |

| Membr | CSI | P Lbs | Axl-CSI-Bnd |
|---|---|---|---|
| ----------Top Chords---------- | | | |
| A -B | 0.03 | 29 C | 0.00 0.03 |
| B -C | 0.03 | 29 C | 0.00 0.03 |
| --------Bottom Chords--------- | | | |
| A -D | 0.03 | 1 C | 0.00 0.03 |
| D -C | 0.03 | 1 C | 0.00 0.03 |
| ----------Gable Webs---------- | | | |
| D -B | 0.00 | 95 C | |

TL Defl 0.00" in A -D L/999
LL Defl 0.00" in A -D L/999
Shear // Grain in A -B 0.06

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORT: NER 691
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.
Plate - LOCK 20 Ga, Gross Area
Plate - RHS 20 Ga, Gross Area

| Jt | Type | Plt Size | X | Y | JSI |
|---|---|---|---|---|---|
| A | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.66 |
| B | LOCK | 4.0x 6.0 | Ctr | Ctr | 0.38 |
| C | LOCK | 2.0x 4.0 | Ctr | Ctr | 0.66 |
| D | LOCK | 1.0x 3.0 | Ctr | Ctr | 0.75 |

REVIEWED BY:
Robbins Engineering, Inc.
PO Box 280055
Tampa, FL 33682

REFER TO ROBBINS ENG. GENERAL NOTES AND SYMBOLS SHEET FOR ADDITIONAL SPECIFICATIONS.

NOTES:
Trusses Manufactured by:
Mayo Truss Co. Inc.
Analysis Conforms To:
FBC2004
Design checked for 10 psf non-concurrent LL on BC.
Wind Loads - ANSI / ASCE 7-02

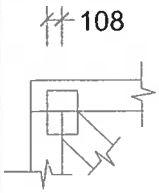
Truss is designed as a Main Wind-Force Resistance System.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor : 1.00
Building Type: Enclosed
Zone location: Exterior
TC Dead Load : 5.0 psf
BC Dead Load : 5.0 psf
Max comp. force 95 Lbs
Quality Control Factor 1.25

Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682


Date Sealed: 3/27/2006

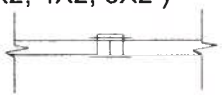
# ROBBINS ENG. GENERAL NOTES & SYMBOLS

## PLATE LOCATION




Center plates on joints unless otherwise noted in plate list or on drawing. Dimensions are given in inches (i.e. 1 1/2" or 1.5" ) or IN-16ths (i.e. 108)

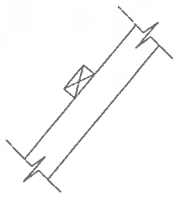
## FLOOR TRUSS SPLICE ( 3X2, 4X2, 6X2 )



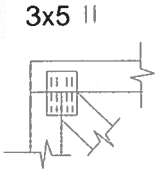
(W) = Wide Face Plate
(N) = Narrow Face Plate

## LATERAL BRACING

Designates the location for continuous lateral bracing (CLB) for support of individual truss members only. CLBs must be properly anchored or restrained to prevent simultaneous buckling of adjacent truss members.



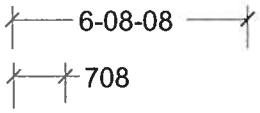
## PLATE SIZE AND ORIENTATION

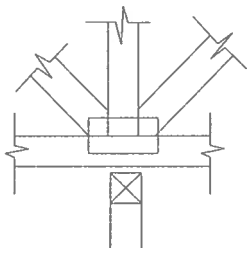



The first dimension is the width measured perpendicular to slots. The second dimension is the length measured parallel to slots. Plate orientation, shown next to plate size, indicates direction of slots in connector plates.

## DIMENSIONS

All dimensions are shown in FT-IN-SX (i.e. 6' 8 1/2" or 6-08-08 ). Dimensions less than one foot are shown in IN-SX only (i.e. 708).



W = Actual Bearing Width (IN-SX)
R = Reaction (lbs.)
U = Uplift (lbs.)

## BEARING

When truss is designed to bear on multiple supports, interior bearing locations should be marked on the truss. Interior support or temporary shoring must be in place before erecting this truss. If necessary, shim bearings to assure solid contact with truss.

ROBBINS connector plates shall be applied on both faces of truss at each joint. Center the plates, unless indicated otherwise. No loose knots or wane in plate contact area. Splice only where shown. Overall spans assume 4" bearing at each end, unless indicated otherwise. Cutting and fabrication shall be performed using equipment which produces snug-fitting joints and plates. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication and the attached truss designs are not applicable for use with fire retardant lumber and some preservative treatments. Nails specified on truss design drawings refer to common wire nails, except as noted.
The attached design drawings were prepared in accordance with " National Design Specifications for Wood Construction" (AF & PA )," National Design Standard for Metal Plate Connected Wood Truss Construction" (ANSI/TPI 1), and HUD Design Criteria for Trussed Rafters.

Robbins Eng. Co. bears no responsibility for the erection of trusses, field bracing or permanent truss bracing. Refer to BCSI 1-03 as published by Truss Plate Institute, 218 North Lee Street, Suite 312, Alexandria, Virginia 22314. Persons erecting trusses are cautioned to seek professional advice concerning proper erection bracing to prevent toppling and " dominoing ". Care should be taken to prevent damage during fabrication, storage, shipping and erection. Top and bottom chords shall be adequately braced in the absence of sheathing or rigid ceiling, respectively. It is the responsibility of others to ascertain that design loads utilized on these drawings meet or exceed the actual dead loads imposed by the structure and the live loads imposed by the local building code or historical climatic records.

FURNISH A COPY OF THE ATTACHED TRUSS DESIGN DRAWINGS TO ERECTION CONTRACTOR. IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER TO REVIEW THESE DRAWINGS AND VERIFY THAT DATA, INCLUDING DIMENSIONS & LOADS, CONFORM TO ARCHITECTURAL PLAN / SPECS AND THE TRUSS PLACEMENT DIAGRAM FURNISHED BY THE TRUSS FABRICATOR.

Robbins Engineering, Inc.

6904 Parke East Blvd.
Tampa, Fl 33610-4115
Tel: 813-972-1135 Fax: 813-971-6117

www.robbinseng.com

# VFGL-4/VFST 27-2 Log Sets

**Believe it or not...** with a simple gas line connection, Superior's Vent-Free Gas Log Sets can turn any fireplace into a clean, convenient space heater. The VFGL-4 logs are designed to be used in vent-free, full-size fireboxes, solid fuel-burning masonry or manufactured wood-burning fireplaces. The VFST 27-2 logs are designed to fit in most masonry or factory-built multi-view fireplaces (see-through and peninsula models). Each log set produces three times the heat of conventional vented gas logs for about half the cost. Their vent-free design is 99%* heat efficient with adjustable high/low settings that control heat output for consistently comfortable room temperatures. All models are design certified by OMNI Test Laboratories as room heaters.

Superior's VFGL-4 Gas Log Sets feature unitized rustic oak logs, and the VFST 27-2 logs feature charred oak. Each is made of heat-resistant, lightweight ceramic fiber, and the logs simulate real wood. The dual burners produce animated yellow flames to create a beautiful fire presentation at every angle. **Millivolt valve models have an on/off rocker switch standard. Wall switch, thermostat and hand-held remotes are optional.**

The VFGL-4 logs are available in 18", 24" and 28" lengths and the VFST 27-2 logs are available in 27" lengths. Each log set is available in natural gas or propane models.

*As tested by Lennox Hearth Products*

## Features & Optional Accessories

- Optional wireless remote control or wall switch delivers the ultimate in flame and temperature control (millivolt valve only)
- VFGL-4 models feature exclusive "CrossLighter" dual burner that maintains full rear yellow flames on both high and low manual settings – front burner turns off on low setting

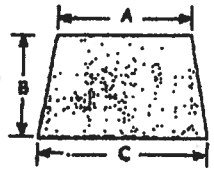
## MODELS AND SPECIFICATIONS

| Log Set Model Number | Valve Type | Recommended Superior Vent-Free Fireplace | Btu/hr Input |
|---|---|---|---|
| VFGL-18MSN-4 | Manual† | UVF-500/UVF-600 | 14,000 – 25,000 |
| VFGL-18MSP-4 | Manual† | UVF-500/UVF-600 | 14,000 – 25,000 |
| VFGL-24MSN-4 | Manual† | UVF-600/UVF-5000 | 17,000 – 32,000 |
| VFGL-24MSP-4 | Manual† | UVF-600/UVF-5000 | 17,000 – 32,000 |
| VFGL-28MSN-4 | Manual† | UVF-5000 | 17,000 – 32,000 |
| VFGL-28MSP-4 | Manual† | UVF-5000 | 17,000 – 32,000 |
| VFGL-18VSN-4 | Millivolt | UVF-500/UVF-600 | 19,500 – 25,000 |
| VFGL-18VSP-4 | Millivolt | UVF-500/UVF-600 | 19,500 – 25,000 |
| VFGL-24VSN-4 | Millivolt | UVF-600/UVF-5000 | 25,000 – 32,000 |
| VFGL-24VSP-4 | Millivolt | UVF-600/UVF-5000 | 25,000 – 32,000 |
| VFGL-28VSN-4 | Millivolt | UVF-5000 | 25,000 – 32,000 |
| VFGL-28VSP-4 | Millivolt | UVF-5000 | 25,000 – 32,000 |

## Minimum Hearth Area

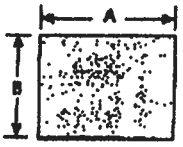
| VFGL-4 | A | B | C |
|---|---|---|---|
| 18" Models | 19" | 14" | 20" |
| 24" Models | 22" | 14" | 26" |
| 28" Models | 26" | 14" | 30" |

*(Minimum Height Opening: 16")*




| VFST 27-2 | A | B |
|---|---|---|
| Multi-View Model | 28" | 18" |

*(Minimum Height Opening: 16")*




**ACRONYM LETTER DEFINITION: MN, MP, MSN, MSP, VSN or VSP**

M=Manual Control Valve • N=Natural Gas • P=Propane Gas • S=Split Log Set • V=Millivolt valve for remote On/Off

Example: A log set with "MSN" indicates a manual gas valve, split oak log set and built for natural gas use.

NOTE: Sets can be installed only in a solid-fuel burning masonry, UL 127 manufactured fireplaces, or in a listed ventless firebox enclosure that has been installed according to their listing. Damper may be in the fully closed position when using Vent-Free Log Sets. Consult your dealer for local fireplace code information.

Distributed by:

NOTE: Product designs, materials, dimensions, specifications, colors and prices subject to change or discontinuance without notice. Built to ANSI Z21.11.2 Standard.
Agency Listings: OMNI Test Laboratories.

†Manual Control Sets only are also built to ANSI Z21.60 Standard and design certified by OMNI Test Laboratories as vented log sets.

MADE IN THE USA

SUPERIOR.


Visit us at www.Lennox.com, or contact us at 1-800-9-LENNOX.



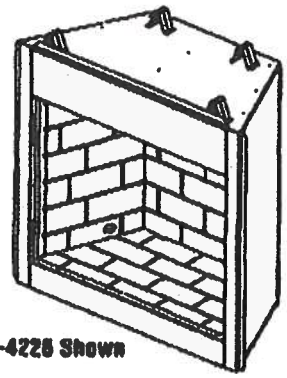
All Superior Vent-Free products have a one-year limited warranty.

# SUPERIOR.

# INSTALLATION AND OPERATING INSTRUCTIONS

## UNIVERSAL VENT-FREE FIREBOX

**36" x 24", 36" x 28" & 42" x 28" Universal Vent-Free Fireboxes**
**P/N 700,032M REV. B 05/2006**



UVFRC-4228 Shown

### MODELS

***UVF-36***
***UVFRC-3628***
***UVFRC-3628-H***
***UVFRC-4228***
***UVFRC-4228-H***

**INSTALLER: LEAVE THIS MANUAL WITH THE APPLIANCE.**
**CONSUMER: RETAIN THIS MANUAL FOR FUTURE REFERENCE.**

**In the Commonwealth of Massachusetts:**
- **Installation must be performed by a licensed plumber or gas fitter;**
- **See Table of Contents for location of additional Commonwealth of Massachusetts requirements.**

WARNING: DO NOT ATTEMPT TO BURN SOLID WOOD FUELS. OTHER GAS LOG SETS OR ANY OTHER COMBUSTIBLE MATERIALS IN THIS VENT-FREE FIREBOX.

**FOR YOUR SAFETY: Do not store or use gasoline or other flammables or liquids in the vicinity of this or any other appliance.**

**FOR YOUR SAFETY: What to do if you smell gas:**
- **DO NOT light any appliance.**
- **DO NOT touch any electrical switches.**
- **Do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow your gas suppliers instructions.**
- **If your gas supplier cannot be reached, call the fire department.**

**Installation and service must be performed by a qualified installer, service agency or the gas supplier.**

Tested & Listed By OTL Bonanza Oregon USA
Omni-Test Laboratories, Inc.

OTL Report No. 116-F-38-5

FOR USE ONLY WITH A LISTED GAS-FIRED UNVENTED DECORATIVE ROOM HEATER NOT TO EXCEED 40,000 BTU/H.

DO NOT BURN WOOD OR OTHER MATERIAL IN THESE APPLIANCES.

WARNING: IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE INJURY OR PROPERTY DAMAGE. REFER TO THIS MANUAL. FOR ASSISTANCE OR ADDITIONAL INFORMATION CONSULT A QUALIFIED INSTALLER, SERVICE AGENCY OR THE GAS SUPPLIER.

CAREFULLY REVIEW THE INSTRUCTIONS SUPPLIED WITH THE DECORATIVE TYPE VENT-FREE ROOM HEATER FOR THE MINIMUM FIREPLACE SIZE REQUIREMENT.

DO NOT INSTALL AN APPLIANCE IN THIS FIREBOX, UNLESS THIS FIREBOX MEETS THE MINIMUM DIMENSIONS REQUIRED FOR THE INSTALLATIONS.

THIS IS A VENT-FREE GAS-FIRED HEATER ENCLOSURE. IT USES AIR (OXYGEN) FROM THE ROOM IN WHICH IT IS INSTALLED. PROVISIONS FOR ADEQUATE COMBUSTION AND VENTILATION AIR MUST BE PROVIDED. REFER TO COMBUSTION AND VENTILATION AIR SECTION, PAGES 3 & 4.

**Due to high temperatures, the appliance should be located out of traffic and away from furniture or draperies.**

**Do not place clothing or other materials on or near this appliance.**

**IMPORTANT: READ AND UNDERSTAND THESE INSTRUCTIONS COMPLETELY BEFORE INSTALLING YOUR VENT-FREE ROOM HEATERS.**

## IMPORTANT SAFETY INFORMATION

**INSTALLER: PLEASE LEAVE THESE INSTRUCTIONS WITH THE OWNER.**

**OWNER: PLEASE RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE.**

**⚠ WARNING**

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

**⚠ IMPORTANT**

The fireplace screens on the appliance must be closed prior to operating the fireplace.

**⚠ WARNING**

These built-in vent-free fireboxes have only been tested and approved for use with ANSI Z21.11.2 Vent-free gas logs.

**⚠ WARNING**

Do not attempt to burn solid wood fuels, other gas log sets or any other combustible materials in this vent-free firebox.

**⚠ WARNING**

Any change to this Vent-Free room heater can be dangerous. Improper installation or use of this heater can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.

**⚠ WARNING**

Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns.

**⚠ WARNING**

Carbon Monoxide Poisoning. Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, obtain fresh air immediately. Have the Vent-Free Gas Heater serviced as it may not be operating correctly.

**⚠ WARNINGS**

- Due to high temperatures, the firebox should be located out of traffic and away from furniture and draperies.
- Do not place clothing or other flammable material on or near the heater.
- Any safety screen or guard removed for servicing the firebox must be replaced and/or closed prior to operating the heater.
- Installation and repair should be done by a qualified service person. The heater should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is important that control compartments, burners and circulating air passageways of the heater be kept clean.
- Allow the heater to cool before servicing. Always shut off any electricity or gas to the heater while performing service work.
- Do not install the firebox in a sleeping room or bathroom.
- The appliance and its individual shut-off valve must be disconnected from the gas supply piping system while performing any tests of the gas supply piping system at test pressures equal to or less than 1/2 psig.

**⚠ WARNING**

- The heater must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig.
- Keep heater area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- Do not use this heater if any part has been under water. Immediately call a qualified service technician to inspect the heater and to replace any part of the control system and any gas control which has been under water.
- Ensure that the heater is clean when operating. Excessive dust accumulation on the burner and logs will increase the amount of carbon monoxide formation and could lead to carbon monoxide poisoning and death.

**⚠ IMPORTANT**

Before starting your firebox installation, read these installation instructions carefully to be sure you understand them completely and in entirety. Failure to follow these instructions could cause a heater malfunction resulting in serious injury and/or property damage.

**⚠ WARNING**

Do not install in the vicinity where gasoline or other flammable liquids may be stored. The Vent-Free firebox must be kept clear and free from these combustible materials.

**⚠ WARNING**

Maintain minimum clearances.



NOTE: DIAGRAMS & ILLUSTRATION ARE NOT TO SCALE.

## CONGRATULATIONS!

In selecting this SUPERIOR Vent-Free Gas Firebox you have chosen the finest and most dependable fireplace to be found anywhere. A beautiful, prestigious, alternative to a wood burning fireplace. Welcome to a family of tens of thousands of satisfied SUPERIOR Fireplace Owners.

Please read and carefully follow all of the instructions found in this manual. Please pay special attention to the safety instructions provided in this manual. The Homeowner's Care and Operation instructions included here will assure that you have many years of dependable and enjoyable service from your SUPERIOR product.

## TABLE OF CONTENTS



This installation manual will help you obtain a safe, efficient, dependable installation for your appliance and vent system.

**PLEASE READ AND UNDERSTAND THESE INSTRUCTIONS BEFORE BEGINNING YOUR INSTALLATION.**

### Packaging List

Vent-Free Gas Firebox
Canopy *(optional for models UVFRC-3628, UVFRC-3628-H, UVFRC-4228 & UVFRC-4228-H)*
Installation and Operating Instructions
Warranty Certificate

We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

## GENERAL INFORMATION

These Vent-Free firebox enclosures are designed to accept all ANSI Z21.11.2 approved Decorative Type Vent-Free Gas Log Room Heaters. **For the appropriate Vent-Free Gas Log Room Heater model, refer to *Page 16* (see Vent-Free Gas Log Sets).** Refer to the installation instructions provided with the log sets for detailed instructions.

This installation manual will enable you to obtain a safe, efficient and dependable installation of your room heater system.

Do not alter or modify the firebox or its components under any circumstances. Any modification or alteration of the firebox system, including but not limited to the firebox and accessories, may void the warranty, listings and approvals of this system and could result in an unsafe and potentially dangerous installation.

These Built-In Vent-Free Fireboxes have been tested and approved as Ventless Firebox Enclosures for Gas-Fired Unvented Decorative Room Heaters to ANSI Z21.91.

### Burn-In Period

During the first few times of operation of this appliance there will be some odor due to the curing of the paint and burning off of lubricants used in the manufacturing process. We recommend that you open windows and ventilate the house during the initial burns. The paint emits non-toxic odors during this process.

Depending on your use, the burn-in period may take a few hours or a few days.

**KEEP YOUR HOUSE WELL VENTILATED DURING THE BURN-IN PERIOD. THE ODOR AND HAZE EMITTED DURING THE BURN-IN PERIOD CAN BE QUITE NOTICEABLE AND MAY SET OFF A SMOKE DETECTOR.**

If an optional blower is installed, Do not turn it on during the Burn-In period.

### Misc. Codes / Standards -

The installation must conform to local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54 - latest edition.

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70 - latest edition.

Check the packaging list to be sure that you have all the necessary parts in usable condition. Also check for concealed damage.

### Tools and Building Supplies Normally Required

**Tools Should Include:**

- Phillips screwdriver
- Hammer
- Saw and/or sabersaw
- Level
- Measuring tape
- Electric drill and bits
- Pliers
- Square
- Piping complying with local codes
- Pipe wrench
- Tee joint
- Pipe compound

**Building Supplies Should Include:**

- Framing materials
- Wall finishing materials
- Caulking materials *(noncombustible)*
- Fireplace surround materials *(noncombustible)*
- Insulation *(for packing around gas-fire penetration holes)*

## CODES

Adhere to all local codes or in their absence the latest edition of The National Fuel Gas Code ANSI Z223.1 or NFPA 54 which can be obtained from The American National Standards Institute, Inc. (1430 Broadway, New York, NY, 10018) or National Fire Protection Association, Inc. (Batterymarch Park, Quincy, MA, 02269).

## COMBUSTION AND VENTILATION AIR

Heaters installed in these appliances shall not be installed in a confined space. Heaters installed in these appliances may be located in unusually tight construction provided the space is unconfined, or if confined, is provided with two permanent openings communicating directly with an additional room(s) of sufficient volume so that the combined volume of all connected spaces meets the criteria for an unconfined space. (National Fuel Gas Code ANSI Z223.1 1992, Section 5.3). Generally 50 ft² per 1,000 BTU input of all operating appliances in the space.

The National Fuel Gas Code defines a confined space as a space whose volume is less than 50 ft³ per 1,000 BTU/Hr (4.8 m³ per kw) of the aggregate input rating of all appliances installed in that space and an unconfined space as a space whose volume is not less than 50 ft³ per 1,000 BTU/Hr (4.8 m³ per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the unconfined space.

Unusually tight construction is defined as construction where:

a. Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of one perm or less with openings gasketed or sealed, and
b. Weather stripping has been added on operable windows and doors, and
c. Caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

Use the following equations to determine if you have a confined or unconfined space.

1. Determine the volume of space — ft³.

   Length x Width x Height = _____ ft³
   (Include adjoining rooms with doorless passageways or ventilation grills between rooms).

   **Example:** 24' (L) x 16' (W) x 8' (H) = 3072 ft³

2. Divide the volume of space by 50 ft³ to determine the maximum BTU/Hr the space can support.

   (volume of space – ft³)/ 50 ft³ = (Maximum BTU/Hr the space can support)

   **Example:** 3072 ft³ / 50 ft³ = 61.44
   or 61,440 BTU/Hr the space can support.

3. Add the BTU/Hr of all the fuel burning appliances in the space.

| | | |
|---|---|---|
| Vent-Free heater | _____ | BTU/Hr |
| Gas appliance #1* | _____ | BTU/Hr |
| Gas appliance #2 | +_____ | BTU/Hr |
| | Total =_____ | BTU/Hr |

**Example:**

| | | |
|---|---|---|
| Vent-free heater | 26,000 | BTU/Hr |
| Gas appliance #1 (water heater) | 40,000 | BTU/Hr |
| Total = | 66,000 | BTU/Hr |

* Do not include direct-vent gas appliances. Direct-vent is sealed combustion and draws combustion air from the outdoors.

4. Compare the maximum BTU/Hr the space can support with the actual amount of BTU/Hr used.

   . . . . BTU/Hr
   (max. the space can support)
   _____ BTU/Hr
   (actual amount of BTU/Hr used)

   **Example:**
   61,440 BTU/Hr
   (max. the space can support)
   66,000 BTU/Hr
   (actual amount of BTU/Hr used)

The space in the above example is a confined space because the actual BTU/Hr used is more than the maximum BTU/Hr the space can support. You must provide additional fresh air.

**⚠ WARNING**

If the area in which the heater may be operated is smaller than that defined as an unconfined space, provide adequate combustion and ventilation air by one of the methods described in the National Fuel Gas Code, ANSI Z223.1 1992, Section 5.3 or applicable local codes.

Your options are:

a. Rework equations adding the space of adjoining room(s). If the extra volume provides an unconfined space, then remove door or add ventilation grills between rooms. Refer to National Fuel Gas Code, ANSI Z223.1 1992, Section 5.3.

b. Vent room directly to the outdoors. Refer to National Fuel Gas Code, ANSI Z223.1 1992, Section 5.3.
c. Install a lower BTU/Hr heater, such as a 21,000 BTU/Hr, to make the area an unconfined space.

If the actual BTU/Hr used is less than the maximum BTU/Hr the space can support, then the space is an unconfined space. You will need no additional fresh air ventilation for an unconfined space.

## COLD CLIMATE INSULATION

For cold climate installations, seal all cracks around the appliance with noncombustible material and wherever cold air could enter the room. It is especially important to insulate outside cavities between studs and under floor on which the appliance rests, if floor is above ground level. Gas line holes and other openings should be caulked with high temperature caulk or stuffed with unfaced fiberglass insulation. If the fireplace is being installed on a cement slab, in cold climates, a sheet of plywood or other raised platform can be placed underneath to prevent conducting cold up into the room. It also helps to sheetrock inside surfaces and tape for maximum air tightness and caulk firestops.

## NEW YORK CITY, NEW YORK (MEA)

Installation of these fireplaces are approved for installation in New York City in the US state of New York.



NOTE. DIAGRAMS & ILLUSTRATION ARE NOT TO SCALE.

***Note:*** **The following requirements reference various Massachusetts and national codes not contained in this document.**

## Requirements for the Commonwealth of Massachusetts

Un-vented Room Heaters shall be installed in accordance with 527 CMR 30.00 and 248 CMR 3.00 through 7.00:

(a) Permits and Inspections: In addition to complying with 248 CMR 3.05 the following requirements must be satisfied:

1. A permit shall be obtained from the head of the fire department and the local or state gas inspector having jurisdiction for the installation of all unvented propane or natural gas-fired space/room heaters.

2. The permits shall be conditioned upon final inspection and approval of installation by the head of the fire department and the local or state gas inspector having jurisdiction.

3. A copy of the manufacturer's installation/operating literature shall be submitted with each permit application.

4. Before operation, the Head of the Fire Department and the local or state gas inspector shall inspect the installation for compliance with 527 CMR (Board of Fire Prevention Regulations) and 248 CMR (Board of State Examiners of Plumbers and Gas Fitters).

5. A final inspection by the state or local gas inspector of the unvented space/room heater shall not be performed until proof is provided that the head of the fire department having jurisdiction has granted a permit.

(b) Unvented propane or natural gas-fired space/room heaters shall conform to ANSI Z21.11.2, be equipped with an oxygen depletion safety (ODS) shutoff system and be Product-approved in accordance with 248 CMR.

(c) Unvented propane or natural gas-fired space/room heaters shall be installed in accordance with their listings and the manufacturer's instructions. Proper clearances to combustibles shall be maintained. In no case shall the clearances be such as to interfere with combustion air and accessibility.

(d) Installations shall be of a permanent type, with a permanently piped fuel supply in accordance with 248 CMR. LPG appliances shall be subject to the storage requirements in accordance with 527 CMR 6.00. Portable unvented propane or natural gas-fired space/room heaters shall be prohibited.

(e) Unvented propane or natural gas-fired space/room heaters shall be prohibited in bedrooms and bathrooms.

(f) Space/room heaters shall be properly sized for the room or space of installation, but shall not exceed a maximum of 40,000 BTU input per room or space.

(g) In occupancies with an unvented propane or natural gas-fired space/room heater, no less than one listed carbon monoxide detector that is installed in accordance with the manufacturers instructions shall be installed and maintained near the space where the heater is located.

1. Any building wherein the heater is to be installed shall, as a precondition to such installation, have working smoke detectors installed and maintained in accordance with the requirements of 780 CMR (State Board of Building Regulations and Standards) in effect at the time of construction or;

2. If no requirement was in effect at the time of construction the smoke detector shall be compliant and installed as provided for in M.G.L. c. 148, § 26E.

(h) In rooms and buildings served by an unvented propane or natural gas-fired space/room heater, a primary source of heat, which is operable, shall be permanently installed and maintained in the building in accordance with 105 CMR (Department of Public Health).

(i) Sellers of unvented propane or natural gas-fired space/room heaters shall provide to each purchaser a copy of 527 CMR 30.00 upon sale of the unit.

- Installation and repair must be done by a plumber or gas fitter licensed in the Commonwealth of Massachusetts.
- The flexible gas line connector used shall not exceed 36 inches (92 centimeters) in length.
- The individual manual shut-off must be a T-handle type valve.

NOTE: DIAGRAMS & ILLUSTRATION ARE NOT TO SCALE

## LOCATION OF FIREBOX

Carefully select the best location for installation of your built-in Vent-Free firebox. The following factors should be taken into consideration:

- Clearance to side wall, ceiling, woodwork and windows.
- Location must not be affected by drafts caused by kitchen exhaust fans, return air registers for forced air furnaces/air conditioners, windows or doors.
- Installation must provide adequate ventilation and combustion air.
- Do not install this firebox in a sleeping room or bathroom.
- Location should be out of high traffic areas and away from furniture and draperies due to heat from firebox.
- Never obstruct the front opening of the Vent-Free firebox or restrict the flow of combustion and ventilation air.
- Minimize modifications to existing construction. See *Figure 1* for location suggestions.

**⚠ CAUTION**

Do not install in the vicinity where gasoline or other flammable liquids may be stored. The Vent-Free firebox must be kept clear and free from these combustible materials.

**⚠ WARNING**

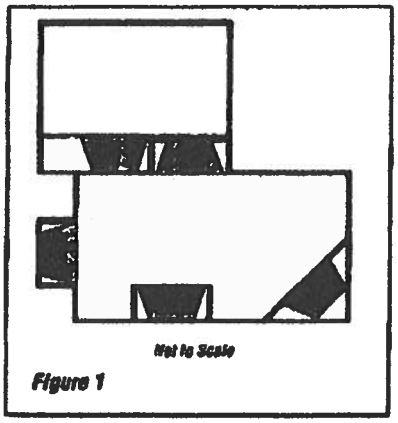
Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this fireplace.

**⚠ WARNING**

Do not install these built-in Vent-Free fireboxes in sleeping quarters, or in recreational vehicles.

**⚠ WARNINGS**

Do not install these appliances:
- Where curtains, furniture, clothing or other flammable objects are less than 42" from the front of the Vent-Free room heater.
- In high traffic areas.
- In windy or drafty areas.



Not to Scale

*Figure 1*

### Clearances

Ensure the minimum clearances shown in *Figures 2 through 6* are maintained. Left and right clearances are determined when facing the front of the firebox.

Follow these instructions carefully to ensure safe installation. Failure to follow these requirements may create a fire hazard.

**Sidewall clearances:** The sides of the firebox opening must be at least 16" from any combustible wall (*Figure 2*).

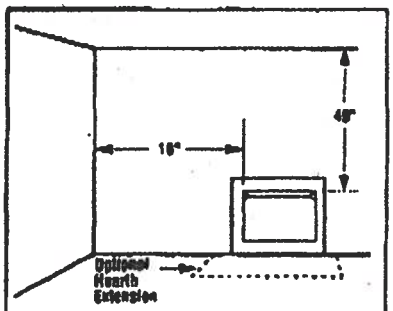



*Figure 2*

**Ceiling clearance:** The ceiling must be at least 40" from the top of the firebox opening (*Figure 2*).

**Noncombustible material:** Noncombustible materials, such as slate and marble, must be at least 1/2" thick and may be used without restriction above the firebox opening, to the sides or as a hearth extension, so long as they do not obstruct vent openings for heat circulating models.

**RECOMMENDATION:** Use high temperature finish material for the mantels and/or use the canopy (for UVFRC-3628, UVFRC-3628-H, UVFRC-4228 & UVFRC-4228-H).

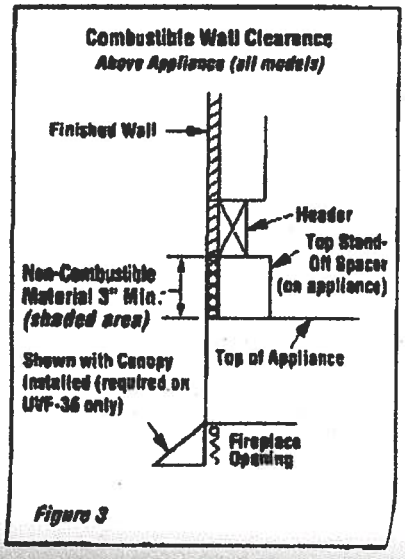
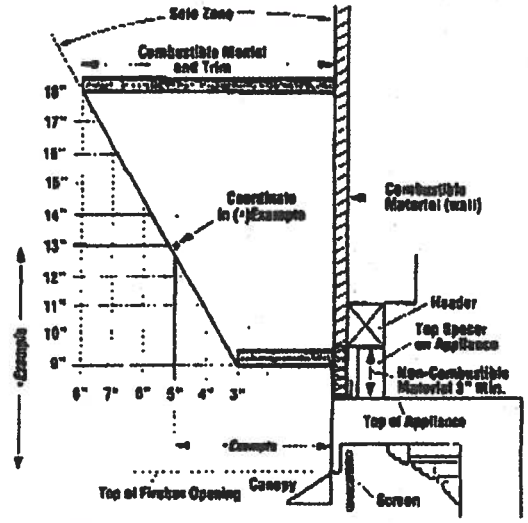



*Figure 3*

**Combustible Mantel and Trim Clearance**

***Model UVF-36 WITH Canopy Installed***
***Canopy is required on all installations for this model only.***

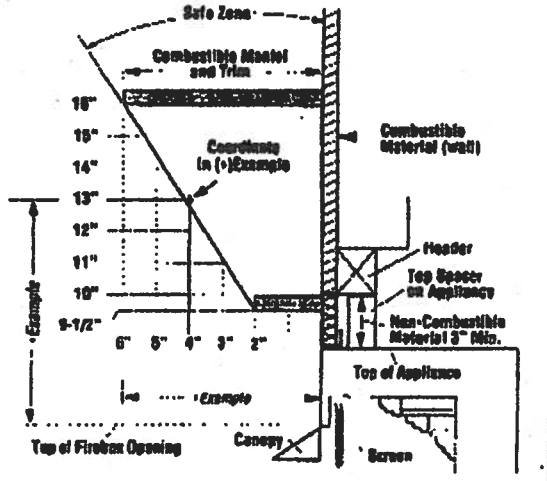



** EXAMPLE: If you choose to install a mantel that projects 5", you will need to install it so that the bottom of the mantel and trim is approximately 13" or more above Firebox opening (see coordinate in shaded area above).*

***Figure 4***

**Combustible Mantel and Trim Clearance**

***Models UVFRC-3628 and UVFRC-4228 WITH Canopy Installed***
***Canopy is optional on these models***

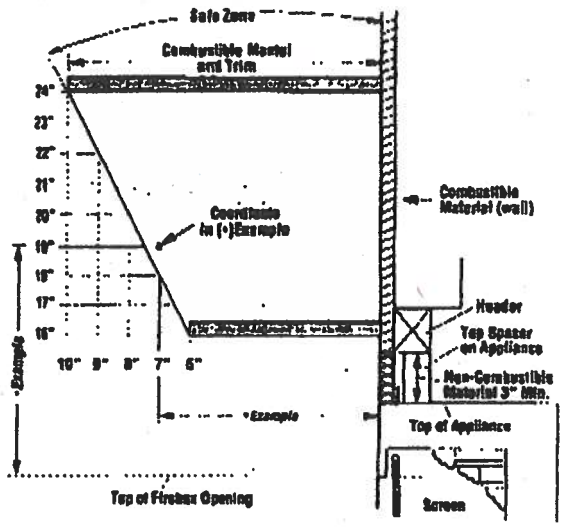



** EXAMPLE: If you choose to install a mantel that projects 4", you will need to install it so that the bottom of the mantel and trim is approximately 13" or more above Firebox opening (see coordinate in shaded area above).*

***Figure 5***

**Combustible Mantel and Trim Clearance**

***Models UVFRC-3628 and UVFRC-4228 WITHOUT Canopy Installed***
***Canopy is optional on these models***




** EXAMPLE: If you choose to install a mantel that projects 7", you will need to install it so that the bottom of the mantel and trim is approximately 15" or more above Firebox opening (see coordinate in shaded area above).*

***Figure 6***

**Noncombustible material (minimum requirements) with wood mantel or other combustible projections:** To install the firebox with a wood mantel, shelf or other combustible projection above firebox opening. Refer to ***Figures 4, 5 & 6.***

**⚠ WARNING**

The canopy must be in place to be in compliance with the clearances specified in *Figures 4 & 5*. Do not remove or replace canopy, only use canopy supplied or offered for these fireboxes (see *Pages 16 & 17*). Do not use any canopy which may be provided with the decorative type Vent-Free room heater.

**If your mantel profile is unsafe, you may either:**

- **Raise the mantel to an acceptable height, or**
- **Remove the mantel.**

**Floor clearance:** These fireplaces may sit directly on a combustible surface. The appliance should be mounted on a fully supported base extending the full width and depth of the unit. The appliance may be located on or near conventional construction materials. However,

If installed on combustible materials, such as carpeting, vinyl tile, etc., a metal or wood barrier covering the entire bottom surface must be used.

NOTE: DIAGRAMS & ILLUSTRATION ARE NOT TO SCALE.

## SPECIFICATIONS

**Dimensions - Inches (millimeters)**

| Model No. | A | B | C | D | E | F | G | H | J | K | L | M | N | P | *Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UVF-36 | 36 (914) | 24 (610) | 41-3/4 (1061) | 37-1/4 (946) | 23-1/2 (597) | 20 (508) | 3 (76) | 7-3/8 (187) | 15-7/8 (403) | 7-1/2 (190) | 11-15/16 (303) | 1-5/16 (33) | 5-1/2 (140) | 30-5/16 (770) | 29-5/8 (753) |
| UVFRC-3628 & UVFRC-3628-H | 36 (914) | 28 (711) | 41-3/4 (1061) | 41-1/4 (1048) | 23-1/2 (597) | 20 (508) | 3 (76) | 8-3/8 (213) | 15-7/8 (403) | 7-1/2 (190) | 11-15/16 (303) | 1-5/16 (33) | 5-1/2 (140) | 34-5/16 (872) | 33-5/8 (854) |
| UVFRC-4228 & UVFRC-4228-H | 42 (1067) | 28 (711) | 47-3/4 (1213) | 41-1/4 (1048) | 29-1/2 (749) | 20 (508) | 3 (76) | 8-3/8 (213) | 15-7/8 (403) | 7-1/2 (190) | 11-15/16 (303) | 1-5/16 (33) | 5-1/2 (140) | 34-5/16 (872) | 33-5/8 (854) |

**Product Reference Information**

| Cat. No. | Model | Ship. Weight (lbs) | Shipping Volume |
|---|---|---|---|
| H1957 | UVF-36 | 156 lbs | 20 Cu. Ft. |
| H1953 | UVFRC-3628 | 200 lbs | 22 Cu. Ft. |
| H1954 | UVFRC-3628-H | 200 lbs | 22 Cu. Ft. |
| H1955 | UVFRC-4228 | 230 lbs | 25 Cu. Ft. |
| H1956 | UVFRC-4228-H | 230 lbs | 25 Cu. Ft. |

* *A canopy comes standard and is required for model UVF-36. The factory-supplied canopy must be installed on the firebox for safe operation for model UVF-36 in all installations. This part is optional for models UVFRC-3628, UVFRC-3628-H, UVFRC-4228 & UVFRC-4228-H.*

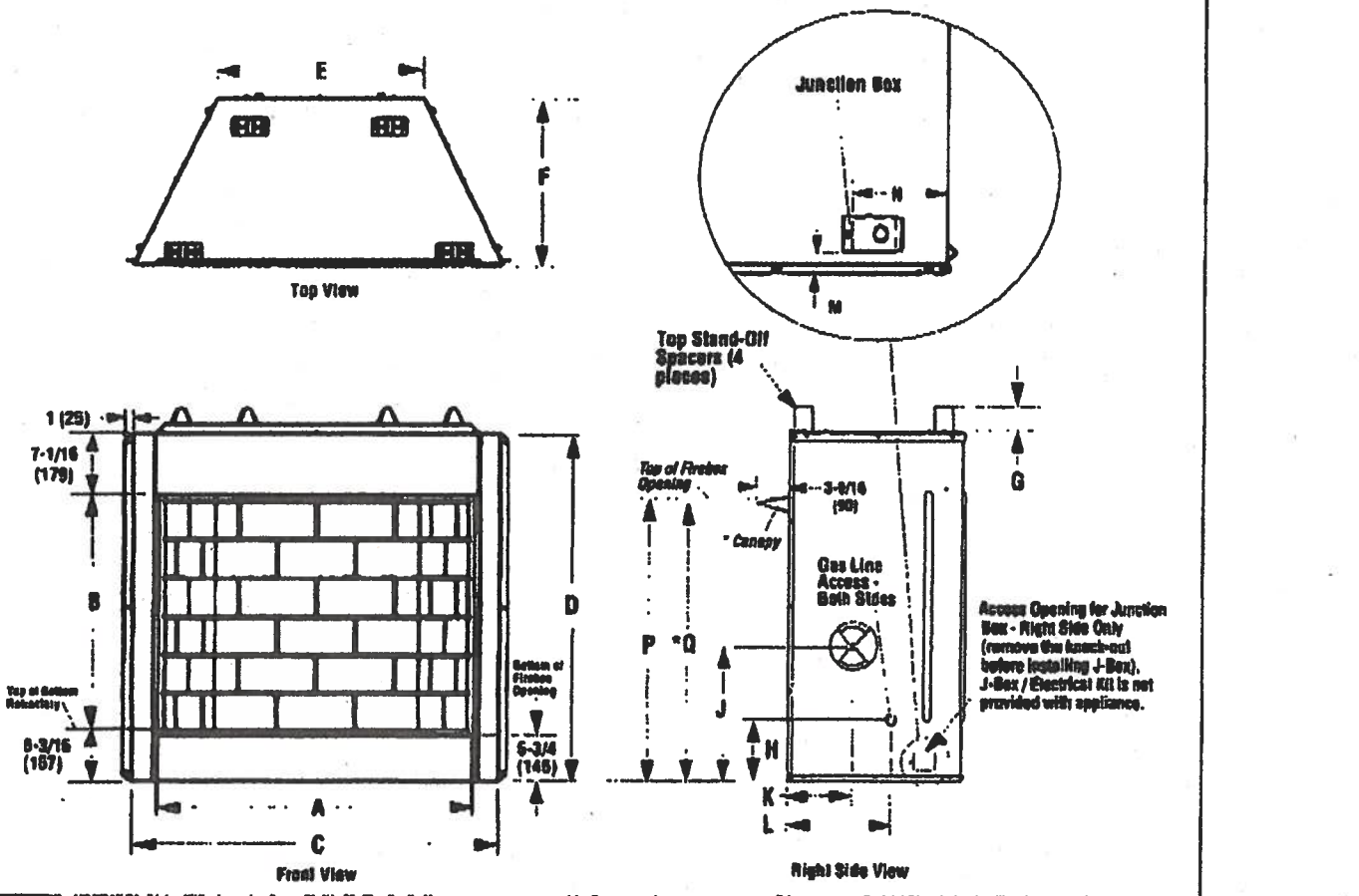



*Figure 8*



NOTE: DIAGRAMS & ILLUSTRATION ARE NOT TO SCALE.

## FRAMING SPECIFICATIONS

| Framing Dimensions | | | |
|---|---|---|---|
| Opening | UVF-36 | UVFRC-3628 & UVFRC-3628-H | UVFRC-4228 & UVFRC-4228-H |
| A | 42-1/4" (1073) | 42-1/4" (1073) | 48-1/4" (1226) |
| B | 40-1/4" (1022) | 44-1/4" (1124) | 44-1/4" (1124) |
| C | 23-9/16" (599) | 23-9/16" (599) | 29-9/16" (751) |
| D | 11-1/4" (286) | 11-1/4" (286) | 14-1/4" (362) |
| E | 63-1/2" (1613) | 63-1/2" (1613) | 69-1/2" (1765) |
| F | 31-3/4" (807) | 31-3/4" (807) | 34-3/4" (883) |
| G | 20-1/2"( 521) | 20-1/2"( 521) | 20-1/2"( 521) |
| H | 44-3/16" (1122) | 44-3/16" (1122) | 49-1/8" (1248) |

*Table 1 - This Table corresponds to Figures 9, 10 & 11*

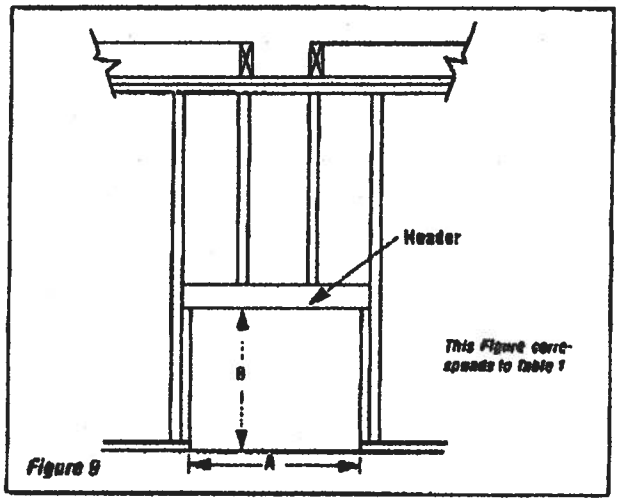


*Figure 9*

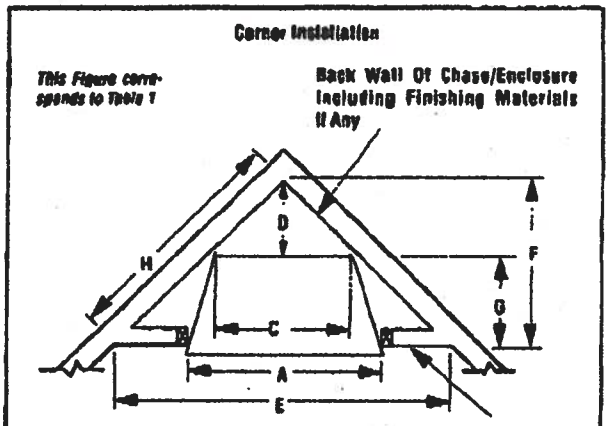


*Figure 10*

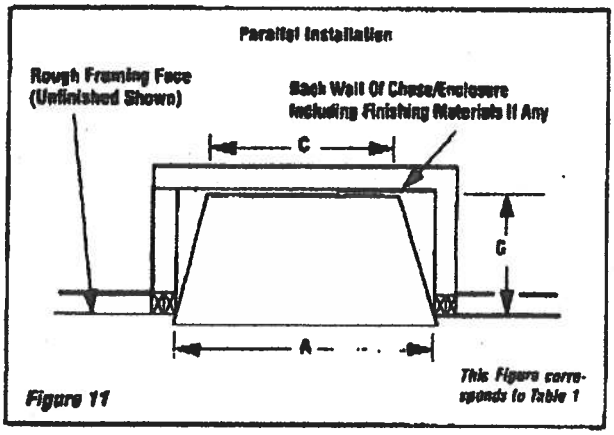


*Figure 11*

## Canopy Kit Installation (see ordering information on *Page 16)*

***NOTE:* A canopy comes standard and is required for model UVF-36. The factory-supplied canopy must be installed on the firebox for safe operation for model UVF-36 in all installations (this part is optional for other models). See *Figure 13*.**

These canopy kits are design to be fitted to the face of the appliance directly above the firebox opening. In addition to providing an aesthetically pleasing appearance to your appliance, the canopy reduces heat effects to decorative mantels and finish materials located directly above the fireplace and reduces the Mantel / Trim clearances (see *Figures 4, 5 & 6* on *Page 7*).

Please read this entire manual and understood thoroughly before proceeding with the installation of these kits.

Step 1. Using a 5/16" nut driver or socket, remove the screen and rod assemblies as shown in *Figure 12*.

Step 2. Align the canopy with the holes in the side frames as shown in *Figure 13*. Install three screws as shown in *Figure 13*. Make sure canopy is level and secure.

Step 3. Reinstall screen and rod assemblies *(see Figure 12)*.

**Removing Screens & Rods:** Remove screws (see dotted lines). Pull out rods from locating holes on side of firebox opening.

**Reinstalling Screens & Rods:** Insert rods into corresponding locating holes on sides of firebox opening, then reinstall screws as shown.

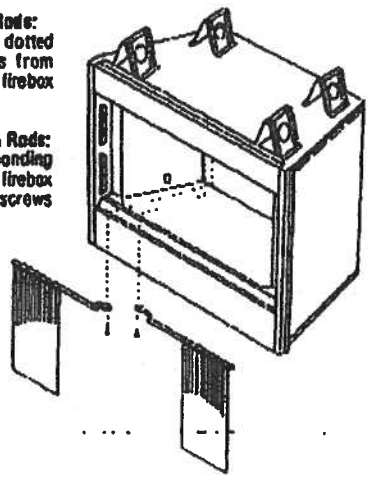


*Figure 12*

NOTE: DIAGRAMS & ILLUSTRATION ARE NOT TO SCALE.

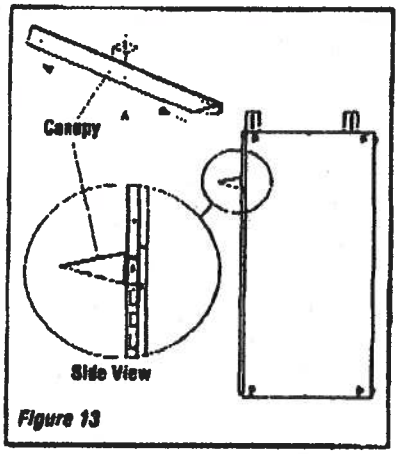



*Figure 13*

## OPTIONAL EQUIPMENT

### Blower Kits

The ***FBK-100 Blower Kits*** are used when a wall-mounted ON/OFF blower switch is desired, and the ***FBK-200 Blower Kits*** are used when a wall-mounted variable speed blower control (rheostat) is desired. A ***Junction Box/Electrical Kit*** is also required to install these kits (purchased separately - see ***Page 15***).

The blower is installed beneath the firebox. Room air is drawn in through the side slots of the fireplace, heated as it passes across the firebox, and discharged through the upper area of the firebox opening.

The installation instructions for installing these blower kits are on ***Pages 12 through 14***. Also see the installation instructions provided with the blower kits (Form #750,028M). For electrical requirements, refer to ***Figures 14, 15 & 16***.

If the blower kit is to be installed at the time of installation or at a later date, the main power supply must be installed at the time of installation. **This will require that the electrical connections must be made BEFORE the firebox is framed and enclosed in the finished walls.** Route a 3-wire, 120 VAC, 60 Hz, 1 ph power supply and connect to electrical receptacle wires and wall switch or rheostat.

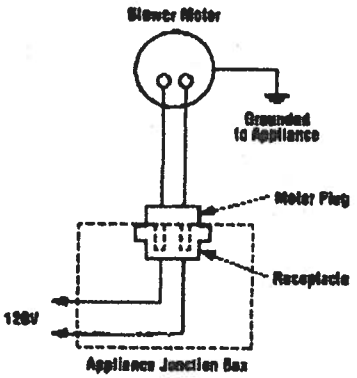
## ⚠ IMPORTANT

The *Ground Lead* must be connected to the green screw (located on the junction box). Failure to do this could result in an electrical short or shock injury.

The appliance must be electrically grounded in accordance with local codes or, in the absence of local codes, the national electrical code, ANSI/NFPA 70-(latest edition) (in Canada, the current CSA C22.1 Canadian Electrical Code).

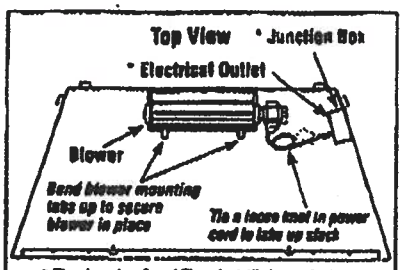
## ⚠ CAUTION

Electrical connections should only be performed by a qualified, licensed electrician. Main power must be off when connecting to main electrical power supply or performing service.



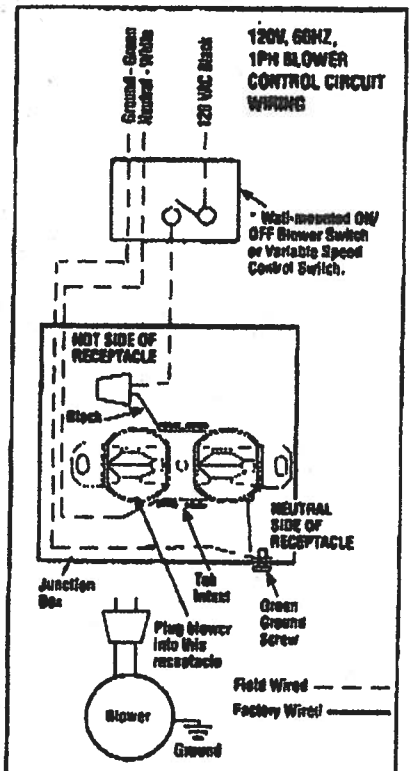

*Note: If any of the original wire as supplied must be replaced, it must be replaced with type AWM 105 degree C - 14 gage wire.*

*Figure 14*




* The Junction Box / Electrical Kit is not included. See Page 15 for ordering information.

*Figure 15*




*An ON/OFF Wall Switch is used with the FBK-100 kit (field provided or sold separately - order P/N 8SL87); A Variable Speed Control (provided) is used with the FBK-200 kit. The installation of these kits also require a Junction Box / Electrical Kit, not included. See Page 15 for ordering information.*

*Note: If any of the original wire as supplied must be replaced, it must be replaced with type AWM 105 degree C - 14 gage wire.*

*Figure 16*



NOTE: DIAGRAMS & ILLUSTRATION ARE NOT TO SCALE.

# PRODUCT APPROVAL SPECIFICATION SHEET

**Location:** CONSTRUCTION S **Project Name:** Willow

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

| Category/Subcategory | Manufacturer | Product Description | Approval Number(s) |
|---|---|---|---|
| A. EXTERIOR DOORS | | | |
| 1. Swinging | Thermatru | Swinging Door Assemblies | FL 5891 |
| 2. Sliding | | | |
| 3. Sectional | | | |
| 4. Roll up | | | |
| 5. Automatic | | | |
| 6. Other | | | |
| B. WINDOWS | | | |
| 1. Single hung | MI Home | Single Hung Window | FL 5108 |
| 2. Horizontal Slider | MI Home | | FL 5451 |
| 3. Casement | MI Home | CASING | FL 6023 |
| 4. Double Hung | MI Home | | FL 5104, 5447 |
| 5. Fixed | MI Home | | FL 6028 |
| 6. Awning | | | |
| 7. Pass -through | | | |
| 8. Projected | | | |
| 9. Mullion | MI Home | MULLIONS | FL 5513; 6489 |
| 10. Wind Breaker | | | |
| 11 Dual Action | | | |
| 12. Other | | | |
| C. PANEL WALL | | | |
| 1. Siding | Hardi-Board | 7 1/4 x 12' Primed Hardi Board | FL889 |
| 2. Soffits | Kay-Can | | FL 4899, 4957 |
| 3. EIFS | | | |
| 4. Storefronts | | | |
| 5. Curtain walls | | | |
| 6. Wall louver | | | |
| 7. Glass block | | | |
| 8. Membrane | | | |
| 9. Greenhouse | | | |
| 10. Other | | | |
| D. ROOFING PRODUCTS | | | |
| 1. Asphalt Shingles | TAMKO | 3-TAB & Arch Shingles | FL-1958-R1 |
| 2. Underlayments | TAMKO | Misc Underlays | FL-1478, 1481, 1744 |
| 3. Roofing Fasteners | RMW | | |
| 4. Non-structural Metal Rf | RMW | | |
| 5. Built-Up Roofing | TAMKO | Built-up Roof | FL-741-R1 |
| 6. Modified Bitumen | TAMKO | SBS Mod Roofing | FL-755-R1 |
| 7. Single Ply Roofing Sys | RMW | | |
| 8. Roofing Tiles | RMW | N/A | |
| 9. Roofing Insulation | RMW | | |
| 10. Waterproofing | RMW | | |
| 11. Wood shingles /shakes | N/A | | |
| 12. Roofing Slate | N/A | | |

* REFER TO MANUFACTURE'S WEBSITE (RMW)

| Category/Subcategory (cont.) | Manufacturer | Product Description | Approval Number(s) |
|---|---|---|---|
| 13. Liquid Applied Roof Sys | | | |
| 14. Cements-Adhesives – Coatings | TAMKO | Wet/Dry Cement | 1960-2 |
| 15. Roof Tile Adhesive | | | |
| 16. Spray Applied Polyurethane Roof | | | |
| 17. Other | MISTA | #15 & 30# Felt | D4869 |
| E. SHUTTERS | | | |
| 1. Accordion | | | |
| 2. Bahama | | | |
| 3. Storm Panels | | | |
| 4. Colonial | | | |
| 5. Roll-up | | | |
| 6. Equipment | | | |
| 7. Others | Tapco | Decorative Shutters | FL 6422 |
| F. SKYLIGHTS | | | |
| 1. Skylight | Sun-Tek | | FL 2442 |
| 2. Other | | | |
| G. STRUCTURAL COMPONENTS | Simpson | ABU44Z | FL 474.21 |
| | Simpson | H2.5A | FL 503.5 |
| 1. Wood connector/anchor | Simpson | MSTA24 | FL 1901.57 |
| 2. Truss plates | | | |
| 3. Engineered lumber | G.P. | 2x4 #2 SYP | FL 1008 |
| 4. Railing | | | |
| 5. Coolers-freezers | | | |
| 6. Concrete Admixtures | | | |
| 7. Material | | | |
| 8. Insulation Forms | | | |
| 9. Plastics | | | |
| 10. Deck-Roof | Norboard | OSB | |
| 11. Wall | Norboard | OSB - Wind Storm | |
| 12. Sheds | | | |
| 13. Other | | | |
| H. NEW EXTERIOR ENVELOPE PRODUCTS | | | |
| 1. | | | |
| 2. | | | |

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) the performance characteristics which the product was tested and certified to comply with, 3) copy of the applicable manufacturers installation requirements.

I understand these products may have to be removed if approval cannot be demonstrated during inspection.

Contractor or Contractor's Authorized Agent Signature

Print Name

Date

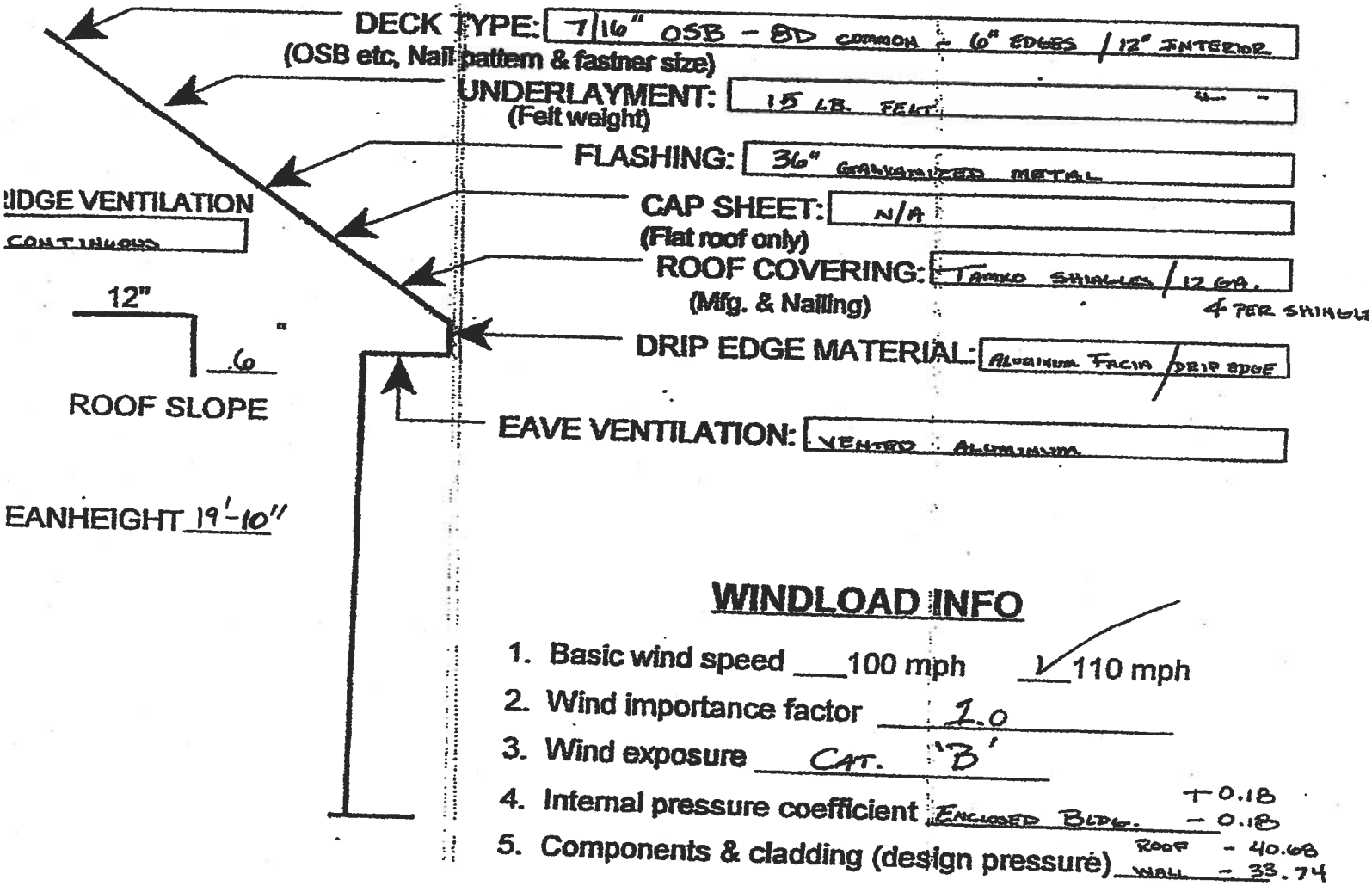
Location

Permit # (FOR STAFF USE ONLY)

## ROOFING, WINDOW & DOOR REQUIREMENTS

Willow

## ROOF SYSTEM DESCRIPTION




## WINDLOAD INFO

1. Basic wind speed ___100 mph ✓ 110 mph
2. Wind importance factor 1.0
3. Wind exposure CAT. 'B'
4. Internal pressure coefficient ENCLOSED BLDG. +0.18 / -0.18
5. Components & cladding (design pressure) ROOF -40.68 / WALL -33.74

## WINDOWS* — WILLOW — ATTACHMENTS

| TYPE | MANUFACTURER | SERIES | SIZE | JAMB TYPE / SPACING | HEADER TYPE / SPACING | SILLS TYPE / SPACING | MULLIONS |
|---|---|---|---|---|---|---|---|
| SH | CAPITOL | 650 FIN | 3060 | #8×1¼" SMS 6" 27" 54" 67" | #8×1¼" SMS 2" FE | #8×1¼" SMS 2" FE | N/A |
| SH | CAPITOL | 650 FIN | 2-3050 | " | " | " | FACTORY |
| SH | " | " | 4050 | " | " | " | N/A |
| SH | " | " | 3050 | " | " | " | N/A |
| Tempered HS | " | " | Tempered 3020 | " | " | " | N/A |
| Tempered HS | " | " | Tempered 4010 | " | " | " | N/A |

## DOORS — ATTACHMENT OF FRAME

| TYPE | MANUFACTURER | SERIES | SIZE | JAMB | HEADER | SILL |
|---|---|---|---|---|---|---|
| METAL INSULATED | PREMDOR | 6-8 SW/E | 3068 | #10WS×1½"/6" FE 15" o.c. | #10WS×1½"/4" FE 15" o.c. | #8WS×1¾"/4" FE 15" o.c. |
| HVAC DBL. CLOSET METAL INSULATED | " | " | 2-3068 | " | " | " |
| METAL INSULATED | " | " | 2868 | " | " | " |
| DBL METAL FRENCH | " | " | FRENCH 2-3068 | " | " | " |
| | | | | | | |

*Space around windows shall be a maximum of 3/16" ± 1/16".

THE OVERHEAD DOOR
SINCE the original 1921

**Overhead Door Company of Gainesville**

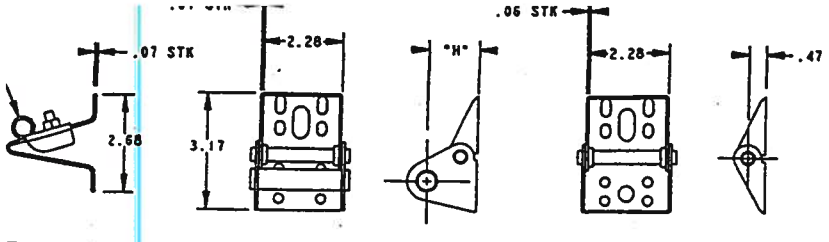
POST OFFICE BOX 568 • GAINESVILLE, FL 32602 • OFFICE (904) 468-2733 • ANS. SERVICE (904) 374-0802
A DIVISION OF FLORIDA OVERHEAD DOOR & SPECIALTIES, INC.

Please find enclosed approved 110mph Windload Drawings by Overhead Door Corp.for 8 & 9x 7's,16 x 7 and 18 x 7 281 Series Doors.

A copy of these drawings must be present on site as per Alachua County Code Enforcement.For drawings on other sizes and types of Doors,Please contact Overhead Door Company.

352-468-2733

Thank You
Bob Hartman

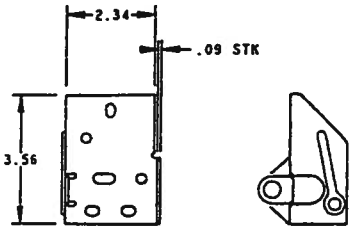



P FIXTURE

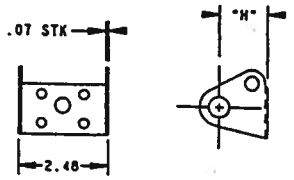
407605-XXXX END HINGE

| P/N | "H" |
|---|---|
| 407605-0002 | .85 |
| 407605-0003 | 1.10 |
| 407605-0004 | 1.35 |
| 407605-0005 | 1.60 |

407603-0001 CTR HINGE

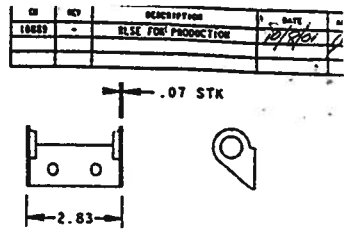



405771-XXXX BOTTOM FIXTURE

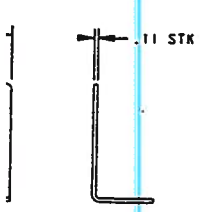



407604-XXXX HINGE LEAF, BTM

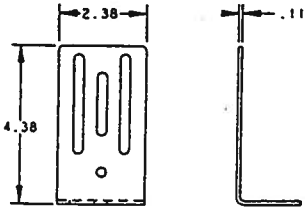
| P/N | "H" |
|---|---|
| 407604-0002 | .85 |
| 407604-0003 | 1.10 |
| 407604-0004 | 1.35 |
| 407604-0005 | 1.60 |




407532-1001 HINGE LEAF, BTM

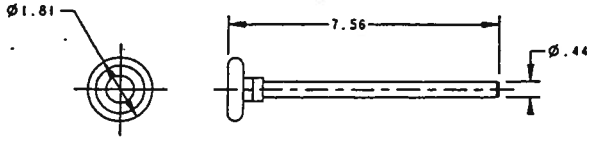



JAMB BRACKET




SCAB BRACKET

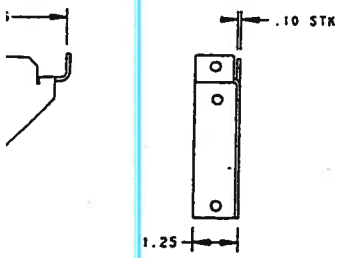
405964-0002 SCAB BRACKET



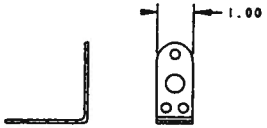

061166-0001 ROLLER ASSEMBLY, TR-3


409898-XXXX DOUBLER, RAIL

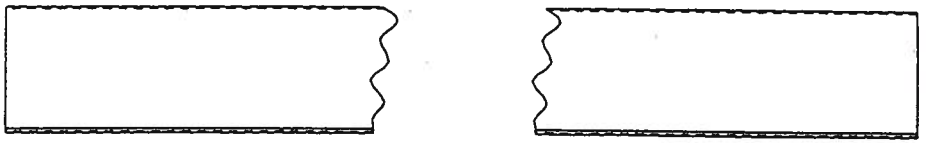
| | "L" |
|---|---|
| )003 | 4.00 |
| )001 | 3.25 |



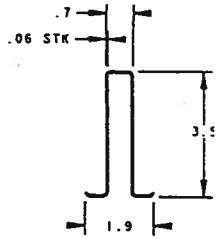

XX CHANNEL SUPPORT

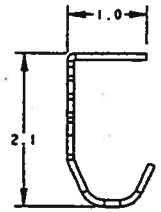



405742-0001 ROLLER BRKT



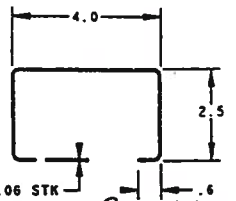
400650-XXX3 STRUT, HS-3




407743-XXX3
2" TRACK DETAIL
SCALE 1/1

409517-XXXX CHANNEL (2)






| REF DWG | USED ON |
|---|---|
| | |

| TOLERANCES UNLESS OTHERWISE SPECIFIED | |
|---|---|
| WHOLE NUMBERS: | ± .25 |
| .X | ± .1 |
| .XX | ± .03 |
| .XXX | ± .010 |
| ANGLES: | ± 1° |
| HOLES: | ± |

FINISH: N/A

UNIT OF MEASURE: EA

OVERHEAD DOOR, DALLAS, TEXAS

MATERIAL: N/A

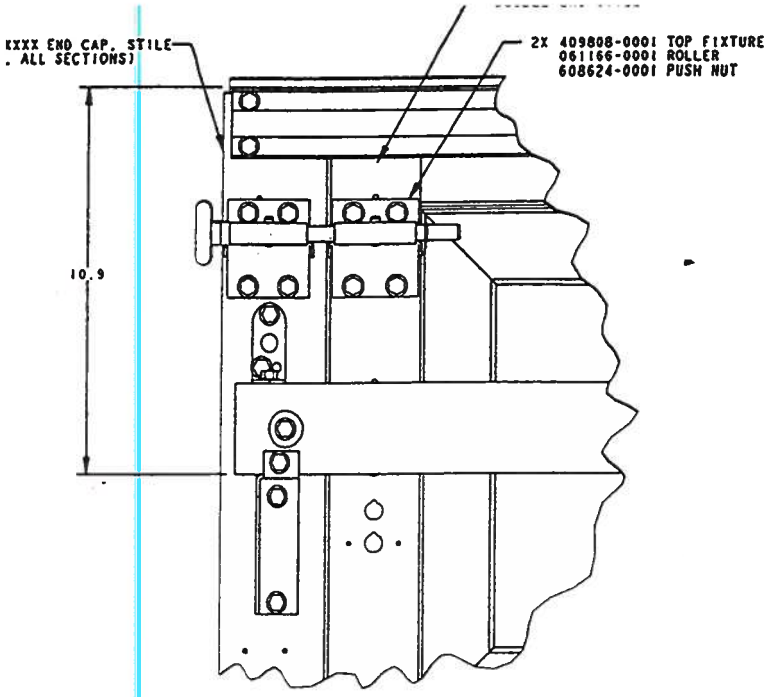
| | NAME | DATE |
|---|---|---|
| DRAWN BY: | RX HOOFARD | 24 Sept 01 |
| CHECKED BY: | | 10/08/01 |
| APPROVED BY: | | 10/08/01 |

DRAWING TITLE: RESI PAN STL DOOR. 31/46.5 PSF. 18" MAX

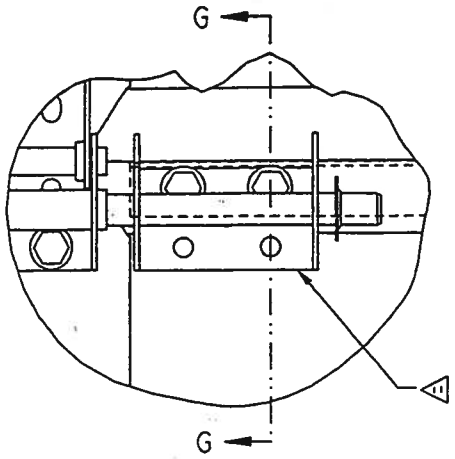
DRAWING NUMBER: D-409888

SCALE: 1/2 SHEET 4 OF 4

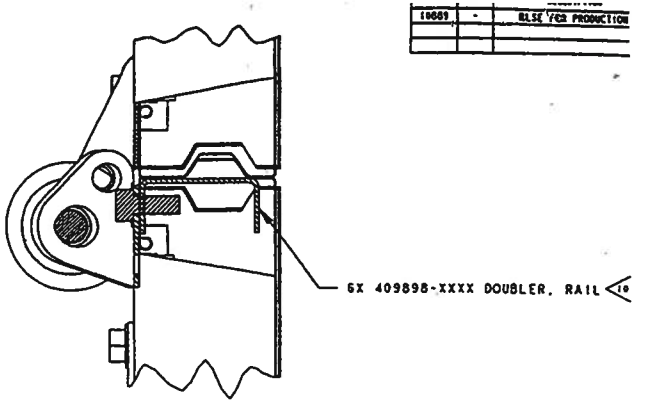
| | | |
|---|---|---|
| 10689 | - | RLSE FOR PRODUCTION |
| | | |
| | | |




DETAIL B
SCALE 1/2 ZN C7.1
TYPICAL BOTH SIDES

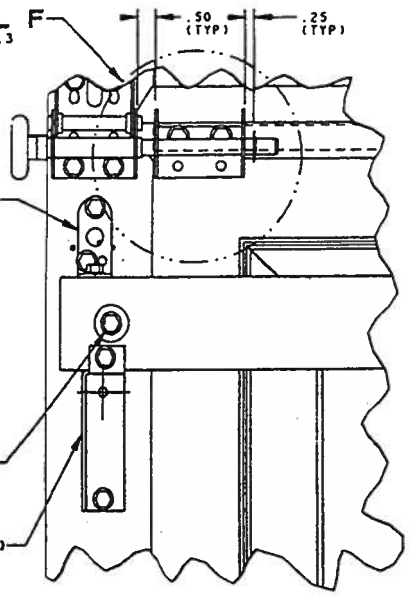


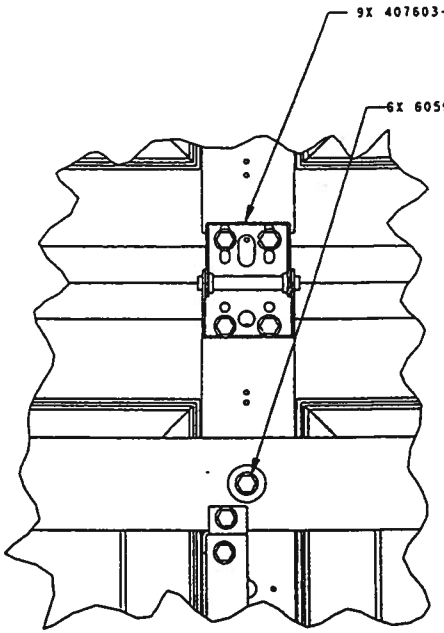

DETAIL F
SCALE 1/1 ZN B7.3



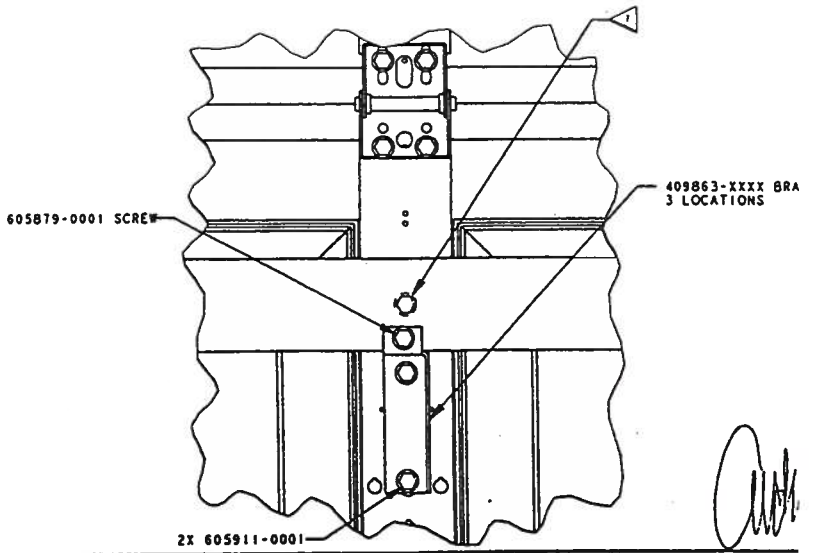

SECTION G-G

DETAIL F
ZN C4.3




DETAIL C
TYPICAL CHANNEL INSTALLATION
SCALE 1/2 ZN C7.1






| REF DWG | USED ON |
|---|---|
| | |
| | |
| | |
| | |
| | |

TOLERANCES UNLESS OTHERWISE SPECIFIED

| | |
|---|---|
| WHOLE NUMBERS: | ± .25 |
| .X | ± .1 |
| .XX | ± .03 |
| .XXX | ± .010 |
| ANGLES: | ± 1° |
| HOLES: | ± |

FINISH: N/A

UNIT OF MEASURE: EA

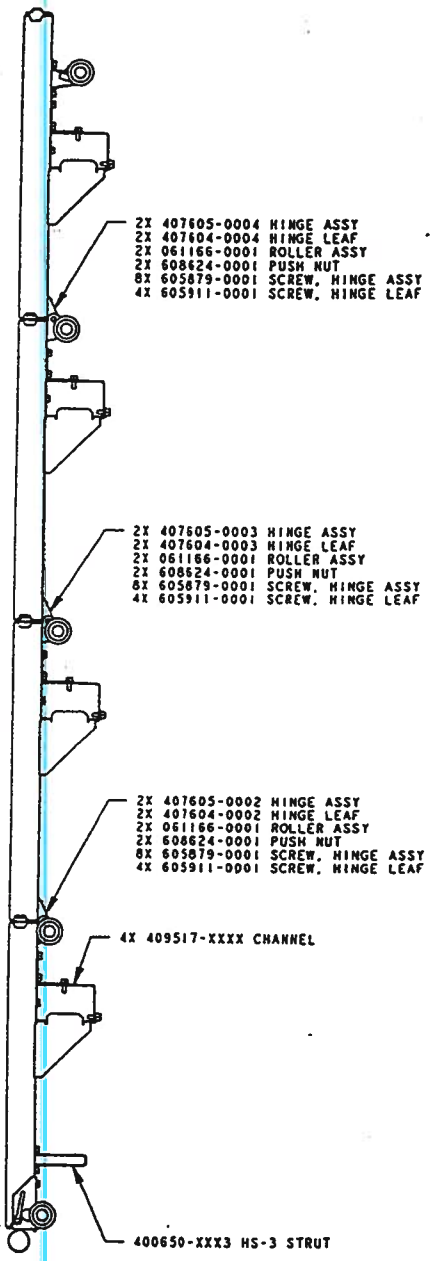
OVERHEAD DOOR — DALLAS, TEXAS

MATERIAL: N/A

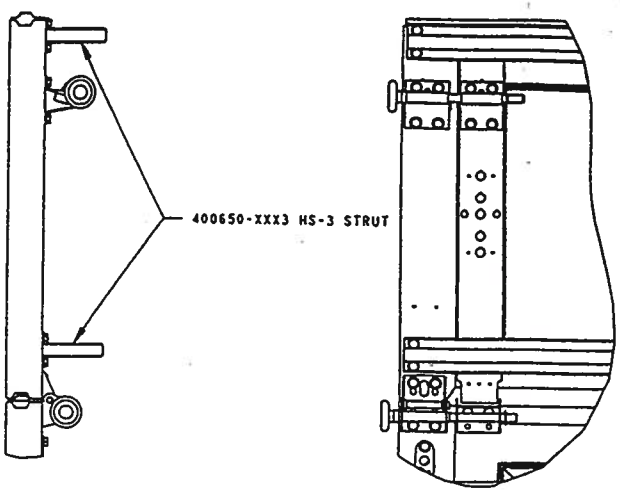
| | NAME | DATE |
|---|---|---|
| DRAWN BY: | RK HOOFARD | 24 Sept 01 |
| CHECKED BY: | | 10/08/01 |
| APPROVED BY: | | 10/08/01 |

DRAWING TYPE: RES
DRAWING NUMBER: 31/4
SCALE:

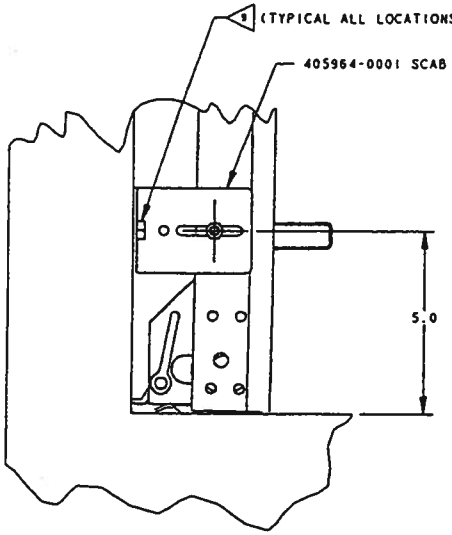
| ID | REV | DESCRIPTION |
|---|---|---|
| 10889 | - | RLSE FOR PRODU |
| | | |
| | | |



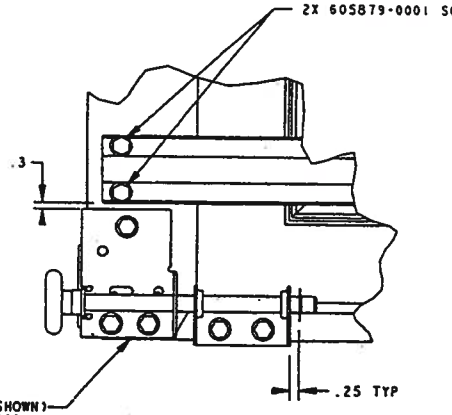

**VIEW A-A**
(DOOR ASSY REMOVED FOR CLARITY)
SCALE: 1/5 ZN A6.1




**WINDOW BRACING DETAIL**
SCALE 1/4




**DETAIL E**
TYPICAL BOTH SIDES
SCALE 1/2 ZN A7.1




405771-0001 BOTTOM FIXTURE, LH (SHOWN)
405771-0002 BOTTOM FIXTURE, RH (OPP)
6X 605879-0001 SCREW, BOTTOM FIXTURE
2X 061166-0001 ROLLER ASSY
2X 407532-1001 HINGE LEAF, BOTTOM
4X 605911-0001 SCREW, HINGE LEAF, BOTTOM
2X 608624-0001 PUSH NUT

**DETAIL D**
SCALE 1/2 ZN A6.1



| REF DRG | USED ON |
|---|---|
| | |
| | |
| | |
| | |
| | |
| | |

| TOLERANCES UNLESS OTHERWISE SPECIFIED | |
|---|---|
| WHOLE NUMBERS: | ± .25 |
| .X | ± .1 |
| .XX | ± .03 |
| .XXX | ± .010 |
| ANGLES: | ± 1° |
| HOLES: | ± |

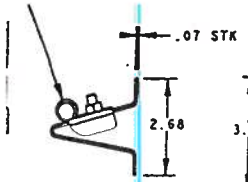
FINISH: N/A
UNIT OF MEASURE: EA
MATERIAL: N/A

OVERHEAD DOOR designed to go DALLAS, TEXAS

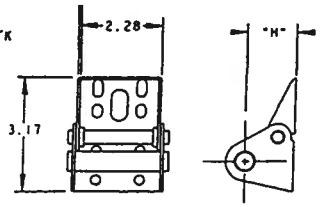
| | NAME | DATE |
|---|---|---|
| DRAWN BY: | RK HOOFARD | 24 Sept 01 |
| CHECKED BY: | | 10/08/01 |
| APPROVED BY: | | 10/8/01 |

DRAWING No.: RE 31
SCALE:

| | | |
|---|---|---|
| 10836 | - | RLSE FOR PRE-PRODUCTION |
| 10869 | A | RLSE FOR PRODUCTION |

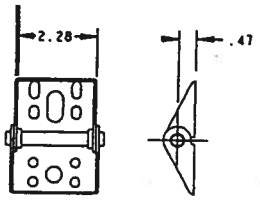



L TOP FIXTURE

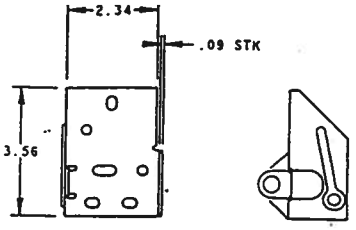



407605-XXXX END HINGE

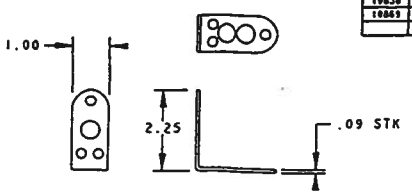
| P/N | "H" |
|---|---|
| 407605-0002 | .85 |
| 407605-0003 | 1.10 |
| 407605-0004 | 1.35 |
| 407605-0005 | 1.60 |



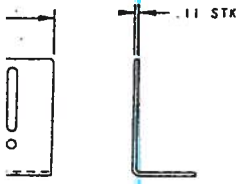

407603-0001 CTR HINGE




405771-XXXX BOTTOM FIXTURE

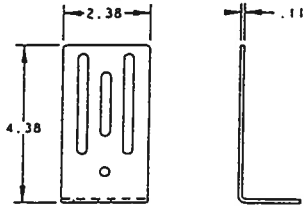



405742-0001 BRKT. ROLLER SHAFT

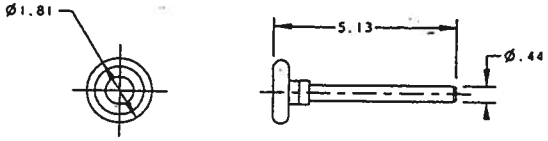



003 JAMB BRACKET
001 SCAB BRACKET

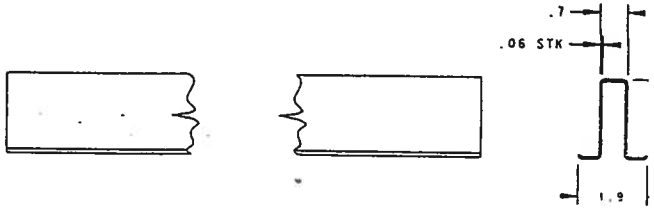
| P/N | "L" |
|---|---|
| 450-0003 | 4.00 |
| 964-0001 | 3.25 |



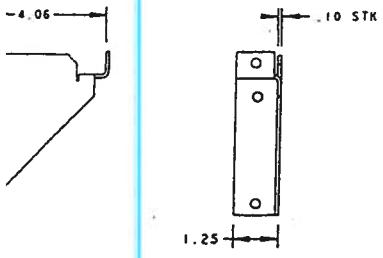

405964-0002 SCAB BRACKET



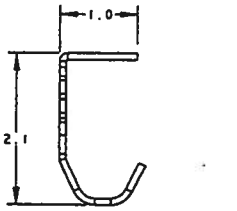

061166-0002 ROLLER ASSEMBLY, TR-3




400650-XXX2 STRUT, HS-2

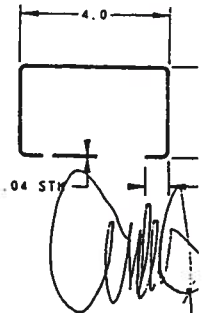



3-XXXX CHANNEL, SUPPORT




407743-XXX1
2" TRACK DETAIL
SCALE 1/1

409517-XXXX CHANNEL <12






| REF DWG | USED ON |
|---|---|
| | |

TOLERANCES UNLESS OTHERWISE SPECIFIED
WHOLE NUMBERS: ± .25
.X ± .1
.XX ± .03
.XXX ± .010
ANGLES: ± 1°
HOLES: ±

FINISH: N/A
UNIT OF MEASURE: EA
MATERIAL: N/A

| | NAME | DATE |
|---|---|---|
| DRAWN BY: | RK HOOFARD | 30 July 01 |
| CHECKED BY: | N WOMACK | 7/30/01 |
| APPROVED BY: | RK HOOFARD | 7/30/01 |

DRAWING TITLE: RESI PAN STL 0
22/33 PSF, 16'
DRAWING NUMBER: D-40988
SCALE: 1/2

7 6 5 4 3 2 1

| | | DESCRIPTION | DATE |
|---|---|---|---|
| 10838 | - | RLSE FOR PRE-PRODUCTION | 7/30/01 |
| 10869 | A | RLSE FOR PRODUCTION | 9/07/01 |
| | | | |

400650-XXX2 HS-2 STRUT

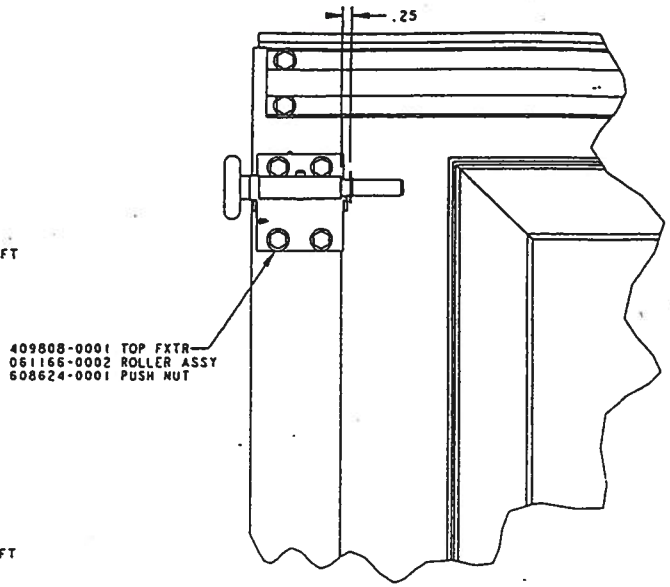
2X 407605-0004 HINGE ASSY
2X 405742-0001 BRKT, RLR SHAFT
2X 061166-0002 ROLLER ASSY
2X 608624-0001 PUSH NUT

2X 407605-0003 HINGE ASSY
2X 405742-0001 BRKT, RLR SHAFT
2X 061166-0002 ROLLER ASSY
2X 608624-0001 PUSH NUT

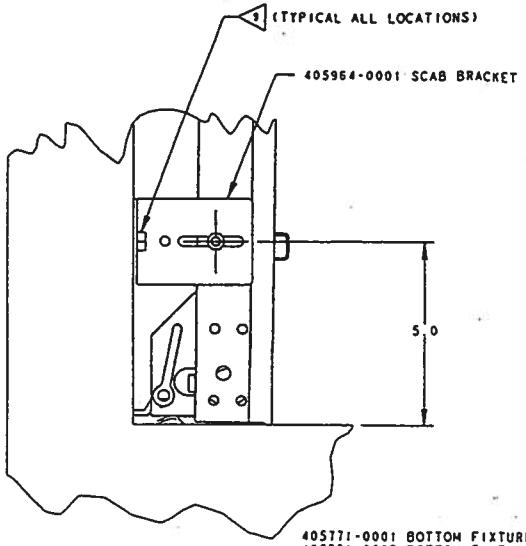
2X 407605-0002 HINGE ASSY
2X 405742-0001 BRKT, RLR SHAFT
2X 061166-0002 ROLLER ASSY
2X 608624-0001 PUSH NUT

3X 409517-XXXX CHANNEL

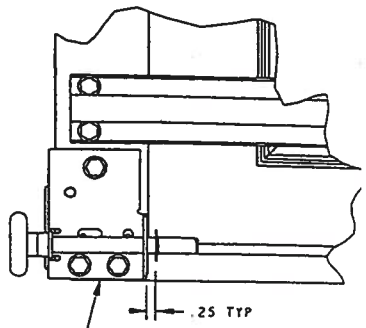
400650-XXX2 HS-2 STRUT



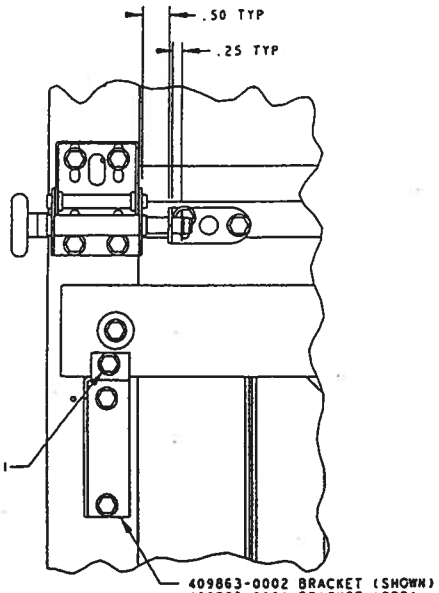

DETAIL B
SCALE 1/2 ZN C7.1
TYPICAL BOTH SIDES

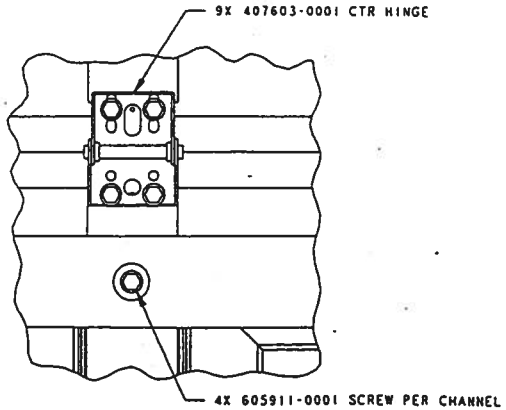



DETAIL E
SCALE 1/2 ZN A7.1
TYPICAL BOTH SIDES



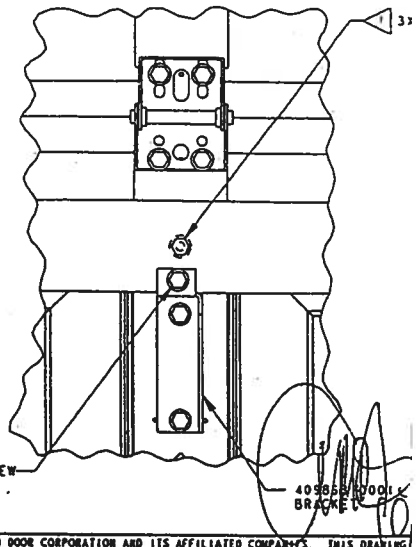

DETAIL D
SCALE 1/2 ZN A6.1




DETAIL C
SCALE 1/2 ZN C7.1

TYPICAL CHANNEL INSTALLATION




A
OR CLARITY)
A6.1



| REF DWG | USED ON |
|---|---|
| | |

TOLERANCES UNLESS OTHERWISE SPECIFIED:
WHOLE NUMBERS: ± .25
.X ± .1
.XX ± .03
.XXX ± .010
ANGLES: ± 1°
HOLES: ±

FINISH: N/A
UNIT OF MEASURE: EA
MATERIAL: N/A

OVERHEAD DOOR — DALLAS, TEXAS

| | NAME | DATE |
|---|---|---|
| DRAWN BY: | RK HOOFARD | 30 July 01 |
| CHECKED BY: | N WONACK | 7/30/01 |
| APPROVED BY: | RK HOOFARD | 7/30/01 |

DRAWING TITLE: RESI PAN STL DOOR, 22/33 PSF, 16' MAX
DRAWING NUMBER: D-409884
SCALE: NOTED SHEET 2 OF

7 6 5 4 3 2 1

| | | |
|---|---|---|
| 10838 | - | RLSE FOR PRE-PRODUCTION |
| 10869 | A | RLSE FOR PRODUCTION |
| | | |

IN ACCORDANCE WITH DRAWING 409783.

ECTION 7' TALL DOOR SHOWN. 8' DOORS HAVE 5 SECTIONS.
W HEIGHTS OF 20.88, 19.00 AND 16.75 ARE AVAILABLE AND
USED IN COMBINATION TO ACHIEVE VARIOUS DOOR HEIGHTS.

IENT PATTERN OF 14.5 X 20.4 SHOWN. ALTERNATE PATTERNS
X 43.4 AND 12.5 X 20.4 MAY BE USED.

TE/REVOLUTION COUNTERBALANCE SHOWN. TORSION AND
ON COUNTERBALANCE SYSTEMS AVAILABLE. 405964-0002
D AT TRACK INTERFACE ON TORSION AND EXTENSION SYSTEMS.

S BRACKET 405964-0002 ON 8' HIGH DOORS ONLY.

409517 CHANNELS AS SHOWN. VERTICAL PLACEMENT CAN
US/MINUS 3 INCHES.

MIDDLE CENTER STILE THERE IS NO TOOL CLEARANCE HOLE
UPPER 605911-0001 SCREW. INSTALL FROM BELOW.

911-0001 AB POINT SCREWS FOR ALL COMPONENT INSTALLATION
OTHERWISE NOTED.

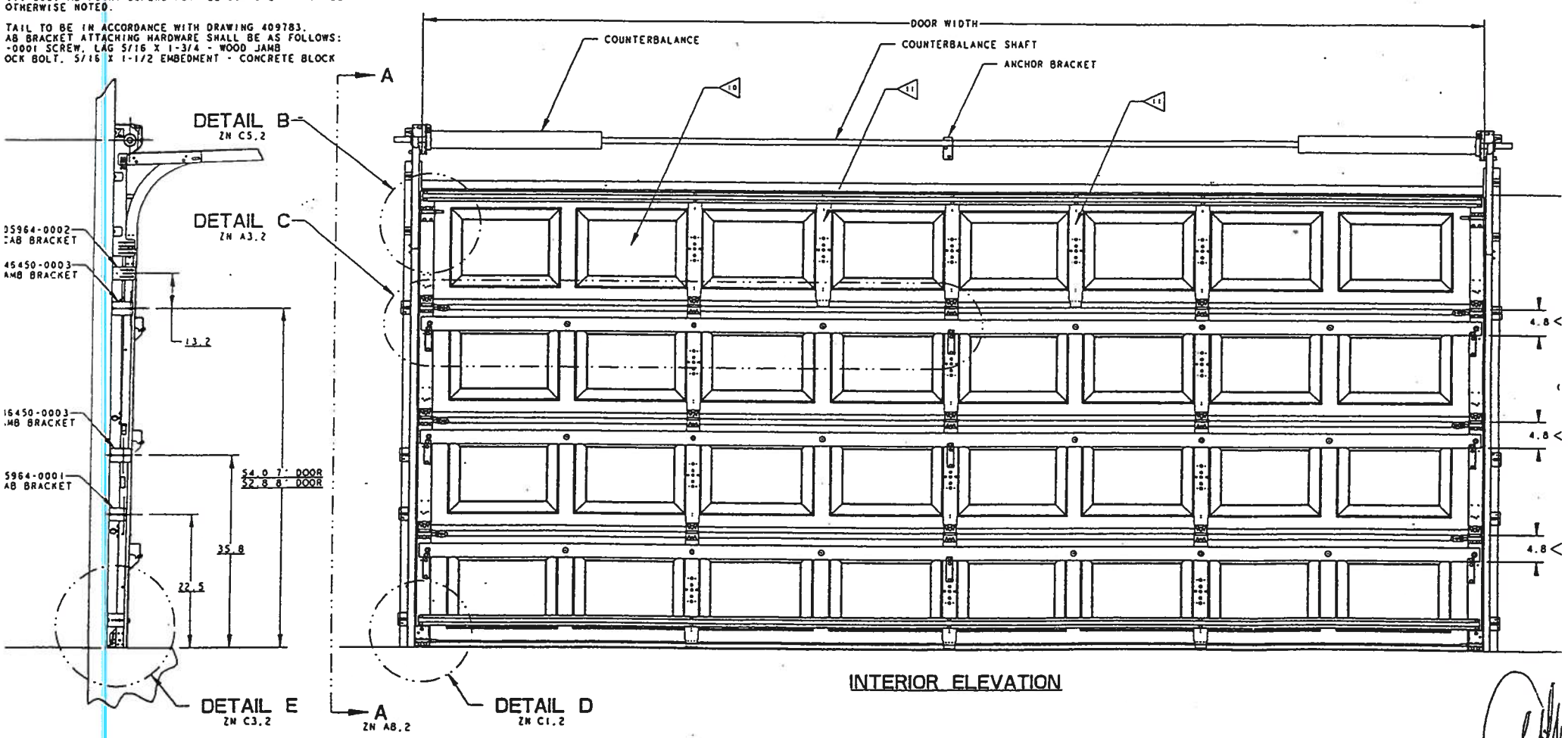
TAIL TO BE IN ACCORDANCE WITH DRAWING 409783.
AB BRACKET ATTACHING HARDWARE SHALL BE AS FOLLOWS:
-0001 SCREW, LAG 5/16 X 1-3/4 - WOOD JAMB
OCK BOLT, 5/16 X 1-1/2 EMBEDMENT - CONCRETE BLOCK

10 WINDOW INSTALLATION ALLOWED. WINDOWS MUST BE INSTALLED IN TOP SECTION.

11 EXTRA CENTER STILES ARE NOT REQUIRED ON DOORS WITHOUT A WINDOW SECTION.

12 USE 18 GAUGE CHANNEL.

| OHD/GENIE DOOR EQUIVALENCY CHART | | |
|---|---|---|
| OHD DOOR SERIES No. | GENIE DOOR SERIES No. | PAN STEEL THICKI |
| SERIES 188 | SERIES GDS300 | 24 GA |
| SERIES 189 | SERIES GDS30R | 24 GA |
| SERIES 281 | SERIES GDS200 | 25 GA |
| SERIES 288 | SERIES GDS500 | 25 GA |




INTERIOR ELEVATION

STD TRACK DETAIL
FOR 16' WIDE DOOR

| DOOR WIDTH | CENTER STILE | END STILE | RLR SHAFT BRACKET | STRUTS/SECT | ROLLER | VERT TRK GA | JAMB LOAD (#/FT-HT) |
|---|---|---|---|---|---|---|---|
| 16' | 3 | SINGLE | YES | 4" x 2.5" CH HS-2 | STL 2"x7/16" | .049" | 176 |

REF DWG | RESIDENTIAL USED ON



TOLERANCES UNLESS OTHERWISE SPECIFIED:
WHOLE NUMBERS: ± .25
.X ± .1
.XX ± .03
.XXX ± .010
ANGLES: ± 1°
HOLES: ±

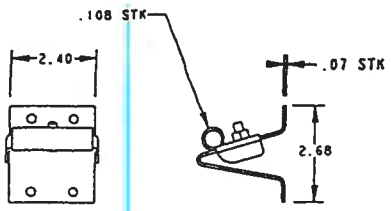
FINISH: N/A
UNIT OF MEASURE: EA
MATERIAL: N/A

DRAWN BY: RK HOOFARD — DATE: 30 July 01
CHECKED BY: M WOMACK — 7/30/01
APPROVED BY: RK HOOFARD — 7/30/01

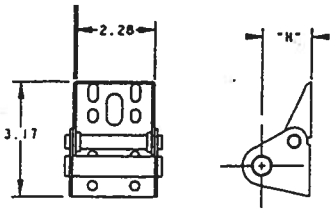
DRAWING TITLE: RESI PAN S 22/33 PSF.
DRAWING NUMBER: D-40
SCALE: 1/10

7 6 5 4 3 2 1

| | | |
|---|---|---|
| 14038 | - | RLSE FOR PRE-PROD |
| 16859 | A | RLSE FOR PRODUC |
| | | |

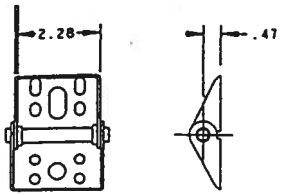



409808-0001 TOP FIXTURE

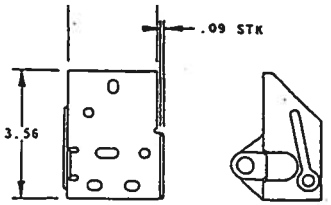



407605-XXXX END HINGE

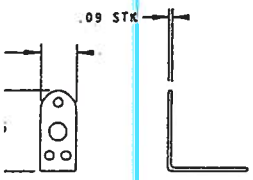
| P/N | "H" |
|---|---|
| 407605-0002 | .85 |
| 407605-0003 | 1.10 |
| 407605-0004 | 1.35 |
| 407605-0005 | 1.60 |



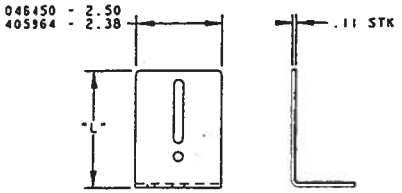

407603-0001 CTR HINGE




405771-XXXX BOTTOM FIXTURE

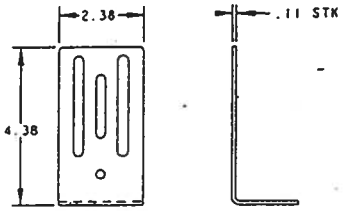



'42-0001 BRKT, RLR SHAFT

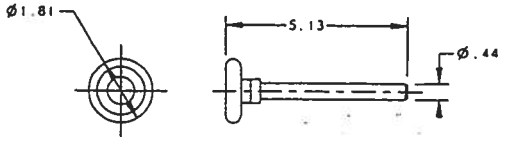



046450-0003 JAMB BRACKET
405964-0001 SCAB BRACKET

| P/N | "L" |
|---|---|
| 046450-0003 | 4.00 |
| 405964-0001 | 3.25 |

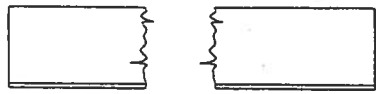



405964-0002 SCAB BRACKET




061166-0002 ROLLER ASSEMBLY, TR-3

03 ST

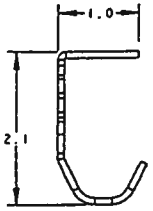


400650-XXX1 STRUT, HS-1

.7

.06 STK

400650-XXX2 STRUT, HS-2




407743-XXX1
2" TRACK DETAIL
SCALE 1/1



| REF DWG | USED ON |
|---|---|
| | |

TOLERANCES UNLESS OTHERWISE SPECIFIED

| | |
|---|---|
| WHOLE NUMBERS: | ± .25 |
| .X | ± .1 |
| .XX | ± .03 |
| .XXX | ± .010 |
| ANGLES: | ± 1° |
| HOLES: | ± |

FINISH: N/A

UNIT OF MEASURE: EA

OVERHEAD DOOR, DALLAS, TEXAS

MATERIAL: N/A

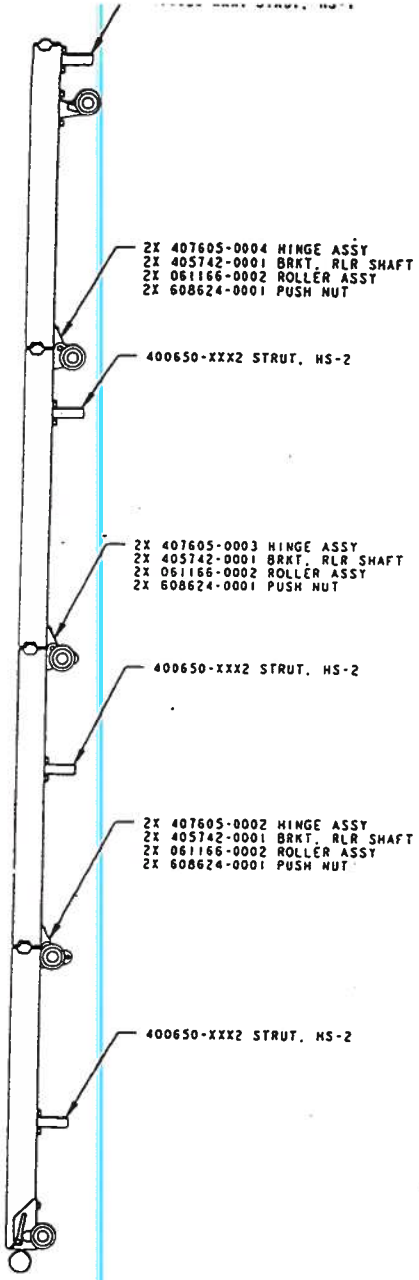
| | NAME | DATE |
|---|---|---|
| DRAWN BY: | RK HOOFARD | 30 July 01 |
| CHECKED BY: | N WONACK | 7/30/01 |
| APPROVED BY: | RK HOOFARD | 7/30/01 |

DRAWING NUMBER

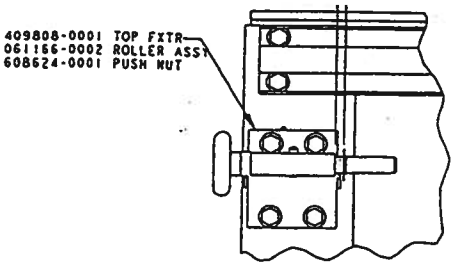
SCALE:

8 | 7 | 6 | 5 | 4 | 3 | 2

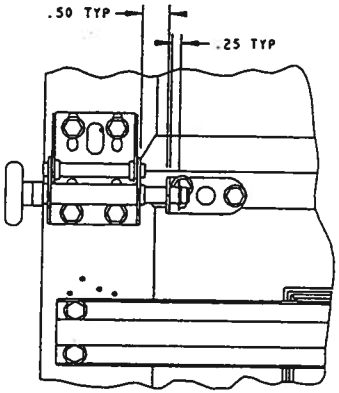
| | | |
|---|---|---|
| 10838 | - | RLSE FOR PRE-PRODUCTION |
| 10869 | A | RLSE FOR PRODUCTION |



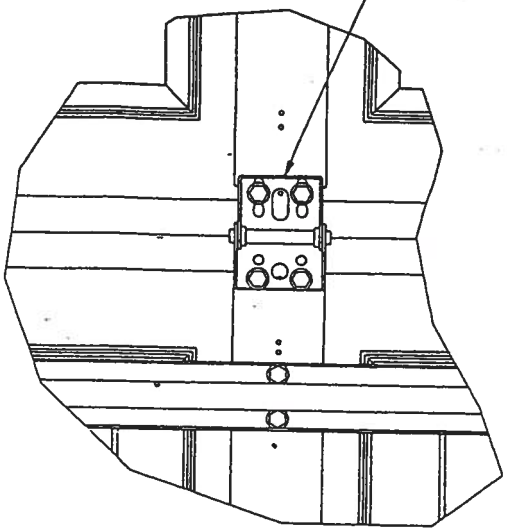

VIEW A-A
(REMOVED FOR CLARITY)
SCALE: 1/5 ZN A4.1



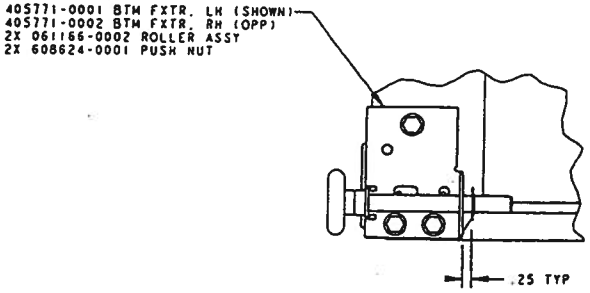

DETAIL B
SCALE 1/2 ZN C5.1
TYPICAL BOTH SIDES




DETAIL C
SCALE 1/2 ZN C5.1




DETAIL E
SCALE 1/2 C2.1




DETAIL D
SCALE 1/2 ZN A4.1



| REF DWG | USED ON |
|---|---|
| | |

| TOLERANCES UNLESS OTHERWISE SPECIFIED | |
|---|---|
| WHOLE NUMBERS: | ± .25 |
| .X | ± .1 |
| .XX | ± .03 |
| .XXX | ± .010 |
| ANGLES: | ± 1° |
| HOLES: | ± |

| FINISH | MATERIAL |
|---|---|
| N/A | N/A |
| UNIT OF MEASURE: EA | |

OVERHEAD DOOR DALLAS, TEXAS

| | NAME | DATE |
|---|---|---|
| DRAWN BY: | RK HOOFARD | 30 July 01 |
| CHECKED BY: | M WOMACK | 7/30/01 |
| APPROVED BY: | RK HOOFARD | 7/30/01 |

DRAWING TITLE: RESI PAN 22/33 PS
DRAWING NUMBER: D-40
SCALE: NOTED

8 7 6 5 4 3 2 1

1. TESTED IN ACCORDANCE WITH DASMA 108.

2. FOUR SECTION 7' TALL DOOR SHOWN. 8' DOORS HAVE 5 SECTIONS. SECTION HEIGHTS OF 20.88, 19.00 AND 16.75 ARE AVAILABLE AND MAY BE USED IN COMBINATION TO ACHIEVE VARIOUS DOOR HEIGHTS.

3. EMBOSSMENT PATTERN OF 14.5 X 20.4 SHOWN. ALTERNATE PATTERNS OF 12.5 X 43.4 AND 12.5 X 20.4 MAY BE USED.

4. ARMORTITE/REVOLUTION COUNTERBALANCE SHOWN. TORSION AND EXTENSION COUNTERBALANCE SYSTEMS AVAILABLE. 405964-0002 REQUIRED AT TRACK INTERFACE ON TORSION AND EXTENSION SYSTEMS.

5. USE THIS BRACKET 405964-0002 ON 8' HIGH DOORS ONLY.

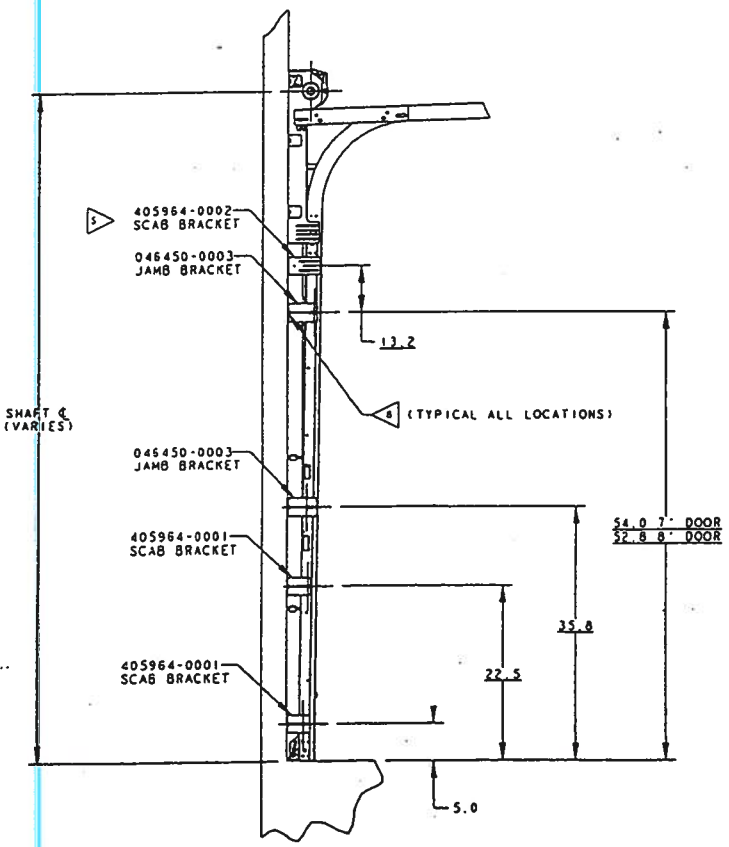
6. LOCATE 400650 STRUTS AS SHOWN. VERTICAL PLACEMENT CAN VARY PLUS/MINUS 3 INCHES.

7. USE 605911-0001 A8 POINT SCREWS FOR ALL COMPONENT INSTALLATION UNLESS OTHERWISE NOTED.

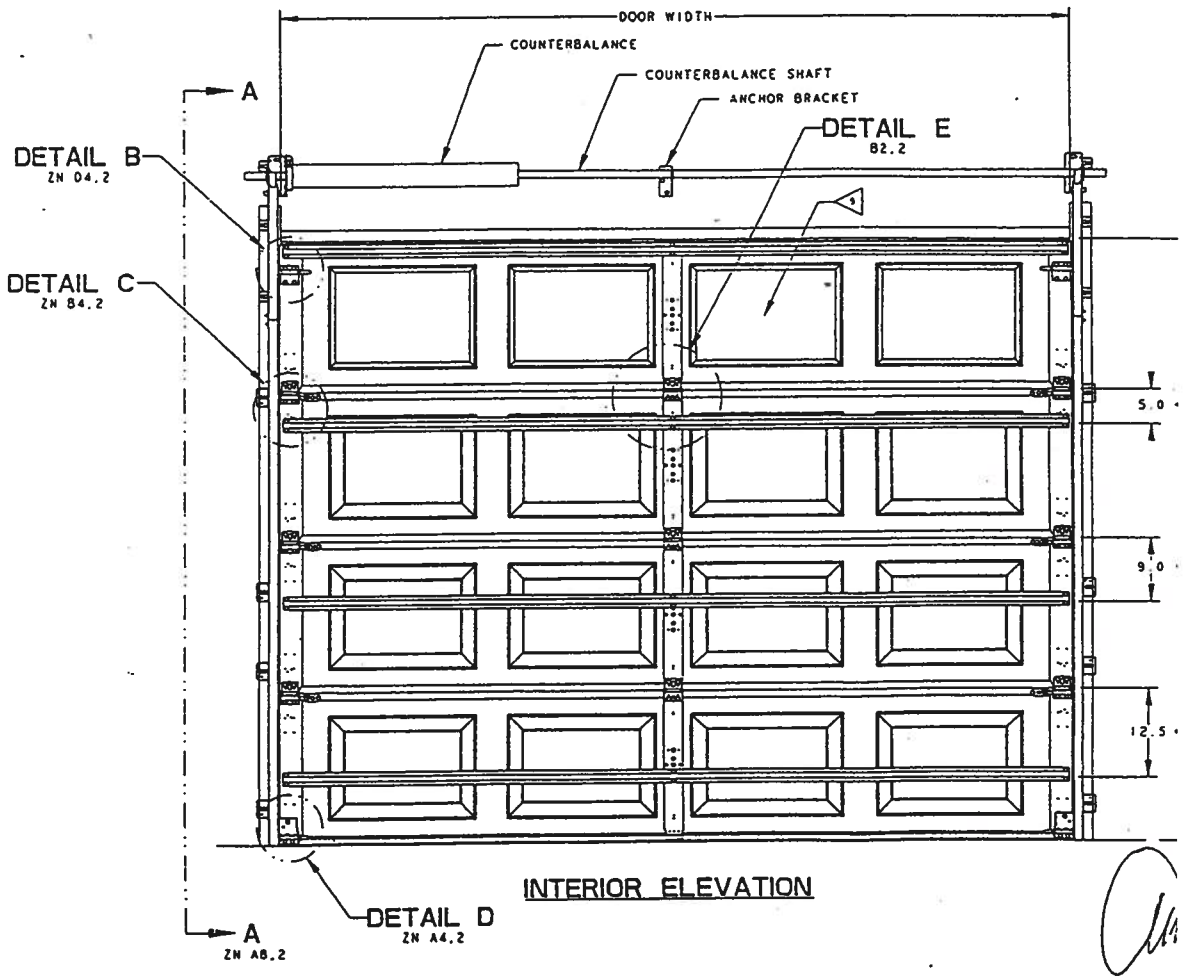
8. JAMB DETAIL TO BE IN ACCORDANCE WITH DRAWING 409783. JAMB/SCAB BRACKET ATTACHING HARDWARE SHALL BE AS FOLLOWS: 605574-0001 SCREW, LAG 5/16 X 1-3/4 - WOOD JAMB RAWL LOCK BOLT, 5/16 X 1-1/2 EMBEDMENT - CONCRETE BLOCK

9. WINDOW INSTALLATION ALLOWED. WINDOWS MUST BE INSTALLED IN TOP SECTION.

| OHD/GENIE DOOR EQUIVALENCY CHART | | |
|---|---|---|
| OHD DOOR SERIES No. | GENIE DOOR SERIES No. | PAN ST |
| SERIES 188 | SERIES GDS300 | |
| SERIES 189 | SERIES GDS30R | |
| SERIES 281 | SERIES GDS200 | |
| SERIES 288 | SERIES GDS500 | |




## STD TRACK DETAIL FOR 9' WIDE DOOR




## INTERIOR ELEVATION

| DOOR WIDTH | CENTER STILE | END STILE | RLR SHAFT BRACKET | STRUTS/SECT | ROLLER | VERT TRK GA | JAMB LOAD (#/FT-HT) |
|---|---|---|---|---|---|---|---|
| 9' | 1 | SINGLE | YES | HS-1 HS-2 | STL 2"X7/16" | .049" | 99 |

REF DWG: RESIDENTIAL — USED ON



TOLERANCES UNLESS OTHERWISE SPECIFIED:
WHOLE NUMBERS: ± .25
.X ± .1
.XX ± .03
.XXX ± .010
ANGLES: ± 1°
HOLES: ±

FINISH: N/A
UNIT OF MEASURE: EA
MATERIAL: N/A
OVERHEAD DOOR corporation DALLAS, TEXAS

DRAWN BY: RK HOOFARD — DATE: 30 July 01
CHECKED BY: M WOMACK — 7/30/01
APPROVED BY: RK HOOFARD — 7/30/01

8 7 6 5 4 3 2

| ECN | REV | DESCRIPTION |
|---|---|---|
| 10889 | - | RELEASE FOR PRODUCTION |
| | | |
| | | |

ESTED IN ACCORDANCE WITH DASMA 108.

OUR SECTION 7' TALL DOOR SHOWN. 8' DOORS HAVE 5 SECTIONS. CTION HEIGHTS OF 20.88, 19.00 AND 16.75 ARE AVAILABLE AND LY BE USED IN COMBINATION TO ACHIEVE VARIOUS DOOR HEIGHTS.

IBOSSMENT PATTERN OF 14.5 X 20.4 SHOWN. ALTERNATE PATTERNS 12.5 X 43.4 AND 12.5 X 20.4 MAY BE USED.

MORTITE/REVOLUTION COUNTERBALANCE SHOWN. TORSION AND TENSION COUNTERBALANCE SYSTEMS AVAILABLE. 405964-0002 QUIRED AT TRACK INTERFACE ON TORSION AND EXTENSION SYSTEMS.

E THIS BRACKET 405964-0002 ON 8' HIGH DOORS ONLY.

CATE 409517 CHANNEL AS SHOWN. VERTICAL PLACEMENT M VARY PLUS/MINUS 3 INCHES.

THE MIDDLE CENTER STILE THERE IS NO TOOL CLEARANCE HOLE R THE UPPER 605911-0001 SCREW. INSTALL FROM BELOW.

E 605911-0001 AB POINT SCREWS FOR ALL COMPONENT INSTALLATION LESS OTHERWISE NOTED.

MB DETAIL TO BE IN ACCORDANCE WITH DRAWING 409783.
MB/SCAB BRACKET ATTACHING HARDWARE SHALL BE AS FOLLOWS:
05574-0001 SCREW, LAG 5/16 X 1-3/4 - WOOD JAMB
AWL LOCK BOLT, 5/16 X 1-1/2 EMBEDMENT - CONCRETE BLOCK

10 409898-XXXX RAIL DOUBLER TO BE LOCATED AT THE FACTORY: BOTTOM AND INTERMEDIATE SECTIONS ONLY.

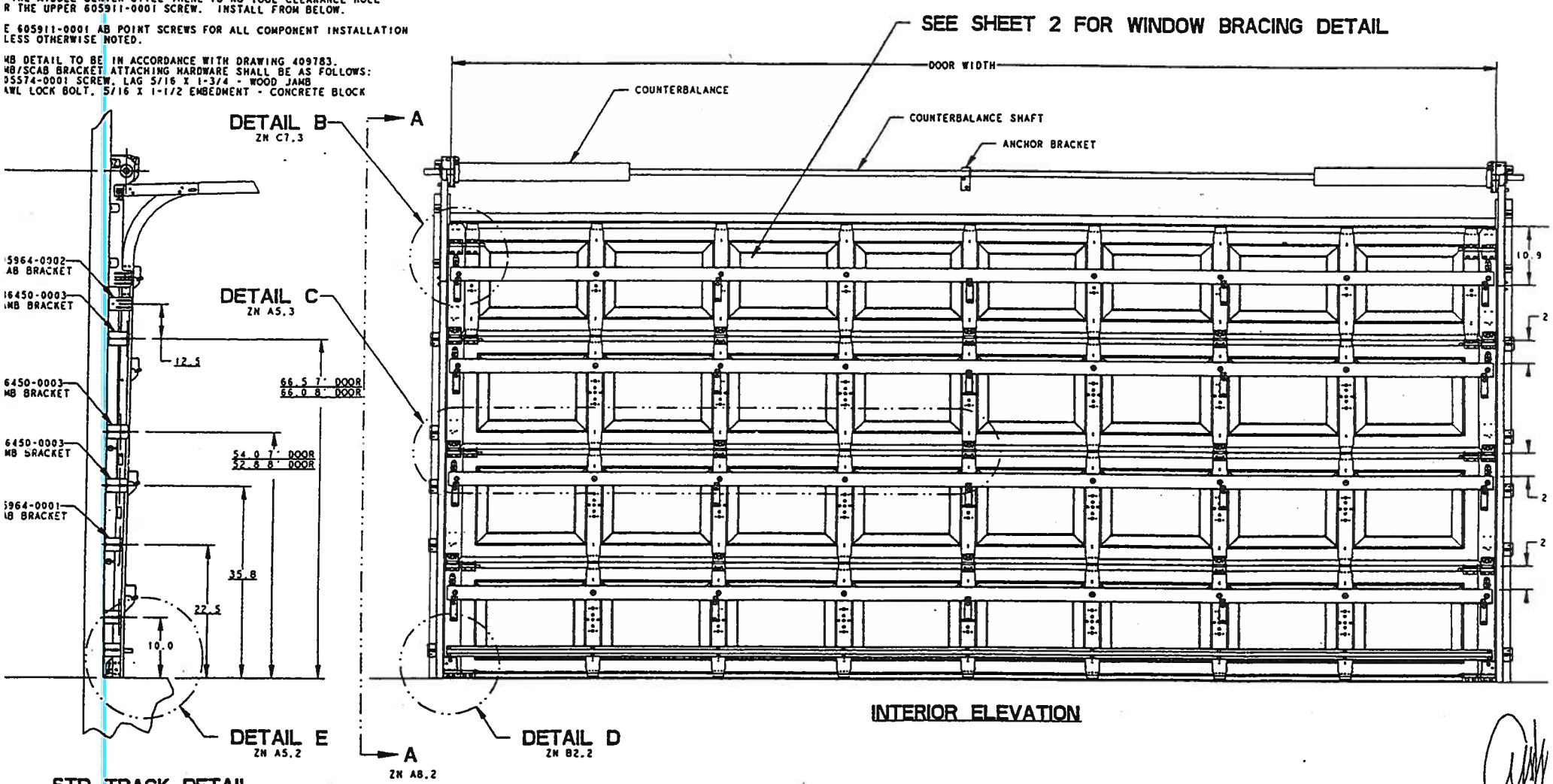
11 INSTALL 407604-XXXX HINGE LEAF USING 605879-0001 SELF DRILLING FASTENER. ENSURE 409898-XXXX RAIL IS FLAT AGAINST INSIDE OF RAIL SURFACE PRIOR TO FASTENING.

12 USE 16 GA CHANNEL

13 408794 END CAP TO BE FACTORY INSTALLED.

| OHD/GENIE DOOR EQUIVALENCY CHART | | |
|---|---|---|
| OHD DOOR SERIES No. | GENIE DOOR SERIES No. | PAN STEEL TH |
| SERIES 188 | SERIES GDS300 | 24 GA |
| SERIES 189 | SERIES GDS30R | 24 GA |
| SERIES 281 | SERIES GDS200 | 25 GA |
| SERIES 288 | SERIES GDS500 | 25 GA |

SEE SHEET 2 FOR WINDOW BRACING DETAIL




INTERIOR ELEVATION

STD TRACK DETAIL
FOR 18' WIDE DOOR

| DOOR WIDTH | CENTER STILE | END STILE | RLR SHAFT BRACKET | STRUTS/SECT | ROLLER | VERT TRK GA | JAMB LOAD (#/FT-HT) |
|---|---|---|---|---|---|---|---|
| 18' | 7 | SGL W/CAP DBL-T SECT | YES | 4" X 2.5" CH HS-3 | STL 2"X7/16" | .068" | 279 |



RESIDENTIAL
REF DWG | USED ON

TOLERANCES UNLESS OTHERWISE SPECIFIED
WHOLE NUMBERS: ± .25
.X ± .1
.XX ± .03
.XXX ± .010
ANGLES: ± 1°
HOLES: ±

FINISH: N/A
UNIT OF MEASURE: EA
MATERIAL: N/A

OVERHEAD DOOR — DALLAS, TEXAS

DRAWN BY: RK HOOFARD — 24 Sept 01
CHECKED BY: 10/08/01
APPROVED BY: 10/08/01

DRAWING TITLE: RESI P 31/46.5
DRAWING NUMBER: D-
SCALE: 1

TAMKO ROOFING PRODUCTS

January 31, 2002

**TO: OUR FLORIDA CUSTOMERS:**

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

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

All testing was performed by Florida State certified independent labs.

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

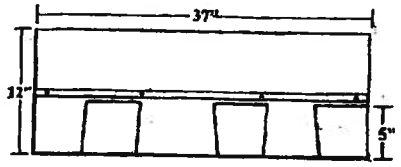
TAMKO Roofing Products, Inc.

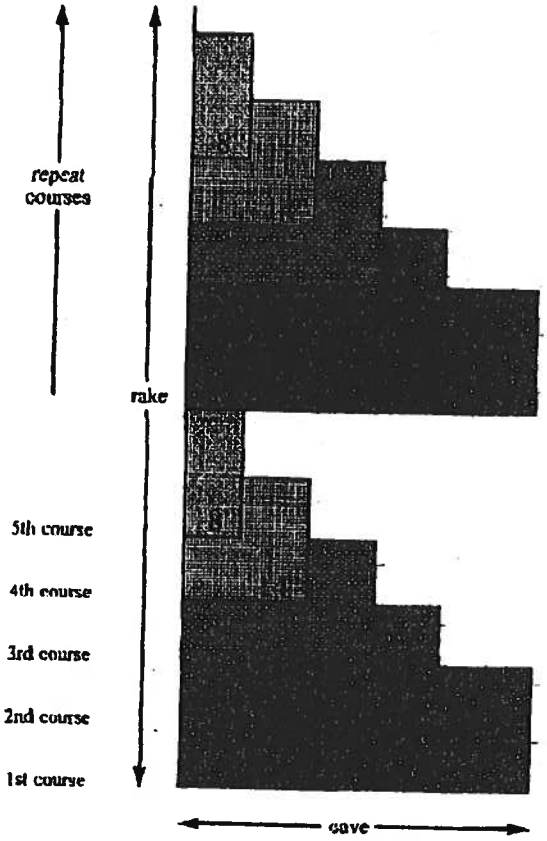
2300 35th STREET P.O. BOX 2149 TUSCALOOSA, AL 35403-2149 205-752-3555 FAX 205-349-2049

TAMKO ROOFING PRODUCTS

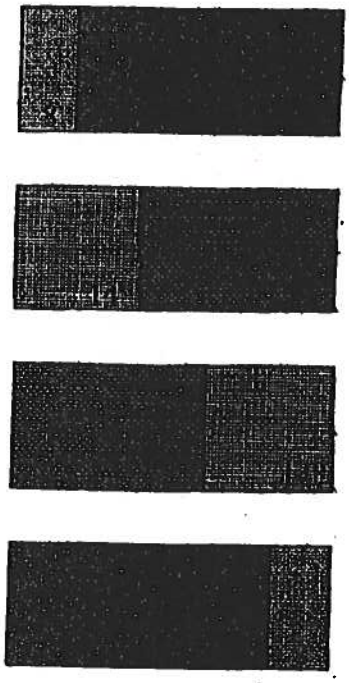
# Application Instructions For Heritage® 25 Series Shingles

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




The 4 cuts in the first 10 courses:



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

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

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

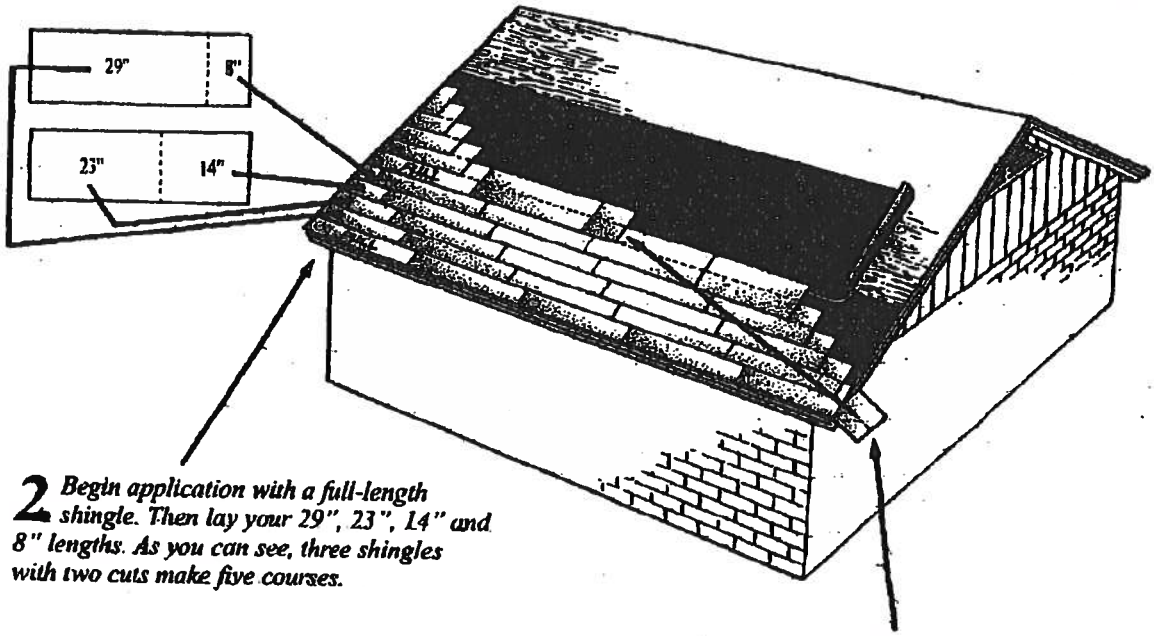
**NOTE:** These application instructions apply only to Heritage 25 and Heritage 25 AR shingles.

TAMKO ROOFING PRODUCTS

# Application Instructions For Heritage® 25 Series Shingles

With two simple cuts, you can create five courses out of three Heritage shingles with no waste. Fewer cuts mean labor savings and faster application. The TAMKO method also eliminates unsightly zipper patterns. And because you can work any piece over 8" long back into the field of roofing, you'll save money on materials. For the best-looking roof with the least waste, rely on TAMKO and the Heritage Series.

**1.** *Cut your first shingle to make a 29" and an 8" length. Cut a second shingle to make a 23" and a 14" length.*




**2** *Begin application with a full-length shingle. Then lay your 29", 23", 14" and 8" lengths. As you can see, three shingles with two cuts make five courses.*

**3.** *Continue working your way across the roof. When you make your final cut at the roof's edge, flip any pieces that are 8" or longer back onto the roof. These pieces can be worked in anywhere without creating zippers or color variations.*

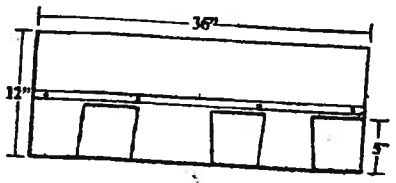
**NOTE: Do not align joints of shingle courses when working in cut pieces. Joints should be no closer than 4" from one another.**

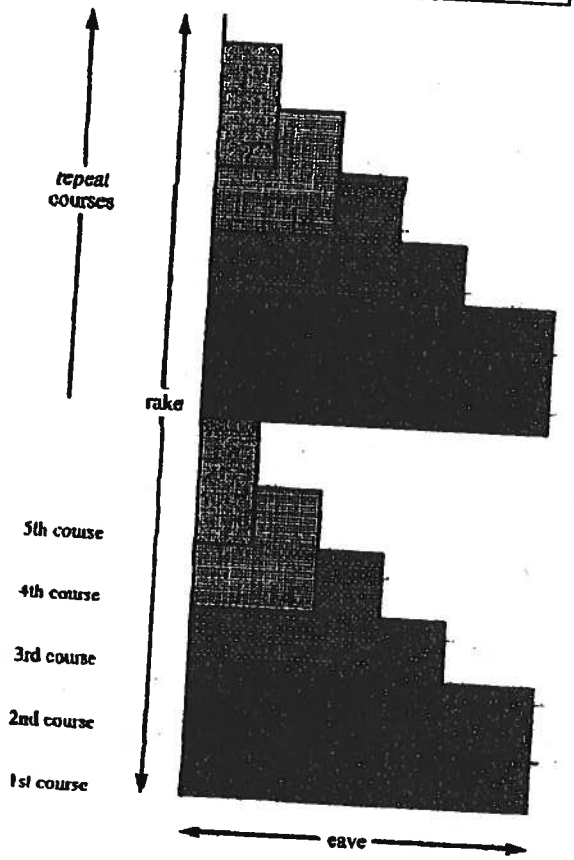
997493

TAMKO ROOFING PRODUCTS

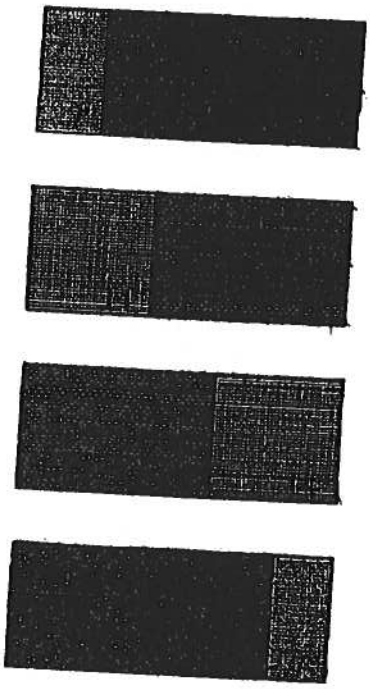
# Application Instructions For Heritage® 40 & 30 Series Shingles

| SPECIFICATIONS (APPROX.) | |
|---|---|
| Length | 36" |
| Width | 12" |
| Bundles per Sq. | 4 |
| Shingles per Sq. | 80 |
| Shingles per Bundle | 20 |
| Coverage per Sq. (Sq. Ft.) | 100 |
| Exposure | 5" |




The 4 cuts in the first 10 courses:



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

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

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

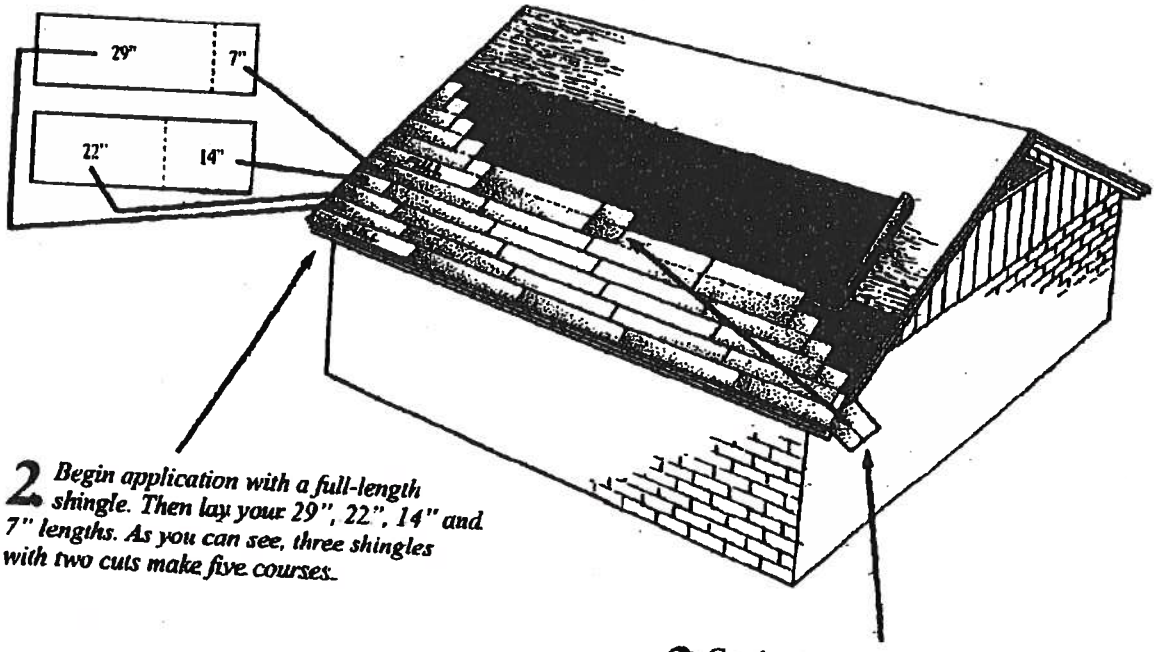
**NOTE:** These application instructions apply only to Heritage 40, Heritage 30, Heritage 40 AR, and Heritage 30 AR shingles.

TAMKO ROOFING PRODUCTS

# Application Instructions For Heritage® 40 & 30 Series Shingles

With two simple cuts, you can create five courses out of three Heritage shingles with no waste. Fewer cuts mean labor savings and faster application. The TAMKO method also eliminates unsightly zipper patterns. And because you can work any piece over 8" long back into the field of roofing, you'll save money on materials. For the best-looking roof with the least waste, rely on TAMKO and the Heritage Series.

**1.** *Cut your first shingle to make a 29" and a 7" length. Cut a second shingle to make a 22" and a 14" length.*




**2.** *Begin application with a full-length shingle. Then lay your 29", 22", 14" and 7" lengths. As you can see, three shingles with two cuts make five courses.*

**3.** *Continue working your way across the roof. When you make your final cut at the roof's edge, flip any pieces that are 8" or longer back onto the roof. These pieces can be worked in anywhere without creating zippers or color variations.*

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

997494



P2812

TAMKO ROOFING PRODUCTS

# Application Instructions for

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

## THREE-TAB ASPHALT SHINGLES

**THESE ARE THE MANUFACTURER'S APPLICATION INSTRUCTIONS FOR THE ROOFING CONDITIONS DESCRIBED. TAMKO ROOFING PRODUCTS, INC. ASSUMES NO RESPONSIBILITY FOR LEAKS OR OTHER ROOFING DEFECTS RESULTING FROM FAILURE TO FOLLOW THE MANUFACTURER'S INSTRUCTIONS.**
**THIS PRODUCT IS COVERED BY A LIMITED WARRANTY, THE TERMS OF WHICH ARE PRINTED ON THE WRAPPER.**
**IN COLD WEATHER (BELOW 40°F), CARE MUST BE TAKEN TO AVOID DAMAGE TO THE EDGES AND CORNERS OF THE SHINGLES.**

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

### 1. ROOF DECK

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

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

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

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

### 2. VENTILATION

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

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

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

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

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

### 3. FASTENING

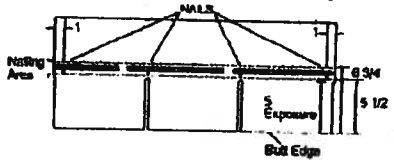
**NAILS:** TAMKO recommends the use of nails as the preferred method of application.

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

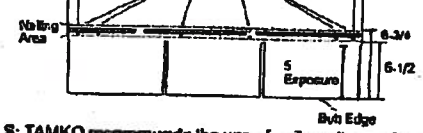
Correct placement of the fasteners is critical to the performance of the shingle. If the fasteners are not placed as shown in the diagram and described below, TAMKO will not be responsible for any shingles blown off or displaced. TAMKO will not be responsible for damage to shingles caused by winds or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

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

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




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




**NAILS:** TAMKO recommends the use of nails as the preferred method of application. Standard type roofing nails should be used. Nail shanks should be made of minimum 12-gauge wire, and a minimum head diameter of 3/8 in. Nails should be long enough to penetrate 3/4 in.

(Continued)

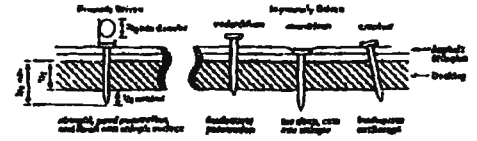
TAMKO ROOFING PRODUCTS

(CONTINUED from Pg. 1)

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

## THREE-TAB ASPHALT SHINGLES

into the roof deck. Where the deck is less than 3/4 in. thick, the nails should be long enough to penetrate completely through plywood decking and extend at least 1/8 in. through the roof deck. Drive nail head flush with the shingle surface.



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

CAUTION: DO NOT FASTEN INTO THE FACTORY APPLIED ADHESIVE.

### 4. UNDERLAYMENT

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

Products which are acceptable for use as underlayment are:

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

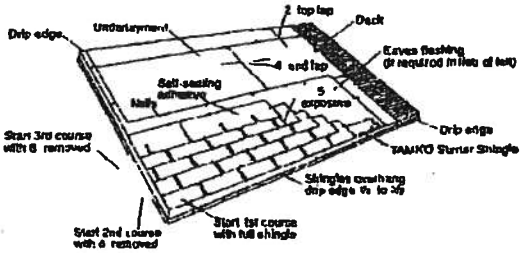
In areas where ice builds up along the eaves or a back-up of water from frozen or clogged gutters is a potential problem, TAMKO's Moisture Guard Plus® waterproofing underlayment (or any specialty eaves flashing product) may be applied to eaves, rakes, ridges, valleys, around chimneys, skylights or dormers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

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

### 5. APPLICATION INSTRUCTIONS

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

**SHINGLE APPLICATION:** There are three different offset methods for applying strip shingles: the 4-inch method, the 5-inch method and the 6-inch method. By removing different lengths from the first shingle, cutouts in one course of shingles do not line up directly with those of the course below. It is recommended that the shingles be laid according to one of these methods consistent with procedures outlined in ARMA's Residential Asphalt Roofing Manual. This panel will feature the 4-inch method. For information regarding the other methods, please refer to the ARMA Residential Asphalt Roofing Manual.
CAUTION: Never use an alignment system where shingle joints are closer than 4 in. to one another.




### 6. LOW SLOPE APPLICATION

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

### 7. HANDRAIL ROOF OR STEEP SLOPE ROOF

If the slope exceeds 21 in. per foot (60°), each shingle must be sealed

(Continued)

TAMKO ROOFING PRODUCTS

(CONTINUED from Pg. 2)

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

## THREE-TAB ASPHALT SHINGLES

with quick setting asphalt adhesive cement immediately upon installation. Spots of cement must be equivalent in size to a $.25 piece and applied to shingles with a 5 in. exposure, use 6 fasteners per shingle. See Section 3 for the Mansard Fastening Pattern.

### 9. RE-ROOFING

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

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

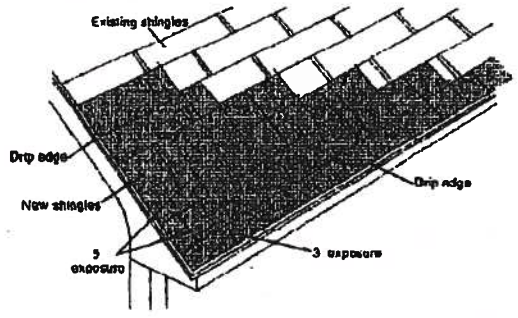
If re-roofing over an existing roof where new flashing is required to protect against ice dams (freeze/thaw cycle of water and/or the backup of water in frozen or clogged gutters), remove the old roofing to a point at least 24 in. beyond the interior wall line and apply TAMKO's Moisture Guard Plus® waterproofing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

The nesting procedure described below is the preferred method for re-roofing over square tab strip shingles with a 5 in. exposure.

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

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

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




### 8. VALLEY APPLICATION

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

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

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

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

- Extend the end shingle at least 12 in. onto the adjoining roof. Apply succeeding courses in the same manner, extending them across the valley and onto the adjoining roof.
- Do not trim if the shingle length exceeds 12 in. Lengths should vary.
- Press the shingles tightly into the valley.
- Use normal shingle fastening methods.

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

- To the adjoining roof plane, apply one row of shingles extending it over previously applied shingles and trim a minimum of 2 in. back from the centerline of the valley.

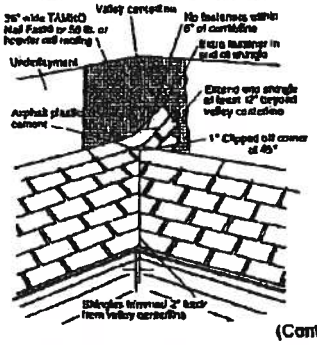
*Note: For a neater installation, snap a chalkline over the shingles for guidance.*

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

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

Excessive use of adhesive will cause blistering to this product.

TAMKO assumes no responsibility for blistering.




(Continued)

TAMKO® ROOFING PRODUCTS

(CONTINUED from Pg. 3)

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

## THREE-TAB ASPHALT SHINGLES

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

**16. HIP AND RIDGE FASTENING DETAIL**

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

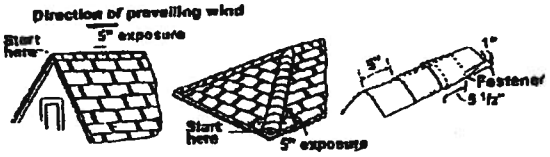
TAMKO recommends the use of TAMKO Hip & Ridge shingle products. Where matching colors are available, it is acceptable to use TAMKO's Glass-Seal or Elite Glass-Seal shingles cut down to 12 in. pieces.

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

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

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

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




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

**IMPORTANT - READ CAREFULLY BEFORE OPENING BUNDLE**

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

Front Entry

# PRODUCT PERFORMANCE DATA

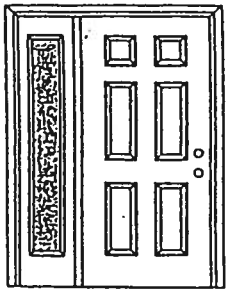
HURRICANE CODE

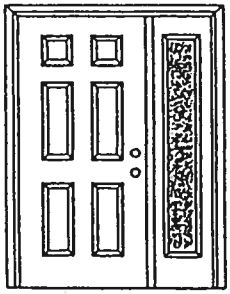
## WOOD-EDGE STEEL DOOR IN WOOD FRAME

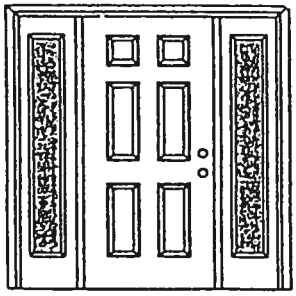
## PRODUCT CERTIFICATION SHEET 01-0314-18 (DADE - INSWING)

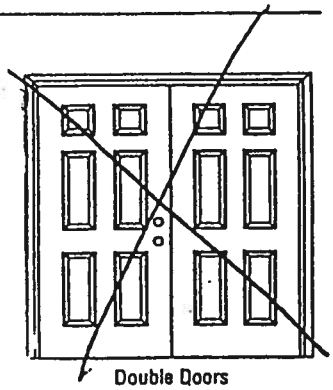
Valid for the following side-hinged door arrangements:

### OPAQUE DOORS - 6'8" NOMINAL HEIGHT:


Single Door with Sidelite on Hinge side

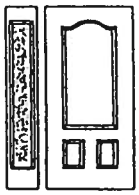

Single Door with Sidelite on Strike side

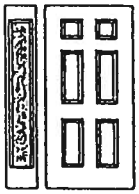

Single Door with 2 Sidelites

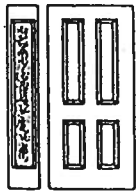

Double Doors

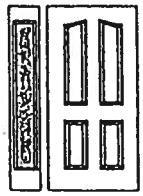
### DOOR STYLES:

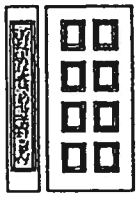

Flush

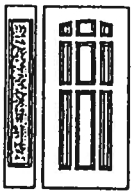

Arch Top 3-panel

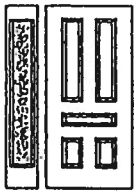

6-panel


New England 4-panel


Eyebrow 4-panel

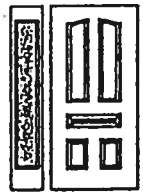

8-panel


9-panel

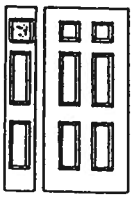

5-panel

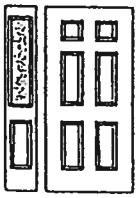

5-panel with scroll

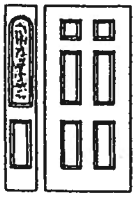

Eyebrow 5-panel

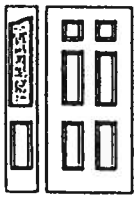

Eyebrow 5-panel with scroll

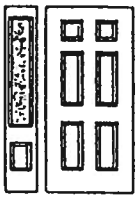
### SIDELITE STYLES:

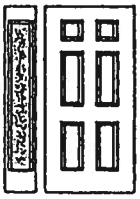

680 Series


129 Series


200 Series


12R, 12L, 23R, 23L, 24R, 24L Series


450 Series


152 Series


149 Series

DP +67.0 -67.0 IMPACT YES

MULTI_WE_STL_WD_OP

Entergy
Entry Systems



PREMI makes it!

# PRODUCT PERFORMANCE DATA

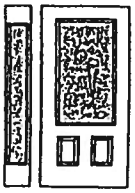
**HURRICANE CODE**

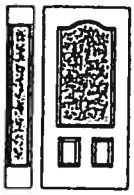
## WOOD-EDGE STEEL DOOR IN WOOD FRAME

## PRODUCT CERTIFICATION SHEET 01-0314.29 (DADE-OUTSWING)

Valid for the following side-hinged door arrangements (Sheet 2 of 2):

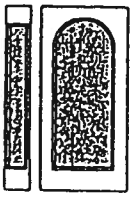
### 3/4 GLASS:

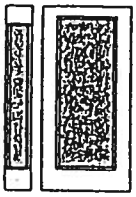

404 Series


410 Series


450 Series

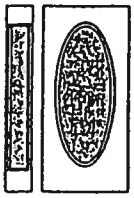
### FULL GLASS:


109 Series

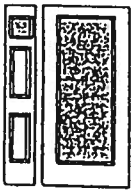

114, 120, 122 Series

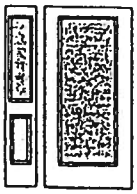

152 Series

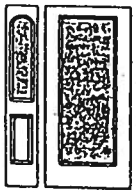

149 Series

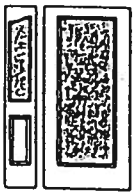

300 Series

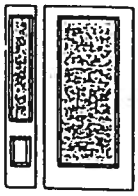
### SIDELITE STYLES:

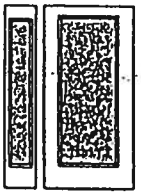

680 Series

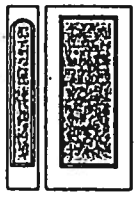

129 Series


200 Series


12R, 12L, 23R, 23L, 24R, 24L Series


450 Series


152 Series


149 Series

DP +50.5 -50.5 IMPACT NO

MULTI_WE_STL_WD_GLZ-2

Entergy
Entry Systems



PRFM makes it!

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

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

CONTRACTOR LICENSING SECTION
(305) 375-2527 FAX (305) 375-2558

CONTRACTOR ENFORCEMENT DIVISION
(305) 375-2966 FAX (305) 375-2908

PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

# PRODUCT CONTROL NOTICE OF ACCEPTANCE

**Premdor Entry Systems**
**911 E. Jeferson, P.O. Box 76**
**Pittsburgh ,KS 66762**

Your application for Notice of Acceptance (NOA) of:
**Entergy 6-8 S-W/E Outswing Glazed Double w/sidelites Residential Insulated Steel Doors**
under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

ACCEPTANCE NO.: 01-0314.29
EXPIRES: 04/02/2006

Raul Rodriguez
Chief Product Control Division

THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL CONDITIONS
BUILDING CODE & PRODUCT REVIEW COMMITTEE

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.
Director
Miami-Dade County
Building Code Compliance Office

APPROVED: 06/05/2001

Premdor Entry Systems

ACCEPTANCE No.: 01-0314.29

APPROVED : JUN 0 5 2001

EXPIRES : April 02, 2006

## NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

1.1 This renews the Notice of Acceptance No. 00-0321.31 which was issued on April 28, 2000. It approves a residential insulated door, as described in Section 2 of this Notice of Acceptance, designed to comply with the South Florida Building Code (SFBC), 1994 Edition for Miami-Dade County, for the locations where the pressure requirements, as determined by SFBC Chapter 23, do not exceed the Design Pressure Rating values indicated in the approved drawings.

2. PRODUCT DESCRIPTION

2.1 The Series Entergy 6-8 S-W/E Outswing Glazed Double Residential Insulated Steel Door with Sidelites and its components shall be constructed in strict compliance with the following documents: Drawing No 31-1028-EW-O, Sheets 1 through 6 of 6, titled "Premdor (Entergy Brand) Double Door with Sidelites in Wood Frames with Bumper Threshold (Outswing)," prepared by manufacturer, dated 7/29/97 with revision C dated 01/11/00, 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. These documents shall hereinafter be referred to as the approved drawings.

3. LIMITATIONS

3.1 This approval applies to single unit applications of pair of doors and single door only, as shown in approved drawings. Single door units shall include all components described in the active leaf of this approval.

4. INSTALLATION

4.1 The residential insulated steel door and its components shall be installed in strict compliance with the approved drawings.

4.2 Hurricane protection system (shutters): the installation of this unit will require a hurricane protection system.

5. LABELING

5.1 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".

6. BUILDING PERMIT REQUIREMENTS

6.1 Application for building permit shall be accompanied by copies of the following:

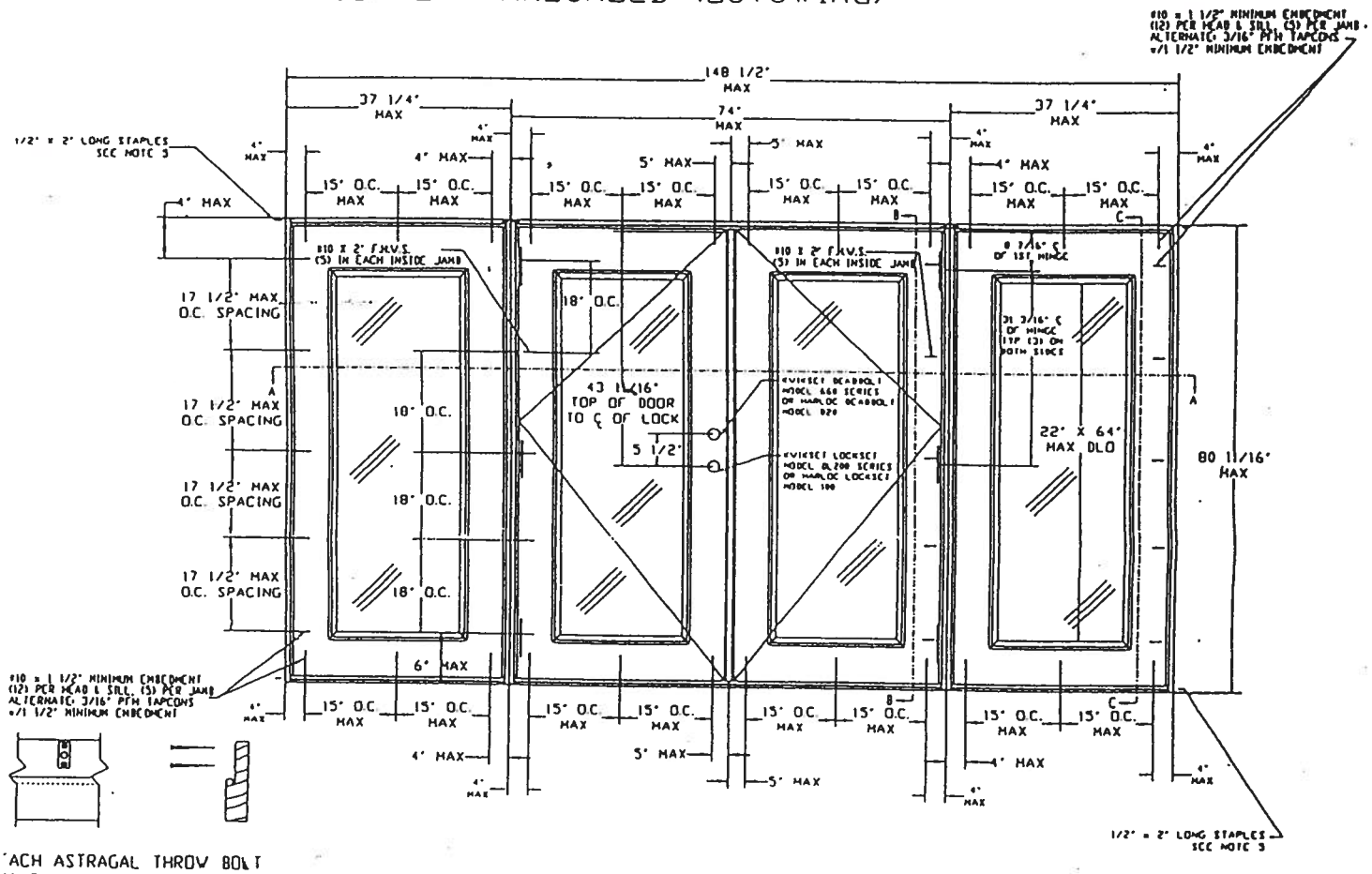
6.1.1 This Notice of Acceptance

6.1.2 Duplicate copies of the approved drawings, as identified in Section 2 of this Notice of Acceptance, clearly marked to show the components selected for the proposed installation.

6.1.3 Any other documents required by the Building Official or the South Florida Building Code (SFBC) in order to properly evaluate the installation of this system.

Manuel Perez, P.E. Product Control Examiner
Product Control Division

# PREMDOR (ENTERGY BRAND) DOUBLE DOOR WITH SIDELITES IN WOOD FRAMES WITH A BUMPER THRESHOLD (OUTSWING)






ACH ASTRAGAL THROW BOLT
IKE PLATE TO THE HEADER
) THRESHOLD WITH #10 x 1 3/4"
ATHEAD SCREWS

NOTES:

WOOD BUCKS BY OTHERS. MUST BE ANCHORED
OPERLY TO TRANSFER LOADS TO THE STRUCTURE.
THE PRECEDING DRAWINGS ARE INTENDED TO
ALIFY THE FOLLOWING INSTALLATIONS.

WOOD FRAME CONSTRUCTION WHERE DOOR
STEM IS ANCHORED TO A MINIMUM TWO BY WOOD
NING.

MASONRY OR CONCRETE CONSTRUCTION WHERE
IR SYSTEM IS ANCHORED TO A MINIMUM TWO BY
UCTURAL WOOD BUCK.

MASONRY OR CONCRETE CONSTRUCTION WHERE
IR SYSTEM IS ANCHORED DIRECTLY TO CONCRETE
MASONRY WITH OR WITHOUT A NON-STRUCTURAL
BY WOOD BUCK.

ALL ANCHORING SCREWS TO BE #10 WITH
IMUM 1 1/2" EMBEDMENT INTO WOOD SUBSTRATE
3/16" PFH TAPCONS WITH 1 1/2" MINIMUM EMBEDMENT
MASONRY.

NIT MUST BE INSTALLED WITH "MIAMI-DADE COUNTY
ROVED" SHUTTERS

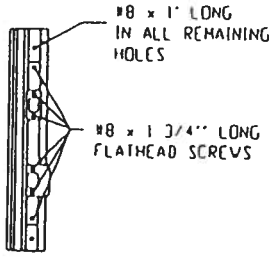
HREE STAPLES PER SIDE JAMB INTO HEADER ON SIDELITES
DOOR, THREE STAPLES PER JAMB INTO THRESHOLD ON
CLITES AND DOOR.

ATEX SEALANT TO BE APPLIED AT SIDE BY SIDE
BS AND SIDELITES.

OOR/SIDELITE HEADER, DOOR/SIDELITE JAMBS, AND SIDELITE BASE
NERS ARE COPED AND BUTT JOINED.

OORS SHALL BE PRE-PAINTED WITH A WATER-BASED EPOXY RUST
BITIVE PRIMER PAINT WITH A DRY FILM THICKNESS OF 0.8 TO 1.2 MIL.

RAMES SHALL BE PRE-PAINTED WITH AN ACRYLIC LATEX WATER-BASED/
ER-REDUCIBLE WHITE PRIMER WITH A DRY FILM THICKNESS OF 0.8 TO 1.2 MIL




ASTRAGAL

R.H. OUTSWING L.H. OUTSWING

| DESIGN PRESSURE RATINGS | | |
|---|---|---|
| | WHERE WATER INFILTRATION REQUIREMENT IS NEEDED * | WHERE WATER INFILTRATION REQUIREMENT IS NOT NEEDED |
| Positive | + 50.5 psf | +50.5 psf |
| Negative | NOT APPROVED* | -50.5 psf |

* UNITS SHALL BE INSTALLED ONLY AT LOCATIONS PROTECTED BY A CANOPY OR OVERHANG SUCH THAT THE ANGLE BETWEEN THE EDGE OF CANOPY OR OVERHANG TO SILL IS LESS THAN 45 DEGREES. UNLESS UNIT IS INSTALLED IN NON-HABITABLE AREAS WHERE THE UNIT AND THE AREA ARE DESIGNED TO ACCEPT WATER INFILTRATION.

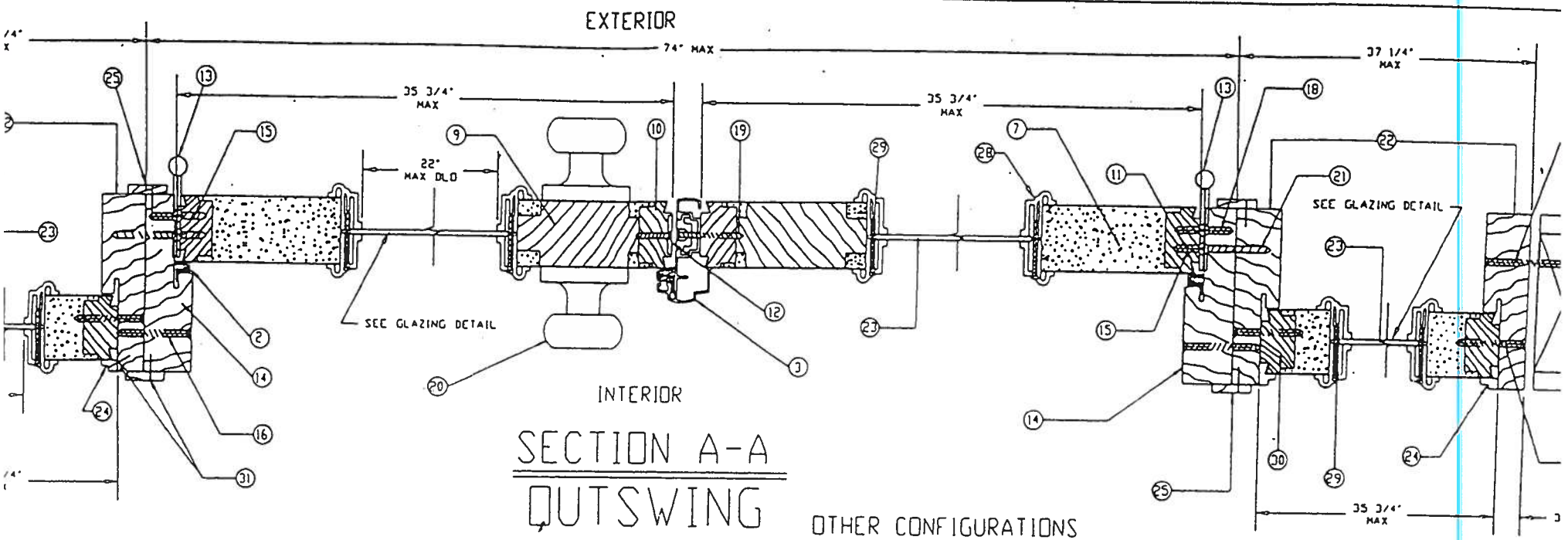
APPROVED AS COMPLYING WITH TH
SOUTH FLORIDA BUILDING CODE
DATE JUN 05 2001
BY
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFIC
ACCEPTANCE NO. 01-0314.

| LTR | REVISIONS | DATE |
|---|---|---|
| C | DADE COUNTY MODIFICATIONS | 3/11/00 |
| B | ADDED PAGE 5 (DOOR OPTIONS) | 10-1-98 |
| A | ADD OTHER DOOR CONFIGURATIONS | 12/18/97 |

LIMITS UNLESS NOTED: FRAC. ± DEC. ± ANG. ±
EXTRUSIONS UNLESS NOTED: STD. COMM. TOL.
ENGINEER:
DR BY R.S. DATE 7-29-97
PART NAME: ENTERGY WOOD FRAME DOUBLE DOOR W/SIDELITES
MAT'L:
SCALE: N.T.S.

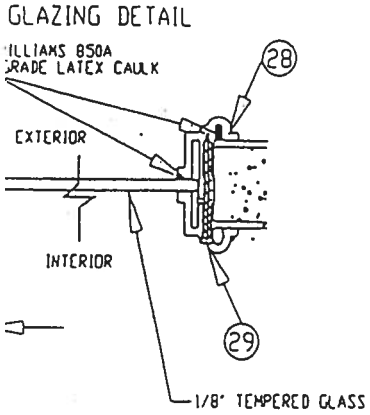
PREMDOOR ENTRY SYSTEMS
911 E. JEFFERSON
PITTSBURG, KS 66762

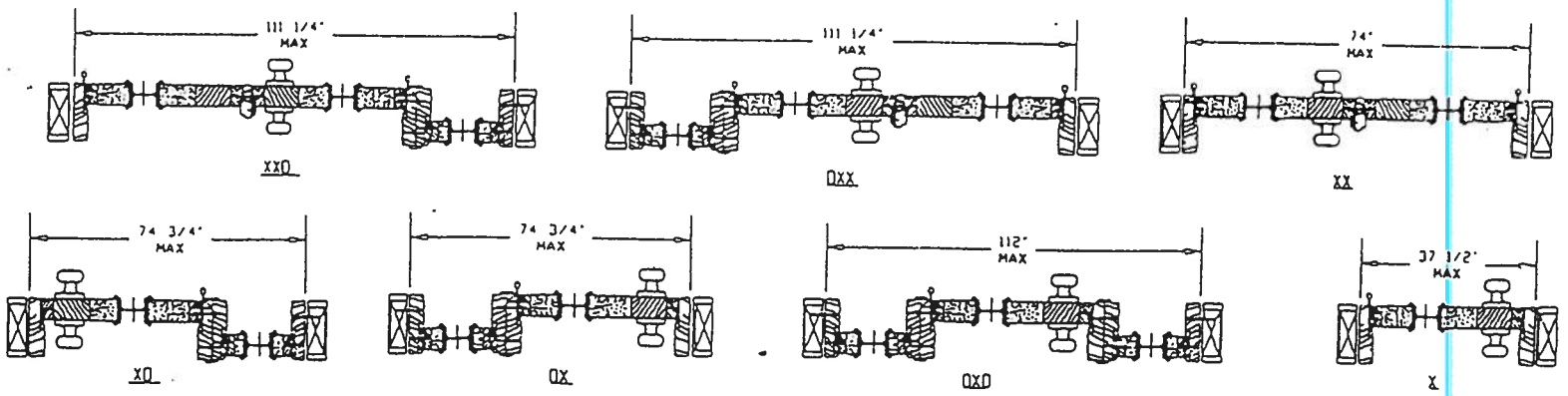
31-1028-EW-0
SHEET 1 OF 6
REVISION LETTER C




# SECTION A-A
# OUTSWING

## OTHER CONFIGURATIONS



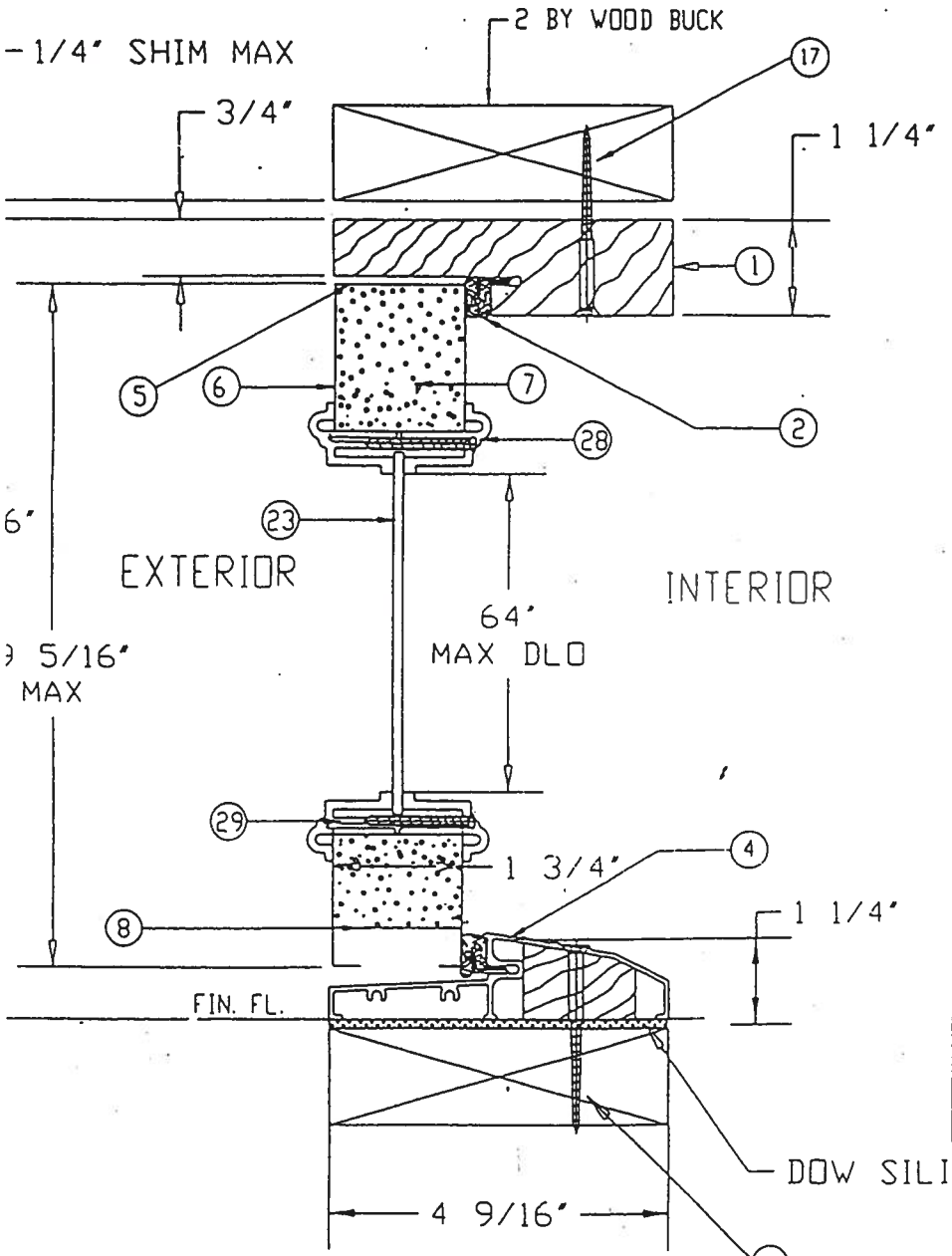

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE JUN 05 2001
BY
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE

| | | |
|---|---|---|
| C | DADE COUNTY MODIFICATIONS | |
| B | ADDED PAGE 5 (DOOR OPTIONS) | 11-1-98 |
| A | ADD SCREWS TO LITE FRAMES L<br>ADD OTHER DOOR CONFIGURATIONS | 2-10-97 |
| LTR | REVISIONS | DATE |

UNITS: UNLESS NOTED, FRAC. : ±1/64 DEC. : ±.02 ANG. : ±1°
EXTRUSIONS: UNLESS NOTED, SEE CONT. 10.5
ENGINEER:
DRAWN: DATE 7-29-97
PART NAME: ENERGY DOOR VISTA (A-A)
MFG:
SCALE: NTS

PREMDOR ENTRY SYSTEMS

31-1028-EW-0




# MATERIALS LIST

| ITEM NO. | DESCRIPTION | PART NUMBER | COMMENTS |
|---|---|---|---|
| 1 | WOOD HEAD JAMB | EV-14 | 1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT |
| 2 | COMPRESSION WEATHERSTRIP | EV-25 | LOCKSCREEN BRAND LOXSEAL 9650 (BRONZE) |
| 3 | ALUMINUM ASTRAGAL | EV-12 | PREMDOR BRAND OR EQUIVALENT- 5/8" ALUMINUM |
| 4 | ALUMINUM-BUMPER THRESHOLD | EV-15 | PREMDOR BRAND OR EQUIVALENT - 1 1/4" x 4 9/16 |
| 5 | TOP CHANNEL | EV-08 | PREMDOR BRAND - 1 11/16" - 20 GA STEEL |
| 6 | STEEL SKIN | 26 ga. (.017 +.004 -.000) | XXX YIELD STRENGTH 45,000 PSI<br>XXX THICKNESS PER TENSILE TEST REPORT IS .017" |
| 7 | POLYURETHANE FOAM CORE | BASF FOAM - DENSITY 2.0 TO 2.5 lbs./ft³ | |
| 8 | BOTTOM CHANNEL | EV-07 | PREMDOR BRAND - 1 11/16" - 20 GA STEEL |
| 9 | WOOD LOCK BLOCK | EV-09 | 4" X 9 1/2" MTL. TO BE PINE OR EQUIVALENT |
| 10 | STRIKE STILE | EV-06 | 15/16" X 1 11/16" MTL. TO BE PINE OR EQUIVALENT |
| 11 | HINGE STILE | EV-05 | 15/16" X 1 11/16" MTL. TO BE PINE OR EQUIVALENT |
| 12 | LOCK PREP FILLER PLATE | EV-10 | PREMDOR BRAND - .050" THICK- MTL. TO BE POLYE |
| 13 | 4"x4" HINGE | EV-16 | HAGER BRAND HINGE OR EQUIVALENT - .097 THICK |
| 14 | WOOD HINGE JAMB | EV-13 | 1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT |
| 15 | #10 x 3/4" F.H.W.S. | | (4) SCREWS PER HINGE INTO DOOR |
| 16 | #10 X 2" F.H.W.S. | | (5) SCREWS THROUGH HINGE JAMB INTO SIDELITE JAMB, 8" DOWN MAX 18" O.C. THEREAFTER<br>(10) SCREWS THROUGH STRIKE JAMB INTO SIDELITE JAMB, 4" DOWN MAX 8" O.C. THEREAFTER<br>(6) SCREWS THROUGH EACH SIDELITE JAMB INTO SIDELITE, 4" DOWN TOP, MAX 15" O.C. THEREAFTER |
| 17 | #10 F.H.W.S. W/MINIMUM 1 1/2" EMBEDMENT OR 3/16" PIN TAPCONS W/MINIMUM 1 1/2" EMBEDMENT | | REFER TO ELEVATION VIEW, FOR # OF SCREWS USED AND LOC |
| 18 | #10 X 3/4" F.H.W.S. | | (2) SCREWS PER HINGE INTO JAMB |
| 19 | #8 x 2" F.H.W.S. | | (2) SCREWS AT EACH STRIKE PLATE |
| 20 | LOCKSET | | KWIKSET BRAND 200 LOCK OR HARLOC BRAND 100 |
| 21 | #10 X 1 3/4" F.H.W.S. | | (2) SCREWS PER HINGE INTO JAMB |
| 22 | WOOD SIDELITE JAMB | EV-19 | 1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT |
| 23 | 22" X 64" SINGLE PANEL GLASS | EV-20 | TEMPERED GLASS IN POLYPROPYLENE FRAME- DC-1643 -<br>1/8" CLEAR TEMPERED GLASS |
| 24 | SIDELITE TRIM (WOOD) | EV-21 | 5/16 x 1/2" MTL. TO BE PINE OR EQUIV |
| 25 | WOOD CASING | EV-22 | 1/8" x 1" MTL. TO BE PINE OR EQUIVALENT - ITEMS ARE HOLD FOR "SIDE BY SIDE JAMBS" AS MULLIONS |
| 26 | WOOD SIDELITE HEAD JAMB | EV-23 | 1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT |
| 27 | WOOD SIDELITE BASE | EV-24 | 1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT |
| 28 | POLYPROPYLENE LITE FRAME | DC-1643, ODL-2 | HP Polypropylene by ODL |
| 29 | #6 X 1 1/2" PAN HEAD SCREWS | | 18 PER FRAME SCREW SPACING TO BE 3" IN FROM EACH CORNER TO EXCEED 14" OC THERE AFTER |
| 30 | SIDELITE STILES | EV-26 | 15/16" X 1 11/16" MTL. TO BE PINE OR EQUIVALENT |
| 31 | PIN NAIL | | 3/4" LONG NAIL, 4" IN FROM END, MAX 8" O.C. THEREAFTER, USED ON MULLIONS |

## SECTION B-B

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE JUN 05 2001
BY
PRODUCT CONTROL DIVISION
BUILDING CODE CO' 'NCE OFFICE

LIMITS: UNLESS NOTED, FRAC. : DEC. : ANG. :
EXTRUSIONS: UNLESS NOTED, STD. COM'L. TOL'S
ENGINEER:
DR BY R.S. DATE 7-29-97

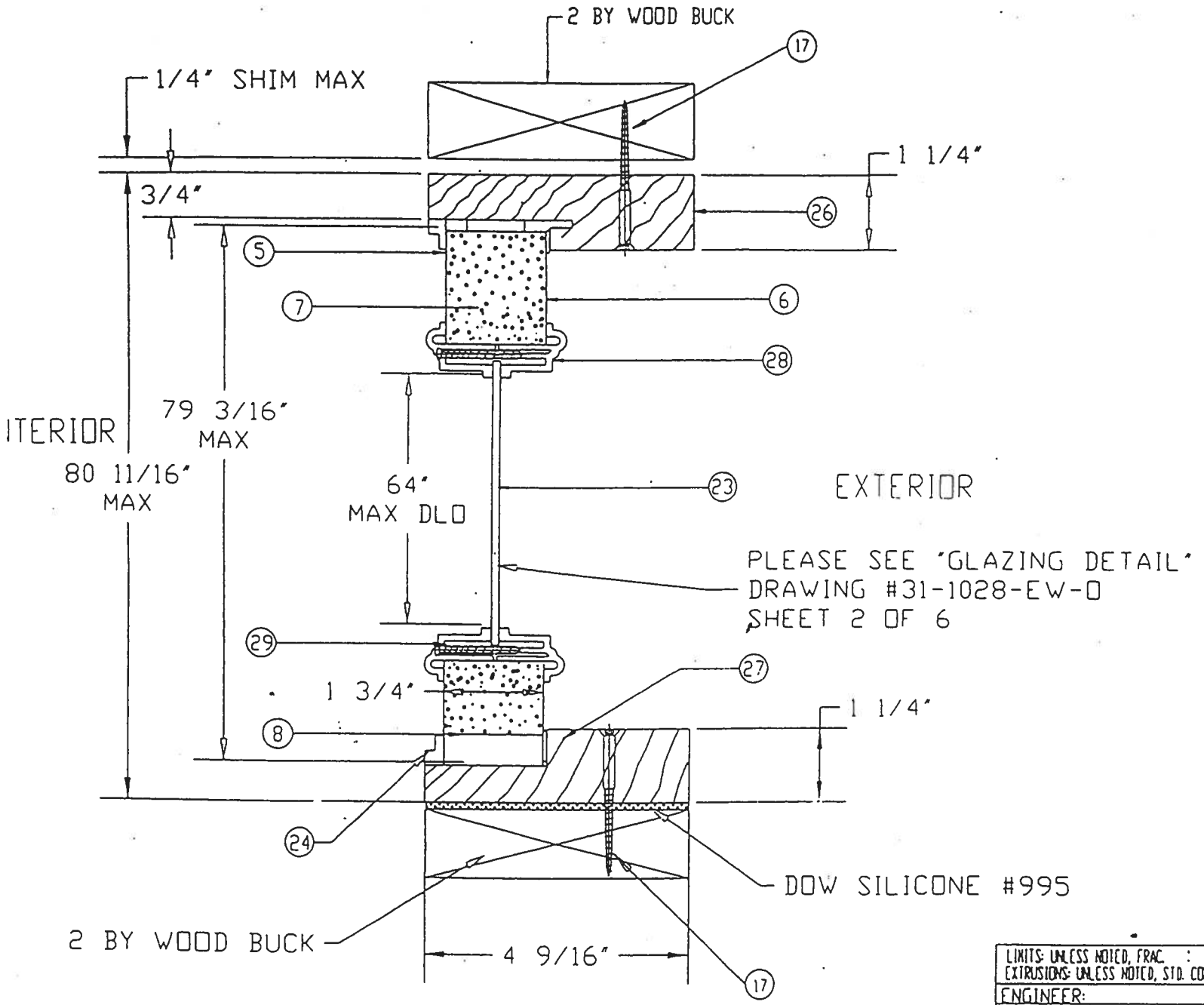
| LTR | REVISIONS | DATE |
|---|---|---|
| B | DADE COUNTY MODIFICATIONS | 1/11/01 |
| A | ADDED PAGE 5 (DOOR OPTIONS) | 10-1-98 |

PART NAME: ENERGY WOOD EDGE DOOR (B-B)
MAT'L: SCALE:

PREMDOR ENTRY SYSTEMS
911 E. JEFFERSON
PITTSBURG, KS. 66762

A

31-1028-EW-0
SHEET 3 OF



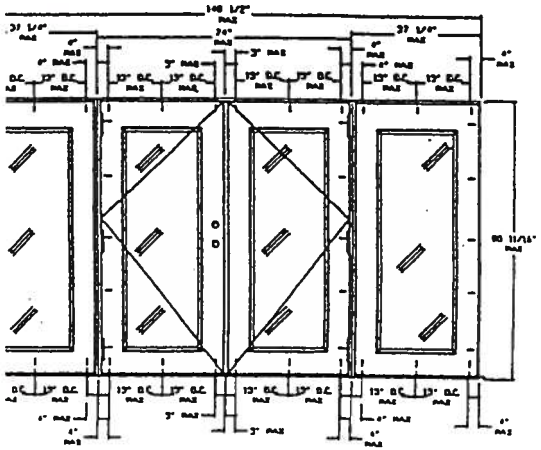

# SECTION C-C

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE JUN 05 2001
BY
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE

| | |
|---|---|
| LIMITS: UNLESS NOTED, FRAC. : DEC. : ANG. : | D DADE COUNTY |
| EXTRUSIONS: UNLESS NOTED, STD. COM'L. TOL'S. | C MATERIAL |
| ENGINEER: | B ADDED PAG |
| | A ADD SCREWS TO |
| | LTR. |
| | PART NAME: ENTERGY |
| DR. BY R.S. DATE 7-29-97 | MAT'L: |

PREMDOR ENTRY SYSTEMS
911 E. JEFFERSON
PITTSBURG, KS 66762

# OTHER DOOR CONFIGURATIONS



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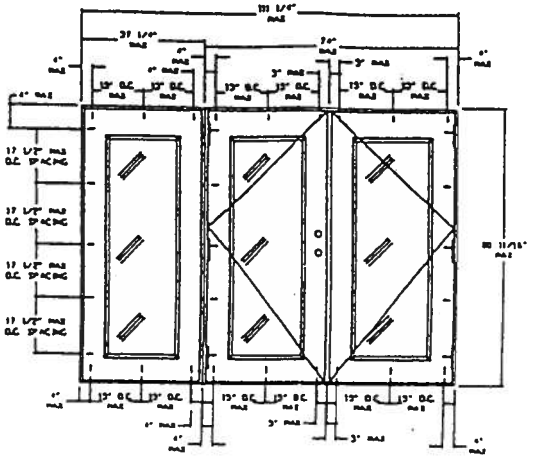

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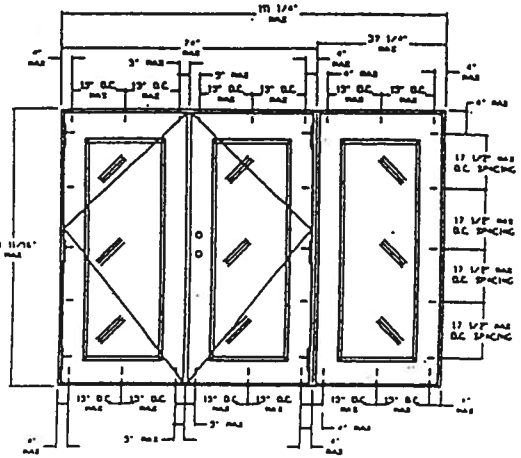

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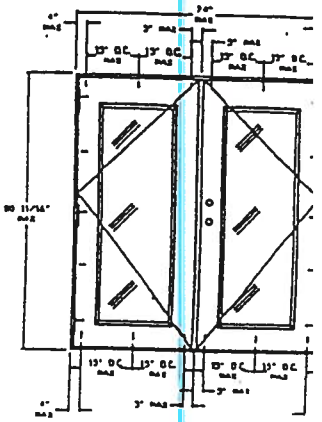

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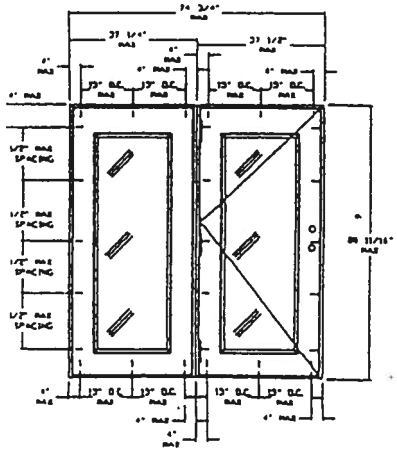

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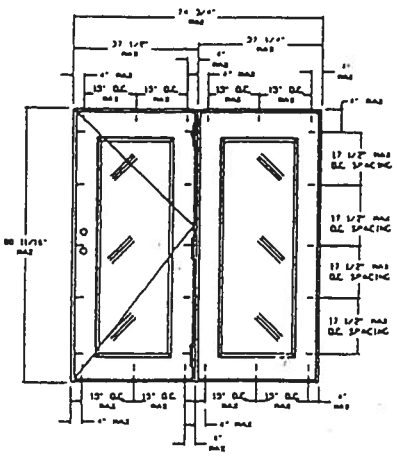

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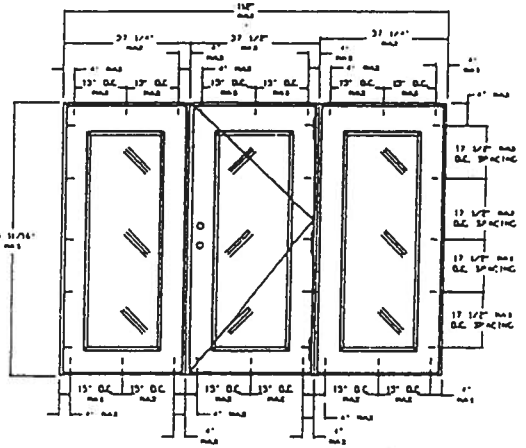

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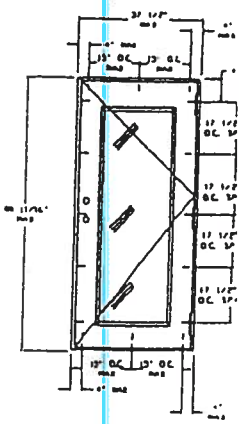


X

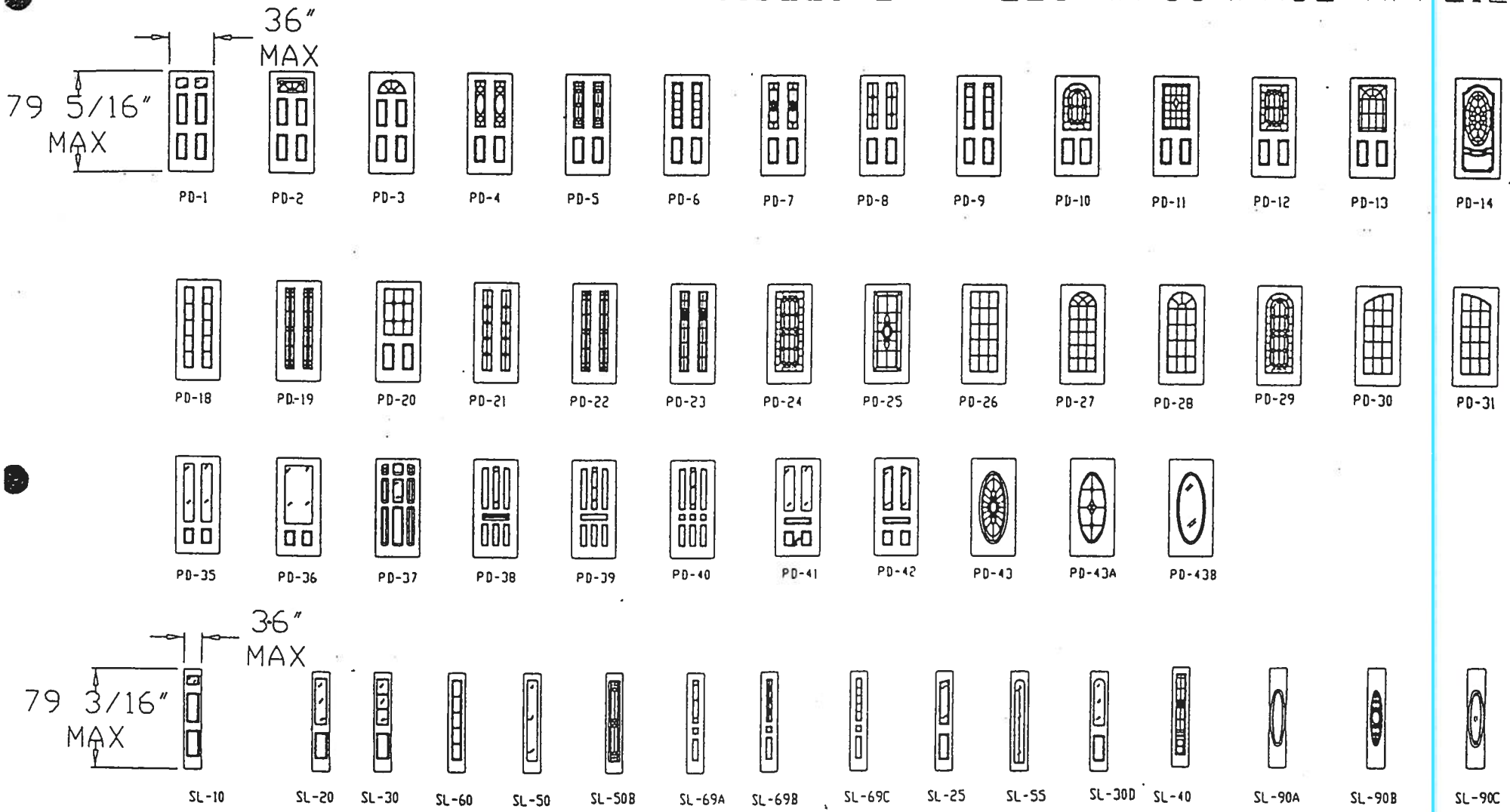
APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE JUN 05 2001
BY
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-0314.29

| | | | |
|---|---|---|---|
| LIMITS: UNLESS NOTED, FRAC. : DEC : ANG :<br>EXTRUSIONS: UNLESS NOTED, STD. COM'L. TOL'S | | | |
| ENGINEER: | LTR | REVISIONS | DATE |
| | PART NAME: | | |
| DR. BY J.D. DATE 1-11-01 | MAT'L: | SCALE: | |

PREMDOR ENTRY SYSTEMS
911 E. JEFFERSON
PITTSBURG, KS. 66762

31-1028-EW
SHEET 5 OF 6

# OTHER GLAZED DOOR PANEL/SIDELITE STYLES W/SURFACE APPLIED




APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE JUN 05 2001
BY
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO 01-0314.20

| | | | |
|---|---|---|---|
| UNITS: UNLESS NOTED, FRAC. : DEC. : ANG. : | | | |
| EXTRUSIONS: UNLESS NOTED, STD. COML. TOLS. | | | |
| ENGINEER: | | | LTR |
| | | | PART |
| DR. BY J.D. | DATE 1/15/01 | | MATL: |

PREMDOR ENTRY SYSTEMS
911 C JEFFERSON
PITTSBURG, KS 66762

Patio

# PRODUCT PERFORMANCE DATA

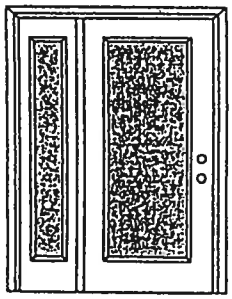
HURRICANE CODE

## WOOD-EDGE STEEL DOOR IN WOOD FRAME

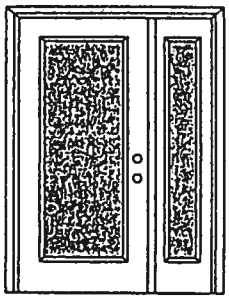
## PRODUCT CERTIFICATION SHEET 01-0314.29 (DADE-OUTSWING)

Valid for the following side-hinged door arrangements (Sheet 1 of 2):

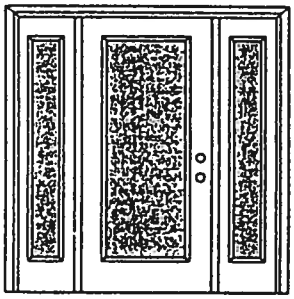
### GLAZED DOORS - 6'8" NOMINAL HEIGHT:



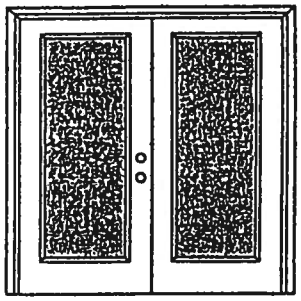
Single Door with Sidelite on Hinge side



Single Door with Sidelite on Strike side

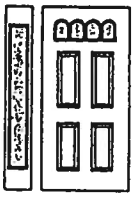


Single Door with 2 Sidelites

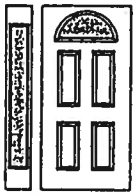


Double Doors

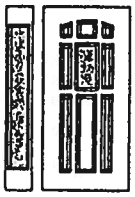
### DOOR STYLES - 1/4 GLASS:



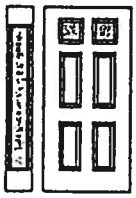
100 Series



133, 135 Series



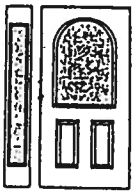
136 Series



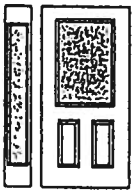
680 Series

822 Series

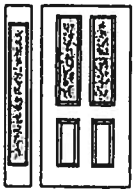
### 1/2 GLASS:



105 Series



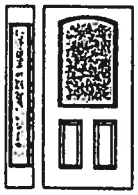
106, 160 Series



129 Series

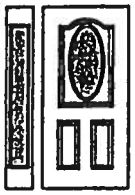
200 Series

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



107 Series

108 Series



304 Series

MULTI_WE_STL_WD_GLZ-1

Entergy
Entry Systems



PREM makes it!

# PRODUCT PERFORMANCE DATA

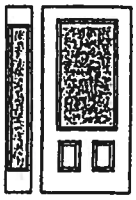
**HURRICANE CODE**

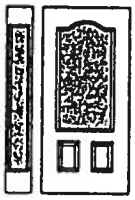
## WOOD-EDGE STEEL DOOR IN WOOD FRAME

## PRODUCT CERTIFICATION SHEET 01-0314.29 (DADE-OUTSWING)

Valid for the following side-hinged door arrangements (Sheet 2 of 2):

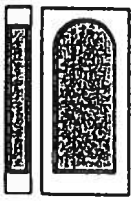
### 3/4 GLASS:

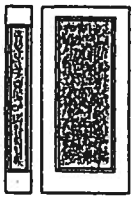

404 Series


410 Series


450 Series

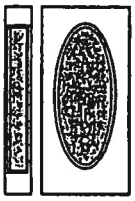
### FULL GLASS:


109 Series

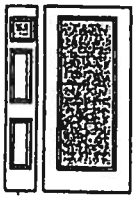

114, 120, 122 Series

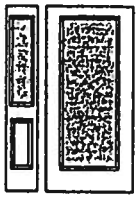

152 Series

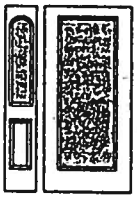

149 Series

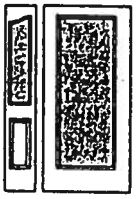

300 Series

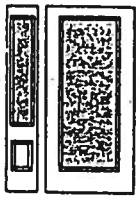
### SIDELITE STYLES:

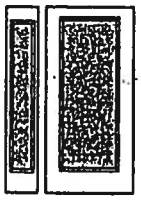

680 Series

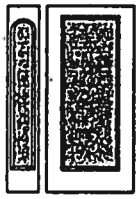

129 Series


200 Series


12R, 12L, 23R, 23L, 24R, 24L Series


450 Series


152 Series


149 Series

DP +50.5-50.5 IMPACT NO

MULTI_WE_STL_WD_GLZ-2

Entergy
Entry Systems



PRFM makes it.

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

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

CONTRACTOR LICENSING SECTION
(305) 375-2527 FAX (305) 375-2558

CONTRACTOR ENFORCEMENT DIVISION
(305) 375-2966 FAX (305) 375-2908

PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

# PRODUCT CONTROL NOTICE OF ACCEPTANCE

**Premdor Entry Systems**
**911 E. Jeferson, P.O. Box 76**
**Pittsburgh ,KS 66762**

Your application for Notice of Acceptance (NOA) of:
**Entergy 6-8 S-W/E Outswing Glazed Double w/sidelites Residential Insulated Steel Doors**
under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

ACCEPTANCE NO.: 01-0314.29
EXPIRES: 04/02/2006

Raul Rodriguez
Chief Product Control Division

THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL CONDITIONS
BUILDING CODE & PRODUCT REVIEW COMMITTEE

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.
Director
Miami-Dade County
Building Code Compliance Office

APPROVED: 06/05/2001

Premdor Entry Systems

ACCEPTANCE No.: 01-0314.29

APPROVED : JUN 05 2001

EXPIRES : April 02, 2006

## NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

1.1 This renews the Notice of Acceptance No. 00-0321.31 which was issued on April 28, 2000. It approves a residential insulated door, as described in Section 2 of this Notice of Acceptance, designed to comply with the South Florida Building Code (SFBC), 1994 Edition for Miami-Dade County, for the locations where the pressure requirements, as determined by SFBC Chapter 23, do not exceed the Design Pressure Rating values indicated in the approved drawings.

2. PRODUCT DESCRIPTION

2.1 **The Series Entergy 6-8 S-W/E Outswing Glazed Double Residential Insulated Steel Door with Sidelites** and its components shall be constructed in strict compliance with the following documents: Drawing No 31-1028-EW-O, Sheets 1 through 6 of 6, titled "Premdor (Entergy Brand) Double Door with Sidelites in Wood Frames with Bumper Threshold (Outswing)," prepared by manufacturer, dated 7/29/97 with revision C dated 01/11/00, 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. These documents shall hereinafter be referred to as the approved drawings.

3. LIMITATIONS

3.1 This approval applies to single unit applications of pair of doors and single door only, as shown in approved drawings. Single door units shall include all components described in the active leaf of this approval.

4. INSTALLATION

4.1 The residential insulated steel door and its components shall be installed in strict compliance with the approved drawings.

4.2 Hurricane protection system (shutters): the installation of this unit will require a hurricane protection system.

5. LABELING

5.1 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".

6. BUILDING PERMIT REQUIREMENTS

6.1 Application for building permit shall be accompanied by copies of the following:

6.1.1 This Notice of Acceptance

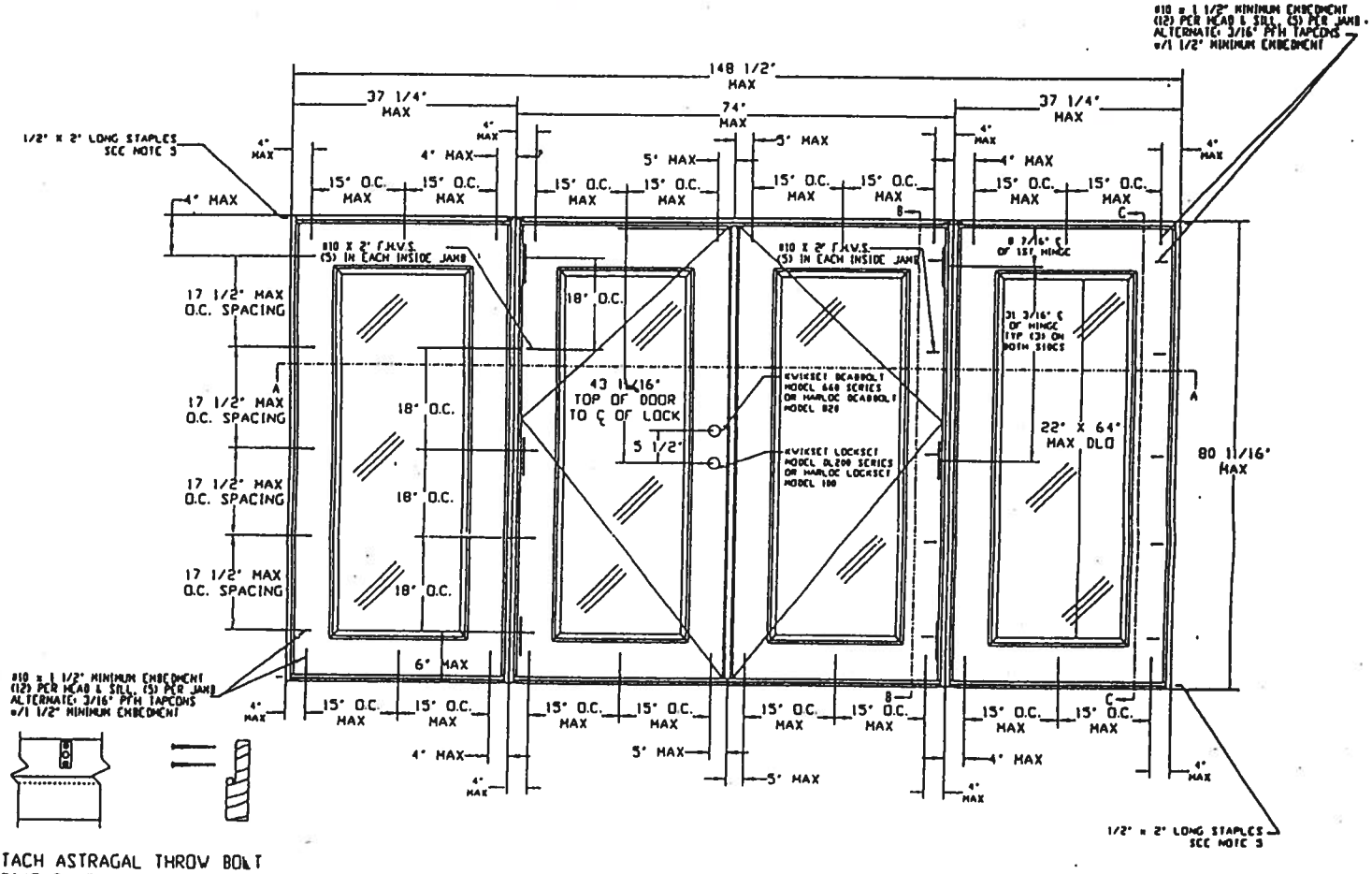
6.1.2 Duplicate copies of the approved drawings, as identified in Section 2 of this Notice of Acceptance, clearly marked to show the components selected for the proposed installation.

6.1.3 Any other documents required by the Building Official or the South Florida Building Code (SFBC) in order to properly evaluate the installation of this system.

Manuel Perez

Manuel Perez, P.E. Product Control Examiner
Product Control Division

# PREMDOR (ENTERGY BRAND) DOUBLE DOOR WITH SIDELITES IN WOOD FRAMES WITH A BUMPER THRESHOLD (OUTSWING)






ATTACH ASTRAGAL THROW BOLT STRIKE PLATE TO THE HEADER AND THRESHOLD WITH #10 x 1 3/4" FLATHEAD SCREWS

NOTES:

1.) WOOD BUCKS BY OTHERS. MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.
2.) THE PRECEDING DRAWINGS ARE INTENDED TO QUALIFY THE FOLLOWING INSTALLATIONS.

A. WOOD FRAME CONSTRUCTION WHERE DOOR SYSTEM IS ANCHORED TO A MINIMUM TWO BY WOOD OPENING.

B. MASONRY OR CONCRETE CONSTRUCTION WHERE DOOR SYSTEM IS ANCHORED TO A MINIMUM TWO BY STRUCTURAL WOOD BUCK.

C. MASONRY OR CONCRETE CONSTRUCTION WHERE DOOR SYSTEM IS ANCHORED DIRECTLY TO CONCRETE OR MASONRY WITH OR WITHOUT A NON-STRUCTURAL ONE BY WOOD BUCK.

3. ALL ANCHORING SCREWS TO BE #10 WITH MINIMUM 1 1/2" EMBEDMENT INTO WOOD SUBSTRATE OR 3/16" PFH TAPCONS WITH 1 1/2" MINIMUM EMBEDMENT MASONRY.

UNIT MUST BE INSTALLED WITH 'MIAMI-DADE COUNTY APPROVED' SHUTTERS

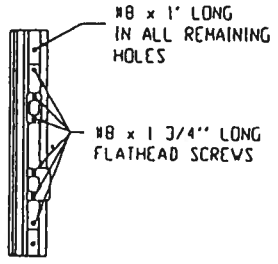
5. THREE STAPLES PER SIDE JAMB INTO HEADER ON SIDELITES AND DOOR, THREE STAPLES PER JAMB INTO THRESHOLD ON SIDELITES AND DOOR.

6. LATEX SEALANT TO BE APPLIED AT SIDE BY SIDE JAMBS AND SIDELITES.

7. DOOR/SIDELITE HEADER, DOOR/SIDELITE JAMBS, AND SIDELITE BASE CORNERS ARE COPED AND BUTT JOINED.

8. DOORS SHALL BE PRE-PAINTED WITH A WATER-BASED EPOXY RUST INHIBITIVE PRIMER PAINT WITH A DRY FILM THICKNESS OF 0.8 TO 1.2 MIL.

9. FRAMES SHALL BE PRE-PAINTED WITH AN ACRYLIC LATEX WATER-BASED/ WATER-REDUCIBLE WHITE PRIMER WITH A DRY FILM THICKNESS OF 0.8 TO 1.2 MIL.




ASTRAGAL

R.H. OUTSWING L.H. OUTSWING

| DESIGN PRESSURE RATINGS | | |
|---|---|---|
| | WHERE WATER INFILTRATION REQUIREMENT IS NEEDED x | WHERE WATER INFILTRATION REQUIREMENT IS NOT NEEDED |
| Positive | + 50.5 psf | +50.5 psf |
| Negative | NOT APPROVED x | -50.5 psf |

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BY
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFIC
ACCEPTANCE NO. 01-0314.

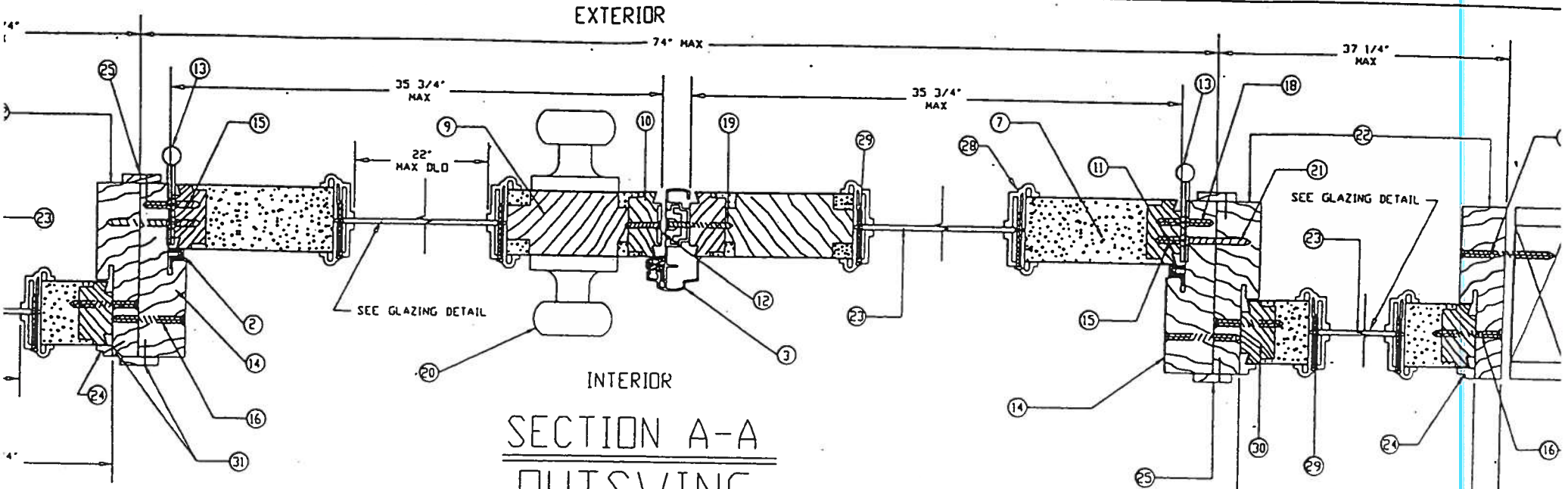
x UNITS SHALL BE INSTALLED ONLY AT LOCATIONS PROTECTED BY A CANOPY OR OVERHANG SUCH THAT THE ANGLE BETWEEN THE EDGE OF CANOPY OR OVERHANG TO SILL IS LESS THAN 45 DEGREES. UNLESS UNIT IS INSTALLED IN NON-HABITABLE AREAS WHERE THE UNIT AND THE AREA ARE DESIGNED TO ACCEPT WATER INFILTRATION.

| | | |
|---|---|---|
| C | DADE COUNTY MODIFICATIONS | 1/11/00 |
| B | ADDED PAGE 5 (DOOR OPTIONS) | 10-1-98 |
| A | ADD OTHER DOOR CONFIGURATIONS | 12/16/97 |
| LTR | REVISIONS | DATE |

UNITS: UNLESS NOTED, FRAC. : DEC : ANG. :
EXTRUSIONS: UNLESS NOTED, STD. COM. TOL'S
ENGINEER:
DR. BY R.S. DATE 7-29-97
PART NAME: ENTERGY DOUBLE DOOR W/SIDELITES
MAT'L: SCALE: N.T.S.

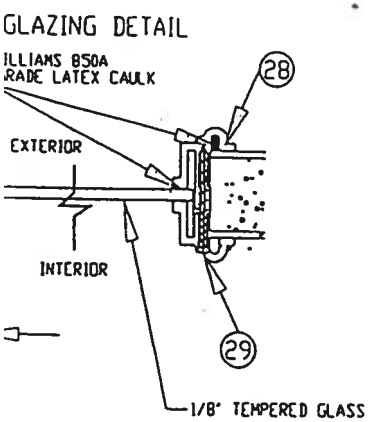
PREMDOR ENTRY SYSTEMS
911 E. JEFFERSON
PITTSBURG, KS 66762

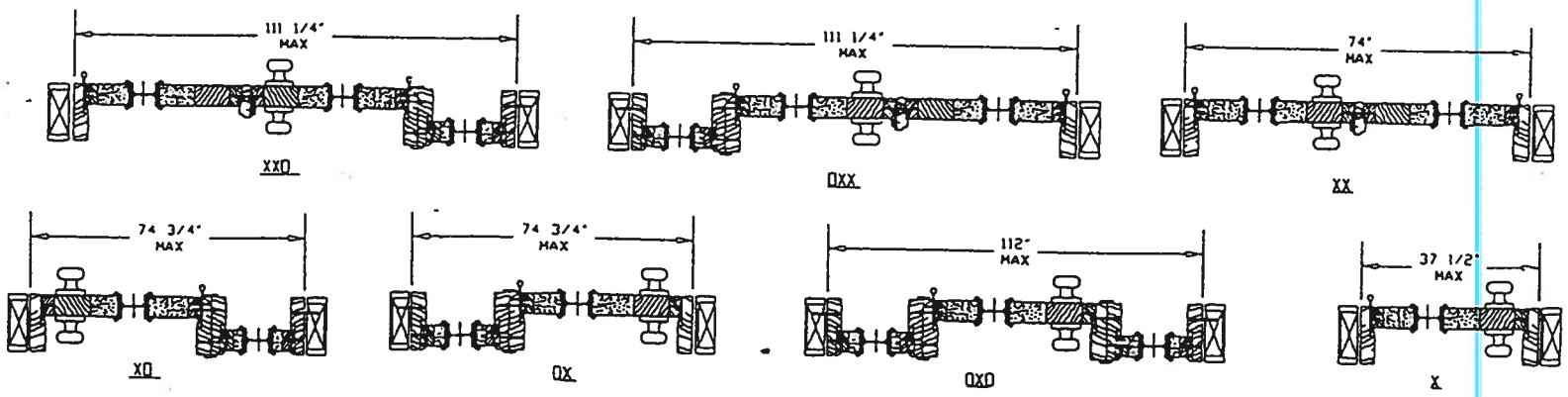
31-1028-EW-0
SHEET 1 OF 6
REVISION LETTER C




# SECTION A-A
# OUTSWING

## OTHER CONFIGURATIONS

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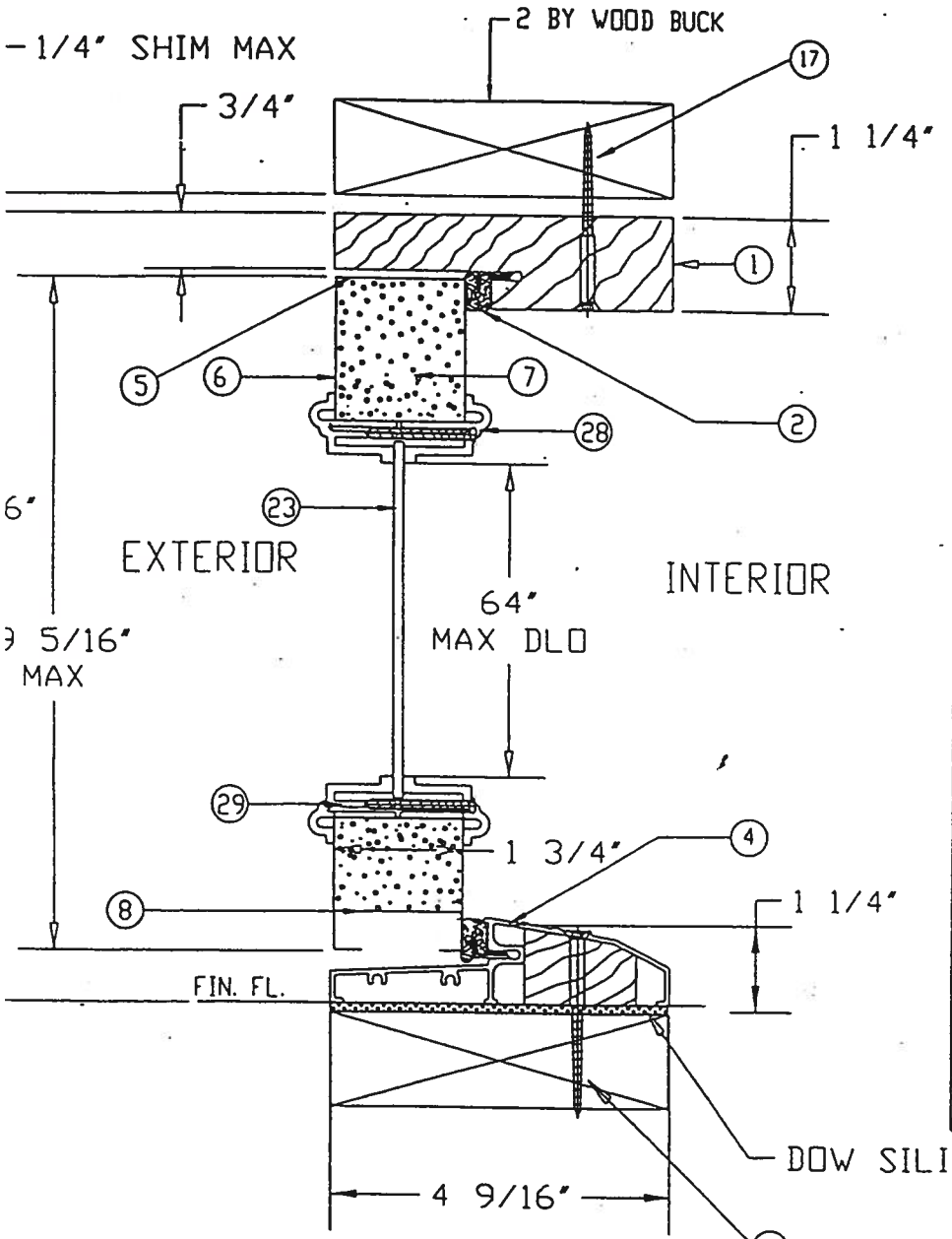
BUILDING CODE COMPLIANCE OFFICE

| | | | |
|---|---|---|---|
| C | DADE COUNTY MODIFICATIONS | | |
| B | ADDED PAGE 5 (DOOR OPTIONS) | 4-1-98 | RS |
| A | ADD SCREWS TO LITE FRAMES & ADD OTHER DOOR CONFIGURATIONS | 7-29-97 | RS |
| LTR | REVISIONS | DATE | |

LIMITS UNLESS NOTED, FRAC. ± ; DEC. ± ; ANG. ± ;
EXTRUSIONS UNLESS NOTED, STD. COMM. TOLS.
ENGINEER:
DR. BY: R.S. DATE: 7-29-97
PART NAME: ENTRANCE DOOR W/SUPPORTS (A-A)
MATL: SCALE: NTS

PREMDOR ENTRY SYSTEMS
90 E. JEFFERSON
PITTSBURG, TX 75686

31-1028-EW-0
SHEET 2 OF 6




# SECTION B-B

## MATERIALS LIST

| ITEM NO. | DESCRIPTION | PART NUMBER | COMMENTS |
|---|---|---|---|
| 1 | WOOD HEAD JAMB | EV-14 | 1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT |
| 2 | COMPRESSION WEATHERSTRIP | EV-25 | LOCKSCREEN BRAND LOXSEAL 9650 (BRONZE) |
| 3 | ALUMINUM ASTRAGAL | EV-12 | PREMDOR BRAND OR EQUIVALENT- 5/8" ALUMINUM AST |
| 4 | ALUMINUM-BUMPER THRESHOLD | EV-15 | PREMDOR BRAND OR EQUIVALENT - 1 1/4" x 4 9/16" |
| 5 | TOP CHANNEL | EV-08 | PREMDOR BRAND - 1 11/16" - 20 GA STEEL |
| 6 | STEEL SKIN | 26 ga. (.017 +.004 -.000) | MIN. YIELD STRENGTH (50,000 PSI) MIN. THICKNESS PER TENSILE TEST REPORT IS .017" |
| 7 | POLYURETHANE FOAM CORE | BASF FOAM - DENSITY 2.0 TO 2.5 lbs./Ft³ | |
| 8 | BOTTOM CHANNEL | EV-07 | PREMDOR BRAND - 1 11/16" - 20 GA STEEL |
| 9 | WOOD LOCK BLOCK | EV-09 | 4" X 9 1/2" MTL. TO BE PINE OR EQUIVALENT |
| 10 | STRIKE STILE | EV-06 | 15/16" X 1 11/16" MTL. TO BE PINE OR EQUIVALENT |
| 11 | HINGE STILE | EV-05 | 15/16" X 1 11/16" MTL. TO BE PINE OR EQUIVALENT |
| 12 | LOCK PREP FILLER PLATE | EV-10 | PREMDOR BRAND - .050" THICK- MTL. TO BE POLYETH |
| 13 | 4"x4" HINGE | EV-16 | HAGER BRAND HINGE OR EQUIVALENT - .097 THICK (S |
| 14 | WOOD HINGE JAMB | EV-13 | 1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT |
| 15 | #10 x 3/4" F.H.W.S. | | (4) SCREWS PER HINGE INTO DOOR |
| 16 | #10 X 2" F.H.W.S. | | (5) SCREWS THROUGH HINGE JAMB INTO SIDELITE JAMB, 8" DOWN FR MAX 18" O.C. THEREAFTER (10) SCREWS THROUGH STRIKE JAMB INTO SIDELITE JAMB, 4" DOWN FI MAX 8" O.C. THEREAFTER (6) SCREWS THROUGH EACH SIDELITE JAMB INTO SIDELITE, 4" DOWN I TOP, MAX 15" O.C. THEREAFTER |
| 17 | #10 F.H.W.S. W/MINIMUM 1 1/2 EMBEDMENT OR 3/16" PFH TAPCONS W/MINIMUM 1 1/2" EMBEDMENT | | REFER TO ELEVATION VIEW, FOR # OF SCREWS USED AND LOCAT |
| 18 | #10 X 3/4" F.H.W.S. | | (2) SCREWS PER HINGE INTO JAMB |
| 19 | #8 x 2" F.H.W.S. | | (2) SCREWS AT EACH STRIKE PLATE |
| 20 | LOCKSET | | KWIKSET BRAND 200 LOCK OR HARLOC BRAND 100 LC |
| 21 | #10 X 1 3/4" F.H.W.S. | | (2) SCREWS PER HINGE INTO JAMB |
| 22 | WOOD SIDELITE JAMB | EV-19 | 1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT |
| 23 | 22" X 64" SINGLE PANEL GLASS | EV-20 | TEMPERED GLASS IN POLYPROPYLENE FRAME- DC-1643 - C 1/8" CLEAR TEMPERED GLASS |
| 24 | SIDELITE TRIM (WOOD) | EV-21 | 5/16 x 1/2" MTL. TO BE PINE OR EQUIVAL |
| 25 | WOOD CASING | EV-22 | 1/8" x 1" MTL. TO BE PINE OR EQUIVALENT - ITEMS ARE HOLDING FOR "SIDE BY SIDE JAMBS" AS MULLIONS |
| 26 | WOOD SIDELITE HEAD JAMB | EV-23 | 1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT |
| 27 | WOOD SIDELITE BASE | EV-24 | 1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT |
| 28 | POLYPROPYLENE LITE FRAME | DC-1643, ODL-2 | HP Polypropylene by ODL |
| 29 | #6 X 1 1/2" PAN HEAD SCREWS | | 18 PER FRAME SCREW SPACING TO BE 3" IN FROM EACH CORNER A TO EXCEED 14" OC THERE AFTER |
| 30 | SIDELITE STILES | EV-26 | 15/16" X 1 11/16" MTL. TO BE PINE OR EQUIVALENT |
| 31 | PIN NAIL | | 3/4" LONG NAIL, 4" IN FROM END, MAX 8" O.C. THERAFTER, USED ON MULLIONS A |

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BUILDING CODE CO' 'NCE OFFICE
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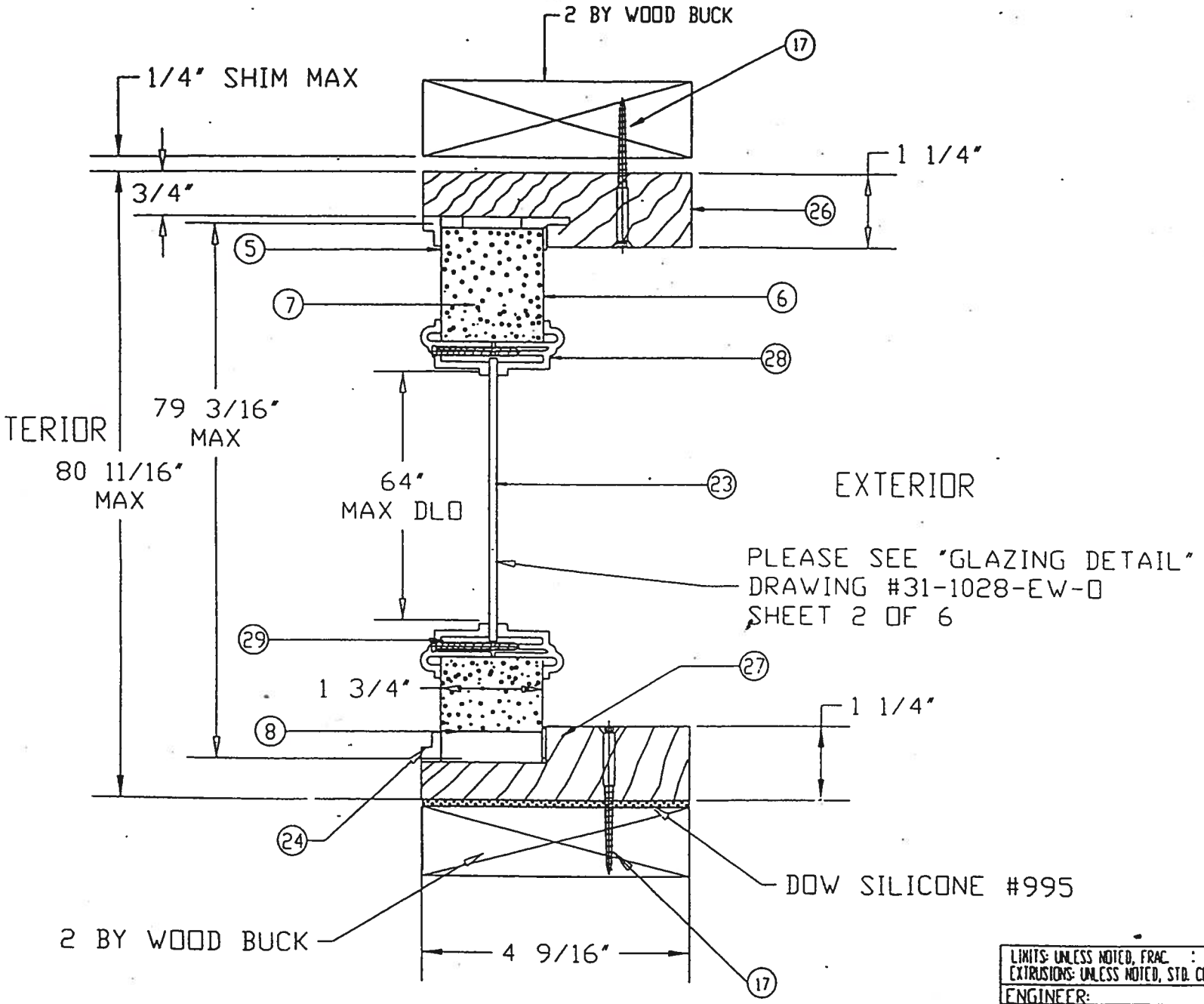
LIMITS: UNLESS NOTED, FRAC. : DEC. : ANG. :
EXTRUSIONS: UNLESS NOTED, STD. COM'L. TOL'S.
ENGINEER:
DR. BY R.S. | DATE 7-29-97

| LTR | REVISIONS | DATE |
|---|---|---|
| B | DADE COUNTY MODIFICATIONS | 1/11/01 |
| A | ADDED PAGE 5 (DOOR OPTIONS) | 10-1-98 |

PART NAME: ENTERGY WOOD EDGE DOOR (B-B)
MAT'L: SCALE:

PREMDOR ENTRY SYSTEMS
911 E. JEFFERSON
PITTSBURG, KS. 66762

31-1028-EV-0
SHEET 3 OF 6
REVISION LETTER




# SECTION C-C

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE JUN 05 2001
BY
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BUILDING CODE COMP[illegible]E OFFICE
ACCEPTANCE NO 01 [illegible]4.29

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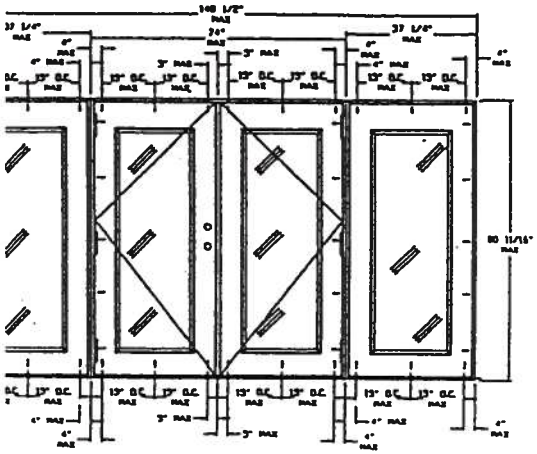
| D | DADE COUNTY HC |
| C | MATERIAL WA |
| B | ADDED PAGE |
| A | ADD SCREWS TO LI |
| LTR. | R |

LIMITS: UNLESS NOTED, FRAC. : DEC. : ANG. :
EXTRUSIONS: UNLESS NOTED, STD. COM'L. TOL'S.
ENGINEER:
DR. BY R.S. | DATE 7-29-97
PART NAME: ENTERGY VC
MAT'L:

PREMDOR ENTRY SYSTEMS
911 E. JEFFERSON
PITTSBURG, KS. 66762

# OTHER DOOR CONFIGURATIONS



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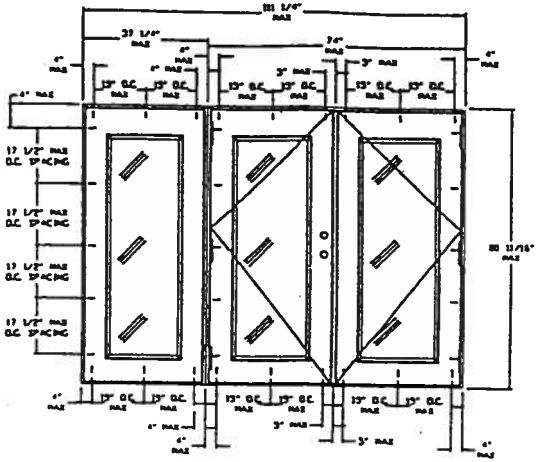

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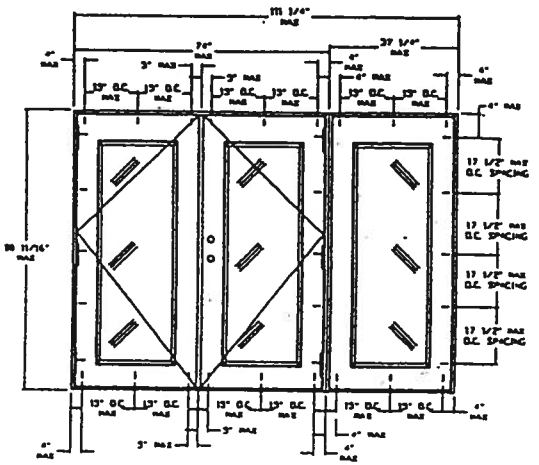

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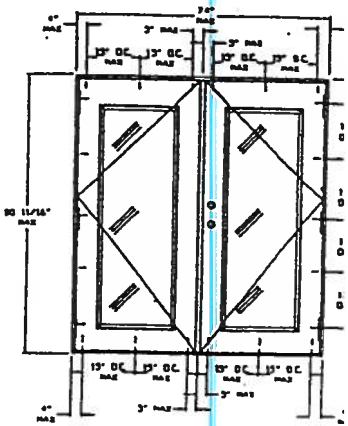

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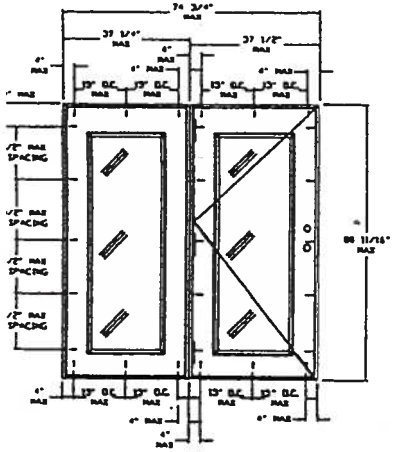

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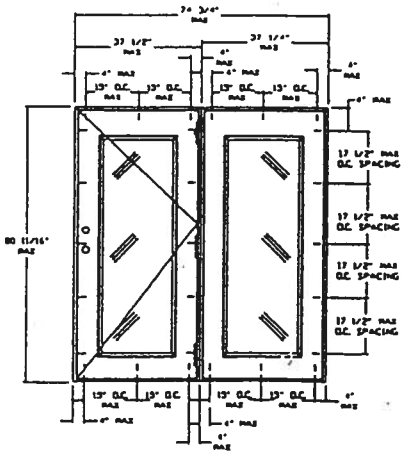

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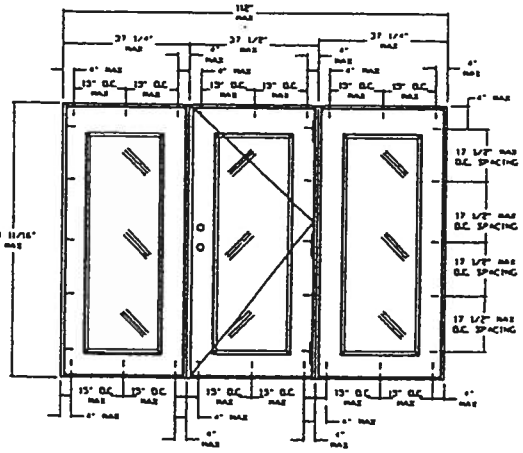

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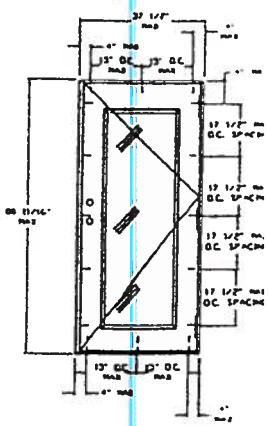

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DATE JUN 05 2001
BY Manuel Perez
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-0314.29

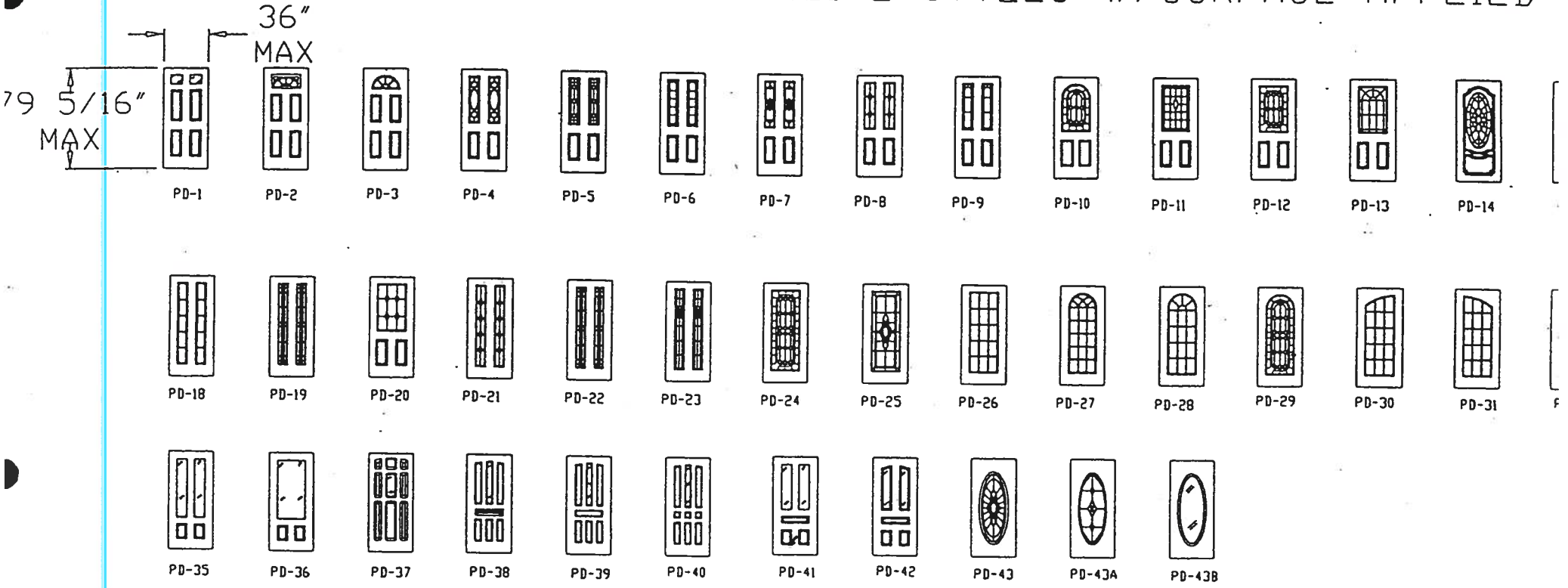
| | | | |
|---|---|---|---|
| LIMITS: UNLESS NOTED, FRAC. : DEC. : ANG. :<br>EXTRUSIONS: UNLESS NOTED, STD. COMM. TOL'S. | | | |
| ENGINEER: | LTR | REVISIONS | DATE |
| DR. BY J.D. DATE 1-11-01 | PART NAME: | | |
| | MAT'L: | SCALE: | |

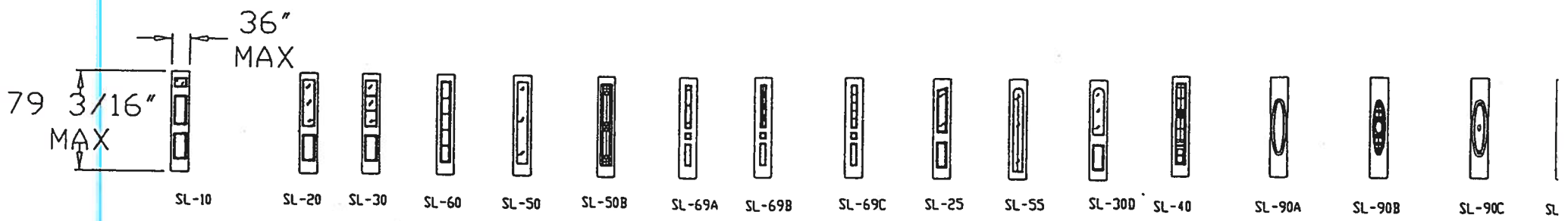
PREMDOR ENTRY SYSTEMS
911 E. JEFFERSON
PITTSBURG, KS 66762

31-1028-EW
SHEET 5 OF 6

REVISION LETTER

# OTHER GLAZED DOOR PANEL/SIDELITE STYLES W/SURFACE APPLIED

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DATE JUN 05 2001
BY
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NG CODE COMPLIANCE OFFICE
TANCE NO 01-0314.20

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| LIMITS: UNLESS NOTED, FRAC : DEC : ANG : | |
| EXTRUSIONS: UNLESS NOTED, STD. COML. TOLS. | |
| ENGINEER: | LTR |
| DR. BY J.D. DATE 1/15/01 | PART NAME |
| | MAT'L: |

PREMDOR ENTRY SYSTEMS
911 E. JEFFERSON
PITTSBURG, KS. 66762

CAPITOL WINDOWS

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

**Rendered to:**

**MI HOME PRODUCTS, INC.**

**SERIES/MODEL: 650 Fin**
**TYPE: Aluminum Single Hung Window**

| Title of Test | Results |
|---|---|
| Rating | H-R40 52 x 72 |
| Overall Design Pressure | +45.0 psf<br>-47.2 psf |
| Operating Force | 11 lb max. |
| Air Infiltration | 0.13 cfm/ft² |
| Water Resistance | 6.00 psf |
| Structural Test Pressure | +67.5 psf<br>-70.8 psf |
| Deglazing | Passed |
| Forced Entry Resistance | Grade 10 |

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

For ARCHITECTURAL TESTING, INC.

Mark A. Hess, Technician

MAH:nlb

ALLEN M. REEVES
CERTIFICATE
NO. 11334
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

Allen M. Reeves
1 APRIL 2002

Architectural Testing

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

Rendered to

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

Report No: 01-41134.01
Test Date: 03/07/02
Report Date: 03/26/02
Expiration Date: 03/07/06

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

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

**Test Specimen Description:**

**Series/Model:** 650 Fin

**Type:** Aluminum Single Hung Window

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

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

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

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

**Finish:** All aluminum was white.

**Glazing Details:** The active and fixed lites utilized 5/8" thick, sealed insulating glass constructed from two sheets of 1/8" thick, clear annealed glass and a metal reinforced butyl spacer system. The active sash was channel glazed utilizing a flexible vinyl wrap-around gasket. The fixed lite was interior glazed against double-sided adhesive foam tape and secured with PVC snap-in glazing beads.

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

Allen M. Reeves
1 APRIL 2002

ALLEN M. REEVES
No. 19354
STATE OF FLORIDA
PROFESSIONAL ENGINEER

**Test Specimen Description:** (Continued)

**Weatherstripping:**

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

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

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

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

**Hardware:**

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

Allen N. Reeves
1 APRIL 2002

ALLEN N. REEVES
CERTIFICATE
NO. 1[illegible]
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

**Test Specimen Description:** (Continued)

**Drainage:** Sloped sill

**Reinforcement:** No reinforcement was utilized.

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

**Test Results:**

The results are tabulated as follows:

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

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

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

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

| | | | |
|---|---|---|---|
| 2.1.4.2 | Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 10 seconds) | | |
| | @ 38.9 psf (positive) | 0.02" | 0.18" max. |
| | @ 52.1 psf (negative) | 0.02" | 0.18" max. |

Allen M. Reeves
1 APRIL 2002

ALLEN M. REEVES
CERTIFICATE
NO. 1837
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

**Test Specimen Description:** (Continued)

| Paragraph | Title of Test - Test Method | Results | Allowed |
|---|---|---|---|
| 2.2.1.6.2 | Deglazing Test (ASTM E 987) | | |
| | In operating direction at 70 lbs | | |
| | Meeting rail | 0.12"/25% | 0.50"/100% |
| | Bottom rail | 0.12"/25% | 0.50"/100% |
| | In remaining direction at 50 lbs | | |
| | Left stile | 0.06"/12% | 0.50"/100% |
| | Right stile | 0.06"/12% | 0.50"/100% |
| | Forced Entry Resistance (ASTM F 588-97) | | |
| | Type: A<br>Grade: 10 | | |
| | Lock Manipulation Test | No entry | No entry |
| | Tests A1 through A5 | No entry | No entry |
| | Test A7 | No entry | No entry |
| | Lock Manipulation Test | No entry | No entry |
| Optional Performance | | | |
| 4.3 | Water Resistance (ASTM E 547-00)<br>(with and without screen)<br>WTP = 6.00 psf | No leakage | No leakage |
| | Uniform Load Deflection (ASTM E 330-97)<br>(Measurements reported were taken on the meeting rail)<br>(Loads were held for 33 seconds) | | |
| | @ 45.0 psf (positive) | 0.47"* | 0.26" max. |
| | @ 47.2 psf (negative) | 0.46"* | 0.26" max. |
| | Uniform Load Structural (ASTM E 330-97)<br>(Measurements reported were taken on the meeting rail)<br>(Loads were held for 10 seconds) | | |
| | @ 67.5 psf (positive) | 0.05" | 0.18" max. |
| | @ 70.8 psf (negative) | 0.05" | 0.18" max. |

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

Allen M. Reeves
1 APRIL 2002

LEN N. REEVES
CERTIFICATE NO. 18534
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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

For ARCHITECTURAL TESTING, INC:

Mark A. Hess
Technician

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

MAH:nlb
01-41134.01

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

**Rendered to:**

**MI HOME PRODUCTS, INC.**

**SERIES/MODEL: 650**
**TYPE: Aluminum Triple Single Hung Window**

| Title of Test | Summary of Results |
|---|---|
| AAMA Rating | H-R35 112 x 72 |
| Uniform Load Deflection Test Pressure | +35.3 psf -47.2 psf |
| Operating Force | 25 lb max. |
| Air Infiltration | 0.16 cfm/ft$^2$ |
| Water Resistance Test Pressure | 5.25 psf |
| Uniform Load Structural Test Pressure | +53.0 psf -52.5 psf |
| Deglazing | Passed |
| Forced Entry Resistance | Grade 10 |

Reference should be made to ATI Report No. 01-41641.01 for complete test specimen description and data.

Allen N. Reeves
7 JUNE 2002

ALLEN N. REEVES
No. 18354
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Architectural Testing

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

Rendered to:

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

Report No: 01-41641.01
Test Date: 05/13/02
And: 05/16/02
Report Date: 06/05/02
Expiration Date: 05/16/06

**Project Summary:** Architectural Testing, Inc. (ATI) was contracted by MI Home Products, Inc. to witness testing on a Series/Model 650, aluminum triple single hung window at their facility located in Elizabethville, Pennsylvania. The sample tested successfully met the performance requirements for a H-R35 112 x 72 rating.

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

**Test Specimen Description:**

**Series/Model:** 650

**Type:** Aluminum Triple Single Hung Window

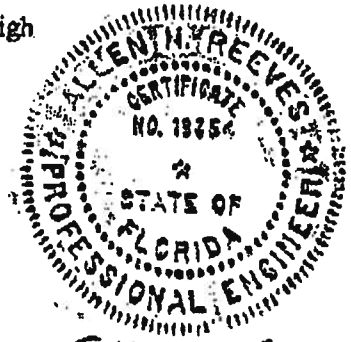
**Overall Size:** 9' 3-1/2" wide by 5' 11-11/16" high

**Active Sash Size (3):** 3' 0-1/4" wide by 2' 10-3/4" high

**Fixed Daylight Opening Size (3):** 2' 8-1/4" wide by 2' 9-1/8" high

**Screen Size (3):** 2' 9-1/8" wide by 2' 11" high

**Finish:** All aluminum was painted white.




7 JUNE 2002

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

**Test Specimen Description:** (Continued)

**Glazing Details:** The active and fixed lites utilized 5/8" thick, sealed insulating glass constructed from two sheets of 1/8" thick, clear annealed glass and a metal reinforced butyl spacer system. The active sash was channel glazed utilizing a flexible vinyl wrap-around gasket. The fixed lite was interior glazed against double-sided adhesive foam tape and secured with PVC snap-in glazing beads.

**Weatherstripping:**

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

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

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

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

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Allen H. Reeves
7 JUNE 2002

**Test Specimen Description:** (Continued)

**Hardware:**

| Description | Quantity | Location |
|---|---|---|
| Metal cam lock with keeper | 1 | Midspan of each active meeting rail with adjacent keepers |
| Plastic tilt latch | 2 | Each active sash meeting rail ends |
| Metal tilt pin | 2 | Each active sash bottom rail ends |
| Balance assembly | 2 | Each active sash contained one in each jamb |
| Screen plunger | 2 | Each screen contained two 4" from rail ends on top rail |

**Drainage:** Sloped sill

**Reinforcement:** No reinforcement was utilized.

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

**Test Results:**

The results are tabulated as follows

| Paragraph | Title of Test - Test Method | Results | Allowed |
|---|---|---|---|
| 2.2.1.6.1 | Operating Force | 25 lbs | 30 lbs max. |
| | Air Infiltration (ASTM E 283-91) @ 1.57 psf (25 mph) | 0.16 cfm/ft$^2$ | 0.3 cfm/ft$^2$ max |

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

| | | |
|---|---|---|
| Water Resistance (ASTM E 547-00) (with and without screen) WTP = 2.86 psf | No leakage | No leakage |

Allen N. Reeves
7 JUNE 2002

ALLEN N. REEVES CERTIFICATE NO. 12364 STATE OF FLORIDA PROFESSIONAL ENGINEER

**Test Results:** (Continued)

| Paragraph | Title of Test - Test Method | Results | Allowed |
|---|---|---|---|
| 2.1.4.1 | Uniform Load Deflection (ASTM E 330-97)<br>(Measurements reported were taken on the mullion)<br>(Loads were held for 52 seconds) | | |
| | @ 15.0 psf (positive) | 0.15" | 0.41" max. |
| | @ 15.0 psf (negative) | 0.29" | 0.41" max |
| 2.1.4.2 | Uniform Load Structural (ASTM E 330-97)<br>(Measurements reported were taken on the mullion)<br>(Loads were held for 10 seconds) | | |
| | @ 22.5 psf (positive) | 0.01" | 0.29" max. |
| | @ 22.5 psf (negative) | 0.01" | 0.29" max. |
| 2.2. .6.2 | Deglazing Test (ASTM E 987-88)<br>In operating direction at 70 lbs | | |
| | Right sash, meeting rail | 0.12"/25% | 0.50"/100% |
| | Right sash, bottom rail | 0.12"/25% | 0.50"/100% |
| | Middle sash, meeting rail | 0.12"/25% | 0.50"/100% |
| | Middle sash, bottom rail | 0.12"/25% | 0.50"/100% |
| | Left sash, meeting rail | 0.12"/25% | 0.50"/100% |
| | Left sash, bottom rail | 0.12"/25% | 0.50"/100% |
| | In remaining direction at 50 lbs | | |
| | Right sash, right stile | 0.06"/12% | 0.50"/100% |
| | Right sash, left stile | 0.06"/12% | 0.50"/100% |
| | Middle sash, right stile | 0.06"/12% | 0.50"/100% |
| | Middle sash, left stile | 0.06"/12% | 0.50"/100% |
| | Left sash, right stile | 0.06"/12% | 0.50"/100% |
| | Left sash, left stile | 0.06"/12% | 0.50"/100% |
| 2 .8 | Forced Entry Resistance (ASTM F 588-97) | | |
| | Type: A<br>Grade: 10 | | |
| | Lock Manipulation Test | No entry | No entry |
| | Test A1 through A5 | No entry | No entry |
| | Test A7 | No entry | No entry |
| | Lock Manipulation Test | No entry | No entry |

Allen N. Reeves
7 JUNE 2002

ALLEN N. REEVES CERTIFICATE NO. 18334 STATE OF FLORIDA PROFESSIONAL ENGINEER

**Test Results**: (Continued)

| Paragraph | Title of Test - Test Method | Results | Allowed |
|---|---|---|---|
| **Optional Performance** | | | |
| 4.3 | Water Resistance (ASTM E 547-00)<br>(with and without screen)<br>WTP = 5.25 psf | No leakage | No leakage |
| | Uniform Load Deflection (ASTM E 330-97)<br>(Measurements reported were taken on the mullion)<br>(Loads were held for 52 seconds) | | |
| | @ 35.3 psf (positive) | 0.46"* | 0.41" max |
| | @ 47.2 psf (negative) | 0.67"* | 0.41" max |
| | Uniform Load Structural (ASTM E 330-97)<br>(Measurements reported were taken on the mullion)<br>(Loads were held for 10 seconds) | | |
| | @ 53.0 psf (positive) | 0.03" | 0.29" max |
| | @ 52.5 psf (negative) | 0.02" | 0.29" max |

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

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

For ARCHITECTURAL TESTING, INC.

Mark A. Hess
Technician

MAH:nlb
01-41641.01

Allen N. Reeves, P.E.
Director - Engineering Services
7 June 2002

ALLEN N. REEVES
CERTIFICATE NO. 19384
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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

**Rendered to:**

**MI HOME PRODUCTS, INC.**

**SERIES/MODEL: 650**
**TYPE: Aluminum Picture Window**

| Title of Test | Results |
|---|---|
| Rating | F-R45 60 x 80 |
| Overall Design Pressure | +45.0 psf<br>-47.2 psf |
| Air Infiltration | 0.04 cfm/ft$^2$ |
| Water Resistance | 8.25 psf |
| Structural Test Pressure | +67.5 psf<br>-70.8 psf |
| Forced Entry Resistance | Grade 10 |

Reference should be made to Report No. 01-41135.01 dated 03/26/02 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.

Mark A. Hess, Technician

MAH:nlb

Allen N. Reeves
1 APRIL 2002

ALLEN N. REEVES
No. [illegible]
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Architectural Testing

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

Rendered to

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

Report No: 01-41135.01
Test Date: 03/07/02
Report Date: 03/26/02
Expiration Date: 03/07/06

**Project Summary:** Architectural Testing, Inc. (ATI) was contracted by MI Home Products, Inc. to perform tests on Series/Model 650, aluminum picture window at their facility located in Elizabethville, Pennsylvania. The samples tested successfully met the performance requirements for a F-R45 60 x 80 rating.

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

**Test Specimen Description:**

**Series/Model:** 650

**Type:** Aluminum Picture Window

**Overall Size:** 5' 0" wide by 6' 8" high

**Daylight Opening Size:** 4' 9-1/4" wide by 6' 5-1/4" high

**Finish** All aluminum was white.

**Glazing Details:** The test specimen utilized 7/8" thick, sealed insulating glass constructed from two sheets of 3/16" thick, clear annealed glass and a metal reinforced butyl spacer system. The glass was interior glazed against double-sided adhesive foam tape and retained with aluminum snap-in glazing beads.

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www.archtest.com

Allen M. Reeves
1 APR 02 2002

**Test Specimen Description:** (Continued)

**Frame Construction:** The frame was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1" screws through the head and sill into each jamb screw boss.

**Reinforcement:** No reinforcement was utilized.

**Installation:** The test specimen was installed into a 2 x 8 #2 Spruce-Pine-Fir wood test buck. #8 x 2-1/2" installation screws were utilized 18" on center around the interior perimeter. Polyurethane was utilized to seal the exterior.

**Test Results:**

The results are tabulated as follows:

| Paragraph | Title of Test - Test Method | Results | Allowed |
|---|---|---|---|
| | Air Infiltration (ASTM E 283-91)<br>@ 1.57 psf (25 mph) | 0.04 cfm/ft$^2$ | 0.3 cfm/ft$^2$ max. |
| | *Note #1: The tested specimen meets the performance levels specified in AAMA/NWWDA 101/I.S. 2-97 for air infiltration.* | | |
| | Water Resistance (ASTM E 547-00)<br>WTP = 2.86 psf | No leakage | No leakage |
| 2.1.4.1 | Uniform Load Deflection (ASTM E 330-97)<br>(Measurements reported were taken on the jamb)<br>(Loads were held for 33 seconds) | | |
| | @ 25.9 psf (positive) | 0.01" | 0.41" max. |
| | @ 34.7 psf (negative) | 0.01" | 0.41" max. |
| 2.1.4.2 | Uniform Load Structural (ASTM E 330-97)<br>(Measurements reported were taken on the jamb)<br>(Loads were held for 10 seconds) | | |
| | @ 38.9 psf (positive) | 0.0" | 0.29" max. |
| | @ 52.1 psf (negative) | 0.01" | 0.29" max. |


Allen N. Reeves
1 APRIL 2002

Test Results: (Continued)

| Paragraph | Title of Test - Test Method | Results | Allowed |
|---|---|---|---|
| | Forced Entry Resistance (ASTM F 588-97) | | |
| | Type: D<br>Grade: 10 | | |
| | Hand and Tool Manipulation Test | No entry | No entry |
| Optional Performance | | | |
| 4.3 | Water Resistance (ASTM E 547-00)<br>WTP = 8.25 psf | No leakage | No leakage |
| | Uniform Load Deflection (ASTM E 330-97)<br>(Measurements reported were taken on the jamb)<br>(Loads were held for 33 seconds) | | |
| | @ 45.0 psf (positive)<br>@ 47.2 psf (negative) | 0.02"<br>0.02" | 0.41" max.<br>0.41" max. |
| | Uniform Load Structural (ASTM E 330-97)<br>(Measurements reported were taken on the jamb)<br>(Loads were held for 10 seconds) | | |
| | @ 67.5 psf (positive)<br>@ 70.8 psf (negative) | 0.01"<br>0.02" | 0.29" max.<br>0.29" max. |

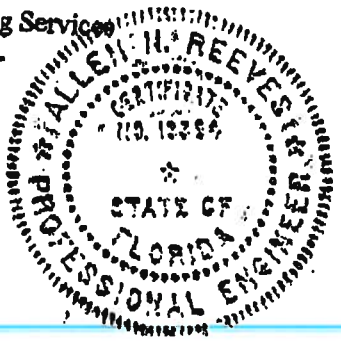
Detailed drawings, representative samples of the test specimen, and a copy of this report will be retained by ATI for a period of four years. The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specification.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

For ARCHITECTURAL TESTING, INC

Mark A. Hess
Technician

MAH:nlb
01-41135.01

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



MI HOME PRODUCTS

- PRIME ALUMINUM WINDOWS -

# INSTALLATION INSTRUCTIONS FOR "NAIL FIN" PRODUCTS

MI Home Products appreciates your recent purchase of a maintenance free prime window, which will rust, rot, mildew, or warp. This is a quality product that left our factory in good condition – proper hand and installation are just as important as good design and workmanship. Please follow th recommendations to allow this product to complete its function.

1. Handle units one at a time in the closed and locked position and take care not to scratch frame or gl or to bend the nailing fin.

2. Set unit plumb and square into opening and make sure that there is 3/16" ± 1/16" clearance around frame. Fasten unit into opening in the closed and locked position, making sure that fasteners screwed in straight in order to avoid twisting or bowing of the frame. Make sure that sill is straight a level. Check operation of unit before any and all fasteners are set.

3. Use # 8 sheet metal or wood screws with a minimum of 1" penetration into the framing (stud). Place fi screws (two at each corner) 3" from end of fin. For positive and negative DPs (design pressures) up 35, do not exceed 24" spacing of additional screws. For DPs from 35.1 to 50, do not exceed 18". Inst load bearing shim adjacent to each anchor. Use shim where space exceeds 1/16".

4. Flash over head and caulk outside perimeter in accordance with code requirements and good installati practices.

5. Fill voids between frame and construction with loose batten type insulation or non-expanding aeros foam specifically formulated for windows and doors to eliminate drafts. The use of expanding aeros type insulating foam, which can bow the frame, waives all stated warranties.

6. Remove plaster, mortar, paint and any other debris that may have collected on the unit and make su that sash/vent tracks and interlocks are also clear. Do not use abrasives, solvents, ammonia, vineg alkaline, or acid solutions for clean-up, especially with insulated glass units as their use could cau chemical breakdown of the glass seal. Take care not to scratch glass; scratches severely weaken gla and it could eventually break from thermal expansion and contraction. Clean units with water and mi detergent as you would you automobile.

## - CAUTION -

MI Home Products or its representatives are unable to control and cannot assume responsibility for th selection and placement of their products in a building or structure in a manner required by laws, statute and/or building codes. The purchaser is solely responsible for knowledge of and adherence to the same. I Home Products window products are not provided with safety glazing unless specifically ordered with suc Many laws and codes require safety glazing near doors, bathtubs, and shower enclosures. Also be aware emergency egress code requirements.

Corporate Headquarters:
650 West Market St.
Gratz, PA 17030-0370
(717) 365-3300

CENTRAL FLORIDA REGIONAL
MINIMUM PROPERTY STANDARDS

juris luzins
architect
AR 0007907

## Wind Load Design

Date 14 Feb. 07

Job Name Willow Model
Location LDM Constr. Columbia Co.

**The Wind Load Design for this structure is in compliance with the 2004 Florida Building Code Section 1609 with 2006 Suppliment**

Method of Design ASCE 7-02

**Criteria:**
Basic Wind Speed (3 second Gust) 110 MPH

Wind Importance Factor and Building Category 1.0

Wind Exposure Category B

| | | |
|---|---|---|
| Internal Pressure Coefficients: | Partially Enclosed Buildings | +0.55 |
| | | -0.55 |
| | Enclosed Buildings | +0.18 |
| | | -0.18 |
| | Open Buildings | 0.00 |

Maximum lateral load transferred through roof diaphragm 5425 #

Design Wind pressure for Components and Cladding: (maximum values)
Roof −40.68 psf
Wall −33.74 psf

Juris Luzins
14 Feb 07

3220 northwest 13th place, gainesville, florida 32606 (352) 224 - 8673 fax (352) 332- 6967

**Shearwalls and Exterior Sheathing:**

Wall Sheathing 7/16" OSB

Transverse Shearwalls ( accumulated length ) 61.67'

Fasteners: @ edges 8 d Nails ____ Staples ____ Screws 6 " o.c. See * Below

@ interior 8 d Nails ____ Staples ____ Screws 12 " o.c.

Longitudinal Shearwalls ( accumulated length ) 37.67'

Fasteners: @ edges 8 d Nails ____ Staples ____ Screws 6 " o.c.

@ interior 8 d Nails ____ Staples ____ Screws 12 " o.c.

Drag Strut: 16 d Nails @ 24 " o.c. all top plates

**Vertical Tension Resistance:**

* Wall Straps Simpson SP4 @ 32" o.c. @ top if req'd

Sheathing Fasteners 8d Common @ 4" o.c. top & bot.

Tie Columns —

**Anchorage to Concrete Slabs:**

Anchor Bolts 1/2" ϕ Spacing 48" Washer 2"

Corner Hold-down 1/2" AB w/ 2" w Location 6.5" ea. way @ corners

Distance to first anchor bolt from corner 24"

Corner Hold-down at wood floor system ____ Location ____

**Foundations:** 12" x 20" deep monolithic w/ 2#5 ϕ cont

**Porch Column Anchors:**

Column to Beam Simpson PC44 or equal

Column to Slab Simpson ABU44 or equal

**Anchorage @ Wall Openings**

Simpson CS18X24 ea. side of opg. top & bottom

Juris Luzins

Architect

AR0007907

Data entry by: Juris Luzins  Date: 03-27-06

Project name: Willow Model
Location : LDM Construction

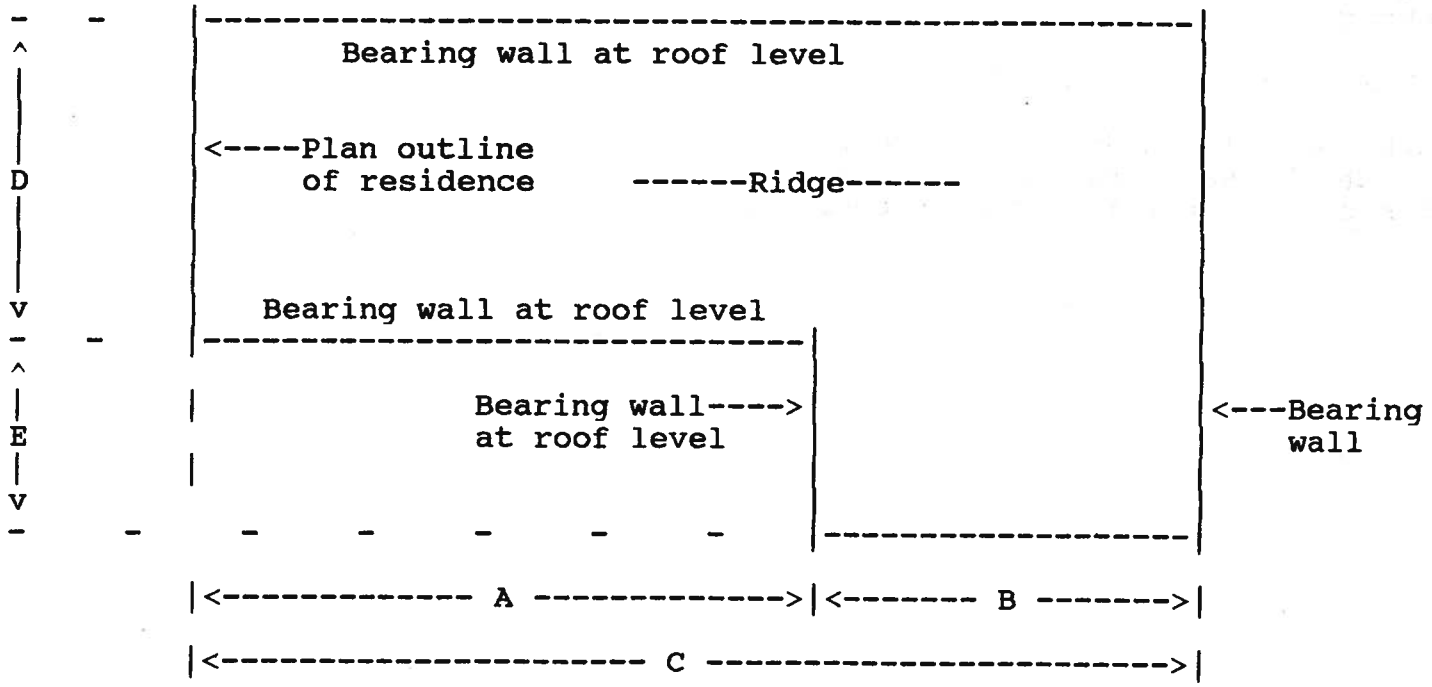
---

W I N D  D E S I G N

---

**** GENERAL INPUT DATA ****

Permanent construction
L-shaped building




All dimensions are out to out of studs (block).
Dimension A = 27 feet
Dimension B = 21.33 feet
Dimension C = 48.33 feet
Dimension D = 44.67 feet
Dimension E = 20 feet
Roof overhang in long dir. from outer face of stud (block) = 1.5 feet gen.
Roof overhang at short end wall from outer face of stud(block) = 1.5 ft. gen.
Height of exterior wall to top of plate (tie bm) on long side = 8 feet
Roof cross slope = 6 /12

Wind velocity = 110 mph 9.1.

**** DEGREE OF ENCLOSURE ****

---

Assume that this building is an 'Enclosed building' per Code

---

COEFFICIENTS AND PRESSURES

Main Wind Force Resisting Systems

Actual wind pressure = Velocity pressure x Use factor x Coefficient

Wind velocity is 110 mph 9.f.

Mean roof height is 13.95643 feet

Velocity pressure is 22.6 psf

Use factor is 1.0

Roof cross slope is 6 on 12, which equals 26.56505 degrees to horizontal

End zone width is 8.934 feet

For illustration see Code

| | Coefficient | Actual Pressure (psf) |
|---|---|---|
| End zone: | | |
| Windward wall (1E) | .7 | 15.82 |
| Windward roof (2E) | -1 | -22.6 |
| Leeward roof (3E) | -1 | -22.6 |
| Leeward wall (4E) | -.95 | -21.47 |
| Interior zone: | | |
| Windward wall (1) | .4 | 9.04 |
| Windward roof (2) | -.75 | -16.96 |
| Leeward roof (3) | -.75 | -16.96 |
| Leeward wall (4) | -.7 | -15.82 |

## COEFFICIENTS AND PRESSURES
### Roof Components

Actual wind pressure = Velocity pressure x Use factor x Coefficient
Velocity pressure = 22.6 psf  Use factor = 1.0
Edge strip width = 4.467 feet  End zone width = 8.934 feet

Common truss 1 --Span 44.67 ft., Spacing 24 in., Slope 6 /12, Overhang 1.5 ft.
Member located in interior zone: Tributary area = 665.1362 square feet
Interior area : Coefficient = -1.1  Pressure = -24.86 psf
Eave and ridge areas: Coefficient = -1.2  Pressure = -27.12 psf
Overhang area : Coefficient = -1.55  Pressure = -35.03 psf
Wind uplift at bearing = 1257 pounds

Common truss 2 --Span 44.67 ft., Spacing 24 in., Slope 6 /12, Overhang 1.5 ft.
Member located in end zone: Tributary area = 665.1362 square feet
Interior area : Coefficient = -1.8  Pressure = -40.68 psf
Eave and ridge areas: Coefficient = -1.8  Pressure = -40.68 psf
Overhang area : Coefficient = -1.6  Pressure = -36.16 psf
Wind uplift at bearing = 1927 pounds

Common truss 3 --Span 21.33 ft., Spacing 24 in., Slope 6 /12, Overhang 1.5 ft.
Member located in interior zone: Tributary area = 151.6563 square feet
Interior area : Coefficient = -1.1  Pressure = -24.86 psf
Eave and ridge areas: Coefficient = -1.2  Pressure = -27.12 psf
Overhang area : Coefficient = -1.55  Pressure = -35.03 psf
Wind uplift at bearing = 679 pounds

Common truss 4 --Span 21.33 ft., Spacing 24 in., Slope 6 /12, Overhang 1.5 ft.
Member located in end zone: Tributary area = 151.6563 square feet
Interior area : Coefficient = -1.8  Pressure = -40.68 psf
Eave and ridge areas: Coefficient = -1.8  Pressure = -40.68 psf
Overhang area : Coefficient = -1.6  Pressure = -36.16 psf
Wind uplift at bearing = 979 pounds

ROOF LOADING--Roof Number 1 (pounds per square foot)

Roof cross slope = 6 inches per foot

| | |
|---|---|
| Fiberglass shingles 210 # per square and 1 layer of 30 # felt | = 2.4 |
| No insulation | |
| 7/16 in. roof sheathing, 1 layer | = 1.31 |
| Total roof unit weight on slope | = 3.71 |
| Cosine of roof cross slope | = .8944272 |
| Roof unit weight on horizontal | = 4.147906 |
| 2 in. x 4 in. wood trusses at 24 in. spacing | = 2.215147 |
| 1 layer of 1/2 in. gypsum board ceiling--plain | = 2 |
| Ceiling insulation R-30 | = .5 |
| Air-conditioning ductwork | = 1 |
| Full lighting | = .3 |
| Miscellaneous | = 0 |
| Total | = 10.16305 |

Roof Unit Dead Load = 11 psf
Roof dead load supported generally by wall = 235.6168 plf

ROOF LOADING--Roof Number 2 (pounds per square foot)

Roof cross slope = 6 inches per foot

| | |
|---|---|
| Fiberglass shingles 210 # per square and 1 layer of 30 # felt | = 2.4 |
| No insulation | |
| 7/16 in. roof sheathing, 1 layer | = 1.31 |
| Total roof unit weight on slope | = 3.71 |
| Cosine of roof cross slope | = .8944272 |
| Roof unit weight on horizontal | = 4.147906 |
| 2 in. x 4 in. wood trusses at 24 in. spacing | = 2.215147 |
| 1 layer of 1/2 in. gypsum board ceiling--plain | = 2 |
| Ceiling insulation R-30 | = .5 |
| Air-conditioning ductwork | = 1 |
| Full lighting | = .3 |
| Miscellaneous | = 0 |
| Total | = 10.16305 |

Roof Unit Dead Load = 11 psf
Roof dead load supported generally by wall = 235.6168 plf

## ROOF MEMBER DEAD LOAD REACTIONS AT BEARINGS (pounds)

Roof member number 1 --Span 44.67 feet, Slope 6 /12, interior zone---- 471
Roof member number 2 --Span 44.67 feet, Slope 6 /12, end zone--------- 471
Roof member number 3 --Span 21.33 feet, Slope 6 /12, interior zone---- 234
Roof member number 4 --Span 21.33 feet, Slope 6 /12, end zone--------- 234

**** TRANSVERSE SHEARWALL DIMENSIONS ***

Transverse Shearwall Segment Analysis:

Segment ST1, wall, H = 96 in., L = 164 in., H/L = .585 < 3.5
Segment ST2, wall, H = 96 in., L = 192 in., H/L = .5 < 3.5
Segment ST3, wall, H = 96 in., L = 240 in., H/L = .4 < 3.5
Segment ST4, wall, H = 96 in., L = 144 in., H/L = .666 < 3.5

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**** ANALYSIS OF ROOF SHEATHING AS SHEAR DIAPHRAGM TRANSVERSE ****

Shear analysis applies along supporting shearwalls.
Roof trusses are Southern Pine lumber, spaced at 24 in.
Sheathing is Oriented Strand Board, 7/16 inch thick
Sheathing has no intermediate blocking
Fasteners on panel ends are 8d common nails spaced 6 in.
Fasteners in panel interior are 8d common nails spaced 12 in.

Total lateral wind force on building = 10850 pounds
Total force transferred through diaphragm to shearwalls = 5425 pounds
Total length of shearwalls = 61.66667 feet
MINIMUM REQUIRED TOTAL SHEARWALL LENGTH = 23.4 FT.--LOCATE EVENLY THROUGHOUT

Actual diaphragm force per unit length of shearwall = 87 plf
Allowable diaphragm force per unit length of shearwall = 230 plf

*** Summary of Analysis ***
Roof sheathing diaphragm satisfies Code requirements.

**** ANALYSIS OF ROOF SHEATHING FOR FASTENER WITHDRAWAL ****

Interior zone (area Ri)
Roof trusses are Southern Pine lumber, spaced at 24 inches
Sheathing is 7/16 inch with no intermediate blocking
Size of sheathing is 48 inches by 96 inches
Fasteners along end trusses are 8d nails spaced 6 in.
Fasteners along int. trusses are 8d nails spaced 12 in.
Total outward wind force on sheathing = 743 pounds
Total withdrawal resistance of 33 common nails = 2506 pounds
Fastening of roof sheathing satisfies Code requirements.

Edge strip (area Si) width = 4.467 feet
Roof trusses are Southern Pine lumber, spaced at 24 inches
Sheathing is 7/16 inch with no intermediate blocking
Size of sheathing is 48 inches by 96 inches
Fasteners along end trusses are 8d nails spaced 6 in.
Fasteners along int. trusses are 8d nails spaced 12 in.
Total outward wind force on sheathing = 1151 pounds
Total withdrawal resistance of 33 common nails = 2506 pounds
Fastening of roof sheathing satisfies Code requirements.

End zone (areas Se and C) width = 8.934 feet
Roof trusses are Southern Pine lumber, spaced at 24 inches
Sheathing is 7/16 inch with no intermediate blocking
Size of sheathing is 48 inches by 96 inches
Fasteners along end truss are 8d nails spaced 6 in.
Fasteners along end wall are 8d nails spaced 6 in.
Fasteners along int. trusses are 8d nails spaced 12 in.
Total outward wind force on sheathing = 1549 pounds
Total withdrawal resistance of 33 common nails = 2506 pounds
Fastening of roof sheathing satisfies Code requirements.

# S U M M A R Y  O F  H U R R I C A N E  A N C H O R  D E S I G N

Simpson Strong-Tie hurricane anchors

Member number 1 --Span 44.67 feet, located in interior zone:--Model H4 & LTS12

Member number 2 --Span 44.67 feet, located in end zone:-------Model ~~xxxx~~ H15-2 S.T. H10-2

Member number 3 --Span 21.33 feet, located in interior zone:--Model H1

Member number 4 --Span 21.33 feet, located in end zone:-------Model H4 & LTS12

Total dragstrut length = 96 feet
Shear per unit dragstrut length = 52 pounds per linear foot

Actual shear on each nail = 104 pounds
Allowable shear on each nail = 126 pounds

Dragstrut nailing satisfies Code requirements.

**** ANALYSIS OF SHEATHING FASTENERS ****

Wall framing is Spruce--Pine--Fir lumber
Sheathing is 7/16 inch Oriented Strand Board
Sheathing extends from bottom of bottom plate to top of top plate
Fasteners are 8d common nails at 4 inch spacing

Total uniform wind uplift in first story at top of wall level = 477 plf
Uniform dead loads per linear foot:
Roof = 235.6168 plf
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Total = 235.6168 plf
Total uniform dead load in first story at top of wall level = 235 plf
Net wind uplift in first story at top of wall level = 242 plf

Total uplift force on each nail = 80 pounds
Allowable shear on each nail = 90 pounds (increased for wind)
Sheathing to plate fastening ~~fails~~ to satisfy Code requirements.
O.K. J.S.

**** ANALYSIS OF PORCH ROOF BEAM TO WOOD COLUMN CONNECTION ***

Columns are at 82 inch average spacing
Simpson Strong-Tie Model PC44----12 gauge----12-16d to beam----8-16d to column
Southern Pine framing lumber

Total uniform wind uplift at top of column = 162 plf
Total uniform dead load at top of column = 28 plf
Net uniform wind uplift at top of column = 134 plf

Total uplift force on connector = 912 pounds
Allowable tension load on connector = 1700 pounds (increased by 60 percent)

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*** Summary of Analysis ***
Connection satisfies all Code requirements.

**** ANALYSIS OF FOUNDATION ****

Footing is monolithic with slab-on-grade
Footing is 12 inches wide by 20 inches deep (including slab)

Total uniform wind uplift on foundation = 477 pounds per linear foot
Uniform dead loads in pounds per linear foot:
    Roof  = 235.6168 plf
    Wall  = 53.01051 plf
    ---------------------
    Total = 288.6273 plf
Total uniform dead load times 2/3 = 192 pounds per linear foot
Net uplift force at top of foundation = 285 pounds per linear foot
Weight of slab turndown footing x 2/3 = 161 pounds per linear foot
Net uplift at bottom of footing = 124 pounds per linear foot

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*** Summary of Analysis ***
Foundation is stable. Net uplift is resisted by slab shear.

**** DESIGN OF WALL STUD NUMBER 1 ****

2 in. x 4 in. single stud at 16 in. spacing
Stud height is 7.625 feet--located in interior zone
Spruce--Pine--Fir lumber--Number 1--Number 2 grade
Sheathing is 7/16 inch rated OSB, span rating 24/16
Exterior finish is

Total outward force on stud = 298 pounds
Stud moment = 284 ft-lb.
Composite bending stresses in vertical stud-sheathing combination:
Stud inside face : Actual = 693 psi Allowable = 2415 psi (adjusted)
Sheathing exterior: Actual = 152 psi Allowable = 661 psi (adjusted)
Stud tensile stress: Actual = 42 psi Allowable = 1020 psi (adjusted)
Interaction bending and tension actual/allowable stress ratio total = .328133
Sheathing stress horiz: Actual = 163 psi Allowable = 222 psi (adjusted)
Deflections:
Stud : Actual = .1152 in. Allowable = .5083 in.

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*** Summary of Design ***
Wood wall studs COMPLY with Code requirements.