

DATE 12/20/2006

Columbia County Building Permit

PERMIT

This Permit Expires One Year From the Date of Issue

000025327

APPLICANT KAREN MAGGARD PHONE 497-1249
ADDRESS 625 SW KINARD CT FORT WHITE FL 32038
OWNER HAROLD & KAREN MAGGARD PHONE 497-1249
ADDRESS 625 SW KINARD CT FORT WHITE FL 32038
CONTRACTOR OWNER BUILDER PHONE
LOCATION OF PROPERTY 47 S, R HERLONG RD, R KINARD CT, 1/2 MILE HOUSE ON RIGHT

TYPE DEVELOPMENT SFD, UTILITY ESTIMATED COST OF CONSTRUCTION 112300.00
HEATED FLOOR AREA 2246.00 TOTAL AREA 3516.00 HEIGHT 20.00 STORIES 1
FOUNDATION CONCRETE WALLS FRAMED ROOF PITCH 6/12 FLOOR SLAB
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. 1 FLOOD ZONE X DEVELOPMENT PERMIT NO.

PARCEL ID 05-6S-16-03773-004 SUBDIVISION
LOT BLOCK PHASE UNIT TOTAL ACRES 10.00

Culvert Permit No. Culvert Waiver Contractor's License Number Applicant/Owner/Contractor
EXISTING 06-1045-E BK JH N
Driveway Connection Septic Tank Number LU & Zoning checked by Approved for Issuance New Resident

COMMENTS: FLOOR ONE FOOT ABOVE THE ROAD
MH TO BE REMOVED WITHIN 45 DAYS OF CO BEING IAAUED

Check # or Cash 2677

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

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

BUILDING PERMIT FEE \$ 565.00 CERTIFICATION FEE \$ 17.58 SURCHARGE FEE \$ 17.58
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 675.16
INSPECTORS OFFICE CLERKS OFFICE

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

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

This Permit Must Be Prominently Posted on Premises During Construction

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

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

1-25-08

Columbia Co Building
Zoning Dept.
Lake city FL 32055

We Are Requesting An extension
for building permit # 000025327,
due to the time Required, that will
ensure our home is finished in the
high quality And integrity we demand,
As owner builders.

Thank You
Karen Maggard

Karen & Harold Maggard
625 SW. Kinnard Ct.
Fort white FL 32038
Permit # 000025327

Permit Number: [type permit number]

Tax Folio Number: 03773-004

State of: Florida

County of: Columbia

File Number: 07-224

NOTICE OF COMMENCEMENT

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.

1. Description of Property:

A Part of the NW 1/4 of the SE 1/4 and the SW 1/4 of the NE 1/4 of Section 5, Township 6 South, Range 16 East COLUMBIA COUNTY, FLORIDA. Being more particularly described as follows:

Commence at the NE corner of the NW 1/4 of the SE 1/4 of said Section 5, and run Thence South 0° 53' 02" East along said East line thereof, 557.83 feet, Thence South 88° 19' 37" West 707.97 feet to the Point of Beginning, Thence South 88° 19' 37" West 552.20 feet to the East maintained Right of Way of Kinard Road, Thence North 5° 44' 46" West 558.45 feet, to its intersection with the North line of said NW 1/4 of SE 1/4, Thence North 8° 49' 37" West 142.21 feet to a point on the West line of said SW 1/4 of NE 1/4, Thence North 0° 45' 37" West along said West line 48.91 feet, Thence North 88° 17' 48" East 619.33 feet, Thence South 0° 51' 57" East 747.45 feet to the Point of Beginning.

2. General Description of Improvements: Single Family Dwelling

3. Owner Information:

a. Name and Address: Harold G. Maggard and Karen DeMurra Maggard
625 SW Kinard Court, Ft. White, Florida 32038

b. Interest in property: Fee Simple

c. Names and address of fee simple title holder (if other than owner):

4. Contractor: Harold G. Maggard
625 SW Kinard Court, Ft. White, Florida 32038

5. Surety: N/A

6. Lender: N/A

7. Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a)7., Florida Statutes.

8. In addition to himself, Owner designates the following persons to receive a copy of the Lienor's Notice as provided in Section 713.13(1)(b), Florida Statutes.

9. Expiration date of Notice of Commencement (the expiration date is 1 year from date of recording unless a different date is specified): [User Input as to the date of expiration of the Notice of Commencement].

Harold G. Maggard
Harold G. Maggard

Karen DeMurra Maggard
Karen DeMurra Maggard

Sworn to and subscribed before me June 8, 2007 by who is personally known to me or who did provide
Charles L. Lunde as identification.

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.

1. Description of Property:

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Commence at the NE corner of the NW 1/4 of the SE 1/4 of said Section 5, and run Thence South 0° 53' 02" East along said East line thereof, 557.83 feet, Thence South 88° 19' 37" West 707.97 feet to the Point of Beginning, Thence South 88° 19' 37" West 552.20 feet to the East maintained Right of Way of Kinard Road, Thence North 5° 44' 46" West 558.45 feet, to its intersection with the North line of said NW 1/4 of SE 1/4, Thence North 8° 49' 37" West 142.21 feet to a point on the West line of said SW 1/4 of NE 1/4, Thence North 0° 45' 37" West along said West line 48.91 feet, Thence North 88° 17' 48" East 619.33 feet, Thence South 0° 51' 57" East 747.45 feet to the Point of Beginning.

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- a. Name and Address: Harold G. Maggard and Karen DeMurra Maggard
625 SW Kinard Court, Ft. White, Florida 32038
- b. Interest in property: Fee Simple
- c. Names and address of fee simple title holder (if other than owner):

4. Contractor: Harold G. Maggard
625 SW Kinard Court, Ft. White, Florida 32038

5. Surety: N/A

6. Lender: N/A

7. Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a)7., Florida Statutes.

8. In addition to himself, Owner designates the following persons to receive a copy of the Lienor's Notice as provided in Section 713.13(1)(b), Florida Statutes.

9. Expiration date of Notice of Commencement (the expiration date is 1 year from date of recording unless a different date is specified): [User Input as to the date of expiration of the Notice of Commencement].

Harold G. Maggard
Harold G. Maggard

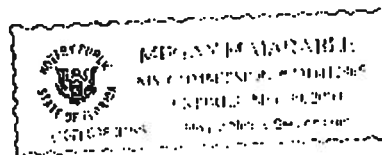
Karen DeMurra Maggard
Karen DeMurra Maggard

Sworn to and subscribed before me June 8, 2007 by who is personally known to me or who did provide
Shavers as identification.

Myron M. Marble

Notary Public

My Commission Expires: _____



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 05-65-16-03773-004

PERMIT NUMBER 00025327

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

beg AT NE COR OF NW 1/4 OF SE 1/4 Run S 558.09
FT, W 1257.80 FT to E R/W Kinard Rd,
N 751.58 FT E 1326.74 FT S 190 FT to POB
ORB 858-578
625 SW Kinard Ct. Fort White FL 32038

2. General description of improvement: Single Family Home

3. Owner Name & Address Harold + Karen Maffard 625 SW Kinard Ct
Fort White FL 32038 Interest in Property CONVEY

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

5. Contractor Name Harold Maffard Phone Number 386 467-1249
Address 625 SW Kinard Ct Fort White FL 32038

6. Surety Holders Name _____ Phone Number _____
Address NA

Amount of Bond _____ Inst: 2007008085 Date: 04/10/2007 Time: 14:32

7. Lender Name NA D.C. DC, P. DeWitt Cason, Columbia County B:1116 P:127
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 _____

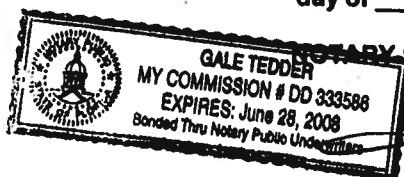
10. Expiration date of the Notice of Commencement (the expiration date is 1 (one) year from the date of recording,
(Unless a different date is specified) _____

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.

Sworn to (or affirmed) and subscribed before 10th
day of April, 20 07

Karen Maffard
Signature of Owner



Gale Tedder
Signature of Notary

Columbia County Building Permit Application

ck 2677

left message 12/5/06

Revised 9-23-04

For Office Use Only Application # 0611-58 Date Received 11-28-06 By GT Permit # 25327
 Application Approved by - Zoning Official BK Date 05-12-06 Plans Examiner OK JTH Date 12-4-06
 Flood Zone X Development Permit N/A Zoning A-3 Land Use Plan Map Category A-3
 Comments MT to be Removed within 45 days of CO being Issued
NUC Existing well

Applicants Name Harold Gilbert Maggard Phone 497-1249
 Address 625 SW Kinard Ct., Fort White, Florida 32038
 Owners Name Harold & Karen Maggard Phone 497-1249
 911 Address 625 SW Kinard Rd. Fort White, Florida 32038
 Contractors Name OWNER/Builder Phone 497-3941/1249
 Address 625 SW Kinard Ct., Fort White, Florida 32038
 Fee Simple Owner Name & Address Harold & Karen Maggard, Fort White, Florida 32038
 Bonding Co. Name & Address None
 Architect/Engineer Name & Address Huey R. Hawkins, P.E., Fort White, Florida 32038
 Mortgage Lenders Name & Address None cell 961-1727
 Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy
 Property ID Number 05-065-16-03773-004 Estimated Cost of Construction \$200,000
 Subdivision Name N/A Lot Block Unit Phase
 Driving Directions South on 5247, Rt on Herlong Rd, Rt on Kinard Court,
1/2 mi house on right side.

Type of Construction SFD Number of Existing Dwellings on Property 1
 Total Acreage 1.0 A Lot Size N/A Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive
 Actual Distance of Structure from Property Lines - Front 400' Side 650' Side 67' Rear 67'
 Total Building Height 20' Number of Stories 1 Heated Floor Area 2246 Roof Pitch 6/12
TOT AL 3516

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

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

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

Harold Maggard
 Owner/Builder or Agent (including Contractor)

STATE OF FLORIDA
 COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me
 this 28 day of November 2006.

Personally known or Produced Identification FCDL
M 263-347-50-221-0

Harold Maggard
 Contractor Signature
 Contractors License Number
 Competency Code Number
 NOTARY STAMP REAL BRENDA G. DAVIS
 MY COMMISSION # DD 578859
 EXPIRES: September 28, 2010
Brenda G. Davis
 Notary Signature



0611-58

STATE OF FLORIDA
DEPARTMENT OF HEALTH

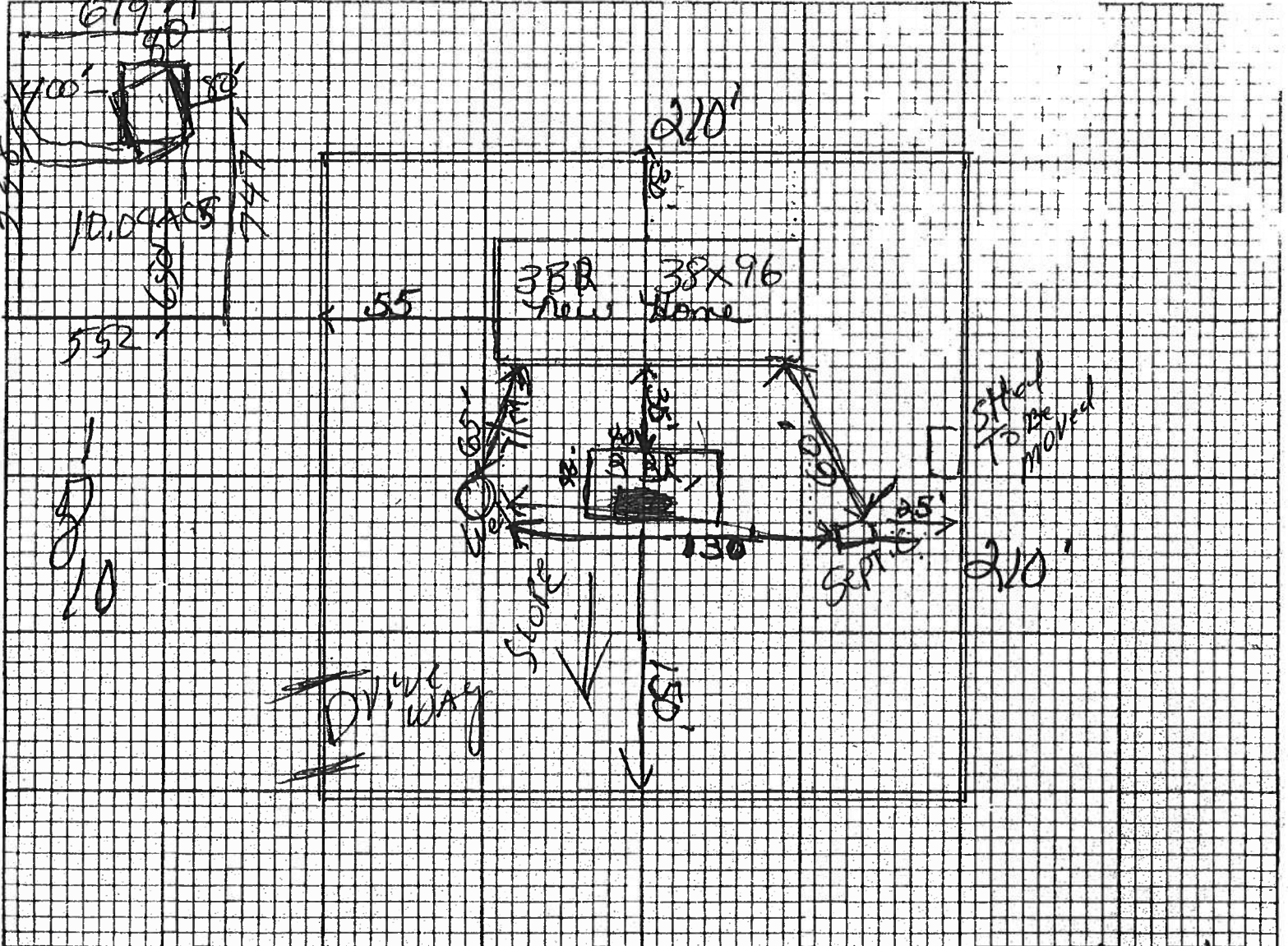
APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number

061045E
0611-58

PART II - SITE PLAN

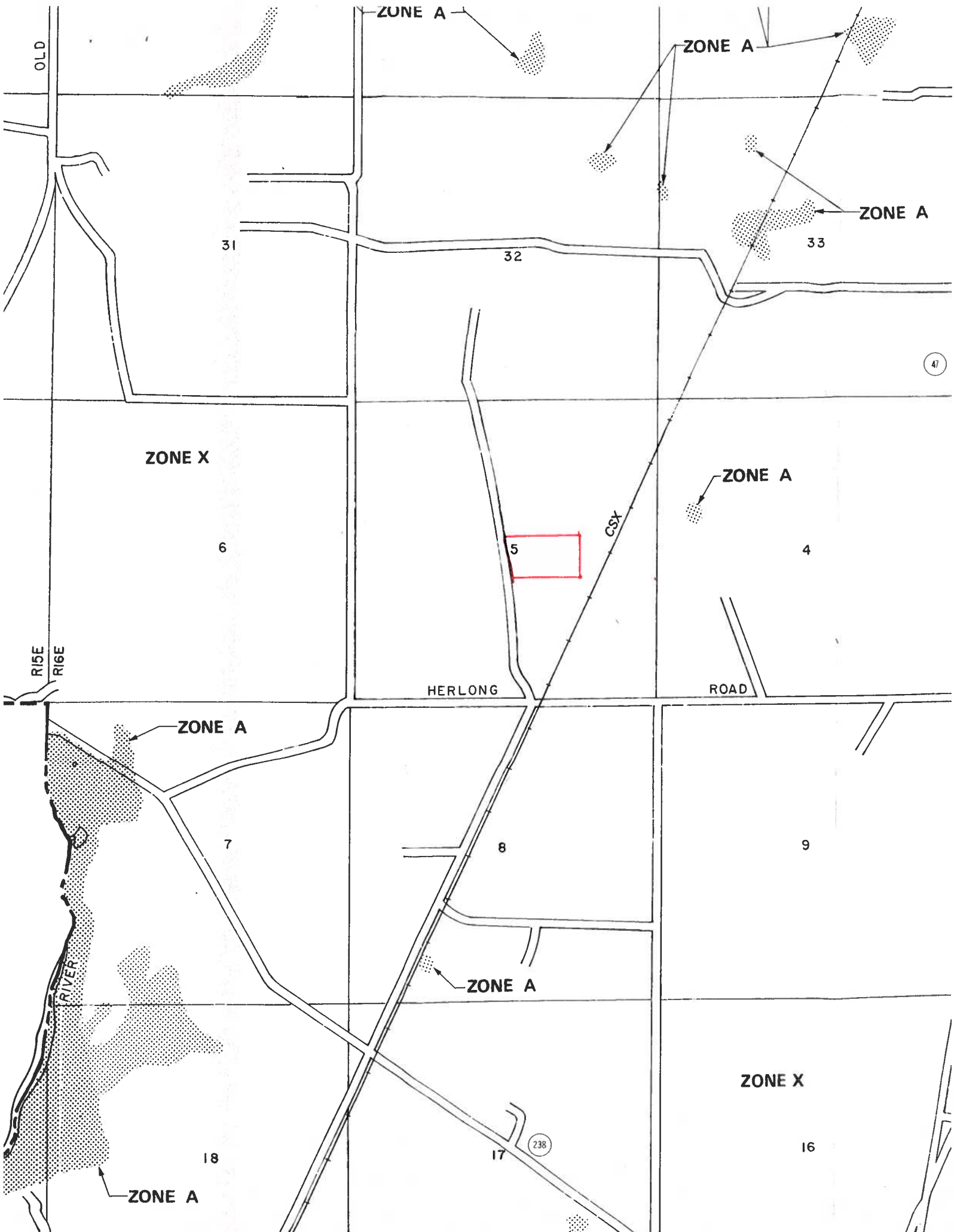
Scale: Each block represents 5 feet and 1 inch = 50 feet.

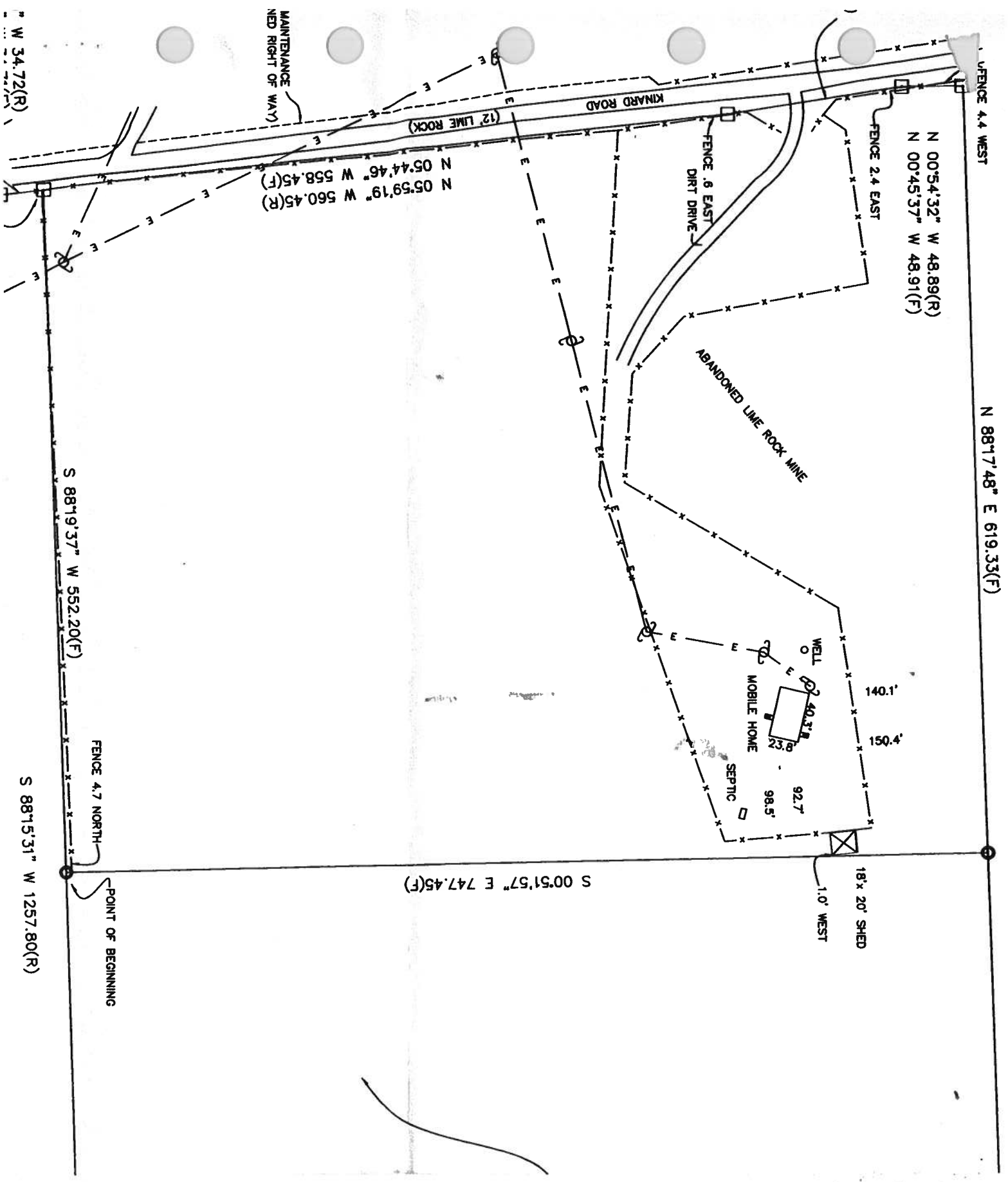


Notes: Will be moved when home complete (38PMH)

Site Plan submitted by: Harold Muggs
Signature
Plan Approved X
By: [Signature]
Not Approved
APPROVED
Columbia CHD
County Health Department
Date 11/29/06
Title

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT





LEGAL DESCRIPTION:

A PART OF THE NW 1/4 OF THE SE 1/4 AND THE SW 1/4 OF THE NE 1/4 OF SECTION 5, TOWNSHIP 6 SOUTH, RANGE 16 EAST, COLUMBIA COUNTY, FLORIDA. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE NE CORNER OF THE NW 1/4 OF THE SE 1/4 OF SAID SECTION 5 AND RUN THENCE S 0°53'02" E, ALONG SAID EAST LINE THEREOF, 557.83 FEET; THENCE S 88°19'37" W, 707.97 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE S 88°19'37" W, 552.20 FEET TO THE EAST MAINTAINED RIGHT OF WAY OF KINARD ROAD; THENCE N 5°44'46" W, 558.45 FEET TO ITS INTERSECTION WITH THE NORTH LINE OF SAID NW 1/4 OF SE 1/4; THENCE N 8°49'37" W, 142.21 FEET TO A POINT ON THE WEST LINE OF SAID SW 1/4 OF NE 1/4; THENCE N 0°45'37" W, ALONG SAID WEST LINE, 48.91 FEET; THENCE N 88°17'48" E, 619.33 FEET; THENCE S 0°51'57" E, 747.45 FEET TO THE POINT OF BEGINNING. CONTAINING 10.04 ACRES MORE OR LESS.

SURVEYOR'S NOTES:

1. BOUNDARY INFORMATION TAKEN FROM A PREVIOUS SURVEY BY BRITT SURVEYING DATED 2/9/98, #L-8367, AND FOUND MONUMENTATION.
2. BEARINGS BASED ON AN ASSUMED BEARING OF N 88°17'48" E, FOR THE NORTH LINE OF SUBJECT PARCEL.
3. ACCURACY EXCEEDS 1/10,000.
4. THE PURPOSE OF THIS SURVEY IS TO FURTHER SUBDIVIDE THE PARCEL RECORDED IN OFFICIAL RECORDS BOOK 858, PAGE 580, COLUMBIA COUNTY, FLORIDA.
5. ALL MONUMENTS STAMPED # 1071.
6. SUBJECT SURVEY WAS DONE WITHOUT THE BENEFIT OF TITLE ABSTRACT; THEREFORE THERE MAY BE EASEMENTS, ETC. AFFECTING THE PROPERTY THAT ARE NOT SHOWN HEREON.

NE CORNER OF NW 1/4 OF
THE SE 1/4 OF SECTION 5,
TOWNSHIP 6 SOUTH, RANGE
16 EAST.

S 00°54'32" E 190.00(R)
S 00°48'44" E 190.00(F)

S 00°58'18" E 558.09(R)
S 00°53'02" E 557.83(F)

NOTORIZED DISCLOSURE STATEMENT

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

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

TYPE OF CONSTRUCTION

- ☒ Single Family Dwelling
☐ Farm Outbuilding

- ☐ Two-Family Residence
☐ Other _____

NEW CONSTRUCTION OR IMPROVEMENT

- ☐ New Construction ☐ Addition, Alteration, Modification or other Improvement

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

Harold Mageard 11-28-06
Owner Builder Signature Date

The above signer is personally known to me or produced identification PL

Notary Signature Gale Tedder Date 11-28-06



(Stamp / Seal)

FOR BUILDING USE ONLY

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

Date _____ Building Official/Representative _____

Print Key Output
 5716551 VSR7M0 941108 S1032F6G
 Display Device : W8
 User : ENVIRON

Page 1
 03/29/99 14:39:09

CAM11EM01 S BRC DamaUSA Appraisal System
 3/29/99 14:37 Legal Description Maintenance
 Year T Property Sel
 1999 R 05-65-16-00773-004

Columbia County
 39906 Land 001
 AG 000
 Bldg 000
 Xfea 000
 39906 TOTAL B

MAGBARD HAROLD GILBERT S

1	BEG NE COR OF NW1/4 OF SE1/4,	RUN S 559.09 FT, W 1257.80 FT	2
2	TO E R/W KENARD RD, N 751.28	FT, E 1326.74 FT, S 190 FT TO	4
3	PCB. CRB 659-578.		6
4			8
5			10
6			12
7			14
8			16
9			18
10			20
11			22
12			24
13			26
14			28

Mnt 1/27/99 TERRY

F1=Help F3=Exit F4=Prompt F10=GoTo PGUP/PDWN F24=MoreKeys

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs
Residential Whole Building Performance Method A

Project Name: **Maggard Residence**
Address: **625 SW Kinard Court**
City, State: **Ft White, FL 32038-**
Owner: **Harold & Karen Maggard**
Climate Zone: **North**

Builder: _____
Permitting Office: **Columbia Co**
Permit Number: **25327**
Jurisdiction Number: **121000**

- | | | |
|-------------------------------------|---------------------|-------------|
| 1. New construction or existing | New | _____ |
| 2. Single family or multi-family | Single family | _____ |
| 3. Number of units, if multi-family | 1 | _____ |
| 4. Number of Bedrooms | 3 | _____ |
| 5. Is this a worst case? | No | _____ |
| 6. Conditioned floor area (ft²) | 2252 ft² | _____ |
| 7. Glass area & type | Single Pane | Double Pane |
| a. Clear glass, default U-factor | 0.0 ft² | 270.0 ft² |
| b. Default tint | 0.0 ft² | 0.0 ft² |
| c. Labeled U or SHGC | 0.0 ft² | 0.0 ft² |
| 8. Floor types | | _____ |
| a. Slab-On-Grade Edge Insulation | R=0.0, 268.0(p) ft | _____ |
| b. N/A | | _____ |
| c. N/A | | _____ |
| 9. Wall types | | _____ |
| a. Frame, Wood, Exterior | R=19.0, 1976.0 ft² | _____ |
| b. N/A | | _____ |
| c. N/A | | _____ |
| d. N/A | | _____ |
| e. N/A | | _____ |
| 10. Ceiling types | | _____ |
| a. Under Attic | R=30.0, 2252.0 ft² | _____ |
| b. N/A | | _____ |
| c. N/A | | _____ |
| 11. Ducts | | _____ |
| a. Sup: Unc. Ret: Unc. AH: Interior | Sup. R=6.0, 30.0 ft | _____ |
| b. N/A | | _____ |

- | | | |
|--|-------------------|-------|
| 12. Cooling systems | | |
| a. Central Unit | Cap: 35.0 kBtu/hr | _____ |
| | SEER: 14.00 | _____ |
| b. N/A | | _____ |
| c. N/A | | _____ |
| 13. Heating systems | | |
| a. Electric Heat Pump | Cap: 35.0 kBtu/hr | _____ |
| | HSPF: 7.90 | _____ |
| b. N/A | | _____ |
| c. N/A | | _____ |
| 14. Hot water systems | | |
| a. Electric Resistance | Cap: 30.0 gallons | _____ |
| | EF: 0.90 | _____ |
| b. N/A | | _____ |
| c. Conservation credits | | _____ |
| (HR-Heat recovery, Solar | | _____ |
| DHP-Dedicated heat pump) | | _____ |
| 15. HVAC credits | PT, CF, | _____ |
| (CF-Ceiling fan, CV-Cross ventilation, | | _____ |
| HF-Whole house fan, | | _____ |
| PT-Programmable Thermostat, | | _____ |
| MZ-C-Multizone cooling, | | _____ |
| MZ-H-Multizone heating) | | _____ |

Glass/Floor Area: 0.12

Total as-built points: 23400

Total base points: 32370

PASS

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

PREPARED BY: Tim Delbene

DATE: 11-28-06

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

OWNER/AGENT: Harold Maggard

DATE: 11-28-06

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



BUILDING OFFICIAL: _____

DATE: _____

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: 625 SW Kinard Court, Ft White, FL, 32038-

PERMIT #:

BASE				AS-BUILT							
GLASS TYPES											
.18 X Conditioned X BSPM = Points Floor Area				Overhang Type/SC Ornt Len Hgt Area X SPM X SOF = Points							
.18	2252.0	20.04	8123.4	Double, Clear	N	8.0	5.0	9.0	19.20	0.65	111.5
				Double, Clear	N	2.0	7.0	60.0	19.20	0.92	1062.4
				Double, Clear	N	2.0	5.0	6.0	19.20	0.87	100.3
				Double, Clear	N	5.0	7.0	15.0	19.20	0.76	220.3
				Double, Clear	N	6.0	7.0	15.0	19.20	0.73	211.2
				Double, Clear	N	10.0	8.0	60.0	19.20	0.68	778.5
				Double, Clear	S	2.0	7.0	45.0	35.87	0.82	1323.7
				Double, Clear	S	14.0	7.0	30.0	35.87	0.45	485.4
				Double, Clear	E	2.0	7.0	30.0	42.06	0.89	1117.9
				As-Built Total:							
				270.0 5411.3							
WALL TYPES Area X BSPM = Points				Type R-Value Area X SPM = Points							
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior		19.0	1976.0	0.90			1778.4
Exterior	1976.0	1.70	3359.2								
Base Total:				As-Built Total:							
1976.0 3359.2				1976.0 1778.4							
DOOR TYPES Area X BSPM = Points				Type Area X SPM = Points							
Adjacent	21.0	2.40	50.4	Exterior Insulated			21.0	4.10			86.1
Exterior	42.0	6.10	256.2	Adjacent Insulated			21.0	1.60			33.6
				Exterior Insulated			21.0	4.10			86.1
Base Total:				As-Built Total:							
63.0 306.6				63.0 205.8							
CEILING TYPES Area X BSPM = Points				Type R-Value Area X SPM X SCM = Points							
Under Attic	2252.0	1.73	3896.0	Under Attic		30.0	2252.0	1.73 X 1.00			3896.0
Base Total:				As-Built Total:							
2252.0 3896.0				2252.0 3896.0							
FLOOR TYPES Area X BSPM = Points				Type R-Value Area X SPM = Points							
Slab	268.0(p)	-37.0	-9916.0	Slab-On-Grade Edge Insulation		0.0	268.0(p)	-41.20			-11041.6
Raised	0.0	0.00	0.0								
Base Total:				As-Built Total:							
-9916.0				268.0 -11041.6							
INFILTRATION Area X BSPM = Points				Area X SPM = Points							
2252.0 10.21 22992.9				2252.0 10.21 22992.9							

SUMMER CALCULATIONS**Residential Whole Building Performance Method A - Details**ADDRESS: **625 SW Kinard Court, Ft White, FL, 32038-**

PERMIT #:

BASE					AS-BUILT										
Summer Base Points: 28762.1					Summer As-Built Points: 23242.8										
Total Summer Points	X	System Multiplier	=	Cooling Points	Total Component	X	Cap Ratio	X	Duct Multiplier (DM x DSM x AHU)	X	System Multiplier	X	Credit Multiplier	=	Cooling Points
28762.1		0.4266		12269.9	23242.8		1.000		(1.090 x 1.147 x 0.91)		0.244		0.902		5818.0
					23242.8		1.00		1.138		0.244		0.902		5818.0

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: 625 SW Kinard Court, Ft White, FL, 32038-

PERMIT #:

BASE				AS-BUILT								
GLASS TYPES .18 X Conditioned X BWPM = Points Floor Area				Type/SC	Overhang Ornt Len Hgt			Area X WPM X WOF = Points				
.18	2252.0	12.74	5164.3	Double, Clear	N	8.0	5.0	9.0	24.58	1.02	226.4	
				Double, Clear	N	2.0	7.0	60.0	24.58	1.00	1479.6	
				Double, Clear	N	2.0	5.0	6.0	24.58	1.01	148.4	
				Double, Clear	N	5.0	7.0	15.0	24.58	1.01	373.9	
				Double, Clear	N	6.0	7.0	15.0	24.58	1.02	374.8	
				Double, Clear	N	10.0	8.0	60.0	24.58	1.02	1505.6	
				Double, Clear	S	2.0	7.0	45.0	13.30	1.17	700.7	
				Double, Clear	S	14.0	7.0	30.0	13.30	3.51	1398.4	
				Double, Clear	E	2.0	7.0	30.0	18.79	1.05	589.4	
				As-Built Total:			270.0			6797.1		
WALL TYPES Area X BWPM = Points				Type	R-Value			Area X WPM = Points				
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior	19.0			1976.0	2.20		4347.2	
Exterior	1976.0	3.70	7311.2									
Base Total:				1976.0			7311.2		As-Built Total:			1976.0 4347.2
DOOR TYPES Area X BWPM = Points				Type				Area X WPM = Points				
Adjacent	21.0	11.50	241.5	Exterior Insulated				21.0	8.40		176.4	
Exterior	42.0	12.30	516.6	Adjacent Insulated				21.0	8.00		168.0	
				Exterior Insulated				21.0	8.40		176.4	
Base Total:				63.0			758.1		As-Built Total:			63.0 520.8
CEILING TYPES Area X BWPM = Points				Type	R-Value			Area X WPM X WCM = Points				
Under Attic	2252.0	2.05	4616.6	Under Attic	30.0			2252.0	2.05 X 1.00		4616.6	
Base Total:				2252.0			4616.6		As-Built Total:			2252.0 4616.6
FLOOR TYPES Area X BWPM = Points				Type	R-Value			Area X WPM = Points				
Slab	268.0(p)	8.9	2385.2	Slab-On-Grade Edge Insulation	0.0			268.0(p)	18.80		5038.4	
Raised	0.0	0.00	0.0									
Base Total:				2385.2			5038.4		As-Built Total:			268.0 5038.4
INFILTRATION Area X BWPM = Points				Area X WPM = Points								
2252.0 -0.59 -1328.7				2252.0 -0.59 -1328.7								

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

ADDRESS: 625 SW Kinard Court, Ft White, FL, 32038-

PERMIT #:

BASE				AS-BUILT						
Winter Base Points: 18906.7				Winter As-Built Points: 19991.4						
Total Winter Points	X	System Multiplier	= Heating Points	Total Component	X	Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Heating Points
18906.7		0.6274	11862.1	19991.4		1.000	(1.069 x 1.169 x 0.93)	0.432	0.950	9527.3
18906.7		0.6274	11862.1	19991.4		1.00	1.162	0.432	0.950	9527.3

PERMIT #:

CODE COMPLIANCE STATUS

PASS



Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: 625 SW Kinard Court, Ft White, FL, 32038-

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.	N/A
Additional Infiltration reqts	606.1.ABC.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	✓

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

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	612.1	Comply with efficiency requirements in Table 6-12. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	✓
Swimming Pools & Spas	612.1	Spas & heated pools must have covers (except solar heated). Non-commercial pools must have a pump timer. Gas spa & pool heaters must have a minimum thermal efficiency of 78%.	N/A
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.	✓

WILE J. KELLEY, JR., P.E.
Consulting Structural Engineer
JACKSONVILLE, FLORIDA

CALCULATED BY _____ DATE _____
CHECKED BY _____ DATE _____
ETCH NO. _____ SCALE _____

JOB TITLE _____ JOB NO. _____
SUBJECT _____ SH 1 OF 8

CALCULATIONS FOR
ATTACHMENTS FOR
RIB PANELS
29 & 26 Gauge
FOR

Lo
Paul Loyde

**MILLENNIUM
METALS, INC.**

1333 HAINES STREET EXPRESSWAY • JACKSONVILLE, FL 32202
904-358-8388 • WATTS 1-877-358-7663 (ROOF)
FAX 904-358-8285

Greatest Mean Height 30' Exposure B
Pitches 3/12 to 12/12

BY
W. J. Kelley Jr. #6519
2/14/2003

DOLE J. KELLEY, JR., P.E.
Consulting Structural Engineer
JACKSONVILLE, FLORIDA

CALCULATED BY DJK DATE 2/2003
CHECKED BY _____ DATE _____
SKETCH NO. _____ SCALE _____

JOB TITLE MILLENIUM

JOB NO. _____
SH 2A-8

SUBJECT RIB PANELS

ZONE	TYPE OF FASTENER	ATTACHMENT MATERIAL	FASTENER SIZE	WIND SPEED			
				100 MPH	110 MPH	120 MPH	140 MPH
		EXISTING		ON CENTER	ON CENTER	ON CENTER	ON CENTER
		1/2" TIMBER		SPACING	SPACING	SPACING	SPACING
ZONE 1	WOOD	DECK WITH	#9 x 2 1/2	16" O.C.	16" O.C.	16" O.C.	16" O.C.
THRU	SCREW	BATTENS**					
ZONE 3		5/8" THICK	#9 x 1 1/2	16" O.C.	16" O.C.	16" O.C.	16" O.C.
		PLYWOOD					
		2x4 RAFTERS	#9 x 3"	24" O.C.	24" O.C.	24" O.C.	24" O.C.
		@ 20" C. WITH					
		BATTENS					
	METAL	12 THROUGH	#12 x 1"	16" O.C.	16" O.C.	16" O.C.	16" O.C.
	SCREW	18 GAUGE					
		20 THROUGH	#14 x 3/8	16" O.C.	16" O.C.	16" O.C.	SEE NOTE
		26 GAUGE					

TYPICAL ATTACHMENT IS 9" O.C. EXCEPT AS NOTED

NOTE = DOUBLE SCREWS @ 9" O.C. WITH ROWS OF 16" PER DETAIL C.

** Battens 2x4 Attached OVER 1/2" Plywood 12" OC with a #8 x 3" Ring Shank Fastener

2x4 open Rafter Attachment of Battens ARE the Responsibility of the Engineer of the post Frame Application.

Alternative RIB PANEL FASTENING RECOMMENDATIONS (ON RIB)

NOTE: NAIL ATTACHMENTS IS THROUGH MAJOR RIBS.

DETAIL B
FIELD PURLIN
ATTACHMENT #9 x 2 1/2"
WOOD FASTENER



DETAIL C
(EAVES, RIDGES & ENDLAPS)
#9 x 2 1/2" WOOD FASTENER



Dole J. Kelley Jr.
2/19/2003

DOLE J. KELLEY, JR., P.E.
Consulting Structural Engineer
JACKSONVILLE, FLORIDA

CALCULATED BY DJK DATE 2/2003
CHECKED BY _____ DATE _____
SKETCH NO. _____ SCALE _____

JOB TITLE MILLENNIUM

JOB NO. _____

SUBJECT RIB PANELS

SH. 3 OF 8

RIB PANELS:

UPLIFT ATTACHMENTS -

ZONE 1

WOOD SCREWS INTO $\frac{1}{2}$ " TIMBER
UPLIFT = $152 \text{ #/IN} \times \frac{1}{2} = 76 \text{ #} \times 1.6 = 121 \text{ #}$

TABLE 1606.2B

100 MPH = -18.0 #/IN

ZONE 2

100 MPH = -34.8 #/IN

ZONE 3

100 MPH = -45.4 #/IN

SCREWS @ 9" O.C.

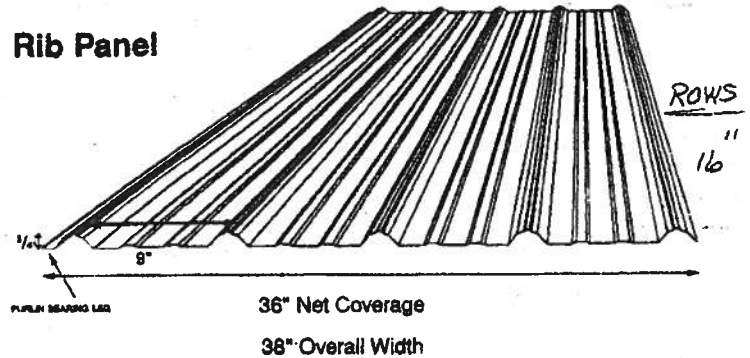
NOTE - USE 9" O.C. WITH ROWS @ 16" O.C. MAX.



**MILLENNIUM
METALS, INC.**

1333 MAINES STREET EXPRESSWAY • JACKSONVILLE, FL 32202
904-358-8385 • WATTS 1-877-358-7883 (ROOF)
FAX 904-358-8285

Rib Panel



SECTION PROPERTIES										
Depth (in.)	Flange (in.)	Thickness (in.)	Flange		Weight (lb/ft)	Area (in. ²)	Ix (in. ⁴)	Sx (in. ³)	Ix (in. ⁴)	Sx (in. ³)
			Top Flange	Bottom Flange						
26	80	0.0187	36	36	0.91	42	.0288	.0462	.0288	.1892
29	80	0.0142	36	36	0.89	40.875	.0232	.0374	.0232	.1786

5/8" PLYWOOD

PULL OUT = $152 \text{ #/IN} \times 1.625 = 95 \text{ #} \times 1.6 = 152 \text{ #/SCREW}$

ZONE 3 - $152 \text{ #/IN} \times 1.625 = 95 \text{ #} \times 1.6 = 152 \text{ #/SCREW}$

2x4 BATTENS @ 24" O.C.

PULL OUT = $152 \text{ #/IN} \times 1.5 = 228 \text{ #} \times 1.6 = 364$

MAX. PULL = $.75 \times 2 \times 45.4 \text{ #/IN} = 68.1 < 364 \text{ CAPACITY}$

#12 SCREWS INTO METAL

#12 - 18 GAUGE - ULT = $487/3 = 162 \text{ #} \times 1.3 = 210 \text{ #}$

#14 - 26 GAUGE - ULT = $191/3 = 63.7 \text{ #} \times 1.3 = 82.8 \text{ #}$

MAX PULL OUT = $.75 \times 1.33 \times 45.4 \text{ #/IN} = 45. \text{ #} < 61.1 \text{ #}$

OK FOR #12 SCREWS @ 9" AND ROWS OF 16"

Signature
2/14/2003

DOLE J. KELLEY, JR., P.E.
Consulting Structural Engineer
JACKSONVILLE, FLORIDA

CALCULATED BY DUK DATE 2/2003
CHECKED BY _____ DATE _____
SKETCH NO. _____ SCALE _____

JOB TITLE MILLENNIUM

JOB NO. _____
SH 4 OF 8

SUBJECT RIB PANELS

RIB PANELS CONT:

110 MPH $\frac{1}{16}$ "

ZONE 1 = -21.8 $\frac{1}{16}$ "

ZONE 2 = -42.1 $\frac{1}{16}$ "

ZONE 3 = -55.0 $\frac{1}{16}$ "

WOOD SCREWS

$\frac{1}{2}$ " TIMBER - PULL OUT CAPACITY = 121 #

9" X 16" = 1" = -55# < 121

$\frac{5}{8}$ " PLYWOOD = PULL OUT CAPACITY = 152 #

9" X 16" = 1.0" X -55 = 55# < 152

2X4 BATTENS @ 24" O.C.

PULL OUT CAPACITY = 364 #

9" X 24" = 1.5" X -55 $\frac{1}{16}$ = 82.5# < 364

SCREWS INTO METAL DECK

12 - THRU 18 GA. = CAPACITY = 210

14 - THRU 26 GA = CAPACITY = 81.1

MAX PULL OUT = .75 X 133 X -55 $\frac{1}{16}$ = 55# < 81.1 #

FLORIDA BUILDING CODE — BUILDING

1606.2.5 Components and cladding. Pressure for wind loading actions on components and cladding shall be determined from Table 1606.2B for enclosed portions of the building and Table 1606.2C for overhangs, based on the effective area for the element under consideration. The pressures in Table 1606.2C include internal pressure. The pressure shall be applied in accordance with the loading diagrams in Figure 1606.2c.

D. J. Kelley
2/19/2003

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CALCULATED BY DJK DATE 2/2003
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SUBJECT RIB PANELS

JOB NO. _____

SH 5 OF 8

RIB PANELS

120 MPH - UPLIFT

$$\text{ZONE 1} = -25.9 \frac{\text{lb}}{\text{ft}}$$

$$\text{ZONE 2} = -50.1 \frac{\text{lb}}{\text{ft}}$$

$$\text{ZONE 3} = -65.4 \frac{\text{lb}}{\text{ft}}$$

$\frac{1}{2}$ " TIMBER - PULL OUT CAPACITY = 121 #

$$9" \times 16" = 1.0' \times 65.4 \frac{\text{lb}}{\text{ft}} = 65.4 \text{ #} < 121$$

$\frac{5}{8}$ " PLYWOOD - PULL OUT CAPACITY = 152 #

$$9" \times 16" = 1.0' \times 65.4 \frac{\text{lb}}{\text{ft}} = 65.4 \text{ #} < 152 \text{ #}$$

2x4 BATTENS @ 24" O.C.

$$\text{PULL OUT CAPACITY} = 36 \text{ #}$$

$$\text{MAX UPLIFT} = .75' \times 2' \times 65.4 = 98.1 \text{ #}$$

SCREWS INTO METAL

$$\#12 - 18 \text{ GAUGE} = 210 \text{ #}$$

$$\#14 - 26 \text{ GAUGE} = 61 \text{ #} < 65.4$$

$$\text{IN ZONE 3 - USE } 9" \times 16" = .75' \times 65.4 \frac{\text{lb}}{\text{ft}} = 49 \text{ #} < 61 \text{ #}$$

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2/4/2003

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CALCULATED BY DJK DATE 2003
CHECKED BY _____ DATE _____
SKETCH NO. _____ SCALE _____

JOB TITLE MILLENNIUM

JOB NO. _____
SH 6 OF 8

RIB PANELS CONT:
140 M.P.H.

ZONE 1 = $-35.3 \frac{\#}{ft}$
ZONE 2 = $-68.1 \frac{\#}{ft}$
ZONE 3 = $-89.0 \frac{\#}{ft}$

$\frac{1}{2}$ " TIMBER PULL OUT CAPACITY = $121 \frac{\#}{ft}$
UPLIFT = $9" \times 16" = 1.0' \times 89.0 = 89.0 \frac{\#}{ft} < 121 \frac{\#}{ft}$

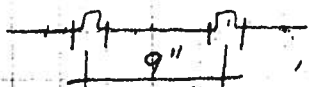
$\frac{5}{8}$ " PLYWOOD = PULL OUT CAPACITY = $152 \frac{\#}{ft}$
UPLIFT = $9" \times 16" = 1.0' \times 89 \frac{\#}{ft} = 89 \frac{\#}{ft} < 152 \frac{\#}{ft}$

2x4 BATTENS @ 24" O.C. /
PULL OUT CAPACITY = $364 \frac{\#}{ft}$
UPLIFT = $9" \times 24" = 1.5' \times 89 \frac{\#}{ft} = 133 \frac{\#}{ft} < 364 \frac{\#}{ft}$

SCREWS INTO METAL

#12 - 18 GAUGE = $210 \frac{\#}{ft} > 89 \frac{\#}{ft}$

#14 - 26 GAUGE = $61 \frac{\#}{ft}$ / SCREW



$$0.375 \times 1.33 = .5' \times 89.0 \frac{\#}{ft} = 44.5 \frac{\#}{ft} < 61.0 \frac{\#}{ft}$$

— IN ZONE 3 DOUBLE UP ON SCREWS
ON EACH SIDE OF RIBS.

Dole Kelley Jr.
2/17/2003

DOLE J. KELLEY, JR., P.E.
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JACKSONVILLE, FLORIDA

CALCULATED BY DJK DATE 2/2003
CHECKED BY _____ DATE _____
SKETCH NO. _____ SCALE _____

JOB TITLE MILLENNIUM

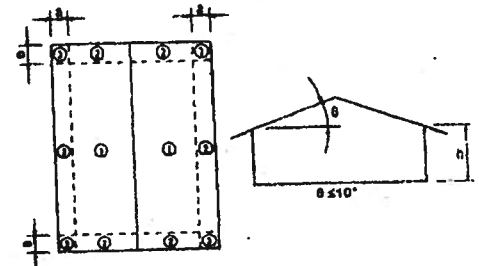
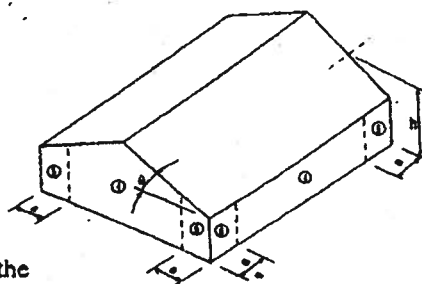
SUBJECT RIB PANELS

JOB NO. _____
SH 7 OF 8

UPLIFT VALUES :

TABLE 1606.2B
COMPONENT AND CLADDING WIND LOADS FOR A BUILDING WITH A MEAN ROOF HEIGHT
OF 30 FEET LOCATED IN EXPOSURE B (psf)

Zone ³	Effective wind area (ft ²)	Basic Wind Speed V (mph - 3 second gust)															
		85		90		100		110		120		130		140		150	
Roof Angle > 0-10 degrees																	
1	10.0	10.0	-13.0	10.0	-14.8	10.0	-16.0	10.0	-17.8	10.0	-21.8	10.0	-26.8	12.4	-30.4	14.3	-40.3
1	20.0	10.0	-12.7	10.0	-14.2	10.0	-17.3	10.0	-21.2	10.0	-26.2	11.8	-29.4	13.4	-34.4	15.4	-38.4
1	50.0	10.0	-12.2	10.0	-13.7	10.0	-16.9	10.0	-20.6	10.0	-24.4	10.8	-28.8	12.3	-32.2	14.1	-36.1
1	100.0	10.0	-11.6	10.0	-13.2	10.0	-16.6	10.0	-19.9	10.0	-23.7	10.0	-27.6	11.4	-32.9	13.0	-37.0
2	10.0	10.0	-21.6	10.0	-24.4	10.0	-30.2	10.0	-36.6	10.8	-43.6	12.4	-41.0	14.3	-49.2	16.6	-67.0
2	20.0	10.0	-19.5	10.0	-21.8	10.0	-27.0	10.0	-32.8	10.6	-38.8	11.8	-46.0	13.4	-52.6	15.4	-60.7
2	50.0	10.0	-16.4	10.0	-18.4	10.0	-22.7	10.0	-27.5	10.0	-32.7	10.8	-38.4	12.3	-44.5	14.1	-51.1
2	100.0	10.0	-14.1	10.0	-16.0	10.0	-19.6	10.0	-23.1	10.0	-30.0	11.4	-36.2	11.4	-38.2	13.0	-49.0
3	10.0	10.0	-32.6	10.0	-36.8	10.0	-46.4	10.0	-55.0	10.5	-65.4	12.4	-78.8	14.3	-88.0	16.5	-102.8
3	20.0	10.0	-27.2	10.0	-30.5	10.0	-37.8	10.0	-46.5	10.0	-64.2	11.8	-83.4	13.4	-79.8	15.4	-84.7
3	50.0	10.0	-19.7	10.0	-22.1	10.0	-27.3	10.0	-33.1	10.0	-39.3	10.8	-48.2	12.3	-63.5	14.1	-61.5
3	100.0	10.0	-14.1	10.0	-15.8	10.0	-19.5	10.0	-23.9	10.0	-28.1	10.0	-33.0	11.4	-39.2	13.0	-43.8
Roof Angle > 10-30 degrees																	
1	10.0	10.0	-11.9	10.0	-13.3	10.4	-16.5	12.5	-19.9	14.8	-23.7	17.5	-27.8	20.3	-32.3	23.3	-37.0
1	20.0	10.0	-11.6	10.0	-13.0	10.0	-16.0	11.4	-19.4	13.6	-23.0	16.0	-27.0	18.5	-31.4	21.3	-36.0
1	50.0	10.0	-11.1	10.0	-12.5	10.0	-15.4	10.0	-18.6	11.9	-22.2	13.9	-26.0	16.1	-30.2	18.5	-34.6
1	100.0	10.0	-10.6	10.0	-12.1	10.0	-14.9	10.0	-18.1	10.5	-21.5	12.4	-25.2	14.3	-29.5	16.5	-33.6
2	10.0	10.0	-25.1	10.0	-28.2	10.4	-34.8	12.5	-42.1	14.9	-50.1	17.5	-60.7	20.3	-68.1	23.3	-78.2
2	20.0	10.0	-22.8	10.0	-25.6	10.0	-31.5	11.4	-38.2	13.6	-45.4	16.0	-53.3	18.5	-61.9	21.3	-71.0
2	50.0	10.0	-18.7	10.0	-21.1	10.0	-27.3	10.0	-33.0	11.9	-39.8	13.9	-46.1	16.1	-59.5	18.5	-61.4
2	100.0	10.0	-17.4	10.0	-19.5	10.0	-21.1	10.0	-28.1	10.5	-34.7	12.4	-40.7	14.3	-47.2	16.5	-54.2
3	10.0	10.0	-25.1	10.0	-28.2	10.4	-34.8	12.5	-42.1	14.9	-50.1	17.5	-60.7	20.3	-68.1	23.3	-78.2
3	20.0	10.0	-22.8	10.0	-25.6	10.0	-31.5	11.4	-38.2	13.6	-45.4	16.0	-53.3	18.5	-61.9	21.3	-71.0
3	50.0	10.0	-19.7	10.0	-22.1	10.0	-27.3	10.0	-33.0	11.9	-39.8	13.9	-46.1	16.1	-59.5	18.5	-61.4
3	100.0	10.0	-17.4	10.0	-19.5	10.0	-21.1	10.0	-29.1	10.5	-34.7	12.4	-40.7	14.3	-47.2	16.5	-54.2
Roof Angle > 30-45 degrees																	
1	10.0	11.9	-13.0	13.3	-14.8	15.5	-18.9	18.9	-21.8	23.7	-25.9	27.8	-30.4	32.3	-35.3	37.0	-40.5
1	20.0	11.6	-12.3	13.0	-13.6	15.0	-17.1	16.4	-20.7	23.0	-24.6	27.0	-28.9	31.4	-33.5	36.0	-38.4
1	50.0	11.1	-11.6	12.5	-12.8	15.4	-15.9	18.6	-19.2	22.2	-22.8	26.0	-26.8	30.2	-31.1	34.8	-35.7
1	100.0	10.6	-10.6	12.1	-12.1	14.9	-14.8	18.1	-18.1	21.5	-21.5	25.2	-25.2	29.3	-29.3	33.6	-33.6
2	10.0	11.9	-18.2	13.3	-17.0	16.5	-21.0	19.9	-25.5	23.7	-26.9	27.8	-35.8	32.3	-41.2	37.0	-47.3
2	20.0	11.6	-14.5	13.0	-16.3	16.0	-20.1	19.4	-24.9	23.0	-26.0	27.0	-34.0	31.4	-39.4	36.0	-45.3
2	50.0	11.1	-13.7	12.5	-15.2	15.4	-18.9	18.6	-22.9	22.2	-27.2	26.0	-32.0	30.2	-37.1	34.8	-42.5
2	100.0	10.6	-13.0	12.1	-14.5	14.9	-18.0	16.1	-21.4	21.5	-25.9	25.2	-30.4	29.3	-35.9	33.6	-40.5
3	10.0	11.9	-15.2	13.3	-17.0	16.5	-21.0	19.9	-25.5	23.7	-30.3	27.8	-35.8	32.3	-41.2	37.0	-47.3
3	20.0	11.6	-14.5	13.0	-16.9	16.0	-20.1	19.4	-24.9	23.0	-29.0	27.0	-34.0	31.4	-39.4	36.0	-45.3
3	50.0	11.1	-13.7	12.5	-15.3	15.4	-18.9	18.6	-22.9	22.2	-27.2	26.0	-32.0	30.2	-37.1	34.8	-42.5
3	100.0	10.6	-13.0	12.1	-14.6	14.9	-18.0	16.1	-21.6	21.5	-25.9	25.2	-30.4	29.3	-36.8	33.6	-40.5



1606.2.3 Edge strips and end zones. The width of the edge strips (a), as shown in Figure 1606.2 (c), shall be 10% of the least horizontal dimension or 40% of the eave height, whichever is less but not less than either 4% of the least horizontal dimension or 3 feet (914 mm). End zones as shown in Figure 1606.2b shall be twice the width of the edge strip (a).

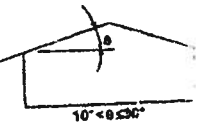
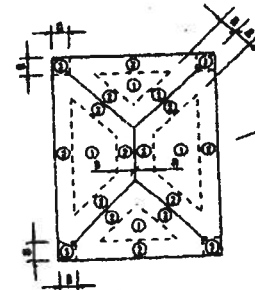
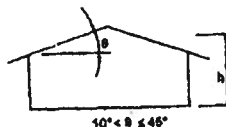
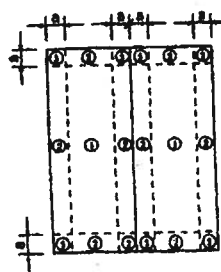


FIGURE 1606.2(c)
COMPONENT AND CLADDING LOADING DIAGRAMS

DOLE J. KELLEY, JR., P.E.
Consulting Structural Engineer
JACKSONVILLE, FLORIDA

CALCULATED BY DJK DATE 2/2003
CHECKED BY _____ DATE _____
SKETCH NO. _____ SCALE _____

JOB TITLE MILLENNIUM

JOB NO. _____
SH 8 OF 8

SUBJECT RIB PANELS

2

DESIGN VALUES

Table 2.3.2 Frequently Used Load Duration Factors, C_D ¹

Load Duration	C_D	Typical Design Loads
Permanent	0.9	Dead Load
Ten years	1.0	Occupancy Live Load
Two months	1.15	Snow Load
Seven days	1.25	Construction Load
Ten minutes	1.6	Wind/Earthquake Load
Impact ²	2.0	Impact Load

1. Load duration factors shall not apply to machines of electricity, E, nor to compression perpendicular to grain design values, F_{\perp} , based on a duration factor.

NOMINAL SCREW SIZES

Thread Diameter	Decimal Equivalent
#6	.140
#7	.150
#8	.160
#9	.180
#10	.190
#11	.200
#12	.210
#13	.230
1/4	.240
#14	.250

SOUTHERN PINE

Table 11.2A Cut Thread or Rolled Thread Wood Screw Withdrawal Design Values (W)¹

Tabulated withdrawal design values (W) are in pounds per inch of thread penetration into side grain of main member. Thread length is approximately 2/3 the total wood screw length (see Reference 7).

Specific Gravity G	Wood Screw Gauge										
	6g	7g	8g	9g	10g	12g	14g	16g	18g	20g	24g
0.73	209	229	249	268	288	327	367	406	446	485	564
0.71	198	216	235	254	272	310	347	384	421	459	533
0.68	181	199	216	233	250	284	318	352	387	421	489
0.67	176	193	209	226	243	276	309	342	375	409	475
0.58	132	144	157	169	182	207	232	256	281	306	356
0.55	119	130	141	152	163	186	208	231	253	275	328
0.51	102	112	121	131	141	160	179	198	217	237	275
0.50	98	107	117	126	135	154	172	191	209	228	264

*ULTIMATE PULLOUT VALUES (POUNDS)

SIZE	POINT	26	24	22	20	18	16	14	12	10	8	6	4
8-18	T/2	119	193	285	298	491	703	859	1558				
	T/3	120	191	239	285	470	663	910	1424	2287			
	T/1	148	241	311	357	565	826	1111	1798				
10-16	T/2	131	214	272	388	547	784	1033	1653				
	T/3	124	208	266	299	499	708	967	1474	2077			
10-24	T/2	121	200	251	333	495	701	900	1375	2070	2812		
	T/1	168	261	338	390	648	908	1260	1949				
12-14	T/2	166	243	283	375	605	848	1181	1858	2668	3520		
	T/3	142	211	289	341	551	757	1063	1631	2420	2988		
12-24	T/4					485	687	986	1532	2441	3485	3844	
	T/5					487	689	913	1527	2207	3701	3989	
	T/1	208	329	428	582	800	1151						
1/4-14	T/2	166	265	314	430	645	922	1152			4883		
	T/3	141	231	293	346	613	880	1145	1858	2408	4950	6033	
1/4-20	T/3	140	228	271	363	558	781	1005	1678	2542	3554		
	T/4					554	788	1116	1803	2650	4297	4589	

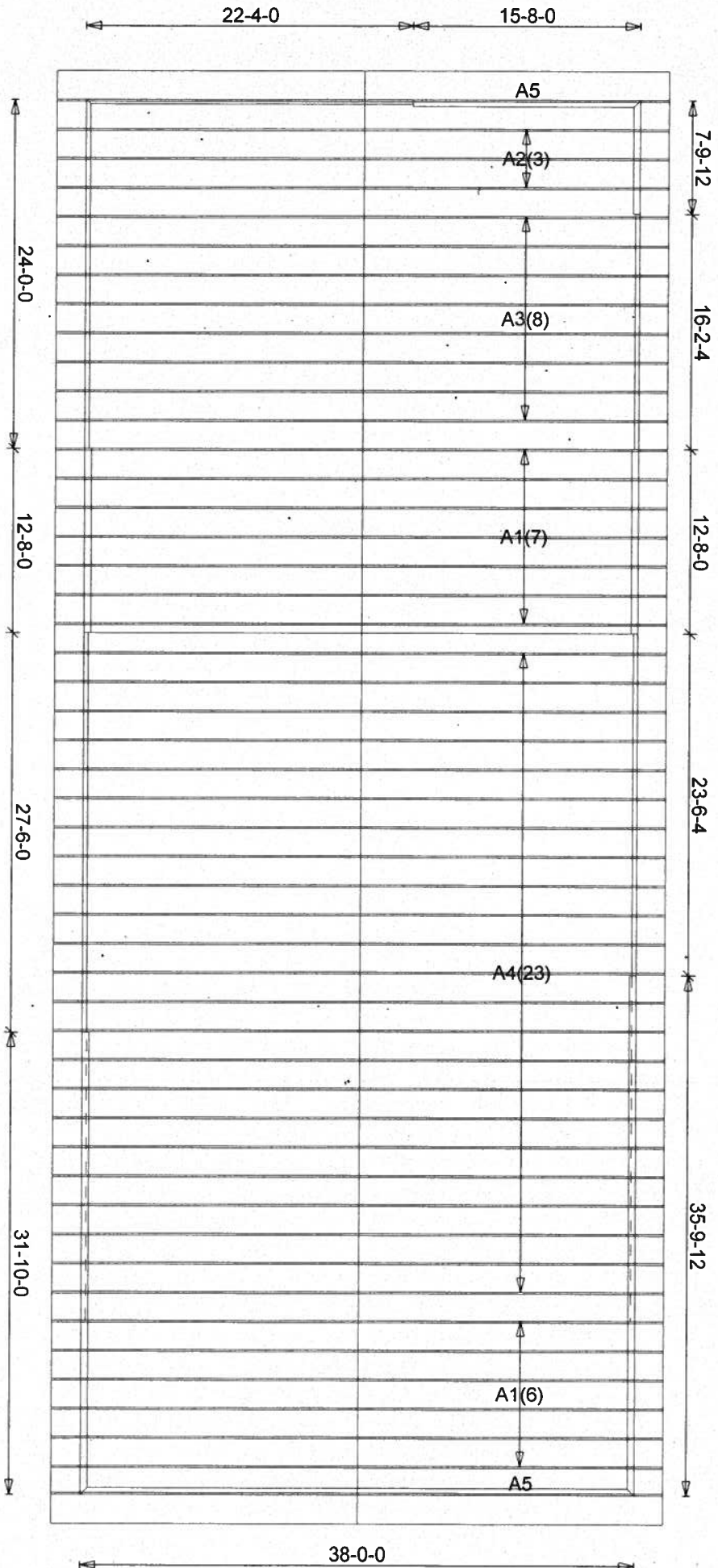
Budax Engineering Report #547

*Note: An appropriate safety factor should be applied to the ultimate test values

*ULTIMATE SHEAR VALUES (POUNDS)

SIZE	POINT	26-24	24-22	22-20	20-18	18-16	16-14	14-12	12-10	10-8	8-6	6-4	4-2
12-14	T/1	432	703	783	1018	1452							
1/4-14	T/1	511	849	885	1244	1784							
8-18	T/2	294	495	590	740	1080	1078						
10-16	T/2	312	478	589	830	1208	1268						
12-14	T/2	365	600	625	898	1370	1758	2138					
8-18	T/3				730	1080	1210	1214					
10-16	T/3				728	1208	1440	1562					
10-24	T/3				751	1208	1654	1694					
12-14	T/3				788	1358	1820	1970	1986				
1/4-14	T/3				930	1442	2100	2584	2850	2920			
12-24	T/4							2048	2338				
12-24	T/6								2768	2728	2782		

Budax Engineering Report # 547 & 583A



Mayo Truss Co. Inc.

845 East US 27
MAYO, FL 32066
(386) 244-3988
(877) 538-6262

MAGGARD

FT. WHITE, FL 32038

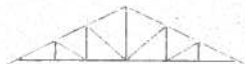




110 MPH ASCE WIND LOAD

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
Spacing: 2'-0" o.c.

Account: INDIVIDUAL

Job: MAGGARD
Designer: M MURRAY
Checker: M MURRAY
Date: 09-25-06

Qty	Plys	Truss Type	Mark	R e a c t i o n s			Sketch
				Horizontal	Vertical	Uplift	
13	1	DH	MAGGARD/ A1	203	1647	224	
				203	1648	224	
3	1	DH	MAGGARD/ A2	203	1647	224	
				203	1648	224	
8	1	DH	MAGGARD/ A3	203	1647	224	
				203	1648	224	
23	1	SCIS	MAGGARD/ A4	203	1648	224	
				204	1648	224	
2	1	DH	MAGGARD/ A5	3040 Continuous Brg			

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: MAGGARD - HAROLD MAGGARD

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

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

Engineering Index Sheet

Index Page 1 of 1

ANSI/ASCE 7-02
Wind Speed - 110 MPH
Mean Roof Ht - 15 FT
Exposure Category - B
Occupancy Factor - 1.00
C and C
Enclosed

Job Number	Date	FBC - 2004 Chapter 16 and 23	Specification Quantity
T06092220	09/22/2006		5

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 responsibility of the Building Designer, as defined in ANSI/TPI 1-2002, Section 2.2. Permanent files of the original Truss Specification 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. (Software - Online Plus)

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

Date Mark

1	09/22/06	A1
5	09/22/06	A5

Date Mark

2	09/22/06	A2
---	----------	----

Date Mark

3	09/22/06	A3
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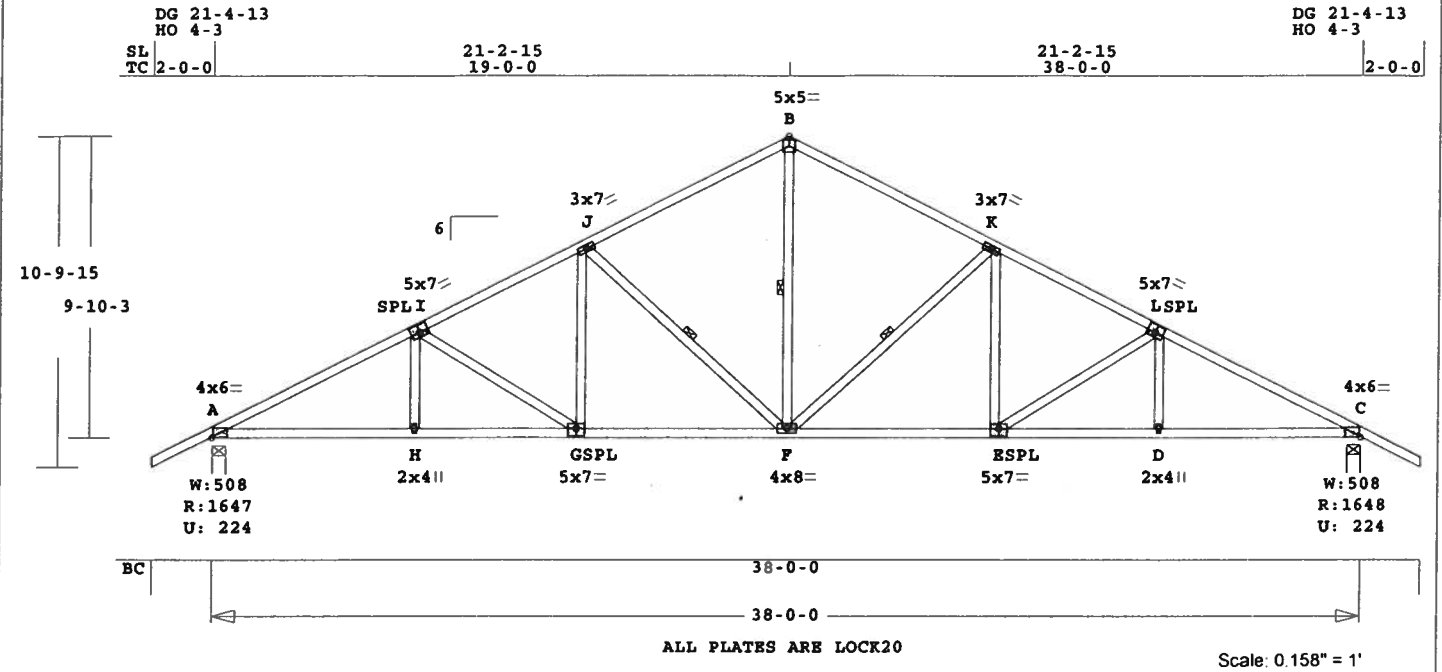
Date Mark

4	09/22/06	A4
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Truss Design Engineer: Philip J. O'Regan
License #: 58126
Address: P.O. Box 280055, Tampa, FL 33682

Date Sealed: 9/22/2006

Job MAGGARD	Mark A1	Quan 13	Type DH	Span 380000	Pl-H1 6	Left OH 2- 0- 0	Right OH 2- 0- 0	Engineering T06092220
U# J#MAGGARD HAROLD MAGGARD								



Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 268.7 LBS

Online Plus -- Version 19.5.025
RUN DATE: 22-SEP-06

CSI -Size- ---Lumber---
TC 0.45 2x 4 SP-#2
BC 0.52 2x 4 SP-#2
WB 0.23 2x 4 SP-#2

Brace truss as follows:

O.C. From To
TC Cont. 0- 0- 0 38- 0- 0
BC Cont. 0- 0- 0 38- 0- 0
WB 1 rows CLB on J -F
WB 1 rows CLB on F -B
WB 1 rows CLB on F -K
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 9 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

Jt	React	Uplft	Size	Req'd
	Lbs	Lbs	In-Sx	In-Sx
A	1648	225	5- 8	1-15
			Hx =	-203
C	1648	225	5- 8	1-15
			Hx =	204

Membr	CSI	P	Lbs	Axl	CSI	Bnd
-----Top Chords-----						
A -I	0.45	2755	C	0.12	0.33	
I -J	0.44	2298	C	0.14	0.30	
J -B	0.41	1701	C	0.11	0.30	
B -K	0.41	1701	C	0.11	0.30	
K -L	0.44	2298	C	0.14	0.30	
L -C	0.45	2755	C	0.12	0.33	

-----Bottom Chords-----
A -H 0.52 2463 T 0.41 0.11
H -G 0.51 2463 T 0.41 0.10
G -F 0.50 2059 T 0.34 0.16
F -E 0.50 2059 T 0.34 0.16
E -D 0.51 2463 T 0.41 0.10
D -C 0.52 2463 T 0.41 0.11

-----Webs-----
H -I 0.03 227 T
I -G 0.23 475 C
G -J 0.06 431 T
J -F 0.20 723 C 1 Br
F -B 0.20 1110 T 1 Br
B -K 0.20 723 C 1 Br
K -L 0.06 431 T
L -E 0.23 475 C
E -D 0.03 227 T

TL Defl -0.30" in F -E L/999
LL Defl -0.14" in F -E L/999
Shear // Grain in J -B 0.24

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORTS: SBCCI 9761
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.

Plate	LOCK	20 Ga	Gross Area
Jt Type	Plt Size	X	Y
A	LOCK	4.0x 6.0	Ctr 0.1 0.72
I	LOCK	5.0x 7.0	0.2 0.5 0.76
J	LOCK	3.0x 7.0	Ctr Ctr 0.43
B	LOCK	5.0x 5.0	Ctr Ctr 0.69
K	LOCK	3.0x 7.0	Ctr Ctr 0.43
L	LOCK	5.0x 7.0	0.2 0.5 0.76
C	LOCK	4.0x 6.0	Ctr 0.1 0.72
H	LOCK	2.0x 4.0	Ctr Ctr 0.46
G	LOCK	5.0x 7.0	Ctr-0.5 0.77
F	LOCK	4.0x 8.0	Ctr Ctr 0.43
E	LOCK	5.0x 7.0	Ctr-0.5 0.77
D	LOCK	2.0x 4.0	Ctr Ctr 0.46

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
Components and Claddings*
for Exterior zone location.

Wind Speed: 110 mph

Mean Roof Height: 15-0

Exposure Category: B

Occupancy Factor : 1.00

Building Type: Enclosed

TC Dead Load: 5.0 psf

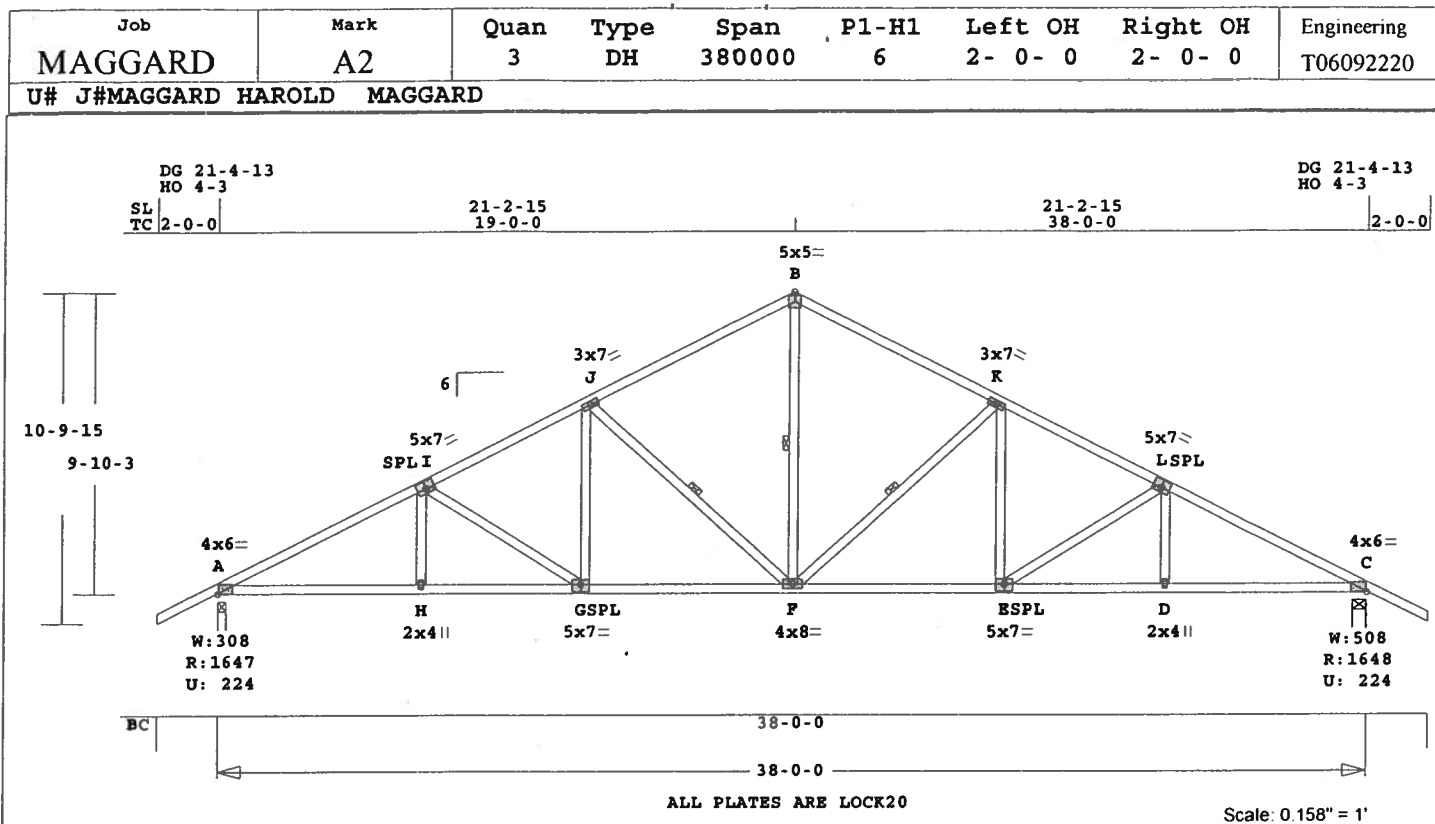
BC Dead Load: 5.0 psf

Max comp. force 2755 Lbs

Quality Control Factor 1.25

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





Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 268.7 LBS

Online Plus -- Version 19.5.025
RUN DATE: 22-SEP-06

CSI	Size	Lumber
TC	0.45 2x 4	SP-#2
BC	0.52 2x 4	SP-#2
WB	0.23 2x 4	SP-#2

Brace truss as follows:

O.C.	From	To
TC Cont.	0- 0- 0	38- 0- 0
BC Cont.	0- 0- 0	38- 0- 0
WB 1 rows CLB on J -F		
WB 1 rows CLB on F -B		
WB 1 rows CLB on F -K		

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

Jt	React	Uplift	Size	Req'd
	Lbs	Lbs	In-Sx	In-Sx
A	1648	225	3- 8	1-15
			Hx =	-203
C	1648	225	5- 8	1-15
			Hx =	204

Membr	CSI	P	Lbs	Axl	CSI	Bnd
-----Top Chords-----						
A	-I	0.45	2755	C	0.12	0.33
I	-J	0.44	2298	C	0.14	0.30
J	-B	0.41	1701	C	0.11	0.30
B	-K	0.41	1701	C	0.11	0.30
K	-L	0.44	2298	C	0.14	0.30
L	-C	0.45	2755	C	0.12	0.33

-----Bottom Chords-----					
A	-H	0.52	2463	T	0.41 0.11
H	-G	0.51	2463	T	0.41 0.10
G	-F	0.50	2059	T	0.34 0.16
F	-E	0.50	2059	T	0.34 0.16
E	-D	0.51	2463	T	0.41 0.10
D	-C	0.52	2463	T	0.41 0.11

-----Webs-----					
H	-I	0.03	227	T	
I	-G	0.23	475	C	
G	-J	0.06	431	T	
J	-F	0.20	723	C	1 Br
F	-B	0.20	1110	T	1 Br
B	-K	0.20	723	C	1 Br
K	-L	0.06	431	T	
L	-C	0.23	475	C	
C	-D	0.03	227	T	

TL Defl -0.30" in F -E L/999
LL Defl -0.14" in F -E L/999
Shear // Grain in J -B 0.24

Plates for each ply each face.
PLATING CONFORMS TO TPI.

REPORTS: SBCCI 9761
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.

Plate	LOCK	20 Ga	Gross Area
Plate	-RHS	20 Ga <td>Gross Area</td>	Gross Area
Jt Type	Plt Size	X	Y JSI
A	LOCK	4.0x 6.0	Ctr 0.1 0.72
I	LOCK	5.0x 7.0	0.2 0.5 0.76
J	LOCK	3.0x 7.0	Ctr Ctr 0.43
B	LOCK	5.0x 5.0	Ctr Ctr 0.69
K	LOCK	3.0x 7.0	Ctr Ctr 0.43
L	LOCK	5.0x 7.0	0.2 0.5 0.76
C	LOCK	4.0x 6.0	Ctr 0.1 0.72
H	LOCK	2.0x 4.0	Ctr Ctr 0.46
G	LOCK	5.0x 7.0	Ctr-0.5 0.77
F	LOCK	4.0x 8.0	Ctr Ctr 0.43
E	LOCK	5.0x 7.0	Ctr-0.5 0.77
D	LOCK	2.0x 4.0	Ctr Ctr 0.46

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

Components and Claddings*
for Exterior zone location.

Wind Speed: 110 mph

Mean Roof Height: 15-0

Exposure Category: B

Occupancy Factor : 1.00

Building Type: Enclosed

TC Dead Load: 5.0 psf

BC Dead Load: 5.0 psf

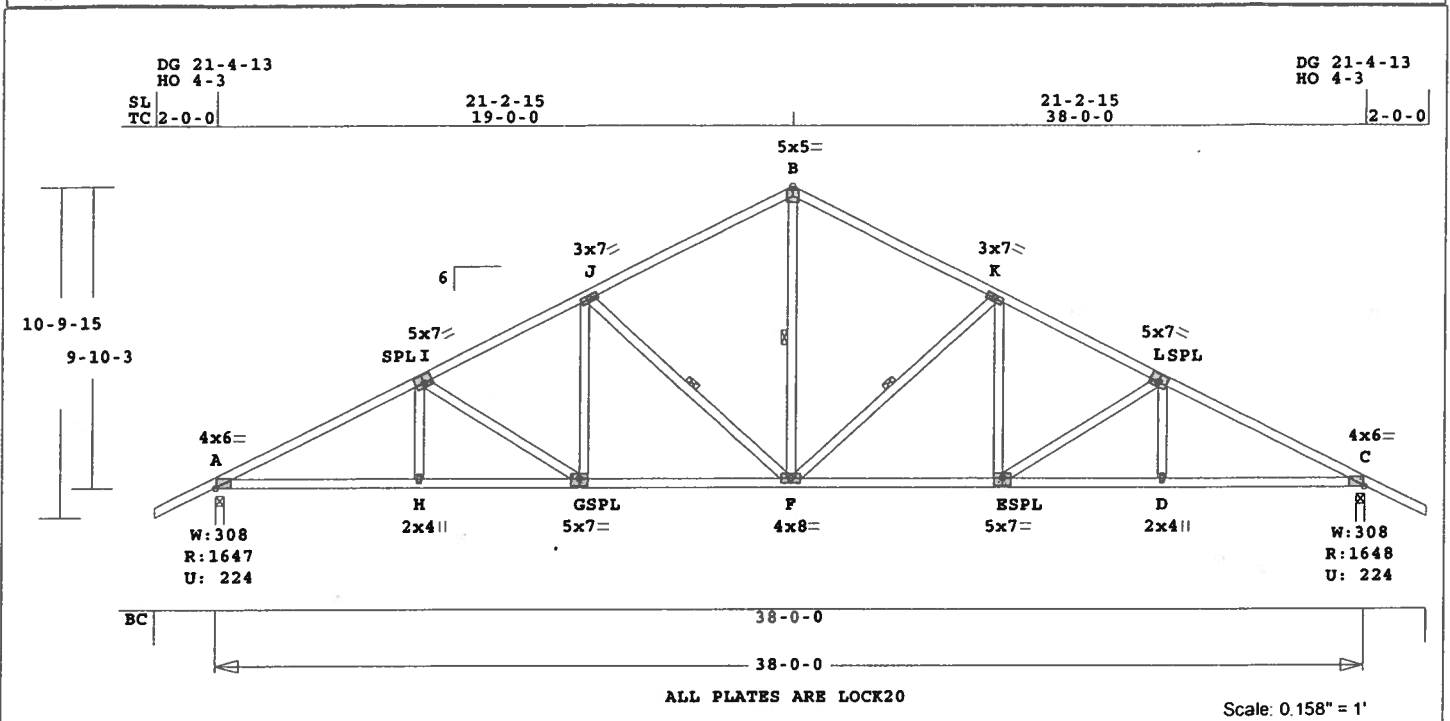
Max comp. force 2755 Lbs

Quality Control Factor 1.25

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



Job	Mark	Quan	Type	Span	Pl-H1	Left OH	Right OH	Engineering
MAGGARD	A3	8	DH	380000	6	2- 0- 0	2- 0- 0	T06092220
U# J#MAGGARD HAROLD MAGGARD								



Robbins Engineering, Inc./Online Plus™ APPROX. TRUSS WEIGHT: 268.7 LBS

Online Plus -- Version 19.5.025
RUN DATE: 22-SEP-06

CSI	-Size-	-----Lumber-----
TC	0.45	2x 4 SP-#2
BC	0.52	2x 4 SP-#2
WB	0.23	2x 4 SP-#2

Brace truss as follows:

O.C.	From	To
TC Cont.	0- 0- 0	38- 0- 0
BC Cont.	0- 0- 0	38- 0- 0

WB 1 rows CLB on J -F
WB 1 rows CLB on F -B
WB 1 rows CLB on F -K
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 9 Wind Load Case(s)
Plus 1 UBC LL Load Case(s)

Jt	React	Uplft	Size	Req'd
	Lbs	Lbs	In-Sx	In-Sx
A	1648	225	3- 8	1-15
C	1648	225	3- 8	1-15

Hx = -203
Hx = 204

Membr	CSI	P Lbs	Axl	CSI-Bnd
A -I	0.45	2755	C	0.12 0.33
I -J	0.44	2298	C	0.14 0.30
J -B	0.41	1701	C	0.11 0.30
B -K	0.41	1701	C	0.11 0.30
K -L	0.44	2298	C	0.14 0.30
L -C	0.45	2755	C	0.12 0.33

-----Bottom Chords-----

A -H	0.52	2463	T	0.41	0.11
H -G	0.51	2463	T	0.41	0.10
G -F	0.50	2059	T	0.34	0.16
F -E	0.50	2059	T	0.34	0.16
E -D	0.51	2463	T	0.41	0.10
D -C	0.52	2463	T	0.41	0.11

-----Webs-----

H -I	0.03	227	T		
I -G	0.23	475	C		
G -J	0.06	431	T		
J -F	0.20	723	C	1 Br	
F -B	0.20	1110	T	1 Br	
B -K	0.20	723	C	1 Br	
K -L	0.06	431	T		
L -C	0.23	475	C		
C -D	0.03	227	T		

TL Defl -0.30" in F -E L/999
LL Defl -0.14" in F -E L/999
Shear // Grain in J -B 0.24

Plates for each ply each face.
PLATING CONFORMS TO TPI.
REPORTS: SBCCI 9761
ROBBINS ENGINEERING, INC.
BASED ON SP LUMBER
USING GROSS AREA TEST.

Plate	LOCK	20 Ga	Gross Area
Jt Type	Plt Size	X	Y JSI
A LOCK	4.0x 6.0	Ctr	0.1 0.72
I LOCK	5.0x 7.0	0.2	0.5 0.76
J LOCK	3.0x 7.0	Ctr	Ctr 0.43
B LOCK	5.0x 5.0	Ctr	Ctr 0.69
K LOCK	3.0x 7.0	Ctr	Ctr 0.43
L LOCK	5.0x 7.0	0.2	0.5 0.76
C LOCK	4.0x 6.0	Ctr	0.1 0.72
H LOCK	2.0x 4.0	Ctr	Ctr 0.46
G LOCK	5.0x 7.0	Ctr	0.5 0.77
F LOCK	4.0x 8.0	Ctr	Ctr 0.43
E LOCK	5.0x 7.0	Ctr	0.5 0.77
D LOCK	2.0x 4.0	Ctr	Ctr 0.46

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
Components and Claddings*
for Exterior zone location.
Wind Speed: 110 mph
Mean Roof Height: 15-0
Exposure Category: B
Occupancy Factor: 1.00
Building Type: Enclosed
TC Dead Load: 5.0 psf
BC Dead Load: 5.0 psf
Max comp. force 2755 Lbs
Quality Control Factor 1.25

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

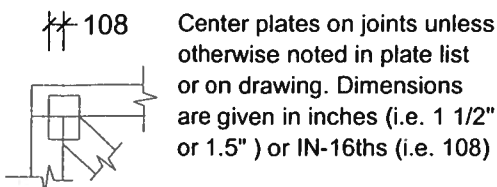


Job	Mark	Quan	Type	Span	Pl-Hl	Left OH	Right OH	Engineering
MAGGARD	A5	2	DH	380000	6	0	0	T06092220
U# J#MAGGARD HAROLD MAGGARD								

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.
 Prevent truss rotation at all
 bearing locations.
 Refer to Gen Det 3 series for
 web bracing and plating.
 Wind Loads - ANSI / ASCE 7-02
 Truss is designed as
 Components and Claddings*
 for Exterior zone location.
 Wind Speed: 110 mph
 Mean Roof Height: 15-0
 Exposure Category: B
 Occupancy Factor : 1.00
 Building Type: Enclosed
 TC Dead Load: 5.0 psf
 BC Dead Load: 5.0 psf
 Max comp. force 205 Lbs
 Quality Control Factor 1.25

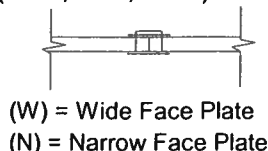
ROBBINS ENG. GENERAL NOTES & SYMBOLS

PLATE LOCATION



FLOOR TRUSS SPLICE

(3X2, 4X2, 6X2)



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.

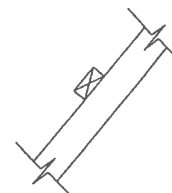
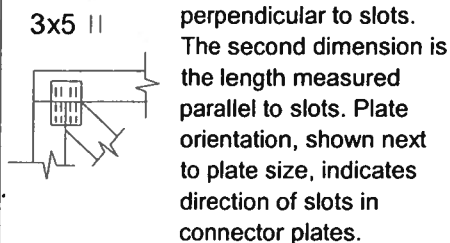
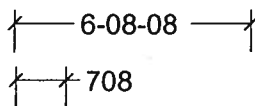


PLATE SIZE AND ORIENTATION



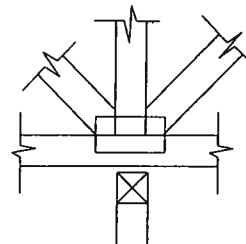
DIMENSIONS

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).



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.



W = Actual Bearing Width (IN-SX)
R = Reaction (lbs.)
U = Uplift (lbs.)

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.



6904 Parke East Blvd.
Tampa, FL 33610-4115
Tel: 813-972-1135 Fax: 813-971-6117

www.robbseng.com



NATIONAL CERTIFIED TESTING LABORATORIES

1464 GEMINI BOULEVARD • ORLANDO, FLORIDA 32837
PHONE (407) 240-1356 • FAX (407) 240-8882

STRUCTURAL PERFORMANCE TEST REPORT

REPORT NO.: NCTL-210-2065-4

TEST DATE: 07-16-98

REPORT DATE: 07-31-98

EXPIRATION DATE: 07-31-02

CLIENT: Better Bilt Aluminum Products
704 12th Avenue
Smyrna, TN 37167

TEST SPECIMEN: Better Bilt Aluminum Product's Series "420" (Type "OXX") Aluminum Sliding Glass Door. (SGD-C35) (Insulated Glazed) (with and without sill riser)

TEST SPECIFICATION: AAMA/NWWDA/101/I.S. 2-97, "Voluntary Specifications for Aluminum Vinyl (PVC) and Wood Windows and Sliding Glass Doors."

TEST SPECIMEN DESCRIPTION

GENERAL: The sample tested was a three panel type "OXX" aluminum sliding glass door measuring 15'1-3/4" wide by 6'10-1/8" high overall. The active panels measured 5'0-1/2" wide by 6'9-1/8" high; the fixed panel measured 5'0-7/8" wide by 6'9-1/8" high. Frame and panel members were not thermally broken. A plastic spacer/guide was used at each panel head/stile corner. The fixed panel was secured to the jamb with two (2) 3" long aluminum angle retainers each fastened to the jamb stile with two (2) (# 8 x 3/4") pan head screws. One claw-type door lock assembly was located at 40" from the bottom of each active panel lock stile each with the keeper fastened and secured to the fixed meeting stile and the right jamb stile at lock position with two (2) screws. One adjustable metal double roller assembly was used at each end of the active bottom rails. The frame was of double screw coped corner construction. Panel corners were of single screw at the bottom rail and double screw at the top rail coped corner construction. The interior vertical sill leg employed an extruded aluminum 1-1/8" high extension; an overall height of 2.031. One (1) aluminum panel retainer was fastened at 2" from the end of each active panel bottom rail. One (1) extruded aluminum female panel adapter was fastened to the fixed panel butt stile with five (5) (# 8 x 1/2") screws. One (1) extruded aluminum screen adapter was fastened to the butt stile using five (5) (# 8 x 1/2") screws.

INSTALLATION: The main frame was fastened to the wood test buck using forty-eight (48) (# 8 x 1-1/2") FHS. (See fastener diagram)

GLAZING: All panels were channel glazed using sealed insulated glass. The overall insulating glass thickness was 5/8" consisting of two (2) pieces of 3/16" clear tempered glass and one (1) air space created by desiccant-filled aluminum spacer system. One (1) extruded aluminum female panel adapter was located at the fixed panel.

WSTP: Double strips of centerfin weatherstrip (0.270" high) were located at each jamb, stile, lock stile. A double strip of centerfin weatherstrip (0.180" high) was located at each interlock stile. A double strip of centerfin weatherstrip (0.250" high) was located at each panel top rail. A double strip of side fin weatherstrip (.430" high) was located at each panel bottom rail. An adhesive back polypile dust plug measuring 1-3/16" x 13/16" x 0.420" was located on the head and sill at each end of vertical stile exterior track

WEEPS: One weep notch measuring 1-1/2" x leg height was located at each end of each of the interior sill roller leg, exterior sill roller leg and the screen sill roller leg.

INTERIOR & EXTERIOR SURFACE FINISH: Non painted aluminum.

SEALANT: Frame and panel bottom rail corners were sealed with a small-joint sealant.

SCREEN: Two (2) insect screens, one center insect screen measuring 5'0-1/4" wide by 7'11" high; Both were of coped type corner construction. The screen employed fiberglass mesh cloth with a hollow vinyl spline. One roller assembly was located at each end of the bottom rails. One (1) claw-type lock assembly.

TEST RESULTS

<u>PARAGRAPH NO.</u>	<u>TITLE OF TEST</u>	<u>MEASURED</u>	<u>ALLOWED</u>
** 2.2.19.5.	Operating Force		
	Center Active Panel		
	To Open	20# max.	30#
	In Motion	5 # max.	20#
	Right Active Panel		
	To Open	18 # max.	30 #
	In Motion	3 # max.	20#
** 2.1.2	Air Infiltration 1.57 psf (15 mph)	Pass	0.30 CFM/FT ²
** 2.1.3	* Water Resistance - 5.0 GPH/FT ² WTP = 4.50 psf	No Entry	No Entry
2.1.4.2	Uniform Load Structural		
	45.0 psf exterior	0.251"	0.328"
	45.0 psf interior	0.267"	0.328"
**2.2.19.5.2	Deglazing		
	Center Active Panel		
	Top Rail (50#)	10.2% (0.051")	< 100%
	Bottom Rail (50#)	7.8% (0.039")	< 100%
	Left Stile (70#)	6.0% (0.030")	< 100%
	Right Stile (70#)	5.4% (0.027")	< 100%
	Right Active Panel		
	Top Rail (50#)	8.4% (0.042")	< 100%
	Bottom Rail (50#)	8.4% (0.042")	< 100%
	Left Stile (70#)	8.0% (0.040")	< 100%
	Right Stile (70#)	6.2% (0.031")	< 100%

OPTIONAL PERFORMANCE

* Water Resistance - (5.0 GPH/FT²)
WTP = 5.25 psf

No Entry

No Entry

Note: At this point in testing an additional sill riser was attached to the existing main sill's interior vertical leg.

The following results were obtained:

** 4.3	* Water Resistance - (5.0 GPH/FT ²) WTP - 6.00 psf	No Entry	No Entry
4.4.2	Uniform Structural Load		
	52.5 psf exterior	0.301"	0.328"
	52.5 psf interior	0.317"	0.328"

TEST COMPLETED: 07-16-98

*Test performed with and without insect screen.

** Reference parent test report no. NCTL-210-2065-1 for test results and qualifications.

In addition, Better Bilt Aluminum Products' Series "430" and "440" also receive an SGD-C35 rating being identical in panel construction and interior sill heights.

This test specimen meets the performance criteria level of SGD-C35 of the AAMA/NWWDA/101/I.S. 2-97 specification.

Detailed drawings were available for laboratory records and compared to the test specimen at the time of this report. A copy of this report along with representative sections of the test specimen will be retained by NCTL for a period of four (4) years. The results obtained apply only to the specimen tested.

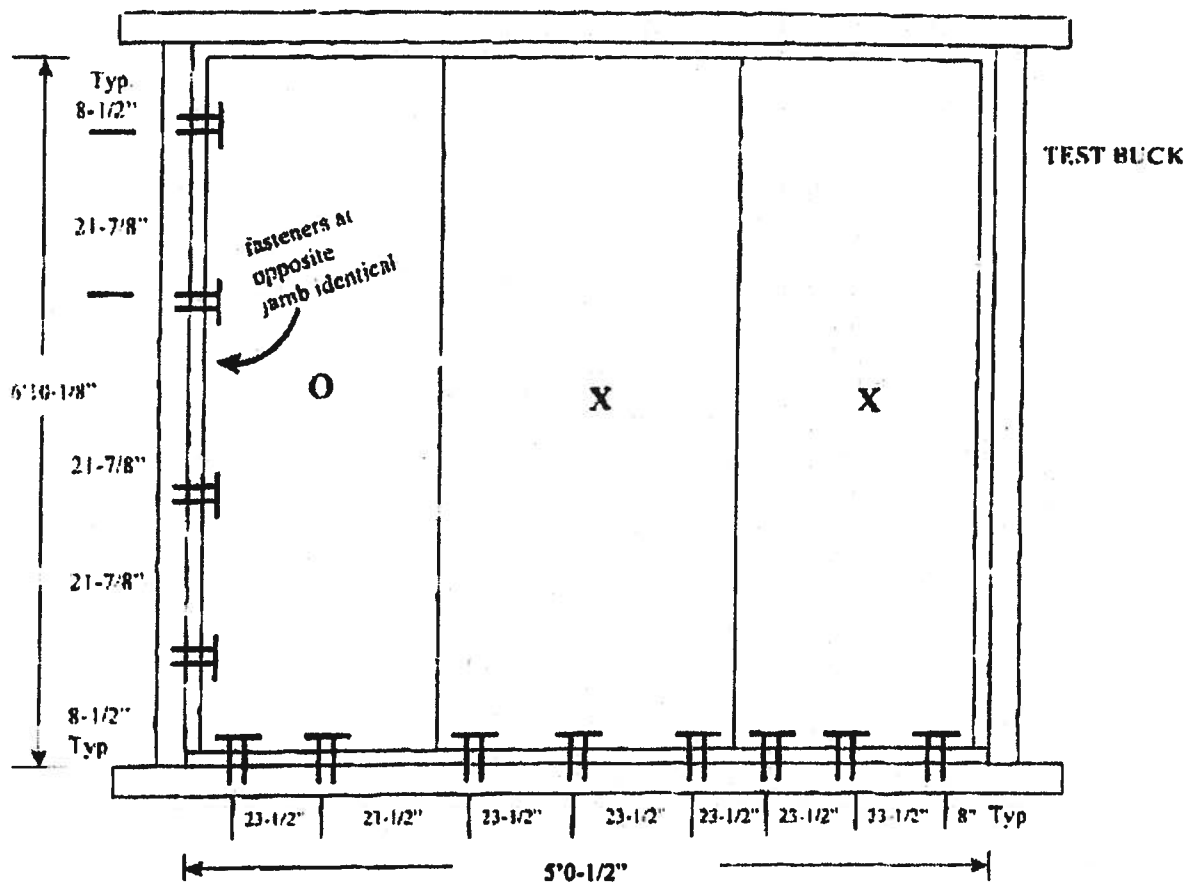
NATIONAL CERTIFIED TESTING
LABORATORIES, INC.

MICHAEL E. LANE
Division Manager

MEL:16

9/5/98

FASTENER LOCATIONS



The test specimen was fin mounted to the test buck using forty-eight (48) (# 8 x 1-1/2") screws at locations shown.

⏏ - Denotes double row (2) at each location.

NOTE: Head fasteners identical to sill both jamb fastening identical

METRO DADE COUNTY REQUIRED

NATIONAL CERTIFIED TESTING LABORATORIES INC.

JOB NO.: NCTL-210-2065-3 & 4

COMPANY: BETTER BILT

TEST DATE: 07-15-98



ELK



**PRESTIQUE®
HIGH DEFINITION®**



RAISED PROFILE®

Prestique Plus High Definition and Prestique Gallery Collection**

Product size	134" x 38"	30-year limited warranty period:
Exposure	36"	5-7 years non-prorated coverage for
Pieces/Bundle	18	shingles and application labor with
Bundles/Square	4/88.5 sq.ft.	prorated coverage for remainder of
Squares/Pallet	11	limited warranty period, plus an
		option for transferability*. 5-year
		limited wind warranty*. Wind
		Coverage: standard 80 mph, extended
		110 mph***

Raised Profile

Product size	134" x 38"	30-year limited warranty period:
Exposure	36"	5-7 years non-prorated coverage for
Pieces/Bundle	22	shingles and application labor with
Bundles/Square	3/100 sq.ft.	prorated coverage for remainder of
Squares/Pallet	18	limited warranty period, plus an
		option for transferability*. 5-year
		limited wind warranty*. Wind
		Coverage: standard 70 mph.

Prestique I High Definition

Product size	134" x 38"	40-year limited warranty period:
Exposure	36"	5-7 years non-prorated coverage for
Pieces/Bundle	18	shingles and application labor with
Bundles/Square	4/88.5 sq.ft.	prorated coverage for remainder of
Squares/Pallet	14	limited warranty period, plus an
		option for transferability*. 5-year
		limited wind warranty*. Wind
		Coverage: standard 80 mph, extended
		90 mph***

HIP AND RIDGE SHINGLES

Seal-A-Ridge® w/FLX™	Vented RidgeCrest™ w/FLX™
Size: 12" x 12"	Size: 15" x 18"
Exposure: 8"	Exposure: 8 1/4"
Pieces/Bundle: 48	Pieces/Box: 25
Coverage: 4 Bundles = 100 linear feet	Coverage: 5 boxes = 100 linear feet

Prestique High Definition

Product size	134" x 38"	30-year limited warranty period:
Exposure	36"	5-7 years non-prorated coverage for
Pieces/Bundle	22	shingles and application labor with
Bundles/Square	3/100 sq.ft.	prorated coverage for remainder of
Squares/Pallet	18	limited warranty period, plus an
		option for transferability*. 5-year
		limited wind warranty*. Wind
		Coverage: standard 80 mph.

Elk Starter Strip

32 Bundles/Pallet
18 Pallets/Truck
888 Bundles/Truck
18 Pieces/Bundle
1 Bundle = 120.33 linear feet

Available Colors (Check Availability): Antique Slate, Weathered Wood, Shakeswood, Shakeswood, Hickory, Barkwood, Forest Green, Wedgewood, Birchwood, Sandalwood, Gallery Collection: Balsam Forest®, Weathered Sage®, Sierra Sunset®.

All Prestique, Raised Profile and Seal-A-Ridge, and Prestique Starter Strip roofing products contain asphalt which softens with the sun's heat, bonding shingles into a wind and weather resistant cover that resists blow-offs and leaks.

Check for availability with built-in StainGuard® treatment to inhibit the discoloration of roofing granules caused by the growth of certain types of algae.

All Prestique and Raised Profile shingles meet UL: Wind Resistant (UL 687) and Class "A" Fire Ratings (UL 790); and ASTM Specifications D 3978, Type-4; D 3101, Type-2; E 108 and the requirements of ASTM D 3462.

All Prestique and Raised Profile shingles have approval from the Florida Building Code Commission, Metro-Dade County, ICBO, and Texas Department of Insurance.

**See actual limited warranty for conditions and limitations.

***Effective January 1, 2005, the above 30-year limited warranty coverage period applies only when a full Elk Starter Strip is installed with the original installation of the Elk shingles, all in accordance with Elk's application instructions for each product. A full Elk Starter Strip system includes Elk Hip and Ridge shingles on all hips and ridges, Elk Starter Strip along all eaves and over edges, on Elk ventilation systems, and Elk AG-Glue-on Self-Adhering Underlayment in all valleys. Additionally, Elk AG-Glue-on Self-Adhering Underlayment is required along the eave and over edges of the roof in and north of the states of VA, DC, MD, DE, NJ, CT, RI, MA, NH, ME. For a limited wind warranty up to 110 mph for Prestique Gallery Collection, Prestique Plus, or 90 mph for Prestique I or Standard, at least one (2) properly placed NAILs and Elk Starter Strip shingles are required. See application instructions printed on the shingle wrapper for additional requirements.

SPECIFICATIONS

Score: Work includes furnishing all labor, materials and equipment necessary to complete installation of (name) shingles specified herein. Color shall be (name of color). Hip and ridge type to be Elk Seal-A-Ridge with formula FLX.

All exposed metal surfaces (flashing, vents, etc.) to be painted with matching Elk roof accessory paint.

Preparation or Roof Deck: Roof deck to be dry, well-seasoned 1" x 6" (25.4mm x 152.4mm) boards; exterior-grade plywood (exposure 1 rated sheathing) at least 3/8" (9.525mm) thick conforming to the specifications of the American Plywood Association; 7/16" (11.074mm) oriented strandboard; or chipboard. Most fire retardant plywood decks are NOT approved substrates for Elk shingles. Consult Elk Field Service for application specifications over other decks and other slopes.

Materials: Underlayment for standard roof slopes, 4" per foot (101.6/304.8mm) or greater; apply non-perforated No. 15 or 30 asphalt-saturated felt underlayment. For Low slopes (4" per foot (101.6/304.8mm)) to a minimum of 2" per foot (50.8/304.8mm), use two pieces of underlayment overlapped a minimum of 18". Fasteners shall be of sufficient length and holding power for securing material as required by the application instructions printed on shingle wrapper.

For areas where algae is a problem, shingles shall be (name) with StainGuard treatment, as manufactured by the Elk Tuscany plant. Hip and ridge type to be Seal-A-Ridge with formula FLX with StainGuard treatment.

Complete application instructions are published by Elk and printed on the back of every shingle bundle. All warranties are contingent upon the correct installation as shown on the instructions. These instructions are the minimum required to meet Elk application requirements. In some areas, building codes may require additional application techniques or methods beyond our instructions. In these cases, the local code must be followed. Under no circumstances will Elk accept application requirements less than those contained in its application instructions.

For specifications in CGI format, call 800.384.SPEC (7732) or e-mail specinfo@elkcorp.com.

**SOUTHEAST &
ATLANTIC OFFICE:**
800.945.5551

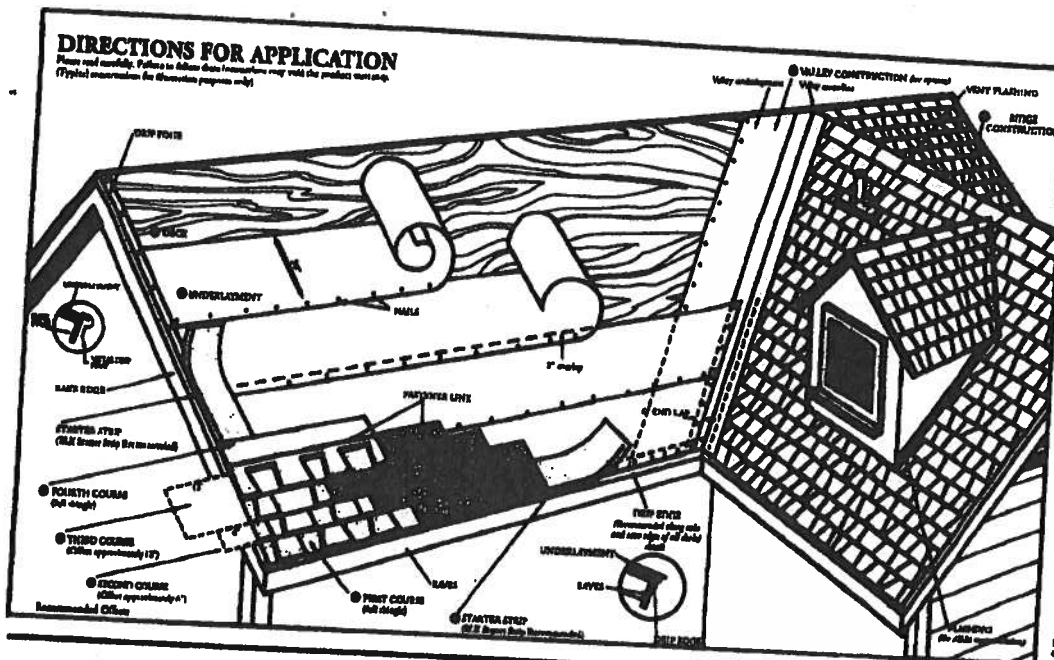
CORPORATE HEADQUARTERS:
800.354.7732

PLANT LOCATION:
800.945.5545

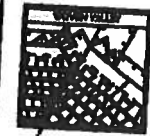
ELK
The Premium Choice®
www.elkcorp.com
SS00T (06/04)

DIRECTIONS FOR APPLICATION

Plans and details. Failure to follow these instructions may void the product warranty.
(Typical instructions for Shingles purposes only)



VALLEY CONSTRUCTION IN OPTION
(Shingles Over and Underlayment are the acceptable valley)



NOTE: For complete ARMA valley construction details, see ARMA roofing installation guide.

DIRECTIONS FOR APPLICATION

These application instructions are the minimum required to meet Elk's application requirements. Your failure to follow these instructions may void the product warranty. In some areas, the building codes may require additional application techniques or methods beyond our instructions. In these areas, the local code must be followed. Under no circumstances will Elk accept application requirements that are less than those printed here. Shingles should not be jammed tightly together. All shingles should be properly ventilated. Note: It is not necessary to remove tape on back of shingle.

● DECK PREPARATION

Roof decks should be dry, well-seasoned 1" x 6" boards or exterior grade plywood minimum 2 1/2" thick and conform to the specifications of the American Plywood Association or 7/16" oriented strandboard, or 7/16" chipboard.

● UNDERLAYMENT

Apply underlayment (Non-Perforated No. 15 or 30 asphalt saturated felt, Elk Versantite™ or self-adhering underlayment is also acceptable. Cover drip edge at eaves only.

For low slopes (2/12 up to 4/12), completely cover the deck with two piles of underlayment overlapping a minimum of 18". Begin by fastening a 18" wide strip of underlayment placed along the eaves. Place a full 36" wide sheet over the starter, horizontally placed along the eaves and completely overlapping the starter strip.

SAVE FLASHING FOR ICE BARS (ASK A ROOFING CONTRACTOR, REFER TO ARMA MANUAL OR CHECK LOCAL CODES)

For standard slope (4/12 to less than 21/12), use coated roll roofing of no less than 30 pounds over the felt underlayment extending from the eave edge to a point at least 24" beyond the inside wall of the living space below or one layer of a self-adhered eave and flashing membrane.

For low slope (2/12 up to 4/12), use a continuous layer of asphalt plastic cement between the two piles of underlayment from the eave edge up roof to a point at least 24" beyond the inside wall of the living space below or one layer of a self-adhered eave and flashing membrane.

Consult the Elk Technical Services Department for application specifications over other decks and other slopes.

● STARTER SHINGLE COURSE

USE AN ELK STARTER STRIP ON THE HEADLAP OF A STRIP SHINGLE WITH THE ADHESIVE STRIP POSITIONED AT THE SAVE EDGE. With at least 2" trimmed from the end of the first shingle, start at the rake edge overhanging the eave and rake edges 1/2" to 3/4". Fasten 2" from the lower edge and 1" from each side.

● FIRST COURSE

Start at rake and continue course with full shingles laid flush with the starter course. Shingles may be applied with a course alignment of 48" on the roof.

● SECOND COURSE

Offset the second course of shingles with respect to the first by approximately 6". Other offsets are approved if greater than 4".

● THIRD COURSE

Offset the next course by 6" with respect to the second course, or consistent with the original offset.

● FOURTH COURSE

Start at the rake and continue with full shingles across roof.

FIFTH AND SUBSEQUENT COURSES

Repeat application as shown for second, third, and fourth courses. Do not rock shingles straight up the roof. Offsets may be adjusted around valleys and penetrations.

● VALLEY CONSTRUCTION

Open, woven and closed cut valleys are acceptable when applied by Asphalt Roofing Manufacturing Association (ARMA) recommended procedures. For metal valleys, use 36" wide vertical underlayment prior to applying metal flashing (secure edge with nails). No nails are to be within 6" of valley center.

● RIDGE CONSTRUCTION

For ridge construction Elk recommends Class "A" Z-Ridge or Seal-A-Ridge™ with formate FLX™ or RidgeCrest™ with FLX (See ridge package for installation instructions). Vented RidgeCrest or 3-tab shingles are also approved.

FASTENERS

While nailing is the preferred method for Elk shingles, Elk will accept fastening methods according to the following instructions.

Using the fastener (nail as a reference), nail or staple the shingle in the double thickness common head area. For shingles without a fastener line, nails or staples must be placed between and/or in the contact area.

NAILS: Corrosive resistant, 3/8" head, minimum 12-gauge roofing nails. Elk recommends 1-1/4" for snow roofs and 1-1/2" for roof over. In cases where you are applying shingles to a roof that has an exposed overhang, for new roofs only, 3/4" ring shank nails are allowed to be used from the eave's edge to a point up the roof that is past the outside wall line. 1" ring shank nails allowed for re-roof.

STAPLES: Corrosive resistant, 16-gauge minimum, crown width minimum of 18/16". Note: An improperly adjusted staple gun can result in raised staples that can cause a fish-mouthed appearance and can prevent sealing.

Fasteners should be long enough to obtain 3/4" deck penetration or penetration through deck, whichever is less. This product meets the requirements of the IRC 2003 code when fastened with 4 nails.

MANUARD APPLICATIONS

Correct fastening is critical to the performance of the roof. For slopes exceeding 60° (or 21/12) use six fasteners per shingle. Locate fasteners in the fastener area 1" from each side edge with the remaining four fasteners equally spaced along the length of the double thickness (laminated) area. Only fastening methods according to the above instructions are acceptable.

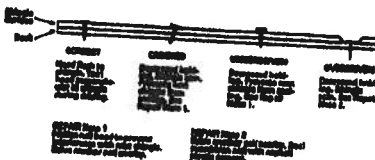
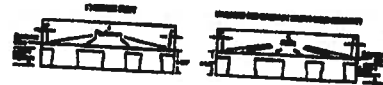
LIMITED WIND WARRANTY

For a Limited Wind Warranty, all Practique and Rated Profile™ shingles must be applied with 4 properly placed fasteners, or in the case of non-rated applications, 6 properly placed fasteners per shingle.

For a Limited Wind Warranty up to 110 MPH for Practique Gallery Collection or Practique Plus or 90 MPH for Practique I, shingles must be applied with 6 properly placed NAILS per shingle. SHINGLES APPLIED WITH STAPLES WILL NOT QUALIFY FOR THIS ENHANCED LIMITED WIND WARRANTY. Also, Elk Starter Strip shingles must be applied at the eaves and rake edges to qualify Practique Plus, Practique Gallery Collection and Practique I shingles for this enhanced Limited Wind Warranty. Under no circumstances should the Elk Shingles or the Elk Starter Strip overhang the eaves or rake edge more than 3/4" of an inch.

HELP STOP BLOW-OFFS AND BALL-BACKS

A minimum of four fasteners must be driven into the DOUBLE THICKNESS (laminated) area of the shingle. Nails or staples must be placed along - and through - the "fastener line" or on products without fastener lines, nail or staple between and in line with sealant dots. CAUTION: Do not use fastener line for shingle alignment.



Refer to local codes which in some areas may require specific application techniques beyond those Elk has specified. All Practique and Rated Profile shingles have a U.L.C. Wind Resistance Rating when applied in accordance with these instructions using nails or staples on re-roofs as well as new construction.

CAUTION TO WHOLESALE: Careless and improper storage or handling can harm shingles. Keep these shingles completely covered, dry, reasonably cool, and protected from the weather. Do not store near various sources of heat. Do not store in direct sunlight until applied. DO NOT DOUBLE STACK. Systematically rotate all stock so that the material that has been stored the longest will be the first to be moved out.

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The Premium Choice
www.elkcorp.com

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**AAMA/NWWDA 101/LS.2-97
TEST REPORT**

Rendered to:

MI HOME PRODUCTS, INC.

**SERIES/MODEL: 450/650/850
TYPE: H-C30 54 x 90; H-C40 52 x 72***

Title of Test	Summary of Results	
	Test Specimen #1	Test Specimen #2
AAMA Rating	H-C30 54 x 90	H-C40 52 x 72*
Uniform Load Deflection Test Pressure	35.0 psf	47.0 psf
Operating Force	20 lb max.	N/A
Air Infiltration	0.27 cfm/ft ²	N/A
Water Resistance Test Pressure	5.25 psf	6.0 psf
Uniform Structural Load Test Pressure	45.0 psf	70.5 psf
Deglazing	Passed	N/A
Forced Entry Resistance	Grade 10	N/A

Reference should be made to ATI Report No. 01-37589.02 for complete test specimen description and data.

Allen M. Rung
24 JUNE 2003



Architectural Testing

TEST REPORT

Rendered to:

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

Report No: 01-37589.02
Test Date: 06/15/00
Thru: 06/29/00
Report Date: 06/06/02
Expiration Date: 06/29/04

Project Summary: Architectural Testing, Inc. (ATTI) was contracted by MI Home Products, Inc. to witness performance testing on two Series/Model 450/650/850, aluminum single hung windows at their facility in Elizabethville, Pennsylvania. The samples tested successfully met the performance requirements for the following ratings: Test Specimen #1: H-C30 54 x 90; Test Specimen #2: H-C40 52 x 72*.

General Note: An asterisk (*) next to the performance grade indicates that the size tested for optional performance was smaller than the Gateway test size for the product type and class.

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

Test Specimen Description

Series/Model: 450/650/850

Type: Aluminum Single Hung Window

Test Specimen #1: Gateway Performance Specimen H-C30 54 x 90 rating

Overall Size: 4' 6-1/2" wide by 7' 6-1/2" high

Active Sash Size: 4' 4" wide by 3' 9-3/4" high

Fixed Daylight Opening Size: 4' 1-1/2" wide by 3' 6-1/2" high

Screen Size: 4' 2-1/4" wide by 3' 8-1/2" high

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

Allen M. Remington
28 JUNE 2002



Test Specimen Description: (Continued)

Test Specimen #2: H-C40 52 x 72*

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

Active Sash Size: 4' 2" wide by 3' 0-1/2" high

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

Screen Size: 4' 0" wide by 2' 11" high

The following descriptions apply to all specimens.

Finish: All aluminum was painted.

Glazing Details: The lites utilized 5/8" thick sealed insulating glass units fabricated from two sheets of 3/32" clear annealed glass and an intercept™ spacer system. The sash was channel glazed with a flexible gasket. The fixed lite was interior glazed onto single-sided adhesive foam tape and secured with extruded PVC glazing beads.

Weatherstripping:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
0.210" 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	Stiles
0.300" diameter by 0.187" backed foam filled vinyl bulb gasket	1 Row	Bottom rail
0.400" high by 1/2" square polypile dust plug	4	One on each sash corner

Frame Construction: Series/Model 450 frame was constructed of thermally broken extruded aluminum with coped, butted and sealed corners. The fixed meeting rail was constructed of an extruded aluminum member with coped, butted and sealed ends fastened with two #8 x 1/4" screws. Series/Model 650 frame was constructed of extruded aluminum. Series/Model 850 frame was constructed of thermally broken extruded aluminum members.

Sash Construction: The Series/Model 450 sash members were constructed of thermally broken extruded aluminum members with coped, butted and sealed corners fastened with one #8 x 1-1/4" screw. Series/Model 650 sash was constructed of extruded aluminum. Series/Model 850 sash was constructed of extruded aluminum.

Screen Construction: The screen was constructed of rolled-aluminum members with plastic keyed corners. The fiberglass mesh was secured with a flexible spline.

Allen M. Reeves
28 JUNE 2002



Test Specimen Description: (Continued)

Hardware:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Plastic snap latch	1	Midspan of bottom rail
Block and tackle balance system	2	One per jamb
Plastic tilt latch	2	One on each end of sash meeting rail
Metal pivot bar	2	One on each end of bottom rail

Drainage: Sloped sill

Reinforcement: No reinforcement.

Installation: The test unit was installed into the nominal 2" x 8" Spruce-Pine-Fir #2 wood test buck utilizing the nailing fin secured with 1" long galvanized roofing nails, 6" from each corner and every 18" on center. The nailing fin was also bedded in polyurethane. The exterior perimeter was blind stopped with wood members and secured with #8 x 3" screws every 24" on center.

Test Results:

The results are tabulated as follows:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
Test Specimen #1: Gateway Performance Specimen H-C30 54 x 90			
2.2.1.6.1	Operating Force	20 lbs	45 lbs max
	Air Infiltration (ASTM E 283) @ 1.57 psf (25 mph)	0.27 cfm/ft ²	0.30 cfm/ft ² max.
Note #1: The tested specimen meets the performance levels specified in AAMA/NWDA 101/I.S. 2-97 for air infiltration.			
	Water Resistance (ASTM E 547) (with and without screen) WTP = 4.5 psf	No leakage	No leakage
2.1.4.1	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the fixed meeting rail) (Loads were held for 33 seconds) @ 35.0 psf (positive) @ 35.0 psf (negative)	0.27" 0.73"*	0.36" max. 0.30" max.

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

Allen M. R...
29 JUNE 2007

Test Results:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
<u>Test Specimen #1:</u> Gateway Performance Specimen H-C30 54 x 90 (Continued)			
2.1.4.2	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the fixed meeting rail) (Loads were held for 10 seconds) @ 45.0 psf (positive) @ 45.0 psf (negative)	0.03" 0.04"	0.21" max 0.21" max
2.2.1.6.2	Deglazing Test (ASTM E 987-88) In operating direction at 70 lbs Meeting rail Bottom rail In remaining direction at 50 lbs Left stile Right stile	 0.06"/12% 0.06"/12% 0.06"/12% 0.06"/12%	 0.50"/100% 0.50"/100% 0.50"/100% 0.50"/100%
2.1.8	Forced Entry Resistance (ASTM F 588-97) Type: A Grade: 10		
	Lock Manipulation Test	No entry	No entry
	Test A1 thru A5	No entry	No entry
	Test A7	No entry	No entry
	Lock Manipulation Test	No entry	No entry

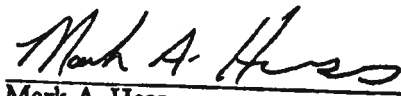
Allen M. Rensen

Test Results:


<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
<u>Test Specimen #1:</u> Gateway Performance Specimen H-C30 54 x 90 (Continued)			
<u>Optional Performance</u>			
4.3	Water Resistance (ASTM E 547) (with and without screen) WTP = 5.25 psf	No leakage	No leakage
<u>Test Specimen #2:</u> H-C40 52 x 72*			
<u>Optional Performance</u>			
4.3	Water Resistance (ASTM E 547 and ASTM E 331) (with and without screen) WTP = 6.0 psf	No leakage	No leakage
	Uniform Load Deflection (ASTM E 330) (Measurements reported were taken on the fixed meeting rail) (Loads were held for 33 seconds)		
	@ 47.0 psf (positive)	0.04"	0.30" max
	@ 47.0 psf (negative)	0.03"	0.30" max
	Uniform Load Structural (ASTM E 330) (Measurements reported were taken on the fixed meeting rail) (Loads were held for 10 seconds)		
	@ 70.5 psf (positive)	0.07"	0.21" max.
	@ 70.5 psf (negative)	0.04"	0.21" max.

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

For ARCHITECTURAL TESTING, INC


Mark A. Hess
Technician

MAH:baw
01-37589.02


Allen N. Reeves, P.E.
Director - Engineering Services
24 JUNE 2002



DOCUMENT CONTROL ADDENDUM #01-37589.00

Current Issue Date: 06/06/02

Report No.: 01-37589.01

Requested by: Scott Gill, MI Home Products, Inc.

Purpose: AAMA/NWWDA 101/L.S.2-97 testing on Series/Model 450, aluminum single hung window.

Issued Date: 09/11/00

Comments: Certification copy to John Smith at Associated Laboratories, Inc.

Report No.: 01-37589.02

Requested by: William Emley, MI Home Products, Inc.

Purpose: Revised Report No. 01-37589.01.

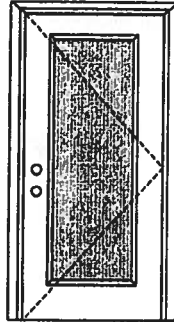
Issued Date: 06/06/02

Comments: Added Series/Model 650/850. Florida P.E. seal required on report
Certification copy to John Smith at Associated Laboratories, Inc.

Allen M. Ramos
20140607 2007

WOOD-EDGE STEEL DOORS

APPROVED ARRANGEMENT:



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



Test Data Review Certificate #3026447A and COP/Test Report Validation Matrix #3026447A-001 provides additional information - available from the ITS/WH website (www.itswh.com), the Masonite website (www.masonite.com) or the Masonite technical center.

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

Design Pressure
+40.5/-40.5
Limited water unless special threshold design is used.

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

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

MINIMUM ASSEMBLY DETAIL:

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

MINIMUM INSTALLATION DETAIL:

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

APPROVED DOOR STYLES:

1/4 GLASS:



100 Series



133, 135 Series



138 Series



680 Series



822 Series

1/2 GLASS:



105 Series*



106, 160 Series*



129 Series*



200 Series*



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



107 Series*



108 Series



304 Series

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

Johnson
EntrySystems

June 17, 2002
Our continuing program of product improvement makes specifications, design and product data subject to change without notice.

PREMDOR Collection
Premium Quality Doors



Exclusively from

Masonite

Masonite International Corporation

X

Glazed Inswing Unit

COP-WL-JH4141-02

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

404 Series



410 Series



460 Series

FULL GLASS:

108 Series

114, 120, 122
Series

162 Series



149 Series



300 Series

CERTIFIED TEST REPORTS:

NCTL 210-1897-7, 8, 9, 10, 11, 12; NCTL 210-1861-4, 5, 6, 10, 11, 12; NCTL 210-2185-1, 2, 3

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

Unit Tested in Accordance with Miami-Dade BCCO PA202.

Evaluation report NCTL-210-2794-1

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

Frame constructed of wood with an extruded aluminum threshold.

PRODUCT COMPLIANCE LABELING:

TESTED IN
ACCORDANCE WITH
MIAMI-DADE BCCO PA202

COMPANY NAME
CITY, STATE

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

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



Test Data Review Certificate #3026447A and COP/Test Report Validation Matrix #3026447A-001 provides additional information - available from the ITSAWH website (www.itsemko.com), the Masonite website (www.masonite.com) or the Masonite technical center.

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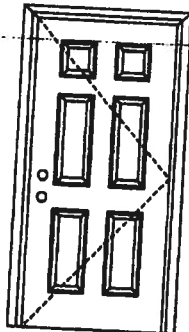
Masonite International Corporation

X
Opaque Inswing Unit

COP-WL-JH4101-02

WOOD-EDGE STEEL DOORS

APPROVED ARRANGEMENT:



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



Test Data Review Certificate #3026447A and COP/Rest Report Validation Matrix #3026447A-001 provides additional information - available from the ITS/WH website (www.itsamko.com), the Masonite website (www.masonite.com) or the Masonite technical center.

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

Design Pressure
+66.0/-66.0

Limited water unless special threshold design is used.

Large Missile Impact Resistance

Hurricane protective system (shutters) is NOT REQUIRED.

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

MINIMUM ASSEMBLY DETAIL:

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

MINIMUM INSTALLATION DETAIL:

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

APPROVED DOOR STYLES:



Flush



Arch Top 3-panel



3-panel



6-panel



New England 4-panel



Eyebrow 4-panel



8-panel



9-panel



15-panel



5-panel



5-panel with scroll



Eyebrow 5-panel



Eyebrow 5-panel with scroll

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Masonite®
Masonite International Corporation

X
Opaque Inswing Unit

COP-WL-JH4101-02

WOOD-EDGE STEEL DOORS

CERTIFIED TEST REPORTS:

NCTL 210-2185-1, 2, 3

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

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

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

Frame constructed of wood with an extruded aluminum threshold.

PRODUCT COMPLIANCE LABELING:

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

COMPANY NAME
CITY, STATE

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

Kurt L Balthaz

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



Test Data Review Certificate #3026447A and COP/Test Report Validation Matrix #3026447A-001 provides additional information - available from the ITS/WH website (www.itswh.com), the Masonite website (www.masonite.com) or the Masonite technical center.

Johnson
EntrySystems

June 17, 2002
Our continuing program of product improvement makes specifications, design and product details subject to change without notice.



Exclusively from
Masonite
Masonite International Corporation

**AAMA/NWWDA 101/LS.2-97
TEST REPORT**

Rendered to:

MI HOME PRODUCTS, INC.

SERIES/MODEL: 450/650/850

TYPE: H-C30 54 x 90; H-C40 52 x 72*

Title of Test	Summary of Results	
	Test Specimen #1	Test Specimen #2
AAMA Rating	H-C30 54 x 90	H-C40 52 x 72*
Uniform Load Deflection Test Pressure	35.0 psf	47.0 psf
Operating Force	20 lb max.	N/A
Air Infiltration	0.27 cfm/ft ²	N/A
Water Resistance Test Pressure	5.25 psf	6.0 psf
Uniform Structural Load Test Pressure	45.0 psf	70.5 psf
Deglazing	Passed	N/A
Forced Entry Resistance	Grade 10	N/A

Reference should be made to ATI Report No. 01-37589.02 for complete test specimen description and data.

Allen M. Rung
24 JUNE 2003



Architectural Testing

TEST REPORT

Rendered to:

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

Report No: 01-37589.02
Test Date: 06/15/00
Thru: 06/29/00
Report Date: 06/06/02
Expiration Date: 06/29/04

Project Summary: Architectural Testing, Inc. (ATI) was contracted by MI Home Products, Inc. to witness performance testing on two Series/Model 450/650/850, aluminum single hung windows at their facility in Elizabethtown, Pennsylvania. The samples tested successfully met the performance requirements for the following ratings: Test Specimen #1: H-C30 54 x 90; Test Specimen #2: H-C40 52 x 72*.

General Note: An asterisk (*) next to the performance grade indicates that the size tested for optional performance was smaller than the Gateway test size for the product type and class.

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

Test Specimen Description

Series/Model: 450/650/850

Type: Aluminum Single Hung Window

Test Specimen #1: Gateway Performance Specimen H-C30 54 x 90 rating

Overall Size: 4' 6-1/2" wide by 7' 6-1/2" high

Active Sash Size: 4' 4" wide by 3' 9-3/4" high

Fixed Daylight Opening Size: 4' 1-1/2" wide by 3' 6-1/2" high

Screen Size: 4' 2-1/4" wide by 3' 8-1/2" high

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

Allen N. Remington
28 JUNE 2002



Test Specimen Description: (Continued)

Test Specimen #2: H-C40 52 x 72*

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

Active Sash Size: 4' 2" wide by 3' 0-1/2" high

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

Screen Size: 4' 0" wide by 2' 11" high

The following descriptions apply to all specimens.

Finish: All aluminum was painted.

Glazing Details: The lites utilized 5/8" thick sealed insulating glass units fabricated from two sheets of 3/32" clear annealed glass and an intercept™ spacer system. The sash was channel glazed with a flexible gasket. The fixed lite was interior glazed onto single-sided adhesive foam tape and secured with extruded PVC glazing beads.

Weatherstripping:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
0.210" 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	Stiles
0.300" diameter by 0.187" backed foam filled vinyl bulb gasket	1 Row	Bottom rail
0.400" high by 1/2" square polypile dust plug	4	One on each sash corner

Frame Construction: Series/Model 450 frame was constructed of thermally broken extruded aluminum with coped, butted and sealed corners. The fixed meeting rail was constructed of an extruded aluminum member with coped, butted and sealed ends fastened with two #8 x 1/4" screws. Series/Model 650 frame was constructed of extruded aluminum. Series/Model 850 frame was constructed of thermally broken extruded aluminum members.

Sash Construction: The Series/Model 450 sash members were constructed of thermally broken extruded aluminum members with coped, butted and sealed corners fastened with one #8 x 1-1/4" screw. Series/Model 650 sash was constructed of extruded aluminum. Series/Model 850 sash was constructed of extruded aluminum.

Screen Construction: The screen was constructed of rolled-aluminum members with plastic keyed corners. The fiberglass mesh was secured with a flexible spline.

Allen M. Reiner
28 JUNE 2012



Test Specimen Description: (Continued)

Hardware:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Plastic snap latch	1	Midspan of bottom rail
Block and tackle balance system	2	One per jamb
Plastic tilt latch	2	One on each end of sash meeting rail
Metal pivot bar	2	One on each end of bottom rail

Drainage: Sloped sill

Reinforcement: No reinforcement.

Installation: The test unit was installed into the nominal 2" x 8" Spruce-Pine-Fir #2 wood test buck utilizing the nailing fin secured with 1" long galvanized roofing nails, 6" from each corner and every 18" on center. The nailing fin was also bedded in polyurethane. The exterior perimeter was blind stopped with wood members and secured with #8 x 3" screws every 24" on center.

Test Results:

The results are tabulated as follows:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
Test Specimen #1: Gateway Performance Specimen H-C30 54 x 90			
2.2.1.6.1	Operating Force	20 lbs	45 lbs max.
	Air Infiltration (ASTM E 283) @ 1.57 psf (25 mph)	0.27 cfm/ft ²	0.30 cfm/ft ² max.
<i>Note #1: The tested specimen meets the performance levels specified in AAMA/NWWDA 101/I.S. 2-97 for air infiltration.</i>			
	Water Resistance (ASTM E 547) (with and without screen) WTP = 4.5 psf	No leakage	No leakage
2.1.4.1	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the fixed meeting rail) (Loads were held for 33 seconds) @ 35.0 psf (positive) @ 35.0 psf (negative)	0.27" 0.73"*	0.36" max. 0.30" max.

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

Allen M. R...
22 JUNE 7...

Test Results:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
Test Specimen #1: Gateway Performance Specimen H-C30 54 x 90 (Continued)			
2.1.4.2	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the fixed meeting rail) (Loads were held for 10 seconds) @ 45.0 psf (positive) @ 45.0 psf (negative)	0.03" 0.04"	0.21" max 0.21" max
2.2.1.6.2	Deglazing Test (ASTM E 987-88) In operating direction at 70 lbs Meeting rail Bottom rail In remaining direction at 50 lbs Left stile Right stile	 0.06"/12% 0.06"/12% 0.06"/12% 0.06"/12%	 0.50"/100% 0.50"/100% 0.50"/100% 0.50"/100%
2.1.8	Forced Entry Resistance (ASTM F 588-97) Type: A Grade: 10		
	Lock Manipulation Test	No entry	No entry
	Test A1 thru A5	No entry	No entry
	Test A7	No entry	No entry
	Lock Manipulation Test	No entry	No entry

Allen M. Reeves

Test Results:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
<u>Test Specimen #1:</u> Gateway Performance Specimen H-C30 54 x 90 (Continued)			

Optional Performance

4.3	Water Resistance (ASTM E 547) (with and without screen) WTP = 5.25 psf	No leakage	No leakage
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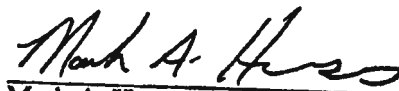
Test Specimen #2: H-C40 52 x 72*

Optional Performance


4.3	Water Resistance (ASTM E 547 and ASTM E 331) (with and without screen) WTP = 6.0 psf	No leakage	No leakage
	Uniform Load Deflection (ASTM E 330) (Measurements reported were taken on the fixed meeting rail) (Loads were held for 33 seconds)		
	@ 47.0 psf (positive)	0.04"	0.30" max.
	@ 47.0 psf (negative)	0.03"	0.30" max.
	Uniform Load Structural (ASTM E 330) (Measurements reported were taken on the fixed meeting rail) (Loads were held for 10 seconds)		
	@ 70.5 psf (positive)	0.07"	0.21" max.
	@ 70.5 psf (negative)	0.04"	0.21" max.

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

For ARCHITECTURAL TESTING, INC


Mark A. Hess
Technician

MAH:baw
01-37589.02


Allen N. Reeves, P.E.
Director - Engineering Services
24 JUNE 2002



DOCUMENT CONTROL ADDENDUM #01-37589.00

Current Issue Date: 06/06/02

Report No.: 01-37589.01

Requested by: Scott Gill, MI Home Products, Inc.

Purpose: AAMA/NWWDA 101/LS.2-97 testing on Series/Model 450, aluminum single hung window.

Issued Date: 09/11/00

Comments: Certification copy to John Smith at Associated Laboratories, Inc.

Report No.: 01-37589.02

Requested by: William Emley, MI Home Products, Inc.

Purpose: Revised Report No. 01-37589.01.

Issued Date: 06/06/02

Comments: Added Series/Model 650/850. Florida P.E. seal required on report
Certification copy to John Smith at Associated Laboratories, Inc.

Allen M. Rasmussen
20 JUNE 2002

**AAMA/NWDA 101/L.S.2-97
TEST REPORT SUMMARY**

Rendered to:

MI HOME PRODUCTS, INC.

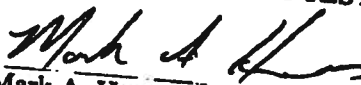
SERIES/MODEL: 650 Fin

TYPE: Aluminum Single Hung Window

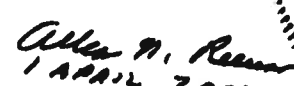
Title of Test	Results
Rating	H-R40 52 x 72
Overall Design Pressure	+45.0 psf
Operating Force	-47.2 psf
Air Infiltration	11 lb max.
Water Resistance	0.13 cfm/ft ²
Structural Test Pressure	6.00 psf
Deglazing	+67.5 psf
Forced Entry Resistance	-70.8 psf
	Passed
	Grade 10

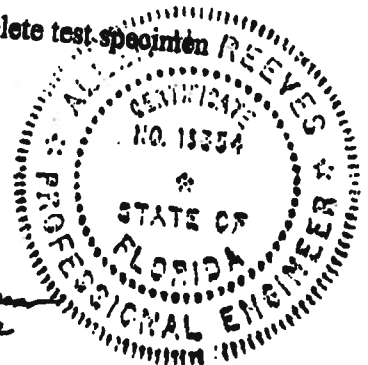
Reference should be made to Report No. 01-41134.01 dated 03/26/02 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.


Mark A. Hess, Technician

MAH:nlb


1 APRIL 2002





Architectural Testing

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

Rendered to

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

Report No: 01-41134.01
Test Date: 03/07/02
Report Date: 03/26/02
Expiration Date: 03/07/06

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

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

Test Specimen Description:

Series/Model: 650 Fin

Type: Aluminum Single Hung Window

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

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

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

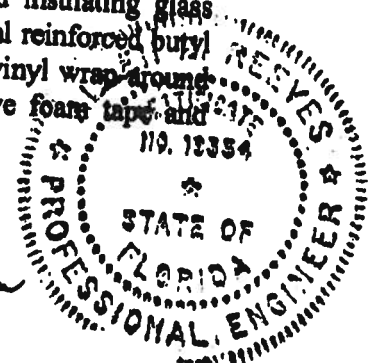
Screen Size: 4' 0-1/4" wide by 2' 11-1/8" high

Finish: All aluminum was white.

Glazing Details: The active and fixed lites utilized 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 D. Ruman
1 APRIL 2002



Test Specimen Description: (Continued)

Weatherstripping:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
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

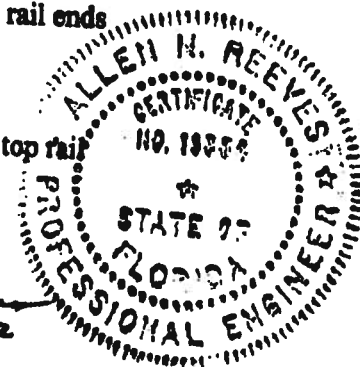
Frame Construction: The frame was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1" screws through the head and sill into each jamb screw boss. End caps were utilized on the ends of the fixed meeting rail and secured with two 1-1/4" screws per cap. Meeting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

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



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:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
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
<i>Note #1: The tested specimen meets the performance levels specified in AAMA/NWDA 101/I.S. 2-97 for air infiltration.</i>			
	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 2.86 psf	No leakage	No leakage
2.1.4.1	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 33 seconds) @ 25.9 psf (positive) @ 34.7 psf (negative)	0.42"* 0.43"*	0.26" max. 0.26" max.
<i>*Exceeds L/175 for deflection, but passes all other test requirements.</i>			
2.1.4.2	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 10 seconds) @ 38.9 psf (positive) @ 52.1 psf (negative)	0.02" 0.02"	0.18" max. 0.18" max.

Allen H. Reeves
1 APRIL 2002



Test Specimen Description: (Continued)

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

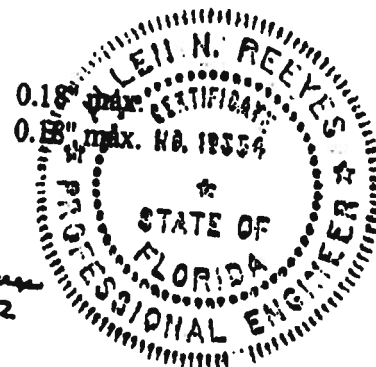
Optional Performance

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

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

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


Allen M. Reeves
1 APRIL 2002



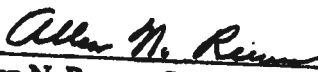


Detailed drawings, representative samples of the test specimen, and a copy of this report will be retained by ATI for a period of four years. The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specification. 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
01-41134.01


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



UNIVERSAL

ENGINEERING SCIENCES

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

REPORT ON IN-PLACE DENSITY TESTS

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

Permit # 000025327

CLIENT: Pete Richardson

PROJECT: Maggard 625 SW Kinard St. Fort White

AREA TESTED: Fill & prop. Ridge road

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

TYPE OF TEST: ASTM D 2922 DATE TESTED: 8-1-07

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

REMARKS:

[illegible]TECH. 15

26

0000 25327

Columbia Co Building
permits 4-25-08

I Am Requesting An extension
of permit # 000025327 issued in
Columbia county. for 625 SW Kinard ct
Fort white FL 32038.

Primary structure is complete,
but AS owner builders we ARE needing
more time to finish detail work so
it is completed to our satisfaction.

Karen & Harold Massard
625 SW Kinard ct.
Fort white FL 32038
Permit # 000025327

COLUMBIA COUNTY OFFICE OF ALTERNATE

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 05-6S-16-03773-004

Building permit No. 000025327

Use Classification SFD, UTILITY

Fire: 0.00

Permit Holder OWNER BUILDER

Waste:

Owner of Building HAROLD & KAREN MAGGARD

Total: 0.00

Location: 625 SW KINARD CT, FT. WHITE, FL

Date: 07/10/2008



Wayne S. Ruse

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)

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Environmental Sciences • Construction Materials Testing**

REPORT ON IN-PLACE DENSITY TESTS

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

Permit # 000025327

CLIENT: Pete Richardson

PROJECT: Maggard 1625 SW Kinard Ct. Fort White

AREA TESTED: Full down: Bldg and

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

TYPE OF TEST: ASTM D 2922 DATE TESTED: 8-1-07

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

REMARKS:

[illegible]TECH. 15