

DATE 01/16/2008

Columbia County Building Permit

This Permit Must Be Prominently Posted on Premises During Construction

PERMIT 000026625

APPLICANT GREG BOLKOSKY PHONE 758.9058

ADDRESS 274 NW POMPANO COURT LAKE CITY FL 32055

OWNER GREG BOLKOSKY PHONE 386.758.9058

ADDRESS 274 NW POMPANO COURT LAKE CITY FL 32055

CONTRACTOR OWNER BUILDER PHONE 758.9058

LOCATION OF PROPERTY LAKE JEFFERY ROAD ROAD TO BRINKLEY TERRACE, TL TO POMPANO, TR

COURT, 3RD LOT ON (LAST)

TYPE DEVELOPMENT ADDITION/SFD ESTIMATED COST OF CONSTRUCTION 63000.00

HEATED FLOOR AREA 1260.00 TOTAL AREA 1260.00 HEIGHT 1 STORIES 1

FOUNDATION CONC WALLS FRAMED ROOF PITCH 6:12 FLOOR CONC

LAND USE & ZONING A-3 MAX. HEIGHT 35

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

NO. EX.D.U. 1 FLOOD ZONE XPP DEVELOPMENT PERMIT NO.

PARCEL ID 09-3S-16-02049-131 SUBDIVISION ROLLING OAKS

LOT 31 BLOCK PHASE UNIT TOTAL ACRES

Culvert Permit No. Culvert Waiver Contractor's License Number

EXISTING 07-0943-N BLK JTH Applicant/Owner/Contractor N

Driveaway Connection Septic Tank Number LU & Zoning checked by Approved for Issuance New Resident

COMMENTS: FLOOR ONE FOOT ABOVE THE ROAD, NOC ON FILE.

Check # or Cash 506

FOR BUILDING & ZONING DEPARTMENT ONLY

Temporary Power Foundation Monolithic (Footer/Slab)

Under slab rough-in plumbing Slab Sheathing/Nailing

Framing Rough-in plumbing above slab and below wood floor

Electrical rough-in Heat & Air Duct Perit. beam (Lintel)

Permanent power C.O. Final Culvert

M/H tie downs, blocking, electricity and plumbing

Reconnection Pump pole Utility Pole Pool

M/H Pole Travel Trailer Re-roof

INSPECTORS OFFICE

FLOOD DEVELOPMENT FEE \$ 25.00

FLOOD ZONE FEE \$ 50.00

ZONING CERT. FEE \$ 0.00

MISC. FEES \$ 0.00

BUILDING PERMIT FEE \$ 315.00

CERTIFICATION FEE \$ 6.30

SURCHARGE FEE \$ 6.30

WASTE FEE \$

CULVERT FEE \$

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."

EVERY PERMIT ISSUED SHALL BECOME INVALID UNLESS THE WORK AUTHORIZED BY SUCH PERMIT IS COMMENCED WITHIN 180 DAYS AFTER ITS ISSUANCE, OR IF THE WORK AUTHORIZED BY SUCH PERMIT IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AFTER THE TIME THE WORK IS COMMENCED. A VALID PERMIT RECEIVES AN APPROVED INSPECTION EVERY 180 DAYS. WORK SHALL BE CONSIDERED TO BE IN ACTIVE PROCESS WHEN THE PERMIT HAS RECEIVED AN APPROVED INSPECTION WITHIN 180 DAYS.

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

Columbia County Building Permit Application

1

For Office Use Only Application # 0801-29 Date Received 1/9/08 By GP Permit # 20625
Zoning Official B2K Date 15.01.08 Flood Zone 1P^hlet FEMA Map # N/A Zoning A-3
Land Use A-3 Elevation N/A MFE N/A River N/A Plans Examiner OK JH Date 1-14-08

Comments

- NOC EH Deed or PA Site Plan State Road Info Parent Parcel # _____
- Dev Permit # _____ In Floodway Letter of Authorization from Contractor
- Unincorporated area Incorporated area Town of Fort White Town of Fort White Compliance letter

Septic Permit No. 07-0943N Fax 758-1848
 Name Authorized Person Signing Permit Greg Bolkosky Phone 386-758-9058
 Address 274 NW Pompano Ct. Lake City, FL 32055
 Owners Name Greg Bolkosky Phone 365-3713
 911 Address SAME
 Contractors Name owner (same) Phone _____
 Address _____

* Fee Simple Owner Name & Address N/A
 Bonding Co. Name & Address NONE
 Architect/Engineer Name & Address Nicholas Geisler
 Mortgage Lenders Name & Address NONE

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

Property ID Number 09-35-16 (R02049-131) Estimated Cost of Construction 50,000
 Subdivision Name Rolling Oaks Lot 31 Block _____ Unit _____ Phase _____
 Driving Directions Lake Jeffery Hwy (west) to Brinkley terrace on left, to Pompano Ct on right, third lot on left (last)

Number of Existing Dwellings on Property 1
 Construction of 1200 sqft addition Total Acreage 5.5 Lot Size same
 Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive Total Building Height _____
 Actual Distance of Structure from Property Lines - Front 139.6 Side 158.6 Side 260 Rear 245
 Number of Stories 1 Heated Floor Area 2820 Total Floor Area 3520 Roof Pitch 6/12
Addition of 1,260

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.
cut - 506'

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

FLORIDA'S CONSTRUCTION LIEN LAW: Protect Yourself and Your Investment

According to Florida Law, those who work on your property or provide materials, and are not paid-in-full, have a right to enforce their claim for payment against your property. This claim is known as a construction lien. If your contractor fails to pay subcontractors or material suppliers or neglects to make other legally required payments, the people who are owed money may look to your property for payment, even if you have paid your contractor in full. This means if a lien is filed against your property, it could be sold against your will to pay for labor, materials or other services which your contractor may have failed to pay.

NOTICE OF RESPONSIBILITY TO BUILDING PERMITEE:

YOU ARE HEREBY NOTIFIED as the recipient of a building permit from Columbia County, Florida, you will be held responsible to the County for any damage to sidewalks and/or road curbs and gutters, concrete features and structures, together with damage to drainage facilities, removal of sod, major changes to lot grades that result in ponding of water, or other damage to roadway and other public infrastructure facilities caused by you or your contractor, subcontractors, agents or representatives in the construction and/or improvement of the building and lot for which this permit is issued. No certificate of occupancy will be issued until all corrective work to these public infrastructures and facilities has been corrected.

OWNERS CERTIFICATION: 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. I further understand the above written responsibilities in Columbia County for obtaining this Building Permit.

Dec Bolsh *Dec Bolsh*

Owners Signature

CONTRACTORS AFFIDAVIT: By my signature I understand and agree that I have informed and provided this written statement to the owner of all the above written responsibilities in Columbia County for obtaining this Building Permit.

Contractor's Signature (Permitee)

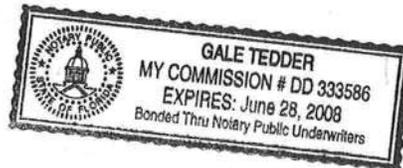
Contractor's License Number _____
Columbia County
Competency Card Number _____

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 9th day of JAN. 2008.
Personally known _____ or Produced Identification DL

Gale Tedder

State of Florida Notary Signature (For the Contractor)

SEAL:





STATE OF FLORIDA
DEPARTMENT OF HEALTH

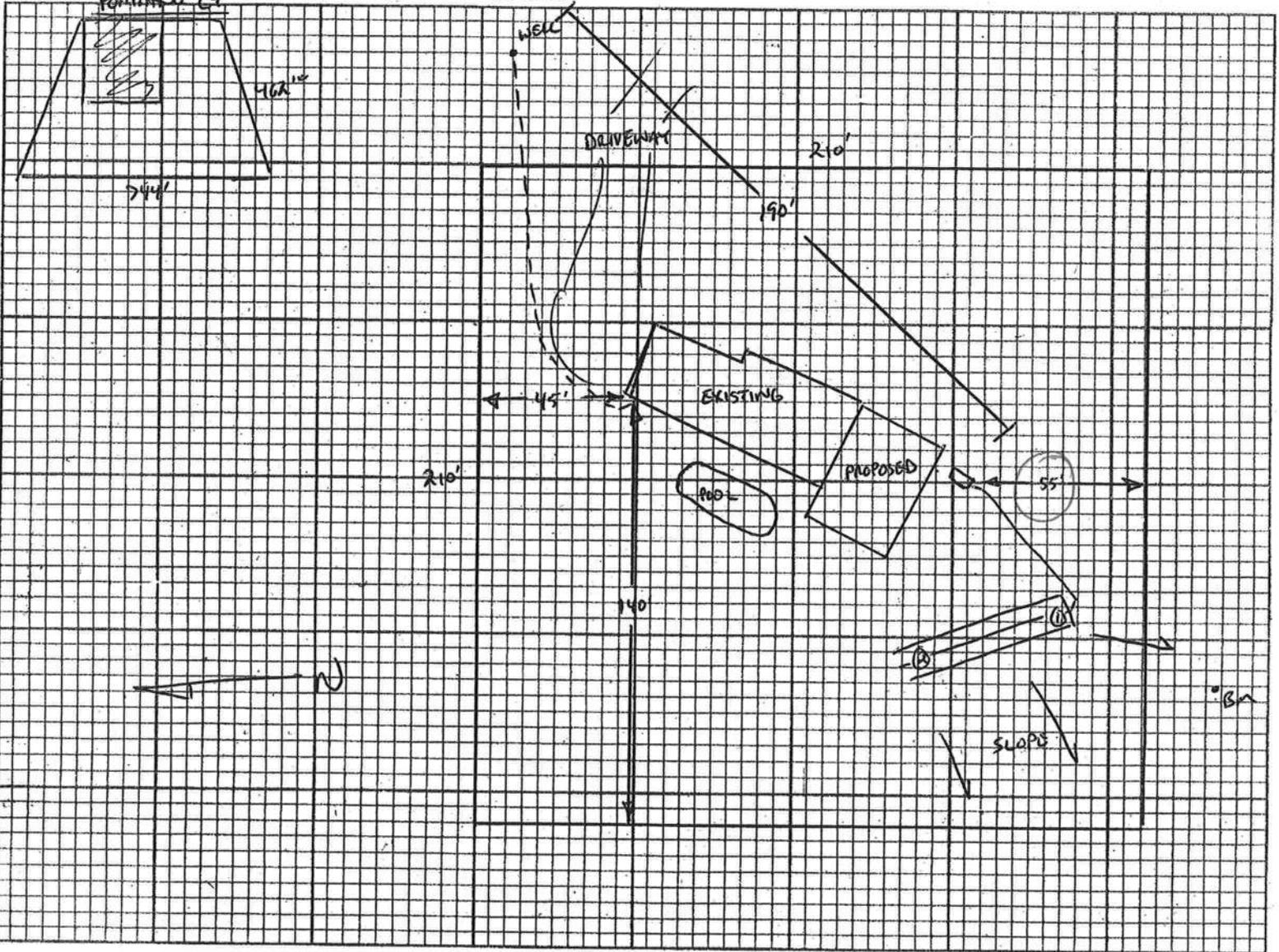
(A)

APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 07-0943-N

PART II - SITE PLAN

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



Notes:

REVISED 12/12/7

Site Plan submitted by: [Signature]

OWNER
Title

Plan Approved APPROVED Not Approved

Date 12/12/7

By [Signature]

Columbia CHD

County Health Department

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT



STATE OF FLORIDA
DEPARTMENT OF HEALTH

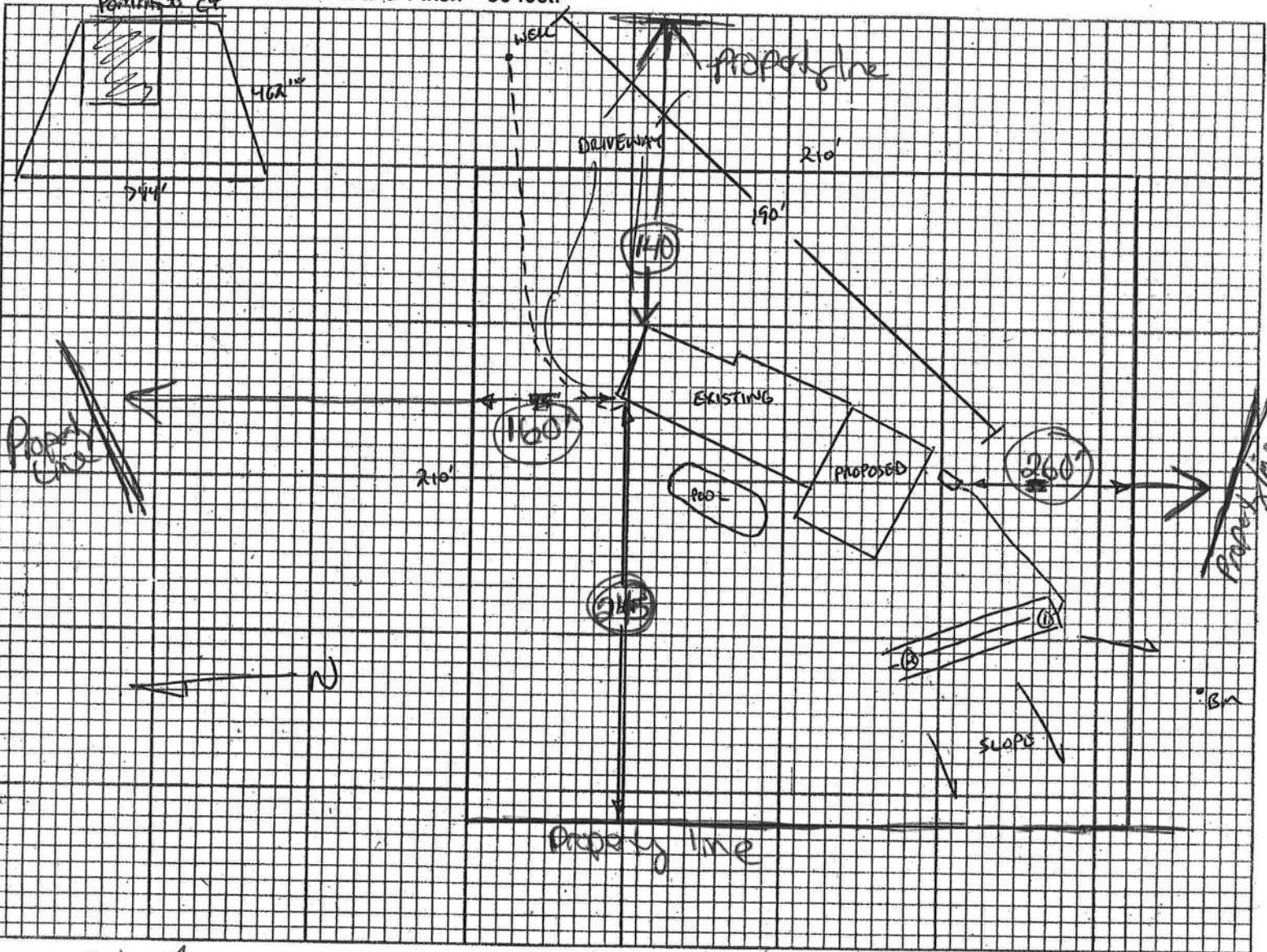
5A

APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 07-0943-N

PART II - SITE PLAN

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



Notes: Site 1-acre scale, property lines indicated by distance not to scale
Distances are correct

REVISSED 12/12/7
Site Plan submitted by: [Signature] Signature
Plan Approved APPROVED Not Approved
by [Signature] Date 12/12/7
OWNER Title
Columbia CHD County Health Department

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT



COLUMBIA COUNTY BUILDING DEPARTMENT

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

**NOTARIZED 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 for 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.

I understand that if I am not physically doing the work or physically supervising free labor from friends or relatives, that I must hire licensed contractors, i.e. electrician, plumber, mechanical (heating & air conditioning), etc. I further understand that the violation of not physically doing the work, and the use of unlicensed contractors at the construction site, will cause the project to be shut down by the inspection staff of the Columbia County Building Department. Additionally, state statutes allows for additional penalties. I also understand that if this violation does occur, that in order for the job to proceed, I will have a licensed contractor come in and obtain a new permit as taking the job over. I understand that if I hire subcontractors under a contract price, that they must be licensed to work in Columbia County, i.e. masonry, drywall, carpentry. Contractors licensed by the Columbia County Contractor Licensing Section or the State of Florida are required to have worker's compensation and liability coverage.

TYPE OF CONSTRUCTION

- Single Family Dwelling ADDITION
- Two-Family Residence
- Farm Outbuilding
- Other _____
- Addition, Alteration, Modification or other Improvement

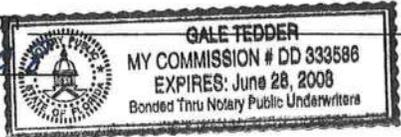
I Greg Balkosky, have been advised of the above disclosure statement for exemption from contractor licensing as an owner/builder. I agree to comply with all requirements provided for in Florida Statutes ss.489.103(7) allowing this exception for the construction permitted by Columbia County Building Permit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

Greg Balkosky 1-9-08
Greg Balkosky 1-7-08
Owner Builder Signature Date

FLORIDA NOTARY

The above signer is personally known to me or produced identification

Notary Signature Gale Tedder Date 1-9-08



FOR BUILDING DEPARTMENT 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 _____

138

FORM 600B-01

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION Residential Component Prescriptive Method B

NORTH 123

Compliance with Method B Chapter 6 of the Florida Energy Efficiency Code may be demonstrated by the use of Form 600B for single and multifamily residences of 3 stories or less in height, and additions to existing residential buildings.

PROJECT NAME: BULKOWSK AND ADDRESS: 20000 Court Lake City FL BUILDER: OWNER PERMITTING OFFICE: COLUMBIA CLIMATE ZONE: 1 2 3 X OWNER: Mr & Mrs Gregg Bulkowski PERMIT NO. JURISDICTION NO.: 8210010

GENERAL DIRECTIONS

- 1. New construction including additions which incorporates any of the following features cannot comply using this method: steel stud walls, single assembly roof/ceiling construction, or skylights or other non-vertical roof glass. 2. Choose one of the component packages "A" through "E" from Table 6B-1 by which you intend to comply with the Code. Circle the column of the package you have chosen. 3. Fill in all the applicable spaces of the "To Be Installed" column on Table 6B-1 with the information requested. All "To Be Installed" values must be equal to or more efficient than the required levels. 4. Complete page 1 based on the "To Be Installed" column information. 5. Read "Minimum Requirements for All Packages", Table 6B-2 and check each box to indicate your intent to comply with all applicable items. 6. Read, sign and date the "Prepared By" certification statement at the bottom of page 1. The owner or owner's agent must also sign and date the form.

Please Print

CK

- 1. Compliance package chosen (A-F)
2. New construction or addition
3. Single family detached or Multifamily attached
4. If Multifamily—No. of units covered by this submission
5. Is this a worst case? (yes / no)
6. Conditioned floor area (sq. ft.)
7. Predominant eave overhang (ft.)
8. Glass type and area :
a. Clear glass
b. Tint, film or solar screen
9. Percentage of glass to floor area
10. Floor type, area or perimeter, and insulation:
a. Slab on grade (R-value)
b. Wood, raised (R-value)
c. Wood, common (R-value)
d. Concrete, raised (R-value)
e. Concrete, common (R-value)
11. Wall type, area and insulation:
a. Exterior: 1. Masonry (Insulation R-value)
2. Wood frame (Insulation R-value)
b. Adjacent: 1. Masonry (Insulation R-value)
2. Wood frame (Insulation R-value)
12. Ceiling type, area and insulation:
a. Under attic (Insulation R-value)
b. Single assembly (Insulation R-value)
13. Air Distribution System: Duct insulation, location
Test report (attach if required)
14. Cooling system
(Types: central, room unit, package terminal A.C., gas, none)
15. Heating system:
(Types: heat pump, elec. strip, nat. gas, L.P. gas, gas h.p., room or PTAC, none)
16. Hot water system:
(Types: elec., nat. gas, L.P. gas, solar, heat rec., ded. heat pump, other, none)

1. A
2. New addition
3. Sgl. fam.
4.
5. NO
6. 2765
7. 2'
Single Pane Double Pane
8a. sq. ft. 423 sq. ft.
8b. sq. ft. sq. ft.
9. 15 %
10a. R= 0 lin. ft.
10b. R= sq. ft.
10c. R= sq. ft.
10d. R= sq. ft.
10e. R= sq. ft.
11a-1 R= sq. ft.
11a-2 R= 13 1124 sq. ft.
11b-1 R= sq. ft.
11b-2 R= sq. ft.
12a. R= 30 sq. ft.
12b. R= sq. ft.
13. R=
14a. Type: Central
14b. SEER/EER: 14
14c. Capacity: 3.5
15a. Type: Heat Pump
15b. HSPF/COP/AFUE:
15c. Capacity: 4000
16a. Type: Elect.
16b. EF: 88

I hereby certify that the plans and specifications covered by the calculation are in compliance with the Florida Energy Code. PREPARED BY: DATE: 1-8-08 OWNER AGENT: DATE:

Review of 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 in accordance with Section 553.908, F.S. BUILDING OFFICIAL: DATE:

NOTICE OF COMMENCEMENT

County Clerk's Office Stamp or Seal

Tax Parcel Identification Number R22049-131

THE UNDERSIGNED hereby gives notice that improvements will be made to certain real property, and in accordance with Section 713.13 of the Florida Statutes, the following information is provided in this NOTICE OF COMMENCEMENT.

1. Description of property (legal description): Lot 31 Rolling Oaks S/D
a) Street (job) Address: Pompano Ct.

2. General description of improvements: Additional living space (bedrooms, living space)

3. Owner Information
a) Name and address: Greg Bolkosky 274 NW Pompano Ct L.C. FL 32055
b) Name and address of fee simple titleholder (if other than owner) _____
c) Interest in property Resident Owner

4. Contractor Information
a) Name and address: owner
b) Telephone No.: 386-758-9058 Fax No. (Opt.) _____

5. Surety Information
a) Name and address: none
b) Amount of Bond: _____
c) Telephone No.: _____

6. Lender
a) Name and address: none
b) Phone No. _____

Inst: 200812000385 Date: 1/9/2008 Time: 9:32 AM
DC, P. DeWitt Cason, Columbia County Page 1 of 1

7. Identity of person within the State of Florida designated by owner upon whom notices or other documents may be served:
a) Name and address: owner
b) Telephone No.: _____ Fax No. (Opt.) _____

8. In addition to himself, owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(l)(b), Florida Statutes:
a) Name and address: N/A
b) Telephone No.: _____ Fax No. (Opt.) _____

9. Expiration date of Notice of Commencement (the expiration date is one year from the date of recording unless a different date is specified): _____

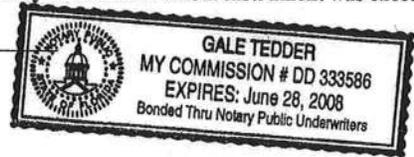
WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY; A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

STATE OF FLORIDA
COUNTY OF COLUMBIA

10. Greg Bolkosky
Signature of Owner or Owner's Authorized Office/Director/Partner/Manager
Greg Bolkosky
Print Name

The foregoing instrument was acknowledged before me, a Florida Notary, this 9th day of JAN, 20 08, by:
Greg Bolkosky as owner (type of authority, e.g. officer, trustee, attorney fact) for N/A (name of party on behalf of whom instrument was executed).

Personally Known OR Produced Identification Type DL
Notary Signature Gale Tedder Notary Stamp or Seal:



—AND—
11. Verification pursuant to Section 92.525, Florida Statutes. Under penalties of perjury, I declare that I have read the foregoing and that the facts stated in it are true to the best of my knowledge and belief.
Greg Bolkosky
Signature of Natural Person Signing (in line #10 above.)

5438.8	3540 Fin Frame	44x72 Insulated SSB Annealed
<p>Limits of Use (See Other) Approved for use in HVHZ: Approved for use outside HVHZ: Impact Resistant: Design Pressure: +/- Other: R-40 DP-47.2 Per manufacturers installation instructions.</p>		<p>Certification Agency Certificate Installation Instructions Verified By:</p>
5438.9	3540 Fin Frame Triple with Continuous Head and Sill	108x72 Insulated SSB Annealed
<p>Limits of Use (See Other) Approved for use in HVHZ: Approved for use outside HVHZ: Impact Resistant: Design Pressure: +/- Other: LC-35* DP-50 Per manufacturers installation instructions.</p>		<p>Certification Agency Certificate Installation Instructions Verified By:</p>

1956.2	Glass-Seal AR	A 3 tab asphalt shingle.
<p>Limits of Use (See Other) Approved for use in HVHZ: Approved for use outside HVHZ: Impact Resistant: Design Pressure: +/- Other: Asphalt shingles shall be used only on roof slopes of 2:12 or greater. Not approved for use in HVHZ.</p>		<p>Certification Agency Certificate Installation Instructions Verified By:</p>



**Underwriters
Laboratories Inc.**

Northbrook Division
333 Pfingsten Road
Northbrook, IL 60062-2096 USA
www.ul.com
tel: 1 847 272 8800

June 17, 2005

Tamko Roofing Products
Ms. Kerri Eden
P.O. Box 1404
220 W. 4th Street
Joplin, MO 64802-1404

Our Reference: R2919

This is to confirm that "Elite Glass-Seal AR", "Heritage 30 AR", "Heritage 50 AR", "Glass-Seal AR" manufactured at Tuscaloosa, AL and "Elite Glass-Seal AR", "Heritage 30 AR", "Heritage XL AR", "Heritage 50 AR" manufactured at Frederick, MD and "Heritage 30 AR", "Heritage XL AR", and "Heritage 50 AR" manufactured in Dallas, TX are UL Listed asphalt glass mat shingles and have been evaluated in accordance with ANSI/UL 790, Class A (ASTM E108), ASTM D3462, ASTM D3161 or UL 997 modified to 110 mph when secured with four nails.

Let me know if you have any further questions.

Very truly yours,

Alpesh Patel (Ext. 42522)
Engineer Project
Fire Protection Division

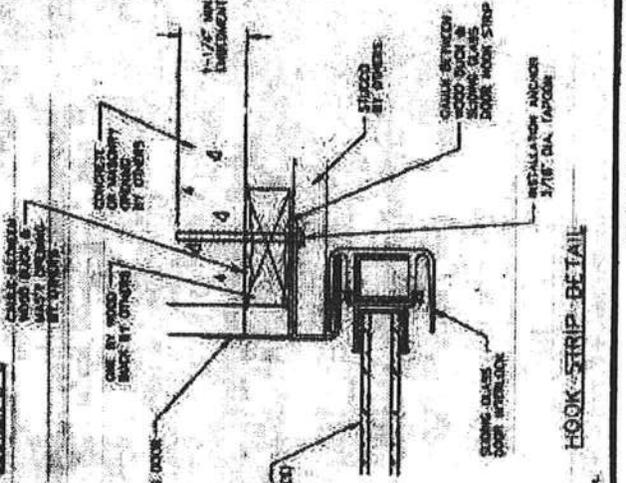
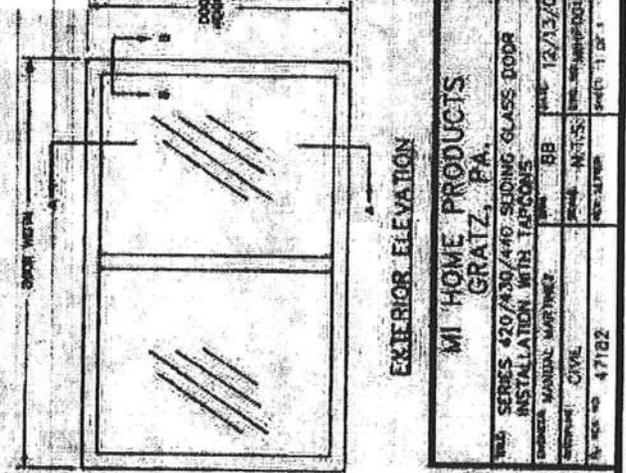
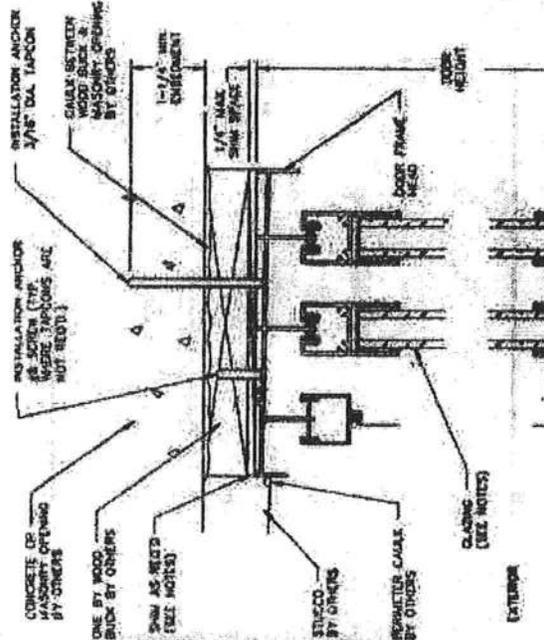
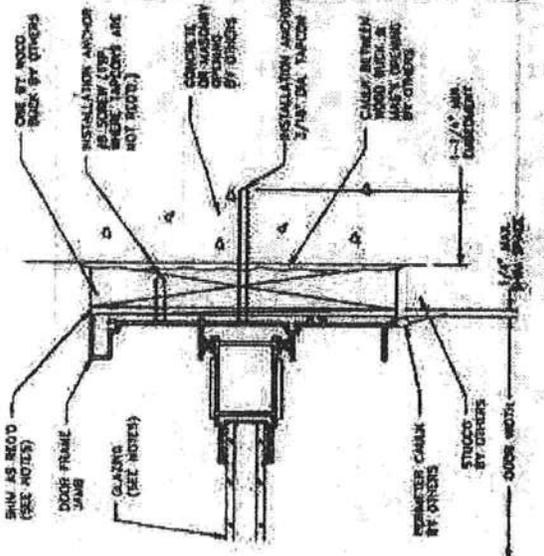
Reviewed by,

Randall K. Laymon (Ext. 42687)
Engineer Sr Staff
Fire Protection Division

21

TAPCON INSTALLATION CHART

CALL SIZE	LOCATION OF HOOK & SILL		DOOR SIZE	DOOR WEIGHT	
	UP TO 45 P.S.F.	45 P.S.F. TO 100 P.S.F.		UP TO 140 P.S.F.	140 P.S.F. TO 200 P.S.F.
3/8" X 3"	10"	10"	30" X 80"	100	100
3/8" X 4"	10"	10"	30" X 90"	100	100
3/8" X 5"	10"	10"	30" X 100"	100	100
3/8" X 6"	10"	10"	30" X 110"	100	100
3/8" X 8"	10"	10"	30" X 130"	100	100
3/8" X 10"	10"	10"	30" X 150"	100	100
3/8" X 12"	10"	10"	30" X 170"	100	100
3/8" X 14"	10"	10"	30" X 190"	100	100
3/8" X 16"	10"	10"	30" X 210"	100	100
3/8" X 18"	10"	10"	30" X 230"	100	100
3/8" X 20"	10"	10"	30" X 250"	100	100
3/8" X 22"	10"	10"	30" X 270"	100	100
3/8" X 24"	10"	10"	30" X 290"	100	100
3/8" X 26"	10"	10"	30" X 310"	100	100
3/8" X 28"	10"	10"	30" X 330"	100	100
3/8" X 30"	10"	10"	30" X 350"	100	100
3/8" X 32"	10"	10"	30" X 370"	100	100
3/8" X 34"	10"	10"	30" X 390"	100	100
3/8" X 36"	10"	10"	30" X 410"	100	100
3/8" X 38"	10"	10"	30" X 430"	100	100
3/8" X 40"	10"	10"	30" X 450"	100	100
3/8" X 42"	10"	10"	30" X 470"	100	100
3/8" X 44"	10"	10"	30" X 490"	100	100
3/8" X 46"	10"	10"	30" X 510"	100	100
3/8" X 48"	10"	10"	30" X 530"	100	100
3/8" X 50"	10"	10"	30" X 550"	100	100
3/8" X 52"	10"	10"	30" X 570"	100	100
3/8" X 54"	10"	10"	30" X 590"	100	100
3/8" X 56"	10"	10"	30" X 610"	100	100
3/8" X 58"	10"	10"	30" X 630"	100	100
3/8" X 60"	10"	10"	30" X 650"	100	100
3/8" X 62"	10"	10"	30" X 670"	100	100
3/8" X 64"	10"	10"	30" X 690"	100	100
3/8" X 66"	10"	10"	30" X 710"	100	100
3/8" X 68"	10"	10"	30" X 730"	100	100
3/8" X 70"	10"	10"	30" X 750"	100	100
3/8" X 72"	10"	10"	30" X 770"	100	100
3/8" X 74"	10"	10"	30" X 790"	100	100
3/8" X 76"	10"	10"	30" X 810"	100	100
3/8" X 78"	10"	10"	30" X 830"	100	100
3/8" X 80"	10"	10"	30" X 850"	100	100
3/8" X 82"	10"	10"	30" X 870"	100	100
3/8" X 84"	10"	10"	30" X 890"	100	100
3/8" X 86"	10"	10"	30" X 910"	100	100
3/8" X 88"	10"	10"	30" X 930"	100	100
3/8" X 90"	10"	10"	30" X 950"	100	100
3/8" X 92"	10"	10"	30" X 970"	100	100
3/8" X 94"	10"	10"	30" X 990"	100	100
3/8" X 96"	10"	10"	30" X 1010"	100	100
3/8" X 98"	10"	10"	30" X 1030"	100	100
3/8" X 100"	10"	10"	30" X 1050"	100	100



- NOTES:
1. FOR MATERIALS, ALUMINUM ALLOY-8063.
 2. TAPCON, THE INSTALLATION ANCHORS MUST BE OF SUFFICIENT LENGTH TO ANCHOR THE ELEMENT OF 1-1/2" INTO THE SURFACE OF CONCRETE.
 3. THE TAPCON ANCHORS MUST BE INSTALLED AT THE CORNERS AND IN ALL FRAME MEMBERS.
 4. THE TAPCON ANCHORS MUST BE INSTALLED AT THE CORNERS AND IN ALL FRAME MEMBERS.
 5. IF EXISTING CONCRETE IS NOT SUFFICIENTLY THICK TO ANCHOR THE TAPCON ANCHORS, THE TAPCON ANCHORS MUST BE INSTALLED THROUGH THE CONCRETE INTO THE MASONRY OR CONCRETE BELOW.
 6. FOR FINISH, CONCRETE SHALL BE FINISHED WITH A FINISH THAT IS COMPATIBLE WITH THE TAPCON ANCHORS.
 7. ALL FINISHES APPLIED SHALL BE OF SUFFICIENT THICKNESS TO PROTECT THE TAPCON ANCHORS FROM CORROSION.
 8. THE TAPCON ANCHORS SHALL BE INSTALLED AT THE CORNERS AND IN ALL FRAME MEMBERS.
 9. THE TAPCON ANCHORS SHALL BE INSTALLED AT THE CORNERS AND IN ALL FRAME MEMBERS.
 10. THE TAPCON ANCHORS SHALL BE INSTALLED AT THE CORNERS AND IN ALL FRAME MEMBERS.
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 19. THE TAPCON ANCHORS SHALL BE INSTALLED AT THE CORNERS AND IN ALL FRAME MEMBERS.
 20. THE TAPCON ANCHORS SHALL BE INSTALLED AT THE CORNERS AND IN ALL FRAME MEMBERS.

REVISIONS BY: PRODUCT & APPLICATION DEVELOPMENT, INC. 255 REDWOOD DRIVE, WILMINGTON, NC 28403 PHONE 919-399-0365 FAX 919-399-0366

INSTALLATION INSTRUCTIONS FOR NEW CONSTRUCTION VINYL FIN WINDOWS

READ THESE INSTRUCTIONS COMPLETELY BEFORE BEGINNING. Please inspect your MI Windows and Doors, Inc. product thoroughly before beginning installation. Inspect the opening and the product, and do not install if there is any observable damage or other irregularity. The product specification sheet and warranty include important information regarding your product and may include product-specific installation requirements (for example, types of fasteners to be used with impact resistant windows and limitations on the height at which the product may be installed), if you did not obtain copies please contact MI Windows and Doors, Inc. Local building codes may impose additional requirements, and those codes supercede these instructions.

FAILURE TO FOLLOW THESE INSTRUCTIONS, AND BUILDING CODE REQUIREMENTS, MAY AFFECT THE REMEDIES AVAILABLE UNDER YOUR WARRANTY.

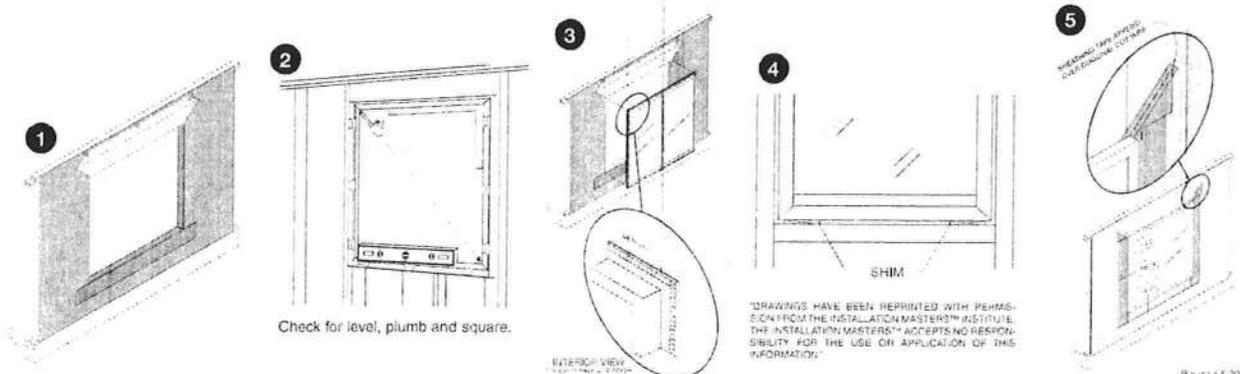
1. IF THE BUILDING HAS A WEATHER RESISTANT BARRIER (WRB) I.E. HOUSE WRAP, PREPARE THE OPENING ACCORDING TO WRB MANUFACTURER'S INSTRUCTIONS. AT EACH TOP CORNER MAKE A 45° CUT IN THE WRB. FOLD UP THE WRB SO THAT THE TOP NAIL FIN OF THE UNIT CAN BE INSTALLED UNDERNEATH IT. (See Figure 1 below) FLASHING OF THE WINDOW OPENING IS RECOMMENDED AND MAY BE REQUIRED BY SOME BUILDING CODES.
2. MAKE SURE THE ROUGH OPENING IS PLUMB, SQUARE AND THE SILL PLATE IS LEVEL. ROUGH OPENINGS SHOULD BE 1/2" LARGER THAN WINDOW FRAME IN WIDTH & HEIGHT. (See Figure 2 below)
3. CLOSE & LOCK THE SASH THROUGHOUT INSTALLATION. KEEP THE SIDE JAMBS PLUMB & SQUARE WITH HEAD AND SILL. BE CAREFUL NOT TO "CROWN UP" OR "BOW DOWN" THE SILL OR HEAD. CONSTANTLY CHECK WIDTH AT THE MEETING RAILS OF SINGLE AND DOUBLE HUNG (CENTER POINT ON CASEMENTS) TO AVOID A "BOWED OUT" INSTALLATION. WHEN USING FLASHING APPLY THE BOTTOM PIECE BEFORE INSTALLING THE WINDOW. (See Figure 1 below) FLASHING MUST BE RATED TO MEET ASTM D-779, 24 HOUR WATER RESISTANCE TEST.
4. APPLY A CONTINUOUS 3/8" BEAD OF PREMIUM GRADE COMPATIBLE EXTERIOR SEALANT TO THE INTERIOR (BACKSIDE) OF THE NAIL FIN NEAR THE OUTSIDE EDGE IN LINE WITH THE PRE-PUNCHED HOLES ON ALL SIDES PRIOR TO SETTING THE WINDOW INTO THE ROUGH OPENING. (See Figure 3 below)
5. PLACE 1/4" FLAT SHIMS ON THE ROUGH OPENING SILL PLATE UNDER THE BOTTOM CORNERS OF THE WINDOW (See Figure 4 below). THESE SHIMS SHOULD BE REMOVED WHEN INSTALLATION IS COMPLETE. DO NOT PLACE SHIMS OR BLOCKS UNDER THE SILL EXCEPT AT THE FRAME CORNERS. SET THE WINDOW ONTO THE SHIMS CENTERING THE WINDOW IN THE OPENING ALLOWING EQUAL SPACE ON EITHER SIDE. FOR WINDOWS WITH INTERMEDIATE JAMBS AND ALL SLIDER WINDOWS, CONTINUOUS SHIM OR HORIZONTAL SHIMS ARE RECOMMENDED UNDER EACH INTERMEDIATE JAMB AND MEETING RAIL TO ENSURE SILL IS LEVEL. THESE SILL SHIMS SHOULD REMAIN AFTER INSTALLATION IS COMPLETE. APPLY ADDITIONAL SHIMS AS NECESSARY TO MAINTAIN A LEVEL SILL THROUGHOUT INSTALLATION.
6. PLACE A TEMPORARY FASTENER IN THE SLOT PROVIDED IN THE NAIL FIN ON EACH TOP CORNER. CHECK LEVEL AND SQUARE OF THE WINDOW BY MEASURING THE DIAGONALS. OPEN BOTTOM SASH, CHECK THE "REVEAL" (SPACE) BETWEEN THE BOTTOM OF THE SASH AND THE WINDOW SILL. CLOSE AND RELOCK THE SASH, ADJUST IF NECESSARY. PLACE ADDITIONAL FASTENERS IN THE BOTTOM CORNERS CHECKING WINDOW AGAIN FOR LEVEL, PLUMB AND SQUARE.
7. SECURE THE WINDOW WITH FASTENERS THAT PENETRATE THE FRAMING BY A MINIMUM OF 1". CARE SHOULD BE TAKEN TO INSTALL FASTENERS STRAIGHT, NOT ANGLED. KEEP THE SASH LOCKED UNTIL ALL SIDES ARE SECURE. PRIOR TO FASTENING THE SILL AND HEAD BE SURE THEY ARE STRAIGHT AND LEVEL. FASTENERS SHOULD BE APPLIED SECURELY INTO EVERY OTHER SLOT ON ALL SIDES. DO NOT DISTORT THE NAIL FIN WITH THE FASTENERS.
8. APPLY SEALANT OVER EXPOSED FASTENER HEADS, ANY UNUSED SLOTS AND THE OUTSIDE EDGE OF THE NAIL FIN WHERE IT COMES IN CONTACT WITH THE WRB/SHEATHING. **OR IF FLASHING (WINDOW TAPE) IS BEING USED** - NOTE: SILL FLASHING SHOULD HAVE BEEN APPLIED PRIOR TO INSTALLING THE WINDOW. APPLY THE SIDE FLASHING ON TOP OF THE NAIL FIN, OVERLAPPING THE SILL FLASHING AND EXTENDING UP PAST THE TOP NAIL FIN APPROXIMATELY 2". THEN APPLY THE TOP FLASHING ALSO OVER THE NAIL FIN, OVERLAPPING THE SIDE PIECES AND EXTENDING PAST THE SIDE FLASHING BY APPROXIMATELY 1". LASTLY FOLD DOWN THE WRB FLAP OVER THE FLASHING, TAPE THE DIAGONAL CUTS ABOVE EACH CORNER. (SEE FIGURE #5 BELOW)
9. PLACE SHIMS AT THE MEETING RAIL/CHECK RAIL ON THE SIDE JAMBS TO PREVENT BOWING. THESE SHIMS SHOULD REMAIN AFTER INSTALLATION. CAUTION SHOULD BE TAKEN AS TO NOT OVER SHIM, CAUSING DEFLECTION OF THE FRAME AND HINDER SASH OPERATION. CHECK THE FRAME WIDTH AT TOP, MIDDLE AND BOTTOM. IF NOT THE SAME, SHIM ACCORDINGLY. UNLOCK AND OPERATE THE SASH(S). VISUALLY INSPECT ALL SIGHT LINES. ADJUST OR SHIM AS REQUIRED TO ASSURE CONSISTENT SASH REVEAL AND EASE OF OPERATION.
10. INSULATE BETWEEN THE WINDOW FRAME & ROUGH OPENING WITH FIBERGLASS INSULATION OR EQUAL. THE SPACE MAY BE EFFECTIVELY FILLED WITH MEASURED USE OF LOW EXPANSION FOAM BUT ONLY AFTER DETERMINING THAT FOAM WILL NOT EXERT PRESSURE AGAINST THE FRAME. WHICH CAN IMPAIR OPERATION. DISTORTION OF THE FRAME WILL AFFECT THE USER'S RIGHTS UNDER THE WARRANTY.
11. ALLOW A 1/4" GAP BETWEEN THE EXTERIOR CLADDING, SIDING, BRICK, STUCCO OR STONE AND THE WINDOW FRAME ON ALL SIDES (EXCEPT VINYL J CHANNEL). THE GAP (EXPANSION JOINT) SHOULD BE FILLED WITH CORRECT SIZE BACKER ROD, THEN SEALED WITH A HIGH GRADE EXTERIOR SEALANT AND WILL NEED TO BE MAINTAINED.

CAUTION:

- USE OF SOLVENTS OR ACIDS WILL DAMAGE COMPONENTS OF THIS PRODUCT AND WILL LIMIT RIGHTS UNDER THE WARRANTY
- VINYL WINDOWS HAVE PRE-PUNCHED SLOTS FOR INSTALLATION - FASTENING IN ANY OTHER PORTION MAY PERMANENTLY DAMAGE UNIT WHICH WILL LIMIT RIGHTS UNDER THE WARRANTY
- IT IS THE SOLE RESPONSIBILITY OF THE OWNER, ARCHITECT, AND/OR BUILDER TO SELECT CORRECT PRODUCTS TO BE IN COMPLIANCE WITH APPLICABLE LAWS, SITE REQUIREMENTS AND BUILDING CODES AND TO ENSURE THAT INSTALLATION IS IN COMPLIANCE WITH APPLICABLE LAWS, SITE REQUIREMENTS AND BUILDING CODES.
- DO NOT STORE IN THE SUN OR LAY FLAT BEFORE OR DURING INSTALLATION.
- ANY PENETRATIONS (e.g. ALARM SENSORS) MADE THROUGH ANY PORTION OF ANY M.I., BETTERBILT OR CAPITOL PRODUCT MAY AFFECT RIGHTS UNDER THE MANUFACTURER'S WARRANTY
- SOME LAWS AND BUILDING CODES REQUIRE SAFETY GLASS. THE ORDERING PARTY IS RESPONSIBLE TO SPECIFY SAFETY GLASS AND ENSURE COMPLIANCE WITH LOCAL LAWS AND BUILDING CODES.

THESE INSTRUCTIONS ARE MINIMUM REQUIREMENTS ONLY. CHECK STATE AND LOCAL CODE RESTRICTIONS FOR ADDITIONAL COMPLIANCE ON INSTALLATION AND/OR FASTENING. IF UNIT HAS EXTERIOR TRIM (BRICK/MOULDING CHANNEL, ETC.) THE UNIT MUST BE SEALED BEHIND THE NAIL FIN. THE TRIM IS PROVIDED FOR AESTHETIC PURPOSES ONLY AND NOT DESIGNED TO BE WATER TIGHT. INSTALLATION INTO MASONRY OR REPLACEMENT OPENINGS MUST BE SEALED TO THE OPENINGS USING AN APPROVED, PROPER METHOD. REFER TO AAMA 2403 AND/OR ASTM 2112 STANDARDS

These installation instructions are provided for information only, no representation and warranty is made that these instructions set forth all of the information necessary for proper installation of the product. Given the variety of field conditions, primary responsibility for product installation rests with the installer. Do not proceed unless you have addressed the factors necessary to achieve weather-tight installation of a properly functioning product. MI Windows and Doors, Inc. assumes no liability for any personal injury or property damage incurred in installation. These instructions, together with the product specifications and warranty set forth the entire liability of MI Windows and Doors, Inc. with regard to the product.





**AAMA/WDMA/CSA 101/I.S.2/A440-05
TEST REPORT**

Rendered to:

MI WINDOWS AND DOORS, INC.

**SERIES/MODEL: 3540/3240 (Fin)
PRODUCT TYPE: PVC Single Hung Window**

Title	Summary of Results
Primary Product Designator	H-R35 1168 x 1524 (46 x 60)
Design Pressure	1689 Pa (35.3 psf)
Negative Design Pressure	2400 Pa (50.16 psf)
Uniform Load Structural Test Pressure	+2536 Pa (53.0 psf) -3600 Pa (75.24 psf)

Test Completion Date: 11/20/06

Reference must be made to Report No. 67853.02-109-47, dated 03/05/07 for complete test specimen description and data.

130 Derry Court
York, PA 17406-8405
phone: 717-764-7700
fax: 717-764-4129
www.archtest.com



AAMA/WDMA/CSA 101/I.S.2/A440-05 TEST REPORT

Rendered to:

MI WINDOWS AND DOORS, INC.
P.O. Box 370
650 West Market Street
Gratz, Pennsylvania 17030-0370

Report No.: 67853.02-109-47
Test Date: 11/20/06
Report Date: 03/05/07
Expiration Date: 11/20/10

Project Summary: Architectural Testing, Inc. (ATI) was contracted by MI Windows and Doors, Inc. to witness testing on a Series/Model 3540/3240 (fin), PVC single hung window at MI Windows and Doors, Inc. test facility in Elizabethville, Pennsylvania. The sample tested successfully met the performance requirements for a H-R35 1168 x 1524 (46 x 60) rating. Test specimen description and results are reported herein. The sample was provided by the client.

Test Specification: The test specimen was evaluated in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-05, *Standard/Specification for Windows, Doors, and Unit Skylights*.

Test Specimen Description:

Series/Model: 3540/3240 (Fin)

Product Type: PVC Single Hung Window

Overall Size: 1168 mm (46") wide by 1524 mm (60") high

Sash Size: 1118 mm (44") wide by 746 mm (29-3/8") high

Overall Area: 0.83 m² (19.16 ft²)

Finish: All vinyl was white.

Frame Construction: The frame was constructed from extruded PVC. The corners were mitered and welded. The fixed meeting rail was secured to each jamb with a plastic clip. The clip was secured to each jamb with three #6 x 5/8" flat head screws and was secured to the fixed meeting rail with three #6 x 1-1/4" flat head screws.

Test Specimen Description: (Continued)

Sash Construction: The sash was constructed from extruded PVC. The corners were mitered and welded.

Weatherstripping:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
0.187" backed by 0.230" polypile with center fin	2 Rows	Sash stiles
0.187" backed by 0.230" polypile with center fin	1 Row	Operable meeting rail
0.187" backed by 0.230" polypile with center fin	1 Row	Sill leg
3/8" diameter single leaf foam-filled vinyl bulb	1 Row	Bottom rail
1/8" diameter foam-filled vinyl bulb	1 Row	Fixed meeting rail

Glazing Details: The window utilized 7/8" thick sealed insulating glass constructed from two sheets of 3/32" clear annealed glass with an aluminum reinforced butyl spacer system. The glass was interior glazed onto sash glazing tape and secured with snap-in PVC glazing beads.

Drainage:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
3/4" by 1/8" weepslot	2	Interior hollow
3/4" by 1/8" weepslot	2	Middle hollow
1/2" by 1/8" weepslot	2	3" from edge of frame draining screen track
1" by 1/8" weepslot	2	Sill face
3/4" by 1/16" weepslot	2	Bottom rail of sash

Test Specimen Description: (Continued)

Hardware:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Metal sweep lock	2	6" from ends of top rail
Constant force balance	2	One in each jamb
Metal pivot bars	2	Ends of bottom rail
Plastic tilt latches	2	Ends of top rail

Reinforcement: All sash members were reinforced with "I" shaped, roll-formed aluminum, (Drawing #GVL-451-020). The fixed meeting rail utilized custom shaped roll-formed aluminum reinforcement, (Drawing #RF-1045-020).

Screen Construction: The screen was constructed from roll-formed aluminum square-cut and keyed with plastic keys. The fiberglass mesh was secured with a flexible vinyl spline.

Installation: The window was installed into a Spruce-Pine-Fir wood buck. The fin was set onto a bead of silicone. The window was secured with #8 x 1-5/8" screws 3" from ends and 12" on center around the perimeter of the frame through the fin into the wood buck.

Test Results: The results are tabulated as follows:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
5.3.4.2	Uniform Load Deflection per ASTM E 330		See Note #1
5.3.4.3	Uniform Load Structural per ASTM E 330		See Note #1

Note #1: The client opted to start at a pressure higher than the minimum required. Those results are listed under "Optional Performance".

Test Results: (Continued)

Optional Performance

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
4.4.2.6	Uniform Load Deflection per ASTM E 330 (Deflections were taken on the meeting rail) (Loads were held for 52 seconds)		
	1689 Pa (35.3 psf) (positive)	10.4 mm (0.41")	See Note #2
	2400 Pa (50.16 psf) (negative)	13.0 mm (0.51")	See Note #2

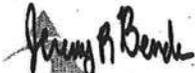
Note #2: The deflections reported are not limited by AAMA/WDMA/CSA 101/I.S.2/A440-05 for this product designation. The deflection data is recorded in this report for special code compliance and information only.

4.4.2.6	Uniform Load Structural per ASTM E 330 (Permanent sets were taken on the meeting rail) (Loads were held for 10 seconds)		
	2536 Pa (53.0 psf) (positive)	1.0 mm (0.04")	4.32 mm (0.17") max.
	3600 Pa (75.24 psf) (negative)	1.3 mm (0.05")	4.32 mm (0.17") max.

Drawing Reference: The test specimen drawings have been reviewed by Architectural Testing, Inc. and are representative of the test specimen reported herein.

Detailed drawings, data sheets, representative samples of test specimens, a copy of this report, or other pertinent project documentation will be retained by Architectural Testing, Inc. for a period of four years from the original test date. At the end of this retention period, such materials shall be discarded without notice and the service life of this report will expire. Results obtained are tested values and were secured by using the designated test methods. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimens tested. This report may not be reproduced, except in full, without the written approval of Architectural Testing, Inc.

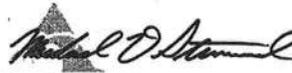
For ARCHITECTURAL TESTING, INC.



Digitally Signed by: Jeremy R. Bender

Jeremy R. Bender
Technician

JRB:clo



Digitally Signed by: Michael D. Stremmel

Michael D. Stremmel, P.E.
Senior Project Engineer

Attachments (pages): This report is complete only when all attachments listed are included.
Appendix-A: Alteration Addendum (1)

Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
0	03/05/07	N/A	Original report issue

Appendix A
Alteration Addendum

Note: No alterations were required.

**ANSI/AAMA/NWDA 101/I.S.2-97
TEST REPORT**

Rendered to:

MI WINDOWS AND DOORS, INC.

SERIES/MODEL: 3540

PRODUCT TYPE: PVC Triple Single Hung

Title	Summary of Results
Rating	H-R30* 108 x 74
Operating Force	17 lbf max.
Air Infiltration	0.11 cfm/ft ²
Water Resistance Test Pressure	4.50 psf
Uniform Load Deflection Test Pressure	±47.2 psf
Uniform Load Structural Test Pressure	+52.5 psf, -70.8 psf
Forced Entry Resistance	Grade 10

Reference should be made to ATI Report No. 50172.01-122-47 for complete test specimen description and data.



ANSI/AAMA/NWWDA 101/I.S.2-97 TEST REPORT

Rendered to:

MI WINDOWS AND DOORS, INC.
P.O. Box 370
Gratz, Pennsylvania 17030-0370

Report No.: 50172.01-122-47
Revision 1: 08/30/04
Test Dates: 06/11/04
Through: 07/07/04
Report Date: 07/27/04
Expiration Date: 07/07/08

Project Summary: Architectural Testing, Inc. (ATI) was contracted by MI Windows and Doors, Inc. to witness testing on a Series/Model 3540, triple single hung window at MI Windows and Doors, Inc. test facility in Elizabethville, Pennsylvania. The sample tested successfully met the performance requirements for a H-R30* 108 x 74 rating. Reference should be made to Report No. 01-45617.02 for Gateway Performance results. Test specimen description and results are reported herein.

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 ANSI/AAMA/NWWDA 101/I.S.2-97, *Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors.*

Test Specimen Description:

Series/Model: 3540

Product Type: PVC Triple Single Hung

Overall Size: 8' 11-5/8" wide by 6' 1-3/4" high

Interior Sash Size (3): 2' 9-3/4" wide by 3' 0-1/8" high

Fixed Daylight Opening Size (3): 2' 7-3/4" wide by 2' 9-3/16" high

Screen Size: 2' 9" wide by 2' 11-1/4" high

Overall Area: 55.1 ft²



ANSI/AAMA/NWWDA 101/I.S.2-97 TEST REPORT

Rendered to:

MI WINDOWS AND DOORS, INC.
P.O. Box 370
Gratz, Pennsylvania 17030-0370

Report No.: 50172.01-122-47
Revision 1: 08/30/04
Test Dates: 06/11/04
Through: 07/07/04
Report Date: 07/27/04
Expiration Date: 07/07/08

Project Summary: Architectural Testing, Inc. (ATI) was contracted by MI Windows and Doors, Inc. to witness testing on a Series/Model 3540, triple single hung window at MI Windows and Doors, Inc. test facility in Elizabethville, Pennsylvania. The sample tested successfully met the performance requirements for a H-R30* 108 x 74 rating. Reference should be made to Report No. 01-45617.02 for Gateway Performance results. Test specimen description and results are reported herein.

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 ANSI/AAMA/NWWDA 101/I.S.2-97, *Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors.*

Test Specimen Description:

Series/Model: 3540

Product Type: PVC Triple Single Hung

Overall Size: 8' 11-5/8" wide by 6' 1-3/4" high

Interior Sash Size (3): 2' 9-3/4" wide by 3' 0-1/8" high

Fixed Daylight Opening Size (3): 2' 7-3/4" wide by 2' 9-3/16" high

Screen Size: 2' 9" wide by 2' 11-1/4" high

Overall Area: 55.1 ft²

Test Specimen Description: (Continued)

Hardware:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Constant force balances	6	One per jamb
Metal cam locks with adjacent keepers	6	Meeting rail, 7" from each end
Plastic tilt latches	6	Each end of the interior meeting rail
Metal pivot pins	6	Each end of the bottom rail

Drainage:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
3/32" by 1/2" weepslot	12	Bottom rail, 2 at each end
1/8" by 1" weepslot	2	Sill, 3" from each end
3/16" by 1/2" weepslot	2	Screen track, 2-1/2" from each end

Reinforcement: The interior meeting rail and bottom rail utilized a roll-formed "I beam" steel reinforcement (Drawing #GVL-451-020). The fixed meeting rail utilized a steel reinforcement (Drawing #RF-104S-020). The intermediate frame rails utilized a steel reinforcement (Drawing #2.75x.125 steel plate).

Installation: The unit was installed into a wood test buck. The nail fin was set against a silicone bedding and fastened to the buck with #6 by 1-5/8" screws, 2" from corners and 8" on center. 3/4" washers were utilized along the entire length of the sill, at midspan of the head and jambs, and at all corners.

Test Results: The results are tabulated as follows:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
2.2.6.1.1	Operating Force	17 lbf	30 lbf max.
2.1.2	Air Infiltration per ASTM E 283 1.57 psf (25 mph)	0.11 cfm/ft ²	0.3 cfm/ft ² max.

Note #1: The tested specimen meets (or exceeds) the performance levels specified in ANSI/AAMA/NWDA 101/I.S.2-97 for air infiltration.

Test Results: (Continued)

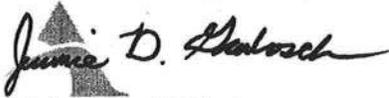
<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
2.1.3	Water Resistance per ASTM E 547 (with and without screen)		See Note #2
<i>Note #2: The client opted to start at a pressure higher than the minimum required. Those results are listed under "Optional Performance".</i>			
2.1.4.1	Uniform Load Deflection per ASTM E 330 (Deflections reported were taken on the mullion) (Loads were held for 52 seconds)		
	35.0 psf (positive)	0.39"	See Note #3
	35.0 psf (negative)	0.54"	See Note #3
<i>Note #3: The Uniform Load Deflection test is not a requirement of ANSI/AAMA/NWDA 101/I.S.2-97 for this product designation. The deflection data is recorded in this report for special code compliance and information only.</i>			
2.1.4.2	Uniform Load Structural per ASTM E 330 (Permanent sets reported were taken on the mullion) (Loads were held for 10 seconds)		
	52.5 psf (positive)	<0.01"	0.27" max.
	52.5 psf (negative)	0.07"	0.27" max.
2.2.6.1.2	Deglazing Test per ASTM E 987 In operating direction - 70 lbs		
	Interior meeting rail	0.13"/26%	0.50"/100%
	Bottom rail	0.11"/22%	0.50"/100%
	In remaining direction - 50 lbs		
	Left stile	0.09"/18%	0.50"/100%
	Right stile	0.10"/20%	0.50"/100%
2.1.7	Welded Corner Test	Meets as stated	Meets as stated

Test Results: (Continued)

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
2.1.8	Forced Entry Resistance per ASTM F 588		
	Type: A	Grade: 10	
	Lock Manipulation Test	No entry	No entry
	Test A1	No entry	No entry
	Test A2	No entry	No entry
	Test A3	No entry	No entry
	Test A4	No entry	No entry
	Test A5	No entry	No entry
	Test A7	No entry	No entry
	Lock Manipulation Test	No entry	No entry
<u>Optional Performance</u>			
4.3	Water Resistance per ASTM E 547 (with and without screen) 4.50 psf	No leakage	No leakage
4.4.1	Uniform Load Deflection per ASTM E 330 (Deflections reported were taken on the mullion) (Loads were held for 52 seconds) 47.2 psf (positive) 47.2 psf (negative)	0.73" 0.92"	See Note #3 See Note #3
4.4.2	Uniform Load Structural per ASTM E 330 (Permanent sets reported were taken on the mullion) (Loads were held for 10 seconds) 52.5 psf (positive) 70.8 psf (negative)	<0.01" 0.21"	0.27" max. 0.27" 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 from the original test date. 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. This report may not be reproduced, except in full, without the approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC:



Digitally Signed by: Jeramie D. Grabosch

Jeramie D. Grabosch
Technician

JDG:vlm



Digitally Signed by: Steven M. Urich

Steven M. Urich, P.E.
Senior Project Engineer



**ANSI/AAMA/NWWDA 101/I.S.2-97
TEST REPORT**

Rendered to:

MI WINDOWS AND DOORS, INC

SERIES/MODEL: 420/430/440

PRODUCT TYPE: Aluminum Sliding Glass Door

Summary of Results			
Title	Test Specimen #1	Test Specimen #2	Test Specimen #3
Rating	SGD-R25 182 x 96	SGD-R35 182 x 80	SGD-R40 144 x 96
Operating Force	17 lbf max.	17 lbf max.	N/A
Air Infiltration	0.23 cfm/ft ²	0.27 cfm/ft ²	N/A
Water Resistance Test Pressure	3.75/6.0/9.0 psf	6.0 psf	N/A
Uniform Load Deflection Test Pressure	±35.0 psf	±35.0 psf	+40.0 psf/-40.1 psf
Uniform Load Structural Test Pressure	±37.5 psf	±52.5 psf	+60.0 psf/-60.2 psf
Forced Entry Resistance	Grade 10	Grade 10	N/A

Reference should be made to ATI Report No. 52112.01-122-47 for complete test specimen description and data.

130 Derry Court
York, PA 17402-9405
phone: 717-764-7700
fax: 717-764-4129
www.archtest.com



ANSI/AAMA/NWWDA 101/I.S.2-97 TEST REPORT

Rendered to:

MI WINDOWS AND DOORS, INC
P.O. Box 370
Gratz, Pennsylvania 17030-0370

Report No.: 52112.01-122-47
Revision 2: 09/14/05
Test Dates: 06/30/04
Through: 08/12/04
Report Date: 08/30/04
Expiration Date: 07/02/08

Project Summary: Architectural Testing, Inc. (ATI) was contracted by MI Windows and Doors, Inc. to witness testing on three Series/Model 420/430/440, aluminum sliding glass doors at MI Windows and Doors, Inc. test facility in Elizabethville, Pennsylvania. The samples tested successfully met the performance requirements for the following ratings: Test Specimen #1: SGD-R25 182 x 96; Test Specimen #2: SGD-R35 182 x 80; Test Specimen #3: SGD-R40 144 x 96. Test specimen description and results are reported herein.

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

Test Specimen Description:

Series/Model: 420/430/440

Product Type: Aluminum Sliding Glass Door

Test Specimen #1: SGD-R25 182 x 96 (XXO)

Overall Size: 15' 1-3/4" wide by 8' 0" high

Active Door Panel Size (2): 5' 0-1/2" wide by 7' 11" high

Fixed Door Panel Size: 5' 1" wide by 7' 11" high

Screen Size: 5' 0-3/8" wide by 7' 11" high

Overall Area: 121.2 ft²

Reinforcement: The active and fixed interlocking stile utilized a steel U-shaped reinforcement (Drawing #9917525). The fixed intermediate jamb utilized a steel reinforcement (Drawing #9917520).

Test Specimen Description: (Continued)

Test Specimen #2: SGD-R35 182 x 80 (OXX)

Overall Size: 15' 1-3/4" wide by 6' 8" high

Active Door Panel Size (2): 5' 0-1/2" wide by 6' 7" high

Fixed Door Panel Size: 4' 8-7/8" wide by 6' 2-5/8" high

Screen Size: 5' 0-3/8" wide by 6' 7" high

Overall Area: 101 ft²

Reinforcement: No reinforcement was utilized.

Test Specimen #3: SGD-R40 144 x 96 (OXO)

Overall Size: 12' 0" wide by 8' 0" high

Active Door Panel Size: 3' 8-1/4" wide by 7' 10-1/2" high

Fixed Door Panel Size (2): 3' 8-3/4" wide by 7' 6-1/2" high

Screen Size: 3' 11-1/2" wide by 7' 11-3/8" high

Overall Area: 96 ft²

Reinforcement: The active and fixed interlocking stile utilized a steel U-shaped reinforcement (Drawing #9917525). The fixed intermediate jamb utilized a steel reinforcement (Drawing #9917520). The interlock utilized an aluminum reinforcement (Drawing #SECT4237).

The following descriptions apply to all specimens.

Finish: All aluminum was painted.

Glazing Details: All glazing consisted of a single sheet of 3/16" thick clear tempered glass that was channel glazed with a wrap around rubber gasket.

Test Specimen Description: (Continued)

Weatherstripping:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
0.187" backed by 0.270" high polypile with center fin	2 Rows	Stiles
1/2" wide by 1" long polypile dust plug	2 Pieces	Corner of head, jamb, and top and bottom of panel retainer
0.187" backed by 0.250" high polypile with center fin	2 Rows	Top rail
0.187" backed by 0.350" high polypile with center fin	2 Rows	Bottom rail
0.187" backed by 0.230" high polypile with center fin	1 Row	Panel interlock, screen stiles

Frame Construction: The frame was constructed of extruded aluminum. Corners were coped, butted, sealed, and fastened with two #8 x 5/8" screws. An aluminum panel adaptor was added to the screen adaptor and secured with #6 x 3/8" pan head screws located 3-1/2" from the ends and 14" on center through the screen adaptor into the panel adaptor. The jambs utilized a panel jamb retainer on the fixed panels secured to the jambs with two #6 x 1/2" screws through the retainer into the jambs. The panels were placed in the retainer and secured to the frame with two #8 x 1/2" screws located through the retainers into the panels. Three panel jamb retainers were utilized to secure the fixed panels, located at panel top and bottom and one midspan. The fixed panels also utilized an aluminum sill retainer clip located at the sill. The sill utilized an optional aluminum sill extender.

Door Panel Construction: The door panels were constructed of extruded aluminum members. Corners were coped, butted, and fastened with one 1/4" x 3/4" screw at the bottom and two #8 x 3/4" screws at the top.

Screen Construction: The screen was constructed of extruded aluminum members. Corners were coped, butted, and fastened with one 1/4" x 3/4" screw and one #8 x 1" screw at the bottom and one #8 x 1" screw at the top.

Test Specimen Description: (Continued)

Hardware:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Locking handle	1	44" from active panel bottom
Roller assembly	2	3" from bottom rail ends
Screen locking handle	1	46" from screen bottom rail
Screen rollers	2	Corners of bottom rail

Drainage:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Sloped sill	1	Sill
1/2" long drain off notches	6	Ends of vertical sill legs

Installation: The units were installed into a #2 Spruce-Pine-Fir wood test buck. The units were fastened to the test buck with two rows of #8 x 1-1/4" screws, 8" from each end and 23" on center. The exterior perimeter was sealed with silicone.

Test Results:

The results are tabulated as follows:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
<u>Test Specimen #1:</u> SGD-R25 182 x 96 (XXO)			
2.2.1.6.1	Operating Force	17 lbf	20 lbf max.
	Breakaway force	24 lbf	30 lbf max.
2.1.2	Air Infiltration per ASTM E 283 1.57 psf (25 mph)	0.23 cfm/ft ²	0.3 cfm/ft ² max.
<i>Note #1: The tested specimen meets (or exceeds) the performance levels specified in ANSI/AAMA/NWWDA 101/I.S.2-97 for air infiltration.</i>			
2.1.3	Water Resistance per ASTM E 547 (with and without screen) 2.86 psf	No leakage	No leakage
2.1.4.1	Uniform Load Deflection per ASTM E 330 (Deflections reported were taken on the meeting rail) (Loads were held for 52 seconds) 15.0 psf (positive) 15.0 psf (negative)	0.56" 0.57"	See Note #2 See Note #2
<i>Note #2: The Uniform Load Deflection test is not a requirement of ANSI/AAMA/NWWDA 101/I.S.2-97 for this product designation. The deflection data is recorded in this report for special code compliance and information only.</i>			
2.1.4.2	Uniform Load Structural per ASTM E 330 (Permanent sets reported were taken on the meeting stile) (Loads were held for 10 seconds) 22.5 psf (positive) 22.5 psf (negative)	0.02" 0.03"	0.30" max. 0.30" max.
2.2.1.6.2	Deglazing Test per ASTM E 987 In operating direction - 70 lbs		
	Locking stile	0.12"/24%	0.50"/100%
	Interlock stile	0.12"/24%	0.50"/100%

Test Results: (Continued)

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
<u>Test Specimen #1:</u> SGD-R25 182 x 96 (XXO) (Continued)			
2.2.1.6.2	Deglazing Test per ASTM E 987 In remaining direction - 50 lbs		
	Top rail	0.06"/12%	0.50"/100%
	Bottom rail	0.06"/12%	0.50"/100%
2.1.8	Forced Entry Resistance per ASTM F 842		
	Type: A	Grade: 10	
	Lock Manipulation Test	No entry	No entry
	Test A1 through A6	No entry	No entry
	Lock Manipulation Test	No entry	No entry
<u>Optional Performance</u>			
4.3	Water Resistance per ASTM E 547 (with and without screen) 3.75 psf	No leakage	No leakage
4.3	Water Resistance per ASTM E 547 (with and without screen) (with sill riser) 6.0 psf	No leakage	No leakage
4.3	Water Resistance per ASTM E 547 (with and without screen) (with 2-5/8" Dade County sill extension) 9.0 psf	No leakage	No leakage
4.4.1	Uniform Load Deflection per ASTM E 330 (Deflections reported were taken on the meeting stile) (Loads were held for 10 seconds)		
	35.0 psf (positive)	2.98"	See Note #2
	35.0 psf (negative)	2.52"	See Note #2

Test Results: (Continued)

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
<u>Test Specimen #1:</u> SGD-R25 182 x 96 (XXO) (Continued)			
4.4.2	Uniform Load Structural per ASTM E 330 (Permanent sets reported were taken on the meeting stile) (Loads were held for 10 seconds)		
	37.5 psf (positive)	0.20"	0.36" max.
	37.5 psf (negative)	0.19"	0.36" max.
<u>Test Specimen #2:</u> SGD-R35 182 x 80 (OXX)			
2.2.1.6.1	Operating Force	17 lbf	20 lbf max.
	Breakaway force	21 lbf	30 lbf max.
2.1.2	Air Infiltration per ASTM E 283		
	1.57 psf (25 mph)	0.27 cfm/ft ²	0.3 cfm/ft ² max.
<i>Note #1: The tested specimen meets (or exceed) the performance levels specified in ANSI/AAMA/NWDA 101/I.S.2-97 for air infiltration.</i>			
2.1.3	Water Resistance per ASTM E 547 (with and without screen)		
	2.86 psf	No leakage	No leakage
2.2.1.6.2	Deglazing Test per ASTM E 987		
	In operating direction - 70 lbs		
	Locking stile	0.12"/24%	0.50"/100%
	Interlock stile	0.12"/24%	0.50"/100%
	In remaining direction - 50 lbs		
	Top rail	0.06"/12%	0.50"/100%
	Bottom rail	0.06"/12%	0.50"/100%
2.1.8	Forced Entry Resistance per ASTM F 842		
	Type: A	Grade: 10	
	Lock Manipulation Test	No entry	No entry
	Test A1 through A6	No entry	No entry
	Lock Manipulation Test	No entry	No entry

Test Results: (Continued)

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
<u>Test Specimen #2: SGD-R35 182 x 80 (OXX) (Continued)</u>			
<u>Optional Performance</u>			
4.3	Water Resistance per ASTM E 547 (with and without screen) (with sill riser) 6.0 psf	No leakage	No leakage
4.4.1	Uniform Load Deflection per ASTM E 330 (Deflections reported were taken on the meeting stile) (Loads were held for 52 seconds) 35.0 psf (positive) 35.0 psf (negative)	1.28" 1.33"	See Note #2 See Note #2
4.4.2	Uniform Load Structural per ASTM E 330 (Permanent sets reported were taken on the meeting stile) (Loads were held for 10 seconds) 52.5 psf (positive) 52.5 psf (negative)	0.13" 0.15"	0.30" max. 0.30" max.
<u>Test Specimen #3: SGD-R40 144 x 96 (OXO)</u>			
<u>Optional Performance</u>			
4.4.1	Uniform Load Deflection per ASTM E 330 (Deflections reported were taken on the meeting stile) (Loads were held for 52 seconds) 40.0 psf (positive) 40.1 psf (negative)	1.42" 1.28"	See Note #2 See Note #2
4.4.2	Uniform Load Structural per ASTM E 330 (Permanent sets reported were taken on the meeting stile) (Loads were held for 10 seconds) 60.0 psf (positive) 60.2 psf (negative)	0.27" 0.30"	0.37" max. 0.37" 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 from the original test date. 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. This report may not be reproduced, except in full, without approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC:



Digitally Signed by: Mark A. Hess

Mark A. Hess
Technician

MH:vlm

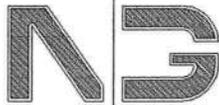


Digitally Signed by: Steven M. Urich

Steven M. Urich, P.E.
Senior Project Engineer

Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
0	08/30/04	N/A	Original report issue
1	09/13/04	Cover page	Switch Specimens 1 and 2 / Added 430/440 to Series/Model
1	09/13/04	Page 1 and 2	Switch Specimen 1 and 2 sizes Added 430/440 to Series/Model on Page 1
1	09/13/04	Pages 4 through 7	Switch Specimen 1 and 2 test results / Specimen 2 optional performance water resistance from 3.75 psf to 6.00 psf with sill riser.
2	09/14/05	Page 2	Corrected configuration of Test Specimen #3
2	09/14/05	Page 3	Added additional Weatherstripping



**NICHOLAS
PAUL
GEISLER**
ARCHITECT
N.C.A.R.B. Certified

1758 NW Brown Road
Lake City, FL 32055
386/755-9021

FLORIDA BUILDING CODE SECTION 1609

COMPLIANCE SUMMARY

PROJECT: BOLKOWSKI RESIDENCE, COLUMBIA COUNTY, FL (110 WIND ZONE)

TYPE OF CONSTRUCTION

ROOF: Gable Construction, Wood Trusses @ 24" O.C., SYP
WALLS: 2x4 Wood Studs @ 16" O.C.
FLOOR: 4" Thk. Conc. Slab, w/ Fibermesh concrete additive
FOUNDATION: Continuous Footer/Stemwall
EDGE STRIP: 3.0 ft. END ZONE: 6.0 ft.

ROOF DECKING

MATERIAL: 7/16" O.S.B.
SHEET SIZE: 48"x96" Sheets Placed Perpendicular to Roof Framing
FASTENERS: 8d Common Nails @ 4" O.C. Ends, 8" O.C. Interior

SHEAR WALLS

MATERIAL: 7/16" O.S.B. "WindStorm Sheathing"
SHEET SIZE: 48"x97" Sheets Placed Vertical
FASTENERS: 8d Common Nails @ 4" O.C. Edges, 10" O.C. Interior
DRAGSTRUT: Dbl. Top Plate Nailed w/ 16d Nails @ 16" O.C.
WALL STUDS: S-P-F Nr. 2 and better, 2x4 Studs @ 16" O.C.

HURRICANE UPLIFT CONNECTORS

TRUSS CLIPS: "Semco" H16S
WALL TENSION: 1/2" CDX plywd. w/ 8d Common Nails @ 4" O.C. Edges,
8" O.C. Interior for all exterior non-shear walls
HOLD-DOWN CONNECTORS: A307 Bolts, within 6" of corners
WALL SILL: 1/2" x 10" A.B., w/ 2" washers @ 48" o.c., 7" embedment
CORNER HOLD-DOWN DEVICE: One Typical Anchor Bolt w/ Washer

FOOTINGS AND FOUNDATIONS

HOUSE FOOTINGS: 20"x10" Continuous w/ 2 - #5 Rebars
HOUSE STEMWALL: 8" CMU w/ #5 Rebar Dowels Gd. 40, @ 72" O.C.
CONCRETE: F_b = 2500 p.s.i. or greater

PREPARER'S CERTIFICATION

I hereby certify that the attached Wind Load Design and Analysis calculations are in compliance with the Florida Building Code, Section 1606, to the best of my knowledge and belief.


Nicholas Paul Geisler, Architect AR0007005

Date: 18 Dec 2007

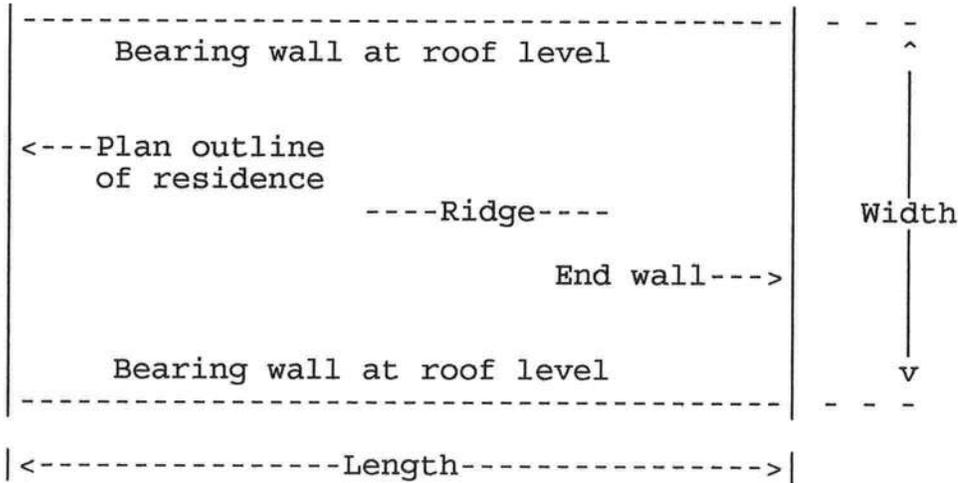
Data entry by: M.T. Date: 12 03 07

Project name: BOLKOWSKI
Location : COLUMBIA COUNTY

R E S I D E N T I A L W I N D D E S I G N A N D A N A L Y S I S
A product of EDA Software, Inc.
Based on the Standard Building Code, 1994 edition

**** GENERAL INPUT DATA ****

Permanent construction
Simple rectangular building



Length along bearing walls out to out of studs = 30 feet
Width along end walls out to out of studs = 42 feet
Roof overhang in long direction from outer face of stud = 2 feet generally
Roof overhang at short end wall from outer face of stud = 2 feet generally
Height of exterior wall to top of plate on long side = 8 feet constant
Roof cross slope = 6 /12

Wind velocity = 110 mph

**** DEGREE OF ENCLOSURE ****

Assume that this building is an 'Enclosed building' per Code 1606.2.3.

[Handwritten signature]
12/03/07 18 Dec 2007

**** STRUCTURAL FRAMING INPUT DATA ****

*** Roof Structural Data ***

Member number 1
 Normal gable type house truss--supported by exterior walls only
 Span length out to out of supports = 30 feet
 Roof cross slope = 6 /12
 Truss spacing = 24 inches
 Overhang = 2 feet

*** Wall Structural Data ***

Spacing of wall studs = 16 inches
 Total number of plates = 3
 Wall stud number 1 is 8 feet high out to out of plates

COEFFICIENTS AND PRESSURES
 Main Wind Force Resisting Systems

Actual pressure = Velocity pressure x Use factor x Coefficient
 Wind velocity is 110 mph
 Mean roof height is 13.62268 feet
 Velocity pressure is 24.7 psf
 Use factor is 1.0
 Roof cross slope is 6 on 12, which equals 26.56505 degrees to horizontal
 End zone width is 8.4 feet

	Coefficient	Design Pressure (psf)

End zone		
Windward wall (1E)	.7	17.29
Windward roof (2E)	-1	-24.7
Leeward roof (3E)	-1	-24.7
Leeward wall (4E)	-.95	-23.47
Overhang	-1.5	-37.06
Interior zone		
Windward wall (1)	.4	9.88
Windward roof (2)	-.75	-18.53
Leeward roof (3)	-.75	-18.53
Leeward wall (4)	-.7	-17.3
Overhang	-1.5	-37.06
=====		

ROOF LOADING--Roof Number 1 (pounds per square foot)

Roof cross slope = 6 inches per foot

Fiberglass shingles 240 # per square and 1 layer of 15 # felt	= 2.55
Rigid isocyanurate insulation 5.5 in. average depth	= .935
7/16 in. roof sheathing	= 1.31

Total roof unit weight on slope	= 4.795
Cosine of roof cross slope	= .8944272

Roof unit weight on horizontal	= 5.360973
2 in. x 4 in. wood trusses at 24 in. spacing	= 2.215147
1 layer of 1/2 in. gypsum board ceiling--plain	= 2
Air-conditioning ductwork	= 1
Full lighting	= .3
Miscellaneous	= 0
=====	
Total	= 10.87612

Roof Unit Dead Load = 11 psf

Roof dead load supported generally by wall = 239.8985 plf

ROOF LOADING--Roof Number 2 (pounds per square foot)

Roof cross slope = 6 inches per foot

Fiberglass shingles 240 # per square and 1 layer of 15 # felt	= 2.55
Rigid isocyanurate insulation 5.5 in. average depth	= .935
7/16 in. roof sheathing	= 1.31

Total roof unit weight on slope	= 4.795
Cosine of roof cross slope	= .8944272

Roof unit weight on horizontal	= 5.360973
2 in. x 4 in. wood trusses at 24 in. spacing	= 2.215147
1 layer of 1/2 in. gypsum board ceiling--plain	= 2
Air-conditioning ductwork	= 1
Full lighting	= .3
Miscellaneous	= 0
=====	
Total	= 10.87612

Roof Unit Dead Load = 11 psf

Roof dead load supported generally by wall = 239.8985 plf

ROOF MEMBER DEAD LOAD REACTIONS AT BEARINGS

All values are in pounds

Roof member number 1 --Span 30 feet, Slope 6 /12, interior zone---- 349
 Roof member number 2 --Span 30 feet, Slope 6 /12, end zone----- 349

EXTERIOR WALL LOADING (pounds per linear foot)

Wood frame wall-- 8 ft. out to out plates

3--2 in. x 4 in. plates	= 2.865625
2 in. x 4 in. studs at 16 in. spacing	= 5.462598
R-13 Insulation	= 1.90625
Brick veneer siding	= 400
1/2 in. Gypsum board--Total 1 layer---	= 16
=====	=====
Total	= 426.2345

Exterior Wall Unit Dead Load = 427 plf

S U M M A R Y O F H U R R I C A N E A N C H O R A N A L Y S I S

All values of forces are in pounds. Resistances have been increased for wind.

End zone width = 8.4 feet

Code: C = Compliance

N = Non-compliance

Southeastern Metal hurricane anchors

Member 1 --Gable roof--Span 30 feet, at 24 inches oc--in interior zone:

Uplift = 1014 Dead = 349 Net = 665 Model Special, Resistance = 1037 C

Model H16S--all nails per mfr.--data supplied by operator, not EDA

Member 2 --Gable roof--Span 30 feet, at 24 inches oc--in end zone:

Uplift = 1497 Dead = 349 Net = 1148 Model Special, Resistance = 1476 C

Model H16S an H2.5A--all nails per mfr.--data supplied by operator, not EDA

**** ANALYSIS OF ROOF SHEATHING AS SHEAR DIAPHRAGM TRANSVERSE ****
Shear analysis applies along supporting shearwalls.

Roof trusses are Southern Pine lumber, spaced at 24 inches
Sheathing is Oriented Strand Board, 7/16 inch thick
Sheathing has no intermediate blocking
Fasteners on panel ends are 8d nails spaced at 4 inches
Fasteners in panel interior are 8d nails spaced at 8 inches

Total lateral wind force on building = 7693 pounds
Total force transferred through diaphragm to shearwalls = 3846 pounds
Total length of shearwalls = 84 feet
MINIMUM REQUIRED TOTAL SHEARWALL LENGTH = 12.1 FT.--LOCATE EVENLY THROUGHOUT

Actual diaphragm force per unit length of shearwall = 45 plf
Allowable diaphragm force per unit length of shearwall = 314 plf

*** Summary of Analysis ***

Roof sheathing diaphragm satisfies Code requirements.

**** ANALYSIS OF ROOF SHEATHING AS SHEAR DIAPHRAGM LONGITUDINAL ****
Shear analysis applies along supporting shearwalls.

Roof trusses are Southern Pine lumber, spaced at 24 inches
Sheathing is Oriented Strand Board, 7/16 inch thick
Sheathing has no intermediate blocking
Fasteners on panel ends are 8d nails spaced at 4 inches
Fasteners in panel interior are 8d nails spaced at 8 inches

Total lateral wind force on building = 13043 pounds
Total force transferred through diaphragm to shearwalls = 6521.5 pounds
Total length of shearwalls = 60 feet
MINIMUM REQUIRED TOTAL SHEARWALL LENGTH = 20.7 FT.--LOCATE EVENLY THROUGHOUT

Actual diaphragm force per unit length of shearwall = 108 plf
Allowable diaphragm force per unit length of shearwall = 314 plf

*** Summary of Analysis ***

Roof sheathing diaphragm satisfies Code requirements.

**** ANALYSIS OF ROOF SHEATHING FOR FASTENER WITHDRAWAL ****

Interior zone (area Ri)

Roof trusses are Southern Pine lumber, spaced at 24 inches
Sheathing is 7/16 inch with no intermediate blocking
Size of sheathing is 48 inches by 96 inches
Fasteners along end trusses are 8d nails spaced at 4 inches
Fasteners along int. trusses are 8d nails spaced at 8 inches
Total outward wind force on sheathing = 818 pounds
Total withdrawal resistance of 47 nails = 3569 pounds (increased for wind)
Fastening of roof sheathing satisfies Code requirements.

Edge strip (area Si) width = 4.2 feet

Roof trusses are Southern Pine lumber, spaced at 24 inches
Sheathing is 7/16 inch with no intermediate blocking
Size of sheathing is 48 inches by 96 inches
Fasteners along end trusses are 8d nails spaced at 4 inches
Fasteners along int. trusses are 8d nails spaced at 8 inches
Total outward wind force on sheathing = 1263 pounds
Total withdrawal resistance of 47 nails = 3569 pounds (increased for wind)
Fastening of roof sheathing satisfies Code requirements.

End zone (areas Se and C) width = 8.4 feet

Roof trusses are Southern Pine lumber, spaced at 24 inches
Sheathing is 7/16 inch with no intermediate blocking
Size of sheathing is 48 inches by 96 inches
Fasteners along end truss are 8d nails spaced at 4 inches
Fasteners along end wall are 8d nails spaced at 4 inches
Fasteners along int. trusses are 8d nails spaced at 8 inches
Total outward wind force on sheathing = 1738 pounds
Total withdrawal resistance of 47 nails = 3569 pounds (increased for wind)
Fastening of roof sheathing satisfies Code requirements.

**** ANALYSIS OF WALL STUDS ****

*** Analysis of Wall Stud Number 1 ***

2 in. x 4 in. single studs at 16 in. spacing
Stud height is 7.625 feet--located in interior zone
Top of studs is laterally supported by ceiling diaphragm or other method
Spruce--Pine--Fir (south) lumber----Number 2 grade
Sheathing is inch rated OSB, span rating 24/16

Cross-sectional area = 5.25 sq.in.
Moment of inertia = 5.359375 in.^4
Section Modulus = 3.0625 in.^3
Elastic modulus of wood stud = 1100000 in.^2

Total outward force on stud = 325 pounds
Stud moment = 309 ft-lb.

Stresses:

Stud bending vert : Actual = 1213 psi Allowable = 2070 psi (adjusted)
Stud shear : Actual = 42 psi Allowable = 112 psi (adjusted)
Stud tensile : Actual = 75 psi Allowable = 780 psi (adjusted)
Interaction bending and tension actual/allowable stress ratio total = .6821442
Sheathing bending hor: Actual = 178 psi Allowable = 222 psi(adjusted)

Deflections:

Stud : Actual = .3436 in. Allowable = .5083 in.

*** Summary of Analysis ***

Wall structure satisfies all Code requirements.

**** ANALYSIS OF WALL STUDS ****

*** Analysis of Wall Stud Number 2 ***

2 in. x 4 in. single studs at 16 in. spacing
Stud height is 7.625 feet--located in end zone
Top of studs is laterally supported by ceiling diaphragm or other method
Spruce--Pine--Fir (south) lumber----Number 2 grade
Sheathing is inch rated OSB, span rating 24/16

Cross-sectional area = 5.25 sq.in.
Moment of inertia = 5.359375 in.^4
Section Modulus = 3.0625 in.^3
Elastic modulus of wood stud = 1100000 in.^2

Total outward force on stud = 374 pounds
Stud moment = 356 ft-lb.

Stresses:

Stud bending vert : Actual = 1396 psi Allowable = 2070 psi (adjusted)
Stud shear : Actual = 49 psi Allowable = 112 psi (adjusted)
Stud tensile : Actual = 75 psi Allowable = 780 psi (adjusted)
Interaction bending and tension actual/allowable stress ratio total = .77055
Sheathing bending hor: Actual = 205 psi Allowable = 222 psi (adjusted)

Deflections:

Stud : Actual = .3955 in. Allowable = .5083 in.

*** Summary of Analysis ***

Wall structure satisfies all Code requirements.

**** ALLOWABLE STRESS PROPERTIES ****

Base stresses (psi):

Wood:

Bending = 750
Tension = 325
Shear = 70
Elastic modulus = 1100000

Adjustment factors for wood:

Duration (Du) = 1.6
Wet service (Wt) = 1
Temperature (Tm) = 1
Stability (St) = 1
Size (Sz) = 1.5
Volume (Vm) = 1
Flat use (Fu) = 1
Repetitive (Rp) = 1.15
Curvature (Cu) = 1
Form (Fm) = 1
Shear stress (Sh) = 1

Allowable stresses (psi):

Wood:

Bending = 2070 (Base x Du x Wt x Tm x St x Sz x Vm x Fu x Rp x Cu x Fm)
Tension = 780 (Base x Du x Wt x Tm x Sz)
Shear = 112 (Base x Du x Wt x Tm x Sh)
Elastic modulus = 1760000 (Base x Wt x Tm)

Sheathing:

Bending = 222 (Base x 1.33)
Elastic modulus = 61904.76 (Base)

T R A N S V E R S E D R A G S T R U T N A I L A N A L Y S I S

Wall framing is 2 in. x 4 in. studs
Wall stud framing lumber is Spruce--Pine--Fir (south)
Fasteners are 16d common nails
Approximate nail spacing = 16 inches

Total lateral force on building = 7693 pounds
Force applied at top of walls = 3846 pounds
Total dragstrut length = 84 feet
Shear per unit dragstrut length = 45 pounds per linear foot

Actual shear on each nail = 60 pounds
Allowable shear on each nail = 166 pounds

Dragstrut nailing satisfies Code requirements.

L O N G I T U D I N A L D R A G S T R U T N A I L A N A L Y S I S

Wall framing is 2 in. x 4 in. studs
Wall stud framing lumber is Spruce--Pine--Fir (south)
Fasteners are 16d common nails
Approximate nail spacing = 16 inches

Total lateral force on building = 13043 pounds
Force applied at top of walls = 6521 pounds
Total dragstrut length = 60 feet
Shear per unit dragstrut length = 108 pounds per linear foot

Actual shear on each nail = 144 pounds
Allowable shear on each nail = 166 pounds

Dragstrut nailing satisfies Code requirements.

**** TRANSVERSE SHEARWALL ANALYSIS ****

Wall framing is 2 in. x 4 in. studs at 16 inch spacing
Wall stud framing lumber is Spruce--Pine--Fir (south)
Wall shear siding is Oriented Strand Board -- 7/16 inch thick
Wall sheathing has all edges nailed
Fasteners: 8d common nails spaced along edges at 6 inch centers
Fasteners: 8d common nails spaced in interior at 10 inch centers

Total lateral force on building = 7693 pounds
Force applied at top of walls = 3846 pounds
Accumulated total shearwall length = 84 feet

Actual unit shear on shearwalls = 45 pounds per linear foot
Allowable unit shear on shearwalls = 183 pounds per linear foot

Shearwall satisfies Code requirements.

**** LONGITUDINAL SHEARWALL ANALYSIS ****

Wall framing is 2 in. x 4 in. studs at 16 inch spacing
Wall stud framing lumber is Spruce--Pine--Fir (south)
Wall shear siding is Oriented Strand Board -- 7/16 inch thick
Wall sheathing has all edges nailed
Fasteners: 8d common nails spaced along edges at 6 inch centers
Fasteners: 8d common nails spaced in interior at 10 inch centers

Total lateral force on building = 13043 pounds
Force applied at top of walls = 6521 pounds
Accumulated total shearwall length = 60 feet

Actual unit shear on shearwalls = 108 pounds per linear foot
Allowable unit shear on shearwalls = 183 pounds per linear foot

Shearwall satisfies Code requirements.

*** ANALYSIS OF OUTWARD FORCES ON WALL SHEATHING ***

Wall number 1 : Total outward wind force on sheathing = 975 pounds
: Total withdrawal resistance of 66 nails = 2455 pounds

Wall number 2 : Total outward wind force on sheathing = 1122 pounds
: Total withdrawal resistance of 66 nails = 2455 pounds

**** ANALYSIS OF SHEATHING FASTENERS ****

Wall framing is Spruce--Pine--Fir (south) lumber
Sheathing is 7/16 inch Oriented Strand Board
Sheathing extends from bottom of bottom plate to top of top plate
Fasteners are 8d common nails at 3 inch spacing

Total uniform wind uplift in first story at top of wall level = 537 plf
Uniform dead loads per linear foot:
Roof = 239.8985 plf

Total = 239.8985 plf

Total uniform dead load in first story at top of wall level = 239 plf
Net wind uplift in first story at top of wall level = 298 plf

Total uplift force on each nail = 74 pounds
Allowable shear on each nail = 83 pounds (increased for wind)
Sheathing to plate fastening satisfies all Code requirements.

**** ANALYSIS OF SHEATHING FASTENERS ****

Wall framing is Spruce--Pine--Fir (south) lumber
Sheathing is 7/16 inch Oriented Strand Board
Sheathing extends from bottom of bottom plate to top of top plate
Fasteners are 8d common nails at 4 inch spacing

Total uniform wind uplift in first story at floor level = 537 plf
Uniform dead loads per linear foot:
Roof = 239.8985 plf
Wall = 426.2345 plf

Total = 666.133 plf

Total uniform dead load in first story at floor level = 666 plf
Net wind uplift in first story at floor level = -129 plf

Total uplift force on each nail = -43 pounds
Allowable shear on each nail = 83 pounds (increased for wind)
Sheathing to plate fastening satisfies all Code requirements.

**** ANALYSIS OF FOUNDATION ANCHORAGE ****

Anchor bolts are 1/2 inch A307, with 2 inch round washer at 48 inch centers.

Total uniform wind uplift on foundation = 537 pounds per linear foot

Uniform dead loads in pounds per linear foot:

Roof = 239.8985 plf

Wall = 426.2345 plf

Total = 666.133 plf

Total uniform dead load times 2/3 = 444 pounds per linear foot

Net uplift force on foundation = 93 pounds per linear foot

Total uplift force on each anchor bolt = 372 pounds

Safe tension value of each anchor bolt = 1634 pounds (increased by 1/3)

Bolt safe tension value is governed by washer failure

*** Summary of Analysis ***

Foundation anchorage satisfies all Code requirements.

**** ANALYSIS OF CORNER HOLD-DOWN REQUIREMENTS ****

Hold-down is one typical anchor bolt with washer, each wall

Normal anchor bolt spacing = 48 inches

Distance from corner to hold-down device = 6 inches

Distance from corner to first interior anchor bolt = 48 inches

Net uplift force on foundation = 93 pounds per linear foot

Tributary distance to corner device = 2.25 feet

Net uplift on corner hold-down device = 209 pounds

Uplift tension due to shearwall action in a transverse shearwall segment:

Distance from corner to hold-down device = 6 inches

Distance from corner to first interior anchor bolt = 48 inches

Total shear from shearwall segment = 183 pounds

Height of wall = 8 feet

Uniform dead load times 2/3 = 284 pounds per linear foot

Shearwall moment at bottom of wall = 1465 foot-pounds

Additional tension at corner device = 128 pounds

Total uplift tension on corner hold-down devices = 337 pounds

Allowable tension on corner hold-down devices = 3268 pounds

*** Summary of Analysis ***

Corner hold-down device COMPLIES with Code requirements.

**** ANALYSIS OF FOUNDATION ****

Stemwall is 8 inch concrete masonry, filled with grout, 24 inches high
Footing is 20 inches wide by 10 inches deep
Earth cover over top of footing is 4 inches

Total uniform wind uplift on foundation = 537 pounds per linear foot

Uniform dead loads in pounds per linear foot:

Roof = 239.8985 plf

Wall = 426.2345 plf

Total = 666.133 plf

Total uniform dead load times 2/3 = 444 pounds per linear foot

Net uplift force at top of foundation = 93 pounds per linear foot

Weight of stemwall footing earth x 2/3 = 325 pounds per linear foot

Net uplift at bottom of footing = 0 pounds per linear foot

*** Summary of Analysis ***

Foundation is stable.

**** ANALYSIS OF REINFORCING STEEL ****

Grade 40 reinforcing steel, Number 5 vert. bars at 72 inch centers

Total uniform wind uplift on foundation = 537 pounds per linear feet

Uniform dead loads in pounds per linear foot:

Roof = 239.8985 plf

Wall = 426.2345 plf

Total = 666.133 plf

Total uniform dead load times 2/3 = 444 pounds per linear foot

Net uplift force on foundation = 93 pounds per linear foot

Weight of concrete block stemwall x 2/3 = 122 pounds per linear foot

Net uplift at top of footing = 0 pounds per linear foot

Total uplift force on each re-bar = 0 pounds

Safe tension value of each re-bar = 8181 pounds (increased by 1/3)

*** Summary of Analysis ***

Reinforcing steel satisfies all Code requirements.

**** SUMMARY OF REINFORCING DATA ****

Foundation wall data:

Wall is composed of 8 inch concrete masonry, fully grouted.

Wall reinforcing is Grade 40 steel, Number 5 at 72 inch centers

Minimum required lap splice for Number 5 bar is 25 inches.

Minimum required clearance for Number 5 bar is 1.5 inches.

Wall reinf. in footing has a std. A.C.I. hook, 6 inches below top of footing.

Footing data:

Footing is continuous, 20 inches wide by 10 inches deep.

Footing concrete is 2500 psi

Footing reinforcing is Grade 40 steel, 2--#() longitudinal.

Minimum required splice length = 25 inches

Reinforcing steel shall have cover as follows:

Top-----6 inches

Sides-----3 inches

Bottom----3 inches

13A

** LAMAR BOOZER **
900 EAST PUTNAM STREET
LAKE CITY, FL 32055
RESIDENTIAL/LIGHT COMMERCIAL HVAC LOADS

PROJECT: BULKOWSKI
CLIENT: MIKE TODD CONSTRUCTION
DATE: January 8, 2008
DESIGNER: LAMAR BOOZER

CLIENT INFORMATION:

NAME: MIKE TODD CONSTRUCTION
ADDRESS: 129 N.E. COLBURN AVENUE
CITY, STATE: LAKE CITY, FLORIDA 32055

TOTAL BUILDING LOADS

BLDG. LOAD DESCRIPTIONS	AREA QUAN	SEN. LOSS	LAT. + GAIN	SEN. = GAIN	TOTAL GAIN
3-C WINDOW DBL PANE CLR GLS METL FR	294	9,589	0	18,808	18,808
9-I FRENCH DOOR DBL CLR GLS METL FR	84	2,851	0	6,148	6,148
12-E WALL R-11 + 1/2" EXT POLY BD (R-2.5)	2,409	8,131	0	4,808	4,808
11-C DOOR METAL POLYSTYRENE CORE	57	1,206	0	713	713
16-G CEILING R-30 INSULATION	2,600	4,662	0	4,868	4,868
22-A SLAB ON GRADE NO EDGE INSUL	289	10,535	0	0	0
<hr/>					
SUBTOTALS FOR STRUCTURE:	6,272	36,974	0	35,345	35,345
PEOPLE	28	0	0	8,400	8,400
APPLIANCES	0	0	1,800	1,500	3,300
DUCTWORK	0	1,849	0	4,525	4,525
INFILTRATION W.CFM: 0.0 S.CFM: 0.0	0	0	0	0	0
VENTILATION W.CFM: 0.0 S.CFM: 0.0	0	0	0	0	0
<hr/>					
SENSIBLE GAIN TOTAL				49,770	
TEMP. SWING MULTIPLIER				x 1.00	
<hr/>					
BUILDING LOAD TOTALS		38,823	1,800	49,770	51,570

SUPPLY CFM AT 20 DEG DT:	2,262	CFM PER SQUARE FOOT:	0.721
SQUARE FT. OF ROOM AREA:	2,755	SQUARE FOOT PER TON:	730.425

TOTAL HEATING REQUIRED WITH OUTSIDE AIR: 38.823 MBH
TOTAL COOLING REQUIRED WITH OUTSIDE AIR: 3.298 TONS

CALCULATIONS ARE BASED ON 7TH EDITION OF ACCA MANUAL J.
ALL COMPUTED RESULTS ARE ESTIMATES AS BUILDING USE AND WEATHER MAY VARY.
BE SURE TO SELECT A UNIT THAT MEETS BOTH SENSIBLE AND LATENT LOADS.

ITW Building Components Group, Inc.

1950 Marley Drive Haines City, FL 33844
Florida Engineering Certificate of Authorization Number: 0 278
Florida Certificate of Product Approval # FL1999
Page 1 of 1 Document ID: ITD18228Z0306062601

Truss Fabricator: Anderson Truss Company
Job Identification: 7-350--Mike Todd Construction Bolkowski -- Lake City, **
Truss Count: 6
Model Code: Florida Building Code 2004 and 2006 Supplement
Truss Criteria: ANSI/TPI-2002(STD)/FBC
Engineering Software: Alpine Software, Version 7.36.
Structural Engineer of Record: The identity of the structural EOR did not exist as of
Address: the seal date per section 61G15-31.003(5a) of the FAC
Minimum Design Loads: Roof - 40.0 PSF @ 1.25 Duration
Floor - N/A
Wind - 110 MPH ASCE 7-02 -Closed



Notes:

1. Determination as to the suitability of these truss components for the structure is the responsibility of the building designer/engineer of record, as defined in ANSI/TPI 1
2. The drawing date shown on this index sheet must match the date shown on the individual truss component drawing.
3. As shown on attached drawings; the drawing number is preceded by: HCUSR8228

Seal Date: 12/06/2007

-Truss Design Engineer-
James F. Collins Jr.
Florida License Number: 52212
1950 Marley Drive
Haines City, FL 33844

Details: CNBRGBLK-A11015EE-GBLLETIN-

#	Ref	Description	Drawing#	Date
1	39473--A3-GDR		07339011	12/05/07
2	39474--A1		07339010	12/05/07
3	39475--A2		07339009	12/05/07
4	39476--A-GE		07339012	12/05/07
5	39477--B1		07339008	12/05/07
6	39478--B-GE		07339013	12/05/07

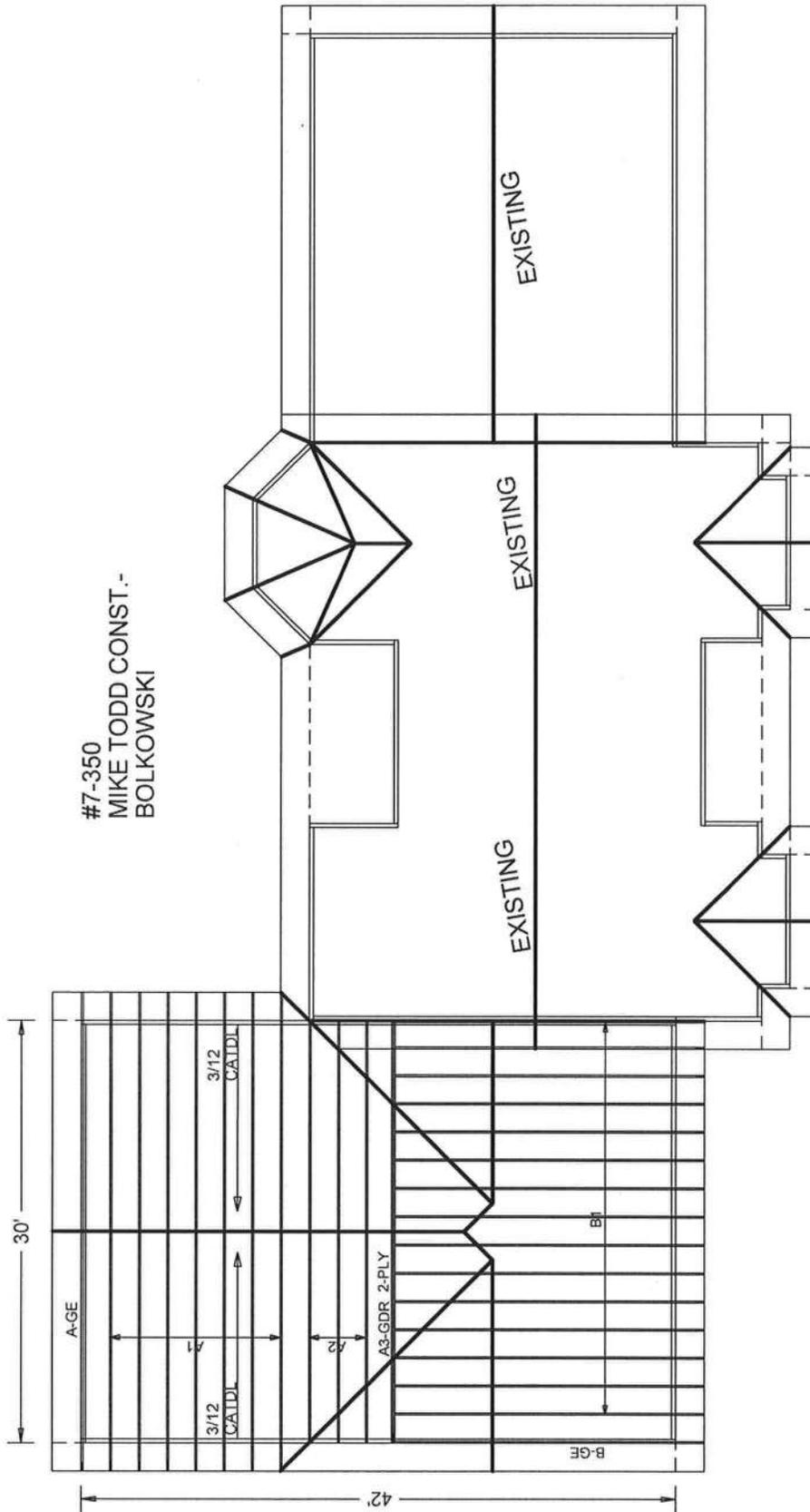


#7-350
MIKE TODD CONST.-
BOLKOWSKI

JOB DESCRIPTION: Mike Todd Construction
/ Bolkowski

JOB NO:
7-350

PAGE NO:
1 OF 1



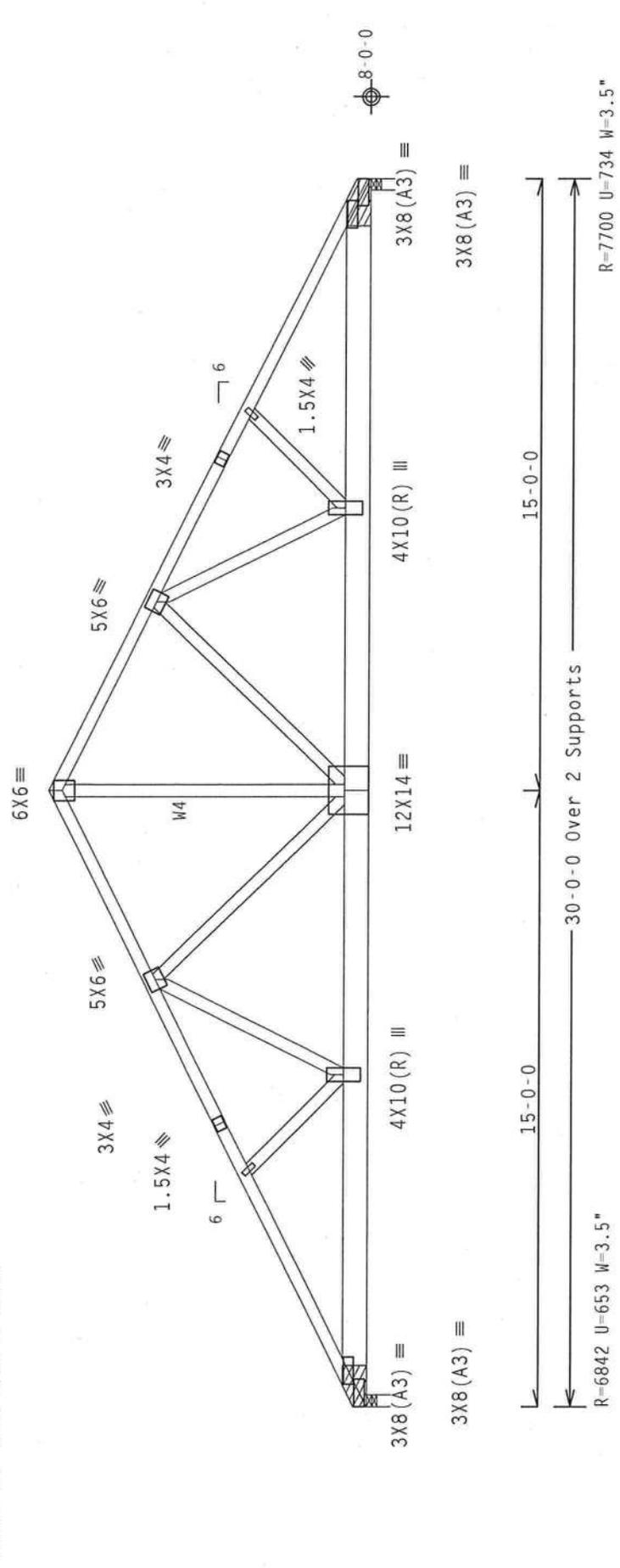
(7-350--Mike Todd Construction Boikowski -- Lake City, ** - A3-GDR)

2 COMPLETE TRUSSES REQUIRED
 Nailing Schedule: (12d Common, 0.148"x3.25", min.)_nails
 Top Chord: 1 Row @12.00" o.c.
 Bot Chord: 1 Row @ 4.75" o.c.
 Webs : 1 Row @ 4" o.c.
 Use equal spacing between rows and stagger nails in each row to avoid splitting.

SPECIAL LOADS
 -----(LUMBER DUR.FAC.=1.25 / PLATE DUR.FAC.=1.25)
 TC - From 62 PLF at 0.00 to 62 PLF at 15.00
 TC - From 62 PLF at 15.00 to 62 PLF at 30.00
 BC - From 20 PLF at 0.00 to 20 PLF at 30.00
 BC - 805 LB Conc. Load at 2.06, 4.06, 6.06, 8.06, 10.06
 12.06, 14.06, 16.06, 18.06, 20.06, 22.06, 24.06, 26.06, 28.06
 29.94

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf, Iw=1.00 GCpi(+/-)=0.18

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.



WIND REACTIONS BASED ON MWFRS PRESSURES.

Design Crit: TPI-2002 (STD) /FBC
 Cq/RT=1.00(1.25)/0(0) 7.36.042 QTY: 1. FL / - / 4 / - / - / R / - Scale = .25" / Ft.

TC LL	20.0 PSF	REF	R8228- 39473
TC DL	10.0 PSF	DATE	12/05/07
BC DL	10.0 PSF	DRW	HCUSR8228 07339011
BC LL	0.0 PSF	HC-ENG	TCE/AP
TOT.LD.	40.0 PSF	SEON-	64715
DUR.FAC.	1.25	FROM	AH
SPACING	24.0"	JREF-	1TD18228Z03



****WARNING**** TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSS (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND NCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LANE, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT**** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI - OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. BY AF&PA) AND TPI. ITW BCG CONNECTOR PLATES ARE MADE OF 2024-T3 ALUMINUM (A3070) AS PER A3070 (4, 6, 8, 10, 12) GALV. STEEL. APPLY ANY INSPECTION OF PLATES FOLLOWED BY SHOWN OTHERWISE LOCATED ON THIS DESIGN. POSITION PER DRAWINGS 160A-2. DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOURCE FOR THE TRUSS UNLESS DESIGN SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.

ALPINE

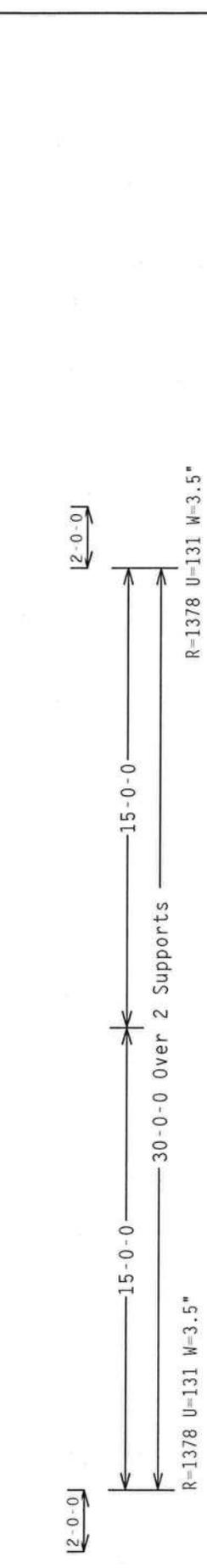
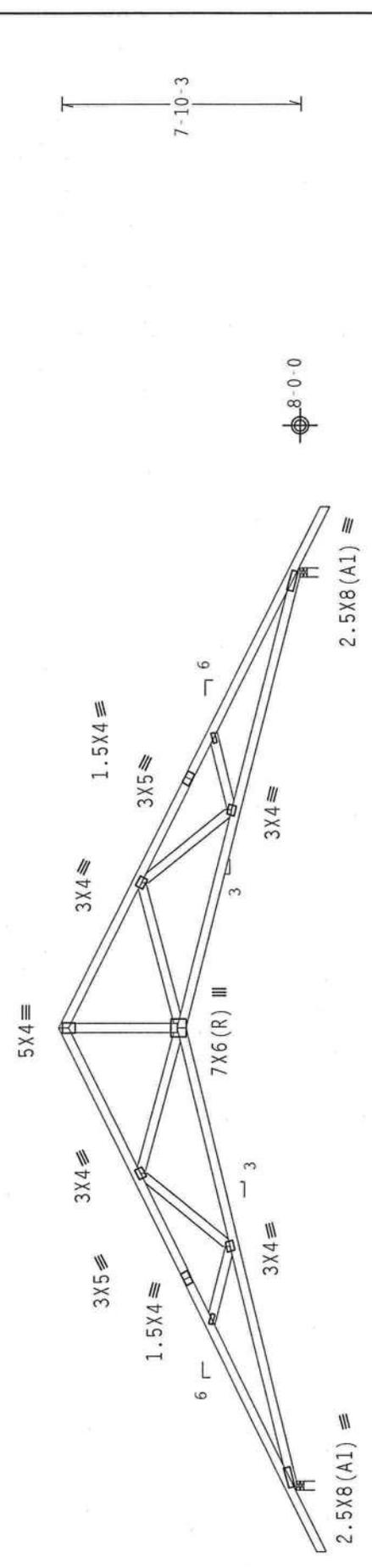
ITW Building Components Group, Inc.
 Haines City, FL 33844
 FL Certificate of Authorization # 0-078

(7-350--Mike Todd Construction Boltkowski -- Lake City, ** - A1)

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED Bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 Gcpi(+/-)=0.18

Wind reactions based on MWFRS pressures.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.



PLT TYP. Wave

Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/0(0) 7.36.0424 QTY:1 FL/-4/-/-/R/- Scale = .1875" /Ft.

TC LL	20.0 PSF	REF	R8228- 39474
TC DL	10.0 PSF	DATE	12/05/07
BC DL	10.0 PSF	DRW	HCUSR8228 07339010
BC LL	0.0 PSF	HC-ENG	TCE/AP *
TOT.LD.	40.0 PSF	SEQN-	64693
DUR.FAC.	1.25	FROM	AH
SPACING	24.0"	JREF-	1TD18228Z03

JAMES J. COLLINS, JR.
LICENSED PROFESSIONAL ENGINEER
STATE OF FLORIDA
No. 52472

Dec 07/07

ALPINE
ITW Building Components Group, Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0-278

****WARNING**** TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BC51 (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22304) AND NPGA (NORTH TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LANE, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT**** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN. ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI; OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF AISC (NATIONAL DESIGN SPEC. BY AISC) AND TPI. ITW BCG SHALL BE RESPONSIBLE FOR THE DESIGN OF THE TRUSS. THE SUITABILITY AND USE OF THIS COMPONENT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1. SEC. 2.

(7-350--Mike Todd Construction Bolkowski -- Lake City, ** - A-6E)

Top chord 2x4 SP #2 Dense
 Bot chord 2x4 SP #2 Dense
 Webs 2x4 SP #3

Truss spaced at 24.0" OC designed to support 2.0-0 top chord outlookers. Cladding load shall not exceed 10.00 PSF. Top chord must not be cut or notched.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

The Building Designer is responsible for the design of the roof and ceiling diaphragms, gable end shear walls, and supporting shear walls. Shear walls must provide continuous lateral restraint to the gable end. All connections to be designed by the Building Designer.

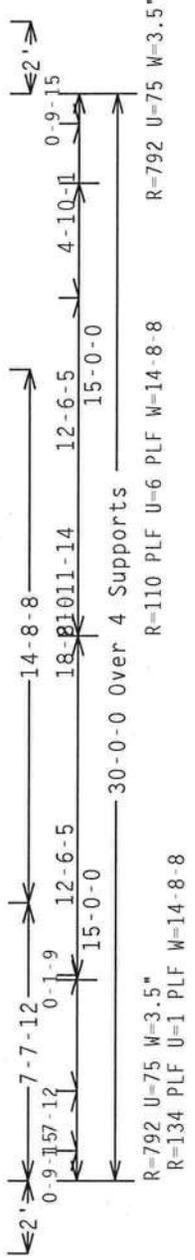
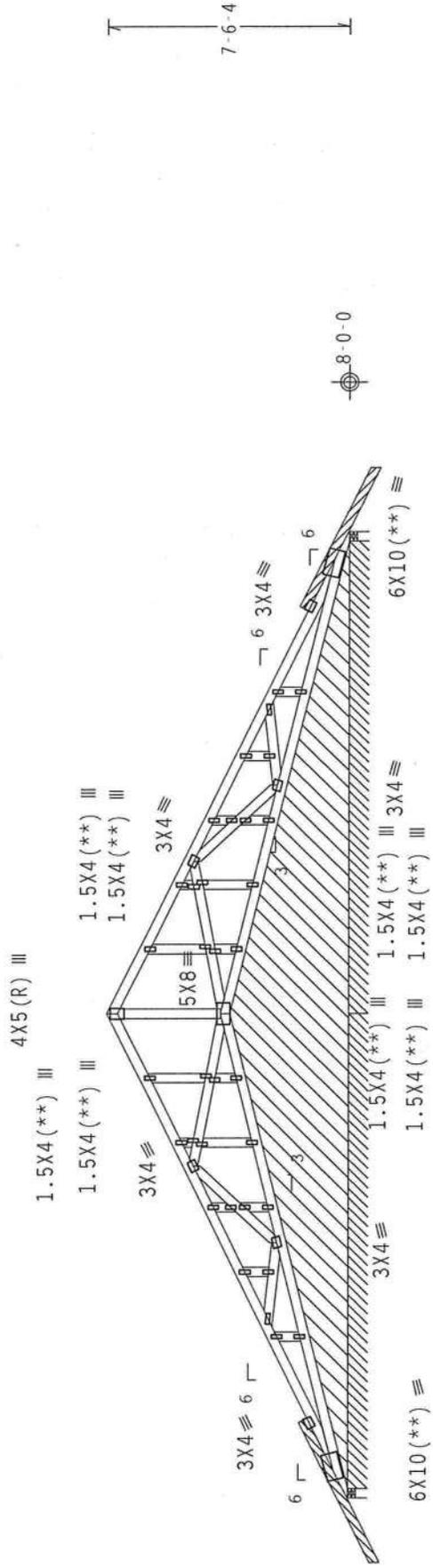
110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

Wind reactions based on MMFRS pressures.

* (1) 2x4x5-0-0 SP #2 Dense Top chord scab located as shown. Attach to one face of chord with (2) rows of 12d Cpmmon (0.148"x3.25", min.)_nails @ 6" O.C., staggered 3".

Shim all supports to solid bearing.

(**) 10 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.



Note: All Plates Are 1.5X4 Except As Shown.

Design Crit: TPI-2002 (STD) / FBC

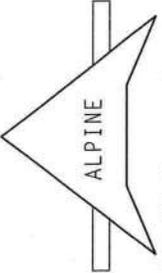
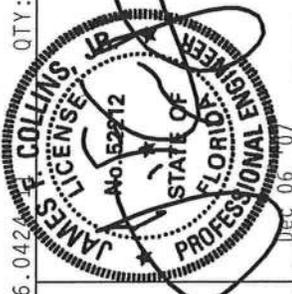
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QTY: 1

FL/-/4/-/-/R/-

Scale = .1875" / Ft.

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TC DL	10.0 PSF	DATE	12/05/07
BC DL	10.0 PSF	DRW	HCUSR8228 07339012
BC LL	0.0 PSF	HC-ENG	TCE/AP
TOT.LD.	40.0 PSF	SEQN-	64746 REV
DUR.FAC.	1.25	FROM	AH
SPACING	SEE ABOVE	JREF-	ITD18228Z03



ITW Building Components Group, Inc.
 Haines City, FL 33844
 FL Certificate of Authorization #A-279

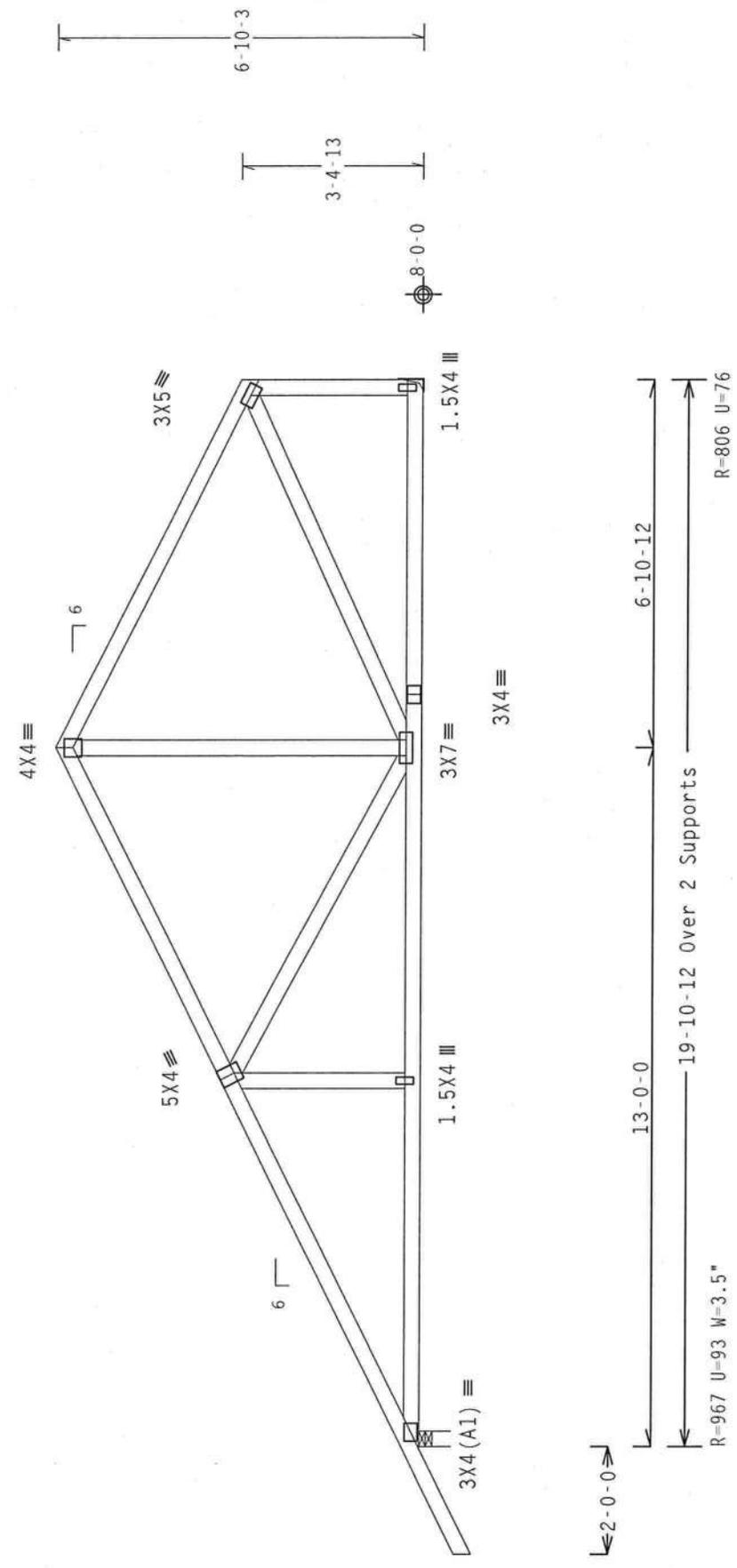
Top chord 2x4 SP #2 Dense
 Bot chord 2x4 SP #2 Dense
 Webs 2x4 SP #3

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. $I_w=1.00$ GCpi (+/-)=0.18

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

Wind reactions based on MMFRS pressures.

Right end vertical not exposed to wind pressure.



Design Crit: TPI-2002 (STD) / FBC

7.36.0424

QTY: 1

Scale = .3125" / Ft.

TC LL	20.0 PSF	REF	R8228- 39477
TC DL	10.0 PSF	DATE	12/05/07
BC DL	10.0 PSF	DRW	HCUSR8228 07339008
BC LL	0.0 PSF	HC-ENG	TCE/AP
TOT.LD.	40.0 PSF	SEQN-	64725
DUR.FAC.	1.25	FROM	AH
SPACING	24.0"	JREF-	1TD18228Z03



****WARNING**** TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCST (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE), 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND NTC (NORTH TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LANE, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT**** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITH BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF BCS (NATIONAL DESIGN SPEC. BY AF&PA) AND TPI. ITH BEG CONNECTION PLATES ARE MADE OF 201/19/7060 (A-7/SS7K) ASTM A653 GRADE 40/60 (W. K/H-SS) GALV. STEEL. APPLY UNLESS OTHERWISE INDICATED. UNLESS OTHERWISE INDICATED, POSITION PER DRAWING 100A-2. ANY INSPECTION OF PLATES, JOINTS OR OTHER DETAILS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THIS DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS DESIGN. DESIGN SHOWN, THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.

ALPINE

ITH Building Components Group, Inc.
 Haines City, FL 33844
 Certificate of Authorization # 0-278

Dec 06 07

Top chord 2x4 SP #2 Dense
 Bot chord 2x4 SP #2 Dense
 Webs 2x4 SP #3
 :Stack Chord SC1 2x4 SP #2 Dense:

Truss spaced at 24.0" OC designed to support 2-0-0 top chord
 outlookers. Cladding load shall not exceed 10.00 PSF. Top chord
 must not be cut or notched.

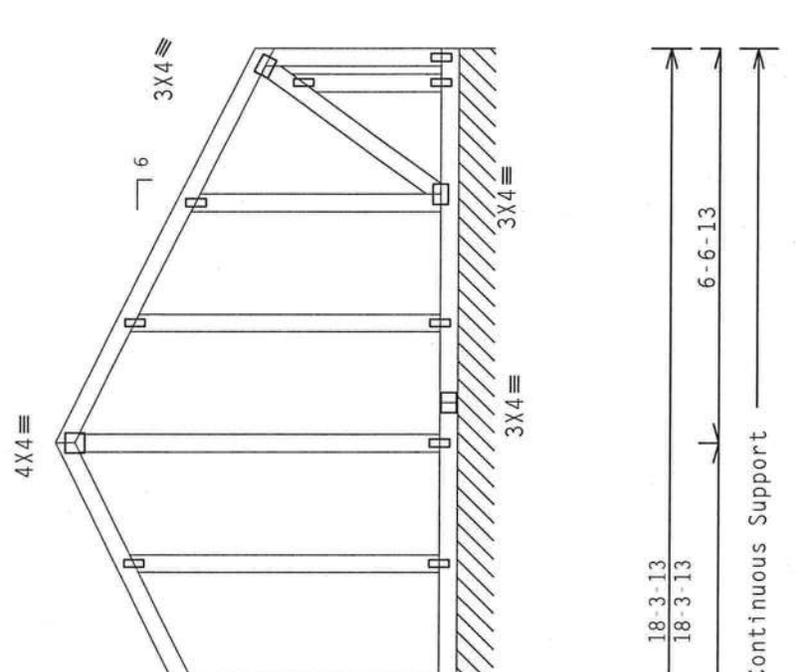
Stacked top chord must NOT be notched or cut in area (NNL).
 Dropped top chord braced at 24" o.c. intervals. Attach stacked
 top chord (SC) to dropped top chord in notched area using 3x4
 tie-plates 24" o.c. Center plate on stacked/dropped chord
 interface, plate length perpendicular to chord length. Splice top
 chord in notched area using 3x6.

The Building Designer is responsible for the design of the
 roof and ceiling diaphragms, gable end shear walls, and
 supporting shear walls. Shear walls must provide continuous
 lateral restraint to the gable end. All connections to be
 designed by the Building Designer.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, Located
 anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC
 DL=5.0 psf. Iw=1.00 GCpl(+/-)=0.18

Wind reactions based on MWFRS pressures.
 Right end vertical not exposed to wind pressure.

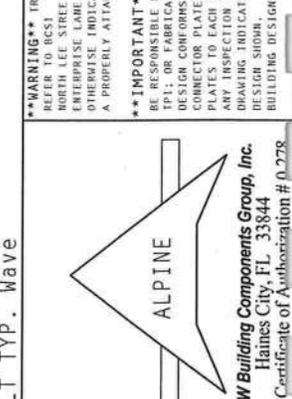
See DWGS A11015EE0207 & GBLETTIN0207 for more requirements.
 In lieu of structural panels use purlins to brace TC @ 24" OC.
 Deflection meets L/240 live and L/180 total load. Creep increase
 factor for dead load is 1.50.



R=189 PLF U=21 PLF W-19-10-12
 19-10-12 Over Continuous Support

PLT TYP. Wave
 Note: All Plates Are 1.5X4 Except As Shown.
 Design Crit: TPI-2002 (STD)/FBC
 Cg/RT=1.00(1.25)/0(0) 7.36.0424 QTY:1 FL/-/4/-/-/R/- Scale = .3125"/Ft.

TC LL	20.0 PSF
TC DL	10.0 PSF
BC DL	10.0 PSF
BC LL	0.0 PSF
TOT.LD.	40.0 PSF
DUR.FAC.	1.25
SPACING	SEE ABOVE
REF	R8228- 39478
DATE	12/05/07
DRW	HCUSR8228 07339013
HC-ENG	TCE/AP
SEQN-	64685
FROM	AH
JREF-	1TD18228Z03



ALPINE
 ITW Building Components Group, Inc.
 James City, FL 33844
 Certificate of Authorization # 0-278

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BC51 (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LANE, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

IMPORTANT FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN. ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES, OR CONSTRUCTION WITH APPLICABLE PROVISIONS OF BOB (NATIONAL DESIGN SPEC. BY AF&PA) AND TPI. ITW BCG PLATES TO EACH FACE OF TRUSS AND JOINTS SHALL BE PERMANENTLY MARKED WITH POSITION PER DRAWINGS 100A-2. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PERMANENTLY MARKED WITH POSITION PER DRAWINGS 100A-2. DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT DESIGN SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.

BEARING BLOCK NAIL SPACING DETAIL

MAXIMUM NUMBER OF NAIL LINES PARALLEL TO GRAIN

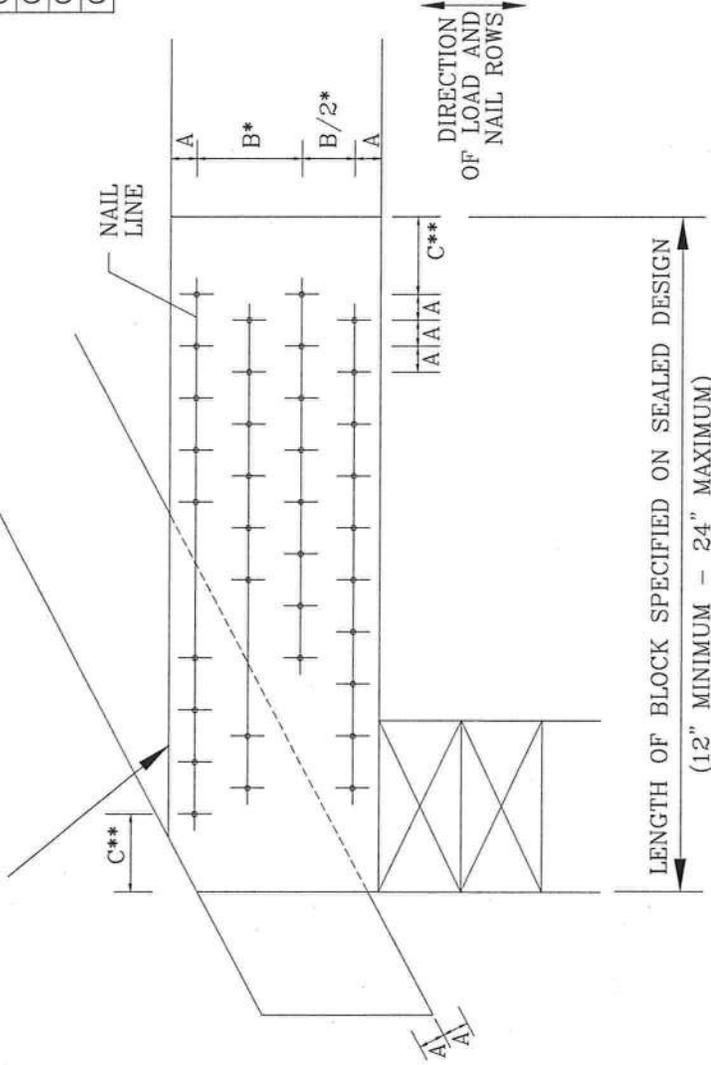
NAIL TYPE	CHORD SIZE			
	2X4	2X6	2X8	2X10
8d BOX (0.113"X 2.5",MIN)	3	6	9	12
10d BOX (0.128"X 3",MIN)	3	5	7	10
12d BOX (0.128"X 3.25",MIN)	3	5	7	10
16d BOX (0.135"X 3.5",MIN)	3	5	7	10
20d BOX (0.148"X 4",MIN)	2	4	5	6
8d COMMON (0.131"X 2.5",MIN)	3	5	7	10
10d COMMON (0.148"X 3",MIN)	2	4	6	8
12d COMMON (0.148"X 3.25",MIN)	2	4	6	8
16d COMMON (0.162"X 3.5",MIN)	2	4	6	8
GUN (0.120"X 2.5",MIN)	3	6	8	11
GUN (0.131"X 2.5",MIN)	3	5	7	10
GUN (0.120"X 3",MIN)	3	6	8	11
GUN (0.131"X 3",MIN)	3	5	7	10

MINIMUM SPACING FOR SINGLE BEARING BLOCK IS SHOWN. DOUBLE NAIL SPACINGS AND STAGGER NAILING FOR TWO BLOCKS. GREATER SPACING MAY BE REQUIRED TO AVOID SPLITTING.

- A - EDGE DISTANCE AND SPACING BETWEEN STAGGERED ROWS OF NAILS (6 NAIL DIAMETERS)
- B - SPACING OF NAILS IN A ROW (12 NAIL DIAMETERS)
- C - END DISTANCE (15 NAIL DIAMETERS)

IF NAIL HOLES ARE PREBORED, SOME SPACING MAY BE REDUCED BY THE AMOUNTS GIVEN BELOW:
 * SPACING MAY BE REDUCED BY 50%
 ** SPACING MAY BE REDUCED BY 33%

BEARING BLOCK TO BE SAME SIZE AND SPECIES AS BOTTOM CHORD. BLOCKS MAY BE ANY GRADE WITHIN THE SPECIES, PROVIDED THE COMPRESSION PERPENDICULAR TO GRAIN VALUE (Fc-perp) IS AT LEAST THAT OF THE CHORD.

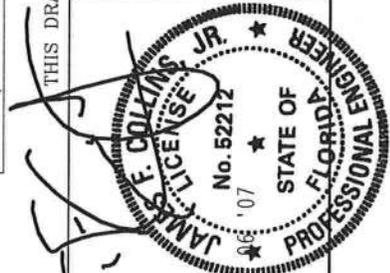


MINIMUM NAIL SPACING DISTANCES

NAIL TYPE	DISTANCES		
	A	B*	C**
8d BOX (0.113"X 2.5",MIN)	3/4"	1 3/8"	1 3/4"
10d BOX (0.128"X 3",MIN)	7/8"	1 5/8"	2"
12d BOX (0.128"X 3.25",MIN)	7/8"	1 5/8"	2"
16d BOX (0.135"X 3.5",MIN)	7/8"	1 5/8"	2 1/8"
20d BOX (0.148"X 4",MIN)	1"	1 7/8"	2 1/4"
8d COMMON (0.131"X 2.5",MIN)	7/8"	1 5/8"	2"
10d COMMON (0.148"X 3",MIN)	1"	1 7/8"	2 1/4"
12d COMMON (0.148"X 3.25",MIN)	1"	1 7/8"	2 1/4"
16d COMMON (0.162"X 3.5",MIN)	1"	2"	2 1/2"
GUN (0.120"X 2.5",MIN)	3/4"	1 1/2"	1 7/8"
GUN (0.131"X 2.5",MIN)	7/8"	1 5/8"	2"
GUN (0.120"X 3",MIN)	3/4"	1 1/2"	1 7/8"
GUN (0.131"X 3",MIN)	7/8"	1 5/8"	2"

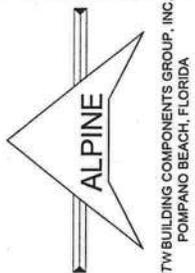
THIS DRAWING REPLACES DRAWING B139 AND CNBRGBLK0699

REF	BEARING BLOCK
DATE	2/23/07
DRWG	CNBRGBLK0207
	-ENG SJP/KAR



WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BEST BUILDING COMPONENT SAFETY INFORMATION, PUBLISHED BY TPI TRUSSING AND PLATE BRACING, 2100 W. 31ST AVENUE, SUITE 312, MIAMI, FL 33135 AND VICA (4000 TRUSSING), 10000 W. 11TH AVENUE, SUITE 100, MIAMI, FL 33157. THESE FUNCTIONS, UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

IMPORTANT FURNISH COPY OF THIS DESIGN TO INSTALLATION CONTRACTOR. ITV BCG, INC., SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE TO BUILD THE TRUSS IN ACCORDANCE WITH THIS DESIGN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL DESIGN, CONFORM WITH TPI, BRACING, SHIPPING, INSTALLING & BRACING OF TRUSSES. ITV, BCG CONNECTOR PLATES ARE MADE OF 20/19/16GA (A/B/SS/VO) STEEL. ALL NAILING SHALL BE PERFORMED IN ACCORDANCE WITH THE DESIGN, POSITION PER DRAWINGS 160A-2. ANY INSPECTION OF PLATES FOLLOWED BY (D) SHALL BE PERFORMED IN ACCORDANCE WITH THE DESIGN, POSITION PER DRAWINGS 160A-2. A SEAL ON THIS DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT DESIGN SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER, PER ANSI/TPI 1 SEC. 2.



ITV/BUILDING COMPONENTS GROUP, INC.
 POMPANO BEACH, FLORIDA

MAX GABLE VERTICAL LENGTH	2X4 GABLE VERTICAL BRACES		1X4 "L" BRACE		2X4 "L" BRACE		2X6 "L" BRACE		2X6 "L" BRACE		
	SPACING	SPECIES	GRADE	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B
12" O.C.	SPF	HF	STANDARD	6' 8"	6' 10"	7' 11"	8' 11"	9' 5"	9' 8"	12' 5"	12' 9"
				6' 0"	6' 0"	7' 11"	7' 11"	9' 5"	9' 5"	12' 4"	12' 4"
	SP	DFL	STANDARD	5' 2"	5' 2"	6' 9"	6' 9"	9' 1"	9' 1"	10' 7"	10' 7"
				7' 2"	7' 2"	7' 11"	8' 6"	9' 5"	10' 2"	12' 5"	13' 5"
16" O.C.	SPF	HF	STANDARD	6' 2"	6' 2"	7' 11"	8' 11"	9' 5"	9' 11"	12' 5"	12' 8"
				6' 1"	6' 1"	7' 11"	8' 0"	9' 5"	9' 11"	12' 5"	12' 6"
	SP	DFL	STANDARD	5' 3"	5' 3"	6' 11"	6' 11"	9' 4"	9' 4"	10' 10"	10' 10"
				7' 8"	7' 10"	9' 1"	9' 4"	10' 10"	11' 1"	14' 0"	14' 0"
24" O.C.	SPF	HF	STANDARD	6' 4"	6' 4"	8' 4"	8' 4"	10' 10"	10' 10"	14' 0"	14' 0"
				7' 4"	7' 4"	9' 1"	9' 1"	10' 10"	10' 10"	14' 0"	14' 0"
	SP	DFL	STANDARD	7' 8"	7' 8"	9' 1"	9' 9"	10' 10"	11' 8"	14' 0"	14' 0"
				8' 3"	8' 3"	9' 1"	9' 9"	10' 10"	11' 4"	14' 0"	14' 0"
24" O.C.	SPF	HF	STANDARD	7' 6"	7' 6"	9' 1"	9' 6"	10' 10"	11' 4"	14' 0"	14' 0"
				6' 5"	6' 5"	8' 6"	8' 6"	10' 10"	11' 1"	13' 3"	13' 3"
	SP	DFL	STANDARD	8' 5"	8' 5"	10' 0"	10' 3"	11' 11"	12' 3"	14' 0"	14' 0"
				8' 5"	8' 5"	10' 0"	10' 0"	11' 11"	11' 11"	14' 0"	14' 0"

BRACING GROUP SPECIES AND GRADES:

GROUP A:

SPRUCE-PINE-FIR	HEM-FIR
#1 / #2 STANDARD	#2 STUD
#3 STUD	STANDARD

DOUGLAS FIR-LARCH

#3 STUD
STANDARD

SOUTHERN PINE

#3 STUD
STANDARD

GROUP B:

HEM-FIR	DOUGLAS FIR-LARCH
#1 & BTR #1	#1
	#2

GABLE TRUSS DETAIL NOTES:

LIVE LOAD DEFLECTION CRITERIA IS L/240.

PROVIDE UPLIFT CONNECTIONS FOR 80 PLF OVER CONTINUOUS BEARING (5 FSF TC DEAD LOAD).

GABLE END SUPPORTS LOAD FROM 4' 0" OUTLOOKERS WITH 2' 0" OVERHANG, OR 12" PLYWOOD OVERHANG.

ATTACH EACH "L" BRACE WITH 10d NAILS.

** FOR (1) "L" BRACE: SPACE NAILS AT 2" O.C. IN 18" END ZONES AND 4" O.C. BETWEEN ZONES.

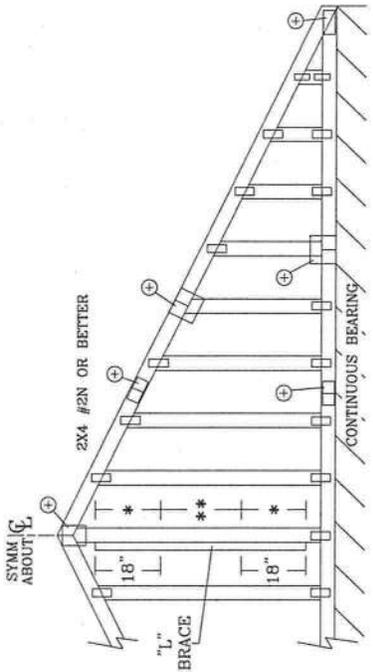
** FOR (2) "L" BRACES: SPACE NAILS AT 3" O.C. IN 18" END ZONES AND 6" O.C. BETWEEN ZONES.

"L" BRACING MUST BE A MINIMUM OF 80% OF WEB MEMBER LENGTH.

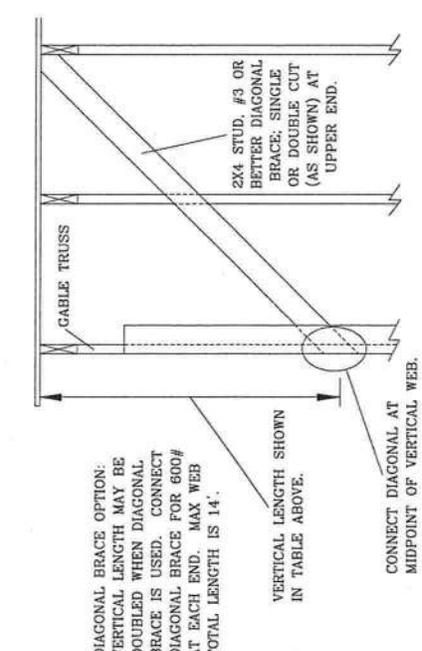
GABLE VERTICAL PLATE SIZES

VERTICAL LENGTH	NO. SPLICES
LESS THAN 4' 0"	1X4 OR 2X3
GREATER THAN 4' 0", BUT LESS THAN 11' 6"	2X4
GREATER THAN 11' 6"	2.5X4

+ REFER TO COMMON TRUSS DESIGN FOR PEAK, SPLICE, AND HEEL PLATES.



REFER TO CHART ABOVE FOR MAX GABLE VERTICAL LENGTH.

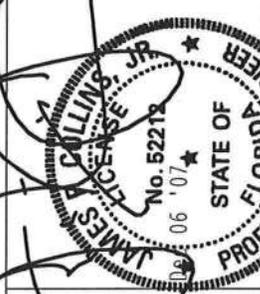


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REF	ASCE7-02-GABI015
DATE	2/23/07
DRWG	A11051EE0207
	-ENG

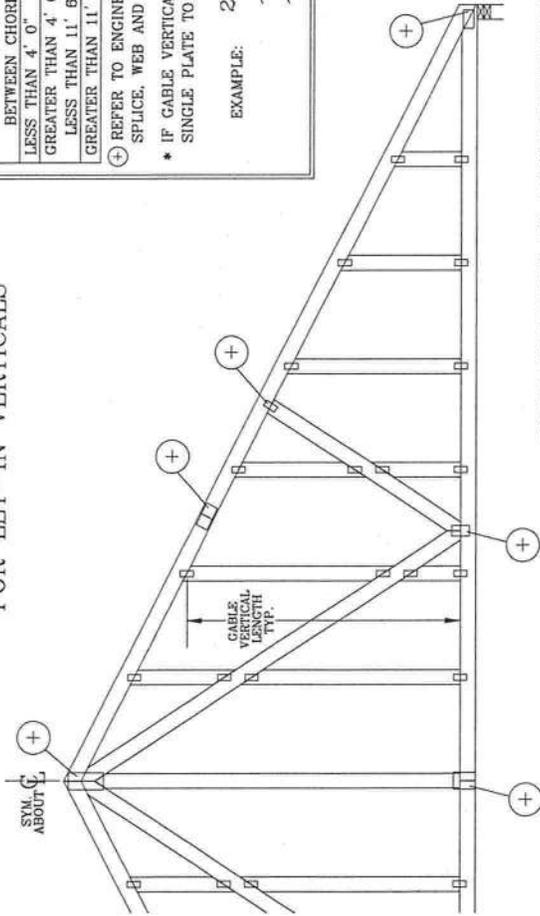
MAX. TOT. LD.	60 PSF
MAX. SPACING	24.0"



ALPINE

ITV BUILDING COMPONENTS GROUP, INC.
POMPANO BEACH, FLORIDA

GABLE DETAIL FOR LET-IN VERTICALS



GABLE VERTICAL PLATE SIZES

VERTICAL LENGTH BETWEEN CHORDS	PLATE SIZE	IF PLATES OVERLAP*
LESS THAN 4' 0"	1X4 OR 2X3	2X8
GREATER THAN 4' 0", BUT LESS THAN 11' 6"	2X4	2X8
GREATER THAN 11' 6"	2.5X4	2.5X8

⊕ REFER TO ENGINEERED TRUSS DESIGN FOR PEAK, SPLICE, WEB AND HEEL PLATES.

* IF GABLE VERTICAL PLATES OVERLAP, USE A SINGLE PLATE TO SPAN THE WEB.

EXAMPLE:

TOENAIL

2X4 REINFORCING MEMBER

TOENAIL

2X6 "T" REINFORCING MEMBER

TO CONVERT FROM "L" TO "T" REINFORCING MEMBERS, MULTIPLY "T" FACTOR BY LENGTH (BASED ON GABLE VERTICAL SPECIES, GRADE AND SPACING) FOR (1) 2X4 "L" BRACE, GROUP A, OBTAINED FROM THE APPROPRIATE ALPINE GABLE DETAIL FOR ASCE OR SBCCI WIND LOAD.

MAXIMUM ALLOWABLE "T" REINFORCED GABLE VERTICAL LENGTH IS 14' FROM TOP TO BOTTOM CHORD.

WEB LENGTH INCREASE W/ "T" BRACE

WIND SPEED AND MRH	"T" REINF. MBR. SIZE	SBCCI	ASCE
110 MPH	2x4	10 %	10 %
15 FT	2x6	40 %	50 %
110 MPH	2x4	10 %	10 %
30 FT	2x6	50 %	50 %
100 MPH	2x4	10 %	10 %
15 FT	2x6	30 %	50 %
100 MPH	2x4	10 %	10 %
30 FT	2x6	40 %	40 %
90 MPH	2x4	20 %	10 %
15 FT	2x6	20 %	40 %
90 MPH	2x4	10 %	10 %
30 FT	2x6	30 %	50 %
80 MPH	2x4	10 %	20 %
15 FT	2x6	10 %	30 %
80 MPH	2x4	20 %	10 %
30 FT	2x6	20 %	40 %
70 MPH	2x4	0 %	20 %
15 FT	2x6	0 %	20 %
70 MPH	2x4	10 %	20 %
30 FT	2x6	10 %	30 %

EXAMPLE:

ASCE WIND SPEED = 100 MPH
 MEAN ROOF HEIGHT = 30 FT
 GABLE VERTICAL = 24" O.C. SP #3
 "T" REINFORCING MEMBER SIZE = 2X4
 "T" BRACE INCREASE (FROM ABOVE) = 10% = 1.10
 (1) 2X4 "L" BRACE LENGTH = 6' 7"
 MAXIMUM "T" REINFORCED GABLE VERTICAL LENGTH 1.10 x 6' 7" = 7' 3"

PROVIDE CONNECTIONS FOR UPLIFT SPECIFIED ON THE ENGINEERED TRUSS DESIGN.

ATTACH EACH "T" REINFORCING MEMBER WITH

HAND DRIVEN NAILS:

- (4) 16d COMMON (0.148" X 3" MIN) TOENAILS AT 4" O.C. PLUS
- (4) 16d COMMON (0.162" X 3.5" MIN) TOENAILS IN TOP AND BOTTOM CHORD.

GUN DRIVEN NAILS:

- 8d COMMON (0.131" X 2.5" MIN) TOENAILS AT 4" O.C. PLUS
- (4) TOENAILS IN TOP AND BOTTOM CHORD.

THIS DETAIL TO BE USED WITH THE APPROPRIATE ALPINE GABLE DETAIL FOR ASCE OR SBCCI WIND LOAD.

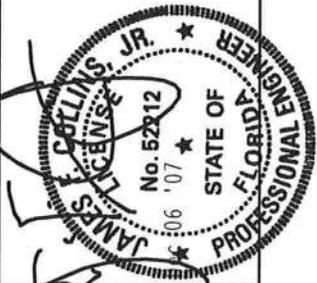
- ASCE 7-93 GABLE DETAIL DRAWINGS
 - A11015EN0207, A10015EN0207, A09015EN0207, A08015EN0207, A07015EN0207, A11030EN0207, A10030EN0207, A09030EN0207, A08030EN0207, A07030EN0207
- ASCE 7-98 GABLE DETAIL DRAWINGS
 - A13015EC0207, A12015EC0207, A11015EC0207, A10015EC0207, A08515EC0207, A13030EC0207, A12030EC0207, A11030EC0207, A10030EC0207, A08530EC0207
- ASCE 7-02 GABLE DETAIL DRAWINGS
 - A13015EE0207, A12015EE0207, A11015EE0207, A10015EE0207, A08515EE0207, A13030EE0207, A12030EE0207, A11030EE0207, A10030EE0207, A08530EE0207
- ASCE 7-05 GABLE DETAIL DRAWINGS
 - A13015E50207, A12015E50207, A11015E50207, A10015E50207, A08515E50207, A13030E50207, A12030E50207, A11030E50207, A10030E50207, A08530E50207

SEE APPROPRIATE ALPINE GABLE DETAIL (ASCE OR SBCCI WIND LOAD) FOR MAXIMUM UNREINFORCED GABLE VERTICAL LENGTH.

THIS DRAWING REPLACES DRAWINGS GAB98117 876,719 & HC26294035

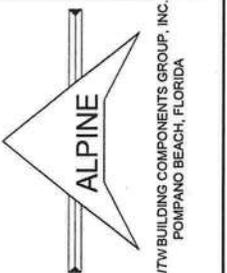
REF	LET-IN VERT
DATE	2/23/07
DRWG	G BILLETINO207
	-ENG DLJ/KAR

MAX TOT. LD.	60 PSF
DUR. FAC.	ANY
MAX SPACING	24.0"



***WARNING** TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI TRUSS PLATE INSTITUTE, 210 NORTH LEE STR., SUITE 312, ALEXANDRIA, VA. 22314, AND WTCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LN., MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE ACTIVITIES. UNREINFORCED TRUSSES SHOULD ALWAYS HAVE PROPERLY ATTACHED STRUTTING PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

***IMPORTANT** FURNISH COPY OF THIS DESIGN TO INSTALLATION CONTRACTOR. ITV BCS, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. BY AF&PA) AND TPI. ALL BEST CONNECTIONS AND DETAILS ARE DUE TO THE 2019/16GA (A)/22XK1 (S) WITH AGES GRADE 40/60 (A)/2X (SS) GAN'S BEST CONNECTIONS. ALL DETAILS ARE TO BE IN ACCORDANCE WITH THE 1609-Z. ANY INSPECTION OF PLATES FOLLOWED BY CIVIL ENGINEER DESIGN POSITION PER DRAWINGS 1609-Z. A SEAL ON THIS DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT DESIGN SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER. PER ANSII/TPI 1 SEC. 2.





COLUMBIA COUNTY AVENUE OPEN

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 09-3S-16-02049-131

Building permit No. 000026625

Use Classification ADDITION/SFD

Fire: 0.00

Permit Holder OWNER BUILDER

Waste:

Owner of Building GREG BOLKOSKY

Total: 0.00

Location: 274 NW POMPANO COURT



Date: 05/11/2009

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)

0019217 01053440000

3

2007 REAL ESTATE

NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

RONNIE BRANNON, CFC
COLUMBIA COUNTY TAX COLLECTOR

TAX ACCOUNT NUMBER	ESCROW CD	ASSESSED VALUE	EXEMPTIONS	TAXABLE VALUE	MILLAGE CODE
R02049-131		112,030	25,000	87,030	003

0017124 01 AV 0.312 **AUTO T6 0 0810 32055-123

BOLKOSKY GREGORY & APRIL S
274 NW POMPANO CT
LAKE CITY FL 32055-8574

09-3S-16 0100/0100 5.57 acres
LOT 31 ROLLING OAKS S/D.
ORB 678-600 803-2023,
812-1422, 820-487,

SEE INSERT FOR IMPORTANT INFO
AND TELEPHONE NUMBERS
WWW.COLUMBIATAXCOLLECTOR.COM



TAXING AUTHORITY	MILLAGE RATE (DOLLARS PER \$1,000 OF TAXABLE VALUE)	AD VALOREM TAXES	TAXES LEVIED
C001 BOARD OF COUNTY COMMISSIONERS	7.8530	25,000	683.45
S002 COLUMBIA COUNTY SCHOOL BOARD DISCRETIONARY		25,000	66.14
LOCAL CAPITAL OUTLAY	.7600	87,030	416.00
W SR SUWANNEE RIVER WATER MGT DIST	4.7800	87,030	174.06
HLSH LAKE SHORE HOSPITAL AUTHORITY	2.0000	87,030	38.28
IIDA COLUMBIA COUNTY INDUSTRIAL	.4399	87,030	175.97
	2.0220	87,030	10.79
	.1240	87,030	
TOTAL MILLAGE	17.9789	AD VALOREM TAXES	\$1,564.69

LEVYING AUTHORITY	NON-AD VALOREM ASSESSMENTS RATE	AMOUNT
FFIR FIRE ASSESSMENTS		77.00
R RO BOARD OF COUNTY COMMISSIONERS	Per Parcel	376.68
GGAR SOLID WASTE - ANNUAL		201.00
PAY ONLY ONE AMOUNT IN YELLOW SHADED AREA	NON-AD VALOREM ASSESSMENTS	\$654.68

COMBINED TAXES AND ASSESSMENTS	PAY ONLY ONE AMOUNT	See reverse side for important information.
	\$2,219.37	

IF PAID BY PLEASE PAY	Nov 30	Dec 31	Jan 31	Feb 29	Mar 31	IF PAID BY
	2,130.60	2,152.79	2,174.98	2,197.18	2,219.37	

RETAIN BLUE PORTION OR RETURN ENTIRE NOTICE WITH A SELF-ADDRESSED STAMPED ENVELOPE FOR A VALIDATED RECEIPT.

ADD TO
7232

Notice of Treatment

Applicator: Florida Pest Control & Chemical Co. (www.flapest.com)

Address: 537 SE BAYA DR
City Lake City Phone (888) 752-1703

Site Location: Subdivision Rolling Oaks
Lot # _____ Block# _____ Permit # 26625
Address 274 NW Pompano Ct.

<u>Product used</u>	<u>Active Ingredient</u>	<u>% Concentration</u>
<input type="checkbox"/> Premise	Imidacloprid	0.1%
<input checked="" type="checkbox"/> Termidor	Fipronil	0.12%
<input type="checkbox"/> Bora-Care	Disodium Octaborate Tetrahydrate	23.0%

Type treatment: Soil Wood

<u>Area Treated</u>	<u>Square feet</u>	<u>Linear feet</u>	<u>Gallons Applied</u>
<u>MAIN BODY</u>	<u>1260</u>	<u>144</u>	<u>125</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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

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

02-19-08
Date

9:00 A
Time

[Signature]
Print Technician's Name

Remarks: _____

Applicator - White Permit File - Canary Permit Holder - Pink