DATE 02/23/2007

Columbia County Building Permit

This Permit Expires One Year From the Date of Issue

PERMIT
000025569

APPLICANT AMANDA WOLFE PHONE 386.755.8887

ADDRESS 2109 W US HWY 90, STE 170-144 LAKE CITY FL 32055

OWNER MARVIN SLAY - ALLSTATE OFFICE PHONE 386.755.1666

ADDRESS 679 NW BASCOM NORRIS DRIVE LAKE CITY FL 32024

CONTRACTOR BRIAN CRAWFORD, CONCEPT CONSTR PHONE 386.755.8887

LOCATION OF PROPERTY 90-W TO SR 247,TL TO BASCOM NORRIS,TL AND THE PROPERTY IS DIRECTLY BEHIND S&S STORE ON BASCOM NORRIS/SR.247-S.

TYPE DEVELOPMENT COMMERCIAL OFFICE ESTIMATED COST OF CONSTRUCTION 265000.00

HEATED FLOOR AREA _____ TOTAL AREA 4513.00 HEIGHT 27.50 STORIES 1

FOUNDATION CONC WALLS FRAMED ROOF PITCH 8'12 FLOOR CONC

LAND USE & ZONING CI MAX. HEIGHT 35

Minimum Set Back Requirments: STREET-FRONT 20.00 REAR 5.00 SIDE 15.00

NO. EX.D.U. 0 FLOOD ZONE X DEVELOPMENT PERMIT NO. _____

PARCEL ID 01-4S-16-02656-000 SUBDIVISION _____

LOT ____ BLOCK ____ PHASE ____ UNIT ____ TOTAL ACRES 0.45

000001337		CBC1251118	Amanda C. Wolfe	
Culvert Permit No.	Culvert Waiver	Contractor's License Number	Applicant/Owner/Contractor	
SIZE ON PLANS	06-1027N	BLK	JTH	N
Driveway Connection	Septic Tank Number	LU & Zoning checked by	Approved for Issuance	New Resident

COMMENTS: PLANS REQUIRE 1ST. FLOOR ELEVATION TO BE 163.00'.ELEVATION LETTER REQUIRED.

Check # or Cash 1337

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

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

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

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

Electrical rough-in _____ date/app. by Heat & Air Duct _____ date/app. by Peri. beam (Lintel) _____ date/app. by

Permanent power _____ date/app. by C.O. Final _____ date/app. by Culvert _____ date/app. by

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

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

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

BUILDING PERMIT FEE $ 1325.00 CERTIFICATION FEE $ 22.57 SURCHARGE FEE $ 22.57

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

FLOOD DEVELOPMENT FEE $ _____ FLOOD ZONE FEE $ 25.00 CULVERT FEE $ 25.00 **TOTAL FEE** 1470.14

INSPECTORS OFFICE _____ CLERKS OFFICE _____

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

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

This Permit Must Be Prominently Posted on Premises During Construction

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

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

Columbia County Building Permit Application

For Office Use Only Application # 0701-83 Date Received 1/22 By JW Permit # 1337/2556

Application Approved by - Zoning Official BLK Date 2.20.07 Plans Examiner OK JTH Date 2-15-0

Flood Zone X Development Permit N/A Zoning CI Land Use Plan Map Category Commercia

Comments Plans Require 1st Floor Elevation to be 163.0 ft Elevation Letter Required

☐ NOC ☑ EH ☑ Deed or PA ☐ Site Plan ☒ State Road Info ☐ Parent Parcel # ☐ Development Per

Fax

Name Authorized Person Signing Permit Amanda Wolfe Phone 386 755-8887

Address 2109 W US 90 Ste 170-144 Lake City FL 32055

Owners Name Marvin Slay 386 755 1666 Phone 1588 458

911 Address 679 SW Bascom Norris Drive Lake City FL 32024

Contractors Name Concept Construction Phone 755-8887

Address 2109 W US 90 Ste 170-144 Lake City FL 32055

Fee Simple Owner Name & Address Marvin Slay

Bonding Co. Name & Address N/A

Architect/Engineer Name & Address Michael S Geisler 386-755-9021

Mortgage Lenders Name & Address Campus Credit Union

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

Property ID Number 01-4S-16-02656-000 Estimated Cost of Construction 265,000

Subdivision Name N/A Lot ____ Block ____ Unit ____ Phase ____

Driving Directions From US 90 & 41 Head West - Turn Left on 247 - Turn Left on Bascom Norris - Property is directly behind S&S on 247 & Bascom Norris

Type of Construction Commercial office Number of Existing Dwellings on Property 0

Total Acreage .45 Acre Lot Size ____ Do you need a - Culvert Permit or Culvert Waiver or Have an Existing D

Actual Distance of Structure from Property Lines - Front 56' Side 53' Side 5'-6" Rear 75'

Total Building Height 27'5" Number of Stories 1 1/2 Heated Floor Area 2460 Roof Pitch 8/12

TOTAL 4513 1930 storage 123 Porc

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 o all laws regulating construction in this jurisdiction.

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

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

Owner Builder or Authorized Person by Notarized Letter

Contractor Signature

Contractors License Number CBC 1251118

Competency Card Number

NOTARY STAMP/SEAL

JANET L. CHEEK
MY COMMISSION # DD 226498
EXPIRES: June 25, 2007
Bonded Thru Notary Public Underwriters

STATE OF FLORIDA
COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me

this 11th day of January 2007.

Personally known ✓ or Produced Identification ____

Janet L. Cheek

Notary Signature

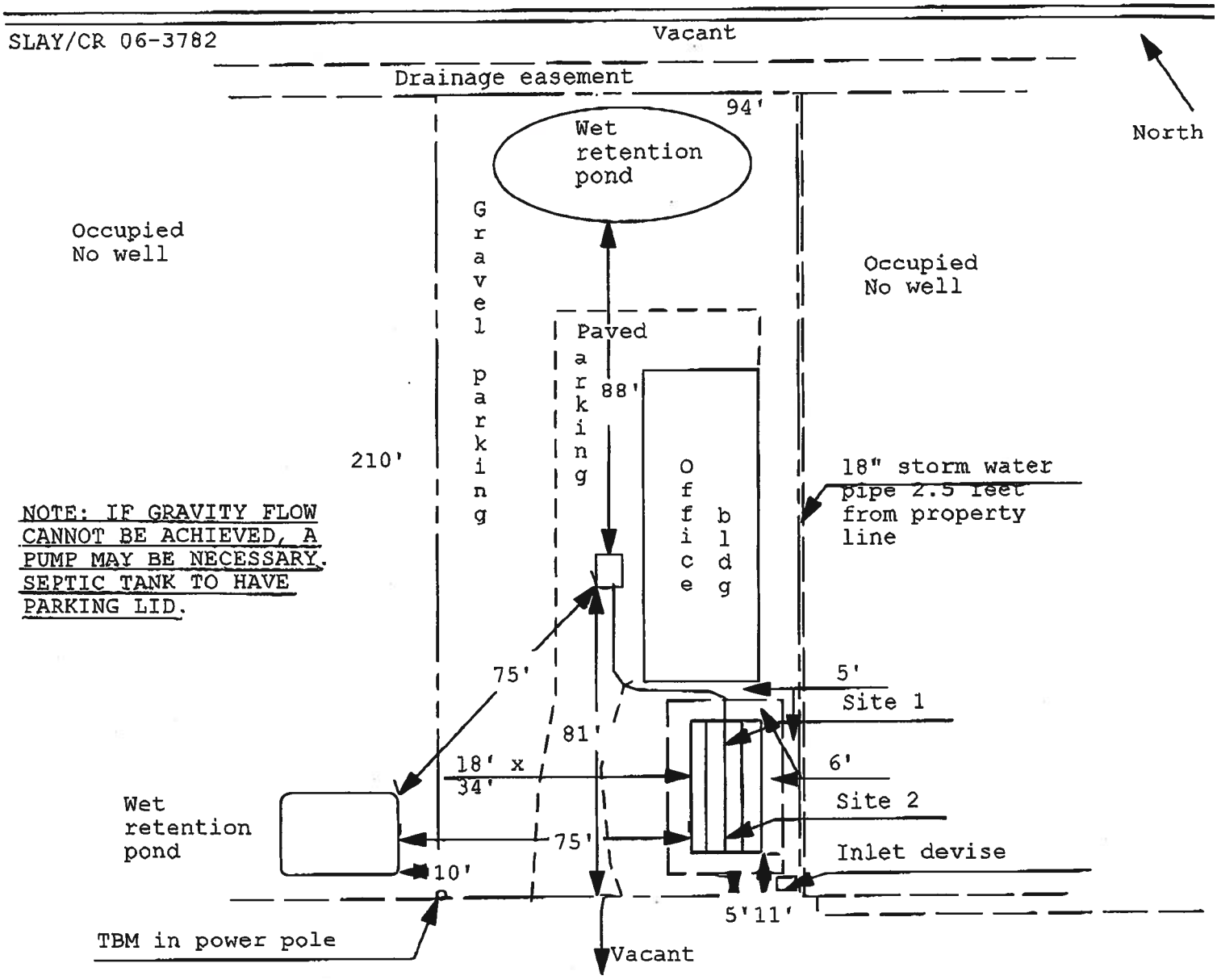
(Revised Sept. 20

JW Left Message 2.23.07

Application for Onsite Sewage Disposal System Construction Permit. Part II Site Plan

Permit Application Number: 06-1027-

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT



1 inch = 40 feet

Site Plan Submitted By Paul Lloyd **Date** 1/26/07

Plan Approved ✓ **Not Approved** ____ **Date** 2/6/07

By Mr Oln Columbia **CPHU**

Notes:

RECEIVED 2-6-07 BP

Permit Number: 25569

Tax Folio Number: **R02656-000**

State of: **Florida**
County of: **Columbia**

File Number: **70112**

Inst:2007005595 Date:03/08/2007 Time:15:53
DC,P.DeWitt Cason,Columbia County B:1113 P:292

NOTICE OF COMMENCEMENT

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

1. Description of Property:
   Section 1, Township 4 South, Range 16 East, Columbia County, Florida, more particularly described as follows:Commencing at the Northwest corner of Southeast 1/4 of Northwest 1/4 of said Section and run South 02°04' East, along the West line of said Southeast 1/4 of Northwest 1/4, 326.6 feet to the Southerly Right-of-Way of State Road 247; thence North 41°30' East, 480 feet; thence South 48°30' East, 304.56 feet for a Point of Beginning; thence North 41°30' East, parallel to said State Road 210 feet; thence North 48°30 West, 94.56 feet; thence South 41°30' West, 210.00 feet; thence South 48°30' East, 94.56 feet to the Point of Beginning.

2. General Description of Improvements: New Construction Office Building

3. Owner Information:
   a. Marvin H. Slay and Mary T. Slay
      1316 N.W. Frontier Drive
      Lake City, Florida, 32025
   b. Interest in property: Fee Simple
   c. Names and address of fee simple title holder (if other than owner):

4. Contractor: Concepts Construction of North Florida, Inc.
   '2109 W. U.S. Hwy. 90 Suite #170-144
   Lake City, Florida. 32055

5. Surety:

6. Lender: Campus USA Credit Union, 2511 N.W. 41st Street, Gainesville, Florida 32606

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

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

9. Expiration date of Notice of Commencement (the expiration date is 1 year from date of recording unless a different date is specified):

Marvin H. Slay

Mary T. Slay

Sworn to and subscribed before me March 8, 2007 by Marvin H. Slay and Mary T. Slay who is personally known to me or who did provide drivers license as identification.

Notary Public CINDY KITCHENS SNIDER
My Commission Expires:

CINDY KITCHENS SNIDER
MY COMMISSION # DD 469079
EXPIRES: December 13, 2009
Bonded Thru Notary Public Underwriters

Allstate First South Insurance
Application # 0701-83

To Whom It May Concern:

I am writing you in reference to the Allstate Office Project. As owner of the building, I recognize that when I decide to complete the upstairs area, vertical accessibility will be necessary if more than 5 occupants are upstairs or if the upstairs area is open to the public. I also understand that if I decide to complete the upstairs area, there will be additional permitting requirements. One of the additional permitting requirements will be additional parking and/or a variance for parking. If additional parking or a variance cannot be obtained, then the use of the upstairs area as office space may not be permitted. Furthermore, I understand that if I decide to sell the building, I will be responsible for passing this information along to the future owner. I have read and understand section 11-4.1.2 and recognize that failure to comply with this section is a direct violation of Florida Statutes and ADAAG requirements.

11-4.1.2 Accessible site and exterior facilities: new construction.
This edition of the code does not apply to buildings, structures, or facilities which were either under construction or under contract for construction on October 1, 1997.

Nothing in this code shall be construed to relieve the owner of any building, structure or facility from the duty to provide vertical accessibility to all levels above and below the occupiable grade level, regardless of whether the code requires an elevator to be installed in such building, structure or facility, except: (1) elevator pits, elevator penthouses, mechanical rooms, piping or equipment catwalks, and automobile lubrication and maintenance pits and platforms; (2) unoccupiable spaces, such as rooms, enclosed spaces, and storage spaces that are not designed for human occupancy, for public accommodations, or for work areas; and (3) occupiable spaces and rooms that are not open to the public and that house no more than five persons including, but not limited to, equipment control rooms and projection booths. However as provided in Section 553.509, Florida Statutes, buildings, structures, and facilities must, at a minimum, comply with the requirements of the ADAAG. Therefore, facilities subject to the ADAAG may be required to provide vertical access to areas otherwise exempt under Section 11-4.1.3 (5) of this code.

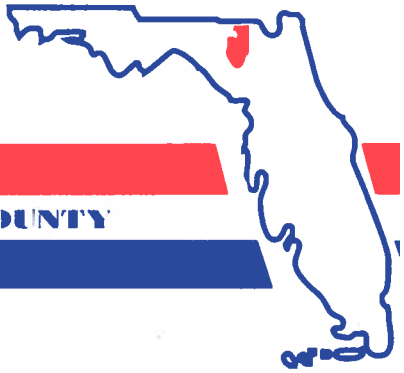
Sincerely,

Marvin Slay

The foregoing instrument was acknowledged before me this 15th day of February, 2007, by Marvin Slay, who are personally known to me and who did not take an oath.

Janet L. Cheek
Notary Public
My Commission Expires: June 25, 2007

JANET L. CHEEK
MY COMMISSION # DD 226496
EXPIRES: June 25, 2007
Bonded Thru Notary Public Underwriters



22 February 2007

TO: File

FROM: Land Development Regulation Administrator

SUBJECT: BP 07-1 (Slay)

Concurrency Assessment Concerning a Building Permit

The following assessment is provided for the purpose of a binding concurrency determination regarding the demand and residual capacities for public facilities required to be addressed within the Concurrency Management System. This assessment serves as a binding concurrency determination, but does not ensure that facilities, which are not owned, operated or permitted by the County will be available to the property at the time development occurs.

BP 07-1, an application by concept construction, as agent for Marvin H. Slay, for building permit approval for a general office use located in a COMMERCIAL INTENSIVE (CI) zoning district in accordance with a site plan and submitted as part of an application dated January 22, 2007 to be located on property described, as follows:

A parcel of land lying with in Section 1, Township 4 South, Range 16 East, Columbia County, Florida. Being more particularly described, as follows: Commence at the Northwest corner of the Southeast 1/4 of the Northwest 1/4 of said Section1; thence South 02°04' East along the West line of said Southeast 1/4 of the Northwest 1/4 of Section 1 a distance of 326.60 feet to the Southerly right-of-way line of State Road 247 (Branford Highway); thence North 41°30' East 480.00 feet; thence South 48°30' East 304.56 feet to the Point of Beginning; thence North 41°30" East 210.00 feet; thence North 48°30' West 94.56 feet; thence South 41°30' West 210.00 feet; thence South 48°30' East 94.56 feet to the Point of Beginning.

Containing 0.46 acre, more or less.

Availability of and Demand on Public Facilities

Potable Water Impact -

The site is not located within a community potable water system service area. Consequently, the uses to be located on the site will be served by an individual wells. The individual water wells are anticipated to meet or exceed the adopted level of service standard for sanitary sewer established within the Comprehensive Plan.

The proposed development will result in the location of 2,943 square feet gross floor area of general office use to be located on the site.

An average general office use is estimated to have 3.39 employees per 1,000 square feet gross floor area.

2.943 (2,943 square feet gross floor area) x 3.39 (employees per 1,000 square feet gross floor area) = 10 employees x 30 (gallons of potable water generated per 1,000 square feet gross floor area) = 300 gallons of potable water generated per day.

Sanitary Sewer Impact -

The site is not located within a community centralized sanitary sewer system service area. Consequently, the uses to be located on the site will be served by an individual septic tanks. The individual septic tanks are anticipated to meet or exceed the adopted level of service standard for sanitary sewer established within the Comprehensive Plan.

The proposed development will result in the location of 2,943 square feet gross floor area of general office use to be located on the site.

An average general office use is estimated to have 3.39 employees per 1,000 square feet gross floor area.

2.943 (2,943 square feet gross floor area) x 3.39 (employees per 1,000 square feet gross floor area) = 10 employees x 23 (gallons of sanitary sewer effluent generated per day) = 230 gallons of sanitary sewer effluent generated per day.

Solid Waste Impact -

Solid waste facilities for the use to be located on the site are provided at the County sanitary landfill, the level of service standard established within the Comprehensive Plan for the provision of solid waste disposal is currently being met or exceeded.

The proposed development will result in the location of 2,943 square feet gross floor area of general office use to be located on the site.

Based upon an average of 5.5 pounds of solid waste generated per 1,000 square feet gross floor area per day:

2.943 (2,943 square feet gross floor area) x 5.5 (pounds of solid waste generated per 1,000 square feet gross floor area per day) = 17 pounds of solid waste generated per day.

Total County average solid waste disposal per day (including municipalities) = 392,500 pounds per day.

Based upon the annual projections of solid waste disposal at the sanitary landfill for 2007, solid waste facilities are anticipated to meet or exceed the adopted level of service standard for solid waste facilities, as provided in the Comprehensive Plan, after adding the solid waste demand generated by the general office use of the site.

Drainage Impact -

Drainage facilities will be required to be maintained on site for the management of stormwater. As stormwater is to be retained on site, the proposed development is not anticipated to adversely impact drainage systems. Therefore, the adopted level of service standard for drainage established within the Comprehensive Plan is anticipated to continue to be met or exceeded.

Recreation Impact -

The level of service standards established within the Comprehensive Plan for the provision of recreation facilities are currently being met or exceeded.

As there will be no additional population generated by the proposed general office use, the proposed development is not anticipated to have an adverse impact on recreational facilities.

Therefore, the level of service standards established within the Comprehensive Plan for the provision of recreation facilities are anticipated to continue to be met or exceeded.

Traffic Impact -

The roadway serving the site is currently meeting or exceeding the level of service standard required for traffic circulation facilities as provided in the Comprehensive Plan.

The proposed development will result in the location of 2,943 square feet gross floor area of general office use to be located on the site.

Summary of Trip Generation Calculations for General Office Use

Based upon 0.46 p.m. peak hour trip per 1,000 square foot gross floor area:

2.943 (2,934 square foot gross floor area) x 0.46 (p.m. peak hour trips) = 2 p.m. peak hour trips.

Existing p.m. peak hour trips = 9,650 annual average daily traffic trips per day (2005 Annual Average Daily Traffic Count Station Data, Florida Department of Transportation). x .096 (k factor) = 927 peak hour p.m. trips per day.

The following table contains information concerning the assessment of the traffic level of service on the surrounding road network by the proposed development.

Level of Service Section	Existing P.M. Peak Hour Trips	Existing Level of Service	Reserved Capacity P.M. Peak Hour Trips Previously Approved	Development P.M. Peak Hour Trips	P.M. Peak Hour Trips With Development	Level of Service With Development
Section 39 S.R. 247 (from C.R. 242 to Lake City Urban Area boundary)	927[a]	C	229	2	1,159	C

a 2005 Annual Average Daily Traffic Count Station Data, Florida Department of Transportation.

Sources: Trip Generation. Institute of Transportation Engineers, 7th Edition, 2003.

Quality/Level of Service Handbook. Florida Department of Transportation, February 2002.

Based upon the above analysis and the adopted level of service standard of "D" with a capacity of 1,565 p.m. peak hour trips for Section 39, the roadway serving the site is anticipated to continue to meet or exceed the level of service standard required for traffic circulation facilities as provided in the Comprehensive Plan after adding the projected number of trips associated with the proposed development.

Surrounding Land Uses

The site is currently vacant. The site is bound on the north by vacant land, on the east by commercial, on the south by commercial and on the west by commercial land uses.

Historic Resources

According to Illustration A-II of the Comprehensive Plan, entitled Historic Resources, which is based upon the Florida Division of Historical Resources, Master Site File, dated 1989 and 1996, there are no known historic resources located on the site.

Flood Prone Areas

According to Illustration A-V of the Comprehensive Plan, entitled General Flood Map, which is based upon the Flood Insurance Rate Map, prepared by the Federal Emergency Management Agency, dated January 6, 1988, the site is not located within flood zone area.

Wetlands

According to Illustration A-VI of the Comprehensive Plan, entitled Wetland Areas, which is based upon the National Wetlands Reconnaissance Survey, dated 1981, and the National Wetlands Inventory, dated 1987, there are no wetlands located on the site.

Minerals

According to Illustration A-VII of the Comprehensive Plan, entitled Minerals, which is based upon Natural Resources, prepared by the North Central Florida Regional Planning Council, 1977, the site is within an area known to contain phosphate deposits.

Soil Types

According to Illustration A-VIII of the Comprehensive Plan, entitled General Soil Map, which is based upon the U.S. Department of Agriculture, Soil Conservation Service, Soil Survey dated October 1984, the Mascotte fine sand soils.

Mascotte fine sand soils are poorly drained, nearly level soils around wet depressions on uplands and throughout the flatwoods. The surface and subsurface layers are comprised of fine sand to a depth of 15 inches. The subsoil layer is comprised of fine sand, fine sandy loam and loamy sand to a depth of 80 inches or more.

Mascotte fine sand soils have severe limitations for building site development and for septic tank absorption fields.

Stream to Sink

According to the Stream to Sink Watersheds, prepared by the Suwannee River Water Management District, dated October 7, 1997, the site is not located within a stream to sink area.

High Aquifer Groundwater Recharge

According to the Areas of High Recharge Potential to the Floridan Aquifer, prepared by the Suwannee River Water Management District, dated July 17, 2001, the site is located within an area of high aquifer groundwater recharge.

Vegetative Communities/Wildlife

According to Illustration V-I of the Data and Analysis Report, entitled Vegetative Communities, the site is located within a non-vegetative community. There are no known wildlife habitats associated with a non-vegetative community.

RLE 15.00
doc 595.00
①

THIS INSTRUMENT PREPARED BY:

MARLIN M. FEAGLE, ESQUIRE
MARLIN M. FEAGLE, P.A.
101 East Madison Street
Post Office Box 1883
Lake City, Florida 32056-1883

Florida Bar No. 0173249

Inst:200101627#1 Date:10/02/2001 Time:09:21:00
Doc Stamp-Deed : 595.00
GD DC,P.DeWitt Cason,Columbia County B:936 P:1198

WARRANTY DEED

THIS INDENTURE, made this 27th day of September, 2001, between **DAVID R. STAMPER, SR.** and his wife, **LINDA G. STAMPER**, parties of the first part, Grantor, and **MARVIN H. SLAY** and his wife, **MARY T. SLAY**, whose mailing address is 1587 West Baya Avenue, Lake City, Florida 32025, parties of the second part, Grantee,

W I T N E S S E T H:

That said grantor, for and in consideration of the sum of **TEN AND NO/100 ($10.00) DOLLARS**, and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said grantee, and grantee's heirs, successors and assigns forever, the following described land, situate, lying and being in Columbia County, Florida, to-wit:

TOWNSHIP 4 SOUTH, RANGE 16 EAST

Section 1: Commencing at the NW corner of SE 1/4 of NW 1/4 of said Section and run S 2°4' E, along the West line of said SE 1/4 of NW 1/4 326.6 feet to the Southerly right-of-way of State Road 247; thence N 41°30' E of 480.00 feet; thence S 48°30' E 304.56 feet for a POINT OF BEGINNING; thence N 41°30' E parallel to said State Road 210 feet;

Inst:200101029#1 Date:10/03/2001 Time:09:21:00
Doc Stamp-Deed : 595.00
AD DC,P.DeWitt Cason,Columbia County B:936 P:1199

thence N 48°30' W 94.56 feet; thence S 41°30' W 210.00 feet; thence S 48°30' E 94.56 feet to the POINT OF BEGINNING.

SUBJECT TO the following:

1. Mortgage in favor of Stephen A. Smith and his wife, Georgia H. Smith dated April 10, 2000 and recorded in rob 900, Page 1593, public records, Columbia County, Florida, which Grantor will timely pay and hold Grantee harmless therefrom.

2. Ad valorem taxes and non-ad valorem assessments subsequent to December 31, 2000.

3. Reservations, restrictions and easements of record, if any.

Tax Parcel No.: 01-4S-16-02656-000

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

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

Signed, sealed and delivered
in the presence of:

Witness
DIANE S. EDENFIELD
Print or type name

Witness
Betsy Rattle
Print or type name

(SEAL)
DAVID R. STAMPER, SR.
515 North Marion Street
Lake City, Florida 32055

(SEAL)
LINDA G. STAMPER
515 North Marion Street
Lake City, Florida 32055

Inst:200101402%1 Date:10/03/2001 Time:09:21:00
Doc Stamp-Deed : 595.00
BD DC,P.DeWitt Cason,Columbia County B:936 P:1200

STATE OF FLORIDA
COUNTY OF COLUMBIA

I HEREBY CERTIFY that on this day before me, an officer duly qualified to take acknowledgments, personally appeared **DAVID R. STAMPER, SR.** and his wife, **LINDA G. STAMPER**, who are personally known to me.

WITNESS my hand and official seal in the County and State last aforesaid this 27th day of Sept., 2001.

Diane S. Edenfield
MY COMMISSION # CC734149 EXPIRES
May 24, 2002
(NOTARIAL SEAL)

Diane S. Edenfield
NOTARY PUBLIC
MY COMMISSION EXPIRES:

COMPLIANCE CERTIFICATION:

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

PREPARED BY: WILL MYERS DESIGN

DATE: _____

I hereby certify that this building is in compliance with the Florida Energy Efficiency Code.

OWNER AGENT: _____

DATE: _____

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

BUILDING OFFICIAL: _____

DATE: _____

If required by Florida law, I hereby certify (*) that the system design is in compliance with the Florida Energy Code.

		REGISTRATION No.
ARCHITECT :	**NICHOLAS PAUL GEISLER**	AR27005
ELECTRICAL SYSTEM DESIGNER		
LIGHTING SYSTEM DESIGNER:		
MECHANICAL SYSTEM DESIGNER:		
PLUMBING SYSTEM DESIGNER:		

(*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

COMPLIANCE CERTIFICATION:

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

PREPARED BY: WILL MYERS DESIGN

DATE: _____

I hereby certify that this building is in compliance with the Florida Energy Efficiency Code.

OWNER AGENT: _____

DATE: _____

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

BUILDING OFFICIAL: _____

DATE: _____

If required by Florida law, I hereby certify (*) that the system design is in compliance with the Florida Energy Code.

		REGISTRATION No.
ARCHITECT :	**NICHOLAS PAUL GEISLER**	AR2005
ELECTRICAL SYSTEM DESIGNER		
LIGHTING SYSTEM DESIGNER:		
MECHANICAL SYSTEM DESIGNER:		
PLUMBING SYSTEM DESIGNER:		

(*) Signature is required where Florida Law requires design to be performed by registered design professionals.
Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Florida Energy Efficiency Code For Building Construction
Florida Department of Community Affairs

EnergyGauge FlaCom v 2.11 FORM 400A-2004
Whole Building Performance Method for Commercial Buildings

Jurisdiction: LAKE CITY, COLUMBIA COUNTY, FL (221200)

Short Desc: New Prj
Owner: BUDDY SLAY
Address: -
-
City: LAKE CITY
State: FL
Zip: 32055

Type: Office
Class: New Finished building

Project: ALLSTATE INSURANCE

PermitNo: 0
Storeys: 1

***Conditioned Area:** 3976
***Cond + UnCond Area:** 3976

* denotes lighted area. Does not include wall crosection areas

Max Tonnage: 4.7 (if different, write in)

Compliance Summary

Component	Design	Criteria	Result
Gross Energy Use	2,523.40	3,352.54	**PASSES**
LIGHTING CONTROLS			**PASSES**
EXTERNAL LIGHTING			**PASSES**
HVAC SYSTEM			**PASSES**
PLANT			**None Entered**
WATER HEATING SYSTEMS			**PASSES**
PIPING SYSTEMS			**PASSES**
Met all required compliance from Check List?			**Yes/No/NA**

IMPORTANT NOTE: An input report Print-Out from EnergyGauge Com of this design building must be submitted along with this Compliance Report.

COMPLIANCE CERTIFICATION:

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

PREPARED BY: WILL MYERS DESIGN

DATE: _____

I hereby certify that this building is in compliance with the Florida Energy Efficiency Code.

OWNER AGENT: _____

DATE: _____

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

BUILDING OFFICIAL: _____

DATE: _____

If required by Florida law, I hereby certify (*) that the system design is in compliance with the Florida Energy Code.

	REGISTRATION No.
ARCHITECT :	**NICHOLAS PAUL GEISLER**
ELECTRICAL SYSTEM DESIGNER	
LIGHTING SYSTEM DESIGNER:	
MECHANICAL SYSTEM DESIGNER:	
PLUMBING SYSTEM DESIGNER:	

(*) Signature is required where Florida Law requires design to be performed by registered design professionals.
Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

Whole Building Compliance

	Design	Reference
Total	*76.28*	*100.00*
	$2,523.40	*$3,352.54*
ELECTRICITY(MBtu/kWh/$)	76.28 50,167.00 *$2,523.40*	100.00 65,736.00 *$3,352.54*
AREA LIGHTS	12.66 8,330.00 *$419.00*	20.37 13,395.00 *$683.14*
MISC EQUIPMT	13.29 8,738.00 *$439.52*	13.29 8,738.00 *$445.64*
PUMPS & MISC	0.09 59.00 *$2.97*	0.09 59.00 *$3.01*
SPACE COOL	16.14 10,614.00 *$533.88*	27.86 18,313.00 *$933.96*
VENT FANS	34.11 22,426.00 *$1,128.03*	38.39 25,231.00 *$1,286.78*

Credits & Penalties (if any): Modified Points: = 76.29 | **PASSES**

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

External Lighting Compliance

Description	Category	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)
Ext Light 1	Building Entrance with (or free standing) Canopy	3.00	102.0	306	100
Ext Light 2	Building exit	20.00	6.0	120	60

Design: 220 (W)
Allowance: 426 (W)

PASSES

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	No. of Tasks	Design CP	Min CP	Compliance
Pr0Zo1Sp1	17	Office - Enclosed	2,460	1	19	1	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	1,148	1	2	1	PASSES
Pr0Zo2Sp2	16	Office - Open Plan	46	1	8	8	PASSES

PASSES

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

System Report Compliance

Pr0Sy1 **System 1** **Constant Volume Air Cooled Split System < 65000 Btu/hr** **No. of Units 2**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Cooled < 65000 Btu/h Cooling Capacity		13.00	10.00	8.00		PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume		0.80	0.90			PASSES

PASSES

Plant Compliance

Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance

None

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Electric water heater	<= 12 [kW]	0.91	0.86			PASSES

PASSES

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

Piping System Compliance

Category	Pipe Dia [inches]	Is Runout?	Operating Temp [F]	Ins Cond [Btu-in/hr .SF.F]	Ins Thick [in]	Req Ins Thick [in]	Compliance
Domestic and Service Hot Water Systems	0.75	False	125.00	0.28	0.60	0.50	PASSES

PASSES

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
Infiltration	406.1	Infiltration Criteria have been met	☐
System	407.1	HVAC Load sizing has been performed	☐
Ventilation	409.1	Ventilation criteria have been met	☐
ADS	410.1	Duct sizing and Design have been performed	☐
T & B	410.1	Testing and Balancing will be performed	☐
Motors	414.1	Motor efficiency criteria have been met	☐
Lighting	415.1	Lighting criteria have been met	☐
O & M	102.1	Operation/maintenance manual will be provided to owner	☐
Roof/Ceil	404.1	R-19 for Roof Deck with supply plenums beneath it	☐
Report	101	Input Report Print-Out from EnergyGauge FlaCom attached?	☐

EnergyGauge FlaCom v 2.11

INPUT DATA REPORT

Project Information

Project Name: New Prj
Project Title: ALLSTATE INSURANCE
Address: -
-
State: FL
Zip: 32055
Owner: BUDDY SLAY

Orientation: North
Building Type: Office
Building Classification: New Finished building
No.of Storeys: 1
GrossArea: 3976

Zones

No	Acronym	Description	Type	Area [sf]	Multiplier	Total Area [sf]	
1	Pr0Zo1	Zone 1	CONDITIONED	2460.0	1	2460.0	☐
2	Pr0Zo2	Zone 2	CONDITIONED	1516.2	1	1516.2	☐

Spaces

No	Acronym	Description	Type	Depth [ft]	Width [ft]	Height [ft]	Multi plier	Total Area [sf]	Total Volume [cf]	
In Zone:	**Pr0Zo1**									
1	Pr0Zo1Sp1	Zo0Sp1	Office - Enclosed	30.00	82.00	10.00	1	2460.0	24600.0	☐
In Zone:	**Pr0Zo2**									
1	Pr0Zo2Sp1	Zo2Sp1	Office - Open Plan	14.00	82.00	8.00	1	1148.0	9184.0	☐
2	Pr0Zo2Sp2	Zo2Sp2	Office - Open Plan	7.67	6.00	8.00	8	368.2	2945.3	☐

Lighting

No	Type	Category	No. of Luminaires	Watts per Luminaire	Power [W]	Control Type	No.of Ctrl pts	
In Zone:	**Pr0Zo1**							
In Space:	**Pr0Zo1Sp1**							
1	Compact Fluorescent	General Lighting	19	80	1520	Manual On/Off	14	☐
2	Incandescent	General Lighting	4	100	400	Manual On/Off	5	☐
In Zone:	**Pr0Zo2**							
In Space:	**Pr0Zo2Sp1**							
1	Compact Fluorescent	General Lighting	3	160	480	Manual On/Off	2	☐
In Space:	**Pr0Zo2Sp2**							
1	Incandescent	General Lighting	1	40	40	Manual On/Off	1	☐

Walls

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Direction	Conductance [Btu/hr. sf. F]	Heat Capacity [Btu/sf.F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]
In Zone:	**Pr0Zo1**										

1	Pr0Zo1Wa1	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	82.00	10.00	1	820.0	North	0.1043	8.9821	67.36	9.59	☐
2	Pr0Zo1Wa2	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	30.00	10.00	1	300.0	East	0.1043	8.9821	67.36	9.59	☐
3	Pr0Zo1Wa3	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	82.00	10.00	1	820.0	South	0.1043	8.9821	67.36	9.59	☐
4	Pr0Zo1Wa4	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	30.00	10.00	1	300.0	West	0.1043	8.9821	67.36	9.59	☐
In Zone:	**Pr0Zo2**											
1	Pr0Zo2Wa1	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	14.00	8.00	1	112.0	East	0.1043	8.9821	67.36	9.59	☐
2	Pr0Zo2Wa2	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	14.00	8.00	1	112.0	West	0.1043	8.9821	67.36	9.59	☐
3	Pr0Zo2Wa3	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	6.00	8.00	4	48.0	North	0.1118	1.1829	14.94	8.94	☐
4	Pr0Zo2Wa4	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	17.67	4.00	1	70.7	North	0.1118	1.1829	14.94	8.94	☐
5	Pr0Zo2Wa5	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	12.83	2.09	2	26.8	North	0.1118	1.1829	14.94	8.94	☐
6	Pr0Zo2Wa6	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	12.83	2.09	4	26.8	South	0.1118	1.1829	14.94	8.94	☐
7	Pr0Zo2Wa8	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	6.00	8.00	3	48.0	South	0.1118	1.1829	14.94	8.94	☐
8	Pr0Zo2Wa9	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	6.00	8.00	1	48.0	South	0.1043	8.9821	67.36	9.59	☐

Windows

	No	Description	Type	Shaded	U [Btu/hr sf F]	SHG	Vis.Tr	W [ft]	H (Effec) [ft]	Multi plier	Total Area [sf]	
In Zone: Pr0Zo1												
In Wall: Pr0Zo1Wa1												
	1	Pr0Zo1Wa1Wi1	User Defined	No	0.6000	0.42	0.39	4.00	5.00	6	120.0	☐
In Wall: Pr0Zo1Wa2												
	1	Pr0Zo1Wa2Wi1	User Defined	No	0.6000	0.42	0.39	4.00	5.00	2	40.0	☐
In Wall: Pr0Zo1Wa3												
	1	Pr0Zo1Wa3Wi1	User Defined	No	0.6000	0.42	0.39	4.00	5.00	5	100.0	☐
	2	Pr0Zo1Wa3Wi2	User Defined	No	0.6000	0.42	0.39	3.00	3.00	1	9.0	☐
In Wall: Pr0Zo1Wa4												
	1	Pr0Zo1Wa4Wi1	User Defined	No	0.6000	0.42	0.39	4.00	5.00	2	40.0	☐
In Zone: Pr0Zo2												
In Wall: Pr0Zo2Wa1												
	1	Pr0Zo2Wa1Wi1	User Defined	No	0.6000	0.42	0.39	4.00	5.00	1	20.0	☐
In Wall: Pr0Zo2Wa2												
	1	Pr0Zo2Wa2Wi1	User Defined	No	0.6000	0.42	0.39	4.00	5.00	1	20.0	☐
In Wall: Pr0Zo2Wa3												
	1	Pr0Zo2Wa3Wi1	User Defined	No	0.6000	0.42	0.39	4.00	5.00	1	20.0	☐
In Wall: Pr0Zo2Wa8												
	1	Pr0Zo2Wa8Wi1	User Defined	No	0.6000	0.42	0.39	4.00	5.00	1	20.0	☐

Doors

	No	Description	Type	Shaded?	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Cond. [Btu/hr. sf. F]	Dens. [lb/cf]	Heat Cap. [Btu/sf. F]	R-Value [h.sf.F/Btu]	
In Zone: Pr0Zo1													
In Wall: Pr0Zo1Wa1													
	1	Pr0Zo1Wa1Dr1	Hollow core flush	No	3.00	6.67	4	20.0	0.7553	0.00	0.00	1.32	☐
In Wall: Pr0Zo1Wa3													
	1	Pr0Zo1Wa3Dr1	Hollow core flush	No	3.00	6.67	2	20.0	0.7553	0.00	0.00	1.32	☐
In Zone: Pr0Zo2													
In Wall: Pr0Zo2Wa9													
	1	Pr0Zo2Wa9Dr1	Hollow core flush	No	3.00	6.67	1	20.0	0.7553	0.00	0.00	1.32	☐

Roofs

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Tilt [deg]	Cond. [Btu/hr. Sf. F]	Heat Cap [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]	
In Zone: Pr0Zo2												
1	Pr0Zo2Rf1	Shngl/1/2"WD Deck/WD Truss/6"Batt/Gyp Brd	82.00	17.33	1	1421.1	34.00	0.0471	1.40	10.89	21.24	☐
2	Pr0Zo2Rf2	Shngl/1/2"WD Deck/WD Truss/6"Batt/Gyp Brd	82.00	17.33	1	1421.1	34.00	0.0471	1.40	10.89	21.24	☐

Skylights

No	Description	Type	U [Btu/hr sf F]	SHGC	Vis.Trans	W [ft]	H (Effec) [ft]	Multiplier	Area [Sf]	Total Area [Sf]	
In Zone:											
In Roof:											☐

Floors

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Cond. [Btu/hr. sf. F]	Heat Cap. [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]	
In Zone: Pr0Zo1											
1	Pr0Zo1Fl1	Concrete floor, carpet and rubber pad	82.00	30.00	1	2460.0	0.5987	9.33	140.00	1.67	☐
In Zone: Pr0Zo2											
1	Pr0Zo2Fl1	Concrete floor, carpet and rubber pad	82.00	30.00	1	2460.0	0.5987	9.33	140.00	1.67	☐

Systems

Pr0Sy1	**System 1**	**Constant Volume Air Cooled Split System < 65000 Btu/hr**		**No. Of Units 2**

Component	Category	Capacity	Efficiency	IPLV	
1	Cooling System (Air Cooled < 65000 Btu/h Cooling Capacity)	56500.00	13.00	8.00	☐
2	Air Handling System -Supply (Air Handler (Supply) - Constant Volume)	1600.00	0.80		☐

Plant

Equipment	Category	Size	Inst.No	Eff.	IPLV	
						☐

Water Heaters

	W-Heater Description	Capacit	Cap.Unit	I/P Rt.		Efficienc		Loss		
1	Electric water heater	50	[Gal]	5	[kW]	0.9100	[Ef]		[Btu/h]	☐

Ext-Lighting

	Description	Category	No. of Luminaires	Watts per Luminaire	Area/Len/No. of units [sf/ft/No]	Control Type	Wattage [W]	
1	Ext Light 1	Building Entrance with (or free standing) Canopy	1	100	102.00	Photo Sensor control	100.00	☐
2	Ext Light 2	Building exit	2	60	6.00	Photo Sensor control	120.00	☐

Piping

No	Type	Operating Temperature [F]	Insulation Conductivity [Btu-in/h.sf.F]	Nomonal pipe Diameter [in]	Insulation Thickness [in]	Is Runout?	
1	Domestic and Service Hot Water Systems	125.00	0.28	0.75	0.60	No	☐

Fenestration Used

Name	Glass Type	No. of Panes	Glass Conductance [Btu/h.sf.F]	SHGC	VLT	
ASHULDblTntWd-Vy-Fg frm	User Defined	2	0.6000	0.4200	0.3900	☐

Materials Used

Mat No	Acronym	Description	Only R-Value Used	RValue [h.sf.F/Btu]	Thickness [ft]	Conductivity [Btu/h.ft.F]	Density [lb/cf]	SpecificHeat [Btu/lb.F]	
187	Matl187	GYP OR PLAS BOARD,1/2IN	No	0.4533	0.0417	0.0920	50.00	0.2000	☐
151	Matl151	CONC HW, DRD, 140LB, 4IN	No	0.4403	0.3333	0.7570	140.00	0.2000	☐
178	Matl178	CARPET W/RUBBER PAD	Yes	1.2300					☐
267	Matl267	0.75" stucco	No	0.1563	0.0625	0.4000	16.00	0.2000	☐
266	Matl266	2x4@16" oc + R11 Batt	No	8.3343	0.2917	0.0350	9.70	0.2000	☐
86	Matl86	BRICK, COMMON, 4IN	No	0.8012	0.3333	0.4160	120.00	0.2000	☐
23	Matl23	6 in. Insulation	No	20.0000	0.5000	0.0250	5.70	0.2000	☐
81	Matl81	ASPHALT-ROOFING, ROLL	Yes	0.1500					☐
244	Matl244	PLYWOOD, 1/2IN	No	0.6318	0.0417	0.0660	34.00	0.2900	☐

Constructs Used

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]
1004	Concrete floor, carpet and rubber pad	No	No	0.60	9.33	140.00	1.6703

Layer	Material No.	Material	Thickness [ft]	Framing Factor
1	151	CONC HW, DRD, 140LB, 4IN	0.3333	0.00
2	178	CARPET W/RUBBER PAD		0.00

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]
1009	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp	No	No	0.11	1.18	14.94	8.9438

Layer	Material No.	Material	Thickness [ft]	Framing Factor
1	267	0.75" stucco	0.0625	0.00
2	266	2x4@16" oc + R11 Batt	0.2917	0.00
3	187	GYP OR PLAS BOARD,1/2IN	0.0417	0.00

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]
1012	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	No	No	0.10	8.98	67.36	9.5887

Layer	Material No.	Material	Thickness [ft]	Framing Factor
1	86	BRICK, COMMON, 4IN	0.3333	0.00
2	266	2x4@16" oc + R11 Batt	0.2917	0.00
3	187	GYP OR PLAS BOARD,1/2IN	0.0417	0.00

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1025	Hollow core flush	No	Yes	0.76			1.3239	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	276	Hollow core flush (1.75")		0.00	☐

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1039	Shngl/1/2"WD Deck/WD Truss/6"Batt/Gyp Brd	No	No	0.05	1.40	10.89	21.2351	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	81	ASPHALT-ROOFING, ROLL		0.00	☐
2	244	PLYWOOD, 1/2IN	0.0417	0.00	☐
3	23	6 in. Insulation	0.5000	0.00	☐
4	187	GYP OR PLAS BOARD,1/2IN	0.0417	0.00	☐

COMPLIANCE CERTIFICATION:

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

PREPARED BY: WILL MYERS DESIGN

DATE: _____

I hereby certify that this building is in compliance with the Florida Energy Efficiency Code.

OWNER AGENT: _____

DATE: _____

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

BUILDING OFFICIAL: _____

DATE: _____

If required by Florida law, I hereby certify (*) that the system design is in compliance with the Florida Energy Code.

		REGISTRATION No.
ARCHITECT :	**NICHOLAS PAUL GEISLER**	AR7005
ELECTRICAL SYSTEM DESIGNER		
LIGHTING SYSTEM DESIGNER:		
MECHANICAL SYSTEM DESIGNER:		
PLUMBING SYSTEM DESIGNER:		

(*) Signature is required where Florida Law requires design to be performed by registered design professionals.
Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Florida Energy Efficiency Code For Building Construction
Florida Department of Community Affairs

EnergyGauge FlaCom v 2.11 FORM 400A-2004
Whole Building Performance Method for Commercial Buildings

Jurisdiction: LAKE CITY, COLUMBIA COUNTY, FL (221200)

Short Desc: New Prj
Owner: BUDDY SLAY
Address: -
-
City: LAKE CITY
State: FL
Zip: 32055

Project: ALLSTATE INSURANCE

PermitNo: 0
Storeys: 1

Type: Office
Class: New Finished building

***Conditioned Area:** 2460
***Cond + UnCond Area:** 2460

* denotes lighted area. Does not include wall crosection areas

Max Tonnage: 4.7 (if different, write in)

Compliance Summary

Component	Design	Criteria	Result
Gross Energy Use	2,088.81	2,679.34	**PASSES**
LIGHTING CONTROLS			**PASSES**
EXTERNAL LIGHTING			**PASSES**
HVAC SYSTEM			**PASSES**
PLANT			**None Entered**
WATER HEATING SYSTEMS			**PASSES**
PIPING SYSTEMS			**PASSES**
Met all required compliance from Check List?			**Yes/No/NA**

IMPORTANT NOTE: An input report Print-Out from EnergyGauge Com of this design building must be submitted along with this Compliance Report.

COMPLIANCE CERTIFICATION:

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

PREPARED BY: WILL MYERS DESIGN

DATE: _____

I hereby certify that this building is in compliance with the Florida Energy Efficiency Code.

OWNER AGENT: _____

DATE: _____

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

BUILDING OFFICIAL: _____

DATE: _____

If required by Florida law, I hereby certify (*) that the system design is in compliance with the Florida Energy Code.

		REGISTRATION No.
ARCHITECT :	**NICHOLAS PAUL GEISLER**	AR7005
ELECTRICAL SYSTEM DESIGNER		
LIGHTING SYSTEM DESIGNER:		
MECHANICAL SYSTEM DESIGNER:		
PLUMBING SYSTEM DESIGNER:		

(*) Signature is required where Florida Law requires design to be performed by registered design professionals.
Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

Whole Building Compliance

	Design	Reference
Total	*79.21*	*100.00*
	$2,088.81	*$2,679.34*
ELECTRICITY(MBtu/kWh/$)	79.21 41,860.00 *$2,088.81*	100.00 52,847.00 *$2,679.34*
AREA LIGHTS	11.14 5,880.00 *$293.41*	15.69 8,287.00 *$420.15*
MISC EQUIPMT	10.25 5,407.00 *$269.81*	10.25 5,407.00 *$274.13*
PUMPS & MISC	0.11 59.00 *$2.94*	0.11 59.00 *$2.99*
SPACE COOL	15.30 8,088.00 *$403.59*	26.22 13,863.00 *$702.85*
VENT FANS	42.41 22,426.00 *$1,119.06*	47.73 25,231.00 *$1,279.21*

Credits & Penalties (if any): Modified Points: = 79.22 | **PASSES**

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

External Lighting Compliance

Description	Category	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)
Ext Light 1	Building Entrance with (or free standing) Canopy	3.00	102.0	306	100
Ext Light 2	Building exit	20.00	6.0	120	60

Design: 220 (W)
Allowance: 426 (W)

PASSES

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	No. of Tasks	Design CP	Min CP	Compliance
Pr0Zo1Sp1	17	Office - Enclosed	2,460	1	19	1	PASSES

PASSES

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

System Report Compliance

Pr0Sy1 **System 1** **Constant Volume Air Cooled Split System < 65000 Btu/hr** **No. of Units 2**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Cooled < 65000 Btu/h Cooling Capacity		13.00	10.00	8.00		PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume		0.80	0.90			PASSES

PASSES

Plant Compliance

Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance

None

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Electric water heater	<= 12 [kW]	0.91	0.86			PASSES

PASSES

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

Piping System Compliance

Category	Pipe Dia [inches]	Is Runout?	Operating Temp [F]	Ins Cond [Btu-in/hr .SF.F]	Ins Thick [in]	Req Ins Thick [in]	Compliance
Domestic and Service Hot Water Systems	0.75	False	125.00	0.28	0.60	0.50	PASSES

PASSES

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
Infiltration	406.1	Infiltration Criteria have been met	☐
System	407.1	HVAC Load sizing has been performed	☐
Ventilation	409.1	Ventilation criteria have been met	☐
ADS	410.1	Duct sizing and Design have been performed	☐
T & B	410.1	Testing and Balancing will be performed	☐
Motors	414.1	Motor efficiency criteria have been met	☐
Lighting	415.1	Lighting criteria have been met	☐
O & M	102.1	Operation/maintenance manual will be provided to owner	☐
Roof/Ceil	404.1	R-19 for Roof Deck with supply plenums beneath it	☐
Report	101	Input Report Print-Out from EnergyGauge FlaCom attached?	☐

EnergyGauge FlaCom v 2.11

INPUT DATA REPORT

Project Information

Project Name: New Prj
Project Title: ALLSTATE INSURANCE
Address: -
-
State: FL
Zip: 32055
Owner: BUDDY SLAY

Orientation: North
Building Type: Office
Building Classification: New Finished building
No.of Storeys: 1
GrossArea: 2460

Zones

No	Acronym	Description	Type	Area [sf]	Multiplier	Total Area [sf]	
1	Pr0Zo1	Zone 1	CONDITIONED	2460.0	1	2460.0	☐

Spaces

No	Acronym	Description	Type	Depth [ft]	Width [ft]	Height [ft]	Multi plier	Total Area [sf]	Total Volume [cf]

In Zone: Pr0Zo1										
1	Pr0Zo1Sp1	Zo0Sp1	Office - Enclosed	30.00	82.00	10.00	1	2460.0	24600.0	☐

Lighting

No	Type	Category	No. of Luminaires	Watts per Luminaire	Power [W]	Control Type	No.of Ctrl pts	
In Zone: Pr0Zo1								
In Space: Pr0Zo1Sp1								
1	Compact Fluorescent	General Lighting	19	80	1520	Manual On/Off	14	☐
2	Incandescent	General Lighting	4	100	400	Manual On/Off	5	☐

Walls

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Direction	Conductance [Btu/hr. sf. F]	Heat Capacity [Btu/sf.F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]	
In Zone: Pr0Zo1												
1	Pr0Zo1Wa1	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	82.00	10.00	1	820.0	North	0.1043	8.9821	67.36	9.59	☐
2	Pr0Zo1Wa2	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	30.00	10.00	1	300.0	East	0.1043	8.9821	67.36	9.59	☐
3	Pr0Zo1Wa3	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	82.00	10.00	1	820.0	South	0.1043	8.9821	67.36	9.59	☐
4	Pr0Zo1Wa4	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	30.00	10.00	1	300.0	West	0.1043	8.9821	67.36	9.59	☐

Windows

	No	Description	Type	Shaded	U [Btu/hr sf F]	SHG	Vis.Tr	W [ft]	H (Effec) [ft]	Multi plier	Total Area [sf]	
In Zone: Pr0Zo1												
In Wall: Pr0Zo1Wa1												
	1	Pr0Zo1Wa1Wi1	User Defined	No	0.6000	0.42	0.39	4.00	5.00	6	120.0	☐
In Wall: Pr0Zo1Wa2												
	1	Pr0Zo1Wa2Wi1	User Defined	No	0.6000	0.42	0.39	4.00	5.00	2	40.0	☐
In Wall: Pr0Zo1Wa3												
	1	Pr0Zo1Wa3Wi1	User Defined	No	0.6000	0.42	0.39	4.00	5.00	5	100.0	☐
	2	Pr0Zo1Wa3Wi2	User Defined	No	0.6000	0.42	0.39	3.00	3.00	1	9.0	☐
In Wall: Pr0Zo1Wa4												
	1	Pr0Zo1Wa4Wi1	User Defined	No	0.6000	0.42	0.39	4.00	5.00	2	40.0	☐

Doors

	No	Description	Type	Shaded?	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Cond. [Btu/hr. sf. F]	Dens. [lb/cf]	Heat Cap. [Btu/sf. F]	R-Value [h.sf.F/Btu]	
In Zone: Pr0Zo1													
In Wall: Pr0Zo1Wa1													
	1	Pr0Zo1Wa1Dr1	Hollow core flush	No	3.00	6.67	4	20.0	0.7553	0.00	0.00	1.32	☐
In Wall: Pr0Zo1Wa3													
	1	Pr0Zo1Wa3Dr1	Hollow core flush	No	3.00	6.67	2	20.0	0.7553	0.00	0.00	1.32	☐

Roofs

	No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Tilt [deg]	Cond. [Btu/hr. Sf. F]	Heat Cap [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]	
In Zone: Pr0Zo1													
	1	Pr0Zo1Rf1	Shngl/1/2"WD Deck/WD Truss/6"Batt/Gyp Brd	82.00	17.33	1	1421.1	33.70	0.0471	1.40	10.89	21.24	☐

2	Pr0Zo1Rf2	Shngl/1/2"WD Deck/WD Truss/6"Batt/Gyp Brd	82.00	17.33	1	1421.1	33.70	0.0471	1.40	10.89	21.24	☐

Skylights

	No	Description	Type	U [Btu/hr sf F]	SHGC	Vis.Trans	W [ft]	H (Effec) [ft]	Multiplier	Area [Sf]	Total Area [Sf]	
In Zone:												
In Roof:												☐

Floors

	No	Description	Type	Width [ft]	H (Effec) [ft]	Multiplier	Area [sf]	Cond. [Btu/hr. sf. F]	Heat Cap. [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]	
In Zone:	**Pr0Zo1**											
	1	Pr0Zo1Fl1	Concrete floor, carpet and rubber pad	82.00	30.00	1	2460.0	0.5987	9.33	140.00	1.67	☐

Systems

Pr0Sy1 **System 1** **Constant Volume Air Cooled Split System < 65000 Btu/hr** **No. Of Units 2**

Component	Category	Capacity	Efficiency	IPLV	
1	Cooling System (Air Cooled < 65000 Btu/h Cooling Capacity)	56500.00	13.00	8.00	☐
2	Air Handling System -Supply (Air Handler (Supply) - Constant Volume)	1600.00	0.80		☐

Plant

Equipment	Category	Size	Inst.No	Eff.	IPLV

Water Heaters

	W-Heater Description	Capacit	Cap.Unit	I/P Rt.		Efficienc		Loss	
1	Electric water heater	50	[Gal]	5	[kW]	0.9100	[Ef]		[Btu/h]

Ext-Lighting

	Description	Category	No. of Luminaires	Watts per Luminaire	Area/Len/No. of units [sf/ft/No]	Control Type	Wattage [W]
1	Ext Light 1	Building Entrance with (or free standing) Canopy	1	100	102.00	Photo Sensor control	100.00
2	Ext Light 2	Building exit	2	60	6.00	Photo Sensor control	120.00

Piping

No	Type	Operating Temperature [F]	Insulation Conductivity [Btu-in/h.sf.F]	Nomonal pipe Diameter [in]	Insulation Thickness [in]	Is Runout?
1	Domestic and Service Hot Water Systems	125.00	0.28	0.75	0.60	No

Fenestration Used

Name	Glass Type	No. of Panes	Glass Conductance [Btu/h.sf.F]	SHGC	VLT

ASHULDblTntW d-Vy-Fg frm	User Defined	2	0.6000	0.4200	0.3900	☐

Materials Used

Mat No	Acronym	Description	Only R-Value Used	RValue [h.sf.F/Btu]	Thickness [ft]	Conductivity [Btu/h.ft.F]	Density [lb/cf]	SpecificHeat [Btu/lb.F]	
187	Matl187	GYP OR PLAS BOARD,1/2IN	No	0.4533	0.0417	0.0920	50.00	0.2000	☐
151	Matl151	CONC HW, DRD, 140LB, 4IN	No	0.4403	0.3333	0.7570	140.00	0.2000	☐
178	Matl178	CARPET W/RUBBER PAD	Yes	1.2300					☐
266	Matl266	2x4@16" oc + R11 Batt	No	8.3343	0.2917	0.0350	9.70	0.2000	☐
86	Matl86	BRICK, COMMON, 4IN	No	0.8012	0.3333	0.4160	120.00	0.2000	☐
23	Matl23	6 in. Insulation	No	20.0000	0.5000	0.0250	5.70	0.2000	☐
81	Matl81	ASPHALT-ROOFING, ROLL	Yes	0.1500					☐
244	Matl244	PLYWOOD, 1/2IN	No	0.6318	0.0417	0.0660	34.00	0.2900	☐

Constructs Used

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1004	Concrete floor, carpet and rubber pad	No	No	0.60	9.33	140.00	1.6703	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	151	CONC HW, DRD, 140LB, 4IN	0.3333	0.00	☐
2	178	CARPET W/RUBBER PAD		0.00	☐

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1012	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	No	No	0.10	8.98	67.36	9.5887	☐

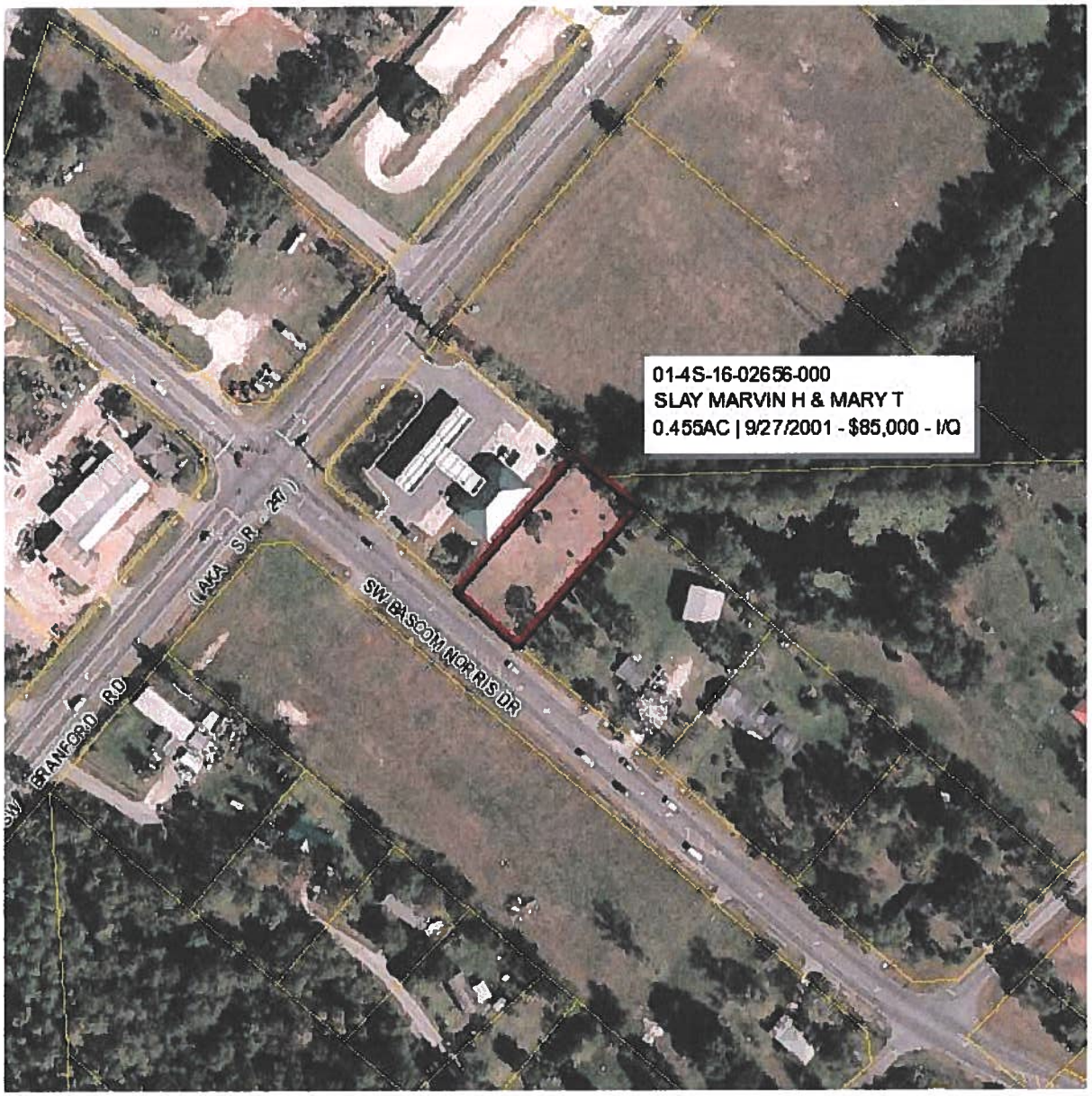
	Layer	Material No.	Material	Thickness [ft]	Framing Factor	
	1	86	BRICK, COMMON, 4IN	0.3333	0.00	☐
	2	266	2x4@16" oc + R11 Batt	0.2917	0.00	☐
	3	187	GYP OR PLAS BOARD,1/2IN	0.0417	0.00	☐

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1025	Hollow core flush	No	Yes	0.76			1.3239	☐

	Layer	Material No.	Material	Thickness [ft]	Framing Factor	
	1	276	Hollow core flush (1.75")		0.00	☐

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1039	Shngl/1/2"WD Deck/WD Truss/6"Batt/Gyp Brd	No	No	0.05	1.40	10.89	21.2351	☐

	Layer	Material No.	Material	Thickness [ft]	Framing Factor	
	1	81	ASPHALT-ROOFING, ROLL		0.00	☐
	2	244	PLYWOOD, 1/2IN	0.0417	0.00	☐
	3	23	6 in. Insulation	0.5000	0.00	☐
	4	187	GYP OR PLAS BOARD,1/2IN	0.0417	0.00	☐


01-4S-16-02656-000
SLAY MARVIN H & MARY T
0.455AC | 9/27/2001 - $85,000 - I/Q
(AKA S.R. 247)
SW BASCOM NORRIS DR
SW BRANFORD RD

Suwannee River Water Management District
9225 CR 49
Live Oak, FL 32060
TELEPHONE: 386-362-1001
TELEPHONE: 800-226-1066

Dear Permittee:

Enclosed is your approved Environmental Resource Permit. Based on the activity described in your application, Suwannee River Water Management District (District) staff has reasonable assurance that the proposed construction meets conditions for issuance, provided you follow the permit conditions and your stated activity.

The construction of a surfacewater management system requires filing a Notice of Commencement and as-built certification forms within 30 days of completion of construction. These forms are enclosed with your permit.

Be aware of the location of underground utilities before starting excavation.

If you wish, we will visit with you on site to discuss the terms of the permit, review existing pre-construction conditions, and answer any questions you may have prior to beginning work. If you would like to schedule a pre-construction meeting, please contact Resource Management staff at 386.362.1001 or 800.226.1066.

Sincerely,

Jon Dinges, P. E.
Department Director, Resource Management

Columbia County Building Department
Culvert Permit

Culvert Permit No.
000001337

DATE 02/23/2007 PARCEL ID # 01-4S-16-02656-000

APPLICANT AMANDA WOLFE PHONE 386.755.8887

ADDRESS 2109 W US HWY 90, STE 170-144 LAKE CITY FL 32055

OWNER MARVIN SLAY - ALLSTATE OFFICE PHONE

ADDRESS 679 NW BASCOM NORRIS DRIVE LAKE CITY FL 32024

CONTRACTOR BRIAN CRAWFORD, CONCEPT CONSTRUCTION PHONE 386.755.8887

LOCATION OF PROPERTY 90-W TO SR 247,TL TO BASCOM NORRIS,TL AND THE PROPERTY IS DIRECTLY BEHIND S&S STORE ON BASCOM NORRIS/SR.247-S.

SUBDIVISION/LOT/BLOCK/PHASE/UNIT

SIGNATURE Amanda C. Wolfe

INSTALLATION REQUIREMENTS

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

INSTALLATION NOTE: Turnouts will be required as follows:
a) a majority of the current and existing driveway turnouts are paved, or;
b) the driveway to be served will be paved or formed with concrete.
Turnouts shall be concrete or paved a minimum of 12 feet wide or the width of the concrete or paved driveway, whichever is greater. The width shall conform to the current and existing paved or concreted turnouts.

☒ Culvert installation shall conform to the approved site plan standards.

☐ Department of Transportation Permit installation approved standards.

☐ Other REFERENCE TI SITE PLAN/BLUEPRINTS.

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

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

Amount Paid 25.00

COLUMBIA COUNTY GATEWAY TO FLORIDA

UNIVERSAL
ENGINEERING SCIENCES
Consultants in: Geotechnical Engineering • Threshold
Environmental Sciences • Construction Materials Testing

Project No.: 28416-007-01
Date: March 8, 2007

25569

Field and Laboratory Report Cover Page

Client: Concept Construction of North Florida
2109 West U.S. Highway 90, Suite 170-144
Lake City, FL 32055

Project: Slay All-State Building, Highway 247 and Bascom Norris Road, Lake City, Columbia County, FL

As requested, a representative of Universal Engineering Sciences, Inc. (UES) was at the referenced project to provide construction materials testing services.

Scope of Work

Report No.	Type of Report
553070	Site Inspection
553077	In-Place Density Tests
553086	Moisture-Density Relationship Test

The results of the observations and or tests are summarized on the attached sheets. We hope this information is sufficient for your immediate needs. If you have any questions, please do not hesitate to contact the undersigned.

Reviewed By:
Universal Engineering Sciences, Inc.

3/8/07

Keith L. Butts, P.E.
Branch Manager
STATE OF FLORIDA
Professional Engineer No. 53986

UNIVERSAL
ENGINEERING SCIENCES
Consultant In: Geotechnical Engineering,
Environmental Sciences, Construction Materials Testing
4475 SW 35th Terrace, Gainesville, Florida 32608 (352) 372-3392

Project No.: 28416-007-01
Report No.: 553070
Date: March 8, 2007

REPORT ON SITE INSPECTION

Client: Concept Construction of North Florida
2109 West U.S. Highway 90, Suite 170-144
Lake City, FL 32055

Project: Slay All-State Building, Highway 247 and Bascom Norris Road

Location: Lake City, Columbia County, FL

Inspected By: Steve Cox

Date Inspected: 02-22-07

OBSERVATIONS:

On February 22, 2007, a representative of Universal Engineering Sciences, Inc., visited the above referenced project to verify that the organic material was undercut beneath the proposed building pad. Organic material had been undercut from beneath the proposed building pad and removed from the site.

Technician: SC/lm

UNIVERSAL
ENGINEERING SCIENCES
Consultant In: Geotechnical Engineering,
Environmental Sciences, Construction Materials Testing
4475 SW 35th Terrace, Gainesville, Florida 32608 (352) 372-3392

Project No.: 28416-007-01
Report No.: 553077
Date: March 8, 2007

REPORT ON
IN-PLACE DENSITY TESTS

Client: Concept Construction of North Florida
2109 West U.S. Highway 90, Suite 170-144
Lake City, FL 32055

Project: Slay All-State Building, Highway 247 and Bascom Norris Road, Lake City, Columbia County, FL

Area Tested: Fill Beneath Proposed Building Pad

Course: As Noted Below **Depth of Test:** 0-1'

Type of Test: ASTM D-2922 **Date Tested:** 02-23-07

Remarks: The tests below meet the minimum 95 percent relative soil compaction requirement of Laboratory Modified Proc maximum dry density (ASTM D-1557).

TEST LOCATION	LABORATORY RESULTS		FIELD TEST RESULTS		
Description of Test Location	Maximum Density (pcf)	Optimum Moisture (%)	Dry Density (pcf)	Field Moisture (%)	Soil Compaction (%)
1. Approximately 10' Northwest of Southeast Corner of Pad, 1' Above Subgrade	108.5	12.5	104.9	4.4	96.7
2. Approximately 15' Northeast of Southwest Corner of Pad, 1' Above Subgrade	108.5	12.5	103.9	5.2	95.8
3. Approximately 20' Southwest of Northeast Corner of Pad, 1' Above Subgrade	108.5	12.5	104.1	5.7	95.9
4. Approximate Center of North Half of Pad, Final Grade	108.5	12.5	107.8	3.9	99.4
5. Approximate Center of Pad, Final Grade	108.5	12.5	105.4	6.0	97.1
6. Approximate Center of South Half of Pad, Final Grade	108.5	12.5	106.4	5.7	98.1

Technician: SC/lm

UNIVERSAL ENGINEERING SCIENCES
4475 S.W. 35TH TERRACE, GAINESVILLE, FL. 32608
(352) 372-3392 FAX NO:(352) 336-7914

PROJECT NO. : 28416-007-01
REPORT NO: 553086
DATE: 03-08-07

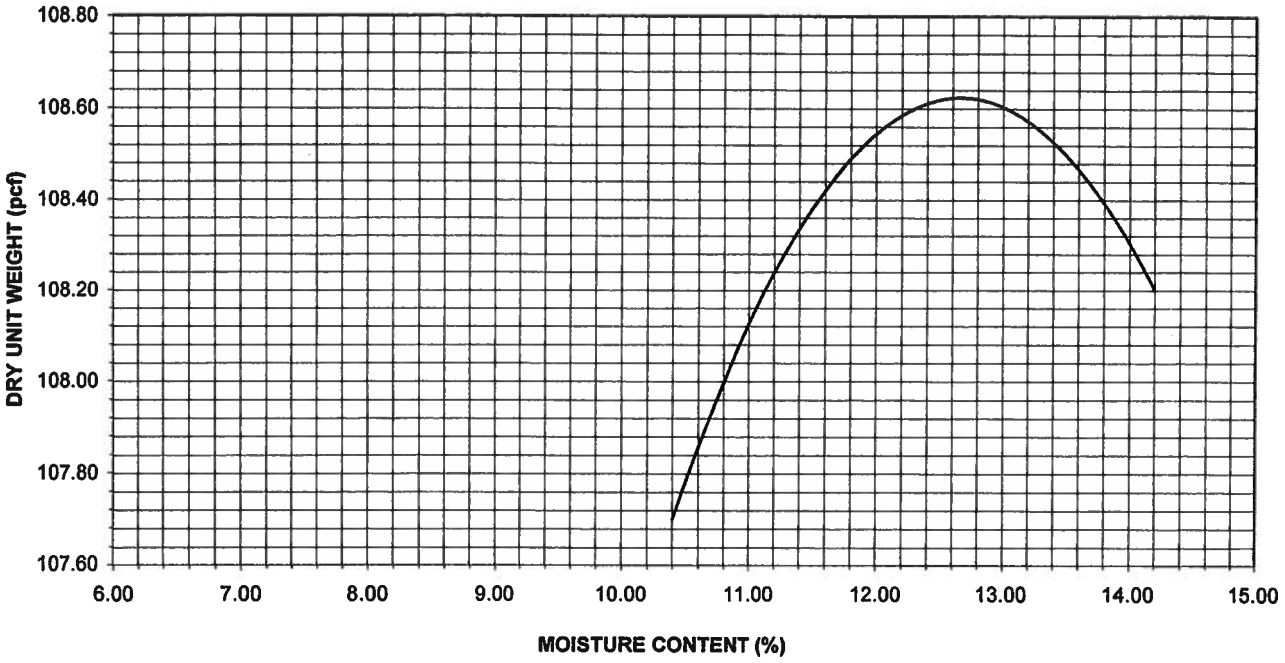
MOISTURE-DENSITY RELATIONSHIP TEST
ASTM D 1557

CLIENT Concept Construction of North Florida
2109 West U.S. Highway 90
Suite 170-144
Lake City, FL 32055

PROJECT: Slay All-State Building
Hwy 247 & Bascom Norris Road
Lake City, Columbia County, FL

DATE TESTED: 02-27-07

SAMPLE LOCATION: N/S (Client Obtained Sample)
SOIL DESCRIPTION: Tan Sand

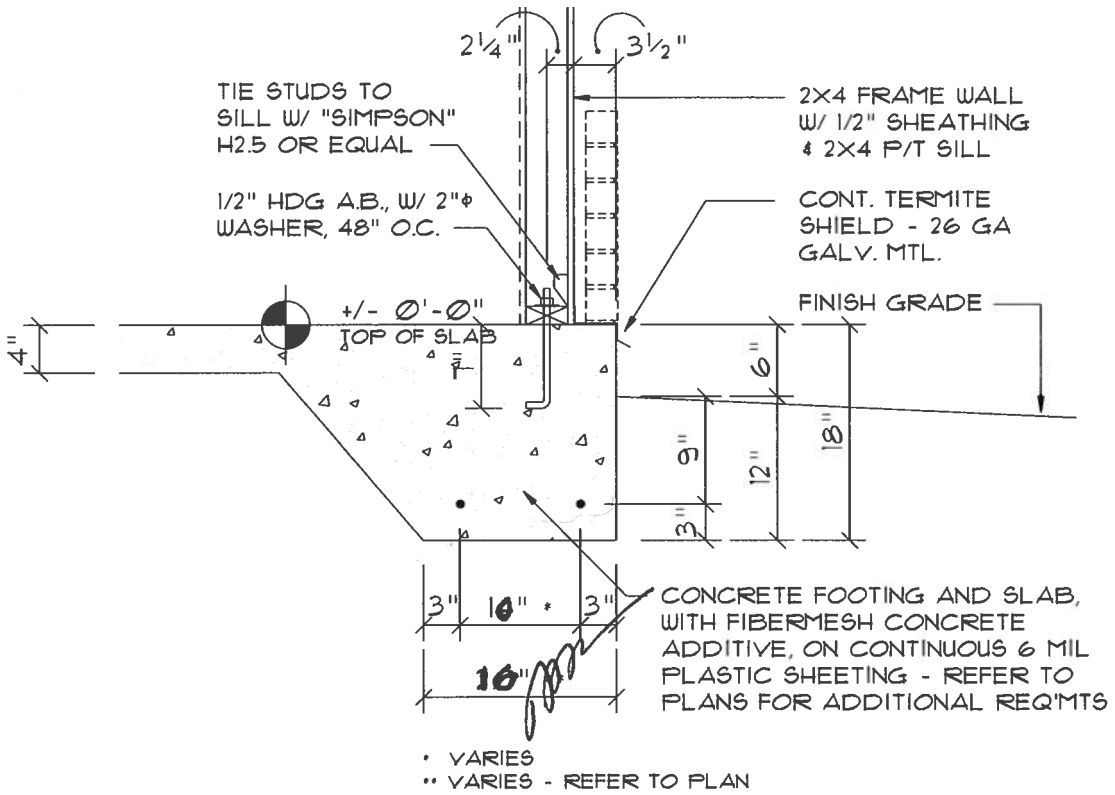


OPT MOISTURE: **12.5**
MAX DENSITY: **108.5**

25569

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

1758 NW Brown Road
Lake City, FL 32055
386/755-6608



* VARIES
** VARIES - REFER TO PLAN

Typ. Mono. Ftg. DET.

A

SCALE: NONE

Foundation Modifacation for:
ALLSTATE INSURANCE

LAKE CITY, FLORIDA

AR 7025

19 MAY 2K7

Donald F. Lee & Associates, Inc.

Surveyors & Engineers

140 NW Ridgewood Avenue
Lake City, Florida 32055
(386) 755-6166
Fax (386) 755-6167
donald@dfla.com

Monday, July 23, 2007

FROM: Tim Delbene, P.L.S.

TO: Columbia County Building & Zoning Dept.

CC: Concept Construction

RE: Floor Elevation Check – Allstate Building – Bascom Norris Drive (Buddy Slay)

Property Description:

TOWNSHIP 4 SOUTH, RANGE 16 EAST
SECTION 1: Commencing at the NW corner of SE 1/4 of NW 1/4 of said Section and run S 2°04' E, along the West line of said SE 1/4 of NW 1/4 326.6 feet to the Southerly right-of-way of State Road 247; thence N 41°30' E of 480.00 feet; thence S 48°30' E 304.56 feet for a POINT OF BEGINNING; thence N 41°30' E parallel to said State Road 210 feet; thence N 48°30' W 94.56 feet; thence S 41°30' W 210.00 feet; thence S 48°30' E 94.56 feet to the POINT OF BEGINNING.

We have obtained elevations on the finished floor (slab) of an office building under construction on the above referenced property. The elevations are based on Local Benchmark Datum. The results are as follows:

Finished Floor Elevation (slab): 163.13 feet

According to engineering plans of the site by GTC Design Group, Inc., the design floor elevation for this project is 163.00 feet.

SIGNED: Timothy A. Delbene

Timothy A. Delbene, P.L.S.
Florida Reg. Cert. No. 5594

DATE: 7/23/2007.

25569

#25569

COLUMBIA COUNTY FIRE DEPARTMENT

135 NE HERNANDO AVENUE
P. O. BOX 1529
SUITE 203
LAKE CITY, FL 32055

PHONE (386) 754-7089
FAX (386) 754-7064

David L. Boozer
Division Chief

16 August 2007

To: Harry Dicks, Building Inspector
Columbia County Building and Zoning

From: David L. Boozer

Re: Mary Slay Insurance

Mr. Dicks,

A fire safety inspection was conducted at the Mary Slay Insurance Company located at 677 SW Bascom Norris Drive in Lake City, Florida 32025. This business meets all the requirements of Chapter 38 of the Florida Fire Prevention Code, 2004 Edition. No violations were noted. I recommend approval.

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

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

06 JUNE 2007

JOHNNY KEARSE, BUILDING OFFICIAL
COLUMBIA COUNTY, BUILDING DEPT.
COLUMBIA COUNTY COURTHOUSE ANNEX
LAKE CITY, FLORIDA 32055

RE: ALLSTATE OFFICE BUILDING
PERMIT Nr.: 25569

DEAR SIR:

PLEASE NOTE THE FOLLOWING CHANGES AND/OR CORRECTIONS TO THE CONSTRUCTION DOCUMENTS AND AS-BUILT CONDITIONS AT THE ABOVE REFERENCED PROJECT:

1. IN LIEU OF THE HD5a ANCHORS INDICATED FOR SHEAR WALL ENDS AND POSTS AT GIRDER TRUSS BEARING POINTS, PROVIDE AND INSTALL "SIMPSON" HTT22 ANCHORS W/ ALL RECOMMENDED FASTENERS.

2. PROVIDE AND INSTALL 2 DBL. 2X12 WIND BEAMS BETWEEN THE EXTERIOR WALL AND THE INTERIOR WALL FRAMING OVER THE ENTRY AREA, WITH THE BOTTOM OF THE ADDED BEAMS AT 9'-0" A.F.F. OR HIGHER. ANCHOR ENDS OF THE BEAMS TO THE WALL FRAMING W/ "SIMPSON" HUCQ410-SDS, INSTALL WITH ALL RECOMMENDED FASTENERS - 4 REQUIRED.

3. AT TRUSS A3G, PROVIDE AND INSTALL A MINIMUM OF 2 2X4 STUDS DIRECTLY UNDER THE TRUSS BEARING. ANCHOR TO FOUNDATION WITH "SIMPSON" HTT22 ANCHORS. AT LOCATIONS WHERE STUDS ARE REQUIRED TO BE ADDED, IT IS PERMISSIBLE TO NOTCH THE O/S FACE OF THE STUDS 1/2" DEEP X 1" WIDE TO RECEIVE THE EXISTING ELECTRICAL WIRING.

4. THE EXISTING CONDITIONS AT THE GIRDER TRUSS ANCHORAGE AT THE ENTRY AREA IS SATISFACTORY AS CONSTRUCTED, USING THE HTT22 ANCHORS.

5. PROVIDE AND INSTALL FIRE BLOCKING TO LIMIT THE WALL CAVITIES IN ALL BEARING WALLS TO A MAXIMUM OF 96" - BLOCKING MAY BE INSTALLED AT ANY POINT SO LONG AS THE MAXIMUM HEIGHT OF THE CAVITY IS 96" OR LESS.

6. BUILDING HAS BEEN SHIFTED TO BE 9'-0" OFF THE EASTERN PROPERTY LINE. SINCE NO EXISTING OR FUTURE BUILDING IS OR WILL BE CONSTRUCTED WITHIN 10'-0" OF THE PRESENT CONSTRUCTION, STANDARD WINDOWS AND DOORS MAY BE USED IN LIEU OF THE FIRE RATED PRODUCTS NOTED IN THE CONSTRUCTION DOCUMENTS.

SHOULD YOU HAVE ANY FURTHER QUESTIONS WITH THIS, PLEASE CALL FOR ASSISTANCE.

YOURS TRULY,
NICHOLAS PAUL GEISLER, ARCHITECT AR0007005

To Whom It May Concern:

I am writing you in reference to the Allstate Office Project. As owner of the building I recognize that when I decide to complete the upstairs area vertical accessibility will be necessary if more than 5 occupants are upstairs or if the upstairs offices are open to the public. Furthermore I understand that if I decide to sell the building I will be responsible for passing this information along to the future owner. I have read and understood section 11-4.1.2 and recognize that failure to comply with this section is a direct violation of Florida Statutes and ADAAG requirements.

11-4.1.2 Accessible site and exterior facilities: new construction.
This edition of the code does not apply to buildings, structures, or facilities which were either under construction or under contract for construction on October 1, 1997.

Nothing in this code shall be construed to relieve the owner of any building, structure or facility from the duty to provide vertical accessibility to all levels above and below the occupiable grade level, regardless of whether the code requires an elevator to be installed in such building, structure or facility, except: (1) elevator pits, elevator penthouses, mechanical rooms, piping or equipment catwalks, and automobile lubrication and maintenance pits and platforms; (2) unoccupiable spaces, such as rooms, enclosed spaces, and storage spaces that are not designed for human occupancy, for public accommodations, or for work areas; and (3) occupiable spaces and rooms that are not open to the public and that house no more than five persons including, but not limited to, equipment control rooms and projection booths. However as provided in Section 553.509, Florida Statutes, buildings, structures, and facilities must, at a minimum, comply with the requirements of the ADAAG. Therefore, facilities subject to the ADAAG may be required to provide vertical access to areas otherwise exempt under Section 11-4.1.3 (5) of this code.

Sincerely,

Marvin Slay

The foregoing instrument was acknowledged before me this 13th day of February, 2007, by Marvin Slay, who are personally known to me and who did not take an oath.

Deidra G Bohannon
Notary Public
My Commission Expires: 12/10/07

DEIDRA G. BOHANNON
MY COMMISSION # DD 274081
EXPIRES: December 10, 2007
Bonded Thru Pichard Insurance Agency

FILE COPY

25569

FIRST South INSURANCE
"Marketers of Quality Insurance Products and Services"
955 SW Baya Drive
Lake City, Florida 32025
Phone (386) 755-1666 • Fax (386) 755-3629

Columbia County Building Department
P O Drawer 1529
Lake City, Florida 32056

Re: 677 SW Bascom Norris Drive

To Whom It May Concern:

Both the entrance and exit doors on the second floor are permanently locked and the owner is the only person who has a key to unlock the doors. If you need any additional information please feel free to contact me at 386-623-0816.

Thank you,

Buddy Slay
First South Insurance

Alpine Engineered Products, Inc.

1950 Marley Drive Haines City, FL 33844
Florida Engineering Certificate of Authorization Number: 567
Florida Certificate of Product Approval # FL1999
 Document ID:1T3O487-Z0102125214

Truss Fabricator:	Anderson Truss Company
Job Identification:	6-058---- Allstate-1st South Ins. -- Lake City, FL 32055
Truss Count:	23
Model Code:	Florida Building Code 2004
Truss Criteria:	ANSI/TPI-2002(STD)/FBC
Engineering Software:	Alpine Software,Version 7.24.
Minimum Design Loads:	Roof - 40.0 PSF @ 1.25 Duration
	Floor - 65.0 PSF @ 1.00 Duration
	Wind - 110 MPH ASCE 7-02 -Closed

Seal Date: 01/02/2007

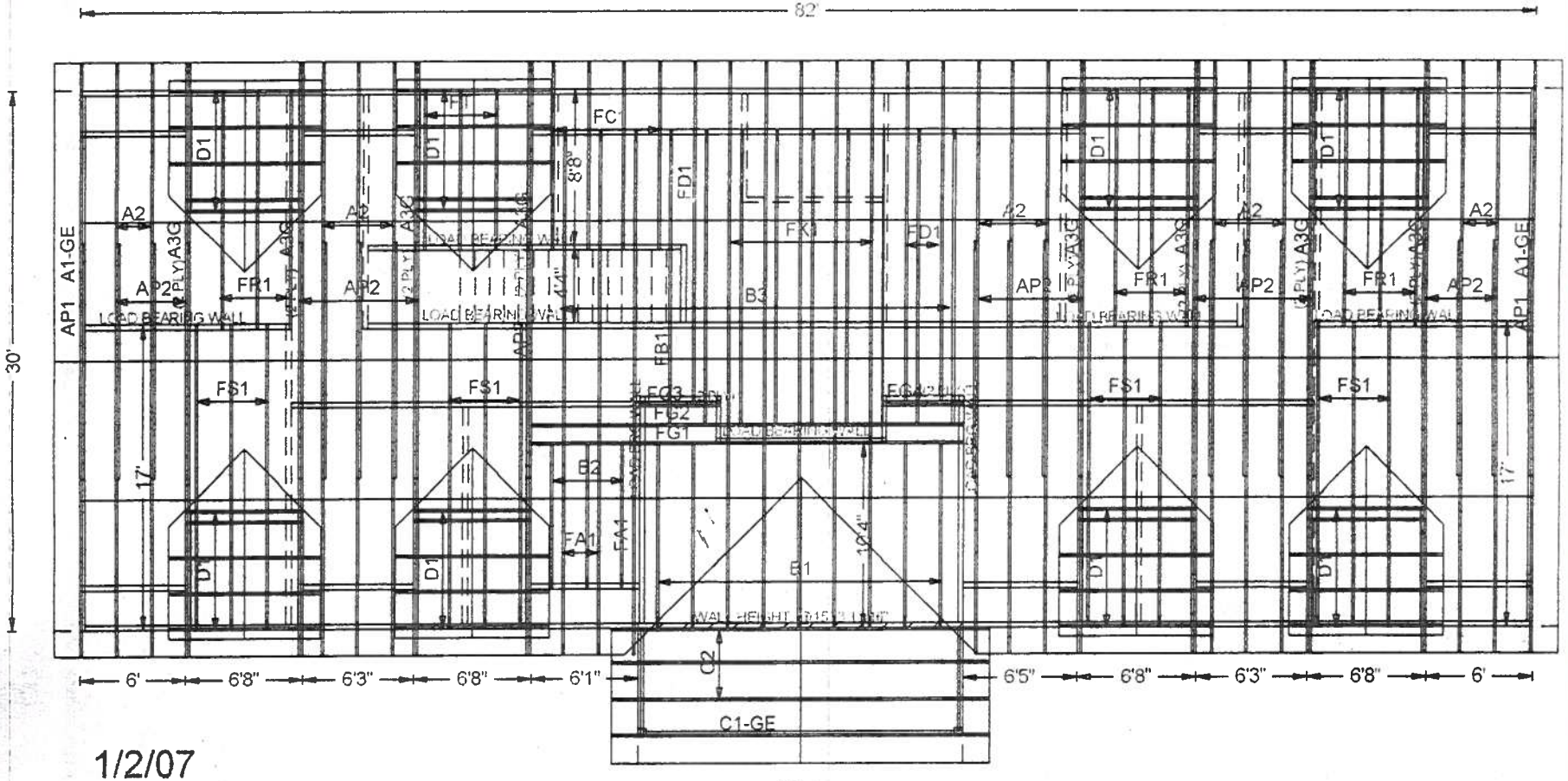
-Truss Design Engineer-
Arthur R. Fisher
Florida License Number: 59687
1950 Marley Drive
Haines City, FL 33844

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. As shown on attached drawings; the drawing number is preceded by: HCUSR487

Details: CNBRGBLK-A11030EE-GBLLETIN-BRCLBSUB-PIGBACKB-

#	Ref Description	Drawing#	Date
1	00605--A1-GE	07002017	01/02/07
2	00606--A2	07002015	01/02/07
3	00607--A3G	07002013	01/02/07
4	00608--B1	07002010	01/02/07
5	00609--B2	07002019	01/02/07
6	00610--B3	07002018	01/02/07
7	00611--C1-GE	07002020	01/02/07
8	00612--C2	07002021	01/02/07
9	00613--D1	07002004	01/02/07
10	00614--FA1	07002022	01/02/07
11	00615--FB1	07002011	01/02/07
12	00616--FC1	07002023	01/02/07
13	00617--FD1	07002006	01/02/07
14	00618--FG1	07002003	01/02/07
15	00619--FG2	07002007	01/02/07
16	00620--FG3	07002012	01/02/07
17	00621--FG4	07002002	01/02/07
18	00622--FK1	07002005	01/02/07
19	00623--FR1	07002008	01/02/07
20	00624--FS1	07002009	01/02/07
21	00625--FT	07002001	01/02/07
22	00626--AP1	07002016	01/02/07
23	00627--AP2	07002014	01/02/07



1/2/07

#6-058 CONCEPT CONSTRUCTION - ALLSTATE FIRST SOUTH INSURANCE

Top chord 2x4 SP #2 Dense :T2, T7 2x8 SP #1 Dense:
:T3, T5, T6 2x6 SP #1 Dense:
Bot chord 2x8 SP #1 Dense
Webs 2x4 SP #3
:W1, W2, W4, W7, W17, W21, W23, W24 2x4 SP #2 Dense:

SPECIAL LOADS
------(LUMBER DUR.FAC.=1.25 / PLATE DUR.FAC.=1.25)
TC - From 106 PLF at -2.00 to 106 PLF at 2.50
TC - From 130 PLF at 2.50 to 130 PLF at 8.43
TC - From 130 PLF at 8.43 to 130 PLF at 27.42
TC - From 106 PLF at 27.42 to 106 PLF at 31.96
BC - From 5 PLF at -2.00 to 5 PLF at 0.00
BC - From 20 PLF at 0.00 to 20 PLF at 2.50
BC - From 140 PLF at 2.50 to 140 PLF at 27.42
BC - From 20 PLF at 27.42 to 5 PLF at 31.96
BC - 124 LB Conc. Load at 2.50, 27.42

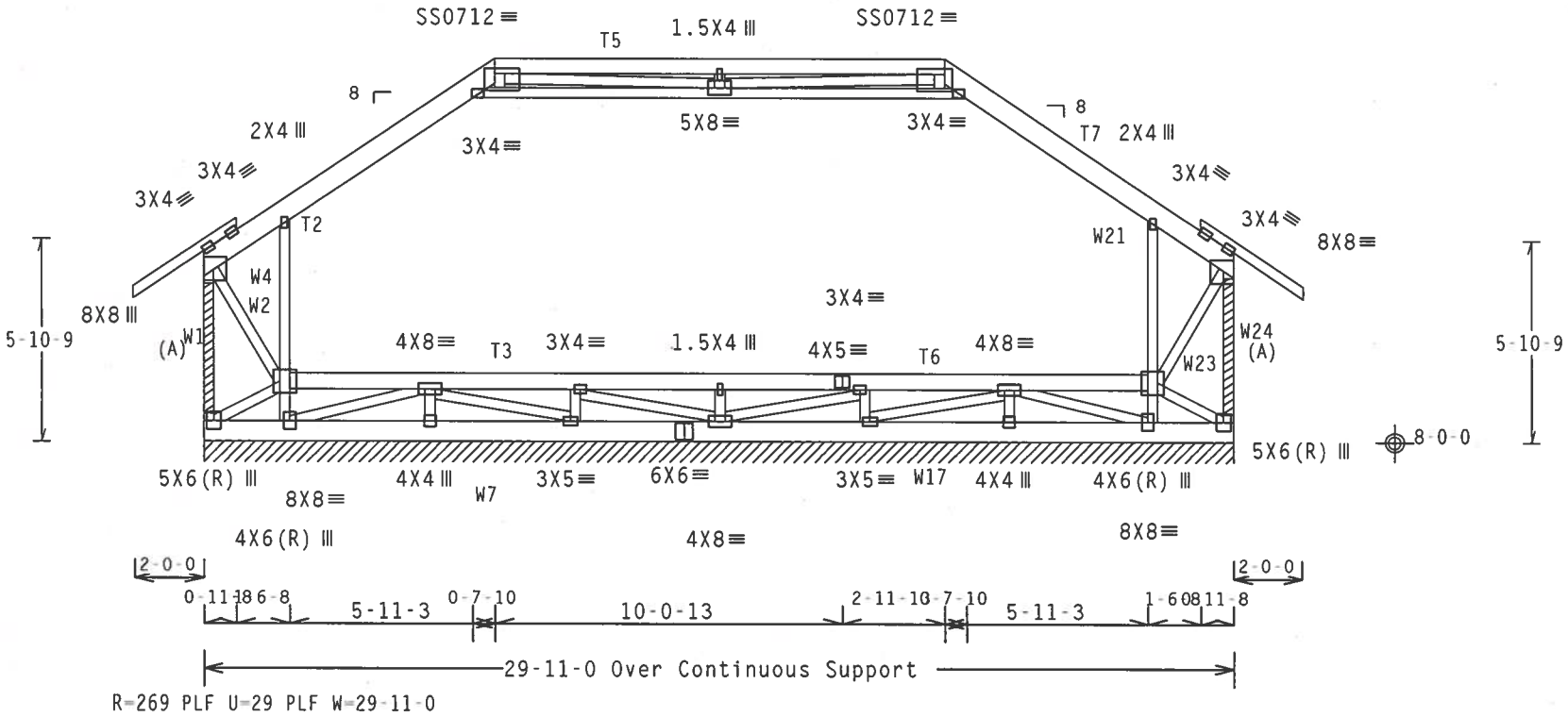
110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf.

End verticals exposed to wind pressure. Deflection meets L/240 criteria for brittle and flexible wall coverings.

Collar-tie braced with continuous lateral bracing at 24" OC. or rigid ceiling.

Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.

(A) scab brace. 80% length of web member. Same size, species & grade or better. Attach with 10d box nails (0.128"X3.0") @ 6" OC.



Design Crit: TPI-2002(STD)/FBC

PLT TYP. 18 Gauge HS,Wave Cq/RT=1.00(1.25)/10(0) 7.24.12 16 QTY:2 FL/-/4/-/-/R/- Scale =.1875"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificate of Authorization # 662

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER LICENSE No. 59687 STATE OF FLORIDA PROFESSIONAL ENGINEER
Jan 02 '07

TC LL	20.0 PSF	REF	R487-- 605
TC DL	10.0 PSF	DATE	01/02/07
BC DL	10.0 PSF	DRW	HCUSR487 07002017
BC LL	0.0 PSF	HC-ENG	JB/AF
TOT.LD.	40.0 PSF	SEQN-	90814 REV
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1T30487_Z01

Top chord 2x8 SP #1 Dense :T2, T5 2x6 SP #1 Dense:
:T3, T4 2x4 SP #2 Dense:
Bot chord 2x8 SP #1 Dense
Webs 2x4 SP #3
:W1, W4, W7, W17, W21, W24 2x4 SP #2 Dense:

(B) 2x4 #3 or better "T" brace. 80% length of web member. Attach with 16d Box or Gun (0.135"x3.5",min.)nails @ 6" OC.

Collar-tie braced with continuous lateral bracing at 24" OC. or rigid ceiling.

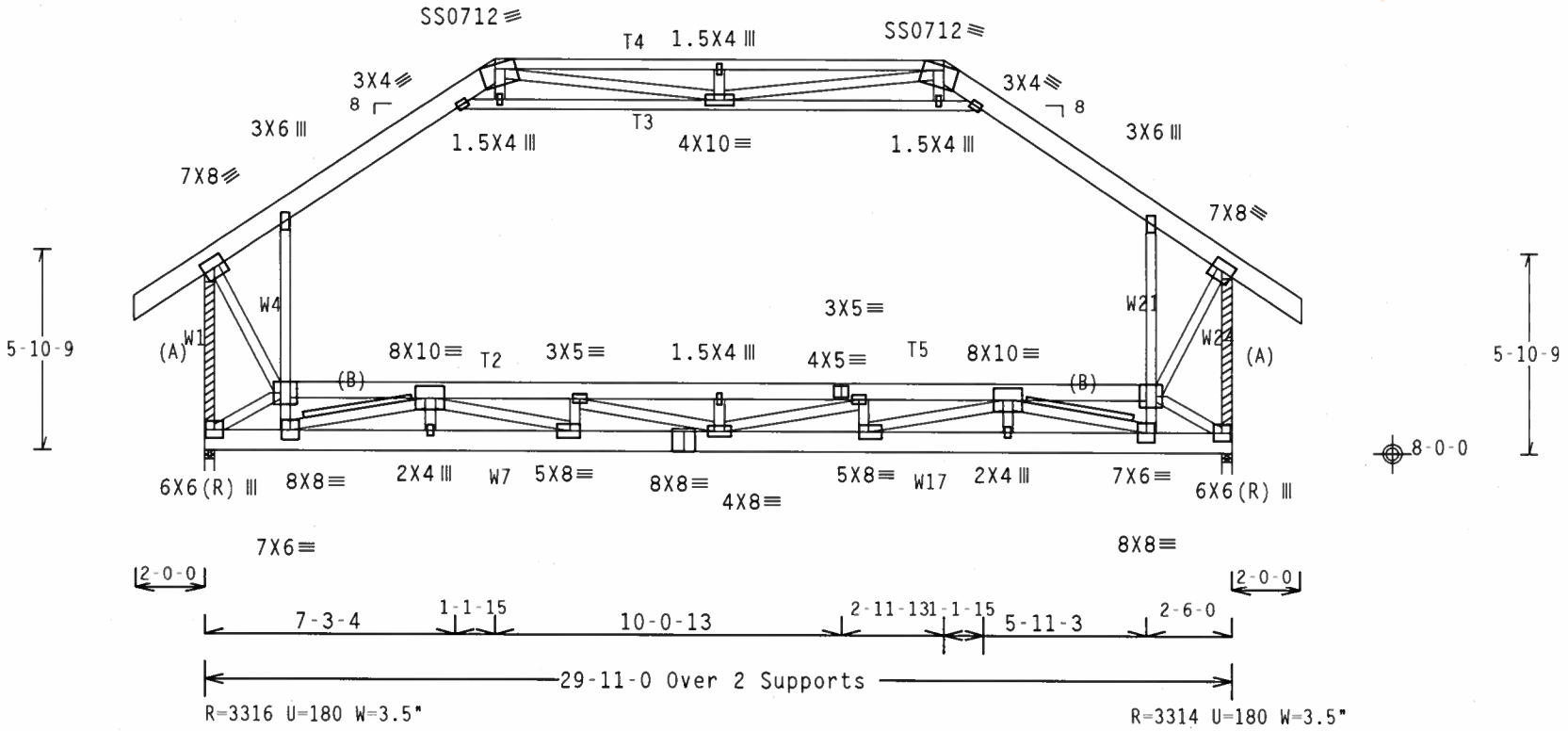
Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.

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.

End verticals exposed to wind pressure. Deflection meets L/240 criteria for brittle and flexible wall coverings.

BC attic room floor loading: LL = 50.00 psf; DL = 10.00 psf; from 2-6-8 to 27-5-8.

(A) scab brace. 80% length of web member. Same size, species & grade or better. Attach with 10d box nails (0.128"X3.0") @ 6" OC.



Design Crit: TPI-2002(STD)/FBC

PLT TYP. 18 Gauge HS,Wave Cq/RT=1.00(1.25)/10(0) 7.24.12 QTY:13 FL/-/4/-/-/R/- Scale =.1875"/Ft.

ALPINE

Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificate of Authorization # 6673

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI1: OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. BY AF&PA) AND TPI. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER LICENSE No. 50687 STATE OF FLORIDA PROFESSIONAL ENGINEER

Jan 02 '07

TC LL	20.0 PSF	REF R487-- 606
TC DL	10.0 PSF	DATE 01/02/07
BC DL	10.0 PSF	DRW HCUSR487 07002015
BC LL	0.0 PSF	HC-ENG JB/AF
TOT.LD.	40.0 PSF	SEQN- 90510
DUR.FAC.	1.25	
SPACING	24.0"	JREF- 1T30487_Z01

Top chord 2x8 SP #1 Dense :T2, T5 2x6 SP #1 Dense:
:T3 2x4 SP #2 Dense:
Bot chord 2x8 SP #1 Dense
Webs 2x4 SP #3
:W1, W2, W4, W7, W17, W21, W23, W24 2x4 SP #2 Dense:

SPECIAL LOADS
------(LUMBER DUR.FAC.=1.25 / PLATE DUR.FAC.=1.25)
TC - From 135 PLF at -2.00 to 135 PLF at 2.50
TC - From 185 PLF at 2.50 to 185 PLF at 8.43
TC - From 185 PLF at 8.43 to 185 PLF at 23.73
TC - From 360 PLF at 23.73 to 135 PLF at 31.96
BC - From 10 PLF at -2.00 to 10 PLF at 0.00
BC - From 42 PLF at 0.00 to 42 PLF at 2.50
BC - From 295 PLF at 2.50 to 295 PLF at 29.92
BC - From 0 PLF at 31.96 toTC - 435 LB Conc. Load at 30.49
BC - 262 LB Conc. Load at 2.50

(A) #3 or better scab brace. Same size & 80% length of web member.
Attach with 10d Box or Gun (0.128"x3",min.)nails @ 6" OC.

Deflection meets L/360 live and L/240 total load. Creep increase factor
for dead load is 1.50.

2 COMPLETE TRUSSES REQUIRED

Nailing Schedule: (12d_Common_(0.148"x3.25"._min.)_nails)
Top Chord: 1 Row @ 9.75" o.c.
Bot Chord: 1 Row @ 9.75" o.c.
Webs : 1 Row @ 4" o.c.
Use equal spacing between rows and stagger nails
in each row to avoid splitting.

Bearing blocks: Nail type: 12d_Common_(0.148"x3.25"._min.)_nails

BRG	X-LOC	#BLOCKS	LENGTH/BLK	#NAILS/BLK	WALL PLATE
1	0.042'	1	12"	4	Match Truss
2	29.667'	1	14"	15	Match Truss

Bearing block to be same size and species as bottom chord.
Refer to drawing CNBRGBLK1103 for additional information.

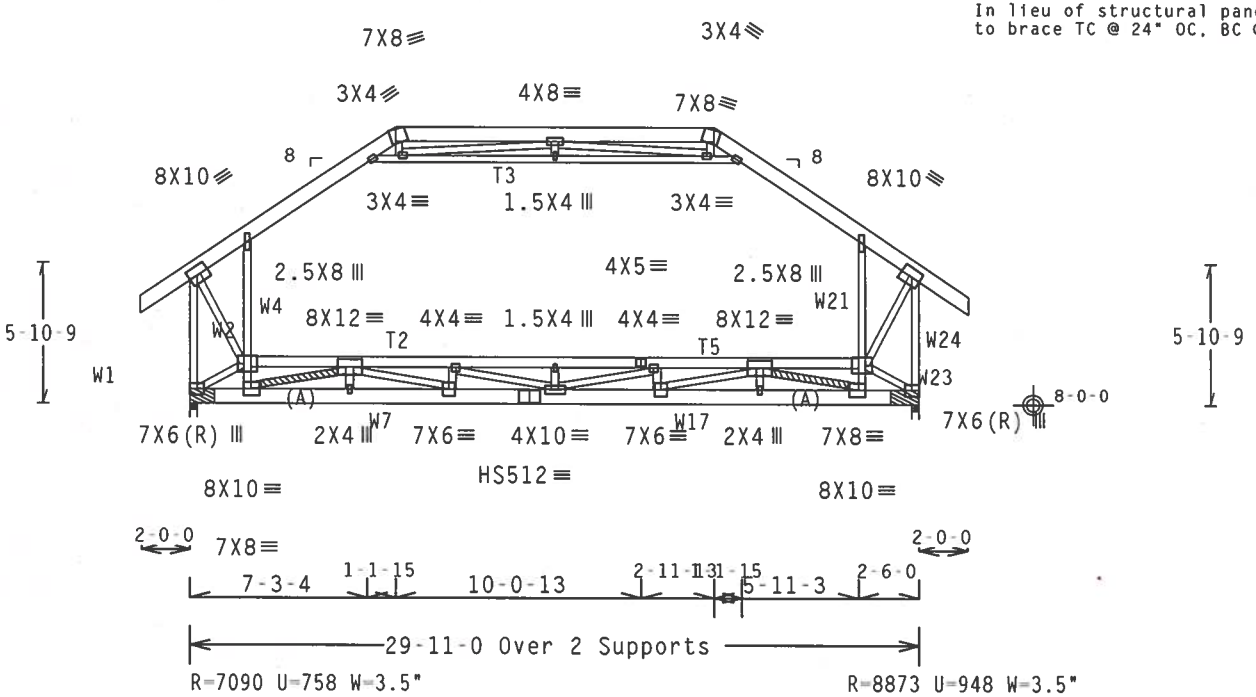
110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, Located
anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf.

In lieu of structural panels use purlins to brace TC @ 24" OC.

Trusses to be spaced at 50.5" OC maximum.

Collar-tie braced with continuous lateral bracing at 24" OC.

In lieu of structural panels or rigid ceiling use purlins
to brace TC @ 24" OC, BC @ 48" OC.



Design Crit: TPI-2002(STD)/FBC

PLT TYP. 20 Gauge HS,Wave Cq/RT=1.00(1.25)/10(0) 7.24.1 TY:8 FL/-/4/-/-/R/- Scale =.125"/Ft.

ARTHUR R. FISHER LICENSE No. 59687 STATE OF FLORIDA PROFESSIONAL ENGINEER
Jan 02 '07

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificat[illegible]rization #[illegible]

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (I) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

TC LL	20.0 PSF	REF	R487-- 607
TC DL	10.0 PSF	DATE	01/02/07
BC DL	10.0 PSF	DRW	HCUSR487 07002013
BC LL	0.0 PSF	HC-ENG	JB/AF
TOT.LD.	40.0 PSF	SEQN-	90563
DUR.FAC.	1.25		
SPACING	50.5"	IREF-	1T30487_Z01

Top chord 2x8 SP #1 Dense
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3

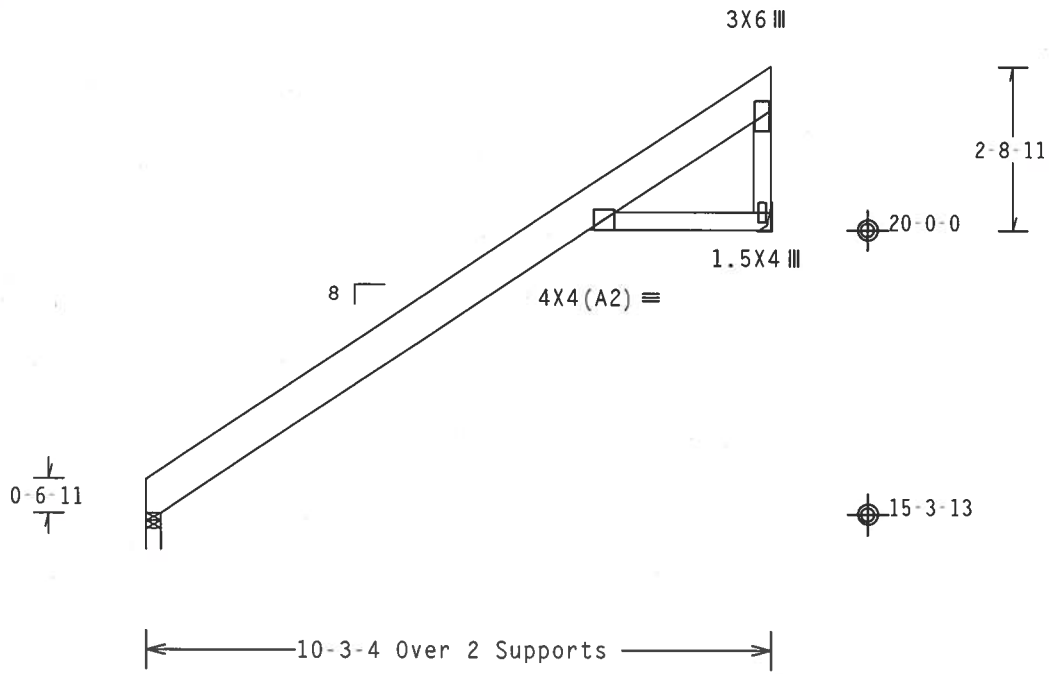
H = recommended connection based on manufacturer tested capacities and calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information.

Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.

110 mph wind, 19.30 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf.

Right end vertical not exposed to wind pressure.

In lieu of structural panels or rigid ceiling use purlins to brace TC @ 24" OC, BC @ 24" OC.



R=442 U=180 W=3"

R=421 U=180 H=Simpson LU24
w/ (2) 10d, 0.148"x1.5" nails in Truss
w/ (4) 10d Common, 0.148"x3.0" nails in Girder
Girder is (1)2X6 min. So.Pine

Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0) 7.24.1 QTY:9 FL/-/4/-/-/R/-

PLT TYP. Wave

Scale =.3125"/Ft.

ALPINE

Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificat... Organization # ...

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER
LICENSE
No. 59687
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Jan 02 '07

TC LL	20.0 PSF	REF R487-- 608
TC DL	10.0 PSF	DATE 01/02/07
BC DL	10.0 PSF	DRW HCUSR487 07002010
BC LL	0.0 PSF	HC-ENG JB/AF
TOT.LD.	40.0 PSF	SEQN- 90703
DUR.FAC.	1.25	
SPACING	24.0"	JREF- 1T30487_Z01

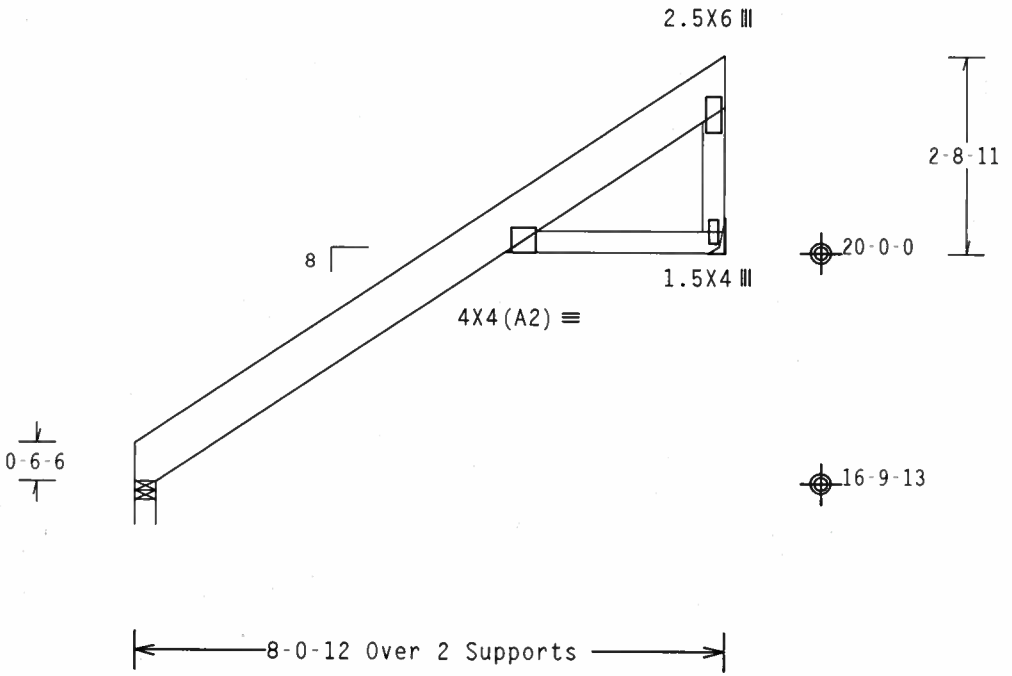
Top chord 2x8 SP #1 Dense
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3

H = recommended connection based on manufacturer tested capacities and calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information.

110 mph wind, 20.04 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf.

Right end vertical not exposed to wind pressure.

Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.



R=351 U=180 W=3.5"

R=326 U=180 H=Simpson LU24
w/ (2) 10d, 0.148"x1.5" nails in Truss
w/ (4) 10d Common, 0.148"x3.0" nails in Girder
Girder is (1)2X6 min. So.Pine

PLT TYP. Wave

Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0) 7.24.1 QTY:3 FL/-/4/-/-/R/- Scale =.375"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificate of Authorization # 667

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER
LICENSE
No. 59687
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Jan 02,'07

TC LL	20.0 PSF	REF R487-- 609
TC DL	10.0 PSF	DATE 01/02/07
BC DL	10.0 PSF	DRW HCUSR487 07002019
BC LL	0.0 PSF	HC-ENG JB/AF
TOT.LD.	40.0 PSF	SEQN- 90730
DUR.FAC.	1.25	
SPACING	24.0"	JREF- 1T30487_Z01

Top chord 2x8 SP SS :T2 2x4 SP #2 Dense:
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3

Calculated horizontal deflection is 0.12" due to live load and 0.19" due to dead load.

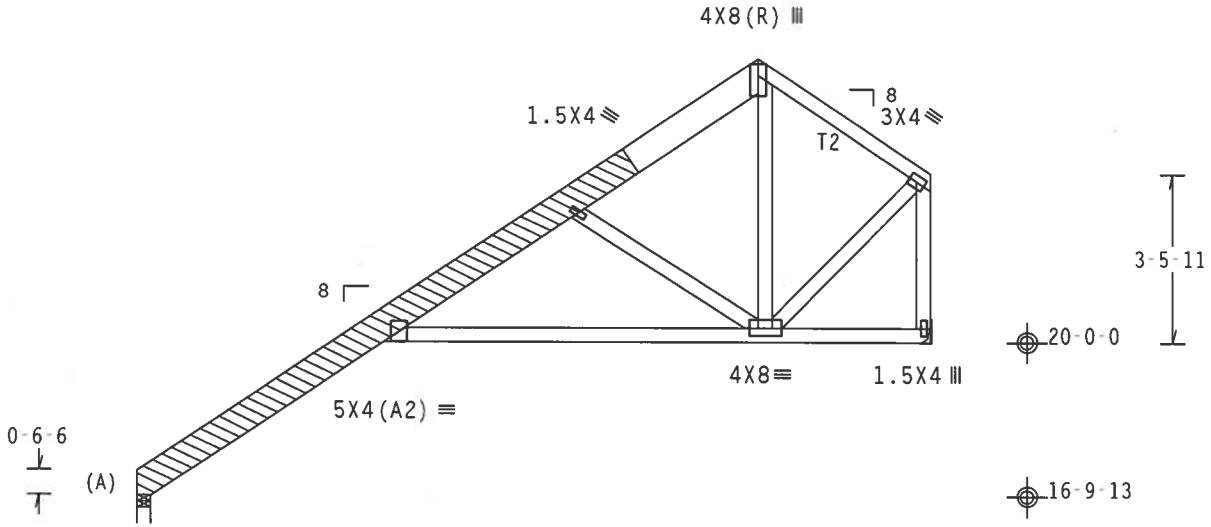
Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.

110 mph wind, 21.60 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf.

Right end vertical not exposed to wind pressure.

H = recommended connection based on manufacturer tested capacities and calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information.

(A) (1) 2x8x12-3-2 SP SS scab at left end. Attach scab to face of chord with: 12d_Common_(0.148"x3.25",_min.)_nails @ 8" OC, plus additional nail clusters at: BRG.: (2), heel: (4), 1st panel point: (2).



7-7-13 | 3-6-12

16-3-12 Over 2 Supports

R=698 U=180 W=3.5"

R=673 U=180 H=Simpson LU26
w/ (4) 10d, 0.148"x1.5" nails in Truss
w/ (6) 10d Comm., 0.148"x3.0" nails in Girder
Girder is 4x8 RT, So.Pine

Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0) 7.24.1 MWFRS TY:12 FL/-/4/-/-/R/-

PLT TYP. Wave

Scale =.25"/Ft.

ALPINE

Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
Fla. Certificate of Authorization #

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND. UNLESS OTHERWISE LOCATED ON THIS DESIGN. POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (I) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR B. FISHER LICENSE No.59687 STATE OF FLORIDA PROFESSIONAL ENGINEER

Jan 02 '07

TC LL	20.0 PSF	REF R487-- 610
TC DL	10.0 PSF	DATE 01/02/07
BC DL	10.0 PSF	DRW HCUSR487 07002018
BC LL	0.0 PSF	HC-ENG JB/AF
TOT.LD.	40.0 PSF	SEQN- 90757
DUR.FAC.	1.25	
SPACING	24.0"	JREF- 1T30487_Z01

Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3
:Stack Chord SC1 2x4 SP #2 Dense:
:Stack Chord SC2 2x4 SP #2 Dense:

See DWGS A11030EE0405 & GBLLETIN0405 for more requirements.

In lieu of structural panels use purlins to brace TC @ 24" OC.

Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.

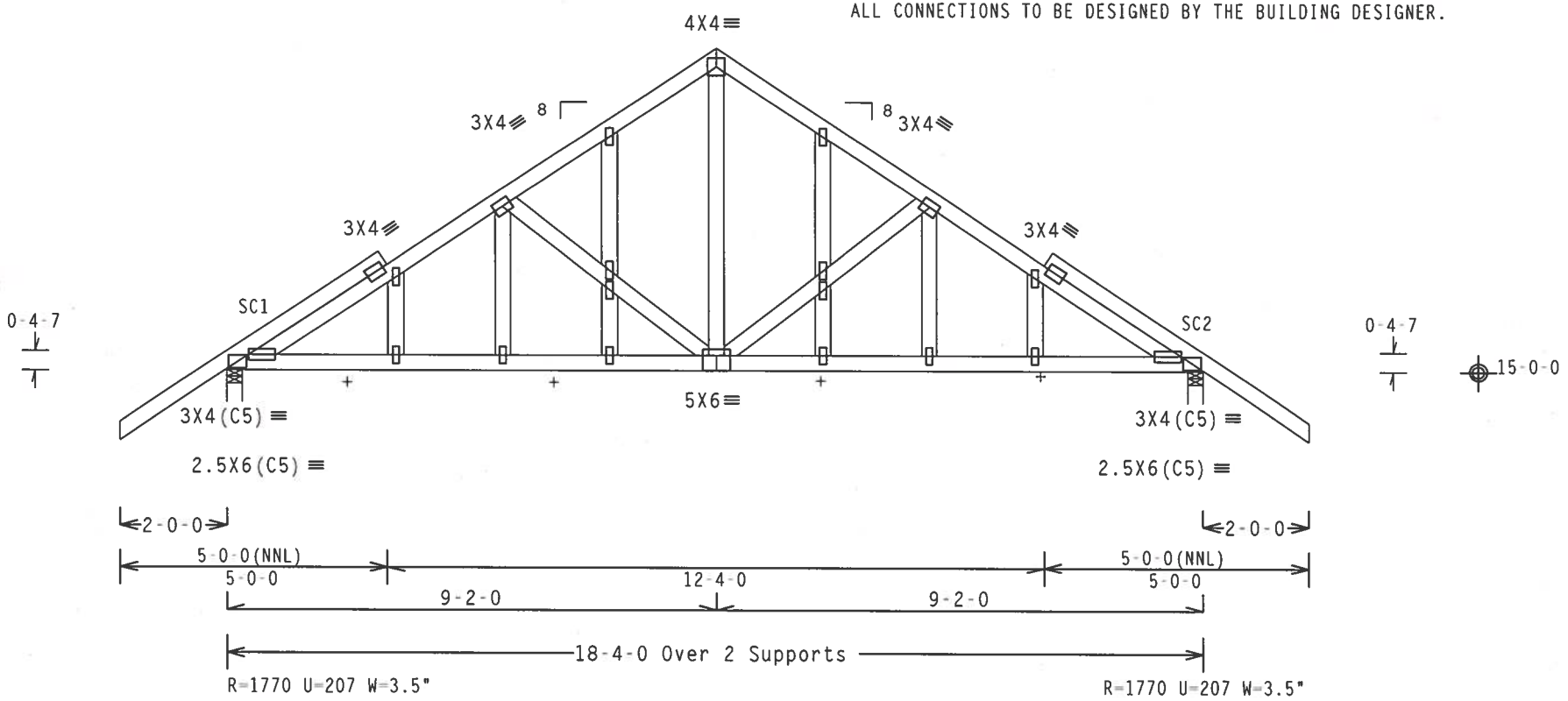
+ MEMBER TO BE LATERALLY BRACED FOR HORIZONTAL WIND LOADS.
BRACING SYSTEM TO BE DESIGNED AND FURNISHED BY OTHERS.

110 mph wind, 18.21 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.

Gable end supports 8" max rake overhang.

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 notchable 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 notchable area using 3x6.

THE BUILDING DESIGNER IS RESPONSIBLE FOR THE DESIGN OF ROOF AND CEILING DIAPHRAGMS, GABLE END SHEAR WALLS, SUPPORTING SHEAR WALLS. SHEAR WALLS MUST PROVIDE CONTINUOUS LATERAL RESTRAINT TO GABLE END. ALL CONNECTIONS TO BE DESIGNED BY THE BUILDING DESIGNER.



Note: All Plates Are 1.5X4 Except As Shown.

Design Crit: TPI-2002(STD)/FBC

PLT TYP. Wave

Cq/RT=1.00(1.25)/10(0) 7.24.13 [illegible] QTY:1 FL/-/4/-/-/R/- Scale =.3125"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
Certificat[illegible]ization #

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (I) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

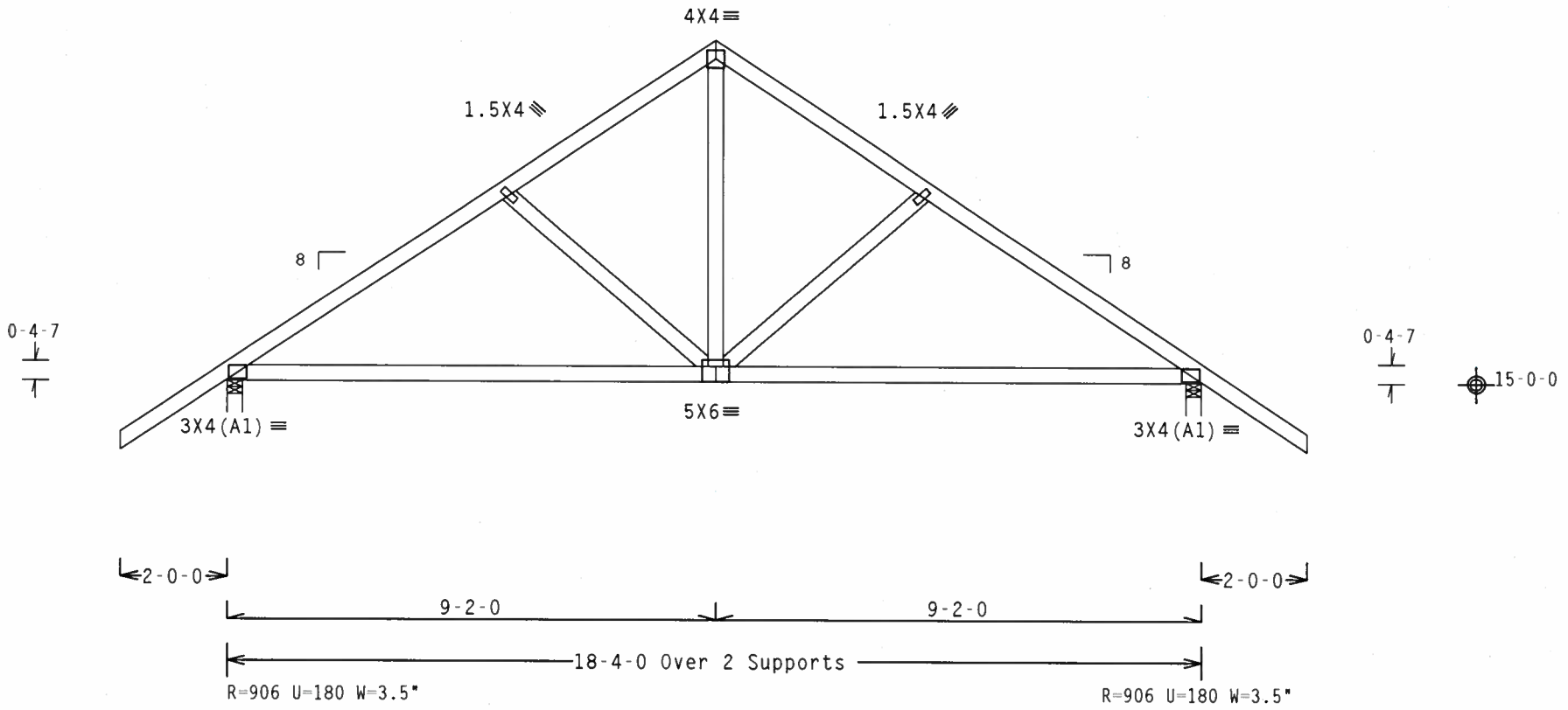
ARTHUR R. FISHER LICENSE No.59687 STATE OF FLORIDA PROFESSIONAL ENGINEER
Jan 02 '07

TC LL	20.0 PSF	REF R487-- 611
TC DL	10.0 PSF	DATE 01/02/07
BC DL	10.0 PSF	DRW HCUSR487 07002020
BC LL	0.0 PSF	HC-ENG JB/AF
TOT.LD.	40.0 PSF	SEQN- 90542
DUR.FAC.	1.25	
SPACING	24.0"	JREF- 1T30487_Z01

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

110 mph wind, 17.76 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.

Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.



Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0) 7.24.1 QTY:3 FL/-/4/-/-/R/-

PLT TYP. Wave

Scale =.3125"/Ft.

ARTHUR R. FISHER LICENSE No.39687 STATE OF FLORIDA PROFESSIONAL ENGINEER
Jan 02 07

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
Fla. Certificate of Authorization #

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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.

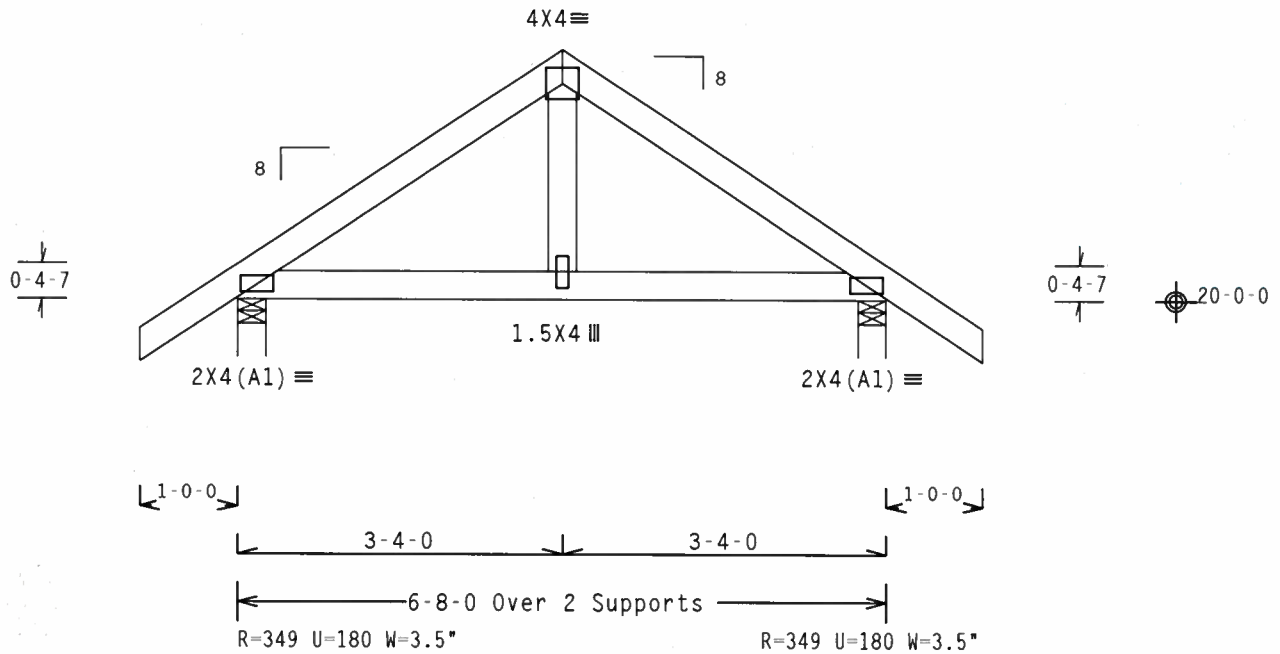
IMPORTANT FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ALPINE ENGINEERED PRODUCTS, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI: OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. BY AF&PA) AND TPI. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

TC LL	20.0 PSF	REF R487-- 612
TC DL	10.0 PSF	DATE 01/02/07
BC DL	10.0 PSF	DRW HCUSR487 07002021
BC LL	0.0 PSF	HC-ENG JB/AF *
TOT.LD.	40.0 PSF	SEQN- 90538
DUR.FAC.	1.25	
SPACING	24.0"	JREF- 1T30487_Z01

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

Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.

110 mph wind, 21.15 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.



Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0) 7.24.12 16:[illegible] QTY:40 FL/-/4/-/-/R/-

PLT TYP. Wave

Scale =.5"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificate of Authorization # [illegible]

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER LICENSE No. 50687 STATE OF FLORIDA PROFESSIONAL ENGINEER
Jan 02 '07

TC LL	20.0 PSF	REF R487-- 613
TC DL	10.0 PSF	DATE 01/02/07
BC DL	10.0 PSF	DRW HCUSR487 07002004
BC LL	0.0 PSF	HC-ENG JB/AF *
TOT.LD.	40.0 PSF	SEQN- 90529
DUR.FAC.	1.25	
SPACING	24.0"	JREF- 1T30487 Z01

Top chord 2x4 SP #2 Dense :T2 2x6 SP #1 Dense:
Bot chord 2x6 SP #1 Dense
Webs 2x4 SP #3 :W1, W11 2x4 SP #2 Dense:

SPECIAL LOADS
------(LUMBER DUR.FAC.=1.00 / PLATE DUR.FAC.=1.00)
TC - From 120 PLF at -2.04 to 120 PLF at 16.96
BC - From 20 PLF at 0.00 to 20 PLF at 16.96
TC - 1219 LB Conc. Load at 2.35

Left end vertical exposed to wind pressure. Deflection meets L/240 criteria for brittle and flexible wall coverings.

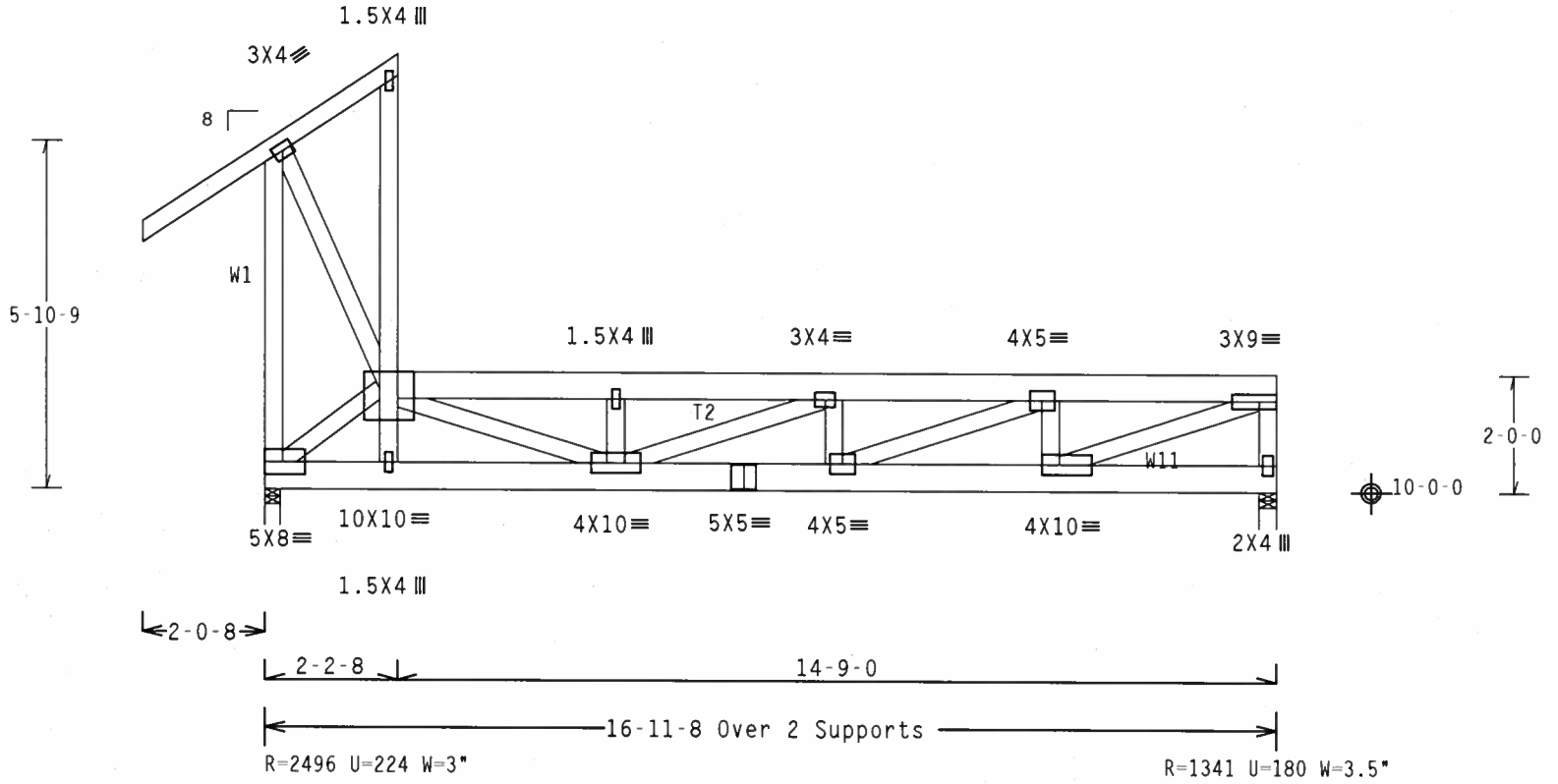
+ 2X6 continuous strongback. See ANSI/TPI 1-02 Sect. 7.5.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=3.0 psf.

Right end vertical not exposed to wind pressure.

Calculated horizontal deflection is 0.16" due to live load and 0.14" due to dead load.

Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.



Design Crit: TPI-2002(STD)/FBC
PLT TYP. Wave Cq/RT=1.00(1.25)/10(0) 7.24.12 TY:3 FL/-/4/-/-/R/- Scale =.3125"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificate of Authorization # 8673

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER LICENSE No.59687 STATE OF FLORIDA PROFESSIONAL ENGINEER
Jan 02 '07

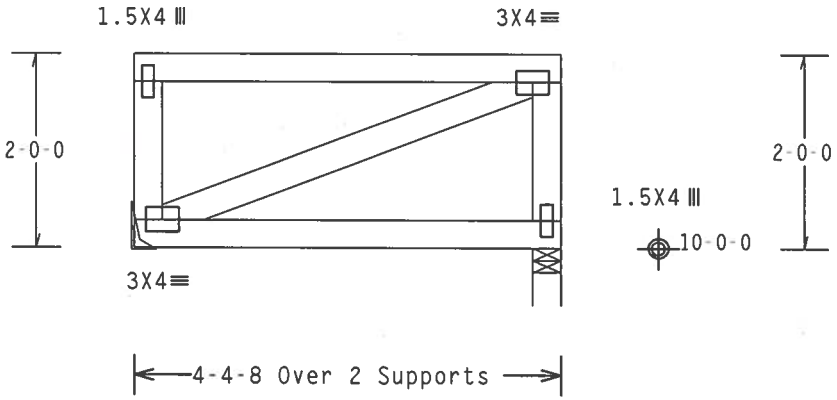
TC LL	50.0 PSF	REF R487-- 614
TC DL	10.0 PSF	DATE 01/02/07
BC DL	10.0 PSF	DRW HCUSR487 07002022
BC LL	0.0 PSF	HC-ENG JB/AF
TOT.LD.	70.0 PSF	SEQN- 90642
DUR.FAC.	1.00	
SPACING	24.0"	JREF- 1T30487_Z01

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

Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.

H = recommended connection based on manufacturer tested capacities and calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information.

Truss must be installed as shown with top chord up.



R=284 H=Simpson LU24
w/ (2) 10d, 0.148"x1.5" nails in Truss
w/ (4) 10d Common, 0.148"x3.0" nails in Girder
Girder is (1)2X6 min. So.Pine

R=284 W=3.5"

PLT TYP. Wave

Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0) 7.24.1 TY:1 FL/-/4/-/-/R/-

Scale =.5"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificate of Authorization # 6[illegible]

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER LICENSE No.59687 STATE OF FLORIDA PROFESSIONAL ENGINEER

Jan 02 '07

TC LL	50.0 PSF	REF R487-- 615
TC DL	10.0 PSF	DATE 01/02/07
BC DL	5.0 PSF	DRW HCUSR487 07002011
BC LL	0.0 PSF	HC-ENG JB/AF
TOT.LD.	65.0 PSF	SEQN- 90741
DUR.FAC.	1.00	
SPACING	24.0"	JREF- 1T30487_Z01

Top chord 2x4 SP #2 Dense :T2 2x6 SP #1 Dense:
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3 :W1 2x4 SP #2 Dense:

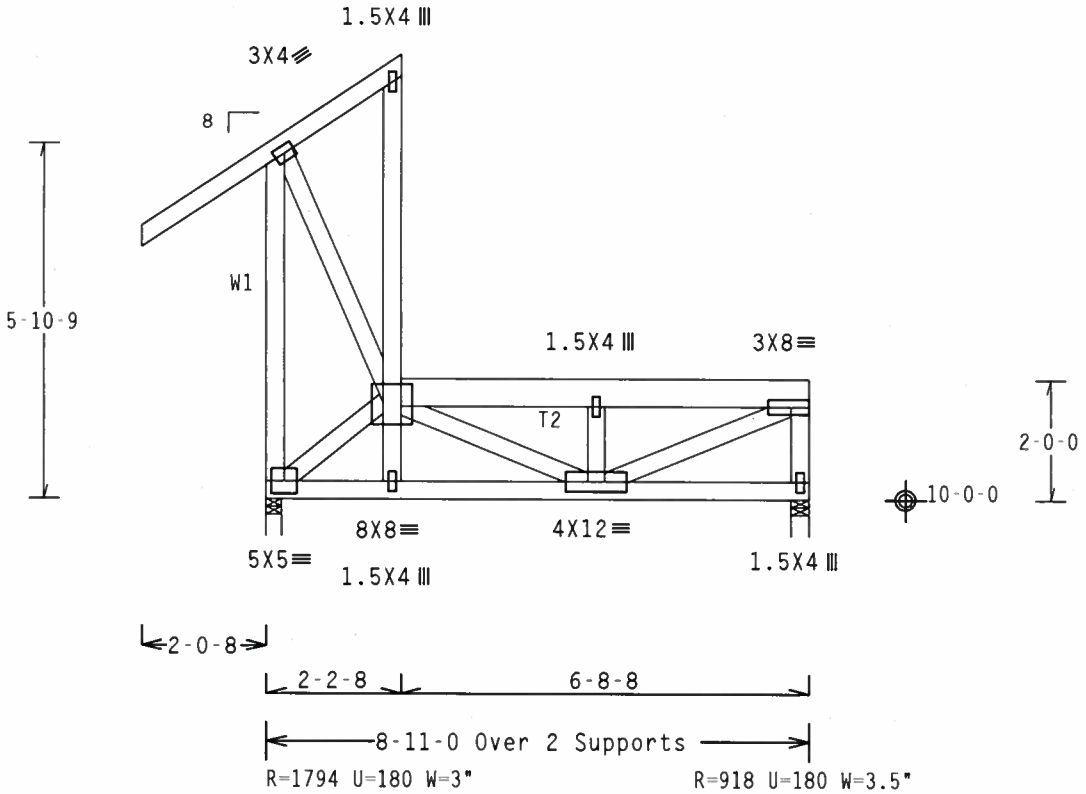
SPECIAL LOADS
------(LUMBER DUR.FAC.=1.00 / PLATE DUR.FAC.=1.00)
TC - From 120 PLF at -2.04 to 120 PLF at 8.92
BC - From 20 PLF at 0.00 to 20 PLF at 8.92
TC - 1219 LB Conc. Load at 2.35

Left end vertical exposed to wind pressure. Deflection meets L/240 criteria for brittle and flexible wall coverings.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=3.0 psf.

Right end vertical not exposed to wind pressure.

Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.



Design Crit: TPI-2002(STD)/FBC
PLT TYP. Wave Cq/RT=1.00(1.25)/10(0) 7.24.12 QTY:4 FL/-/4/-/-/R/- Scale =.3125"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificate of Authorization # 6627

ARTHUR R. FISHER LICENSE No. 59687 STATE OF FLORIDA PROFESSIONAL ENGINEER
Jan 02 '07

TC LL	50.0 PSF	REF R487-- 616
TC DL	10.0 PSF	DATE 01/02/07
BC DL	10.0 PSF	DRW HCUSR487 07002023
BC LL	0.0 PSF	HC-ENG JB/AF
TOT.LD.	70.0 PSF	SEQN- 90629
DUR.FAC.	1.00	
SPACING	24.0"	JREF- 1T30487 Z01

Top chord 2x4 SP #2 Dense :T2 2x6 SP #1 Dense:
Bot chord 2x6 SP #1 Dense
Webs 2x4 SP #3 :W1, W11 2x4 SP #2 Dense:

SPECIAL LOADS
------(LUMBER DUR.FAC.=1.00 / PLATE DUR.FAC.=1.00)
TC - From 120 PLF at -2.04 to 120 PLF at 17.33
BC - From 20 PLF at 0.00 to 20 PLF at 17.33
TC - 1219 LB Conc. Load at 2.35

Left end vertical exposed to wind pressure. Deflection meets L/240 criteria for brittle and flexible wall coverings.

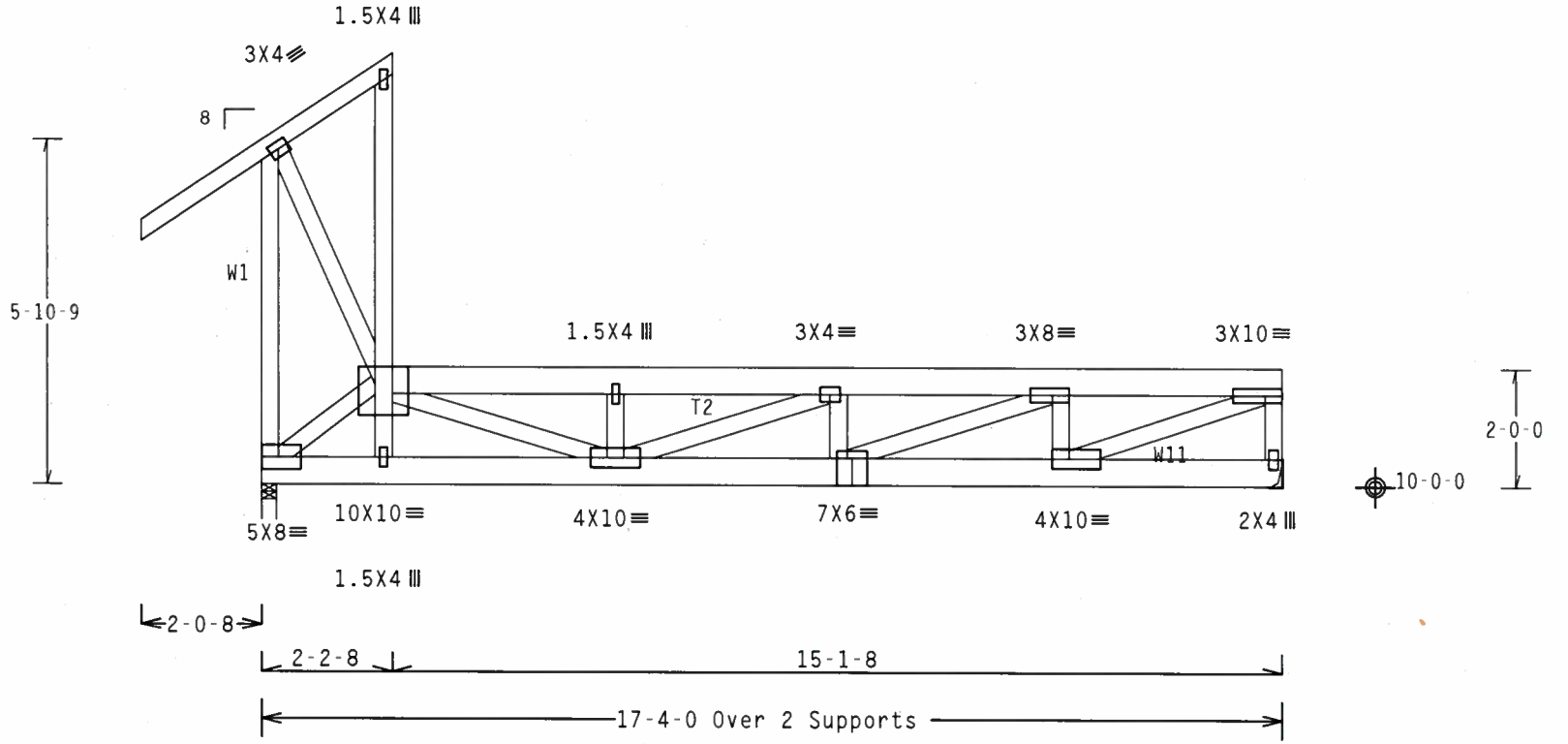
Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=3.0 psf.

Right end vertical not exposed to wind pressure.

Calculated horizontal deflection is 0.17" due to live load and 0.14" due to dead load.

H = recommended connection based on manufacturer tested capacities and calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information.



R=2526 U=227 W=3"

R=1364 U=180 H=Simpson HUS26
w/ (4) 10d Common, 0.148"x3.0" nails in Truss
w/ (14) 10d Common, 0.148"x3.0" nails in Girder
Ri[illegible]is (1)2X6 min. So.Pine

Design Crit: TPI-2002(STD)/FBC
PLT TYP. Wave
Cq/RT=1.00(1.25)/10(0) 7.24.1[illegible] QTY:3 FL/-/4/-/-/R/- Scale =.3125"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA. 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER LICENSE No.39687 STATE OF FLORIDA PROFESSIONAL ENGINEER
Jan 02 '07

TC LL	50.0 PSF	REF	R487-- 617
TC DL	10.0 PSF	DATE	01/02/07
BC DL	10.0 PSF	DRW	HCUSR487 07002006
BC LL	0.0 PSF	HC-ENG	JB/AF
TOT.LD.	70.0 PSF	SEQN-	90669
DUR.FAC.	1.00		
SPACING	24.0"	JREF-	1T30487_Z01

Top chord 2x4 SP #2 Dense
Bot chord 2x8 SP #1 Dense
Webs 2x4 SP #3 :W4, W8 2x4 SP #2 Dense:

SPECIAL LOADS
-------(LUMBER DUR.FAC.=1.25 / PLATE DUR.FAC.=1.25)
TC - From 60 PLF at 0.00 to 60 PLF at 24.42
BC - From 20 PLF at 0.00 to 20 PLF at 24.42
BC - 421 LB Conc. Load at 1.15, 3.06, 5.15, 7.15, 9.15
11.15, 13.15, 15.15, 17.15, 19.15, 21.15, 23.15

(A) Continuous lateral bracing equally spaced on member.

Truss must be installed as shown with top chord up.

The TC of this truss shall be braced with attached spans at 24" OC in lieu of structural sheathing.

Bearing blocks: Nail type: 12d Common (0.148"x3.25", min.) nails

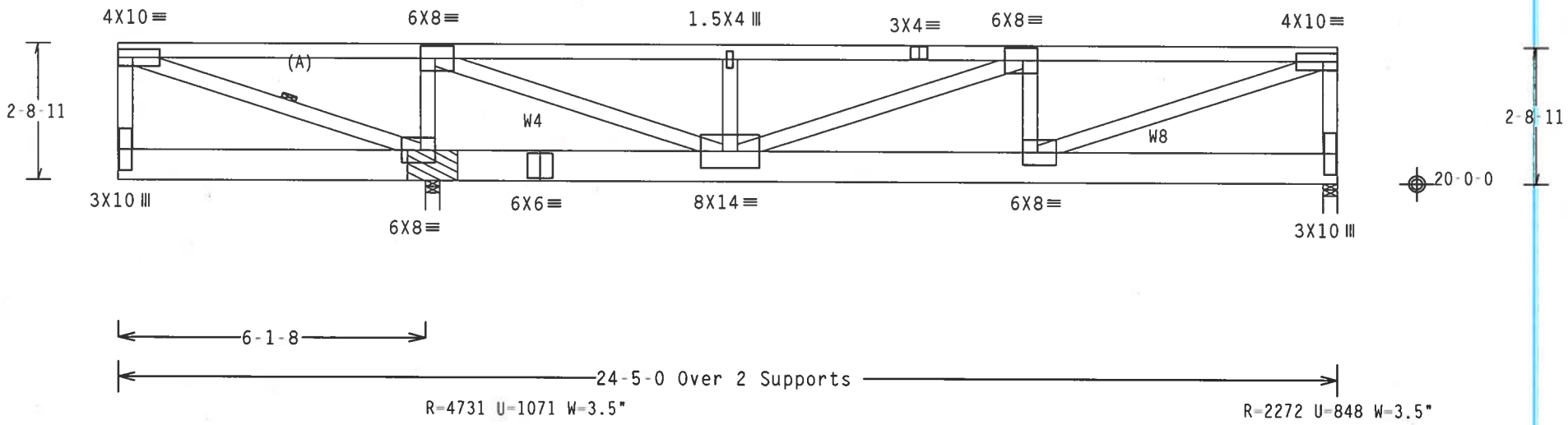
BRG	X-LOC	#BLOCKS	LENGTH/BLK	#NAILS/BLK	WALL PLATE
1	6.125'	1	12"	7	Match Truss

Bearing block to be same size and species as bottom chord.
Refer to drawing CNBRGBLK1103 for additional information.

110 mph wind, 22.72 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf.

Max JT VERT DEFL: LL: 0.05" DL: 0.20" recommended camber 1/4"

Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.



Design Crit: TPI-2002(STD)/FBC
PLT TYP. Wave
Cq/RT=1.00(1.25)/10(0) 7.24.12 TY:1 FL/-/4/-/-/R/-
Scale =.3125"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
Certificate of Authorization #

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (I) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER LICENSE No. 59687 STATE OF FLORIDA PROFESSIONAL ENGINEER
Jan 02 '07

TC LL	20.0 PSF	REF	R487-- 618
TC DL	10.0 PSF	DATE	01/02/07
BC DL	10.0 PSF	DRW	HCUSR487 07002003
BC LL	0.0 PSF	HC-ENG	JB/AF
TOT.LD.	40.0 PSF	SEQN-	90722
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1T30487_Z01

(6 058 Allstate 1st South Ins. Lake City, FL 32055 FG2)

THIS DWG PREPARED FROM COMPUTER INPUT (LOADS & DIMENSIONS) SUBMITTED BY TRUSS MFR.

Top chord 2x4 SP #2 Dense
Bot chord 2x8 SP #1 Dense
Webs 2x4 SP #3 :W6, W14 2x4 SP #2 Dense:

Bearing blocks: Nail type: 12d_Common_(0.148"x3.25",_min.)_nails

BRG	X-LOC	#BLOCKS	LENGTH/BLK	#NAILS/BLK	WALL PLATE
1	6.125'	1	18"	20	Match Truss
2	24.125'	1	12"	4	Match Truss

Bearing block to be same size and species as bottom chord.
Refer to drawing CNBRGBLK1103 for additional information.

Max JT VERT DEFL: LL: 0.11" DL: 0.16" recommended camber 1/4"

In lieu of structural panels or rigid ceiling use purlins to brace TC @ 24" OC, BC @ 24" OC.

Truss must be installed as shown with top chord up.

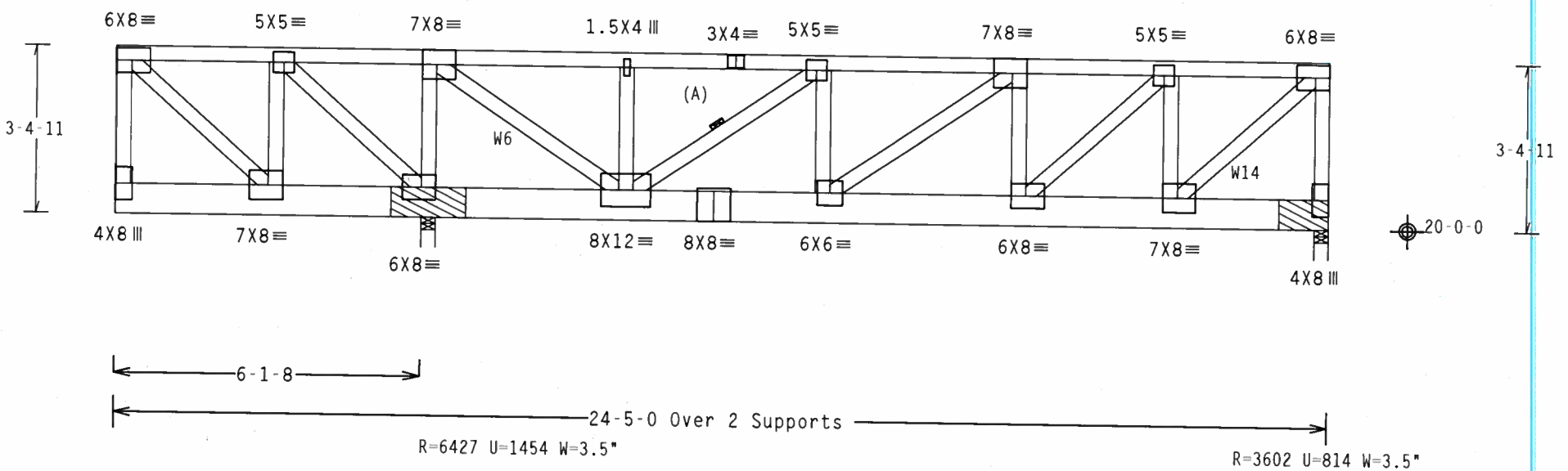
SPECIAL LOADS
------(LUMBER DUR.FAC.=1.25 / PLATE DUR.FAC.=1.25)
TC - From 60 PLF at 0.00 to 60 PLF at 24.42
BC - From 20 PLF at 0.00 to 20 PLF at 24.42
BC - 673 LB Conc. Load at 1.81, 3.81, 5.81, 7.81, 9.81 11.81, 13.81, 15.81, 17.81, 19.81, 21.81, 23.81

110 mph wind, 23.39 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf.

(A) Continuous lateral bracing equally spaced on member.

Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.

The TC of this truss shall be braced with attached spans at 24" OC in lieu of structural sheathing.



PLT TYP. Wave

Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0) 7.24.12 QTY:1 FL/-/4/-/-/R/-

Scale =.3125"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificate of Authorization # 567

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI1: OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. BY AF&PA) AND TPI1. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER LICENSE No. 39687 STATE OF FLORIDA PROFESSIONAL ENGINEER
Jan 02,07

TC LL	20.0 PSF	REF	R487-- 619
TC DL	10.0 PSF	DATE	01/02/07
BC DL	10.0 PSF	DRW	HCUSR487 07002007
BC LL	0.0 PSF	HC-ENG	JB/AF
TOT.LD.	40.0 PSF	SEQN-	90777
DUR.FAC.	1.25		
SPACING	24.0"	JOB	1T30487 Z01

Top chord 2x4 SP #2 Dense
Bot chord 2x6 SP #1 Dense
Webs 2x4 SP #3

SPECIAL LOADS
-------(LUMBER DUR.FAC.=1.00 / PLATE DUR.FAC.=1.00)
TC - From 120 PLF at 0.00 to 120 PLF at 4.63
BC - From 10 PLF at 0.00 to 10 PLF at 4.63
BC - 284 LB Conc. Load at 1.06
BC - 1364 LB Conc. Load at 3.06

Truss must be installed as shown with top chord up.

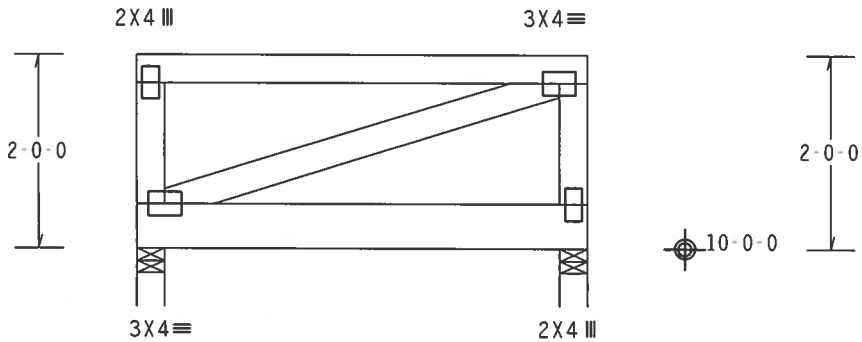
LOADING HAS BEEN CALCULATED BY THE TRUSS MANUFACTURER.
IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER TO
VERIFY AND APPROVE THE LOADING.

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 @ 4.25" o.c.
Webs : 1 Row @ 4" o.c.
Use equal spacing between rows and stagger nails
in each row to avoid splitting.

Deflection meets L/360 live and L/240 total load. Creep increase
factor for dead load is 1.50.

The TC of this truss shall be braced with attached spans at 24" OC in
lieu of structural sheathing.



Design Crit: TPI-2002(STD)/FBC
PLT TYP. Wave
Cq/RT=1.00(1.25)/10(0) 7.24.12 QTY:1 FL/-/4/-/-/R/- Scale =.5"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificat... Authorization #...

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER LICENSE No.59687 STATE OF FLORIDA PROFESSIONAL ENGINEER
Jan 02 '07

TC LL	50.0 PSF	REF R487-- 620
TC DL	10.0 PSF	DATE 01/02/07
BC DL	5.0 PSF	DRW HCUSR487 07002012
BC LL	0.0 PSF	HC-ENG JB/AF
TOT.LD.	65.0 PSF	SEQN- 90688
DUR.FAC.	1.00	
SPACING	24.0"	JREF- 1T30487_Z01

(6-058---- Allstate-1st South Ins. -- Lake City, FL 32055 - FG4)

THIS DWG PREPARED FROM COMPUTER INPUT (LOADS & DIMENSIONS) SUBMITTED BY TRUSS MFR.

Top chord 2x4 SP #2 Dense
Bot chord 2x6 SP #1 Dense
Webs 2x4 SP #3

SPECIAL LOADS
------(LUMBER DUR.FAC.=1.00 / PLATE DUR.FAC.=1.00)
TC - From 120 PLF at -0.00 to 120 PLF at 4.63
BC - From 10 PLF at 0.00 to 10 PLF at 4.63
BC - 1364 LB Conc. Load at 1.27, 3.27

Truss must be installed as shown with top chord up.

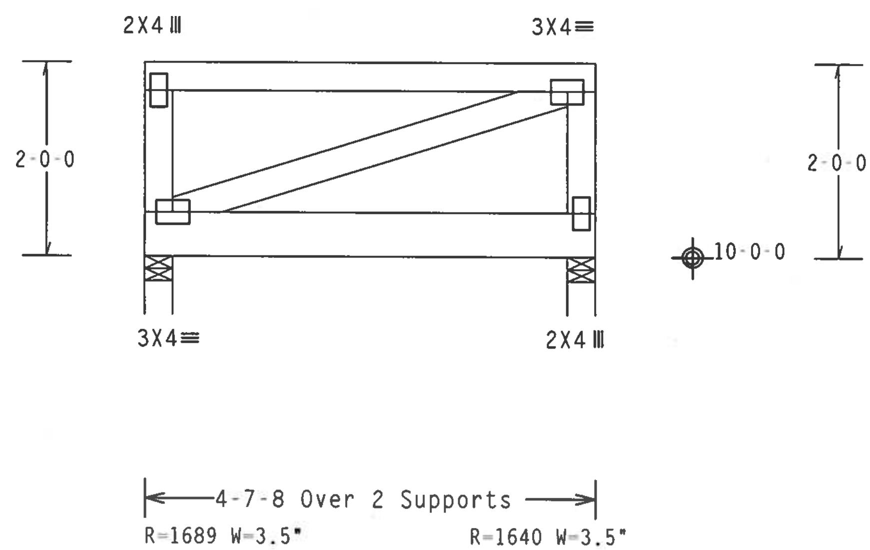
The TC of this truss shall be braced with attached spans at 24" OC in lieu of structural sheathing.

LOADING HAS BEEN CALCULATED BY THE TRUSS MANUFACTURER. IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER TO VERIFY AND APPROVE THE LOADING.

2 COMPLETE TRUSSES REQUIRED

Nailing Schedule: (12d_Common_(0.148"x3.25",_min.)_nails)
Top Chord: 1 Row @12.00" o.c.
Bot Chord: 2 Rows @ 5.00" o.c. (Each Row)
Webs : 1 Row @ 4" o.c.
Use equal spacing between rows and stagger nails in each row to avoid splitting.

Deflection meets L/360 live and L/240 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)/10(0) 7.24.1 ... QTY:1 FL/-/4/-/-/R/- Scale =.5"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificate of Authorization #...

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W.H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (I) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER
LICENSE
No. 59687
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Jan 02 '07

TC LL	50.0 PSF	REF R487-- 621
TC DL	10.0 PSF	DATE 01/02/07
BC DL	5.0 PSF	DRW HCUSR487 07002002
BC LL	0.0 PSF	HC-ENG JB/AF
TOT.LD.	65.0 PSF	SEQN- 90679
DUR.FAC.	1.00	
SPACING	24.0"	JREF- 1T30487_Z01

Top chord 2x6 SP #1 Dense :T1 2x4 SP #2 Dense:
Bot chord 2x6 SP #1 Dense
Webs 2x4 SP #3 :W1, W11 2x4 SP #2 Dense:

SPECIAL LOADS
------(LUMBER DUR.FAC.=1.00 / PLATE DUR.FAC.=1.00)
TC - From 120 PLF at -2.04 to 120 PLF at 19.63
BC - From 20 PLF at 0.00 to 20 PLF at 19.63
TC - 1072 LB Conc. Load at 2.35

Left end vertical exposed to wind pressure. Deflection meets L/240 criteria for brittle and flexible wall coverings.

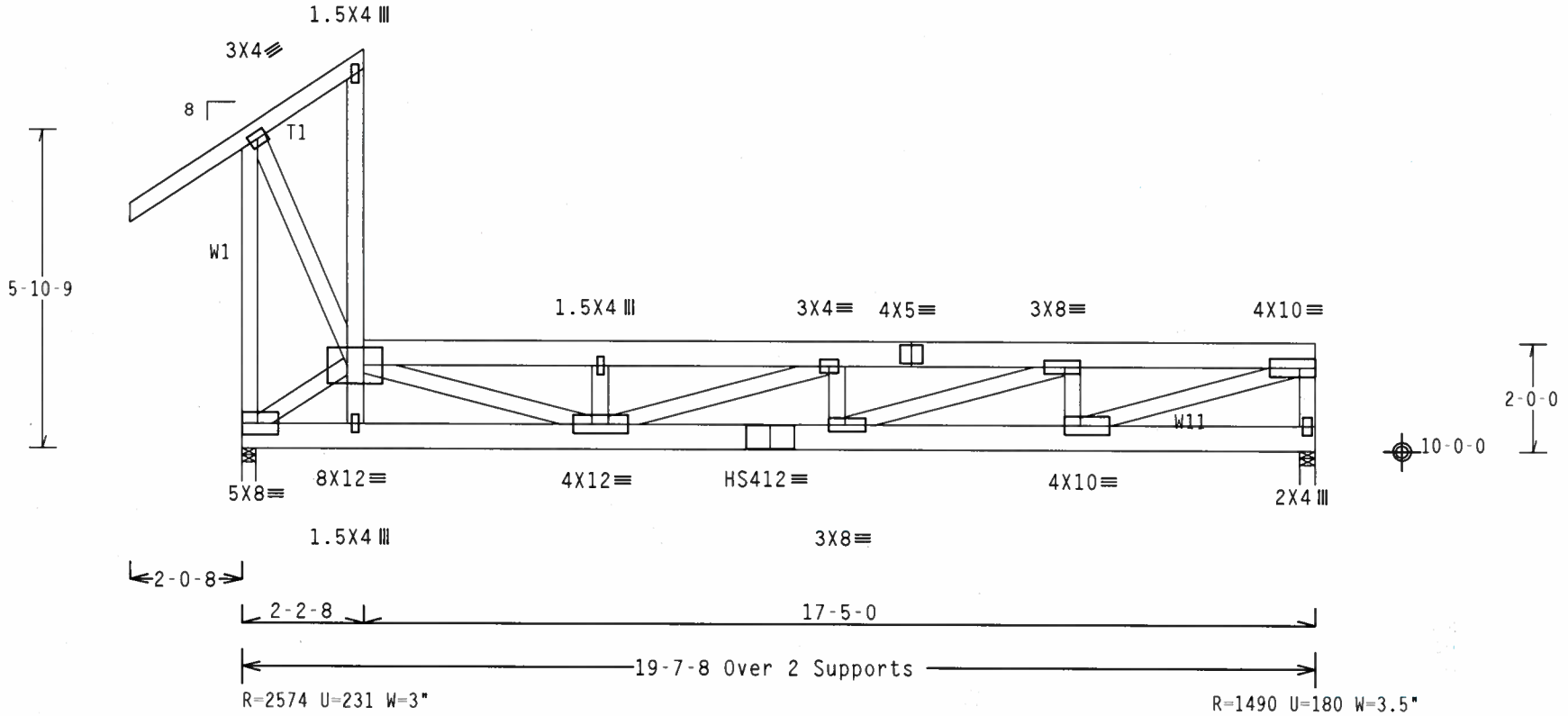
+ 2X6 continuous strongback. See ANSI/TPI 1-02 Sect. 7.5.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=3.0 psf.

Right end vertical not exposed to wind pressure.

Calculated horizontal deflection is 0.23" due to live load and 0.17" due to dead load.

Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.



Design Crit: TPI-2002(STD)/FBC

PLT TYP. 20 Gauge HS,Wave Cq/RT=1.00(1.25)/10(0) 7.24.1 QTY:5 FL/-/4/-/-/R/- Scale =.3125"/Ft.

ALPINE

Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificate of Authorization # 6673

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER LICENSE No.59687 STATE OF FLORIDA PROFESSIONAL ENGINEER

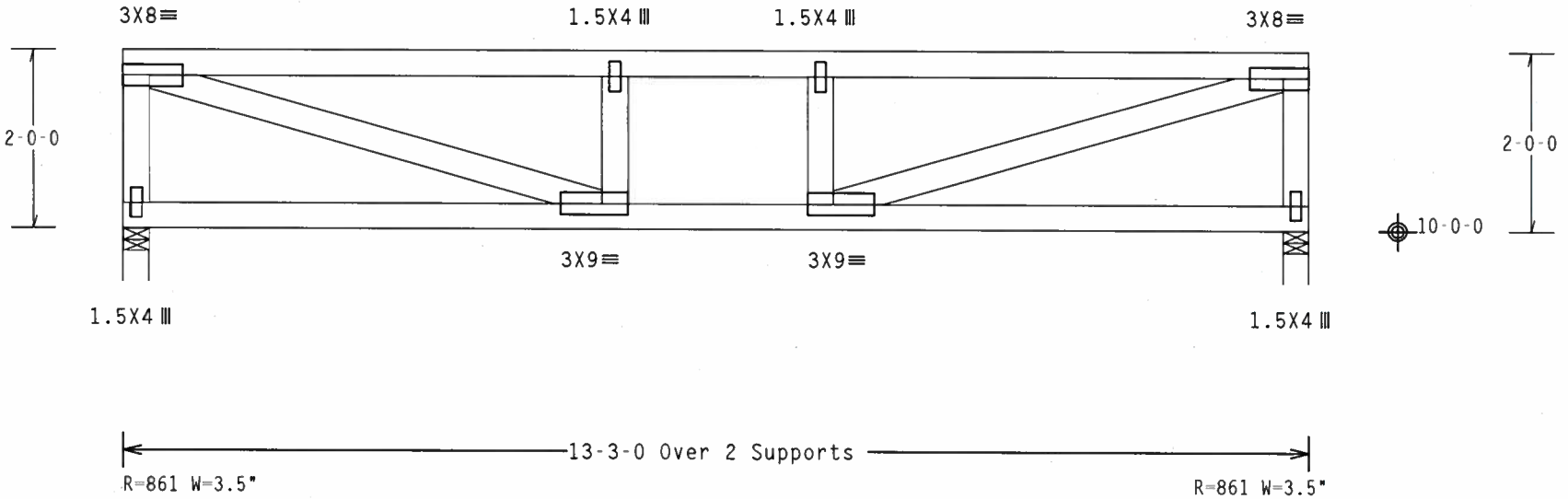
Jan 02 '07

TC LL	50.0 PSF	REF R487-- 622
TC DL	10.0 PSF	DATE 01/02/07
BC DL	10.0 PSF	DRW HCUSR487 07002005
BC LL	0.0 PSF	HC-ENG JB/AF
TOT.LD.	70.0 PSF	SEQN- 90653
DUR.FAC.	1.00	
SPACING	24.0"	JREF- 1T30487_Z01

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

Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.

Truss must be installed as shown with top chord up.



PLT TYP. Wave

Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0) 7.24.1 ... QTY:9 FL/-/4/-/-/R/-

Scale =.5"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificate of Authorization # 6[illegible]

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER
LICENSE
No. 59687
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Jan 02 '07

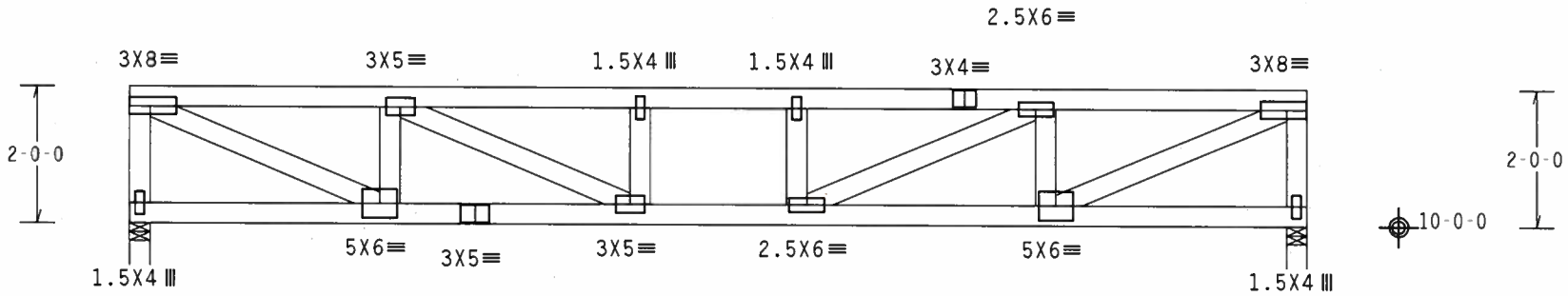
TC LL	50.0 PSF	REF R487-- 623
TC DL	10.0 PSF	DATE 01/02/07
BC DL	5.0 PSF	DRW HCUSR487 07002008
BC LL	0.0 PSF	HC-ENG JB/AF
TOT.LD.	65.0 PSF	SEQN- 90600
DUR.FAC.	1.00	
SPACING	24.0"	JREF- 1T30487 Z01

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

Truss must be installed as shown with top chord up.

+ 2X6 continuous strongback. See ANSI/TPI 1-02 Sect. 7.5.

Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.



16-11-8 Over 2 Supports

R=1102 W=3.5"

R=1102 W=3.5"

Design Crit: TPI-2002(STD)/FBC

PLT TYP. Wave

Cq/RT=1.00(1.25)/10(0) 7.24.1 QTY:12 FL/-/4/-/-/R/- Scale =.375"/Ft.

ALPINE

Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
Certificate of Authorization # 667

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER LICENSE No. 59687 STATE OF FLORIDA PROFESSIONAL ENGINEER

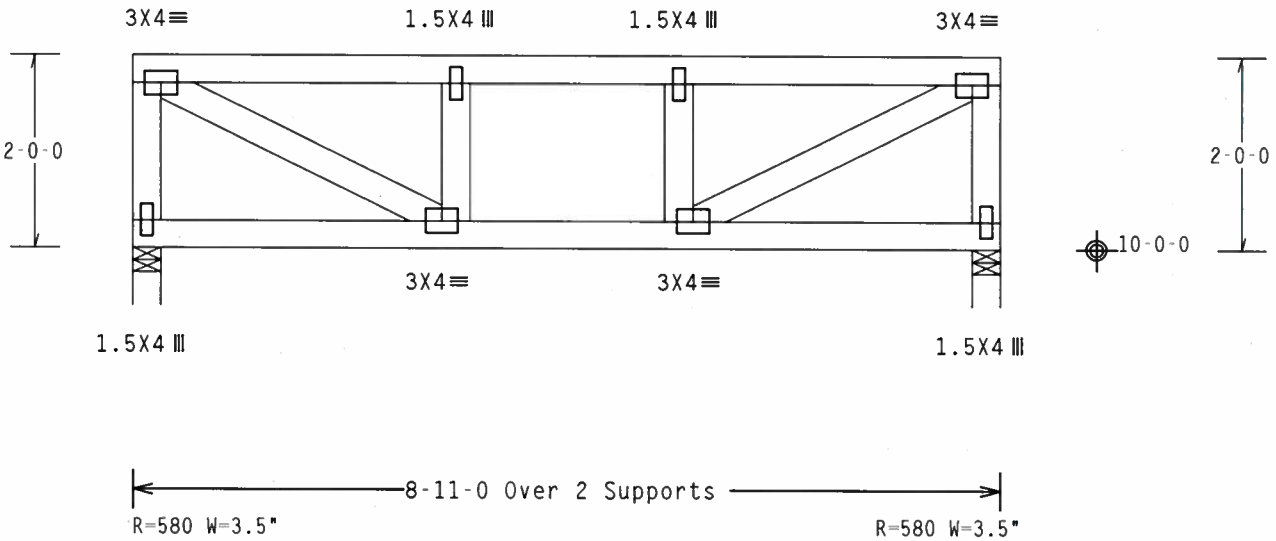
Jan 02 '07

TC LL	50.0 PSF	REF	R487-- 624
TC DL	10.0 PSF	DATE	01/02/07
BC DL	5.0 PSF	DRW	HCUSR487 07002009
BC LL	0.0 PSF	HC-ENG	JB/AF
TOT.LD.	65.0 PSF	SEQN-	90605
DUR.FAC.	1.00		
SPACING	24.0"	JREF-	1T30487_Z01

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

Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.

Truss must be installed as shown with top chord up.



Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0) 7.24.12 QTY:3 FL/-/4/-/-/R/-

PLT TYP. Wave

Scale =.5"/Ft.

ALPINE

Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
Fla. Certificate of Authorization # [illegible]

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (I) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER LICENSE No. 59687 STATE OF FLORIDA PROFESSIONAL ENGINEER

Jan 02 '07

TC LL	50.0 PSF	REF R487-- 625
TC DL	10.0 PSF	DATE 01/02/07
BC DL	5.0 PSF	DRW HCUSR487 07002001
BC LL	0.0 PSF	HC-ENG JB/AF
TOT.LD.	65.0 PSF	SEQN- 90595
DUR.FAC.	1.00	
SPACING	24.0"	JREF- 1T30487_Z01

(6-058---- Allstate-1st South Ins. -- Lake City, FL 32055 - AP1)

THIS DWG PREPARED FROM COMPUTER INPUT (LOADS & DIMENSIONS) SUBMITTED BY TRUSS MFR.

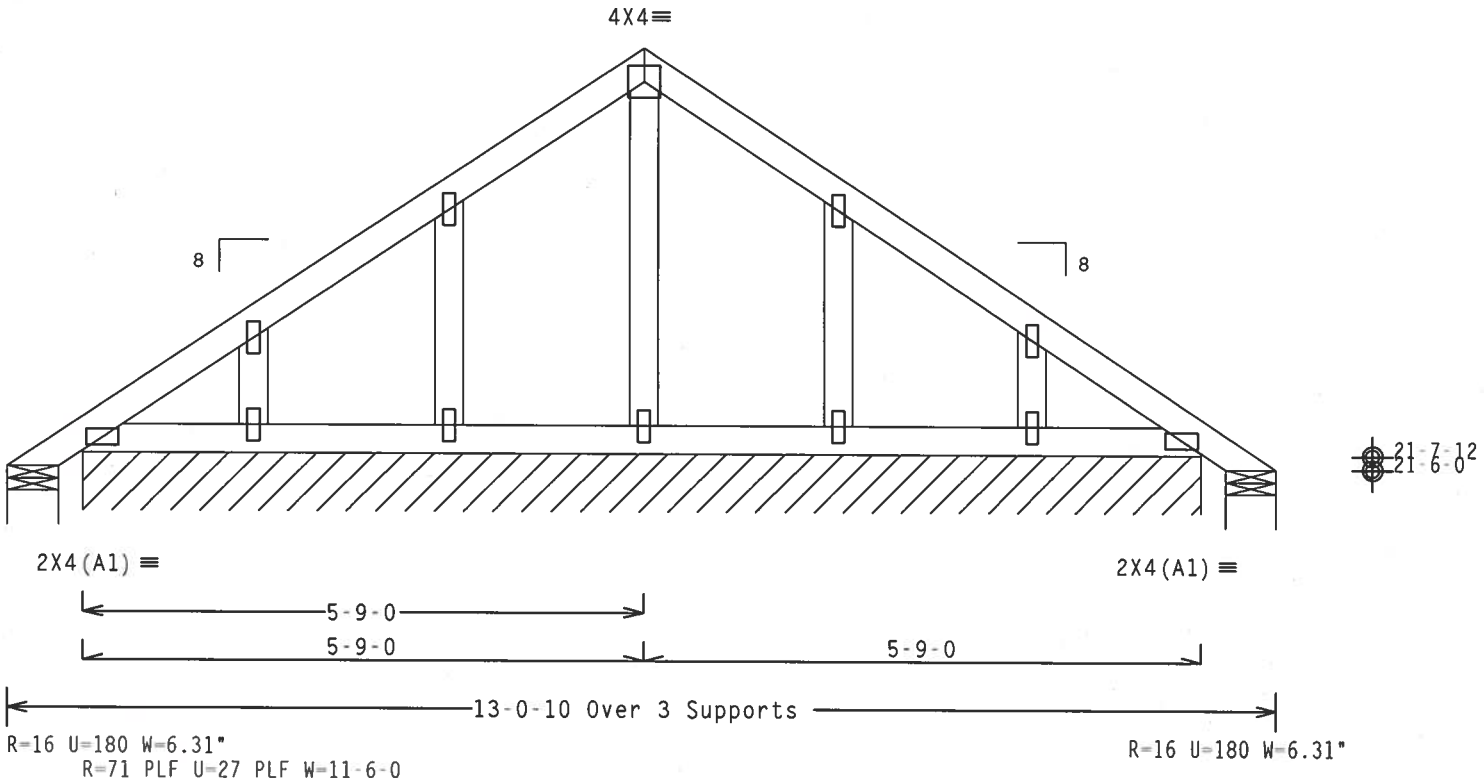
Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3

110 mph wind, 23.67 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=1.2 psf.

REFER TO DWG PIGBACKB0405 FOR PIGGYBACK DETAILS.
TOP CHORD OF SUPPORTING TRUSS UNDER PIGGYBACK TO BE BRACED @ 24"O.C., UNLESS OTHERWISE SPECIFIED

SPECIAL LOADS
------(LUMBER DUR.FAC.=1.25 / PLATE DUR.FAC.=1.25)
TC - From 64 PLF at 0.00 to 64 PLF at 13.05
BC - From 4 PLF at 0.00 to 4 PLF at 13.05

Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.



Note: All Plates Are 1.5X4 Except As Shown.

Design Crit: TPI-2002(STD)/FBC

PLT TYP. Wave Cq/RT=1.00(1.25)/10(0) 7.24.12 [illegible] QTY:2 FL/-/4/-/-/R/- Scale =.5"/Ft.

ALPINE

Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificate of Authorization # [illegible]

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W.H/SS/K) ASTM A653 GRADE 40/60 (W. K/H.SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER
LICENSE
No. 59687
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Jan 02, 07

TC LL	20.0 PSF	REF R487-- 626
TC DL	10.0 PSF	DATE 01/02/07
BC DL	10.0 PSF	DRW HCUSR487 07002016
BC LL	0.0 PSF	HC-ENG JB/AF
TOT.LD.	40.0 PSF	SEQN- 90520
DUR.FAC.	1.25	
SPACING	24.0"	JREF- 1T30487_Z01

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

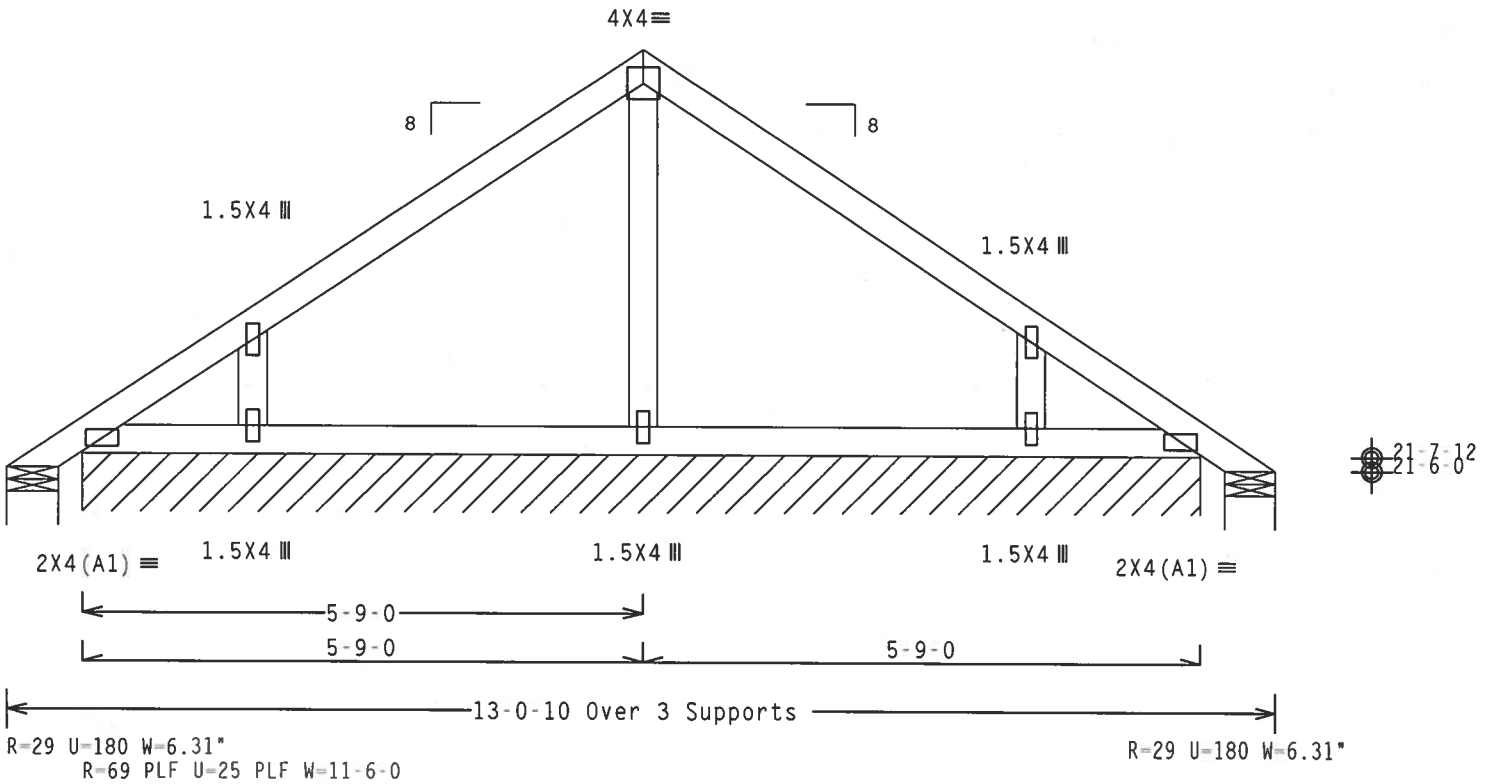
110 mph wind, 23.67 ft mean hgt, ASCE 7-02, CLOSED bldg, Located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=1.2 psf.

Deflection meets L/360 live and L/240 total load. Creep increase factor for dead load is 1.50.

REFER TO DWG PIGBACKB0405 FOR PIGGYBACK DETAILS.
TOP CHORD OF SUPPORTING TRUSS UNDER PIGGYBACK TO BE BRACED @ 24"O.C., UNLESS OTHERWISE SPECIFIED

SPECIAL LOADS
------(LUMBER DUR.FAC.=1.25 / PLATE DUR.FAC.=1.25)
64 PLF at 6.53
TC - From 64 PLF at 6.53 to 64 PLF at 13.05
BC - From 4 PLF at 0.00 to 4 PLF at 13.05

In lieu of rigid ceiling use purlins to brace BC @ 24" OC.



Design Crit: TPI-2002(STD)/FBC
PLT TYP. Wave
Cq/RT=1.00(1.25)/10(0) 7.24.[illegible]TY:21 FL/-/4/-/-/R/- Scale =.5"/Ft.

ALPINE
Alpine Engineered Products, Inc.
1950 Marley Drive
Haines City, FL 33844
FL Certificate of Authorization #[illegible]

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA. 22314) AND WTCA (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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (M,H/SS/K) ASTM A653 GRADE 40/60 (M, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (I) SHALL BE PER ANNEX A3 OF TPI1-2002 SEC.3. 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.

ARTHUR R. FISHER LICENSE No. 59687 STATE OF FLORIDA PROFESSIONAL ENGINEER
Jan 02 '07

TC LL	20.0 PSF	REF R487-- 627
TC DL	10.0 PSF	DATE 01/02/07
BC DL	10.0 PSF	DRW HCUSR487 07002014
BC LL	0.0 PSF	HC-ENG JB/AF
TOT.LD.	40.0 PSF	SEQN- 90516
DUR.FAC.	1.25	
SPACING	24.0"	JREF- 1T30487_Z01

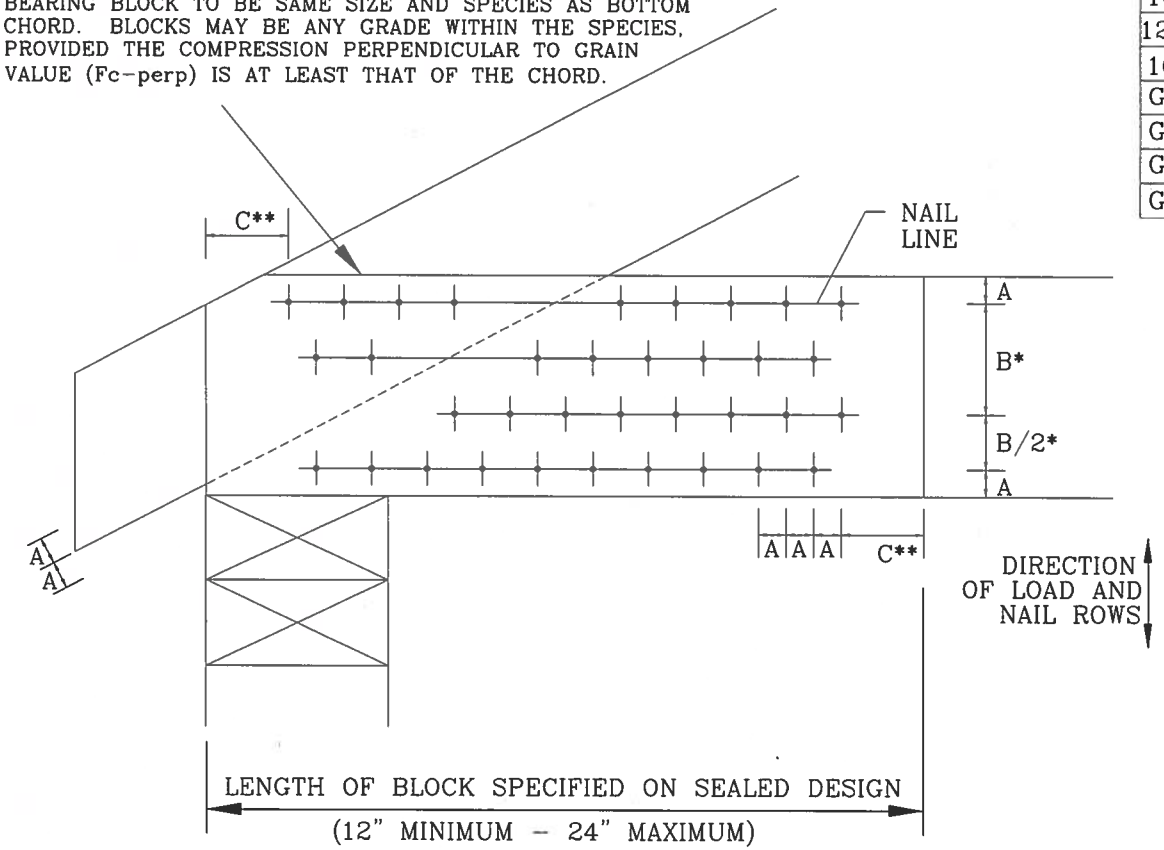
BEARING BLOCK NAIL SPACING DETAIL

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.



MAXIMUM NUMBER OF NAIL LINES PARALLEL TO GRAIN

NAIL TYPE	CHORD SIZE 2X4	2X6	2X8	2X10	2X12
8d BOX (0.113"X 2.5",MIN)	3	6	9	12	15
10d BOX (0.128"X 3.",MIN)	3	5	7	10	12
12d BOX (0.128"X 3.25",MIN)	3	5	7	10	12
16d BOX (0.135"X 3.5",MIN)	3	5	7	10	12
20d BOX (0.148"X 4.",MIN)	2	4	5	6	8
8d COMMON (0.131"X 2.5",MIN)	3	5	7	10	12
10d COMMON (0.148"X 3.",MIN)	2	4	6	8	10
12d COMMON (0.148"X 3.25",MIN)	2	4	6	8	10
16d COMMON (0.162"X 3.5",MIN)	2	4	6	8	10
GUN (0.120"X 2.5",MIN)	3	6	8	11	14
GUN (0.131"X 2.5",MIN)	3	5	7	10	12
GUN (0.120"X 3.",MIN)	3	6	8	11	14
GUN (0.131"X 3.",MIN)	3	5	7	10	12

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"

DRAWING REPLACES DRAWING B139 AND CNBRGBLK0699

ARTHUR R. FISHER LICENSE No. 59687 STATE OF FLORIDA PROFESSIONAL ENGINEER

Jan 0[illegible]

ALPINE

ALPINE ENGINEERED PRODUCTS, INC.
POMPANO BEACH, FLORIDA

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, 218 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 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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W,K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (I) SHALL BE PER ANNEX A3 OF TPI 1-2002 SEC. 3. 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.

REF	BEARING BLOCK
DATE	11/1/06
DRWG	CNBRGBLK1106
-ENG	SJP/KAR

ASCE 7-02: 110 MPH WIND SPEED, 30' MEAN HEIGHT, ENCLOSED, I = 1.00, EXPOSURE C

MAX GABLE VERTICAL LENGTH

2X4 GABLE VERTICAL SPACING	SPECIES	BRACE GRADE	NO BRACES	(1) 1X4 "L" BRACE *		(1) 2X4 "L" BRACE *		(2) 2X4 "L" BRACE **		(1) 2X6 "L" BRACE *		(2) 2X6 "L" BRACE **	
				GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B
24" O.C.	SPF HF	#1 / #2	3' 8"	6' 4"	6' 6"	7' 6"	7' 8"	8' 11"	9' 2"	11' 9"	12' 1"	14' 0"	14' 0"
		#3	3' 7"	5' 5"	5' 5"	7' 2"	7' 2"	8' 11"	8' 11"	11' 2"	11' 2"	14' 0"	14' 0"
		STUD	3' 7"	5' 5"	5' 5"	7' 1"	7' 1"	8' 11"	8' 11"	11' 1"	11' 1"	14' 0"	14' 0"
		STANDARD	3' 7"	4' 8"	4' 8"	6' 1"	6' 1"	8' 3"	8' 3"	9' 6"	9' 6"	12' 11"	12' 11"
	SP DFL	#1	4' 0"	6' 4"	6' 10"	7' 6"	8' 1"	8' 11"	9' 7"	11' 9"	12' 8"	14' 0"	14' 0"
		#2	3' 11"	6' 4"	6' 10"	7' 6"	8' 1"	8' 11"	9' 7"	11' 9"	12' 8"	14' 0"	14' 0"
		#3	3' 9"	5' 7"	5' 7"	7' 4"	7' 4"	8' 11"	9' 5"	11' 5"	11' 5"	14' 0"	14' 0"
		STUD	3' 9"	5' 6"	5' 6"	7' 3"	7' 3"	8' 11"	9' 5"	11' 4"	11' 4"	14' 0"	14' 0"
		STANDARD	3' 8"	4' 9"	4' 9"	6' 3"	6' 3"	8' 5"	8' 5"	9' 9"	9' 9"	13' 3"	14' 0"
16" O.C.	SPF HF	#1 / #2	4' 2"	7' 3"	7' 5"	8' 7"	8' 10"	10' 3"	10' 6"	13' 5"	13' 10"	14' 0"	14' 0"
		#3	4' 1"	6' 8"	6' 8"	8' 7"	8' 7"	10' 3"	10' 3"	13' 5"	13' 5"	14' 0"	14' 0"
		STUD	4' 1"	8' 0"	8' 0"	8' 7"	8' 7"	10' 3"	10' 3"	13' 5"	13' 5"	14' 0"	14' 0"
		STANDARD	4' 1"	5' 8"	5' 8"	7' 6"	7' 6"	10' 1"	10' 1"	11' 8"	11' 8"	14' 0"	14' 0"
	SP DFL	#1	4' 7"	7' 3"	7' 9"	8' 7"	9' 3"	10' 3"	11' 0"	13' 5"	14' 0"	14' 0"	14' 0"
		#2	4' 6"	7' 3"	7' 9"	8' 7"	9' 3"	10' 3"	11' 0"	13' 5"	14' 0"	14' 0"	14' 0"
		#3	4' 4"	6' 10"	6' 10"	8' 7"	9' 0"	10' 3"	10' 9"	13' 5"	14' 0"	14' 0"	14' 0"
		STUD	4' 4"	6' 9"	6' 9"	8' 7"	8' 11"	10' 3"	10' 9"	13' 5"	14' 0"	14' 0"	14' 0"
		STANDARD	4' 2"	5' 10"	5' 10"	7' 8"	7' 8"	10' 3"	10' 4"	11' 11"	11' 11"	14' 0"	14' 0"
12" O.C.	SPF HF	#1 / #2	4' 7"	8' 0"	8' 2"	9' 5"	9' 8"	11' 3"	11' 7"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	4' 6"	7' 8"	7' 8"	9' 5"	9' 5"	11' 3"	11' 3"	14' 0"	14' 0"	14' 0"	14' 0"
		STUD	4' 6"	7' 8"	7' 8"	9' 5"	9' 5"	11' 3"	11' 3"	14' 0"	14' 0"	14' 0"	14' 0"
		STANDARD	4' 6"	6' 7"	6' 7"	8' 8"	8' 8"	11' 3"	11' 3"	13' 6"	13' 6"	14' 0"	14' 0"
	SP DFL	#1	5' 1"	8' 0"	8' 7"	9' 5"	10' 2"	11' 3"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		#2	4' 11"	8' 0"	8' 7"	9' 5"	10' 2"	11' 3"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	4' 9"	7' 11"	7' 11"	9' 5"	9' 11"	11' 3"	11' 10"	14' 0"	14' 0"	14' 0"	14' 0"
		STUD	4' 9"	7' 9"	7' 9"	9' 5"	9' 11"	11' 3"	11' 10"	14' 0"	14' 0"	14' 0"	14' 0"
		STANDARD	4' 7"	6' 9"	6' 9"	8' 10"	8' 10"	11' 3"	11' 7"	13' 10"	13' 10"	14' 0"	14' 0"

BRACING GROUP SPECIES AND GRADES:

GROUP A:

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

HEM-FIR	
#2	STUD
#3	STANDARD

DOUGLAS FIR-LARCH
#3
STUD
STANDARD

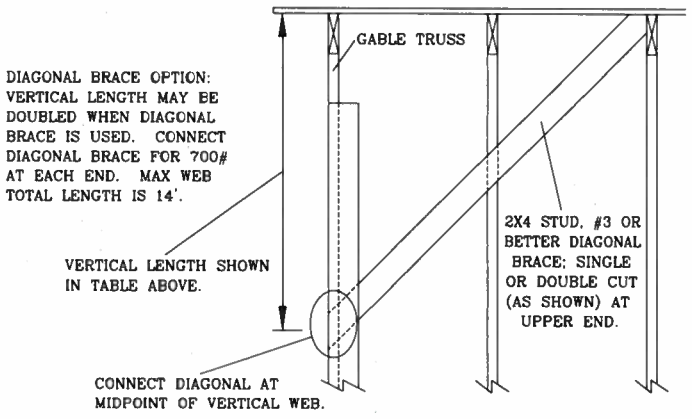
SOUTHERN PINE
#3
STUD
STANDARD

GROUP B:

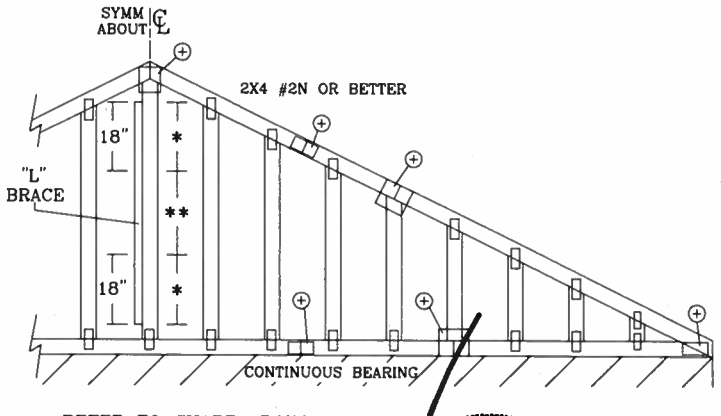
HEM-FIR
#1 & BTR
#1

SOUTHERN PINE
#1
#2

DOUGLAS FIR-LARCH
#1
#2



DIAGONAL BRACE OPTION: VERTICAL LENGTH MAY BE DOUBLED WHEN DIAGONAL BRACE IS USED. CONNECT DIAGONAL BRACE FOR 700# AT EACH END. MAX WEB TOTAL LENGTH IS 14'.



REFER TO CHART ABOVE FOR MAX GABLE VERTICAL LENGTH.

GABLE TRUSS DETAIL NOTES:

LIVE LOAD DEFLECTION CRITERIA IS L/240.

PROVIDE UPLIFT CONNECTIONS FOR 100 PLF OVER CONTINUOUS BEARING (5 PSF 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 SPLICE
LESS THAN 4' 0"	1X4 OR 2X3
GREATER THAN 4' 0", BUT LESS THAN 11' 6"	2X4
GREATER THAN 11' 6"	2.5X4

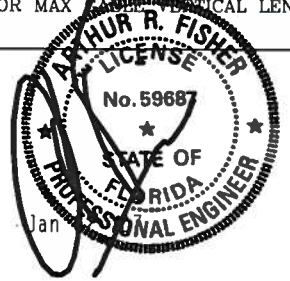
+ REFER TO COMMON TRUSS DESIGN FOR PEAK, SPLICE, AND HEEL PLATES.

ALPINE

ALPINE ENGINEERED PRODUCTS, INC.
POMPANO BEACH, FLORIDA

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, 218 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 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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W,K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (I) SHALL BE PER ANNEX A3 OF TPI 1-2002 SEC. 3. 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.

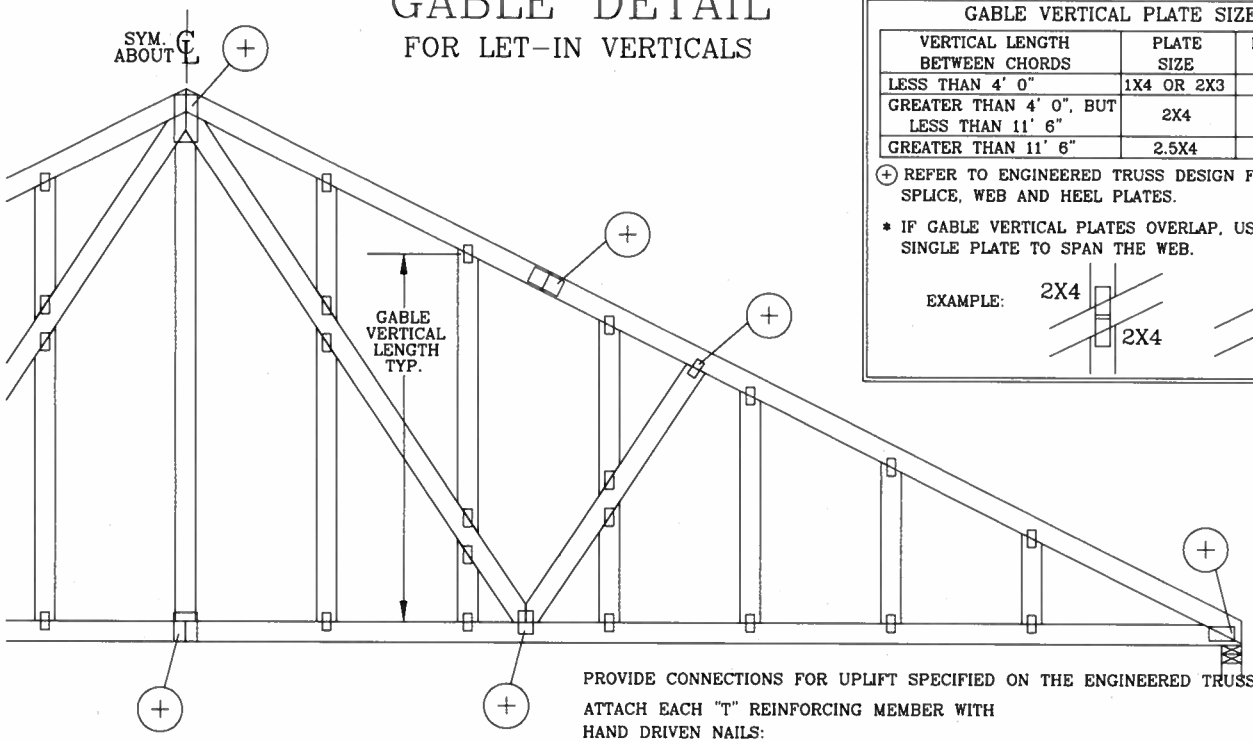


MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

REF	ASCE7-02-GAB11030
DATE	11/1/06
DRWG	A11030EE1106
-ENG	

GABLE DETAIL
FOR LET-IN VERTICALS

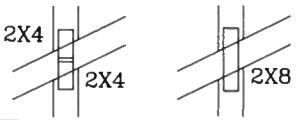


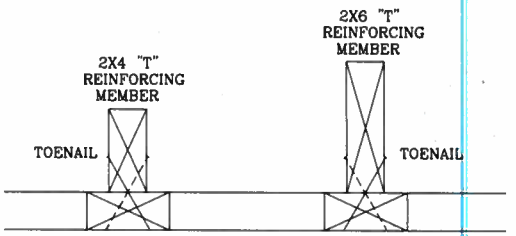
GABLE VERTICAL PLATE SIZES		
VERTICAL LENGTH BETWEEN CHORDS	PLATE SIZE	IF PLATES OVERLAP*
LESS THAN 4' 0"	1X4 OR 2X3	2X8
GREATER THAN 4' 0", BUT LESS THAN 11' 6"	2X4	2X8
GREATER THAN 11' 6"	2.5X4	2.5X8

(+) 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:





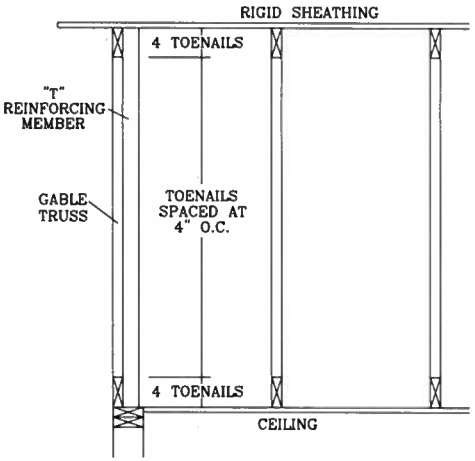
TO CONVERT FROM "L" TO "T" REINFORCING MEMBERS, MULTIPLY "T" FACTOR BY LENGTH (BASED ON GABLE VERTICAL SPECIES, GRADE AND SPACING) FOR (1) 2X4 "L" BRACE, GROUP A, OBTAINED FROM THE APPROPRIATE ALPINE GABLE DETAIL FOR ASCE OR SBCCI WIND LOAD.

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:
10d 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
A11015EN1103, A10015EN1103, A09015EN1103, A08015EN1103, A07015EN1103
A11030EN1103, A10030EN1103, A09030EN1103, A08030EN1103, A07030EN1103
ASCE 7-98 GABLE DETAIL DRAWINGS
A13015EC1103, A12015EC1103, A11015EC1103, A10015EC1103, A08515EC1103
A13030EC1103, A12030EC1103, A11030EC1103, A10030EC1103, A08530EC1103
ASCE 7-02 GABLE DETAIL DRAWINGS
A13015EE0405, A12015EE0405, A11015EE0405, A10015EE0405, A08515EE0405,
A13030EE0405, A12030EE0405, A11030EE0405, A10030EE0405, A08530EE0405

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

THIS DRAWING REPLACES DRAWINGS GAB98117 876,719 & HC26294035

ALPINE
ALPINE ENGINEERED PRODUCTS, INC.
POMPANO BEACH, FLORIDA

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, 218 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 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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W,K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (I) SHALL BE PER ANNEX A3 OF TPI 1-2002 SEC. 3. 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.

ARTHUR J. FISHER
LICENSE
No. 59687
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Jan

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

REF	LET-IN VERT
DATE	11/1/06
DRWG	GBLLETIN1106
-ENG	DLJ/KAR

CLB WEB BRACE SUBSTITUTION

THIS DETAIL IS TO BE USED WHEN CONTINUOUS LATERAL BRACING (CLB) IS SPECIFIED ON AN ALPINE TRUSS DESIGN BUT AN ALTERNATIVE WEB BRACING METHOD IS DESIRED.

NOTES:

THIS DETAIL IS ONLY APPLICABLE FOR CHANGING THE SPECIFIED CLB SHOWN ON SINGLE PLY SEALED DESIGNS TO T-BRACING OR SCAB BRACING.

ALTERNATIVE BRACING SPECIFIED IN CHART BELOW MAY BE CONSERVATIVE. FOR MINIMUM ALTERNATIVE BRACING, RE-RUN DESIGN WITH APPROPRIATE BRACING.

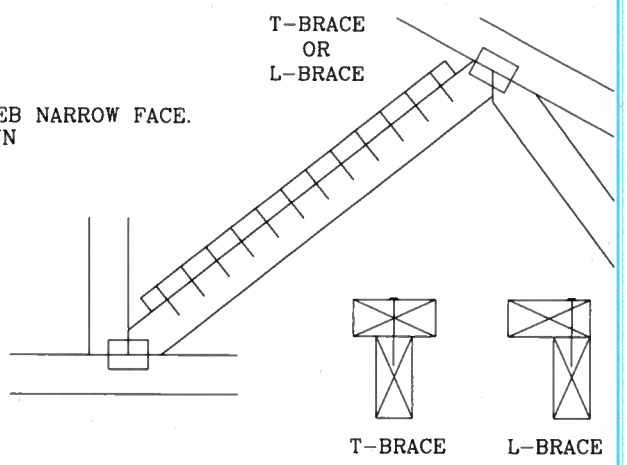
WEB MEMBER SIZE	SPECIFIED CLB BRACING	ALTERNATIVE BRACING T OR L-BRACE	ALTERNATIVE BRACING SCAB BRACE
2X3 OR 2X4	1 ROW	2X4	1-2X4
2X3 OR 2X4	2 ROWS	2X6	2-2X4
2X6	1 ROW	2X4	1-2X6
2X6	2 ROWS	2X6	2-2X4(*)
2X8	1 ROW	2X6	1-2X8
2X8	2 ROWS	2X6	2-2X6(*)

T-BRACE, L-BRACE AND SCAB BRACE TO BE SAME SPECIES AND GRADE OR BETTER THAN WEB MEMBER UNLESS SPECIFIED OTHERWISE ON ENGINEER'S SEALED DESIGN.

(*) CENTER SCAB ON WIDE FACE OF WEB. APPLY (1) SCAB TO EACH FACE OF WEB.

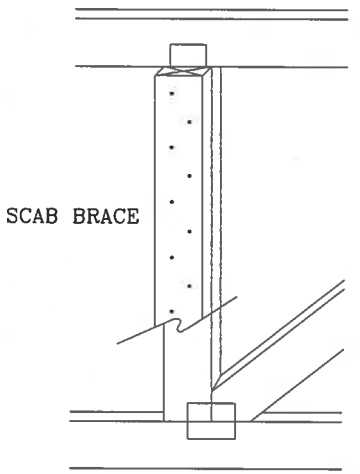
T-BRACING OR L-BRACING:

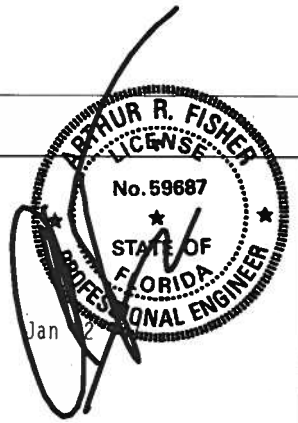
APPLY TO EITHER SIDE OF WEB NARROW FACE. ATTACH WITH 10d BOX OR GUN (0.128"x 3.",MIN) NAILS. AT 6" O.C. BRACE IS A MINIMUM 80% OF WEB MEMBER LENGTH



SCAB BRACING:

APPLY SCAB(S) TO WIDE FACE OF WEB. NO MORE THAN (1) SCAB PER FACE. ATTACH WITH 10d BOX OR GUN (0.128"x 3.",MIN) NAILS. AT 6" O.C. BRACE IS A MINIMUM 80% OF WEB MEMBER LENGTH





THIS DRAWING REPLACES DRAWING 579,640

ALPINE

ALPINE ENGINEERED PRODUCTS, INC.
POMPANO BEACH, FLORIDA

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, 218 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 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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W,K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (I) SHALL BE PER ANNEX A3 OF TPI 1-2002 SEC. 3. 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.

TC LL	PSF	REF CLB SUBST.
TC DL	PSF	DATE 11/1/06
BC DL	PSF	DRWG BRCLBSUB1106
BC LL	PSF	-ENG MLH/KAR
TOT. LD.	PSF	
DUR. FAC.		
SPACING		

PIGGYBACK DETAIL

TOP CHORD 2X4 #2 OR BETTER
BOT CHORD 2X4 #2 OR BETTER
WEBS 2X4 #3 OR BETTER

REFER TO SEALED DESIGN FOR DASHED PLATES.

SPACE PIGGYBACK VERTICALS AT 4' OC MAX.

TOP AND BOTTOM CHORD SPLICES MUST BE STAGGERED SO THAT ONE SPLICE IS NOT DIRECTLY OVER ANOTHER.

PIGGYBACK BOTTOM CHORD MAY BE OMITTED. ATTACH VERTICAL WEBS TO TRUSS TOP CHORD WITH 1.5X3 PLATE.

ATTACH PURLINS TO TOP OF FLAT TOP CHORD. IF PIGGYBACK IS SOLID LUMBER OR THE BOTTOM CHORD IS OMITTED, PURLINS MAY BE APPLIED BENEATH THE TOP CHORD OF SUPPORTING TRUSS.

REFER TO ENGINEER'S SEALED DESIGN FOR REQUIRED PURLIN SPACING.

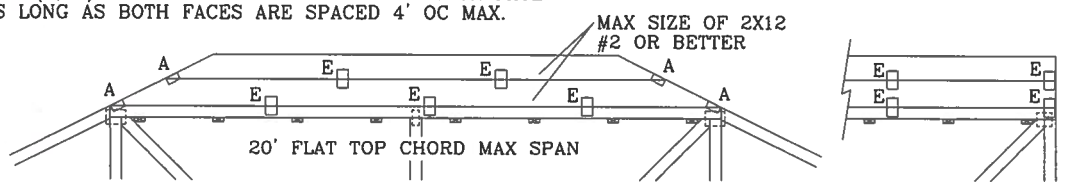
THIS DETAIL IS APPLICABLE FOR THE FOLLOWING WIND CONDITIONS:

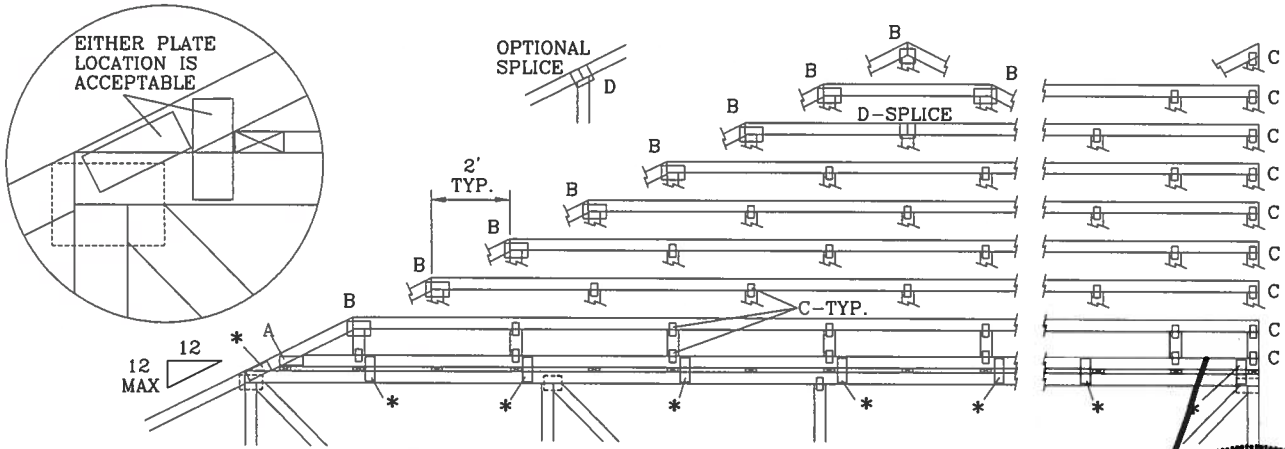
130 MPH WIND, 30' MEAN HGT, ASCE 7-02, CLOSED BLDG, LOCATED ANYWHERE IN ROOF, CAT II, EXP C, WIND TC DL=5 PSF, WIND BC DL=5 PSF

110 MPH WIND, 30' MEAN HGT, SBC ENCLOSED BLDG, LOCATED ANYWHERE IN ROOF WIND TC DL=5 PSF, WIND BC DL=5 PSF

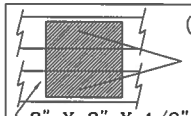
130 MPH WIND, 30' MEAN HGT, ASCE 7-98, CLOSED BLDG, LOCATED ANYWHERE IN ROOF, CAT II, EXP. C, WIND TC DL=5 PSF, WIND BC DL=5 PSF

FRONT FACE (E,*) PLATES MAY BE OFFSET FROM BACK FACE PLATES AS LONG AS BOTH FACES ARE SPACED 4' OC MAX.





*ATTACH PIGGYBACK WITH 3X8 TRULOX OR ALPINE PIGGYBACK SPECIAL PLATE.



(4) 6d BOX (0.099"X 2.",MIN) NAILS.

8" X 8" X 1/2" RATED SHEATHING GUSSETS (EACH FACE) MAY BE USED IN LIEU OF TRULOX PLATES, ATTACH WITH (8) 6d BOX (0.099"X 2.",MIN) NAILS PER GUSSET.

(4) IN CAP BC AND (4) IN BASE TRUSS FLAT TC.

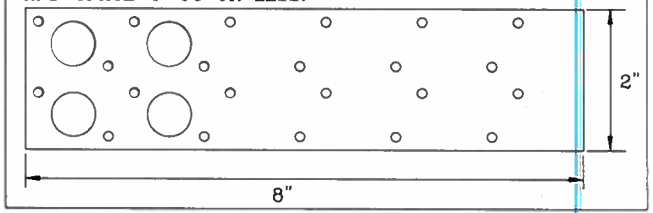
JOINT TYPE	SPANS UP TO			
	30'	34'	38'	52'
A	2X4	2.5X4	2.5X4	3X5
B	4X6	5X6	5X6	5X6
C	1.5X3	1.5X4	1.5X4	1.5X4
D	5X4	5X5	5X5	5X6
E	4X6 OR 3X6 TRULOX AT 4' OC, ROTATED VERTICALLY			

ATTACH TRULOX PLATES WITH (8) 0.120" X 1.375" NAILS, OR EQUAL, PER FACE PER PLY. (4) NAILS IN EACH MEMBER TO BE CONNECTED. REFER TO DRAWING 160 TL FOR TRULOX INFORMATION.

WEB BRACING CHART	
WEB LENGTH	REQUIRED BRACING
0' TO 7'9"	NO BRACING
7'9" TO 10'	1x4 "T" BRACE. SAME GRADE, SPECIES AS WEB MEMBER, OR BETTER, AND 80% LENGTH OF WEB MEMBER. ATTACH WITH 8d BOX (0.113"X 2.5",MIN) NAILS AT 4" OC.
10' TO 14'	2x4 "T" BRACE. SAME GRADE, SPECIES AS WEB MEMBER, OR BETTER, AND 80% LENGTH OF WEB MEMBER. ATTACH WITH 16d BOX (0.135"X 3.5",MIN) NAILS AT 4" OC.

* PIGGYBACK SPECIAL PLATE

ATTACH TEETH TO THE PIGGYBACK AT THE TIME OF FABRICATION. ATTACH TO SUPPORTING TRUSS WITH (4) 0.120" X 1.375" NAILS PER FACE PER PLY. APPLY PIGGYBACK SPECIAL PLATE TO EACH TRUSS FACE AND SPACE 4' OC OR LESS.

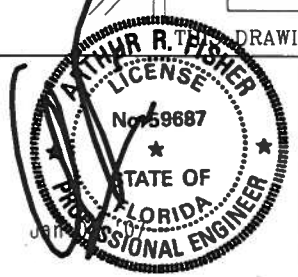


DRAWING REPLACES DRAWINGS 634,016 634,017 & 647,045

ALPINE
ALPINE ENGINEERED PRODUCTS, INC.
POMPANO BEACH, FLORIDA

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, 218 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 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. ALPINE ENGINEERED PRODUCTS, 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. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W,K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (I) SHALL BE PER ANNEX A3 OF TPI 1-2002 SEC. 3. 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.



MAX LOADING
55 PSF AT 1.33 DUR. FAC.
50 PSF AT 1.25 DUR. FAC.
47 PSF AT 1.15 DUR. FAC.
SPACING 24.0"

REF	PIGGYBACK
DATE	11/1/06
DRWG	PIGBACKB1106
-ENG	DLJ/KAR

Allen -
$ 178.64

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

Reference to a building permit application Number: 0701-83

Applicant: Concept Construction, Owner: Marvin Slay Property ID 01-4s-16-02656

On the date of January 29, 2007 application 0701-83 and plans for construction of the two story group B–business and group S-2 storage area building were reviewed and the following information or alteration to the plans will be required to continue processing this application. If you should have any question please contact the above address, or contact phone number (386) 758-1163 or fax any information to (386) 754-7088.

Please include application number 0701-83 and when making reference to this application.

This is a plan review for compliance with the Florida Building Code 2004 for the design of a two story building to occupy a group B-Business and group S-2 Storage area.

Change to B

1. Please refer to table 302.3.2 of the Florida building code, which details the required separation of occupancies in hours of fire separation. This table required a fire separation of a group B–business which will be occupied by the first floor and a group S2- storage area will be located on the second floor. Please submit a UL approved floor system which will incorporate a detail method to obtain the required two hour fire separation between these mix occupancies.

a. The stairwell which provides access from the first floor to the storage area will also be required to be constructed of material which will provide a two hour rated stairwell chamber, also provide a door schedule for the stairwell entry doors. Verify that the two doors have a fire rated frame and door assembly of one and haft hours, with an approved self closing devices.

b. Penetrations of any type of electrical, plumbing and HVAC ducts through this two hour separation floor system shall be constructed with material which will achieve two hour protection or be so protected to provide the two hour separation protection. The HVAC units will be required to have smoke dampers within the supply ducts and smoke detectors located within five feet of the smoke damper which will deactivate the HVAC systems and provide an alarm upon detection of smoke within the HVAC system.

2. Section 1607 of the building code requires that a type S-2 storage floor system (light storage) have a uniform live load rating of 125 pound per square foot show an engineered floor system which will provide for this code requirement.

3. Show the method which will provide compliance with sections 717.2 of the Florida building code: This section requires fireblocking in combustible construction: fireblocking shall be installed to cut off concealed draft openings (both vertical and horizontal) and shall form an effective barrier between floors, between a top story and a roof or attic space. Fireblocking shall be installed in the locations specified in Sections 717.2.2 through 717.2.7.

4. The second story floor area of 1930 square feet is shown on the submitted plans to be used as a group S-2 storage area. If this floor area should ever be converted to a group- B business area a second means of egress may be required established. The Florida accessibility code for building construction, Chapter 11 sections11-4.1.2 of the Florida Building Code states that nothing in this code shall be construed to relieve the owner of any building, structure or facility from the duty to provide vertical accessibility to all levels above and below the occupiable grade level, regardless of whether the code requires an elevator to be installed in such building, structure or facility, except:

(1) Elevator pits, elevator penthouses, mechanical rooms, piping or equipment catwalks, and automobile lubrication and maintenance pits and platforms.

(2) Unoccupiable spaces, such as rooms, enclosed spaces, and storage spaces that are not designed for human occupancy, for public accommodations, or for work areas.

(3) Occupiable spaces and rooms that are not open to the public and that house no more than five persons including, but not limited to, equipment

control rooms and projection booths. However as provided in Section 553.509, Florida Statutes, buildings, structures, and facilities must, at a minimum, comply with the requirements of the ADAAG. Therefore, facilities subject to the ADAAG may be required to provide vertical access *to areas otherwise exempt under Section 11-4.1.3(5) of this code.*

Please submit a certified document that will state that you as the owner of the structure and all future occupant have been or will been given notice of this Florida Statue. Which prohibits the use of the second story of the structure to be occupied by no more than five persons whom are employed by the established first floor occupant and no business active will be conducted upon the second floor which would which would require or prohibits vertical accessibility to the second floor by the general public.

Also certify that in the event that the second floor area is converted to a use other than shown within the plans as submitted with building permit application number 0701-83. That prior to the occupancy conversion an application and plans will be presented to this department for review.

1 HR. F.R. Const. X 5. The site plan locates an exterior wall of the structure to be constructed five foot from the west established property boundary line. This boundary line abuts an established mercantile business building which is also constructed five foot from the property boundary line. The construction of the structure within this application may create a separation of 10 feet or less between the existing mercantile business building and the proposed structure within this application. Please have Mr. Geisler review the building code to evaluate the west wall and roof assembly along with the opening within this wall. To determine if the wall section as shown on the plans complies with the building code.

Refer to Revs X 6. On page A.5 of the plans (electrical) please show the required emergency lighting and exit signage for the first and second story.

X 7. Please follow the geotechnical report form Universal Engineering Sciences Inc. in regards to the soils conditions and analysis.

Refer to truss dwgs X 8. Please submit an architectural or engineering drawing with an embossed seal which will identify the second floor girders beams, joist size, joist spacing, lumber type and attachment method to the foundation. Include the material to be used as flooring on the second floor. Provide certification that the second floor joist and supports system are so designed to support a live load floor rating of 125 pound per square foot, which by the building code is required for a group S-2 storage (light storage usage) for a second floor area.

Refer to Revised Det. X 9. Please provide a drawing which will show a stair detail which will be so assembled to provide a 2 hour fire rate assemble.

Refer to Revised plans X 10. Show on the plan the size and route of the bathroom ventilation fans exhausts system.

See plans

11. On the electrical riser diagram indicate that an electrical service disconnecting device, E-stop switch or main disconnect switching device will be located on the exterior of the structure at or near the service entry location (meter base). This device shall be installed to serve as an emergency disconnecting means from the utility company electrical service. Conductors used from the exterior disconnecting means to a panel or sub panel shall have four-wire conductors, of which one conductor shall be used as an equipment ground.

See Plans

12. Please provide the location of smoke alarms and smoke damper within the discharge ducts of the HVAC units.

See Plans on A.4

13. Please provide a drawing which details the construction materials and attachment method of the dormers to the roof system.

Thank You:

Joe Haltiwanger
Plan Examiner
Columbia County Building
Department

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

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

07 FEBRUARY 2007

JOE HALTIWANGER, BUILDING OFFICIAL
COLUMBIA COUNTY, BUILDING DEPT.
COLUMBIA COUNTY COURTHOUSE ANNEX
LAKE CITY, FLORIDA 32055

RE: BUDDY SLAY / ALLSTATE INSURANCE
PERMIT Nr.: 0701-83

DEAR SIR:

PLEASE REVIEW THE FOLLOWING PROPOSED CHANGES FOR THE ABOVE REFERENCED PROJECT THESE PROPOSED CHANGES ARE IN RESPONSE TO YOUR PLAN REVIEW: 0701-83 AND ARE NUMBERED IN A LIKE MANNER AS IN YOUR WRITTEN REPORT.

ITEM 1, 2 & 4:
IT IS PROPOSED TO RENAME THE SECOND FLOOR AREAS AS "FUTURE OFFICE EXPANSION - UNOCCUPIED - NO STORAGE". IT IS UNDERSTOOD THAT THE LIMITATIONS ON FUTURE DEVELOPMENT IS DEPENDENT UPON COMPLYING WITH ALL CODE ISSUES AT THE TIME THE EXPANSION IS SUBMITTED FOR CONSTRUCTION PERMITS, INCLUDING A SECOND MEAN OF EGRESS ALONG WITH VERTICAL ACCESSIBILITY IN COMPLIANCE WITH A.D.A. STANDARDS IN EFFECT AT THE TIME OF APPLICATION FOR PERMIT. A LETTER FROM THE PROPONENT INDICATING COMPLIANCE WITH THE STIPULATIONS NOTED IN YOUR ITEMS 1, 2 & 4 SHALL BE SUBMITTED UNDER SEPARATE COVER.

ITEM 3:
PLEASE REFER TO NOTES AND DETAILS ON SHEET S.3

ITEM 5:
REFER TO THE REVISIONS OF THE CONSTRUCTION DOCUMENTS, STIPULATING A MINIMUM 1 HOUR FIRE RESISTANT CONSTRUCTION FOR THE REAR WALL OF THE PROPOSED BUILDING. THE WINDOWS SHALL BE OF A 1 HOUR FIRE RESISTANT TYPE. PLEASE REFER TO DOCUMENTATION FROM THE MANUFACTURER SUBSTANTIATING THIS CLAIM, SUBMITTED UNDER SEPARATE COVER.

ITEM 6, 10, 11 & 12:
REFER TO THE REVISED PLANS ON SHEET A.5 FOR THESE ITEMS.

ITEM 7:
REFER TO ADDED NOTES ON SHEET S.1

ITEM 8:
REFER TO TRUSS ENGINEERING DRAWINGS FOR ALL MATTERS PERTAINING TO THE SECOND FLOOR/ROOF TRUSSES.

ITEM 9:
PLEASE REFER TO THE REVISED DETAIL ON SHEET A.3

ITEM 13:
PLEASE REFER TO THE ADDED DETAILS ON SHEET A.4

SHOULD YOU HAVE ANY FURTHER QUESTIONS WITH THIS, PLEASE CALL FOR ASSISTANCE.

YOURS TRULY,
NICHOLAS PAUL GEISLER, ARCHITECT AR0007005

1st Floor

wrightsoft

Load Short Form
Entire House
Touchstone Heating and Air, Inc.

Job: Allstate
Date: Dec 13, 2006
By: TE

P.O. Box 327, Lake Butler, Fl 32054 Phone: 386-496-3467 Fax: 386-496-3147

Project Information

For: Concept Construction
2109 W US Hwy 90 Suite 170-144, Lake City, Fl 32055
Phone: 386-755-8887 Fax: 386-755-1919

Design Information

	Htg	Clg
Outside db (°F)	17	91
Inside db (°F)	70	75
Design TD (°F)	53	16
Daily range	-	M
Inside humidity (%)	-	50
Moisture difference (gr/lb)	-	35

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

HEATING EQUIPMENT

Make	Trane
Trade	
Model	2TWR4060A1
Efficiency	8.8 HSPF
Heating input	
Heating output	53500 Btuh @ 47°F
Temperature rise	26 °F
Actual air flow	1883 cfm
Air flow factor	0.044 cfm/Btuh
Static pressure	0.00 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	Trane
Trade	
Cond	2TWR4060A1
Coil	2TXCC060AC3+*DD100R9V5
Efficiency	13 SEER
Sensible cooling	39550 Btuh
Latent cooling	16950 Btuh
Total cooling	56500 Btuh
Actual air flow	1883 cfm
Air flow factor	0.057 cfm/Btuh
Static pressure	0.00 in H2O
Load sensible heat ratio	0.66

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Room1	156	3780	2581	168	148
Room2	221	4927	3143	219	180
Room3	120	1751	1741	78	100
Room4	120	1751	1741	78	100
Room5	266	3986	2875	177	165
Room6	120	1751	1741	78	100
Room7	120	1751	1741	78	100
Room8	204	5107	3178	226	182
Room9	182	4640	2958	206	169
Room10	78	1075	982	48	56
Room11	130	1792	1777	79	102
Room12	143	2326	2100	103	120
Room15	592	7822	6329	347	362

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

Entire House		2452	42459	32888	1883	1883
Other equip loads			28836	8705		
Equip. @ 0.96	RSM			39929		
Latent cooling				21328		
TOTALS		2452	71295	61257	1883	1883

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

wrightsoft

Duct System Summary
Entire House
Touchstone Heating and Air, Inc.

Job: Allstate
Date: Dec 13, 2006
By: TE

P.O. Box 327, Lake Butler, Fl 32054 Phone: 386-496-3467 Fax: 386-496-3147

Project Information

For: Concept Construction
2109 W US Hwy 90 Suite 170-144, Lake City, Fl 32055
Phone: 386-755-8887 Fax: 386-755-1919

	Heating	Cooling
External static pressure	0.00 in H2O	0.00 in H2O
Pressure losses	0.00 in H2O	0.00 in H2O
Available static pressure	0.00 in H2O	0.00 in H2O
Supply / return available pressure	0.00 / 0.00 in H2O	0.00 / 0.00 in H2O
Lowest friction rate	0.000 in/100ft	0.000 in/100ft
Actual air flow	1883 cfm	1883 cfm
Total effective length (TEL)	0 ft	

Supply Branch Detail Table

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	Rect Size (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
Room1	h 2581	168	148	0.000	0	0x0	ShMt	0.0	0.0	
Room2	h 3143	219	180	0.000	0	0x0	ShMt	0.0	0.0	
Room3	c 1741	78	100	0.000	0	0x0	ShMt	0.0	0.0	
Room4	c 1741	78	100	0.000	0	0x0	ShMt	0.0	0.0	
Room5	h 2875	177	165	0.000	0	0x0	ShMt	0.0	0.0	
Room6	c 1741	78	100	0.000	0	0x0	ShMt	0.0	0.0	
Room7	c 1741	78	100	0.000	0	0x0	ShMt	0.0	0.0	
Room8	h 3178	226	182	0.000	0	0x0	ShMt	0.0	0.0	
Room9	h 2958	206	169	0.000	0	0x0	ShMt	0.0	0.0	
Room10	c 982	48	56	0.000	0	0x0	ShMt	0.0	0.0	
Room11	c 1777	79	102	0.000	0	0x0	ShMt	0.0	0.0	
Room12	c 2100	103	120	0.000	0	0x0	ShMt	0.0	0.0	
Room15-A	c 3165	173	181	0.000	0	0x0	ShMt	0.0	0.0	
Room15	c 3165	173	181	0.000	0	0x0	ShMt	0.0	0.0	

Return Branch Detail Table

Name	Grill Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	RectSize (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x0	1883	1883	0.0	0.000	0	0	0x 0		ShMt	

wrightsoft

Load Short Form
Entire House
Touchstone Heating and Air, Inc.

Job: Allstate [redacted]
Date: Dec 13, 2006
By: TE

P.O. Box 327, Lake Butler, Fl 32054 Phone: 386-496-3467 Fax: 386-496-3147

Project Information

For: Concept Construction
2109 W US Hwy 90, Lake City, Fl 32055
Phone: 386-755-8887 Fax: 386-755-1919

Design Information

	Htg	Clg
Outside db (°F)	17	91
Inside db (°F)	70	75
Design TD (°F)	53	16
Daily range	-	M
Inside humidity (%)	-	50
Moisture difference (gr/lb)	-	35

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

HEATING EQUIPMENT

Make		
Trade		
Model		
Efficiency	100 EFF	
Heating input	0	Btuh
Heating output	56758	Btuh
Temperature rise	39	°F
Actual air flow	1317	cfm
Air flow factor	0.042	cfm/Btuh
Static pressure	0.00	in H2O
Space thermostat		

COOLING EQUIPMENT

Make	Trane	
Trade	XB13	
Cond	2TTB3042A1	
Coil	TWG048A14+TAYTXV-3	
Efficiency	13 SEER	
Sensible cooling	27650	Btuh
Latent cooling	11850	Btuh
Total cooling	39500	Btuh
Actual air flow	1317	cfm
Air flow factor	0.055	cfm/Btuh
Static pressure	0.00	in H2O
Load sensible heat ratio	0.63	

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Room1	1924	31347	23878	1317	1317
Entire House	1924	31347	23878	1317	1317
Other equip loads		25411	7671		
Equip. @ 0.96 RSM			30287		
Latent cooling			18261		
TOTALS	1924	56758	48548	1317	1317

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

wrightsoft

Duct System Summary
Entire House
Touchstone Heating and Air, Inc.

Job: Allstate 2nd Floor
Date: Dec 13, 2006
By: TE

P.O. Box 327, Lake Butler, Fl 32054 Phone: 386-496-3487 Fax: 386-496-3147

Project Information

For: Concept Construction
2109 W US Hwy 90, Lake City, Fl 32055
Phone: 386-755-8887 Fax: 386-755-1919

	Heating	Cooling
External static pressure	0.00 in H2O	0.00 in H2O
Pressure losses	0.00 in H2O	0.00 in H2O
Available static pressure	0.00 in H2O	0.00 in H2O
Supply / return available pressure	0.00 / 0.00 in H2O	0.00 / 0.00 in H2O
Lowest friction rate	0.000 in/100ft	0.000 in/100ft
Actual air flow	1317 cfm	1317 cfm
Total effective length (TEL)	0 ft	

Supply Branch Detail Table

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	Rect Size (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
Room1-A	c 3980	219	219	0.000	0	0x0	ShMt	0.0	0.0	
Room1-B	c 3980	219	219	0.000	0	0x0	ShMt	0.0	0.0	
Room1-C	c 3980	219	219	0.000	0	0x0	ShMt	0.0	0.0	
Room1-D	c 3980	219	219	0.000	0	0x0	ShMt	0.0	0.0	
Room1-E	c 3980	219	219	0.000	0	0x0	ShMt	0.0	0.0	
Room1	c 3983	220	220	0.000	0	0x0	ShMt	0.0	0.0	

Return Branch Detail Table

Name	Grill Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	RectSize (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x0	1317	1317	0.0	0.000	0	0	0x 0		ShMt	

1st Floor

wrightsoft

Load Short Form
Entire House
Touchstone Heating and Air, Inc.

Job: Allstate
Date: Dec 13, 2006
By: TE

P.O. Box 327, Lake Butler, Fl 32054 Phone: 386-496-3467 Fax: 386-496-3147

Project Information

For: Concept Construction
2109 W US Hwy 90 Suite 170-144, Lake City, Fl 32055
Phone: 386-755-8887 Fax: 386-755-1919

Design Information

	Htg	Clg
Outside db (°F)	17	91
Inside db (°F)	70	75
Design TD (°F)	53	16
Daily range	-	M
Inside humidity (%)	-	50
Moisture difference (gr/lb)	-	35

Infiltration	
Method	Simplified
Construction quality	Average
Fireplaces	0

HEATING EQUIPMENT

Make	Trane
Trade	
Model	2TWR4060A1
Efficiency	8.6 HSPF
Heating input	
Heating output	53500 Btuh @ 47°F
Temperature rise	26 °F
Actual air flow	1883 cfm
Air flow factor	0.044 cfm/Btuh
Static pressure	0.00 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	Trane
Trade	
Cond	2TWR4060A1
Coil	2TXCC060AC3+*DD100R9V5
Efficiency	13 SEER
Sensible cooling	39550 Btuh
Latent cooling	16950 Btuh
Total cooling	56500 Btuh
Actual air flow	1883 cfm
Air flow factor	0.057 cfm/Btuh
Static pressure	0.00 in H2O
Load sensible heat ratio	0.66

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Room1	156	3780	2581	168	148
Room2	221	4927	3143	219	180
Room3	120	1751	1741	78	100
Room4	120	1751	1741	78	100
Room5	266	3986	2875	177	165
Room6	120	1751	1741	78	100
Room7	120	1751	1741	78	100
Room8	204	5107	3178	226	182
Room9	182	4640	2958	206	169
Room10	78	1075	982	48	56
Room11	130	1792	1777	79	102
Room12	143	2326	2100	103	120
Room15	592	7822	6329	347	362

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

Entire House	2452	42459	32888	1883	1883
Other equip loads		28836	8705		
Equip. @ 0.96 RSM			39929		
Latent cooling			21328		
TOTALS	2452	71295	61257	1883	1883

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

wrightsoft

Duct System Summary
Entire House
Touchstone Heating and Air, Inc.

Job: Allstate
Date: Dec 13, 2006
By: TE

P.O. Box 327, Lake Butler, Fl 32054 Phone: 386-496-3467 Fax: 386-496-3147

Project Information

For: Concept Construction
2109 W US Hwy 90 Suite 170-144, Lake City, Fl 32055
Phone: 386-755-8887 Fax: 386-755-1919

	Heating	Cooling
External static pressure	0.00 in H2O	0.00 in H2O
Pressure losses	0.00 in H2O	0.00 in H2O
Available static pressure	0.00 in H2O	0.00 in H2O
Supply / return available pressure	0.00 / 0.00 in H2O	0.00 / 0.00 in H2O
Lowest friction rate	0.000 in/100ft	0.000 in/100ft
Actual air flow	1883 cfm	1883 cfm
Total effective length (TEL)	0 ft	

Supply Branch Detail Table

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	Rect Size (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
Room1	h 2581	168	148	0.000	0	0x0	ShMt	0.0	0.0	
Room2	h 3143	219	180	0.000	0	0x0	ShMt	0.0	0.0	
Room3	c 1741	78	100	0.000	0	0x0	ShMt	0.0	0.0	
Room4	c 1741	78	100	0.000	0	0x0	ShMt	0.0	0.0	
Room5	h 2875	177	165	0.000	0	0x0	ShMt	0.0	0.0	
Room6	c 1741	78	100	0.000	0	0x0	ShMt	0.0	0.0	
Room7	c 1741	78	100	0.000	0	0x0	ShMt	0.0	0.0	
Room8	h 3178	226	182	0.000	0	0x0	ShMt	0.0	0.0	
Room9	h 2958	206	169	0.000	0	0x0	ShMt	0.0	0.0	
Room10	c 982	48	56	0.000	0	0x0	ShMt	0.0	0.0	
Room11	c 1777	79	102	0.000	0	0x0	ShMt	0.0	0.0	
Room12	c 2100	103	120	0.000	0	0x0	ShMt	0.0	0.0	
Room15-A	c 3165	173	181	0.000	0	0x0	ShMt	0.0	0.0	
Room15	c 3165	173	181	0.000	0	0x0	ShMt	0.0	0.0	

Return Branch Detail Table

Name	Grill Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	RectSize (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x0	1883	1883	0.0	0.000	0	0	0x 0		ShMt	

wrightsoft

Load Short Form
Entire House
Touchstone Heating and Air, Inc.

Job: Allstate 2[illegible]
Date: Dec 13, 2006
By: TE

P.O. Box 327, Lake Butler, Fl 32054 Phone: 386-496-3467 Fax: 386-496-9147

Project Information

For: Concept Construction
2109 W US Hwy 90, Lake City, Fl 32055
Phone: 386-755-8887 Fax: 386-755-1919

Design Information

	Htg	Clg
Outside db (°F)	17	91
Inside db (°F)	70	75
Design TD (°F)	53	16
Daily range	-	M
Inside humidity (%)	-	50
Moisture difference (gr/lb)	-	35

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

HEATING EQUIPMENT

Make		
Trade		
Model		
Efficiency	100 EFF	
Heating input	0	Btuh
Heating output	56758	Btuh
Temperature rise	39	°F
Actual air flow	1317	cfm
Air flow factor	0.042	cfm/Btuh
Static pressure	0.00	in H2O
Space thermostat		

COOLING EQUIPMENT

Make	Trane	
Trade	XB13	
Cond	2TTB3042A1	
Coil	TWG048A14+TAYTXV-3	
Efficiency	13 SEER	
Sensible cooling	27650	Btuh
Latent cooling	11850	Btuh
Total cooling	39500	Btuh
Actual air flow	1317	cfm
Air flow factor	0.055	cfm/Btuh
Static pressure	0.00	in H2O
Load sensible heat ratio	0.63	

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Room1	1924	31347	23878	1317	1317
Entire House	1924	31347	23878	1317	1317
Other equip loads		25411	7671		
Equip. @ 0.96 RSM			30287		
Latent cooling			18261		
TOTALS	1924	56758	48548	1317	1317

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

wrightsoft

Duct System Summary
Entire House
Touchstone Heating and Air, Inc.

Job: Allstate 2nd Floor
Date: Dec 13, 2006
By: TE

P.O. Box 327, Lake Butler, Fl 32054 Phone: 386-496-3487 Fax: 386-496-3147

Project Information

For: Concept Construction
2109 W US Hwy 90, Lake City, Fl 32055
Phone: 386-755-8887 Fax: 386-755-1919

	Heating	Cooling
External static pressure	0.00 in H2O	0.00 in H2O
Pressure losses	0.00 in H2O	0.00 in H2O
Available static pressure	0.00 in H2O	0.00 in H2O
Supply / return available pressure	0.00 / 0.00 in H2O	0.00 / 0.00 in H2O
Lowest friction rate	0.000 in/100ft	0.000 in/100ft
Actual air flow	1317 cfm	1317 cfm
Total effective length (TEL)	0 ft	

Supply Branch Detail Table

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	Rect Size (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
Room1-A	c 3980	219	219	0.000	0	0x0	ShMt	0.0	0.0	
Room1-B	c 3980	219	219	0.000	0	0x0	ShMt	0.0	0.0	
Room1-C	c 3980	219	219	0.000	0	0x0	ShMt	0.0	0.0	
Room1-D	c 3980	219	219	0.000	0	0x0	ShMt	0.0	0.0	
Room1-E	c 3980	219	219	0.000	0	0x0	ShMt	0.0	0.0	
Room1	c 3983	220	220	0.000	0	0x0	ShMt	0.0	0.0	

Return Branch Detail Table

Name	Grill Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	RectSize (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x0	1317	1317	0.0	0.000	0	0	0x 0		ShMt	

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

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

11 DECEMBER 2006

JOHNNY KEARSE, BUILDING OFFICIAL
COLUMBIA COUNTY, BUILDING DEPT.
COLUMBIA COUNTY COURTHOUSE ANNEX
LAKE CITY, FLORIDA 32055

RE: NEW BUILDING for ALLSTATE INSURANCE
PERMIT Nr.: _____

DEAR SIR:

PLEASE BE ADVISED OF THE FOLLOWING CHANGE TO THE CONSTRUCTION DOCUMENTS FOR THE ABOVE REFERENCED PROJECT:

1. IN LIEU OF THE WIREING AS NOTED IN THE PANEL SCHEDULE, IT IS PERMISSIBLE TO WIRE THIS PROJECT USING TYPE NM CABLE, COMMONLY REFERED TO AS "ROMEX", AND INSTALLED PER PER NEC 336, LATEST

SHOULD YOU HAVE ANY FURTHER QUESTIONS WITH THIS, PLEASE CALL FOR ASSISTANCE.

YOURS TRULY,
NICHOLAS PAUL GEISLER, ARCHITECT AR0007005

High Springs Plumbing & Electric, Inc.
Phone 386 454-1407
Fax 386 454-8351
20605 N HWY 441
High Springs, Fl 32643

January 19, 2007

To: Concept Construction
Job: Allstate Building
Scope: Service Calculation

As per N.E.C.		VA
220-12 2460sq/ft Conditioned at 4.5 VA		=11,070
220-12 1930sq/ft Storage at .25VA		=482.50
220-14(A) 1 – Water heater at 4.5kw		=4500
22014(F) 1 – Sign circuit at 1.2kw		=1200
220-60 2 – AHU with 10kw heat strips		=2000
	Total VA	37,252.50

Divided by 240 volt live voltage =155 amps

The electrical service will be built with a 300 amp service.

Florida Energy Efficiency Code For Building Construction
Florida Department of Community Affairs

EnergyGauge FlaCom v 2.11 FORM 400A-2004
Whole Building Performance Method for Commercial Buildings

Jurisdiction: LAKE CITY, COLUMBIA COUNTY, FL (221200)

Short Desc: New Prj
Project: ALLSTATE INSURANCE
Owner: BUDDY SLAY
Address: -
-
City: LAKE CITY
State: FL
PermitNo: 0
Zip: 32055
Storeys: 1

Type: Office
Class: New Finished building
***Conditioned Area:** 2460
***Cond + UnCond Area:** 2460

* denotes lighted area. Does not include wall crosection areas

Max Tonnage: 4.7 (if different, write in)

Compliance Summary

Component	Design	Criteria	Result
Gross Energy Use	2,088.81	2,679.34	**PASSES**
LIGHTING CONTROLS			**PASSES**
EXTERNAL LIGHTING			**PASSES**
HVAC SYSTEM			**PASSES**
PLANT			**None Entered**
WATER HEATING SYSTEMS			**PASSES**
PIPING SYSTEMS			**PASSES**
Met all required compliance from Check List?			**Yes/No/NA**

IMPORTANT NOTE: An input report Print-Out from EnergyGauge Com of this design building must be submitted along with this Compliance Report.

COMPLIANCE CERTIFICATION:

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

PREPARED BY: WILL MYERS DESIGN

DATE: _____

I hereby certify that this building is in compliance with the Florida Energy Efficiency Code.

OWNER AGENT: _____

DATE: _____

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

BUILDING OFFICIAL: _____

DATE: _____

If required by Florida law, I hereby certify (*) that the system design is in compliance with the Florida Energy Code.

		REGISTRATION No.
ARCHITECT :	**NICHOLAS PAUL GEISLER**	AR7005
ELECTRICAL SYSTEM DESIGNER		
LIGHTING SYSTEM DESIGNER:		
MECHANICAL SYSTEM DESIGNER:		
PLUMBING SYSTEM DESIGNER:		

(*) Signature is required where Florida Law requires design to be performed by registered design professionals.
Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

Whole Building Compliance

	Design	Reference
Total	*79.21*	*100.00*
	$2,088.81	*$2,679.34*
ELECTRICITY(MBtu/kWh/$)	79.21	100.00
	41,860.00	52,847.00
	$2,088.81	*$2,679.34*
AREA LIGHTS	11.14	15.69
	5,880.00	8,287.00
	$293.41	*$420.15*
MISC EQUIPMT	10.25	10.25
	5,407.00	5,407.00
	$269.81	*$274.13*
PUMPS & MISC	0.11	0.11
	59.00	59.00
	$2.94	*$2.99*
SPACE COOL	15.30	26.22
	8,088.00	13,863.00
	$403.59	*$702.85*
VENT FANS	42.41	47.73
	22,426.00	25,231.00
	$1,119.06	*$1,279.21*

Credits & Penalties (if any): Modified Points: = 79.22 | **PASSES**

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

External Lighting Compliance

Description	Category	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)
Ext Light 1	Building Entrance with (or free standing) Canopy	3.00	102.0	306	100
Ext Light 2	Building exit	20.00	6.0	120	60

Design: 220 (W)
Allowance: 426 (W)

PASSES

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	No. of Tasks	Design CP	Min CP	Compliance
Pr0Zo1Sp1	17	Office - Enclosed	2,460	1	19	1	PASSES

PASSES

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

System Report Compliance

Pr0Sy1 **System 1** **Constant Volume Air Cooled Split System < 65000 Btu/hr** **No. of Units 2**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Cooled < 65000 Btu/h Cooling Capacity		13.00	10.00	8.00		PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume		0.80	0.90			PASSES

PASSES

Plant Compliance

Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance

None

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Electric water heater	<= 12 [kW]	0.91	0.86			PASSES

PASSES

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

Piping System Compliance

Category	Pipe Dia [inches]	Is Runout?	Operating Temp [F]	Ins Cond [Btu-in/hr .SF.F]	Ins Thick [in]	Req Ins Thick [in]	Compliance
Domestic and Service Hot Water Systems	0.75	False	125.00	0.28	0.60	0.50	PASSES

PASSES

Project: New Prj
Title: ALLSTATE INSURANCE
Type: Office
(WEA File: JACKSONVILLE.TMY)

Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
Infiltration	406.1	Infiltration Criteria have been met	☐
System	407.1	HVAC Load sizing has been performed	☐
Ventilation	409.1	Ventilation criteria have been met	☐
ADS	410.1	Duct sizing and Design have been performed	☐
T & B	410.1	Testing and Balancing will be performed	☐
Motors	414.1	Motor efficiency criteria have been met	☐
Lighting	415.1	Lighting criteria have been met	☐
O & M	102.1	Operation/maintenance manual will be provided to owner	☐
Roof/Ceil	404.1	R-19 for Roof Deck with supply plenums beneath it	☐
Report	101	Input Report Print-Out from EnergyGauge FlaCom attached?	☐

EnergyGauge FlaCom v 2.11

INPUT DATA REPORT

Project Information

Project Name: New Prj
Project Title: ALLSTATE INSURANCE
Address: -
-
State: FL
Zip: 32055
Owner: BUDDY SLAY

Orientation: North
Building Type: Office
Building Classification: New Finished building
No.of Storeys: 1
GrossArea: 2460

Zones

No	Acronym	Description	Type	Area [sf]	Multiplier	Total Area [sf]	
1	Pr0Zo1	Zone 1	CONDITIONED	2460.0	1	2460.0	☐

Spaces

No	Acronym	Description	Type	Depth [ft]	Width [ft]	Height [ft]	Multiplier	Total Area [sf]	Total Volume [cf]

In Zone: Pr0Zo1										
1	Pr0Zo1Sp1	Zo0Sp1	Office - Enclosed	30.00	82.00	10.00	1	2460.0	24600.0	☐

Lighting

	No	Type	Category	No. of Luminaires	Watts per Luminaire	Power [W]	Control Type	No.of Ctrl pts	
In Zone: Pr0Zo1									
In Space: Pr0Zo1Sp1									
	1	Compact Fluorescent	General Lighting	19	80	1520	Manual On/Off	14	☐
	2	Incandescent	General Lighting	4	100	400	Manual On/Off	5	☐

Walls

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Direction	Conductance [Btu/hr. sf. F]	Heat Capacity [Btu/sf.F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]	
In Zone: Pr0Zo1												
1	Pr0Zo1Wa1	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	82.00	10.00	1	820.0	North	0.1043	8.9821	67.36	9.59	☐
2	Pr0Zo1Wa2	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	30.00	10.00	1	300.0	East	0.1043	8.9821	67.36	9.59	☐
3	Pr0Zo1Wa3	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	82.00	10.00	1	820.0	South	0.1043	8.9821	67.36	9.59	☐
4	Pr0Zo1Wa4	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	30.00	10.00	1	300.0	West	0.1043	8.9821	67.36	9.59	☐

Windows

No	Description	Type	Shaded	U [Btu/hr sf F]	SHG	Vis.Tr	W [ft]	H (Effec) [ft]	Multi plier	Total Area [sf]	
In Zone: Pr0Zo1											
In Wall: Pr0Zo1Wa1											
1	Pr0Zo1Wa1Wi1	User Defined	No	0.6000	0.42	0.39	4.00	5.00	6	120.0	☐
In Wall: Pr0Zo1Wa2											
1	Pr0Zo1Wa2Wi1	User Defined	No	0.6000	0.42	0.39	4.00	5.00	2	40.0	☐
In Wall: Pr0Zo1Wa3											
1	Pr0Zo1Wa3Wi1	User Defined	No	0.6000	0.42	0.39	4.00	5.00	5	100.0	☐
2	Pr0Zo1Wa3Wi2	User Defined	No	0.6000	0.42	0.39	3.00	3.00	1	9.0	☐
In Wall: Pr0Zo1Wa4											
1	Pr0Zo1Wa4Wi1	User Defined	No	0.6000	0.42	0.39	4.00	5.00	2	40.0	☐

Doors

No	Description	Type	Shaded?	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Cond. [Btu/hr. sf. F]	Dens. [lb/cf]	Heat Cap. [Btu/sf. F]	R-Value [h.sf.F/Btu]	
In Zone: Pr0Zo1												
In Wall: Pr0Zo1Wa1												
1	Pr0Zo1Wa1Dr1	Hollow core flush	No	3.00	6.67	4	20.0	0.7553	0.00	0.00	1.32	☐
In Wall: Pr0Zo1Wa3												
1	Pr0Zo1Wa3Dr1	Hollow core flush	No	3.00	6.67	2	20.0	0.7553	0.00	0.00	1.32	☐

Roofs

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Tilt [deg]	Cond. [Btu/hr. Sf. F]	Heat Cap [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]	
In Zone: Pr0Zo1												
1	Pr0Zo1Rf1	Shngl/1/2"WD Deck/WD Truss/6"Batt/Gyp Brd	82.00	17.33	1	1421.1	33.70	0.0471	1.40	10.89	21.24	☐

2	Pr0Zo1Rf2	Shngl/1/2"WD Deck/WD Truss/6"Batt/Gyp Brd	82.00	17.33	1	1421.1	33.70	0.0471	1.40	10.89	21.24	☐

Skylights

No	Description	Type	U [Btu/hr sf F]	SHGC	Vis.Trans	W [ft]	H (Effec) [ft]	Multiplier	Area [Sf]	Total Area [Sf]	
In Zone:											
In Roof:											☐

Floors

No	Description	Type	Width [ft]	H (Effec) [ft]	Multiplier	Area [sf]	Cond. [Btu/hr. sf. F]	Heat Cap. [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]	
In Zone: Pr0Zo1											
1	Pr0Zo1Fl1	Concrete floor, carpet and rubber pad	82.00	30.00	1	2460.0	0.5987	9.33	140.00	1.67	☐

Systems

Pr0Sy1 **System 1** **Constant Volume Air Cooled Split System < 65000 Btu/hr** **No. Of Units 2**

Component	Category	Capacity	Efficiency	IPLV	
1	Cooling System (Air Cooled < 65000 Btu/h Cooling Capacity)	56500.00	13.00	8.00	☐
2	Air Handling System -Supply (Air Handler (Supply) - Constant Volume)	1600.00	0.80		☐

Plant

Equipment	Category	Size	Inst.No	Eff.	IPLV

Water Heaters

	W-Heater Description	Capacit	Cap.Unit	I/P Rt.	Efficienc		Loss	
1	Electric water heater	50	[Gal]	5 [kW]	0.9100	[Ef]		[Btu/h]

Ext-Lighting

	Description	Category	No. of Luminaires	Watts per Luminaire	Area/Len/No. of units [sf/ft/No]	Control Type	Wattage [W]
1	Ext Light 1	Building Entrance with (or free standing) Canopy	1	100	102.00	Photo Sensor control	100.00
2	Ext Light 2	Building exit	2	60	6.00	Photo Sensor control	120.00

Piping

No	Type	Operating Temperature [F]	Insulation Conductivity [Btu-in/h.sf.F]	Nomonal pipe Diameter [in]	Insulation Thickness [in]	Is Runout?
1	Domestic and Service Hot Water Systems	125.00	0.28	0.75	0.60	No

Fenestration Used

Name	Glass Type	No. of Panes	Glass Conductance [Btu/h.sf.F]	SHGC	VLT

ASHULDblTntWd-Vy-Fg frm	User Defined	2	0.6000	0.4200	0.3900	☐

Materials Used

Mat No	Acronym	Description	Only R-Value Used	RValue [h.sf.F/Btu]	Thickness [ft]	Conductivity [Btu/h.ft.F]	Density [lb/cf]	SpecificHeat [Btu/lb.F]	
187	Matl187	GYP OR PLAS BOARD,1/2IN	No	0.4533	0.0417	0.0920	50.00	0.2000	☐
151	Matl151	CONC HW, DRD, 140LB, 4IN	No	0.4403	0.3333	0.7570	140.00	0.2000	☐
178	Matl178	CARPET W/RUBBER PAD	Yes	1.2300					☐
266	Matl266	2x4@16" oc + R11 Batt	No	8.3343	0.2917	0.0350	9.70	0.2000	☐
86	Matl86	BRICK, COMMON, 4IN	No	0.8012	0.3333	0.4160	120.00	0.2000	☐
23	Matl23	6 in. Insulation	No	20.0000	0.5000	0.0250	5.70	0.2000	☐
81	Matl81	ASPHALT-ROOFING, ROLL	Yes	0.1500					☐
244	Matl244	PLYWOOD, 1/2IN	No	0.6318	0.0417	0.0660	34.00	0.2900	☐

Constructs Used

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1004	Concrete floor, carpet and rubber pad	No	No	0.60	9.33	140.00	1.6703	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	151	CONC HW, DRD, 140LB, 4IN	0.3333	0.00	☐
2	178	CARPET W/RUBBER PAD		0.00	☐

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1012	4" Brick /2x4@16" oc+R11Batt/0.5" Gyp	No	No	0.10	8.98	67.36	9.5887	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	86	BRICK, COMMON, 4IN	0.3333	0.00	☐
2	266	2x4@16" oc + R11 Batt	0.2917	0.00	☐
3	187	GYP OR PLAS BOARD,1/2IN	0.0417	0.00	☐

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1025	Hollow core flush	No	Yes	0.76			1.3239	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	276	Hollow core flush (1.75")		0.00	☐

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1039	Shngl/1/2"WD Deck/WD Truss/6"Batt/Gyp Brd	No	No	0.05	1.40	10.89	21.2351	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	81	ASPHALT-ROOFING, ROLL		0.00	☐
2	244	PLYWOOD, 1/2IN	0.0417	0.00	☐
3	23	6 in. Insulation	0.5000	0.00	☐
4	187	GYP OR PLAS BOARD,1/2IN	0.0417	0.00	☐

wrightsoft

Load Short Form
Entire House
Touchstone Heating and Air, Inc.

Job: Allstate
Date: Dec 19, 2008
By: TE

P.O. Box 327, Lake Butler, Fl 32054 Phone: 386-496-3467 Fax: 386-496-3147

Project Information

For: Concept Construction
2109 W US Hwy 90 Suite 170-144, Lake City, Fl 32055
Phone: 386-755-6667 Fax: 386-755-1919

Design Information

	Htg	Clg
Outside db (°F)	17	91
Inside db (°F)	70	75
Design TD (°F)	53	16
Daily range	-	M
Inside humidity (%)	-	50
Moisture difference (gr/lb)	-	35

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

HEATING EQUIPMENT

Make	Trane	
Trade		
Model	2TWR4060A1	
Efficiency	8.8 HSPF	
Heating input		
Heating output	53500	Btuh @ 47°F
Temperature rise	26	°F
Actual air flow	1883	cfm
Air flow factor	0.044	cfm/Btuh
Static pressure	0.00	in H2O
Space thermostat		

COOLING EQUIPMENT

Make	Trane	
Trade		
Cond	2TWR4060A1	
Coil	2TXCC060AC3+*DD100R9V5	
Efficiency	13 SEER	
Sensible cooling	39550	Btuh
Latent cooling	16950	Btuh
Total cooling	56500	Btuh
Actual air flow	1883	cfm
Air flow factor	0.057	cfm/Btuh
Static pressure	0.00	in H2O
Load sensible heat ratio	0.66	

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Room1	156	3780	2581	168	148
Room2	221	4927	3143	219	180
Room3	120	1751	1741	78	100
Room4	120	1751	1741	78	100
Room5	266	3986	2875	177	165
Room6	120	1751	1741	78	100
Room7	120	1751	1741	78	100
Room8	204	5107	3178	226	182
Room9	182	4640	2958	206	169
Room10	78	1075	982	48	56
Room11	130	1792	1777	79	102
Room12	143	2326	2100	103	120
Room15	592	7822	6329	347	362

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

Entire House		2452	42459	32888	1883	1883
Other equip loads			28836	6705		
Equip. @ 0.96	RSM			39929		
Latent cooling				21328		
TOTALS		2452	71295	61257	1883	1883

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

wrightsoft

Duct System Summary
Entire House
Touchstone Heating and Air, Inc.

Job: Allstate
Date: Dec 13, 2006
By: TE

P.O. Box 327, Lake Butler, Fl 32054 Phone: 386-496-3467 Fax: 386-496-3147

Project Information

For: Concept Construction
2109 W US Hwy 90 Suite 170-144, Lake City, Fl 32055
Phone: 386-755-8887 Fax: 386-755-1919

	Heating	Cooling
External static pressure	0.00 in H2O	0.00 in H2O
Pressure losses	0.00 in H2O	0.00 in H2O
Available static pressure	0.00 in H2O	0.00 in H2O
Supply / return available pressure	0.00 / 0.00 in H2O	0.00 / 0.00 in H2O
Lowest friction rate	0.000 in/100ft	0.000 in/100ft
Actual air flow	1883 cfm	1883 cfm
Total effective length (TEL)	0 ft	

Supply Branch Detail Table

Name		Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	Rect Size (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
Room1	h	2581	168	148	0.000	0	0x0	ShMt	0.0	0.0	
Room2	h	3143	219	180	0.000	0	0x0	ShMt	0.0	0.0	
Room3	c	1741	78	100	0.000	0	0x0	ShMt	0.0	0.0	
Room4	c	1741	78	100	0.000	0	0x0	ShMt	0.0	0.0	
Room5	h	2875	177	165	0.000	0	0x0	ShMt	0.0	0.0	
Room6	c	1741	78	100	0.000	0	0x0	ShMt	0.0	0.0	
Room7	c	1741	78	100	0.000	0	0x0	ShMt	0.0	0.0	
Room8	h	3178	226	182	0.000	0	0x0	ShMt	0.0	0.0	
Room9	h	2958	206	169	0.000	0	0x0	ShMt	0.0	0.0	
Room10	c	982	48	56	0.000	0	0x0	ShMt	0.0	0.0	
Room11	c	1777	79	102	0.000	0	0x0	ShMt	0.0	0.0	
Room12	c	2100	103	120	0.000	0	0x0	ShMt	0.0	0.0	
Room15-A	c	3165	173	181	0.000	0	0x0	ShMt	0.0	0.0	
Room15	c	3165	173	181	0.000	0	0x0	ShMt	0.0	0.0	

Return Branch Detail Table

Name	Grill Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	RectSize (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x0	1883	1883	0.0	0.000	0	0	0x 0		ShMt	

Architectural

ELK Premium Roofing

March 6, 2002

Subject: Elk Product Approval Information

All Prestique® and Capstone® products manufactured in Tuscaloosa, AL are certified under the Miami – Dade County Building Code Office (BCCO). These products also meet the requirements for the Florida Building Code since they are MD approved. The following test protocols must be passed by each of the products in order for MD product certification:
ASTM D3462
PA 100 (110 mph uplift and wind driven rain resistance)
PA 107 (Modified ASTM D3161 - 110 mph wind uplift resistance)

The nailing patterns that were used during the PA 100 and PA 107 wind test protocols for the Prestique and Capstone products are listed below. Also listed below are the Miami – Dade Notice of Acceptance Numbers (NOA).

Raised Profile, Prestique High Definition, Prestique 25, or Prestique 30 –
PA 100 = 4 nails
PA 107 = 5 nails
MD NOA# = 01-1226.04

Prestique I 35 or Prestique I* –
PA 100 = 4 nails
PA 107 = 5 nails
MD NOA# = 01-1226.05

Prestique Plus or Prestique Gallery Collection* –
PA 100 = 4 nails
PA 107 = 4 nails
MD NOA# = 01-1226.03

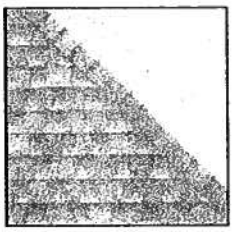
Capstone*
PA 100 = 4 Nails
PA 107 = 4 Nails
MD NOA# = 01-0523.01
* As per the Elk Limited Warranty, six nails are required for the Elk high wind warranty.

If there are any questions please contact:

Mike Reed – Technical Manager
(205) 342-0287

or

Daniel DeJarnette – QA Engineer
(205) 342-0298



PRESTIQUE®
HIGH DEFINITION®

RAISED PROFILE™

High Definition

Product size	13¼"x 39⅜"
Exposure	5⅝"
Pieces/Bundle	16
Bundles/Square	4/98.5 sq.ft.
Squares/Pallet	11

50-year limited warranty period: non-prorated coverage for shingles and application labor for the initial 5 years, plus an option for transferability*; prorated coverage for application labor and shingles for balance of limited warranty period; 5-year limited wind warranty*.

Product size	13¼"x 38¾"
Exposure	5⅝"
Pieces/Bundle	22
Bundles/Square	3/100 sq.ft.
Squares/Pallet	16

30-year limited warranty period: non-prorated coverage for shingles and application labor for the initial 5 years, plus an option for transferability*; prorated coverage for application labor and shingles for balance of limited warranty period; 5-year limited wind warranty*.

High Definition

Product size	13¼"x 39⅜"
Exposure	5⅝"
Pieces/Bundle	16
Bundles/Square	4/98.5 sq.ft.
Squares/Pallet	14

40-year limited warranty period: non-prorated coverage for shingles and application labor for the initial 5 years, plus an option for transferability*; prorated coverage for application labor and shingles for balance of limited warranty period; 5-year limited wind warranty*.

High Definition

Product size	13¼"x 38¾"
Exposure	5⅝"
Pieces/Bundle	22
Bundles/Square	3/100 sq.ft.
Squares/Pallet	16

30-year limited warranty period: non-prorated coverage for shingles and application labor for the initial 5 years, plus an option for transferability*; prorated coverage for application labor and shingles for balance of limited warranty period; 5-year limited wind warranty*.

HIP AND RIDGE SHINGLES

Size: 12"x 12"
Exposure: 6⅞"
Pieces/Bundle: 45
Coverage: 4 Bundles = 100 linear feet

52 Bundles/Pallet
18 Pallets/Truck
936 Bundles/Truck
19 Pieces/Bundle
1 Bundle = 120.33 linear feet

Available Colors: Antique Slate, Weatheredwood, Shakewood, Sablewood, Hickory, Barkwood**, Forest Green, Wedgewood**, Birchwood**, Sandalwood. Gallery Collection: Balsam Forest™, Weathered Sage™, Sienna Sunset™.

All Prestique, Raised Profile and Seal-A-Ridge roofing products contain Elk WindGuard® sealant. WindGuard activates with the sun's heat, bonding shingles into a wind and weather resistant cover that resists blow-offs and leaks.

Check for availability with built-in StainGuard® treatment to inhibit the discoloration of roofing granules caused by the growth of certain types of algae. Not available in Sablewood.

All Prestique and Raised Profile shingles meet UL® Wind Resistant (UL 997) and Class "A" Fire Ratings (UL 790); and ASTM Specifications D 3018, Type-I; D 3161, Type-I; E 108 and the requirements of ASTM D 3462.

All Prestique and Raised Profile shingles meet the latest Metro Dade building code requirements.

***See actual limited warranty for conditions and limitations.**
****Check for product availability.**

SPECIFICATIONS

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

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

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

MATERIALS: Underlayment for standard roof slopes, 4" per foot (101.6/304.8mm) or greater: apply non-perforated No. 15 or 30 asphalt-saturated felt underlayment. For low slopes [4" per foot (101.6/304.8mm) to a minimum of 2" per foot (50.8/304.8mm)], use two plies of underlayment overlapped a minimum of 19". Fasteners shall be of sufficient length and holding power for securing material as required by the application instructions printed on shingle wrapper.

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

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

For specifications in CSI format, call 800.354.SPEC (7732) or e-mail specinfo@elkcorp.com.

SOUTHEAST & ATLANTIC OFFICE:
800.945.5551

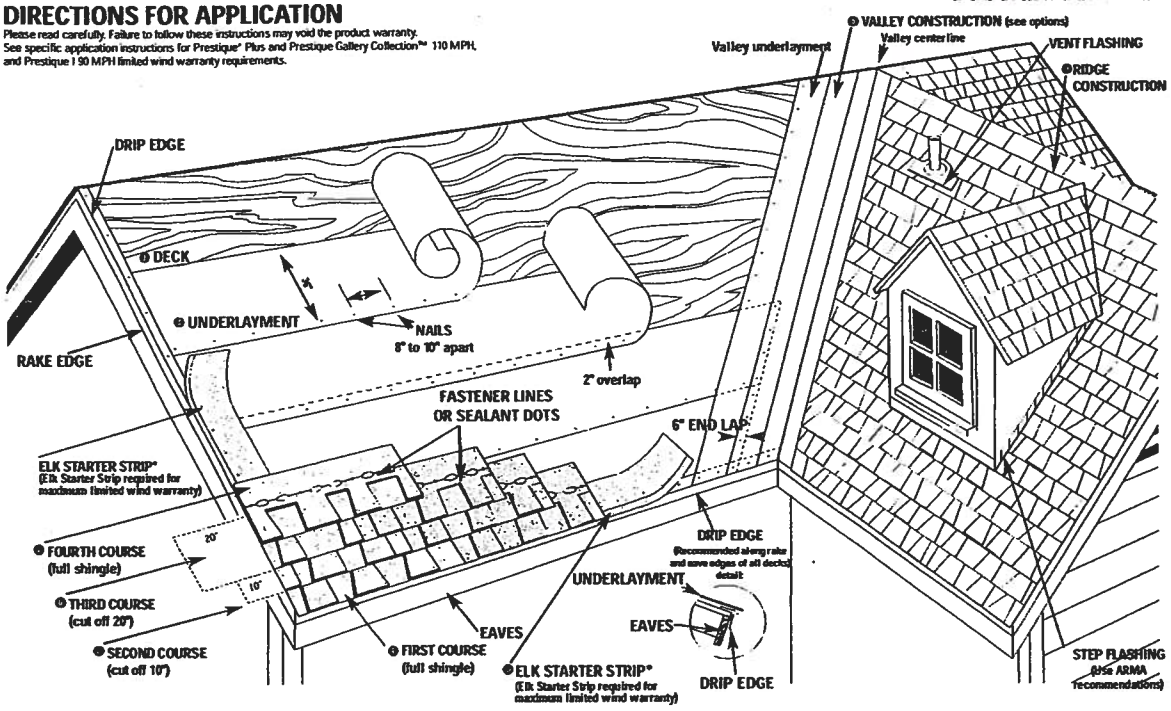
CORPORATE HEADQUARTERS:
800.354.7732

PLANT LOCATION:
800.945.5545

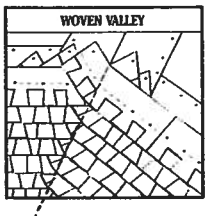
ELK
www.elkcorp.com

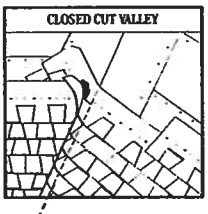
DIRECTIONS FOR APPLICATION

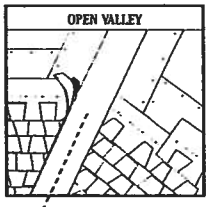
Please read carefully. Failure to follow these instructions may void the product warranty.
See specific application instructions for Prestique® Plus and Prestique Gallery Collection™ 110 MPH, and Prestique I 90 MPH limited wind warranty requirements.



⑥ **VALLEY CONSTRUCTION OPTION** (California Open and California Closed are also acceptable) NOTE: For complete ARMA valley installation details, see ARMA Residential Asphalt Roofing Manual.







DIRECTIONS FOR APPLICATION

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

⑤ DECK PREPARATION

Roof decks should be dry, well-seasoned 1" x 6" boards or exterior grade plywood minimum 3/8" thick and conform to the specifications of the American Plywood Association or 7/16" oriented strandboard, or 7/16" chipboard.

⑧ UNDERLAYMENT

Apply underlayment (Non-Perforated No. 15 or 30 asphalt saturated felt). Cover drip edge at eaves only.

For low slope (2/12 up to 4/12), completely cover the deck with two plies of underlayment overlapping a minimum of 19". Begin by fastening a 19" wide strip of underlayment placed along the eaves. Place a full 36" wide sheet over the starter, horizontally placed along the eaves and completely overlapping the starter strip.

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

For standard slope (4/12 to less than 21/12), use coated roll roofing of no less than 50 pounds over the felt underlayment extending from the eave edge to a point at least 24" beyond the inside wall of the living space below or one layer of a self-adhered eave and flashing membrane.

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

Consult the Elk Field Service Department for application specifications over other decks and other slopes.

① STARTER SHINGLE COURSE

USE AN ELK STARTER STRIP OR A STRIP SHINGLE INVERTED WITH THE HEADLAP APPLIED AT THE EAVE EDGE. With at least 4" trimmed from the end of the first shingle, start at the rake edge overhanging the eave 1/2" to 3/4". Fasten 2" from the lower edge and 1" from each side. Shingles may be applied with a course alignment of 45° on the roof.

④ FIRST COURSE

Start at rake and continue course with full shingles laid flush with the starter course.

② SECOND COURSE

Start at the rake with the shingle having 10" trimmed off and continue across roof with full shingles.

③ THIRD COURSE

Start at the rake with the shingle having 20" trimmed off and continue across roof with full shingles.

④ FOURTH COURSE

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

FIFTH AND SUCCEEDING COURSES.

Repeat application as shown for second, third, and fourth courses. Do not rack shingles straight up the roof.

⑥ VALLEY CONSTRUCTION

Open, woven and closed cut valleys are acceptable when applied by Asphalt Roofing Manufacturing Association (ARMA) recommended procedures. For metal valleys, use 36" wide vertical underlayment prior to applying 18" metal flashing (secure edge with nails). No nails are to be within 6" of valley center.

⑨ RIDGE CONSTRUCTION

For ridge construction use Class "A" Seal-A-Ridge® with formula *FLX*™ (See ridge package for installation instructions.)

FASTENERS

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

Always nail or staple through the fastener line or on products without fastener lines, nail or staple between and in line with sealant dots.

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

STAPLES: Corrosive resistant, 16-gauge minimum, crown width minimum of 15/16". Note: An improperly adjusted staple gun can result in raised staples that can cause a fish-mouthed appearance and can prevent sealing.

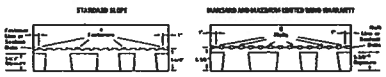
Fasteners should be long enough to obtain 3/4" deck penetration or penetration through deck, whichever is less.

MANSARD APPLICATIONS

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

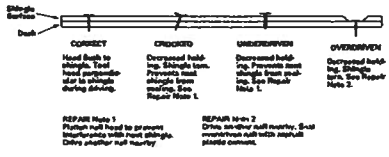
LIMITED WIND WARRANTY

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



HELP STOP BLOW-OFFS AND CALL-BACKS

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



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

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

ELK

www.elkcorp.com

ITS Intertek Testing Services

Test Data Review Certificate

Certificate #3026447A

This certifies that Intertek Testing Services/ETL Semko has reviewed structural load test data and documentation supplied by Masonite/Premdor Exterior Door Products on the product lines indicated below to determine the appropriate design load and impact ratings as specified by Miami-Dade County, Florida Protocol PA201, PA202 and PA203.

The data supplied was reviewed for applicability in support of the data contained in the Masonite/Premdor Product Performance Data Manual for the product line and product models indicated below. ITS/ETL Semko certifies that the test reports provided are consistent with the Masonite Certificate of Performance sheets (COP's) contained in the product performance data manual specified herein. The attached Masonite/Premdor COP/Test Report Validation Matrices (uniquely numbered by product model) provides correlation information for each product model reviewed indicating the test lab, report number(s), product size and installation information and ratings for design load and applicability of the large missile impact test. All applicable COP's and Matrices must bear the Warnock Hersey verification stamp .

Product Line: **Johnson Entry Doors**

Product Models:

Wood-Edge Steel Door Units	**(Matrix #3026447A-001)**
Metal-Edge Steel Door Units	**(Matrix #3026447A-002)**
Fiberglass Door Units	**(Matrix #3026447A-003)**

ITS/ETL-Semko has no direct knowledge of the tests conducted and has made no attempt to verify the accuracy or correctness of the data submitted. The review conducted was only to determine that the manufacturer's claims as represented in the COP's are correct representations of the data supplied from the laboratories. ITS/ETL Semko's review was for structural performance results only and did not include review of air infiltration or water penetration test results.

ISSUED: 6-14-02

Revision Date: June 14, 2002
Supersedes Certificate #3026447
Issued June 6, 2002

BY: _____
Jim Turgeson, Project Manager

ITS Intertek Testing Services

Test Data Review Certificate

Certificate #3026447A

This certifies that Intertek Testing Services/ETL Semko has reviewed structural load test data and documentation supplied by Masonite/Premdor Exterior Door Products on the product lines indicated below to determine the appropriate design load and impact ratings as specified by Miami-Dade County, Florida Protocol PA201, PA202 and PA203.

The data supplied was reviewed for applicability in support of the data contained in the Masonite/Premdor Product Performance Data Manual for the product line and product models indicated below. ITS/ETL Semko certifies that the test reports provided are consistent with the Masonite Certificate of Performance sheets (COP's) contained in the product performance data manual specified herein. The attached Masonite/Premdor COP/Test Report Validation Matrices (uniquely numbered by product model) provides correlation information for each product model reviewed indicating the test lab, report number(s), product size and installation information and ratings for design load and applicability of the large missile impact test. All applicable COP's and Matrices must bear the Warnock Hersey verification stamp .

Product Line: **Johnson Entry Doors**

Product Models:

Wood-Edge Steel Door Units	**(Matrix #3026447A-001)**
Metal-Edge Steel Door Units	**(Matrix #3026447A-002)**
Fiberglass Door Units	**(Matrix #3026447A-003)**

ITS/ETL-Semko has no direct knowledge of the tests conducted and has made no attempt to verify the accuracy or correctness of the data submitted. The review conducted was only to determine that the manufacturer's claims as represented in the COP's are correct representations of the data supplied from the laboratories. ITS/ETL Semko's review was for structural performance results only and did not include review of air infiltration or water penetration test results.

ISSUED: 6-14-02

Revision Date: June 14, 2002
Supersedes Certificate #3026447
Issued June 6, 2002

BY: _____
Jim Turgeson, Project Manager

Johnson™ EntrySystems

COP/Test Report Validation Matrix #3026447A-001

WOOD-EDGE STEEL DOORS

COP# (WL-)	Config.	Swing (I/O)	Max. Overall Size (ins.)	Leaf#	Nominal Max. Leaf Size (ins.)	Glazing Type[1]	+DP (psf)	-DP (psf)	Impact Appr'd	Ref. Test Reports[2] (NCTL-210-)	Ref. Eval. Report (NCTL-210-)	Ass'y Detail (MAD-WL-MA)	Intall Detail (MID-WL-MA)
JH4101-02	X	I	36 x 80	1	36 x 80	O	66.0	66.0	Y	2185 1-3	-	0001-02	0001-02
JH4102-02	XX	I	72 x 80	1, 2	36 x 80	O	45.0	45.0	Y	1905 7-12; 1861 4-6, 10-12, 2185 1-3	2794-1	0002-02	0002-02
JH4103-02	XO/OX	I	50 x 80	1	36 x 80	O	57.0	57.0	Y	1880 7, 9, 10, 12; 1861 4-6, 10-12; 2185 1-3	2794-1	0003-02; 0006/0041-02	0003-02
				SL	14 x 80	IG	57.0	57.0	N				
JH4104-02	OXO	I	108 x 80	1	30 x 80	O			Y	1905 7-12; 1861 4-6, 10-12; 1880 7, 9, 10, 12; 2185 1-3	2794-1	0004-02; 0007/0041-02	0004-02
				SL	14 x 80	IG	57.0	57.0	N				
				SL	36 x 80	IG	45.0	45.0	N				
JH4105-02	OXXO	I	144 x 80	1, 2	36 x 80	O	45.0	45.0	Y	1905 7-12; 1861 4-6, 10-12; 1885 1-3	2794-1	0005/0041-02	0005-02
				SL	36 x 80	IG	45.0	45.0	N				
JH4121-02	X	O	36 x 80	1	36 x 80	O	66.0	66.0	Y	2178 1-3	-	0011-02	0001-02
JH4122-02	XX	O	72 x 80	1, 2	36 x 80	O	45.0	45.0	Y	1905 7-12; 1864 4-8; 2178 1-3	2794-1	0012-02	0002-02
JH4123-02	XO/OX	O	50 x 80	1	36 x 80	O	57.0	57.0	Y	1880 7, 9, 10, 12; 1864 4-8, 10-12; 2178 1-3	2794-1	0013-02 0016/0041-02	0003-02
				SL	14 x 80	IG	57.0	57.0	N				
JH4124-02	OXO	O	108 x 80	1	36 x 80	O			Y	1905 7-12; 1864 5-8; 1880 7-12; 2178 1-3	2794-1	0014-02; 0017/0041-02	0004-02
				SL	14 x 80	IG	57.0	57.0	N				
				SL	36 x 80	IG	45.0	45.0	N				
JH4125-02	OXXO	O	144 x 80	1, 2	36 x 80	O	45.0	45.0	Y	1905 7-12; 1864 5-8; 2178 1-3	2794-1	0015-02; 0018/0041-02	0005-02
				SL	36 x 80	IG	45.0	45.0	N				
JH4141-02	X	I	36 x 80	1	36 x 80	IG	40.5	40.5	N	1897 7-12; 1861 4-6, 10-12; 2185 1-3	2794-1	0001/0041-02	0001-02
JH4142-02	XX	I	72 x 80	1, 2	36 x 80	IG	40.5	40.5	N	1897 7-12; 1861 4-6, 10-12; 2185 1-3	2794-1	0002/0041-02	0002-02
JH4143-02	XO/OX	I	72 x 80	1	36 x 80	IG	40.5	40.5	N	1897 2-12; 1861 4-6, 10-12; 2185 1-3	2794-1	0003-02; 0006/0041-02	0003-02
				SL	36 x 80	IG	40.5	40.5	N				
JH4144-02	OXO	I	108 x 80	1	36 x 80	IG	40.5	40.5	N	1897 7-12; 1861 4-6, 10-12; 2185 1-3	2794-1	0004-02; 0007/0041-02	0004-02
				SL	36 x 80	IG	40.5	40.5	N				
JH4145-02	OXXO	I	144 x 80	1, 2	36 x 80	IG	40.5	40.5	N	1897 7-12; 1861 4-6, 10-12; 2185 1-3	2794-1	0005-02; 0008/0041-02	0005-02
				SL	36 x 80	IG	40.5	40.5	N				

[1] O=opaque; IG=insulating glass with minimum 1/8" tempered glazing
[2] tested in accordance with Metro-Dade Protocols PA201, PA202 and PA203

VERIFIED BY:
Warnock Hersey
June 14, 2002

COP/MAD/MID sheets referenced in this matrix provides additional information – available from the Masonite website (www.masonite.com) or the Masonite technical center.

PREMDOR Collection Premium Quality Doors

Exclusively from Masonite®
Masonite International Corporation

ITS Intertek Testing Services

Johnson™ EntrySystems

COP/Test Report Validation Matrix
#3026447A-001

WOOD-EDGE STEEL DOORS

COP# (WL-)	Config.	Swing (I/O)	Max. Overall Size (ins.)	Leaf#	Nominal Max. Leaf Size (ins.)	Glazing Type[1]	+DP (psf)	-DP (psf)	Impact Appr'd	Rel. Test Reports[2] (NCTL-210-)	Rel. Eval. Report (NCTL-210-)	Ass'y Detail (MAD-WL-MA)	Intall Detail (MID-WL-MA)
JH4161-02	X	O	36 x 80	1	36 x 80	IG	40.5	40.5	N	1897 7-12; 1864 5-8; 2178 1-3	2794-1	0011/0041-02	0001-02
JH4162-02	XX	O	72 x 80	1, 2	36 x 80	IG	40.5	40.5	N	1897 7-12; 1864 5-8; 2178 1-3	2794-1	0012/0041-02	0002-02
JH4163-02	XO/OX	O	72 x 80	1	36 x 80	IG	40.5	40.5	N	1897 7-12; 1864 5-8; 2178 1-3	2794-1	0013-02; 0016/0041-02	0003-02
				SL	36 x 80	IG	40.5	40.5	N				
JH4164-02	OXO	O	108 x 80	1	36 x 80	IG	40.5	40.5	N	1897 7-12; 1864 5-8; 2178 1-3	2794-1	0014-02; 0017/0041-02	0004-02
				SL	36 x 80	IG	40.5	40.5	N				
JH4165-02	OXXO	O	144 x 80	1, 2	36 x 80	IG	40.5	40.5	N	1897 7-12; 1864 5-8; 2178 1-3	2794-1	0018/0041-02	0005-02
				SL	36 x 80	IG	40.5	40.5	N				

[1] O=opaque; IG=insulating glass with minimum 1/8" tempered glazing
[2] tested in accordance with Metro-Dade Protocols PA201, PA202 and PA203

VERIFIED BY:
Warnock Hersey
June 14, 2002

COP/MAD/MID sheets referenced in this matrix provides additional information – available from the Masonite website (www.masonite.com) or the Masonite technical center.

Johnson™ EntrySystems

COP/Test Report Validation Matrix #3026447A-002

METAL-EDGE STEEL DOORS

COP# (WL-)	Config.	Swing (I/O)	Max. Overall Size (ins.)	Leaf#	Nominal Max. Leaf Size (ins.)	Glazing Type[1]	+DP (psf)	-DP (psf)	Impact Appr'd	Ref. Test Reports[2] (NCTL-210-)	Ref. Eval. Report (NCTL-210-)	Ass'y Detail (MAD-WL-MA)	Intall Detail (MID-WL-MA)
JH3101-02	X	I	36 x 80	1	36 x 80	O	76.0	76.0	Y	2185 1-3	2794-1	0001-02	0001-02
JH3102-02	XX	I	72 x 80	1, 2	36 x 80	O	55.0	55.0	Y	1905 1-6; 1861 1-3, 7-9; 2183 1-3	2794-1	0002-02	0002-02
JH3103-02	XO/OX	I	50 x 80	1	36 x 80	O	76.0	76.0	Y	1880 1-6; 1861 1-3, 7-9; 2183 1-3	2794-1	0003-02; 0008/0041-02	0003-02
				SL	14 x 80	IG	76.0	76.0	N				
JH3104-02	OXO	I	108 x 80	1	30 x 80	O			Y	1905 1-6; 1861 1-3, 7-9; 1880 1-6; 2183 1-3	2794-1	0004-02; 0007/0041-02	0004-02
				SL	14 x 80	IG	76.0	76.0	N				
				SL	36 x 80	IG	55.0	55.0	N				
JH3105-02	OXXO	I	144 x 80	1, 2	36 x 80	O	55.0	55.0	Y	1905 1-6; 1861 1-3, 7-9; 2183 1-3	2794-1	0005-02; 0008/0041-02	0005-02
				SL	36 x 80	IG	55.0	55.0	N				
JH3106-02	X	I	36 x 96	1	36 x 96	O	48.3	48.3	Y	1980 1-6; 1861 1-3, 7-9; 2183 1-3	2794-1	0001-02	0001-02
JH3107-02	XX	I	72 x 96	1, 2	36 x 96	O	48.3	48.3	Y	1980 1-6; 1861 1-3, 7-9; 2183 1-3	2794-1	0002-02	0002-02
JH3108-02	XO/OX	I	72 x 96	1	36 x 96	O	48.3	48.3	Y	1980 1-6; 1861 1-3, 7-9; 2183 1-3	2794-1	0003-02; 0016/0041-02	0003-02
				SL	36 x 96	IG	48.3	48.3	N				
JH3109-02	OXO	I	108 x 96	1	36 x 96	O	48.3	48.3	Y	1980 1-6; 1861 1-3, 7-9; 2183 1-3	2794-1	0004-02; 0007/0041-02	0004-02
				SL	36 x 96	IG	48.3	48.3	N				
JH3110-02	OXXO	I	144 x 96	1, 2	36 x 96	O	48.3	48.3	Y	1980 1-6; 1861 1-3, 7-9; 2183 1-3	2794-1	0005-02	0005-02
				SL	36 x 80	IG	48.3	48.3	N				
JH3121-02	X	O	36 x 80	1	36 x 80	O	76.0	76.0	Y	2184 1-3	-	0011-02	0001-02
JH3122-02	XX	O	72 x 80	1, 2	36 x 80	O	55.0	55.0	Y	1905 1-6; 1864 1-4; 2184 1-3	2794-1	0012-02	0002-02
JH3123-02	XO/OX	O	50 x 80	1	36 x 80	O	76.0	76.0	Y	1880 1-6; 1864 1-4; 2184 1-3	2794-1	0013-02; 0016/0014-02	0003-02
				SL	14 x 80	IG	76.0	76.0	N				
JH3124-02	OXO	O	100 x 80	1	36 x 80	O			Y	1880 1-6; 1864 1-4; 1905 1-6; 2184 1-3	2794-1	0014-02; 0017/0041-02	0004-02
				SL	14 x 80	IG	76.0	76.0	N				
				SL	30 x 80	IG	55.0	55.0	N				
JH3125-02	OXXO	O	144 x 80	1, 2	36 x 80	O	55.0	55.0	Y	1905 1-6; 1864 1-4; 2184 1-3	2794-1	0015-02; 0018/0041-02	0005-02
				SL	36 x 80	IG	55.0	55.0	N				
JH3126-02	X	O	36 x 96	1	36 x 96	O	48.3	48.3	Y	1980 1-6; 1864 1-4; 2184 1-3	2794-1	0011-02	0001-02
JH3127-02	XX	O	72 x 96	1, 2	36 x 96	O	48.3	48.3	Y	1980 1-6; 1864 1-4; 2184 1-3	2794-1	0012-02	0002-02

[1] O=opaque; IG=insulating glass with minimum 1/8" tempered glazing
[2] tested in accordance with Metro-Dade Protocols PA201, PA202 and PA203

VERIFIED BY:
Warnock Hersey
June 14, 2002

COP/MAD/MID sheets referenced in this matrix provides additional information – available from the Masonite website (www.masonite.com) or the Masonite technical center.

Johnson EntrySystems

COP/Test Report Validation Matrix #3026447A-002

METAL-EDGE STEEL DOORS

COP# (WL-)	Config.	Swing (I/O)	Max. Overall Size (ins.)	Leaf#	Nominal Max. Leaf Size (ins.)	Glazing Type[1]	+DP (psf)	-DP (psf)	Impact Apprv'd	Ref. Test Reports[2] (NCTL-210-)	Ref. Eval. Report (NCTL-210-)	Ass'y Detail (MAD-WL-00A)	Install Detail (MID-WL-00A)
JH3128-02	XO/OX	O	72 x 96	1	36 x 96	O	48.3	48.3	Y	1980 1-6; 1864 1-4; 2184 1-3	2794-1	0013-02; 0016/0041-02	0003-02
				SL	36 x 96	IG	48.3	48.3	N				
JH3129-02	OXO	O	108 x 96	1	36 x 96	O	48.3	48.3	Y	1980 1-6; 1864 1-4; 2184 1-3	2794-1	0014-02; 0017/0041-02	0004-02
				SL	36 x 96	IG	48.3	48.3	N				
JH3130-02	OXXO	O	144 x 96	1, 2	36 x 96	O	48.3	48.3	Y	1980 1-6; 1864 1-4; 2184 1-3	2794-1	0015-02; 0018/0041-02	0005-02
				SL	36 x 96	IG	48.3	48.3	N				
JH3141-02	X	I	36 x 80	1	36 x 80	IG	50.5	50.5	N	1897 1-6; 1861 1-3, 7-9; 2183 1-3	2794-1	0001/0041-02	0001-02
JH3142-02	XX	I	72 x 80	1, 2	36 x 80	IG	50.5	50.5	N	1897 1-6; 1861 1-3, 7-9; 2183 1-3	2794-1	0002/0041-02	0002-02
JH3143-02	XO/OX	I	72 x 80	1	36 x 80	IG	50.5	50.5	N	1897 1-6; 1861 1-3, 7-9; 2183 1-3	2794-1	0003-02; 0006/0041-02	0003-02
				SL	30 x 80		50.5	50.5	N				
JH3144-02	OXO	I	108 x 80	1	36 x 80	IG	50.5	50.5	N	1897 1-6; 1861 1-3, 7-9; 2183 1-3	2794-1	0004-02; 0007/0041-02	0004-02
				SL	36 x 80		50.5	50.5	N				
JH3145-02	OXXO	I	144 x 80	1, 2	36 x 80	IG	50.5	50.5	N	1897 1-6; 1861 1-3, 7-9; 2183 1-3	2794-1	0005-02; 0008/0041-02	0005-02
				SL	36 x 80		50.5	50.5	N				
JH3146-02	X	I	36 x 96	1	36 x 96	IG	43.0	45.0	N	1897 1-12; 1861 1-3, 7-9; 2183 1-3	2794-1	0001/0041-02	0001-02
JH3147-02	XX	I	72 x 96	1, 2	36 x 96	IG	43.0	45.0	N	1897 1-12; 1861 1-3, 7-9; 2183 1-3	2794-1	0002/0041-02	0002-02
JH3161-02	X	O	36 x 80	1	36 x 80	IG	50.5	50.5	N	1897 1-6; 1864 1-4; 2184 1-3	2794-1	0011/0041-02	0001-02
JH3162-02	XX	O	72 x 80	1, 2	36 x 80	IG	50.5	50.5	N	1897 1-6; 1864 1-4; 2184 1-3	2794-1	0012/0041-02	0002-02
JH3163-02	XO/OX	O	72 x 80	1	36 x 80	IG	50.5	50.5	N	1897 1-6; 1864 1-4; 2184 1-3	2794-1	0013-02; 0016/0041-02	0003-02
				SL	36 x 80	IG	50.5	50.5	N				
JH3164-02	OXO	O	108 x 80	1	36 x 80	IG	50.5	50.5	N	1897 1-6; 1864 1-4; 2184 1-3	2794-1	0014-02; 0017/0041-02	0004-02
				SL	36 x 80	IG	50.5	50.5	N				
JH3165-02	OXXO	O	144 x 80	1, 2	36 x 80	IG	50.5	50.5	N	1897 1-6; 1864 1-4; 2184 1-3	2794-1	0015-02; 0018/0041-02	0005-02
				SL	36 x 80	IG	50.5	50.5	N				
JH3166-02	X	O	36 x 96	1	36 x 96	IG	43.0	43.0	N	1897 1-12; 1864 1-4, 7-9; 2184 1-3	2794-1	0011-02	0001-02
JH3167-02	XX	O	72 x 96	1, 2	36 x 96	IG	43.0	45.0	N	1897 1-12; 1864 1-4, 7-9; 2184 1-3	2794-1	0012/0041-02	0002-02

[1] O=opaque; IG=insulating glass with minimum 1/8" tempered glazing
[2] tested in accordance with Metro-Dade Protocols PA201, PA202 and PA203

VERIFIED BY:
Warnock Hersey
June 14, 2002

COP/MAD/MID sheets referenced in this matrix provides additional information – available from the Masonite website (www.masonite.com) or the Masonite technical center.

Johnson™ EntrySystems

COP/Test Report Validation Matrix #3026447A-003

FIBERGLASS DOORS

COP# (WL-)	Config.	Swing (I/O)	Max. Overall Size (ins.)	Leaf#	Nominal Max. Leaf Size (ins.)	Glazing Type[1]	+DP (psf)	-DP (psf)	Impact Appr'd	Ref. Test Reports[2]	Ass'y Detail (MAD-WL-MA)	Intall Detail (MID-WL-MA)
MA0101-02	X	I	36 x 80	1	36 x 80	0	76.0	76.0	N	NCTL 210-1973 1-3	0001-02	0001-02
MA0102-02	XX	I	72 x 80	1, 2	36 x 80	0	55.0	55.0	N	CTLA-772W-2	0002-02	0002-02
MA0103-02	XO/OX	I	50 x 80	1	36 x 80	0	55.0	55.0	N	CTLA-772W-2	0003/0006/0041-02	0003-02
				SL	14 x 80	IG	55.0	55.0	N			
MA0104-02	OXO	I	64 x 80	1	36 x 80	0	55.0	55.0	N	CTLA-772W-2	0004/0007/0041-02	0004-02
				SL	14 x 80	IG	55.0	55.0	N			
MA0105-02	OXXO	I	100 x 80	1, 2	36 x 80	0	55.0	55.0	N	CTLA-772W-2	0005/0008/0041-02	0005-02
				SL	14 x 80	IG	55.0	55.0	N			
MA0106-02	X	I	36 x 96	1	36 x 96	0	70.0	70.0	N	CTLA-772W	0001-02	0001-02
MA0107-02	XX	I	72 x 96	1, 2	36 x 96	0	55.0	55.0	N	CTLA-772W-1	0002-02	0002-02
MA0108-02	XO/OX	I	50 x 96	1	36 x 96	0	55.0	55.0	N	CTLA-772W-1	0003/0006/0041-02	0003-02
				SL	14 x 96	IG	55.0	55.0	N			
MA0109-02	OXO	I	64 x 96	1	36 x 96	0	55.0	55.0	N	CTLA-772W-1	0004/0007/0041-02	0004-02
				SL	14 x 96	IG	55.0	55.0	N			
MA0110-02	OXXO	I	100 x 96	1, 2	36 x 96	0	55.0	55.0	N	CTLA-772W-1	0005/0014-02	0005-02
				SL	14 x 80	IG	55.0	55.0	N			
MA0121-02	X	O	36 x 80	1	36 x 80	0	76.0	76.0	N	NCTL 210-1973 1-3	0011-02	0001-02
MA0122-02	XX	O	72 x 80	1, 2	36 x 80	0	55.0	55.0	N	CTLA-772W-2	0012-02	0002-02
MA0123-02	XO/OX	O	50 x 80	1	36 x 80	0	55.0	55.0	N	CTLA-772W-2	0013/0016/0014-02	0003-02
				SL	14 x 80	IG	55.0	55.0	N			
MA0124-02	OXO	O	64 x 80	1	36 x 80	0	55.0	55.0	N	CTLA-772W-2	0014/0017/0041-02	0004-02
				SL	14 x 80	IG	55.0	55.0	N			
MA0125-02	OXXO	O	100 x 80	1, 2	36 x 80	0	55.0	55.0	N	CTLA-772W-2	0015/0018/0041-02	0005-02
				SL	14 x 80	IG	55.0	55.0	N			
MA0126-02	X	O	36 x 96	1	36 x 96	0	70.0	70.0	N	CTLA-772W	0011-02	0001-02
MA0127-02	XX	O	72 x 96	1, 2	36 x 96	0	55.0	55.0	N	CTLA-772W-1	0012-02	0002-02
MA0128-02	XO/OX	O	50 x 96	1	36 x 96	0	55.0	55.0	N	CTLA-772W-1	0013/0016/0041-02	0003-02
				SL	14 x 96	IG	55.0	55.0	N			
MA0129-02	OXO	O	64 x 96	1	36 x 96	0	55.0	55.0	N	CTLA-772W-1	0014/0017/0041-02	0004-02
				SL	14 x 96	IG	55.0	55.0	N			
MA0130-02	OXXO	O	100 x 96	1, 2	36 x 96	0	55.0	55.0	N	CTLA-772W-1	0015/0018/0041-02	0005-02
				SL	14 x 96	IG	55.0	55.0	N			

[1] O=opaque; IG=insulating glass with minimum 1/8" tempered glazing
[2] tested in accordance with Metro-Dade Protocols PA201, PA202 and PA203

VERIFIED BY:
Warnock Hersey
June 14, 2002

COP/MAD/MID sheets referenced in this matrix provides additional information – available from the Masonite website (www.masonite.com) or the Masonite technical center.

Johnson™ EntrySystems

COP/Test Report Validation Matrix #3026447A-003

FIBERGLASS DOORS

COP# (WL-)	Config.	Swing (I/O)	Max. Overall Size (ins.)	Leaf#	Nominal Max. Leaf Size (ins.)	Glazing Type¹	+DP (psf)	-DP (psf)	Impact Appr'd	Ref. Test Reports²	Ass'y Detail (MAD-WL-MA)	Intell Detail (MID-WL-MA)
MA0141-02	X	I	36 x 80	1	36 x 80	IG	52.0	52.0	N	CTLA-805W-2	0001/0041-02	0001-02
MA0142-02	XX	I	72 x 80	1, 2	36 x 80	IG	52.0	52.0	N	CTLA-805W-2	0002/0041-02	0002-02
MA0143-02	XO/OX	I	72 x 80	1	36 x 80	IG	52.0	52.0	N	CTLA-805W-2	0003/0006/0041-02	0003-02
				SL	36 x 80	IG	52.0	52.0	N			
MA0144-02	OXO	I	108 x 80	1	36 x 80	IG	52.0	52.0	N	CTLA-805W-2	0004/0007/0041-02	0004-02
				SL	36 x 80	IG	52.0	52.0	N			
MA0145-02	OXXO	I	144 x 80	1, 2	36 x 80	IG	52.0	52.0	N	CTLA-805W-2	0005/0008/0041-02	0005-02
				SL	36 x 80	IG	52.0	52.0	N			
MA0146-02	X	I	36 x 96	1	36 x 96	IG	40.0	40.0	N	CTLA-805W	0001/0041-02	0001-02
MA0147-02	XX	I	72 x 96	1, 2	36 x 96	IG	40.0	40.0	N	CTLA-805W	0002/0041-02	0002-02
MA0148-02	XO/OX	I	72 x 96	1	36 x 96	IG	40.0	40.0	N	CTLA-805W	0003/0006/0041-02	0003-02
				SL	36 x 96	IG	40.0	40.0	N			
MA0149-02	OXO	O	108 x 96	1	36 x 96	IG	40.0	40.0	N	CTLA-805W	0004/0007/0041-02	0004-02
				SL	36 x 96	IG	40.0	40.0	N			
MA0150-02	OXXO	I	144 x 96	1, 2	36 x 96	IG	40.0	40.0	N	CTLA-805W	0005/0007/0041-02	0005-02
				SL	36 x 96	IG	40.0	40.0	N			
MA0161-02	X	O	36 x 80	1	36 x 80	IG	55.0	55.0	N	CTLA-805W-2	0011/0041-02	0001-02
MA0162-02	XX	O	72 x 80	1, 2	36 x 80	IG	55.0	55.0	N	CTLA-805W-2	0012/0041-02	0002-02
MA0163-02	XO/OX	O	72 x 80	1	36 x 80	IG	55.0	55.0	N	CTLA-805W-2	0013/0016/0041-02	0003-02
				SL	36 x 80	IG	55.0	55.0	N			
MA0164-02	OXO	O	108 x 80	1	36 x 80	IG	55.0	55.0	N	CTLA-805W-2	0014/0017/0041-02	0004-02
				SL	36 x 80	IG	55.0	55.0	N			
MA0165-02	OXXO	O	144 x 80	1, 2	36 x 80	IG	55.0	55.0	N	CTLA-805W-2	0015/0018/0041-02	0005-02
				SL	36 x 80	IG	55.0	55.0	N			
MA0166-02	X	O	36 x 96	1	36 x 96	IG	47.0	47.0	N	CTLA-805W	0011/0041-02	0001-02
MA0167-02	XX	O	72 x 96	1, 2	36 x 96	IG	47.0	47.0	N	CTLA-805W	0012/0041-02	0002-02
MA0168-02	XO/OX	O	72 x 96	1	36 x 96	IG	47.0	47.0	N	CTLA-805W	0013/0016/0041-02	0003-02
				SL	36 x 96	IG	47.0	47.0	N			
MA0169-02	OXO	O	108 x 96	1	36 x 96	IG	47.0	47.0	N	CTLA-805W	0014/0017/0041-02	0004-02
				SL	36 x 96	IG	47.0	47.0	N			
MA0170-02	OXXO	O	144 x 96	1, 2	36 x 96	IG	47.0	47.0	N	CTLA-805W	0015/0018/0041-02	0005-02

¹ O=opaque; IG=insulating glass with minimum 1/8" tempered glazing
² tested in accordance with Metro-Dade Protocols PA201, PA202 and PA203

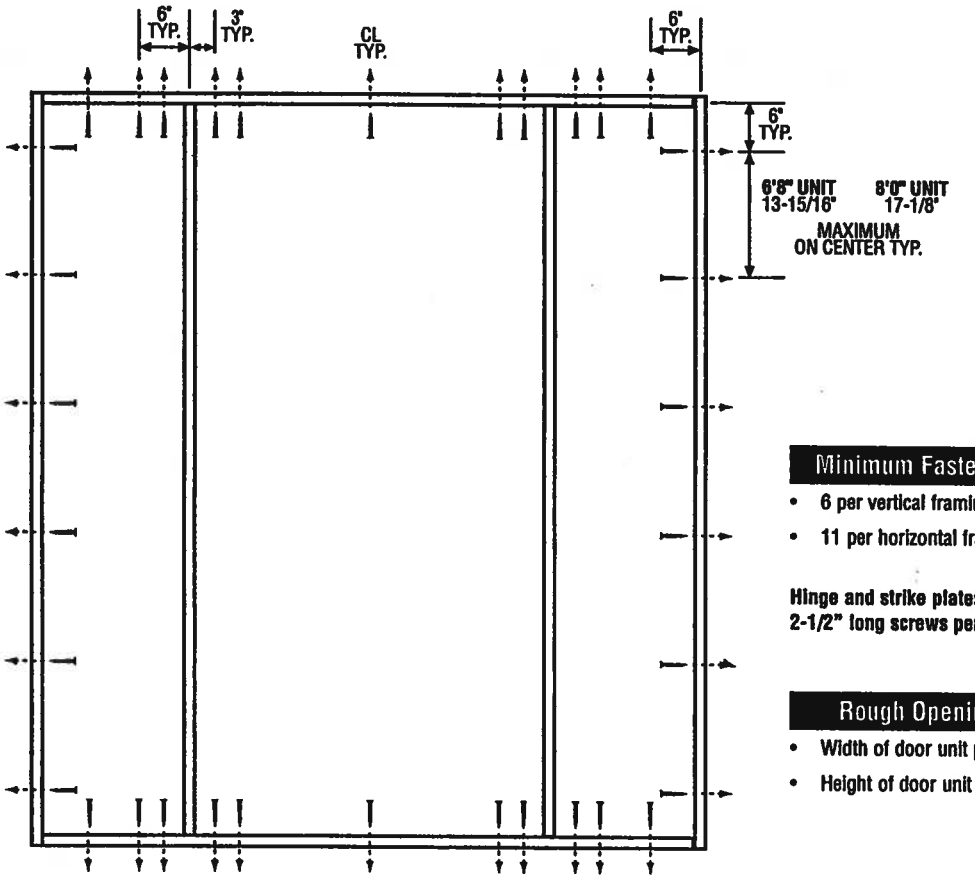
VERIFIED BY:
Warnock Hersey
June 14, 2002

COP/MAD/MID sheets referenced in this matrix provides additional information – available from the Masonite website (www.masonite.com) or the Masonite technical center.

OXO
Unit

MID-WL-MA0004-02

SINGLE DOOR WITH 2 SIDELITES



Minimum Fastener Count

- 6 per vertical framing member
- 11 per horizontal framing member

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

Rough Opening (RO)

- Width of door unit plus 1/2"
- Height of door unit plus 1/4"

Warnock Hersey Test Data Review Certificate #3026447A; #3026447B; #3026447C and COP/Test Report Validation Matrix #3026447A-001, 002, 003; #3026447B-001, 002, 003; #3026447C-001, 002, 003 provides additional information - available from the ITS/WH website (www.etlsemko.com), the Masonite website (www.masonite.com) or the Masonite technical center.

Latching Hardware:

- Compliance requires that GRADE 3 or better (ANSI/BHMA A156.2) cylindrical and deadlock hardware be installed.
- **UNITS COVERED BY COP DOCUMENT 3244*, 3249, 3264* or 3269**
  Compliance requires that 8" GRADE 1 (ANSI/BHMA A156.16) surface bolts be installed on latch side of active door panel – (1) at top and (1) at bottom.

*Based on required Design Pressure – see COP sheet for details.

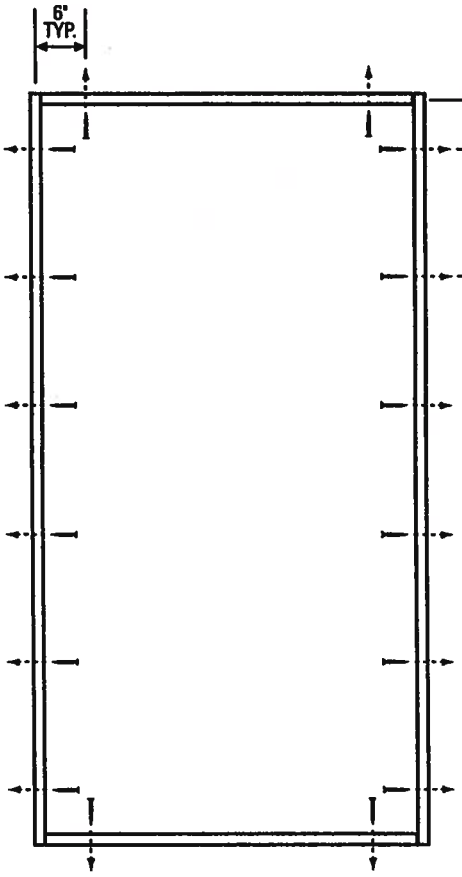
Notes:

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

X
Unit

MID-WL-MA0001-02

SINGLE DOOR



Minimum Fastener Count

- 6 per vertical framing member
- 2 per horizontal framing member

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

Rough Opening (RO)

- Width of door unit plus 1/2"
- Height of door unit plus 1/4"

Warnock Hersey Test Data Review Certificate #3026447A; #3026447B; #3026447C and COP/Test Report Validation Matrix #3026447A-001, 002, 003; #3026447B-001, 002, 003; #3026447C-001, 002, 003 provides additional information - available from the ITS/WH website (www.etlsemko.com), the Masonite website (www.masonite.com) or the Masonite technical center.

Latching Hardware:

- Compliance requires that GRADE 3 or better (ANSI/BHMA A156.2) cylindrical and deadlock hardware be installed.
- **UNITS COVERED BY COP DOCUMENT 3146, 3166, 3241*, 3246, 3261* or 3266**
  Compliance requires that 8" GRADE 1 (ANSI/BHMA A156.16) surface bolts be installed on latch side of active door panel – (1) at top and (1) at bottom.

*Based on required Design Pressure – see COP sheet for details.

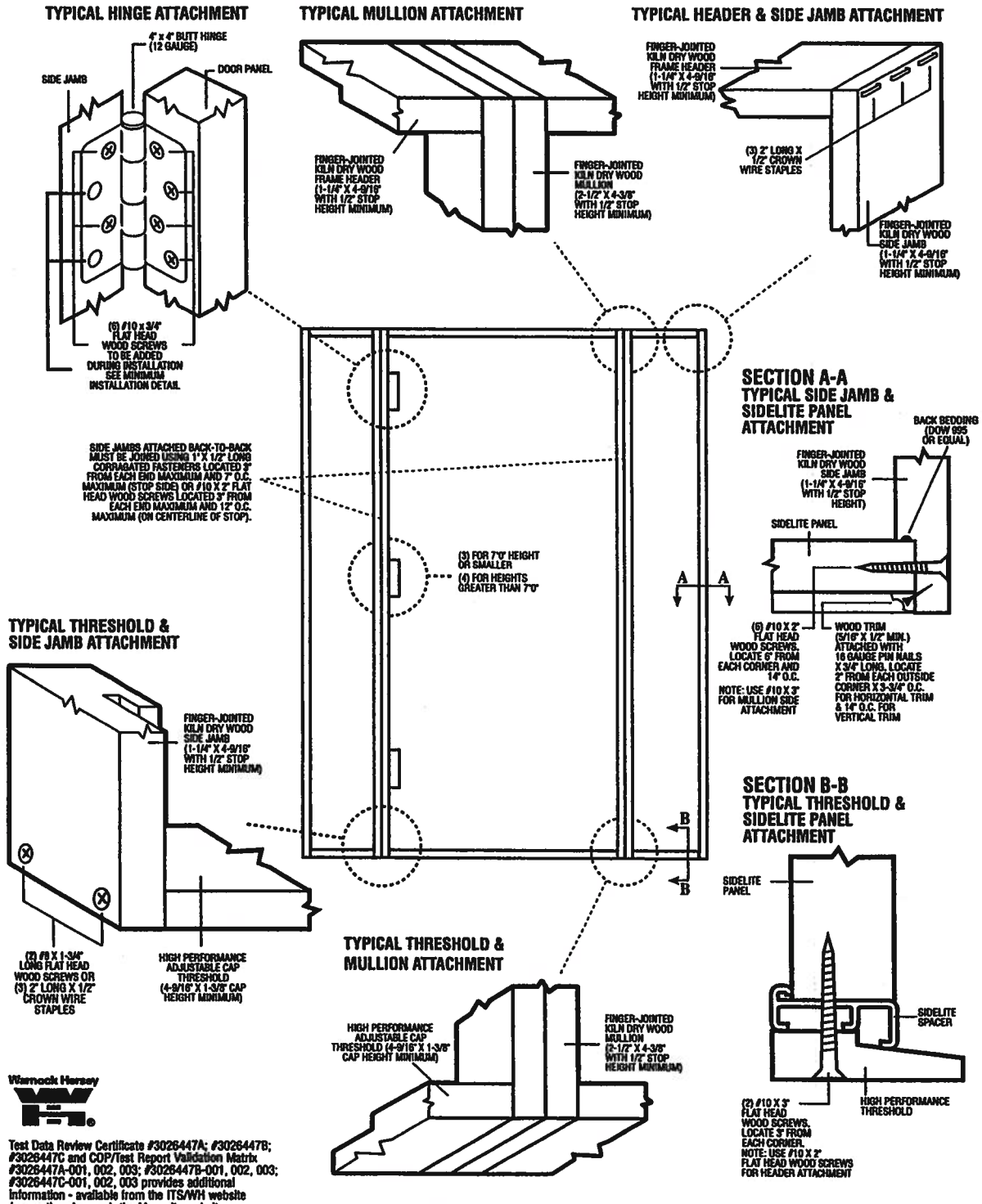
Notes:

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

OXO
Unit

MAD-WL-MA0007-02

INSWING UNIT WITH SINGLE DOOR & TWO SIDELITES (BOXED CONSTRUCTION)



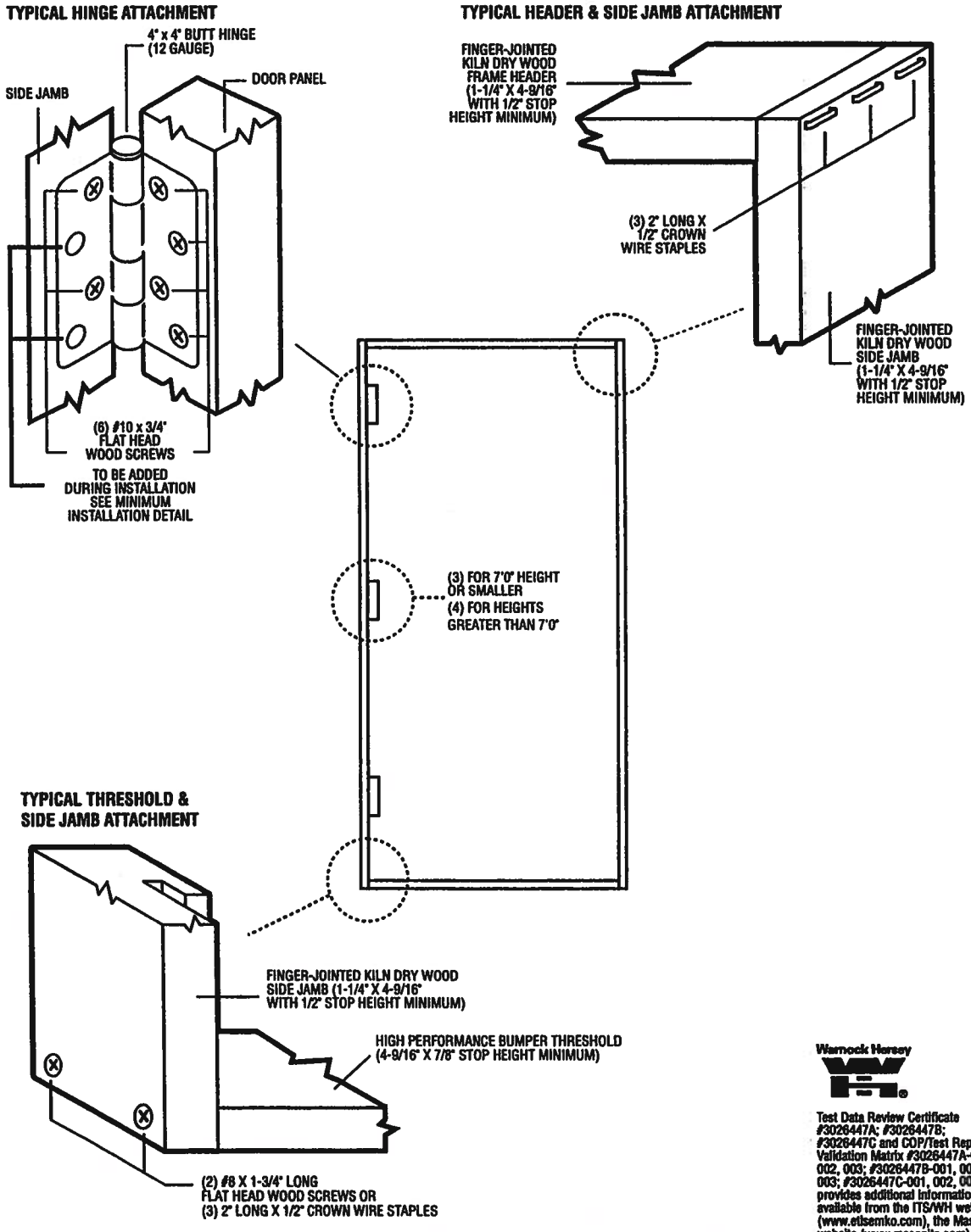
Warnock Hersey

Test Data Review Certificate #3026447A; #3026447B; #3026447C and COP/Test Report Validation Matrix #3026447A-001, 002, 003; #3026447B-001, 002, 003; #3026447C-001, 002, 003 provides additional information - available from the ITS/WH website (www.etsemko.com), the Masonite website (www.masonite.com) or the Masonite technical center.

X
Unit

MAD-WL-MA0011-02

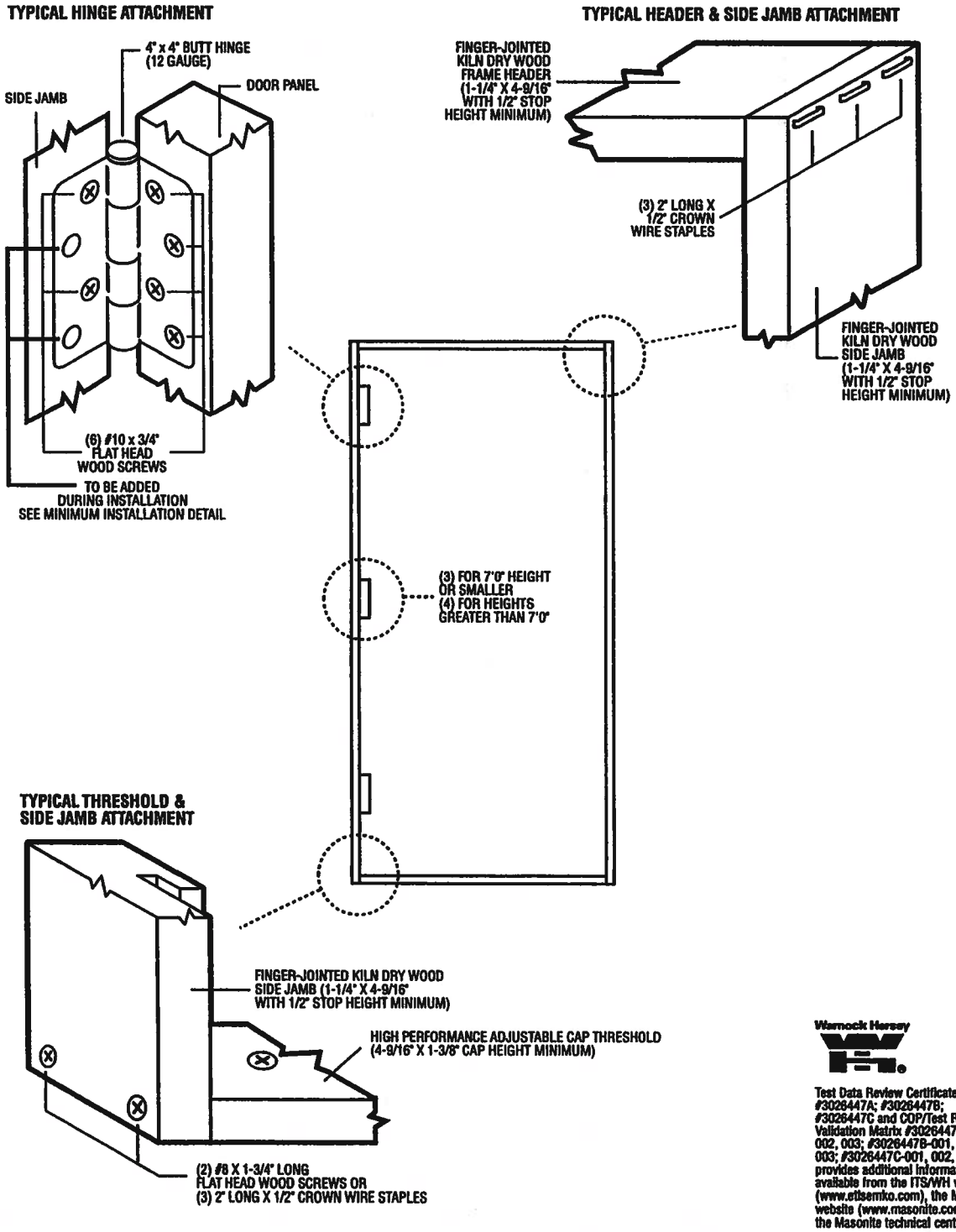
OUTSWING UNITS WITH SINGLE DOOR



Warnock Hersey

Test Data Review Certificate #3026447A; #3026447B; #3026447C and COP/Test Report Validation Matrix #3026447A-001, 002, 003; #3026447B-001, 002, 003; #3026447C-001, 002, 003 provides additional information - available from the ITS/WH website (www.etsemko.com), the Masonite website (www.masonite.com) or the Masonite technical center.

INSWING UNIT WITH SINGLE DOOR



Warnock Hersey

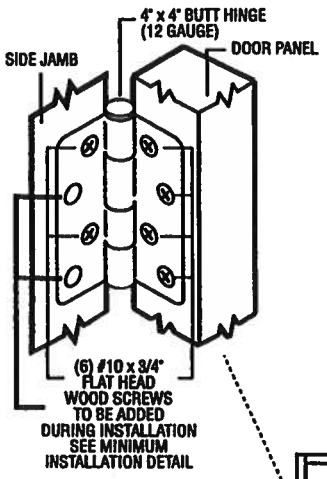
Test Data Review Certificate #3026447A; #3026447B; #3026447C and COP/Test Report Validation Matrix #3026447A-001, 002, 003; #3026447B-001, 002, 003; #3026447C-001, 002, 003 provides additional information - available from the ITS/WH website (www.etlsemko.com), the Masonite website (www.masonite.com) or the Masonite technical center.

XX
Unit

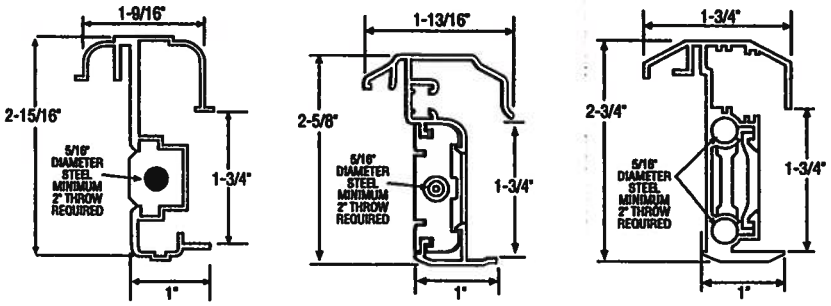
MAD-WL-MA0002-02

INSWING UNIT WITH DOUBLE DOOR

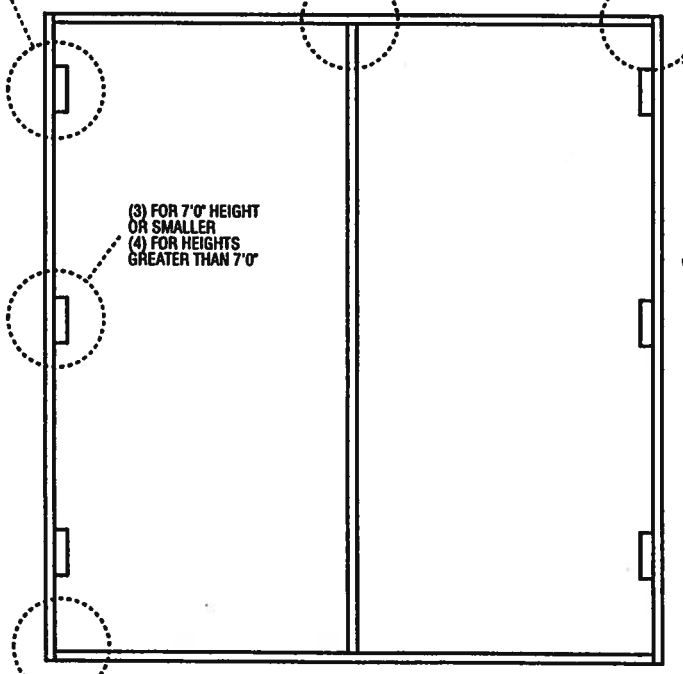
TYPICAL HINGE ATTACHMENT



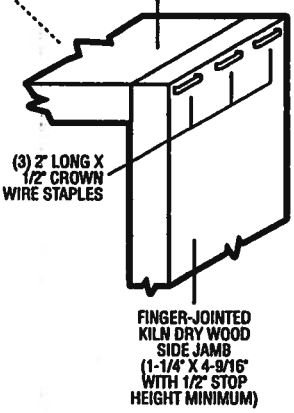
TYPICAL ASTRAGAL PROFILES



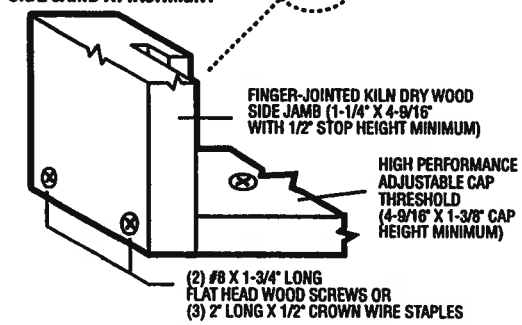
ALUMINUM EXTRUDED ASTRAGAL (0.06" MINIMUM WALL THICKNESS) WITH ADDED REINFORCEMENT INSERTS AT TOP EXTENSION BOLT, BOTTOM EXTENSION BOLT AND CYLINDERICAL/DEADBOLT LATCHING LOCATIONS. ATTACH WITH #8 X 1" PAN HEAD SCREWS – LOCATE 1" FROM EACH END MINIMUM AND 22" O.C. MAXIMUM.



TYPICAL HEADER & SIDE JAMB ATTACHMENT



TYPICAL THRESHOLD & SIDE JAMB ATTACHMENT

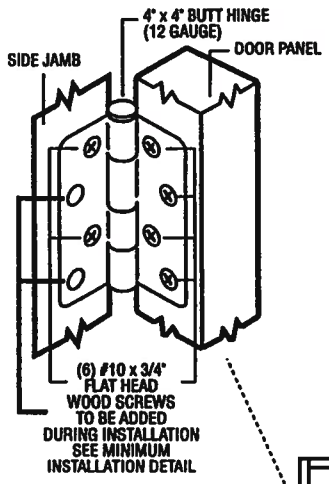


Warnock Hersey

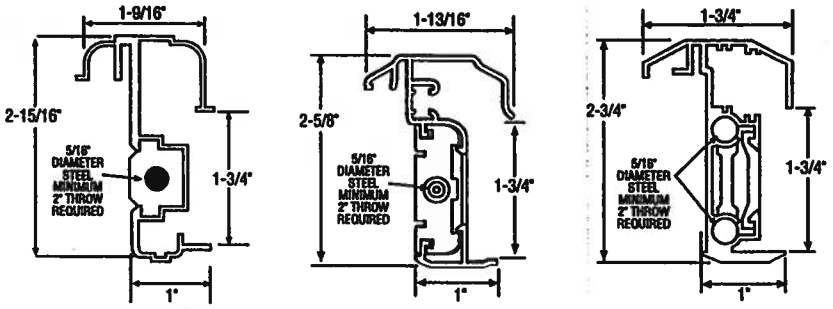
Test Data Review Certificate #3026447A; #3026447B; #3026447C and COP/Test Report Validation Matrix #3026447A-001, 002, 003; #3026447B-001, 002, 003; #3026447C-001, 002, 003 provides additional information - available from the ITS/WH website (www.etsemko.com), the Masonite website (www.masonite.com) or the Masonite technical center.

INSWING UNIT WITH DOUBLE DOOR

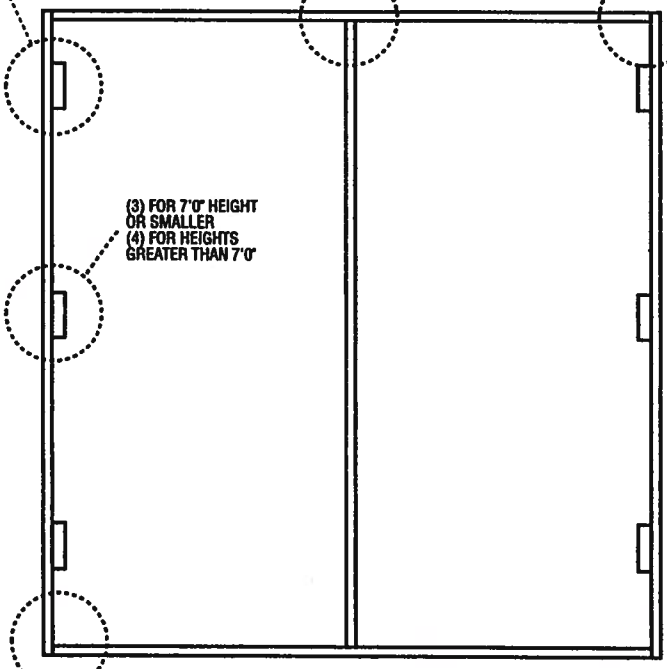
TYPICAL HINGE ATTACHMENT



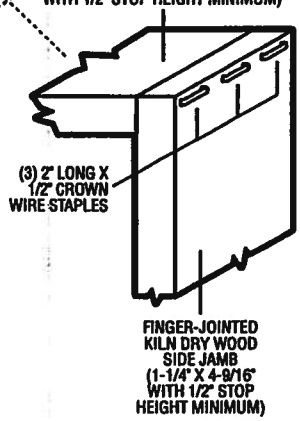
TYPICAL ASTRAGAL PROFILES



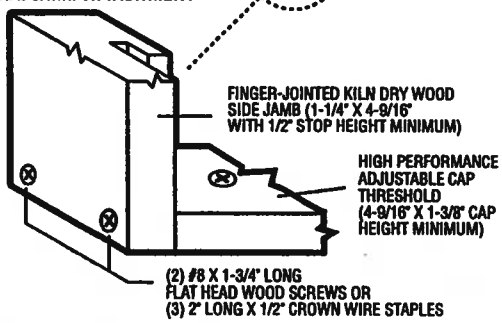
ALUMINUM EXTRUDED ASTRAGAL (0.06" MINIMUM WALL THICKNESS) WITH ADDED REINFORCEMENT INSERTS AT TOP EXTENSION BOLT, BOTTOM EXTENSION BOLT AND CYLINDERICAL/DEADBOLT LATCHING LOCATIONS. ATTACH WITH #8 X 1" PAN HEAD SCREWS – LOCATE 1" FROM EACH END MINIMUM AND 22" O.C. MAXIMUM.



TYPICAL HEADER & SIDE JAMB ATTACHMENT



TYPICAL THRESHOLD & SIDE JAMB ATTACHMENT



Warnock Hersey

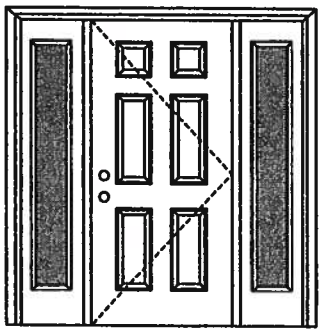
Test Data Review Certificate #3026447A; #3026447B; #3026447C and COP/Test Report Validation Matrix #3026447A-001, 002, 003; #3026447B-001, 002, 003; #3026447C-001, 002, 003 provides additional information - available from the ITS/WH website (www.etisemko.com), the Masonite website (www.masonite.com) or the Masonite technical center.

OXO
Opaque Inswing Unit

COP-WL-JH4104-02

WOOD-EDGE STEEL DOORS

APPROVED ARRANGEMENT:



Warnock Hersey

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

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

Single Door with 2 Sidelites
Maximum unit size = 9'0" x 6'8"

Design Pressure

+57.0/-57.0 with maximum sidelite panel width of 1'2"
+45.0/-45.0 with maximum sidelite panel width of 3'0"
limited water unless special threshold design is used.

Large Missile Impact Resistance

Hurricane protective system (shutters) is NOT REQUIRED on opaque panels, but is required on glazed panels.

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

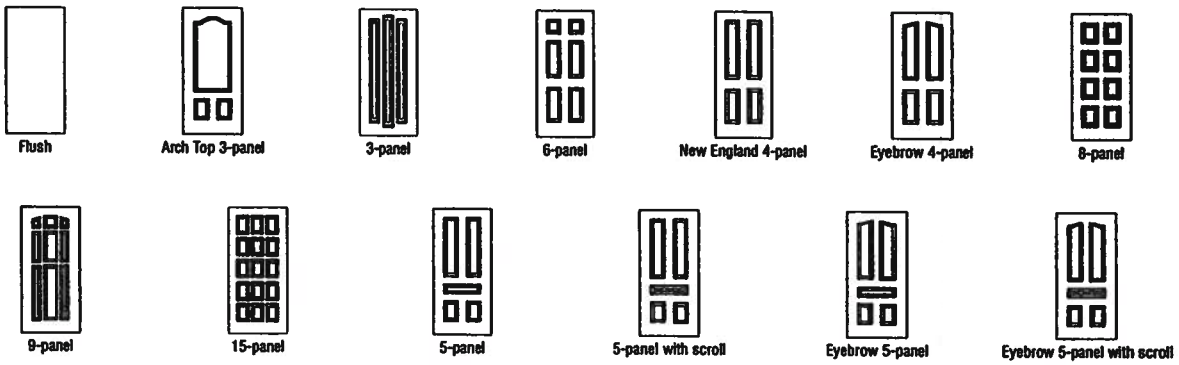
MINIMUM ASSEMBLY DETAIL:

Compliance requires that minimum assembly details have been followed – see MAD-WL-MA0004-02 or MAD-WL-MA0007-02 and MAD-WL-MA0041-02.

MINIMUM INSTALLATION DETAIL:

Compliance requires that minimum installation details have been followed – see MID-WL-MA0004-02.

APPROVED DOOR STYLES:



Johnson™ EntrySystems

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

PREMDOR Collection Premium Quality Doors

Exclusively from Masonite®
Masonite International Corporation

OXO
Opaque Inswing Unit

COP-WL-JH4104-02

WOOD-EDGE STEEL DOORS

APPROVED SIDELITE STYLES:


680 Series


129 Series


200 Series

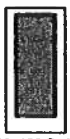

12R, 12L, 23R, 23L, 24R, 24L Series


450 Series


152 Series


149 Series


109 Series


120, 122 Series


300 Series

CERTIFIED TEST REPORTS:

NCTL 210-1905-7, 8, 9, 10, 11, 12; NCTL 210-1861-4, 5, 6, 10, 11, 12; NCTL-210-1880-7, 9, 10, 12; NCTL 210-2185-1, 2, 3

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

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

Evaluation report NCTL-210-2794-1

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

Frame constructed of wood with an extruded aluminum threshold.

PRODUCT COMPLIANCE LABELING:

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

COMPANY NAME
CITY, STATE

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

Kurt L Balthy

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

Warnock Hersey

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

Johnson™ EntrySystems

June 17, 2002

PREMDOR Collection Premium Quality Doors

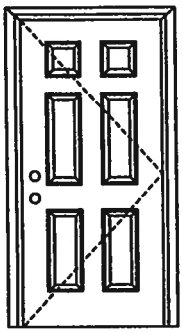
Exclusively from Masonite®
Masonite International Corporation

X
Opaque Inswing Unit

COP-WL-JH4101-02

WOOD-EDGE STEEL DOORS

APPROVED ARRANGEMENT:



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

Warnock Hersey

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

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

Design Pressure
+66.0/-66.0
limited water unless special threshold design is used.

Large Missile Impact Resistance
Hurricane protective system (shutters) is NOT REQUIRED.

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

MINIMUM ASSEMBLY DETAIL:

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

MINIMUM INSTALLATION DETAIL:

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

APPROVED DOOR STYLES:


Flush


Arch Top 3-panel


3-panel


6-panel


New England 4-panel


Eyebrow 4-panel


8-panel


9-panel


15-panel


5-panel


5-panel with scroll


Eyebrow 5-panel


Eyebrow 5-panel with scroll

Johnson™ EntrySystems

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

PREMDOR Collection Premium Quality Doors

Exclusively from Masonite®
Masonite International Corporation

X
Opaque Inswing Unit

COP-WL-JH4101-02

WOOD-EDGE STEEL DOORS

CERTIFIED TEST REPORTS:

NCTL 210-2185-1, 2, 3

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

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

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

Frame constructed of wood with an extruded aluminum threshold.

PRODUCT COMPLIANCE LABELING:

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

COMPANY NAME
CITY, STATE

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

Kurt L Balthazor

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

Warnock Hersey

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

Johnson™ EntrySystems

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

PREMDOR Collection Premium Quality Doors

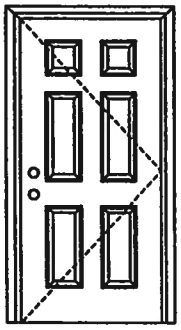
Exclusively from Masonite®
Masonite International Corporation

X
Opaque Outswing Unit

COP-WL-JH4121-02

WOOD-EDGE STEEL DOORS

APPROVED ARRANGEMENT:



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

Warnock Hersey

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

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

Design Pressure
+66.0/-66.0
limited water unless special threshold design is used.

Large Missile Impact Resistance
Hurricane protective system (shutters) is NOT REQUIRED.

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

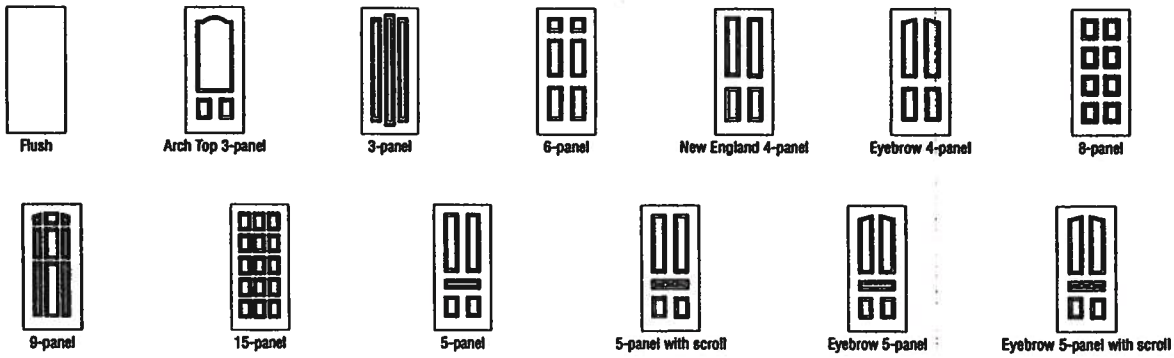
MINIMUM ASSEMBLY DETAIL:

Compliance requires that minimum assembly details have been followed – see MAD-WL-MA0011-02.

MINIMUM INSTALLATION DETAIL:

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

APPROVED DOOR STYLES:



Johnson™ EntrySystems

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

PREMDOR Collection Premium Quality Doors

Exclusively from Masonite®
Masonite International Corporation

X
Opaque Outswing Unit

COP-WL-JH4121-02

WOOD-EDGE STEEL DOORS

CERTIFIED TEST REPORTS:

NCTL 210-2178-1, 2, 3

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

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

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

Frame constructed of wood with an extruded aluminum bumper threshold.

PRODUCT COMPLIANCE LABELING:

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

COMPANY NAME
CITY, STATE

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

Kurt L Balthazor

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

Warnock Hersey

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

Johnson™ EntrySystems

June 17, 2002

PREMDOR Collection Premium Quality Doors

Exclusively from Masonite®

Masonite International Corporation

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

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

CONTRACTOR LICENSING SECTION
(305) 375-2527 FAX (305) 375-2558

CONTRACTOR ENFORCEMENT DIVISION
(305) 375-2966 FAX (305) 375-2908

PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

PRODUCT CONTROL NOTICE OF ACCEPTANCE

Premdor Entry Systems
911 E. Jeferson, P.O. Box 76
Pittsburgh ,KS 66762

Your application for Notice of Acceptance (NOA) of:
Entergy 6-8 S/E Inswing Opaque Double w/sidelites Residential Insulated Steel Door
under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

ACCEPTANCE NO.: 01-0314.23
EXPIRES: 04/02/2006

Raul Rodriguez
Chief Product Control Division

THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL CONDITIONS
BUILDING CODE & PRODUCT REVIEW COMMITTEE

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.
Director
Miami-Dade County
Building Code Compliance Office

APPROVED: 06/05/2001

Premdor Entry Systems

ACCEPTANCE No: 01-0314.23

APPROVED : JUN 05 2001

EXPIRES : April 02, 2006

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

1.1 This renews the Notice of Acceptance No. 00-0321.25 which was issued on April 28, 2000. It approves a residential insulated door, as described in Section 2 of this Notice of Acceptance, designed to comply with the South Florida Building Code (SFBC), 1994 Edition for Miami-Dade County, for the locations where the pressure requirements, as determined by SFBC Chapter 23, do not exceed the Design Pressure Rating values indicated in the approved drawings.

2. PRODUCT DESCRIPTION

2.1 The Series **Entergy 6-8 S/E Inswing Opaque Double Residential Insulated Steel Doors with Sidelites-Impact Resistant Door Slab Only** and its components shall be constructed in strict compliance with the following documents: Drawing No **31-1029-EM-I**, Sheets 1 through 6 of 6, titled "Premdor (Entergy Brand) Double Door with Sidelites in Wood Frames with Bumper Threshold (Inswing)," prepared by manufacturer, dated 7/29/97 with revision C dated 01/11/00, bearing the Miami-Dade County Product Control approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division. These documents shall hereinafter be referred to as the approved drawings.

3. LIMITATIONS

3.1 This approval applies to single unit applications of pair of doors and single door only, as shown in approved drawings. Single door units shall include all components described in the active leaf of this approval.

3.2 Unit shall be installed only at locations protected by a canopy or overhang such that the angle between the edge of canopy or overhang to sill is less than 45 degrees. Unless unit is installed in non-habitable areas where the unit and the area are designed to accept water infiltration.

4. INSTALLATION

4.1 The residential insulated steel door and its components shall be installed in strict compliance with the approved drawings.

4.2 Hurricane protection system (shutters):

4.2.1 Door: the installation of this unit **will not require** a hurricane protection system.

4.2.2 Sidelite: the installation of this unit **will require** a hurricane protection system.

5. LABELING

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

6. BUILDING PERMIT REQUIREMENTS

6.1 Application for building permit shall be accompanied by copies of the following:

6.1.1 This Notice of Acceptance

6.1.2 Duplicate copies of the approved drawings, as identified in Section 2 of this Notice of Acceptance, clearly marked to show the components selected for the proposed installation.

6.1.3 Any other documents required by the Building Official or the South Florida Building Code (SFBC) in order to properly evaluate the installation of this system.

Manuel Perez

Manuel Perez, P.E. Product Control Examiner
Product Control Division

Premdor Entry Systems

ACCEPTANCE No.: 01-0314.23

APPROVED : JUN 0 5- 2001

EXPIRES : April 02, 2006

NOTICE OF ACCEPTANCE: STANDARD CONDITIONS

1. Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documentation, including test supporting data, engineering documents, are no older than eight (8) years.

2. Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.

3. Renewals of Acceptance will not be considered if:
   a. There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes.
   b. The product is no longer the same product (identical) as the one originally approved.
   c. If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product.
   d. The engineer who originally prepared, signed and sealed the required documentation initially submitted, is no longer practicing the engineering profession.

4. Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.

5. Any of the following shall also be grounds for removal of this Acceptance:
   a. Unsatisfactory performance of this product or process.
   b. Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purposes.

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

7. A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all time. The engineer needs not reseal the copies.

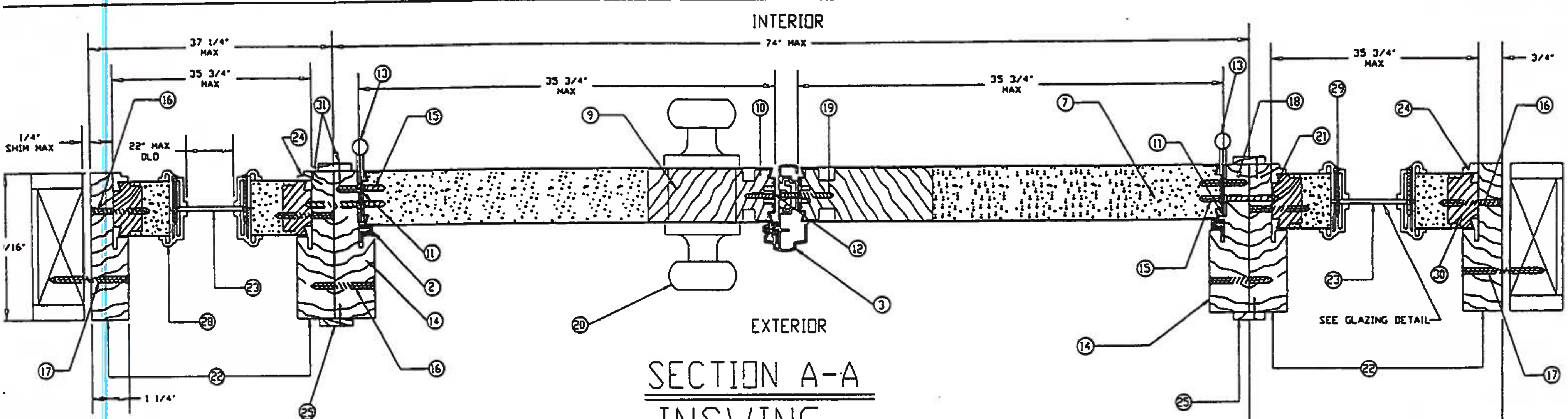
8. Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.

9. This Notice of Acceptance consists of pages 1, 2 and this last page 3.

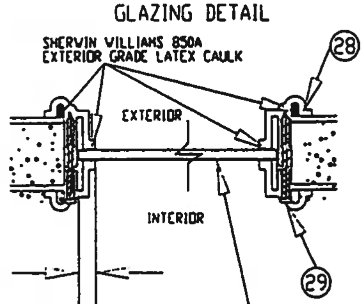
END OF THIS ACCEPTANCE

Manuel Perez

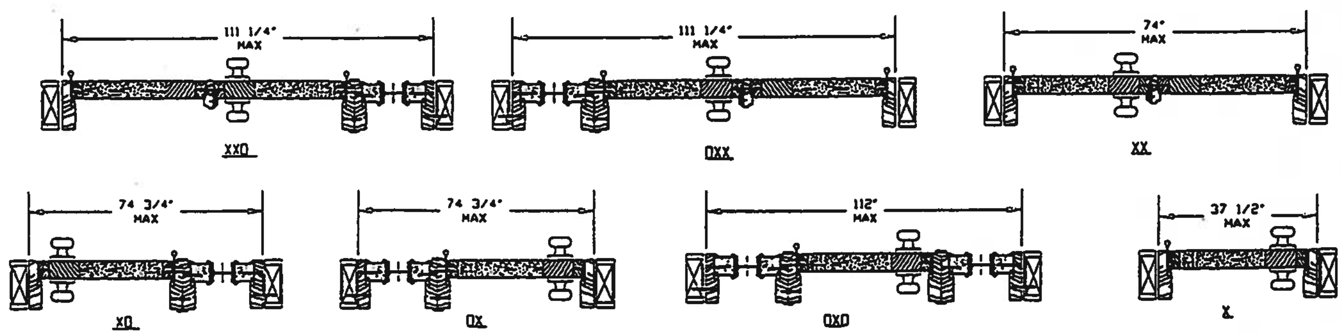
Manuel Perez, P.E., Product Control Examiner
Product Control Division



SECTION A-A
INSWING



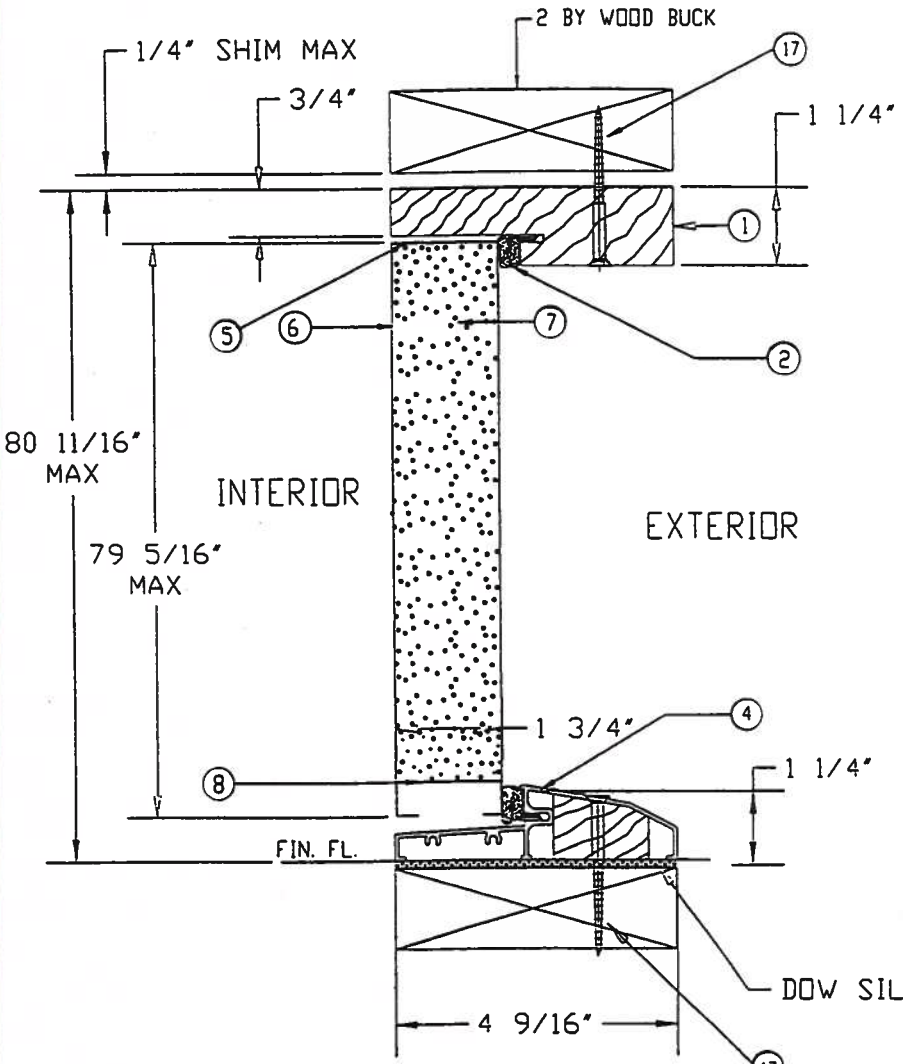
OTHER CONFIGURATIONS



APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE JUN 0 5 2001
BY [signature]
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-0314.23

C	DADE COUNTY MODIFICATIONS		JD
B	ADDED PAGE 5 (DOOR OPTIONS)		RS
A	ADD SCREWS TO LITE FRAMES & ADD OTHER DOOR CONFIGURATIONS		RS
LTR	REVISIONS	DATE	BY

PREMDOR ENTRY SYSTEMS
DR BY RS DATE 7-29-97
ENGINEER:
SCALE: NTS
31-1029-EM-1
SHEET 2 OF 6
REVISION LETTER C



SECTION B-B

MATERIALS LIST

ITEM NO.	DESCRIPTION	PART NUMBER	COMMENTS
①	WOOD HEAD JAMB	EM-14	1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT
②	COMPRESSION WEATHERSTRIP	EM-25	LOCKSCREEN BRAND LOXSEAL 9650 (BRONZE)
③	ALUMINUM ASTRAGAL	EM-12	PREMDOR BRAND OR EQUIVALENT- 5/8" ALUMINUM ASTRAGAL
④	ALUMINUM-BUMPER THRESHOLD	EM-15	PREMDOR BRAND OR EQUIVALENT - 1 1/4" x 4 9/16"
⑤	TOP CHANNEL	EM-08	PREMDOR BRAND - 1 11/16" - 20 GA STEEL
⑥	STEEL SKIN	26 ga. (.017 +.004 -.000)	MIN. YIELD STRENGTH 25,000 PSI MIN. THICKNESS PER TENSILE TEST REPORT IS .021"
⑦	POLYURETHANE FOAM CORE	BASF FOAM - DENSITY 2.0 TO 2.5 lbs./ft³	
⑧	BOTTOM CHANNEL	EM-07	PREMDOR BRAND - 1 11/16" - 20 GA STEEL
⑨	WOOD LOCK BLOCK	EM-09	4" X 9 1/2" MTL. TO BE PINE OR EQUIVALENT
⑩	STRIKE STILE	EM-06	PREMDOR BRAND - 1 11/16" - 20 GA STEEL
⑪	HINGE STILE	EM-05	PREMDOR BRAND - 1 11/16" - 20 GA STEEL
⑫	LOCK PREP FILLER PLATE	EM-10	PREMDOR BRAND - .050" THICK- MTL. TO BE POLYETHYLENE
⑬	4"x4" HINGE	EM-16	HAGER BRAND HINGE OR EQUIVALENT - .097 THICK (STEEL)
⑭	WOOD HINGE JAMB	EM-13	1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT
⑮	#10-24 x 1/2" F.H.M.S.		(4) SCREWS PER HINGE INTO DOOR
⑯	#10 X 2" F.H.W.S.		(5) SCREWS THROUGH HINGE JAMB INTO SIDELITE JAMB, 8" DOWN FROM TOP, MAX 18" O.C. THEREAFTER (10) SCREWS THROUGH STRIKE JAMB INTO SIDELITE JAMB, 4" DOWN FROM TOP MAX 8" O.C. THEREAFTER (6) SCREWS THROUGH EACH SIDELITE JAMB INTO SIDELITE, 4" DOWN FROM TOP, MAX 15" O.C. THEREAFTER
⑰	#10 F.H.W.S. W/MINIMUM 1 1/2 EMBEDMENT OR 3/16" PTH TAPCONS W/MINIMUM 1 1/2" EMBEDMENT		REFER TO ELEVATION VIEW, FOR # OF SCREWS USED AND LOCATIONS
⑱	#10 X 3/4" F.H.W.S.		(2) SCREWS PER HINGE INTO JAMB
⑲	#8 x 2" F.H.W.S.		(2) SCREWS AT EACH STRIKE PLATE
⑳	LOCKSET		KWIKSET BRAND 200 LOCK OR HARLOC BRAND 100 LOCK
㉑	#10 X 1 3/4" F.H.W.S.		(2) SCREWS PER HINGE INTO JAMB
㉒	WOOD SIDELITE JAMB	EM-18	1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT
㉓	22" X 64" SINGLE PANEL GLASS	EM-19	TEMPERED GLASS IN POLYPROPYLENE FRAME- DC-1643 - (ODL-2: 1/8" CLEAR TEMPERED GLASS
㉔	SIDELITE TRIM (WOOD)	EM-20	5/16 x 1/2" MTL. TO BE PINE OR EQUIVALENT
㉕	WOOD CASING	EM-21	1/8" x 1" MTL. TO BE PINE OR EQUIVALENT - ITEMS ARE MOLDINGS USED FOR "SIDE BY SIDE JAMBS" AS MULLIONS
㉖	WOOD SIDELITE HEAD JAMB	EM-22	1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT
㉗	WOOD SIDELITE BASE	EM-23	1 1/4" X 4 9/16" MTL. TO BE PINE OR EQUIVALENT
㉘	POLYPROPYLENE LITE FRAME	DC-1643, ODL-2	HP Polypropylene by ODL
㉙	#6 X 1 1/2" PAN HEAD SCREWS		18 PER FRAME SCREW SPACING TO BE 3" IN FROM EACH CORNER AND NOT TO EXCEED 14" OC THERE AFTER.
㉚	SIDELITE STILES	EM-26	15/16" X 1 11/16" MTL. TO BE PINE OR EQUIVALENT
㉛	PIN NAIL		3/4" LONG NAIL, 4" IN FROM END, MAX 8" O.C. THEREAFTER, USED ON MULLIONS AND TRIM

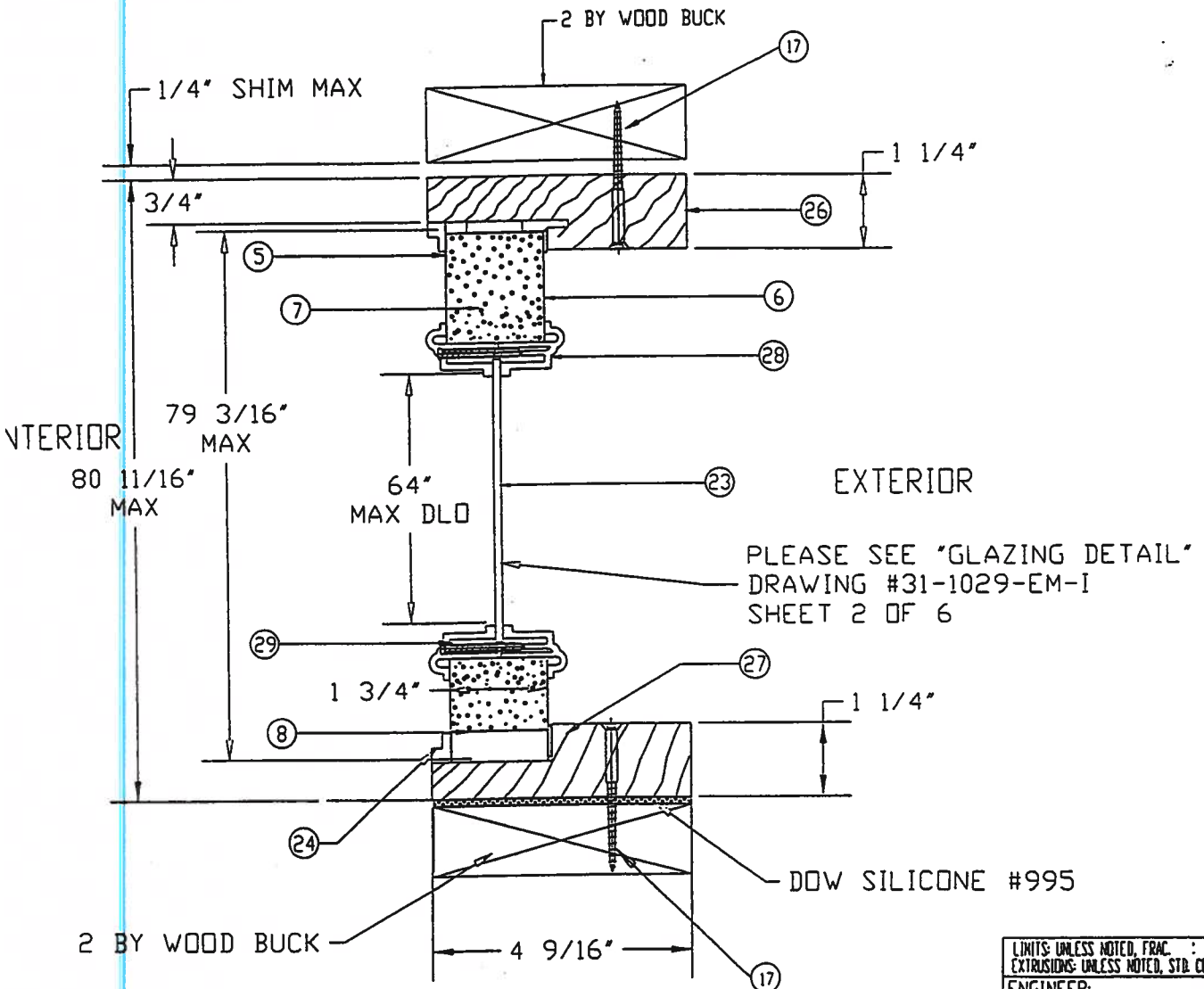
APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE JUN 05 2001
BY
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-0314.23

LIMITS: UNLESS NOTED, FRAC. : DEC. : ANG. :	B	DADE COUNTY MODIFICATIONS	1/11/01	JD
EXTRUSIONS: UNLESS NOTED, STD. COM'L. TOL'S.	A	ADDED PAGE 5 (DOOR OPTIONS)	10-1-98	RS
ENGINEER:	LTR	REVISIONS	DATE	BY
	PART NAME: ENTERGY STEEL EDGE DOOR (B-B)			
DR. BY R.S. DATE 7-29-97	MAT'L:		SCALE:	

PREMDOR ENTRY SYSTEMS
911 E. JEFFERSON
PITTSBURG, KS. 66762

31-1029-EM-I
SHEET 3 OF 6

REVISION LETTER B



SECTION C-C

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE JUN 05 2001
BY Manuel Perez
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-0314.23

LTR.	REVISIONS	DATE	BY
D	DADE COUNTY MODIFICATIONS	1/11/01	JD
C	MATERIAL WAS POLYSTYRENE	6-2-99	RS
B	ADDED PAGE 5 (DOOR OPTIONS)	10-1-98	RS
A	ADD SCREWS TO LITE FRAME & MATERIAL LIST	12-18-97	R.S.

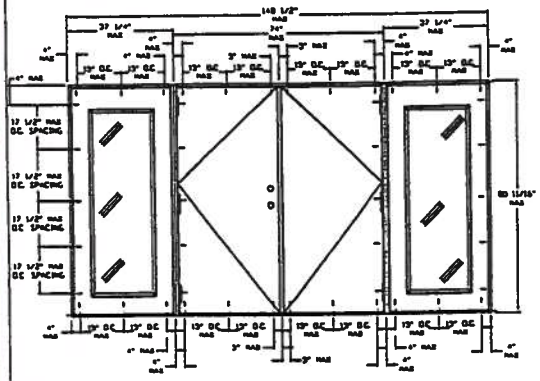
LIMITS: UNLESS NOTED, FRAC. : DEC. : ANG. :
EXTRUSIONS: UNLESS NOTED, STD. COML. TOL'S.
ENGINEER:
DR. BY R.S. | DATE 7-29-97
PART NAME: ENTERGY METAL EDGE SIDELITE (C-C)
MAT'L: | SCALE:

PREMDOR ENTRY SYSTEMS
911 E. JEFFERSON
PITTSBURG, KS. 66762

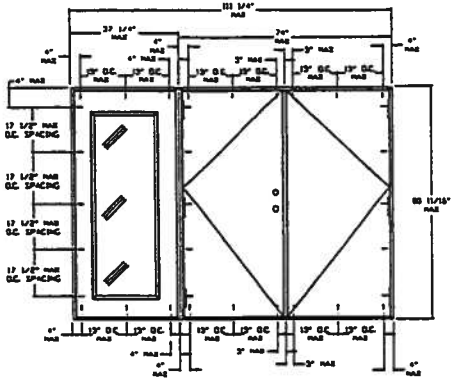
31-1029-EM-I
SHEET 4 OF 6

REVISION LETTER D

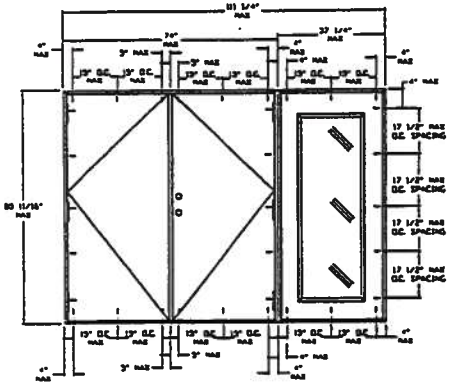
OTHER DOOR CONFIGURATIONS



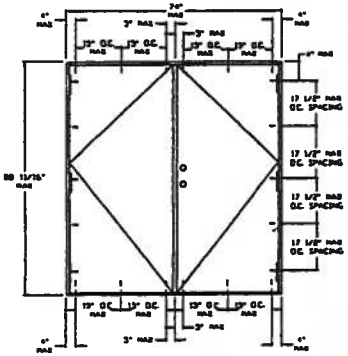
□XX□



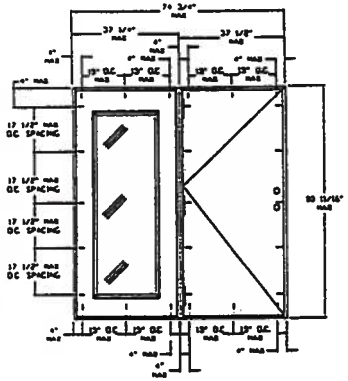
□XX



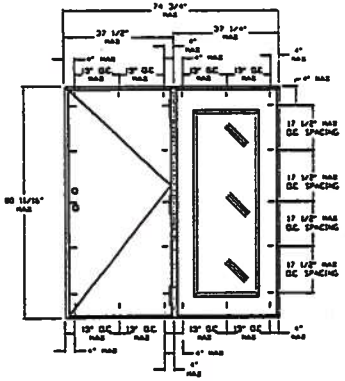
XX□



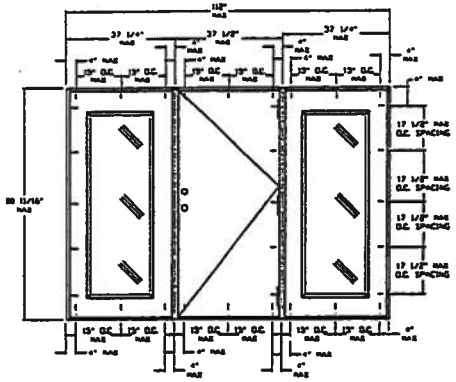
XX



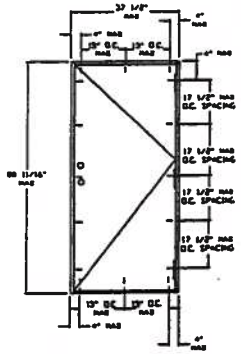
□X



X□



□X□



X

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE JUN 05 2001
BY
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-0314.23

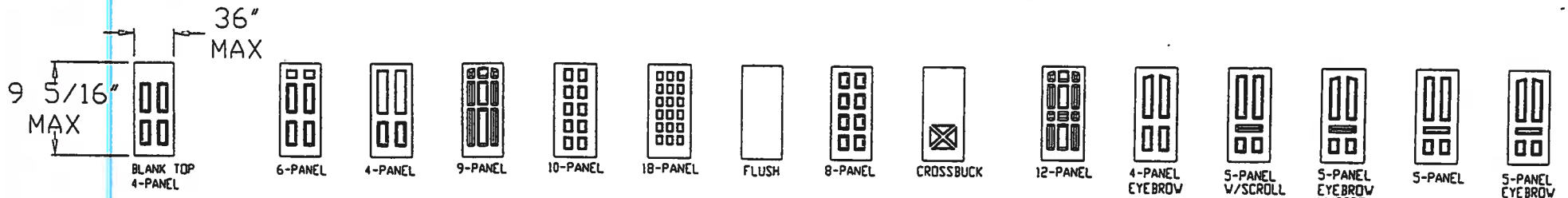
LIMITS: UNLESS NOTED, FRAC : DEC : ANG : EXTRUSIONS: UNLESS NOTED, STD. COML. TOL'S			
ENGINEER:	LTR	REVISIONS	DATE BY
	PART NAME:		
DR. BY J.D. DATE 1-11-01	MAT'L:	SCALE:	

PREMDOR ENTRY SYSTEMS
911 E. JEFFERSON
PITTSBURG, KS. 66762

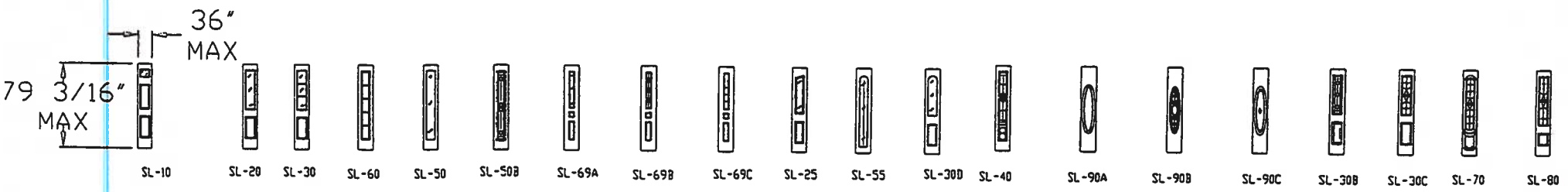
31-1029-EM-I
SHEET 5 OF 6

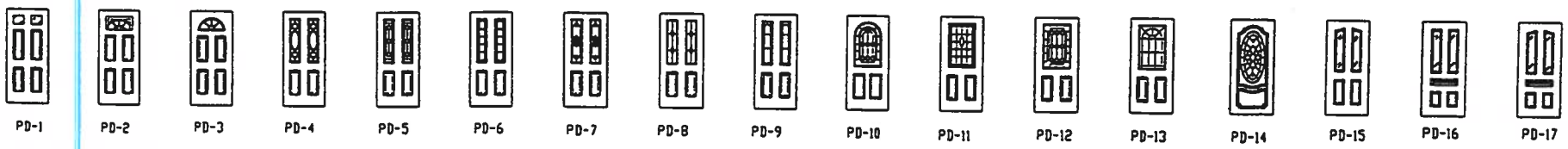
REVISION LETTER

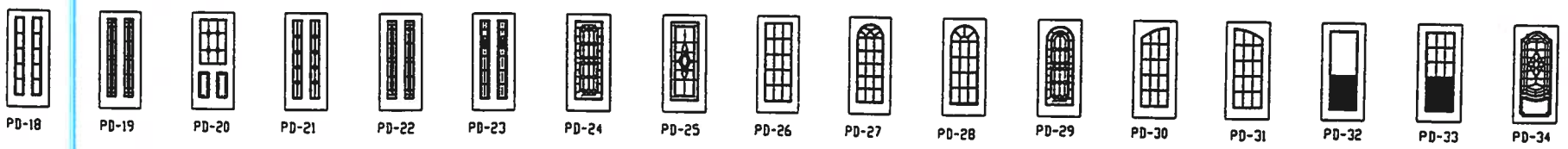
OTHER DOOR PANEL STYLES

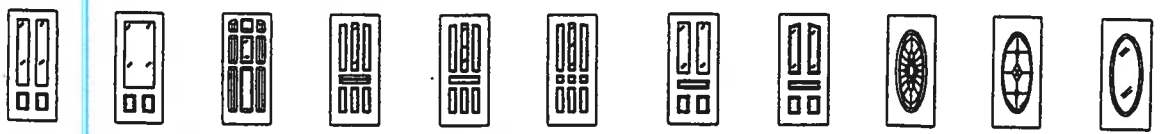


OTHER SIDELITE STYLES









APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE JUN 05 2001
BY
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO 01-0431.23

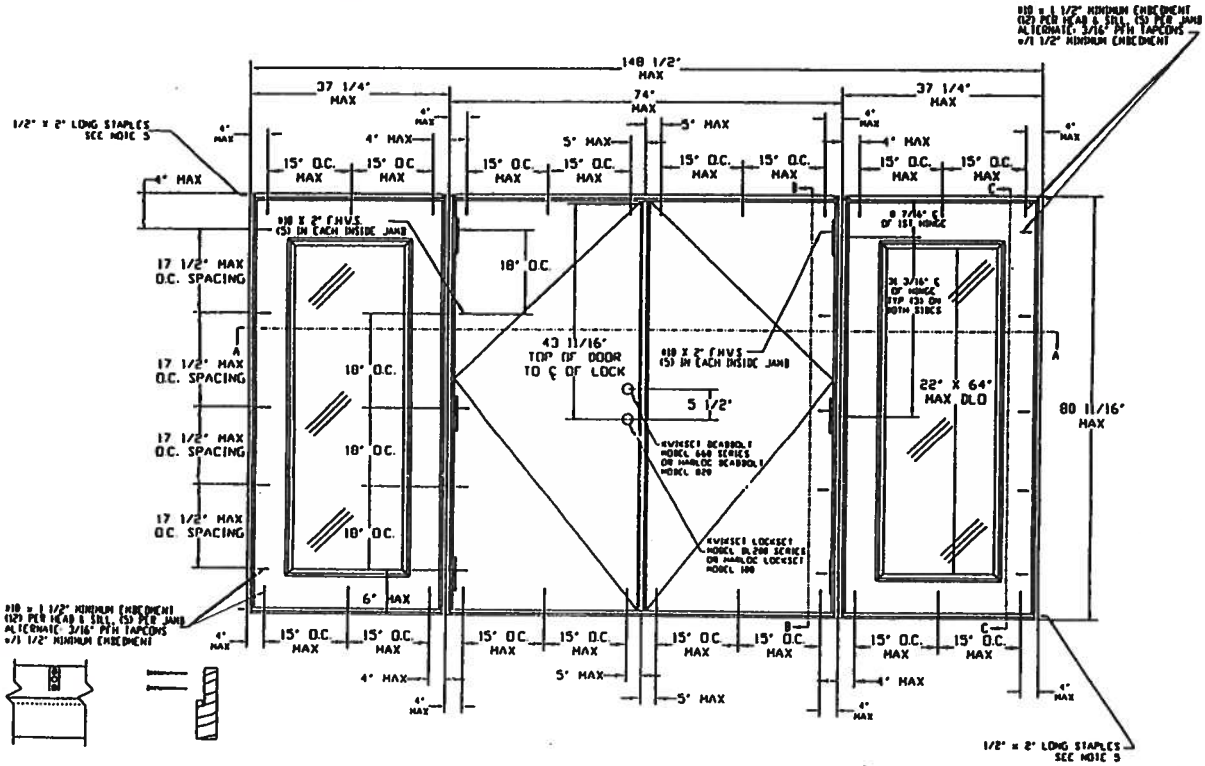
LIMITS: UNLESS NOTED, FRAC : DEC : ANG :
EXTRUSIONS: UNLESS NOTED, STD. COM. TOL'S
ENGINEER:
DR. BY J.D. DATE 7/15/01
PREMDOR ENTRY SYSTEMS
911 C. JEFFERSON
PITTSBURG, KS. 66762

LTR	REVISIONS	DATE	BY

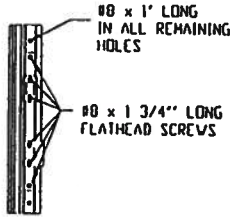
PART NAME: PREMDOR DOOR OPTIONS
MAT'L: SCALE:

31-1029-EM-1
SHEET 6 OF 6
REVISION LETTER

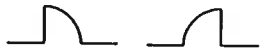
PREMDOR (ENTERGY BRAND) DOUBLE DOOR WITH SIDELITES IN WOOD FRAMES WITH BUMPER THRESHOLD (INSWING)



ATTACH ASTRAGAL THROW BOLT STRIKE PLATE TO THE HEADER AND THRESHOLD WITH #10 x 1 3/4" FLATHEAD SCREWS



ASTRAGAL



NOTES:

) WOOD BUCKS BY OTHERS. MUST BE ANCHORED RUPERLY TO TRANSFER LOADS TO THE STRUCTURE.
) THE PRECEDING DRAWINGS ARE INTENDED TO UALIFY THE FOLLOWING INSTALLATIONS.
. WOOD FRAME CONSTRUCTION WHERE DOOR YSTEM IS ANCHORED TO A MINIMUM TWO BY WOOD PENING.
. MASONRY OR CONCRETE CONSTRUCTION WHERE OOR SYSTEM IS ANCHORED TO A MINIMUM TWO BY TRUCTURAL WOOD BUCK.
. MASONRY OR CONCRETE CONSTRUCTION WHERE OOR SYSTEM IS ANCHORED DIRECTLY TO CONCRETE R MASONRY WITH OR WITHOUT A NON-STRUCTURAL NC BY WOOD BUCK.
. ALL ANCHORING SCREWS TO BE #10 WITH INIMUM 1 1/2" EMBEDMENT INTO WOOD SUBSTRATE R 3/16" PFH TAPCONS WITH 1 1/2" MINIMUM EMBEDMENT NTO MASONRY.
. UNIT MUST BE INSTALLED WITH 'MIAMI-DADE COUNTY PPROVED' SHUTTERS
. THREE STAPLES PER SIDE JAMB INTO HEADER ON SIDELITES ND DOOR, THREE STAPLES PER JAMB INTO THRESHOLD ON IDELITES AND DOOR.
. LATEX SEALANT TO BE APPLIED AT SIDE BY SIDE AMBS AND SIDELITES.
. DOOR/SIDELITE HEADER, DOOR/SIDELITE JAMBS, AND SIDELITE BASE ORNERS ARE COPED AND BUTT JOINED.
. DOORS SHALL BE PRE-PAINTED WITH A WATER-BASED EPOXY RUST NHIBITIVE PRIMER PAINT WITH A DRY FILM THICKNESS OF 0.8 TO 1.2 MIL.
. FRAMES SHALL BE PRE-PAINTED WITH AN ACRYLIC LATEX WATER-BASED/ ATER-REDUCIBLE WHITE PRIMER WITH A DRY FILM THICKNESS OF 0.8 TO 1.2 MIL.

DESIGN PRESSURE RATINGS		
	WHERE WATER INFILTRATION REQUIREMENT IS NEEDED *	WHERE WATER INFILTRATION REQUIREMENT IS NOT NEEDED
Positive	NOT APPROVED *	+55.0 psf
Negative	NOT APPROVED *	-55.0 psf

* UNITS SHALL BE INSTALLED ONLY AT LOCATIONS PROTECTED BY A CANOPY OR OVERHANG SUCH THAT THE ANGLE BETWEEN THE EDGE OF CANOPY OR OVERHANG TO SILL IS LESS THAN 45 DEGREES. UNLESS UNIT IS INSTALLED IN NON-HABITABLE AREAS WHERE THE UNIT AND THE AREA ARE DESIGNED TO ACCEPT WATER INFILTRATION.

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE JUN 05 2001
BY
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-0314.23

LTR	REVISIONS	DATE	BY
C	DADE COUNTY MODIFICATIONS	5/11/00	JO
B	ADDED PAGE 5 (DOOR OPTIONS)	10-1-98	RS
A	ADD OTHER DOOR CONFIGURATIONS	12/18/97	RS

UNITS UNLESS NOTED FRAC. : DEC. : ANG. :
EXTRUSIONS UNLESS NOTED STD. COML. TOL'S
ENGINEER:
DR. BY R.S. DATE 7-29-97
PART NAME: ENERGY METAL CLAD DOUBLE DOOR W/SIDELITES
MAT'L:
SCALE: N.T.S.

PREMDOR ENTRY SYSTEMS
911 E. JEFFERSON
PITTSBURG, KS 66762

31-1029-EM-1
SHEET 1 OF 6

MI HOME PRODUCTS

- PRIME ALUMINUM WINDOWS -

INSTALLATION INSTRUCTIONS FOR "NAIL FIN" PRODUCTS

MI Home Products appreciates your recent purchase of a maintenance free prime window, which will not rust, rot, mildew, or warp. This is a quality product that left our factory in good condition – proper handling and installation are just as important as good design and workmanship. Please follow these recommendations to allow this product to complete its function.

1. Handle units one at a time in the closed and locked position and take care not to scratch frame or glass or to bend the nailing fin.

2. Set unit plumb and square into opening and make sure that there is 3/16" ± 1/16" clearance around the frame. Fasten unit into opening in the closed and locked position, making sure that fasteners are screwed in straight in order to avoid twisting or bowing of the frame. Make sure that sill is straight and level. Check operation of unit before any and all fasteners are set.

3. Use # 8 sheet metal or wood screws with a minimum of 1" penetration into the framing (stud). Place first screws (two at each corner) 3" from end of fin. For positive and negative DPs (design pressures) up to **35**, do not exceed **24"** spacing of additional screws. For DPs from **35.1** to **50**, do not exceed **18"**. Install load bearing shim adjacent to each anchor. Use shim where space exceeds 1/16".

4. Flash over head and caulk outside perimeter in accordance with code requirements and good installation practices.

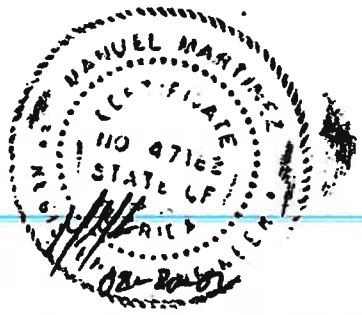
5. Fill voids between frame and construction with loose batten type insulation or non-expanding aerosol foam specifically formulated for windows and doors to eliminate drafts. The use of expanding aerosol type insulating foam, which can bow the frame, waives all stated warranties.

6. Remove plaster, mortar, paint and any other debris that may have collected on the unit and make sure that sash/vent tracks and interlocks are also clear. Do not use abrasives, solvents, ammonia, vinegar, alkaline, or acid solutions for clean-up, especially with insulated glass units as their use could cause chemical breakdown of the glass seal. Take care not to scratch glass; scratches severely weaken glass and it could eventually break from thermal expansion and contraction. Clean units with water and mild detergent as you would you automobile.

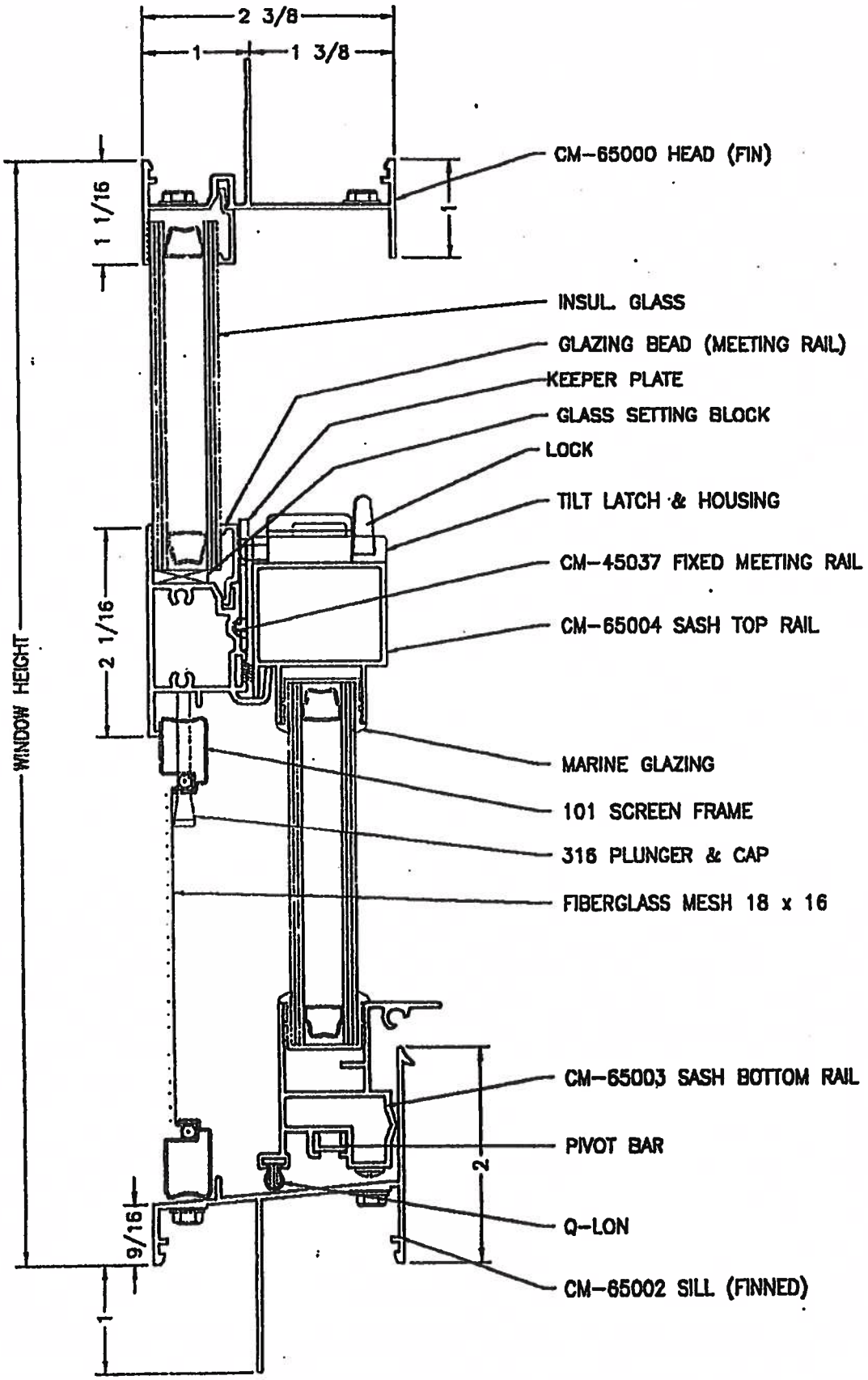
CAUTION -

MI Home Products or its representatives are unable to control and cannot assume responsibility for the selection and placement of their products in a building or structure in a manner required by laws, statutes, and/or building codes. The purchaser is solely responsible for knowledge of and adherence to the same. MI Home Products window products are not provided with safety glazing unless specifically ordered with such. Many laws and codes require safety glazing near doors, bathtubs, and shower enclosures. Also be aware of emergency egress code requirements.

Corporate Headquarters:
650 West Market St.
Gratz, PA 17030-0370
(717) 365-3300



650-AS1 A



LTR	DESCRIPTION	BY	DATE

MI HOME PRODUCTS
650 WEST MARKET STREET • GRATZ, PA • 17030-0370

TITLE	650 SH FIN MAIN FRAME VERTICAL CROSS SECTION				
DRWN V.M.R.	DATE 4-7-92	SCALE FULL	DWG. NO. 650-AS1	REV. A	

Architectural Testing

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

Rendered to:

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

Report No: 01-41641.02
Test Dates: 05/13/02
And: 05/16/02
Report Date: 11/12/02
Expiration Date: 05/16/06

Project Summary: Architectural Testing, Inc. (ATI) was contracted by MI Home Products, Inc. to witness testing on a Series/Model 650, aluminum triple single hung window at their facility located in Elizabethville, Pennsylvania. The sample tested successfully met the performance requirements for a H-R35 112 x 72 rating.

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

Test Specimen Description:

Series/Model: 650

Type: Aluminum Triple Single Hung Window

Overall Size: 9' 3-1/2" wide by 5' 11-11/16" high

Active Sash Size (3): 3' 0-1/4" wide by 2' 10-3/4" high

Fixed Daylight Opening Size (3): 2' 8-1/4" wide by 2' 9-1/8" high

Screen Size (3): 2' 9-1/8" wide by 2' 11" high

Finish: All aluminum was painted white.

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

Test Specimen Description: (Continued)

Glazing Details: The active and fixed lites utilized 5/8" thick, sealed insulating glass constructed from two sheets of 1/8" thick, clear annealed glass and a metal reinforced butyl spacer system. The active sash was channel glazed utilizing a flexible vinyl wrap-around gasket. The fixed lite was interior glazed against double-sided adhesive foam tape and secured with PVC snap-in glazing beads.

Weatherstripping:

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

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

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

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

Test Specimen Description: (Continued)

Hardware:

Description	Quantity	Location
Metal cam lock with keeper	1	Midspan of each active meeting rail with adjacent keepers
Plastic tilt latch	2	Each active sash meeting rail ends
Metal tilt pin	2	Each active sash bottom rail ends
Balance assembly	2	Each active sash contained one in each jamb
Screen plunger	2	Each screen contained two 4" from rail ends on top rail

Drainage: Sloped sill

Reinforcement: No reinforcement was utilized.

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

Test Results:

The results are tabulated as follows:

Paragraph	Title of Test - Test Method	Results	Allowed
2.2.1.6.1	Operating Force	25 lbs	30 lbs max.
2.1.2	Air Infiltration (ASTM E 283-91) @ 1.57 psf (25 mph)	0.16 cfm/ft^2	0.3 cfm/ft^2 max.

Note #1: The tested specimen meets the performance levels specified in AAMA/NWWDA 101/I.S. 2-97 for air infiltration.

2.1.3	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 2.86 psf	No leakage	No leakage

Test Results: (Continued)

Paragraph	Title of Test - Test Method	Results	Allowed
2.1.4.1	Uniform Load Deflection (ASTM E 330-97)		
	(Measurements reported were taken on the mullion)		
	(Loads were held for 52 seconds)		
	@ 15.0 psf (positive)	0.15"	0.41" max.
	@ 15.0 psf (negative)	0.29"	0.41" max.
2.1.4.2	Uniform Load Structural (ASTM E 330-97)		
	(Measurements reported were taken on the mullion)		
	(Loads were held for 10 seconds)		
	@ 22.5 psf (positive)	0.01"	0.29" max.
	@ 22.5 psf (negative)	0.01"	0.29" max.
2.2.1.6.2	Deglazing Test (ASTM E 987-88)		
	In operating direction at 70 lbs		
	Right sash, meeting rail	0.12"/25%	0.50"/100%
	Right sash, bottom rail	0.12"/25%	0.50"/100%
	Middle sash, meeting rail	0.12"/25%	0.50"/100%
	Middle sash, bottom rail	0.12"/25%	0.50"/100%
	Left sash, meeting rail	0.12"/25%	0.50"/100%
	Left sash, bottom rail	0.12"/25%	0.50"/100%
	In remaining direction at 50 lbs		
	Right sash, right stile	0.06"/12%	0.50"/100%
	Right sash, left stile	0.06"/12%	0.50"/100%
	Middle sash, right stile	0.06"/12%	0.50"/100%
	Middle sash, left stile	0.06"/12%	0.50"/100%
	Left sash, right stile	0.06"/12%	0.50"/100%
	Left sash, left stile	0.06"/12%	0.50"/100%
2.1.8	Forced Entry Resistance (ASTM F 588-97)		
	Type: A		
	Grade: 10		
	Lock Manipulation Test	No entry	No entry
	Test A1 through A5	No entry	No entry
	Test A7	No entry	No entry
	Lock Manipulation Test	No entry	No entry

Test Results: (Continued)

Paragraph	Title of Test - Test Method	Results	Allowed
Optional Performance			
4.3	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 5.25 psf	No leakage	No leakage
4.4.1	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the mullion) (Loads were held for 52 seconds) @ 35.3 psf (positive) @ 35.0 psf (negative)	 0.46" 0.41"	 See Note #2 See Note #2
4.4.2	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the mullion) (Loads were held for 10 seconds) @ 53.0 psf (positive) @ 52.5 psf (negative)	 0.03" 0.02"	 0.29" max. 0.29" max.

Note #2: The Uniform Load Deflection test is not an AAMA/NWWDA 101/I.S.2-97 requirement for this product designation. The data is recorded in this report for information only.

Detailed drawings, representative samples of the test specimen, and a copy of this report will be retained by ATI for a period of four years. The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specification. This report does not constitute certification of this product, which may only be granted by the certification program administrator. This report may not be reproduced, except in full, without written approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC:

Mark A. Hess
Technician

David A. Kranz
Director - Product/Physical Testing

MAH:sbu
01-41641.02

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

Rendered to:

MI HOME PRODUCTS, INC.

SERIES/MODEL: 650 Fin
TYPE: Aluminum Single Hung Window

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

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

For ARCHITECTURAL TESTING, INC.

Mark A. Hess, Technician

MAH:nlb

ALLEN M. REEVES
CERTIFICATE NO. 11354
STATE OF FLORIDA
PROFESSIONAL ENGINEER

1 APRIL 2002

Architectural Testing

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

Rendered to

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

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

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

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

Test Specimen Description:

Series/Model: 650 Fin

Type: Aluminum Single Hung Window

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

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

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

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

Finish: All aluminum was white.

Glazing Details: The active and fixed lites utilized 5/8" thick, sealed insulating glass constructed from two sheets of 1/8" thick, clear annealed glass and a metal reinforced butyl spacer system. The active sash was channel glazed utilizing a flexible vinyl wrap around gasket. The fixed lite was interior glazed against double-sided adhesive foam tape and secured with PVC snap-in glazing beads.

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

Allen M. Reeves
1 APRIL 2002

ALLEN M. REEVES
LICENSE NO. 12354
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Test Specimen Description: (Continued)

Weatherstripping:

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

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

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

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

Hardware:

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

ALLEN N. REEVES
CERTIFICATE NO. 1[illegible]
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Allen N. Reeves
1 APRIL 2002

Test Specimen Description: (Continued)

Drainage: Sloped sill

Reinforcement: No reinforcement was utilized.

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

Test Results:

The results are tabulated as follows:

Paragraph	Title of Test - Test Method	Results	Allowed
2.2.1.6.1	Operating Force	11 lbs	30 lbs max
	Air Infiltration (ASTM E 283-91) @ 1.57 psf (25 mph)	0.13 cfm/ft^2	0.3 cfm/ft^2 max
	Note #1: The tested specimen meets the performance levels specified in AAMA/NWWDA 101/I.S. 2-97 for air infiltration.		
	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 2.86 psf	No leakage	No leakage
2.1.4.1	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 33 seconds)		
	@ 25.9 psf (positive)	0.42"*	0.26" max.
	@ 34.7 psf (negative)	0.43"*	0.26" max.
	Exceeds L/175 for deflection, but passes all other test requirements.		
2.1.4.2	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 10 seconds)		
	@ 38.9 psf (positive)	0.02"	0.18" max.
	@ 52.1 psf (negative)	0.02"	0.18" max.

Allen N. Reeves
1 APRIL 2002

ALLEN N. REEVES ★ CERTIFICATE NO. [illegible] ★ STATE OF FLORIDA ★ PROFESSIONAL ENGINEER

Test Specimen Description: (Continued)

Paragraph	Title of Test - Test Method	Results	Allowed
2.2.1.6.2	Deglazing Test (ASTM E 987)		
	In operating direction at 70 lbs		
	Meeting rail	0.12"/25%	0.50"/100%
	Bottom rail	0.12"/25%	0.50"/100%
	In remaining direction at 50 lbs		
	Left stile	0.06"/12%	0.50"/100%
	Right stile	0.06"/12%	0.50"/100%
	Forced Entry Resistance (ASTM F 588-97)		
	Type: A Grade: 10		
	Lock Manipulation Test	No entry	No entry
	Tests A1 through A5	No entry	No entry
	Test A7	No entry	No entry
	Lock Manipulation Test	No entry	No entry
Optional Performance			
4.3	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 6.00 psf	No leakage	No leakage
	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 33 seconds)		
	@ 45.0 psf (positive)	0.47"*	0.26" max.
	@ 47.2 psf (negative)	0.46"*	0.26" max.
	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 10 seconds)		
	@ 67.5 psf (positive)	0.05"	0.18" max.
	@ 70.8 psf (negative)	0.05"	0.18" max.

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

Allen N. Reeves
1 APRIL 2002

ALLEN N. REEVES
CERTIFICATE NO. 19356
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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

For ARCHITECTURAL TESTING, INC:

Mark A. Hess
Technician

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

MAH:nlb
01-41134.01

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

Rendered to:

MI HOME PRODUCTS, INC.

SERIES/MODEL: 650
TYPE: Aluminum Picture Window

Title of Test	Results
Rating	F-R45 60 x 80
Overall Design Pressure	+45.0 psf -47.2 psf
Air Infiltration	0.04 cfm/ft^2
Water Resistance	8.25 psf
Structural Test Pressure	+67.5 psf -70.8 psf
Forced Entry Resistance	Grade 10

Reference should be made to Report No. 01-41135.01 dated 03/26/02 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.

Mark A. Hess, Technician

MAH:mlb

Allen M. Reeves
1 APRIL 2002

ALLEN M. REEVES JR. CERTIFICATE NO. [illegible] STATE OF FLORIDA PROFESSIONAL ENGINEER

Architectural Testing

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

Rendered to

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

Report No: 01-41135.01
Test Date: 03/07/02
Report Date: 03/26/02
Expiration Date: 03/07/06

Project Summary: Architectural Testing, Inc. (ATI) was contracted by MI Home Products, Inc. to perform tests on Series/Model 650, aluminum picture window at their facility located in Elizabethville, Pennsylvania. The samples tested successfully met the performance requirements for a F-R45 60 x 80 rating.

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

Test Specimen Description

Series/Model: 650

Type: Aluminum Picture Window

Overall Size: 5' 0" wide by 6' 8" high

Daylight Opening Size: 4' 9-1/4" wide by 6' 5-1/4" high

Finish All aluminum was white.

Glazing Details: The test specimen utilized 7/8" thick, sealed insulating glass constructed from two sheets of 3/16" thick, clear annealed glass and a metal reinforced butyl spacer system. The glass was interior glazed against double-sided adhesive foam tape and secured with aluminum snap-in glazing beads.

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

Allen N. Reeves
1 APRIL 2002

ALLEN N. REEVES CERTIFICATE NO. 11354 STATE OF FLORIDA PROFESSIONAL ENGINEER

Test Specimen Description: (Continued)

Frame Construction: The frame was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1" screws through the head and sill into each jamb screw boss.

Reinforcement: No reinforcement was utilized.

Installation: The test specimen was installed into a 2 x 8 #2 Spruce-Pine-Fir wood test buck. #8 x 2-1/2" installation screws were utilized 18" on center around the interior perimeter. Polyurethane was utilized to seal the exterior.

Test Results:

The results are tabulated as follows:

Paragraph	Title of Test - Test Method	Results	Allowed
	Air Infiltration (ASTM E 283-91) @ 1.57 psf (25 mph)	0.04 cfm/ft²	0.3 cfm/ft² max.

Note #1: The tested specimen meets the performance levels specified in AAMA/NWWDA 101/I.S. 2-97 for air infiltration.

Paragraph	Title of Test - Test Method	Results	Allowed
	Water Resistance (ASTM E 547-00) WTP = 2.86 psf	No leakage	No leakage
2.1.4.1	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the jamb) (Loads were held for 33 seconds)		
	@ 25.9 psf (positive)	0.01"	0.41" max.
	@ 34.7 psf (negative)	0.01"	0.41" max.
2.1.4.2	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the jamb) (Loads were held for 10 seconds)		
	@ 38.9 psf (positive)	0.0"	0.29" max.
	@ 52.1 psf (negative)	0.01"	0.29" max.

Allen N. Reeves
1 April 2002

ALLEN N. REEVES
CERTIFICATE NO. 13284
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Test Results: (Continued)

Paragraph	Title of Test - Test Method	Results	Allowed
	Forced Entry Resistance (ASTM F 588-97)		
	Type: D Grade: 10		
	Hand and Tool Manipulation Test	No entry	No entry
Optional Performance			
4.3	Water Resistance (ASTM E 547-00) WTP = 8.25 psf	No leakage	No leakage
	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the jamb) (Loads were held for 33 seconds)		
	@ 45.0 psf (positive)	0.02"	0.41" max.
	@ 47.2 psf (negative)	0.02"	0.41" max.
	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the jamb) (Loads were held for 10 seconds)		
	@ 67.5 psf (positive)	0.01"	0.29" max.
	@ 70.8 psf (negative)	0.02"	0.29" max.

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

For ARCHITECTURAL TESTING, INC.

Mark A. Hess
Technician

MAH:nlb
01-41135.01

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

ALLEN N. REEVES P.E. CERTIFICATE NO. 19284 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

Rendered to:

MI HOME PRODUCTS, INC.

SERIES/MODEL: 450/480/650/680
TYPE: Aluminum Fixed Window
RATING: F-C80 72 x 96

Title of Test	Results
Overall Design Pressure	80 psf
Air Infiltration	<0.01 cfm/ft²
Water Resistance	12.0 psf
Structural Test Pressure	±120.0 psf
Forced Entry Resistance	Grade 10

Reference should be made to Report No. 01-38781.01 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.

Adam Fodor, Technician

AF:ajp

Architectural Testing

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

Rendered to:

MI HOME PRODUCTS, INC.
650 West Market Street
Gratz, Pennsylvania 17030-0370

Report No: 01-38781.01
Test Date: 01/23/01
Report Date: 02/22/01
Expiration Date: 01/23/05

Project Summary: Architectural Testing, Inc. (ATI) was contracted to witness tests on a Series/Model 450/480/650/680, aluminum fixed window at the MI Home Products, Inc. in-plant test facility in Elizabethville, Pennsylvania. The sample tested successfully met the performance requirements for an F-C80 72 x96 rating. Test specimen description and results are reported herein.

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

Test Specimen Description:

Series/Model: 450/480/650/680

Type: Aluminum Fixed Window

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

Fixed Daylight Opening Size: 5' 9-1/2" wide by 7' 9-1/2" high

Finish: All aluminum was painted.

Glazing Details: The window utilized a 7/8" thick sealed insulating glass unit fabricated from two sheets of 3/16" thick, clear, tempered glass and a spacer system. The lite was interior glazed onto silicone bedding and dual-sided adhesive foam tape, while secured with aluminum snap-fit glazing beads and polypile weatherstrip.

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

Test Specimen Description (Continued)

Frame Construction: The frame was constructed of thermally broken extruded aluminum members with coped, butted and sealed corners fastened with two screws each.

Drainage: No fabricated drainage was utilized.

Reinforcement: No reinforcement was utilized.

Installation: The test unit was installed into the 2" x 8" Spruce-Pine-Fir #2 wood test buck utilizing the integral nailing fin bedded in polyurethane sealant. The nailing fin was secured to the buck with a 1" roofing nail at each corner, midspan of the head and sill, and two spaced evenly at the jambs.

Test Results:

Results are as follows:

Paragraph	Title	Test - Test Method	Results	Allowed
2.1.2	Air Infiltration per ASTM E 283 (See Note #1)			
	@ 1.57 psf (25 mph)		0.01 cfm/ft²	0.3 cfm/ft² max.
Note #1: The tested specimen meets (or exceeds) the performance level specified in AAMA/NWWDA 101/I.S.2-97 for air infiltration.				
2.1.3	Water Resistance per ASTM E 547			
	WTP = 4.5 psf		No leakage	No leakage
2.1.4.2	Uniform Load Structural per ASTM E 330 (Measurements reported were taken on the jamb)			
	@ 45.0 psf (exterior)		0.02"	0.38" max.
	@ 45.0 psf (interior)		0.02"	0.38" max.
2.1.8	Forced Entry Resistance per ASTM F 588			
	Type D			
	Level 10			
	Hand Manipulation Test		No entry	No entry
Optional Performance				
4.3	Water Resistance per ASTM E 547 and 331			
	WTP = 12.0 psf		No leakage	No leakage
4.4.2	Uniform Load Structural per ASTM E 330 (Measurements reported were taken on the jamb)			
	@ 120.0 psf (exterior)		0.03"	0.38" max.
	@ 120.0 psf (interior)		0.04"	0.38" max.

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

For ARCHITECTURAL TESTING, INC:

Adam Fodor
Technician

Bruce W Croak
Director – Product/Physical Testing

AF:tjp
01-38781.01

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

Rendered to:

MI HOME PRODUCTS, INC.

SERIES/MODEL: 650
TYPE: Aluminum Picture Window

Title of Test	Results
Rating	F-R45 60 x 80
Overall Design Pressure	+45.0 psf -47.2 psf
Air Infiltration	0.04 cfm/ft^2
Water Resistance	8.25 psf
Structural Test Pressure	+67.5 psf -70.8 psf
Forced Entry Resistance	Grade 10

Reference should be made to Report No. 01-41135.01 dated 03/26/02 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.

Mark A. Hess, Technician

MAH:nlb

ALLEN N. REEVES
CERTIFICATE
No. [illegible]
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

Allen N. Reeves
1 APRIL 2002

Architectural Testing

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

Rendered to

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

Report No: 01-41135.01
Test Date: 03/07/02
Report Date: 03/26/02
Expiration Date: 03/07/06

Project Summary: Architectural Testing, Inc. (ATI) was contracted by MI Home Products, Inc. to perform tests on Series/Model 650, aluminum picture window at their facility located in Elizabethville, Pennsylvania. The samples tested successfully met the performance requirements for a F-R45 60 x 80 rating.

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

Test Specimen Description:

Series/Model: 650

Type: Aluminum Picture Window

Overall Size: 5' 0" wide by 6' 8" high

Daylight Opening Size: 4' 9-1/4" wide by 6' 5-1/4" high

Finish All aluminum was white.

Glazing Details: The test specimen utilized 7/8" thick, sealed insulating glass constructed from two sheets of 3/16" thick, clear annealed glass and a metal reinforced butyl spacer system. The glass was interior glazed against double-sided adhesive foam tape and secured with aluminum snap-in glazing beads.

ALLEN N. REEVES
CERTIFICATE NO. 15556
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Allen N. Reeves
1 APR 12 2002

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

Test Specimen Description: (Continued)

Frame Construction: The frame was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1" screws through the head and sill into each jamb screw boss.

Reinforcement: No reinforcement was utilized.

Installation: The test specimen was installed into a 2 x 8 #2 Spruce-Pine-Fir wood test buck. #8 x 2-1/2" installation screws were utilized 18" on center around the interior perimeter. Polyurethane was utilized to seal the exterior.

Test Results:

The results are tabulated as follows:

Paragraph	Title of Test - Test Method	Results	Allowed
	Air Infiltration (ASTM E 283-91)		
	@ 1.57 psf (25 mph)	0.04 cfm/ft^2	0.3 cfm/ft^2 max.

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

	Water Resistance (ASTM E 547-00)		
	WTP = 2.86 psf	No leakage	No leakage
2.1.4.1	Uniform Load Deflection (ASTM E 330-97)		
	(Measurements reported were taken on the jamb)		
	(Loads were held for 33 seconds)		
	@ 25.9 psf (positive)	0.01"	0.41" max.
	@ 34.7 psf (negative)	0.01"	0.41" max.
2.1.4.2	Uniform Load Structural (ASTM E 330-97)		
	(Measurements reported were taken on the jamb)		
	(Loads were held for 10 seconds)		
	@ 38.9 psf (positive)	0.0"	0.29" max.
	@ 52.1 psf (negative)	0.01"	0.29" max.

ALLEN N. REEVES
No. 12884
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Allen N. Reeves
1 APRIL 2002

Test Results: (Continued)

Paragraph	Title of Test - Test Method	Results	Allowed
	Forced Entry Resistance (ASTM F 588-97)		
	Type: D Grade: 10		
	Hand and Tool Manipulation Test	No entry	No entry
Optional Performance			
4.3	Water Resistance (ASTM E 547-00) WTP = 8.25 psf	No leakage	No leakage
	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the jamb) (Loads were held for 33 seconds)		
	@ 45.0 psf (positive)	0.02"	0.41" max.
	@ 47.2 psf (negative)	0.02"	0.41" max.
	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the jamb) (Loads were held for 10 seconds)		
	@ 67.5 psf (positive)	0.01"	0.29" max.
	@ 70.8 psf (negative)	0.02"	0.29" max.

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

For ARCHITECTURAL TESTING, INC:

Mark A. Hess
Technician

MAH:nlb
01-41135.01

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

ALLEN N. REEVES
CERTIFICATE NO. 19284
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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

Rendered to:

MI HOME PRODUCTS, INC.

SERIES/MODEL: 650
TYPE: Aluminum Triple Single Hung Window

Title of Test	Summary of Results
AAMA Rating	H-R35 112 x 72
Uniform Load Deflection Test Pressure	+35.3 psf -47.2 psf
Operating Force	25 lb max.
Air Infiltration	0.16 cfm/ft^2
Water Resistance Test Pressure	5.25 psf
Uniform Load Structural Test Pressure	+53.0 psf -52.5 psf
Deglazing	Passed
Forced Entry Resistance	Grade 10

Reference should be made to ATI Report No. 01-41641.01 for complete test specimen description and data.

Allen N. Reeves
7 JUNE 2002

ALLEN N. REEVES
NO. 18354
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Architectural Testing

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

Rendered to

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

Report No: 01-41641.01
Test Date: 05/13/02
And: 05/16/02
Report Date: 06/05/02
Expiration Date: 05/16/06

Project Summary: Architectural Testing, Inc. (ATI) was contracted by MI Home Products, Inc. to witness testing on a Series/Model 650, aluminum triple single hung window at their facility located in Elizabethville, Pennsylvania. The sample tested successfully met the performance requirements for a H-R35 112 x 72 rating.

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

Test Specimen Description:

Series/Model: 650

Type: Aluminum Triple Single Hung Window

Overall Size: 9' 3-1/2" wide by 5' 11-11/16" high

Active Sash Size (3): 3' 0-1/4" wide by 2' 10-3/4" high

Fixed Daylight Opening Size (3): 2' 8-1/4" wide by 2' 9-1/8" high

Screen Size (3): 2' 9-1/8" wide by 2' 11" high

Finish: All aluminum was painted white.

ALLEN N. REEVES
CERTIFICATE
NO. 19254
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

Allen N. Reeves
7 JUNE 2002

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

Test Specimen Description: (Continued)

Glazing Details: The active and fixed lites utilized 5/8" thick, sealed insulating glass constructed from two sheets of 1/8" thick, clear annealed glass and a metal reinforced butyl spacer system. The active sash was channel glazed utilizing a flexible vinyl wrap-around gasket. The fixed lite was interior glazed against double-sided adhesive foam tape and secured with PVC snap-in glazing beads.

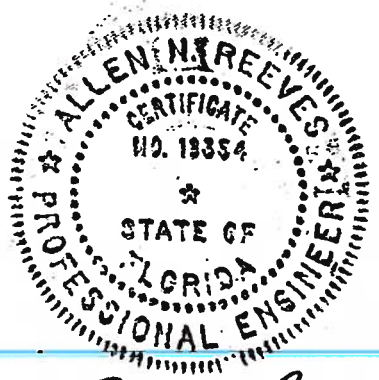
Weatherstripping:

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

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

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

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



Allen N. Reeves
7 JUNE 2002

Test Specimen Description: (Continued)

Hardware:

Description	Quantity	Location
Metal cam lock with keeper	1	Midspan of each active meeting rail with adjacent keepers
Plastic tilt latch	2	Each active sash meeting rail ends
Metal tilt pin	2	Each active sash bottom rail ends
Balance assembly	2	Each active sash contained one in each jamb
Screen plunger	2	Each screen contained two 4" from rail ends on top rail

Drainage: Sloped sill

Reinforcement: No reinforcement was utilized.

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

Test Results:

The results are tabulated as follows:

Paragraph	Title of Test - Test Method	Results	Allowed
2.2.1.6.1	Operating Force	25 lbs	30 lbs max.
	Air Infiltration (ASTM E 283-91) @ 1.57 psf (25 mph)	0.16 cfm/ft^2	0.3 cfm/ft^2 max.

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

Water Resistance (ASTM E 547-00) (with and without screen) WTP = 2.86 psf	No leakage	No leakage

Allen N. Reeves
7 JUNE 2002

ALLEN N. REEVES
CERTIFICATE NO. 18354
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Test Results: (Continued)

Paragraph	Title of Test - Test Method	Results	Allowed
2.1.4.1	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the mullion) (Loads were held for 52 seconds)		
	@ 15.0 psf (positive)	0.15"	0.41" max.
	@ 15.0 psf (negative)	0.29"	0.41" max.
2.1.4.2	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the mullion) (Loads were held for 10 seconds)		
	@ 22.5 psf (positive)	0.01"	0.29" max.
	@ 22.5 psf (negative)	0.01"	0.29" max.
2.2. .6.2	Deglazing Test (ASTM E 987-88) In operating direction at 70 lbs		
	Right sash, meeting rail	0.12"/25%	0.50"/100%
	Right sash, bottom rail	0.12"/25%	0.50"/100%
	Middle sash, meeting rail	0.12"/25%	0.50"/100%
	Middle sash, bottom rail	0.12"/25%	0.50"/100%
	Left sash, meeting rail	0.12"/25%	0.50"/100%
	Left sash, bottom rail	0.12"/25%	0.50"/100%
	In remaining direction at 50 lbs		
	Right sash, right stile	0.06"/12%	0.50"/100%
	Right sash, left stile	0.06"/12%	0.50"/100%
	Middle sash, right stile	0.06"/12%	0.50"/100%
	Middle sash, left stile	0.06"/12%	0.50"/100%
	Left sash, right stile	0.06"/12%	0.50"/100%
	Left sash, left stile	0.06"/12%	0.50"/100%
2 .8	Forced Entry Resistance (ASTM F 588-97)		
	Type: A Grade: 10		
	Lock Manipulation Test	No entry	No entry
	Test A1 through A5	No entry	No entry
	Test A7	No entry	No entry
	Lock Manipulation Test	No entry	No entry

Allen N. Reeves
7 JUNE 2002

ALLEN N. REEVES CERTIFICATE NO. 19354 STATE OF FLORIDA PROFESSIONAL ENGINEER

Test Results: (Continued)

Paragraph	Title of Test - Test Method	Results	Allowed
Optional Performance			
4.3	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 5.25 psf	No leakage	No leakage
	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the mullion) (Loads were held for 52 seconds)		
	@ 35.3 psf (positive)	0.46"*	0.41" max
	@ 47.2 psf (negative)	0.67"*	0.41" max
	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the mullion) (Loads were held for 10 seconds)		
	@ 53.0 psf (positive)	0.03"	0.29" max
	@ 52.5 psf (negative)	0.02"	0.29" max

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

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

For ARCHITECTURAL TESTING, INC

Mark A. Hess
Technician

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

ALLEN N. REEVES
CERTIFICATE
NO. 19354
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

MAH:nlb
01-41641.01

MI HOME PRODUCTS

- PRIME ALUMINUM WINDOWS -

INSTALLATION INSTRUCTIONS FOR "NAIL FIN" PRODUCTS

MI Home Products appreciates your recent purchase of a maintenance free prime window, which will not rust, rot, mildew, or warp. This is a quality product that left our factory in good condition – proper handling and installation are just as important as good design and workmanship. Please follow these recommendations to allow this product to complete its function.

1. Handle units one at a time in the closed and locked position and take care not to scratch frame or glass or to bend the nailing fin.

2. Set unit plumb and square into opening and make sure that there is 3/16" ± 1/16" clearance around the frame. Fasten unit into opening in the closed and locked position, making sure that fasteners are screwed in straight in order to avoid twisting or bowing of the frame. Make sure that sill is straight and level. Check operation of unit before any and all fasteners are set.

3. Use # 8 sheet metal or wood screws with a minimum of 1" penetration into the framing (stud). Place first screws (two at each corner) 3" from end of fin. For positive and negative DPs (design pressures) up to 35, do not exceed 24" spacing of additional screws. For DPs from 35.1 to 50, do not exceed 18". Install load bearing shim adjacent to each anchor. Use shim where space exceeds 1/16".

4. Flash over head and caulk outside perimeter in accordance with code requirements and good installation practices.

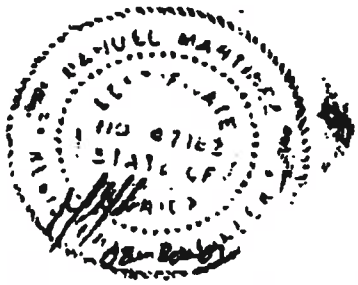
5. Fill voids between frame and construction with loose batten type insulation or non-expanding aerosol foam specifically formulated for windows and doors to eliminate drafts. The use of expanding aerosol type insulating foam, which can bow the frame, waives all stated warranties.

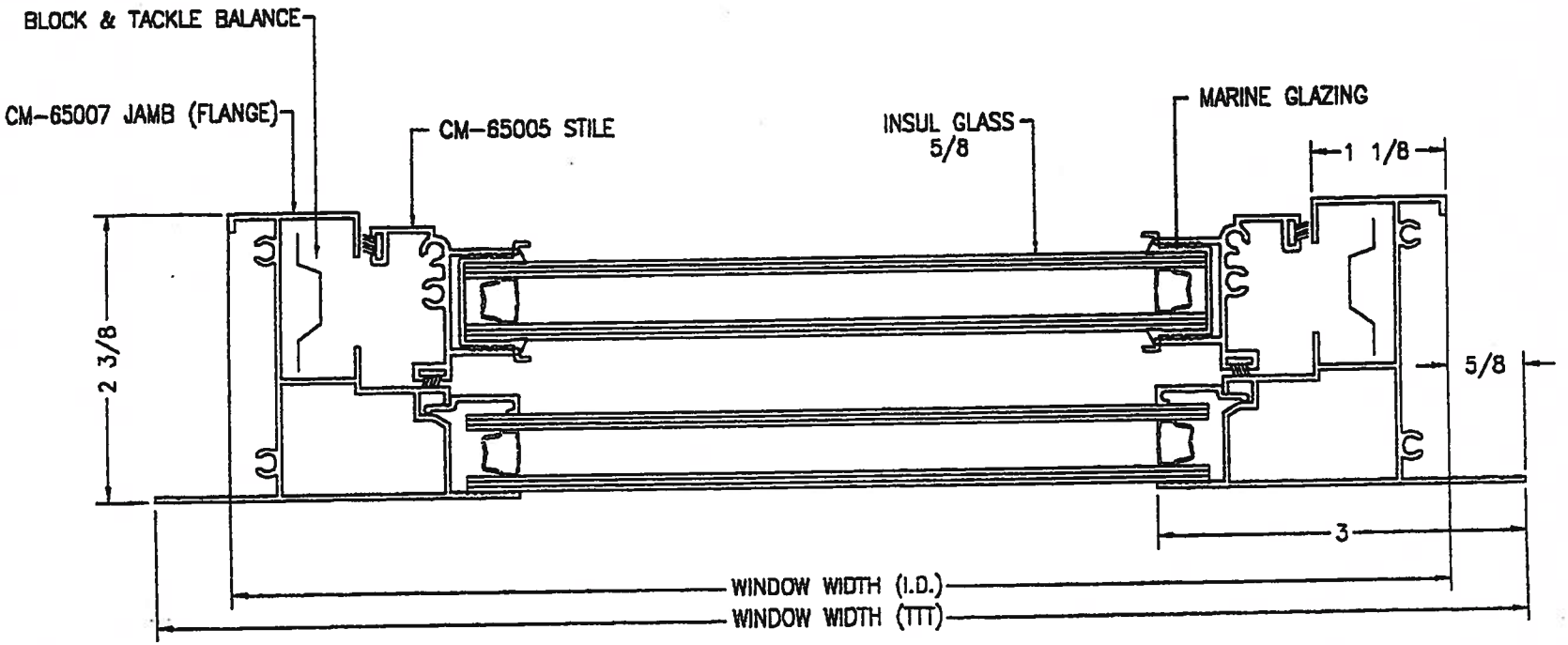
6. Remove plaster, mortar, paint and any other debris that may have collected on the unit and make sure that sash/vent tracks and interlocks are also clear. Do not use abrasives, solvents, ammonia, vinegar, alkaline, or acid solutions for clean-up, especially with insulated glass units as their use could cause chemical breakdown of the glass seal. Take care not to scratch glass; scratches severely weaken glass and it could eventually break from thermal expansion and contraction. Clean units with water and mild detergent as you would you automobile.

CAUTION -

MI Home Products or its representatives are unable to control and cannot assume responsibility for the selection and placement of their products in a building or structure in a manner required by laws, statutes, and/or building codes. The purchaser is solely responsible for knowledge of and adherence to the same. MI Home Products window products are not provided with safety glazing unless specifically ordered with such. Many laws and codes require safety glazing near doors, bathtubs, and shower enclosures. Also be aware of emergency egress code requirements.

Corporate Headquarters:
650 West Market St.
Gratz, PA 17030-0370
(717) 365-3300



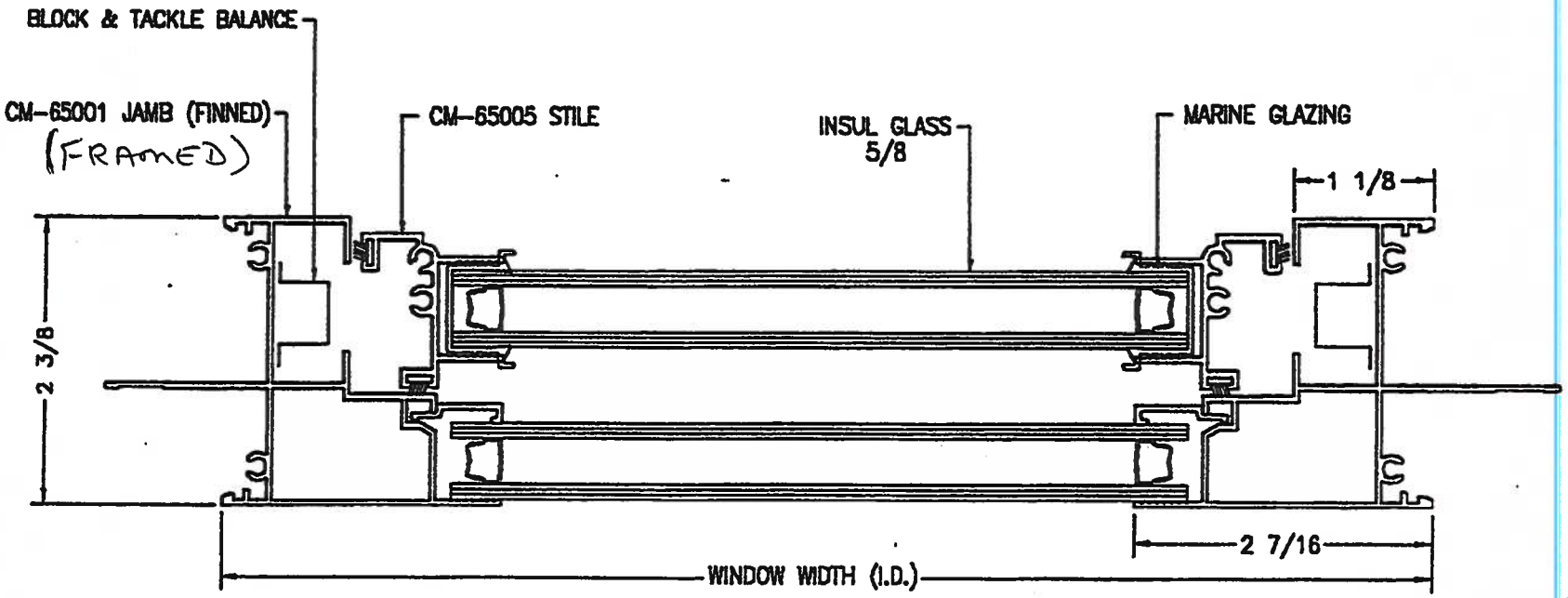


LTR.	DESCRIPTION / REMARKS	BY	DATE

MI HOME PRODUCTS
650 WEST MARKET STREET • GRATZ, PA • 17030-0370

TITLE: 650 SINGLE HUNG FLANGE FRAME HORIZONTAL ASSEMBLY

APPD.	DATE	SCALE	DRAWING NO.	REV.
V.M.R.	7-27-93	FULL	650-AS4	



MI HOME PRODUCTS
650 WEST MARKET STREET • GRATZ, PA • 17030-0370

TITLE: 650 SH FIN MAIN FRAME INSULATED GLASS HORIZONTAL CROSS SECTION

DRN.	DATE	SCALE	DRAWING NO.
V.M.R.	4-7-92	FULL	650-AS2

The Florida Department of Community Affairs
Building Code Information System

PRODUCT APPROVAL

Overview | Product Search | Organization Search | Product Application | View Attachments

User: Andrew Davis - Not Associated with Organization -

Need Help ?

Product Manufacturer: Capitol

Category: Windows

Subcategory:

Application/Seq #:

(### or ###.#)

Application Status: (ALL)

Evaluation Method: (ALL)

New Product | Search

Page:

Go

Page 1 / 1

App/Seq #	Manufacturer	Category	Subcategory	Validation Entity	Status
FL681	Capitol	Windows	Fixed		Approved
FL685	Capitol	Windows	Horizontal Slider		Approved
FL880	Capitol	Windows	Mullions	Architectural Testing, Inc (717) 764-7700	Applied For
FL675	Capitol	Windows	Single Hung		Approved

Page:

Go

Page 1 / 1

New Product | Search

UNIVERSAL
ENGINEERING SCIENCES

REPORT OF GEOTECHNICAL CONSULTING SERVICES

Proposed Slay All-State Building
Vicinity of Highway 247
and Bascom Norris Road
Lake City, Columbia County, Florida

UES Project No. 28416-007-02
UES Report No. 532483

Prepared for:

Concept Construction of North Florida
2109 West U.S. Highway 90
Suite 170-144
Lake City, FL 32055
(386) 755-8887

Prepared by:

Universal Engineering Sciences, Inc.
4475 SW 35th Terrace
Gainesville, Florida 32608
(352) 372-3392

December 22, 2006

UNIVERSAL
ENGINEERING SCIENCES
Consultants in: Geotechnical Engineering • Environmental Engineering
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

OFFICES IN
• Clermont, FL
• Daytona Beach, FL
• DeBary, FL
• Fort Myers, FL
• Gainesville, FL
• Hollywood, FL
• Jacksonville, FL
• Norcross, GA
• Ocala, FL
• Orlando, FL
• Palm Coast, FL
• Pensacola, FL
• Rockledge, FL
• Sarasota, FL
• St. Augustine, FL
• Tampa, FL
• West Palm Beach, FL

December 22, 2006

Concept Construction of North Florida
2109 West U.S. Highway 90, Suite 170-144
Lake City, FL 32055

Attention: Mr. Brian Crawford

Reference: **Report of Geotechnical Consulting Services**
Proposed Slay All-State Building
Vicinity of Highway 247 and Bascom Norris Road
Lake City, Columbia County, Florida
Section 1, Township 4 South, Range 16 East
UES Project No: 28416-007-02 UES Report No: 532483

Dear Mr. Crawford:

Universal Engineering Sciences, Inc. has completed a subsurface exploration at the site of the proposed Slay All-State Insurance building located in the vicinity of State Road 247 and Bascom Norris Road in Lake City, Columbia County, Florida. These services were provided in general accordance with our Proposal No. G3210 dated October 23, 2006. Authorization for our services was provided by Mr. Brian Crawford dated December 12, 2006. This report contains the results of our exploration, an engineering evaluation with respect to the project characteristics described to us, and recommendations for groundwater control, foundation design and site preparation. A summary of our findings is as follows:

- The upper 1 to 2 feet of the subsurface was observed as fill material, followed by very loose to medium dense brown, black and tan sand with silt (SP-SM) to depths of 7 to 8 feet. Underneath the sand with silt medium dense to dense gray silty clayey sand (SC-SM) was encountered to soil test boring termination depth of 15 feet below grade. Soil test boring B-2 encountered a layer of organic sand at a depth ranging from 2 to 4 feet below ground surface. Soil test boring B-3 encountered black sand with organic staining at depth of 1 foot.

- The stabilized groundwater level was encountered in all of the soil test borings at depths ranging from 2 to 5 feet below ground surface. We estimate the normal seasonal high groundwater level will occur at a depth of about 1 to 3 feet below the existing ground surface.

- Assuming the building area will be constructed in accordance with our Site Preparation Recommendations, we have recommended the proposed structure be supported on conventional, shallow spread foundations with an allowable soil bearing pressure of 2,500 pounds per square foot. Due to the very loose surficial sands, we recommend improving the upper 3 to 4 feet using a self propelled vibratory roller. Verification of the improvement should be performed utilizing a dynamic cone penetrometer.

- Soil test boring B-2 encountered a layer of organics sand at a depth ranging from 2 to 4 feet below ground surface. These organic soils should be removed and granular well-compacted soils should be use as a replacement. We recommend test pits be performed near the vicinity of test borings B-2 and B-3 prior to construction in order to help determine the extent of material that will need removal.

- We recommend only normal, good practice site preparation techniques to prepare the existing subgrade to support the proposed structure area. These techniques include compacting the subgrade and placing engineered fill to the desired grades.

We trust this report meets yours needs and addresses the geotechnical issues associated with the proposed construction. We appreciate the opportunity to have worked with you on this project and look forward to a continued association. Please do not hesitate to contact us if you should have any questions, or if we may further assist you as your plans proceed.

Respectfully submitted,

UNIVERSAL ENGINEERING SCIENCES, INC.
Certificate of Authorization 549

Francisco Alfaro, E.I.
Project Engineer

Keith L. Butts, P.E.
Branch Manager
Florida P.E. No. 53986
Date: 12/22/05

TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 GENERAL

In this report, we present the results of the subsurface exploration of the site for the proposed Slay All-State Insurance building located in the vicinity of State Road 247 and Bascom Norris Road in Lake City, Columbia County, Florida. We have divided this report into the following sections:

- SCOPE OF SERVICES - Defines what we did
- FINDINGS - Describes what we encountered
- RECOMMENDATIONS - Describes what we encourage you to do
- LIMITATIONS - Describes the restrictions inherent in this report
- APPENDICES - Presents support materials referenced in this report

2.0 SCOPE OF SERVICES

2.1 PROJECT DESCRIPTION

At the time of our field exploration, the parcel was observed to be vacant and undeveloped. Our office was provided with a copy of Preliminary Conceptual Plans drawn by Structural/Civil Engineers.

Current Site development plans included the construction of a one story building consisting of approximately 2,500 square feet. Also included in the project will be paved areas and parking areas adjacent to the structure. The numbers of borings for the building were selected by Concept Construction of North Florida. The depth of borings for the building area was selected by Universal Engineering Sciences.

Detailed structural loads have not been provided, therefore we have assumed maximum column and wall loads will not exceed 50 kips and 4 klf, respectively. It is assumed elevating fill heights will not exceed 2 feet.

Our recommendations are based upon the above considerations. If any of this information is incorrect, or if you anticipate any changes, please inform Universal Engineering Sciences so that we may review our recommendations.

2.2 PURPOSE

The purposes of this exploration were:

- to explore the general subsurface conditions at the site;
- to interpret and evaluate the subsurface conditions with respect to the proposed construction; and
- to provide geotechnical engineering recommendations for groundwater control, foundation design, and site preparation.

This report presents an evaluation of site conditions on the basis of traditional geotechnical procedures for site characterization. The recovered samples were not examined, either visually or analytically, for chemical composition or environmental hazards. Universal Engineering Sciences would be pleased to perform these services, if you desire.

2.3 FIELD EXPLORATION

The field exploration was started and completed on December 13, 2006. The approximate boring locations are shown on the attached Boring Location Map in Appendix A. The approximate boring locations were determined in the field by our personnel using taped measurements from existing features at the site, and should be considered accurate only to the degree implied by the method of measurement used. Samples of the soils encountered will be held in our laboratory for your inspection for 60 days unless we are notified otherwise.

2.3.1 SPT Borings

To explore the subsurface conditions within the proposed structure area we located and drilled five (5) Standard Penetration Test (SPT) borings to a depth of approximately 15 feet below the existing ground surface in general accordance with the methodology outlined in ASTM D 1586. A summary of this field procedure is included in Appendix A. Split-spoon soil samples recovered during performance of the borings were visually classified in the field and representative portions of the samples were transported to our laboratory for further evaluation.

2.4 LABORATORY TESTING

Representative soil samples obtained during our field exploration were returned to our office and examined by a geotechnical engineer. The samples were visually classified in general accordance with ASTM D 2488 (Unified Soil Classification System).

Two (2) fines content tests and one (1) organic content test were conducted in the laboratory on representative soil samples obtained from the borings. These tests were performed to aid in classifying the soils and to help quantify and correlate engineering properties. The results of these tests are presented on the Boring Logs in Appendix A. A brief description of the laboratory procedures used is also provided in Appendix A.

3.0 KARST TOPOGRAPHY

About 10% of the earth's land (and 15% of the United States) crust is composed of, or underlain by, soluble limestone. When limestone interacts with underground water, over time, the water dissolves the limestone to form karst topography, a mix of caves, underground channels, and rough and undulating ground surfaces. The underground water of karst topography carves channels and caves that become susceptible to collapse from the surface. When enough limestone is eroded from underground, a sinkhole may develop. Sinkholes can range in size and depth from a few feet to over 300 feet. The topography of North Central Florida is characteristic of karst terrain, with sinkholes caused by natural climatic variability, as well as, man-made activities, such as, the drop in groundwater levels from well pumping.

In accordance with our contracted scope of services, our exploration was confined to the zone of soil likely to be stressed by the proposed single-story construction. Our work did not address the potential for surface expression of deep geological conditions, such as sinkhole development related to karst activity. This evaluation requires a more extensive range of field services than performed in this study.

4.0 FINDINGS

4.1 SURFACE CONDITIONS

At the time of our visit, the parcel was undeveloped, and vacant. Exposed surface soils were observed to be sandy and moist. A ditch with ponded water was observed on the east side of the property. At the time of the exploration the upper 1 to 2 feet of the site consisted of fill material. Clay surface soils were not observed on the project parcel. No rock outcroppings were observed on the parcel.

4.2 SUBSURFACE CONDITIONS

The boring locations and detailed subsurface conditions are illustrated in Appendix A: Boring Location Plan and Boring Logs. The classifications and descriptions shown on the logs are generally based upon visual characterizations of the recovered soil samples and a limited number of laboratory tests.

Also, see Appendix A: Key to Boring Logs, for further explanation of the symbols and placement of data on the Boring Logs. Table 1: General Soil Profile summarizes the soil conditions encountered.

TABLE 1
General Soil Profile

Typical depth (ft)		Soil Descriptions
From	To	
0	1 to 2	Fill material (SP-SM)
1 to 2	7 to 8	Very loose to medium dense brown, black and tan sand with silt (SP-SM)
7 to 8	15	Medium dense to dense gray silty clayey sand (SC-SM)
( ) Indicates Unified Soil Classification		

Soil test boring B-2 encountered a layer of organic sand at a depth ranging from 2 to 4 feet below ground surface. Soil test boring B-3 encountered black sand with organic staining at depth of 1 foot. The stabilized groundwater level was encountered in all of the soil test borings at depths ranging from 2 to 5 feet below ground surface.

5.0 RECOMMENDATIONS

5.1 GENERAL

In this section of the report, we present our detailed recommendations for groundwater control, building foundation, pavement design, site preparation, and construction related services. The following recommendations are made based upon a review of the attached soil test data, our understanding of the proposed construction, and experience with similar projects and subsurface conditions. We recommend that we be provided the opportunity to review the project plans and specifications to confirm that our recommendations have been properly interpreted and implemented.

If the structural loadings or the building locations change significantly from those discussed previously, we request the opportunity to review and possibly amend our recommendations with respect to those changes. The discovery of any subsurface conditions during construction which deviate from those encountered in the borings should be reported to us immediately for observation, evaluation, and recommendations.

A geotechnical consideration for the design and construction of the proposed building structure is the presence of a thin layer of organic sand in the shallow subgrade soils. Soil test boring B-2 encountered this material at a depth ranging from 2 to 4 feet below ground surface. These organic soils should to be removed and granular well-compacted soils should be used as a replacement. We recommend test pits be performed near the vicinity of test borings B-2 and B-3 prior to construction in order to help determine the extent of material that will need removal.

5.2 GROUNDWATER CONTROL

The stabilized groundwater level was encountered in all of the soil test borings at depths ranging from 2 to 5 feet below ground surface. We estimate the normal seasonal high groundwater level will occur at a depth of about 1 to 3 feet below the existing ground surface.

Note: It is possible the estimated seasonal high groundwater levels will temporarily exceed these estimated levels during any given year in the future. Should impediments to surface water drainage exist on the site, or should rainfall intensity and duration, or total rainfall quantities exceed the normally anticipated rainfall quantities, groundwater levels may exceed our seasonal high estimates. We recommend positive drainage be established and maintained on the site during construction. We further recommend permanent measures be constructed to maintain positive drainage from the site throughout the life of the project. We recommend all foundation designs be based on the seasonal high groundwater conditions.

5.3 BUILDING FOUNDATION

Based on the results of our exploration, we consider the subsurface conditions at the site adaptable for support of the proposed structure when constructed on a properly designed conventional shallow foundation system. Provided the site preparation and earthwork construction recommendations outlined in Section 5.4 of this report are performed, the following parameters may be used for foundation design.

5.3.1 Bearing Pressure

The maximum allowable net soil bearing pressure for use in shallow foundation design should not exceed 2,500 psf. Net bearing pressure is defined as the soil bearing pressure at the foundation bearing level in excess of the natural overburden pressure at that level. The foundations should be designed based on the maximum load which could be imposed by all loading conditions.

5.3.2 Foundation Size

The minimum widths recommended for any isolated column footings and continuous wall footings are 24 inches and 18 inches, respectively. Even though the maximum allowable soil bearing pressure may not be achieved, these width recommendations should control the minimum size of the foundations.

5.3.3 Bearing Depth

The exterior foundations should bear at a depth of at least 18 inches below the finished exterior grades and the interior foundations should bear at a depth of at least 12 inches below the finish floor elevation to provide confinement to the bearing level soils. It is recommended that stormwater be diverted away from the building exteriors to reduce the possibility of erosion beneath the exterior footings.

5.3.4 Bearing Material

The foundations may bear in either the compacted suitable native soils or compacted structural fill. The bearing level soils, after compaction, should exhibit densities equivalent to at least 95 percent of the modified Proctor maximum dry density (ASTM D 1557). As previously mentioned, very loose surficial sandy soils were encountered in the borings. We recommend improving the soils to a depth of 3 to 4 feet using a vibratory roller. Verification of the improvement should be performed using a dynamic cone penetrometer.

5.3.5 Settlement Estimates

Post-construction settlements of the structure will be influenced by several interrelated factors, such as (1) subsurface stratification and strength/compressibility characteristics; (2) footing size, bearing level, applied loads, and resulting bearing pressures beneath the foundations; and (3) site preparation and earthwork construction techniques used by the contractor. Our settlement estimates for the structure are based on the use of site preparation/earthwork construction techniques as recommended in Section 5.4 of this report. Any deviation from these recommendations could result in an increase in the estimated post-construction settlements of the structure.

Due to the sandy nature of the near-surface soils, we expect the majority of settlement to occur in an elastic manner and fairly rapidly during construction. Using the recommended maximum bearing pressure, the assumed maximum structural loads and the field data which we have correlated to geotechnical strength and compressibility characteristics of the subsurface soils, we estimate that total settlements of the structures could be on the order of one inch or less.

Differential settlements result from differences in applied bearing pressures and variations in the compressibility characteristics of the subsurface soils. Because of the general uniformity of the subsurface conditions and the recommended site preparation and earthwork construction techniques outlined in Section 5.4, we anticipate that differential settlements of the structure should be within tolerable magnitudes (½ inch or less).

5.3.6 Floor Slab

The floor slab can be constructed as a slab-on-grade member using a modulus of subgrade reaction (K) of 150 pci provided the subgrade materials are compacted as outlined in Section 5.5. It is recommended the floor slab bearing soils be covered with an impervious membrane to reduce moisture entry and floor dampness. A 10-mil thick plastic membrane is commonly used for this purpose. Care should be exercised not to tear large sections of the membrane during placement of reinforcing steel and concrete.

5.4 SITE PREPARATION

We recommend normal, good practice site preparation procedures. These procedures include: compacting the subgrade and placing necessary fill or backfill to grade with engineered fill. A more detailed synopsis of this work is as follows:

1. Prior to construction, the location of any existing underground utility lines within the construction area should be established. Provisions should then be made to relocate interfering utilities to appropriate locations. It should be noted that if underground pipes are not properly removed or plugged, they may serve as conduits for subsurface erosion which may subsequently lead to excessive settlement of overlying structure.

2. Strip the proposed construction limits of all grass, roots, topsoil, and other deleterious materials within 5 feet beyond the perimeter of the proposed building area. Following site clearing and grubbing operations, the same project areas with muck or roots/stumps present or suspected must be removed.

   We recommend test pits be performed near the vicinity of test borings B-2 and B-3 prior to construction in order to help determine the extent of material that will need removal. Clean, granular compacted backfill should be used for replacement material. Clean sandy soils resulting from undercutting activities may be stockpiled for use as backfill later.

3. The normal seasonal high groundwater level is estimated to occur at a depth of about 1 to 3 feet below the existing ground surface encountered during our exploration. If required, temporary groundwater control can probably be achieved by pumping from sumps located in perimeter ditches. Each sump should be located outside the bearing area to avoid loosening of the fine sandy bearing soils.

4. Compact the subgrade from the surface with a heavy vibratory roller (10-ton roller, static weight and 5-foot drum diameter) until you obtain a minimum density of at least 95 percent of the modified Proctor maximum dry density (ASTM D-1557), to a depth of 4 feet below the compacted surface.

It should be anticipated that moisture will need to be added to the subgrade in order to achieve the required compaction. Typically, the soils should exhibit moisture contents within ± 2 percent of the modified Proctor optimum moisture content during compaction. A minimum of eight (8) complete coverages (in perpendicular directions) should be made in the building construction area with the roller to improve the uniformity and increase the density of the underlying sandy soils.

Should the bearing level soils experience pumping and soil strength loss during the compaction operations, compaction work should be immediately terminated and (1) the disturbed soils removed and backfilled with dry structural fill soils which are then compacted, or (2) the excess pore pressures within the disturbed soils allowed to dissipate before recompacting.

5. Care should be exercised to avoid damaging any nearby structures while the compaction operation is underway. Prior to commencing compaction, occupants of adjacent structures should be notified and the existing conditions of the structures be documented with photographs and survey (if deemed necessary). Compaction should cease if deemed detrimental to adjacent structures. Universal Engineering Sciences can provide vibration monitoring services to help document and evaluate the effects of the surface compaction operation on existing structures. In the absence of vibration monitoring it is recommended the vibratory roller remain a minimum of 50 feet from existing structures. Within this zone, use of a bulldozer or a vibratory roller operating in the static mode is recommended.

6. Test the subgrade for compaction at a frequency of not less than one test per 2,500 square feet in the building area, or a minimum of two test locations per building, whichever is greater.

7. Place fill material, as required. The fill should consist of "clean," fine sand with less than 5 percent soil fines. You may use fill materials with soil fines between 5 and 10 percent, but strict moisture control may be required. Typically, the soils should exhibit moisture contents within ± 2 percent of the modified Proctor optimum moisture content during compaction. Place fill in uniform 10- to 12-inch loose lifts and compact each lift to a minimum density of 95 percent of the modified Proctor maximum dry density.

8. Perform compliance tests within the fill/backfill at a frequency of not less than one test per 2,500 square feet per lift in the building area, or at a minimum of two tests per building area, whichever is greater.

9. Test all footing cuts for compaction to a depth of 4 feet. Additionally, we recommend you conduct density testing in every column footing, and every 100 linear feet in wall footings. Recompaction of the foundation excavation bearing level soils, if loosened by the excavation process, can probably be achieved by making several coverages with a light weight walk-behind vibratory sled or roller.

5.5 CONSTRUCTION RELATED SERVICES

We recommend the Owner retain Universal Engineering Sciences to perform construction materials tests and observations on this project. Field tests and observations include verification of foundation by performing quality assurance tests on the placement of compacted structural fill. We can also provide concrete testing, pavement section testing, structural steel testing, and general construction observation services.

The geotechnical engineering design does not end with the advertisement of the construction documents. The design is an on-going process throughout construction. Because of our familiarity with the site conditions and the intent of the engineering design, we are most qualified to address problems that might arise during construction in a timely and cost-effective manner.

6.0 LIMITATIONS

During the early stages of most construction projects, geotechnical issues not addressed in this report may arise. Because of the natural limitations inherent in working with the subsurface, it is not possible for a geotechnical engineer to predict and address all possible problems. An Association of Engineering Firms Practicing in the Geosciences (ASFE) publication, "Important Information About Your Geotechnical Engineering Report" appears in Appendix B, and will help explain the nature of geotechnical issues.

Further, we present documents in Appendix B: Constraints and Restrictions, to bring to your attention the potential concerns and the basic limitations of a typical geotechnical report.

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	28416-007-02
REPORT NO.:	62119
PAGE:	A-2

PROJECT: SLAY / ALL-STATE BUILDING
VICINITY OF STATE ROAD 247 & BASCOM NORRIS ROAD
LAKE CITY, COLUMBIA COUNTY, FLORIDA

BORING DESIGNATION: **B-1** SHEET: 1 of 1
SECTION: 1 TOWNSHIP: 4S RANGE: 16E

CLIENT: CONCEPT CONSTRUCTION

LOCATION: SEE BORING LOCATION PLAN

REMARKS: FILL MATERIAL IN UPPER 1 TO 2 FEET

GS ELEVATION(ft): +161(EST) DATE STARTED: 12/13/06
WATER TABLE (ft): 4.5 DATE FINISHED: 12/13/06
DATE OF READING: 12/13/06 DRILLED BY: J. STILLSON
EST. WSWT (ft): NA TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0						Loose brown SAND, with silt [SP-SM]						
		1-2-5	7			Loose...	17					
		2-4-6	10	▼		Loose...						
5		2-5-8	13			Medium dense...						
		4-5-7	12									
						Medium dense gray silty clayey SAND [SC-SM]						
		6-8-10	18			Medium dense...						
10		8-9-10	19			Medium dense...						
15		5-10-10	20			Medium dense...						
						Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	28416-007-02
REPORT NO.:	62119
PAGE:	A-3

PROJECT: SLAY / ALL-STATE BUILDING
VICINITY OF STATE ROAD 247 & BASCOM NORRIS ROAD
LAKE CITY, COLUMBIA COUNTY, FLORIDA

BORING DESIGNATION: **B-2** SHEET: 1 of 1
SECTION: 1 TOWNSHIP: 4S RANGE: 16E

CLIENT: CONCEPT CONSTRUCTION

LOCATION: SEE BORING LOCATION PLAN

REMARKS: FILL MATERIAL IN UPPER 1 TO 2 FEET

GS ELEVATION(ft): +161(EST) DATE STARTED: 12/13/06
WATER TABLE (ft): 2 DATE FINISHED: 12/13/06
DATE OF READING: 12/13/06 DRILLED BY: J. STILLSON
EST. WSWT (ft): NA TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0						Very loose brown SAND, with silt [SP-SM]						
		2-2-1	3	▼		Very loose black organic SAND [SP-SM]	17					7
		1-1-1	2			Loose tan silty SAND [SM]						
5		1-2-7	9			Loose...						
		7-10-10	20			Medium dense tan silty clayey SAND [SC-SM]						
		8-10-12	22									
10		8-15-20	35			Dense...						
15		5-6-10	16			Medium dense... Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	28416-007-02
REPORT NO.:	62119
PAGE:	A-3

PROJECT: SLAY / ALL-STATE BUILDING
VICINITY OF STATE ROAD 247 & BASCOM NORRIS ROAD
LAKE CITY, COLUMBIA COUNTY, FLORIDA

BORING DESIGNATION: **B-3** SHEET: 1 of 1
SECTION: 1 TOWNSHIP: 4S RANGE: 16E

CLIENT: CONCEPT CONSTRUCTION

LOCATION: SEE BORING LOCATION PLAN

REMARKS: FILL MATERIAL IN UPPER 1 TO 2 FEET

GS ELEVATION(ft): +162(EST) DATE STARTED: 12/13/06
WATER TABLE (ft): 3.5 DATE FINISHED: 12/13/06
DATE OF READING: 12/13/06 DRILLED BY: J. STILLSON
EST. WSWT (ft): NA TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0						Brown SAND, with silt [SP-SM]						
						Loose dark brown silty SAND [SM], with trace of organics						
		4-4-3	7			Loose brown to orange SAND, with silt [SP-SM]						
		4-3-4	7	▼		Loose tan...						
5		2-4-4	8			Loose...						
		6-10-10	20			Medium dense...						
		7-10-15	25			Medium dense gray silty clayey SAND [SC-SM]						
10		7-15-25	40			Dense...						
15		8-9-10	19			Medium dense...						
						Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	28416-007-02
REPORT NO.:	62119
PAGE:	A-4

PROJECT: SLAY / ALL-STATE BUILDING
VICINITY OF STATE ROAD 247 & BASCOM NORRIS ROAD
LAKE CITY, COLUMBIA COUNTY, FLORIDA

CLIENT: CONCEPT CONSTRUCTION

LOCATION: SEE BORING LOCATION PLAN

REMARKS: FILL MATERIAL IN UPPER 1 TO 2 FEET

BORING DESIGNATION: **B-4** SHEET: 1 of 1
SECTION: 1 TOWNSHIP: 4S RANGE: 16E

GS ELEVATION(ft): +162(EST) DATE STARTED: 12/13/06
WATER TABLE (ft): 5 DATE FINISHED: 12/13/06
DATE OF READING: 12/13/06 DRILLED BY: J. STILLSON
EST. WSWT (ft): NA TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0						Loose brown SAND, with silt and roots [SP-SM]						
		2-3-4	7			Loose...						
		2-2-1	3			Very loose...						
5		1-2-2	4	▼		Very loose...						
		3-6-9	15			Medium dense gray silty clayey SAND [SC-SM]						
		6-10-12	22									
10		6-13-19	32			Dense...						
15		10-10-10	20			Medium dense... Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	28416-007-02
REPORT NO.:	62119
PAGE:	A-5

PROJECT: SLAY / ALL-STATE BUILDING
VICINITY OF STATE ROAD 247 & BASCOM NORRIS ROAD
LAKE CITY, COLUMBIA COUNTY, FLORIDA

BORING DESIGNATION: **B-5** SHEET: 1 of 1
SECTION: 1 TOWNSHIP: 4S RANGE: 16E

CLIENT: CONCEPT CONSTRUCTION

LOCATION: SEE BORING LOCATION PLAN

REMARKS: FILL MATERIAL IN UPPER 1 TO 2 FEET

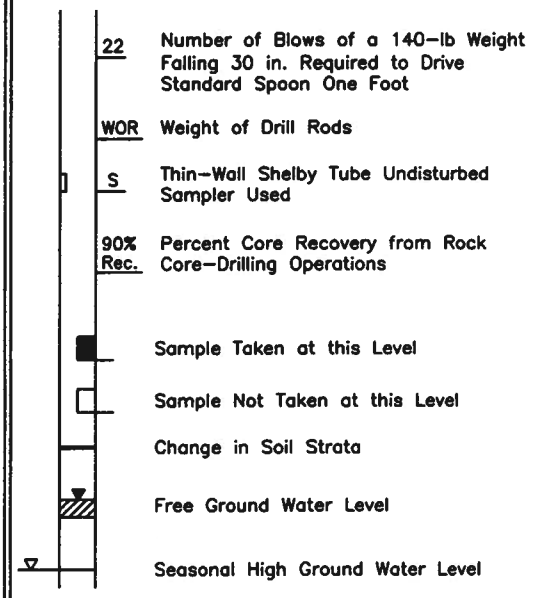
GS ELEVATION(ft): +167(EST) DATE STARTED: 12/13/06
WATER TABLE (ft): 4.5 DATE FINISHED: 12/13/06
DATE OF READING: 12/13/06 DRILLED BY: J. STILLSON
EST. WSWT (ft): NA TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0						Medium dense brown SAND, with silt [SP-SM]						
		4-7-5	12			Medium dense...						
		4-3-2	5	▼		Loose...						
5		1-1-6	7			Loose...						
		6-8-9	17			Medium dense...						
		6-10-13	23			Medium dense...						
		10-20-30	50			Dense to very dense gray silty clayey SAND [SC-SM]						
10												
		8-10-15	25			Medium dense...						
15						Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES

KEY TO BORING LOGS

SYMBOLS



RELATIVE DENSITY (sand-silt)

Very loose – Less Than 4 Blows/Ft.
Loose – 4 to 10 Blows/Ft.
Medium Dense – 10 to 30 Blows/Ft.
Dense – 30 to 50 Blows/Ft.
Very Dense – More Than 50 Blows/Ft.

CONSISTANCY (clay)

Very Soft – Less Than 2 Blows/Ft.
Soft – 2 to 4 Blows/Ft.
Firm – 4 to 8 Blows/Ft.
Stiff – 8 to 15 Blows/Ft.
Very Stiff – 15 to 30 Blows/Ft.
Hard – More Than 30 Blows/Ft.

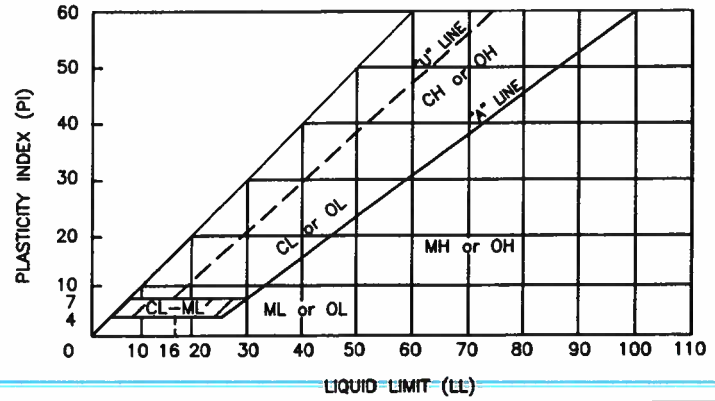
Based on Safety Hammer N–Values

UNIFIED CLASSIFICATION SYSTEM

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES
COARSE-GRAINED SOILS More than 50% retained on No. 200 sieve*	GRAVELS 50% or more of coarse fraction retained on No. 200 sieve	CLEAN GRAVELS	GW	Well–graded gravels and gravel–sand mixtures, little or no fines
			GP	Poorly graded gravels and gravel–sand mixtures, little or no fines
		GRAVELS WITH FINES	GM	Silty gravels, gravel–sand–silt mixtures
			GC	Clayey gravels, gravel–sand–clay mixtures
	SANDS More than 50% of coarse fraction passes No. 4 sieve	CLEAN SANDS	SW	Well–graded sands and gravelly sands, little or no fines
			SP	Poorly graded sands and gravelly sands, little or no fines
		SANDS WITH FINES	SM	Silty sands, sand–silt mixtures
			SC	Clayey sands, sand–clay mixtures
FINE-GRAINED SOILS 50% or more passes No. 200 sieve*	SILTS AND CLAYS Liquid limit 50% or less		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	SILTS AND CLAYS Liquid limit greater than 50%		MH	Inorganic silts, micaceous or diatomacaceous fine sands or silts, elastic silts
			CH	Inorganic clays or high plasticity, fat clays
			OH	Organic clays of medium to high plasticity
Highly organic Soils			PT	Peat, muck and other highly organic soils

* Based on the material passing the 3–in. (75mm) sieve.

PLASTICITY CHART



Laboratory Test Procedures

Percent passing No. 200 Sieve

Certain recovered soil samples were selected to determine the percentage of fines. In this test the soil samples were dried and washed over a No. 200 mesh sieve. The percent of soil by weight passing the sieve was the percentage of fines or portion of the sample in the silt and clay size range. These tests were conducted in accordance with ASTM Procedure D-1140, Amount of Material in Soils Finer Than the #200 Sieve.

Organic Content Determination

This test method evaluates the moisture content, ash content, and organic matter in peats and other organic soils, such as organic clay, silt, sand, and "muck". The organic content measurement was performed by placing a sample of soil in a low temperature oven. The soil is then dried (as described above) to measure the initial moisture content. The soil is then transferred to a high temperature kiln which burns off the organic materials. The organic content is then calculated as the ratio of the weight loss to the dry weight of the soil measured from the low temperature oven; it is expressed as a percent.

Field Exploration Procedures

Penetration Borings

Penetration tests were performed in accordance with ASTM Procedure D-1586, Penetration Test and Split-Barrel Sampling of Soils. This test procedure generally involved driving a 1.4-inch I.D. split-tube sampler into the soil profile in six inch increments for a minimum distance of 18 inches using a 140-pound hammer free-falling 30 inches. The total number of blows required to drive the sampler the second and third 6-inch increments was designated as the N-value, and provides an indication of in-place soil strength, density, and consistency.

Important Information About Your

Geotechnical Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

The following information is provided to help you manage your risks.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you* — should apply the report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are *Not* Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; ***none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.***

Rely, on Your ASFE-Member Geotechncial Engineer for Additional Assistance

Membership in ASFE/The Best People on Earth exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you ASFE-member geotechnical engineer for more information.

ASFE
The Best People on Earth

8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@asfe.org www.asfe.org

CONSTRAINTS AND RESTRICTIONS

WARRANTY

Universal Engineering Sciences has prepared this report for our client for his exclusive use, in accordance with generally accepted soil and foundation engineering practices and makes no other warranty either expressed or implied as to the professional advice provided in the report.

UNANTICIPATED SOIL CONDITIONS

The analysis and recommendations submitted in this report are based upon the data obtained from soil borings performed at the locations indicated on the Boring Location Plan. This report does not reflect any variation which may occur between these borings.

The nature and extent of variations between borings may not become known until excavation begins. If variations appear, we may have to re-evaluate our recommendations after performing on-site observations and noting the characteristics of any variations.

CHANGED CONDITIONS

We recommend that the specifications for the project require that the contractor immediately notify Universal Engineering Sciences, as well as the owner, when subsurface conditions are encountered that are different from those present in this report.

No claim by the contractor for any conditions differing from those anticipated in the plans, specifications, and those found in this report, should be allowed unless the contractor notifies the owner and Universal Engineering Sciences of such changed conditions. Further, we recommend that all foundation work and site improvements be observed by a representative of Universal Engineering Sciences to monitor field conditions and changes, to verify design assumptions and to evaluate and recommend any appropriate modifications to this report.

MISINTERPRETATION OF SOIL ENGINEERING REPORT

Universal Engineering Sciences is responsible for the conclusions and opinions contained within this report based upon the data relating only to the specific project and location discussed herein. If the conclusions or recommendations based upon the data presented are made by others, those conclusions or recommendations are not the responsibility of Universal Engineering Sciences.

CHANGED STRUCTURE OR LOCATION

This report was prepared in order to aid in the evaluation of this project and to assist the architect or engineer in the design of this project. If any changes in the design or location of the structure as outlined in this report are planned, or if any structures are included or added that are not discussed in the report, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and the conclusion modified or approved by Universal Engineering Sciences.

USE OF REPORT BY BIDDERS

Bidders who are examining the report prior to submission of a bid are cautioned that this report was prepared as an aid to the designers of the project and it may affect actual construction operations.

Bidders are urged to make their own soil borings, test pits, test caissons or other investigations to determine those conditions that may affect construction operations. Universal Engineering Sciences cannot be responsible for any interpretations made from this report or the attached boring logs with regard to their adequacy in reflecting subsurface conditions which will affect construction operations.

STRATA CHANGES

Strata changes are indicated by a definite line on the boring logs which accompany this report. However, the actual change in the ground may be more gradual. Where changes occur between soil samples, the location of the change must necessarily be estimated using all available information and may not be shown at the exact depth.

OBSERVATIONS DURING DRILLING

Attempts are made to detect and/or identify occurrences during drilling and sampling, such as: water level, boulders, zones of lost circulation, relative ease or resistance to drilling progress, unusual sample recovery, variation of driving resistance, obstructions, etc.; however, lack of mention does not preclude their presence.

WATER LEVELS

Water level readings have been made in the drill holes during drilling and they indicate normally occurring conditions. Water levels may not have been stabilized at the last readings. This data has been reviewed and interpretations made in this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, temperature, tides, and other factors not evident at the time measurements were made and reported. Since the probability of such variations is anticipated, design drawings and specifications should accommodate such possibilities and construction planning should be based upon such assumptions of variations.

LOCATION OF BURIED OBJECTS

All users of this report are cautioned that there was no requirements for Universal Engineering Sciences to attempt to locate any man-made buried objects during the course of this exploration and that no attempt was made by Universal Engineering Sciences to locate any such buried objects. Universal Engineering Sciences cannot be responsible for any buried man-made objects which are subsequently encountered during construction that are not discussed within the text of this report.

TIME

This report reflects the soil conditions at the time of investigation. If the report is not used in a reasonable amount of time, significant changes to the site may occur and additional reviews may be required.

- 25569 -

COLUMBIA COUNTY FIRE DEPARTMENT

P. O. BOX 1529
LAKE CITY, FL 32056
PHONE (386) 754-7071
FAX (386) 754-7064

David L. Boozer
Division Chief

08 November 2007

To: Columbia County Building Department

From: David L. Boozer

Re: Slay Allstate

A fire safety inspection was performed at the Slay Allstate Building located at 679 NW Bascom Norris Drive in Lake City Florida, 32025. This building meets the requirements of Chapter 38 of The Florida Fire Prevention Code, 2004 edition. We recommend approval of this Business.

CERTIFICATE OF OCCUPANCY

COLUMBIA COUNTY, FLORIDA

Department of Building and Zoning Inspection

This Certificate of Occupancy is issued to the below named permit holder for the building and premises at the below named location, and certifies that the work has been completed in accordance with the Columbia County Building Code.

Parcel Number 01-4S-16-02656-000 **Building permit No.** 000025569

Use Classification COMMERCIAL OFFICE **Fire:** 564.19

Permit Holder BRIAN CRAWFORD, CONCEPT CONSTR **Waste:** 0.00

Owner of Building MARVIN SLAY - ALLSTATE OFFICE **Total:** 564.19

Location: 679 NW BASCOM NORRIS DRIVE, LAKE CITY, FL

Date: 11/16/2007

Harry Dicks

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)

CERTIFICATE OF

OCCUPANCY

COLUMBIA COUNTY, FLORIDA

Department of Building and Zoning Inspection

This Certificate of Occupancy is issued to the below named permit holder for the building and premises at the below named location, and certifies that the work has been completed in accordance with the Columbia County Building Code.

Parcel Number 03-4S-16-02732-572 **Building permit No.** 000025565

Use Classification MODULAR **Fire:** 57.78

Permit Holder BILL HARPER **Waste:** 150.75

Owner of Building FREEDOM MOBILE HOME CENTER **Total:** 208.53

Location: 382 SW WHITETAIL CIRCLE, LAKE CITY, FL

Date: 01/09/2008

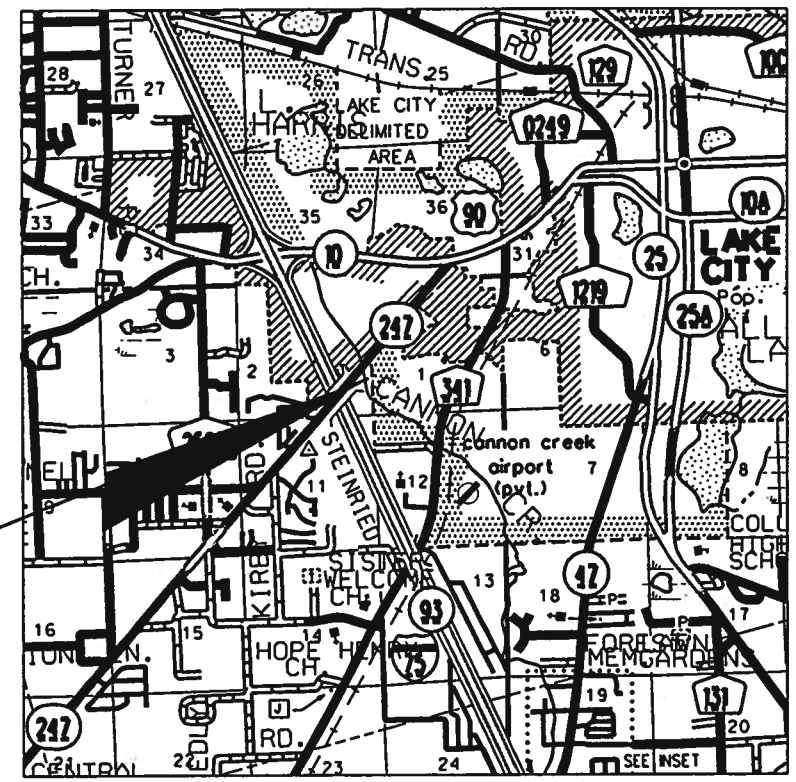
Harry Dicks

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)

SLAY/ALL-STATE INSURANCE
COMMERCIAL OFFICE BUILDING

FOR:
Buddy Slay
955 SW Baya Drive
LAKE CITY, FL. 32025
PHONE: 386-755-1666
FAX: 386-755-3829



LOCATION MAP

SECTION 1, TOWNSHIP 4 SOUTH, RANGE 16 EAST
COLUMBIA COUNTY, FLORIDA

STRUCTURAL/CIVIL ENGINEERS

GTC Design Group
P.O. Box 187
130 West Howard Street
Live Oak FL, 32064
Phone: (386) 362-3678
Fax: (386) 362-6133
Chadwick W. Williams, PE 63144
Auth. #: 9461

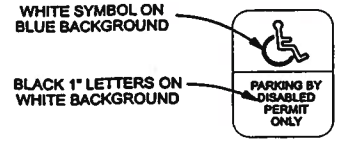
GTC PROJECT NUMBER:
PF06-162

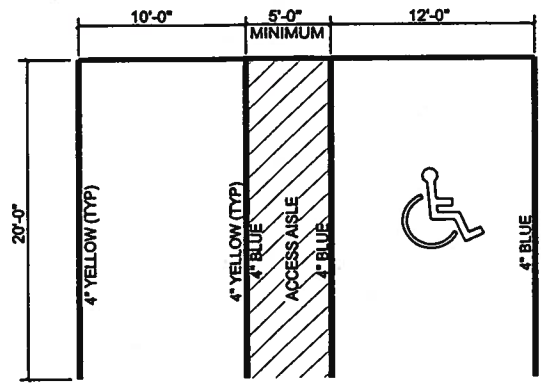
INDEX OF SHEETS

11/02/07

GENERAL NOTES

1. The contractor shall verify all existing conditions and dimensions at the job site to insure that all new work will fit in the manner intended on the plans. Should any conditions exist that are contrary to those shown on the plans, the contractor shall notify the engineer of such differences immediately prior to proceeding with the work.
2. The contractor shall maintain the construction site at all times in a secure manner. All open trenches and excavated areas shall be protected from access by the general public.
3. Boundary and topographical information shown was obtained from a survey performed by Donald F. Lee & Associates, Inc., P.S.M. Florida Certificate #7042.
4. Any public land corner within the limits of construction is to be protected. If a corner monument is in danger of being destroyed and has not been properly referenced, the contractor should notify the engineer.
5. The site is located in Section 1, Township 4 South, Range 16 East, Columbia County, Florida.
6. Contractors shall adhere to the Erosion Control Plan. All erosion control measures shall be implemented prior to construction and be continued until construction is complete.
7. All disturbed areas not sodded shall be seeded with a mixture of long-term vegetation and quick-growing short-term vegetation for the following conditions. For the months from September through March, the mix shall consist of 70 pounds per acre of long-term seed and 20 pounds per acre of winter rye. For the months of April through August, the mix shall consist of 70 pounds per acre of long-term seed and 20 pounds per acre of millet.
8. A pad of rubble riprap shall be placed at the bottom of all collection flumes and collection pipe outlets.
9. The location of the utilities shown in the plans is approximate only. The exact location shall be determined by the contractor during construction.
10. The contractor shall waste all excess earth on site as directed by the engineer.
11. All site construction shall be in accordance with the Columbia County Land Development Regulations.
12. Contractor shall provide an as-built survey meeting the requirements of Chapter 61G17 F.A.C. for the stormwater management systems. Include horizontal and vertical dimensional data so that improvements are located and delineated relative to the boundary. Provide sufficient detailed data to determine whether the improvements were constructed in accordance with the plans. Submit the survey to the engineer on reproducible 20 lb. Vellum.
13. Contractor shall review and become familiar with all required utility connections prior to bidding. Contractor shall provide all work and materials required to complete connection to the existing utilities. This includes, but is not limited to, manhole coring, wet taps, pavement repairs and directional boring.
14. Contractor shall coordinate all work with other contractors within project limits.
15. Contractor shall sod all slopes of 3' horizontal to 1' vertical and staple sod all slopes of 2' horizontal to 1' vertical.
16. All construction of armament shown in these plans shall conform to FDOT indexes and specifications.
17. All stormwater pipes shall have a minimum cover of 6". Use Limerock backfill if pipe under pavement has less than 12" cover.
18. Potable water to be supplied by the City of Lake City, and wastewater sewage to be provided by the City of Lake City.





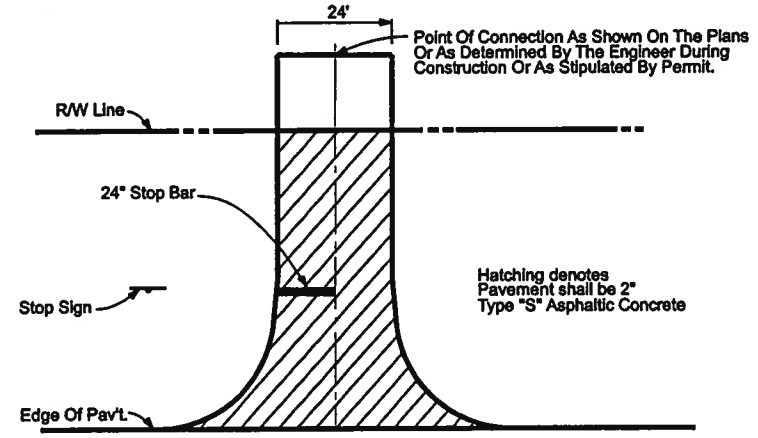
SIGN SHALL BE PLACED IN FRONT OF ALL DESIGNATED HANDICAPPED SPACES. SIGN HEIGHT SHALL BE 7' FROM PAVEMENT TO BOTTOM OF SIGN.

5' HANDICAPPED AISLE MAY BE PLACED ON THE RIGHT OR LEFT SIDE OF PARKING STALL.

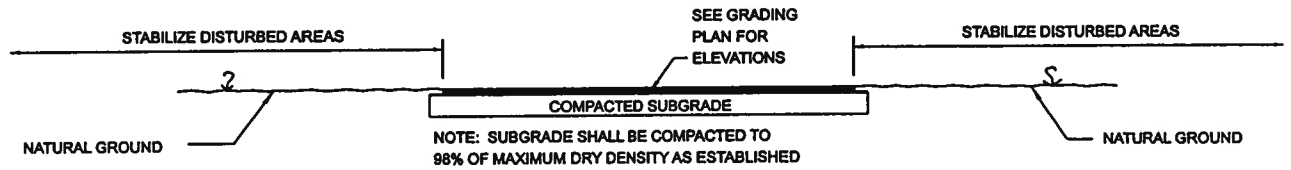
HANDICAPPED PARKING SYMBOL SHALL BE 3 OR 5 FT. HIGH AND BLUE IN COLOR.

SEE SITE PLAN FOR ADDITIONAL PARKING STALL DIMENSIONS.

PARKING STALL DETAIL
NTS



CONNECTION DETAIL
NTS



NOTE: SUBGRADE SHALL BE COMPACTED TO 98% OF MAXIMUM DRY DENSITY AS ESTABLISHED BY ASTM T-99.

PARKING APRON
1.25" TYPE S ASPHALT
6" LIMEROCK BASE
8" COMPACTED SUB-GRADE

INSPECTIONS BY COUNTY ENGINEER OR REPRESENTATIVES

1. Completion of clearing and grubbing. Visual only – no test requirements.
2. Rough graded and drainage structures in place. Test results L.B.R. – pipe backfill density.
3. Subgrade complete. Test results – density.
4. Limerock placed and finished. Test results – thickness, cross-section and density.
5. Asphaltic concrete in place. Test results – thickness and density.
6. Final inspection for acceptance to be performed by county engineer, public works director and county commissioner (should he/she desire to attend).
7. The developer/contractor shall be responsible for notifying the director of public works representative when each construction phase is ready for inspection.

COLUMBIA COUNTY ROADWAY CONSTRUCTION REQUIREMENTS FOR DEVELOPERS GENERAL REQUIREMENTS

1. The roadway construction plans must be reviewed and approved prior to commencing construction.
2. All materials and construction shall conform to the requirements of the FDOT Standard Specifications for Road and Bridge Construction.
3. The materials and construction shall be certified by a testing laboratory retained by the developer or contractor. Copies of all test results shall be provided prior to acceptance.
4. All traffic control and safety items (striping, stop bars, regulatory signs, etc.) shall be in place.
5. The temporary grass shall be sufficient to control erosion.
6. Final inspection for acceptance to be performed by county engineer, public works director and county commissioner (should he/she desire to attend).

1/02/07

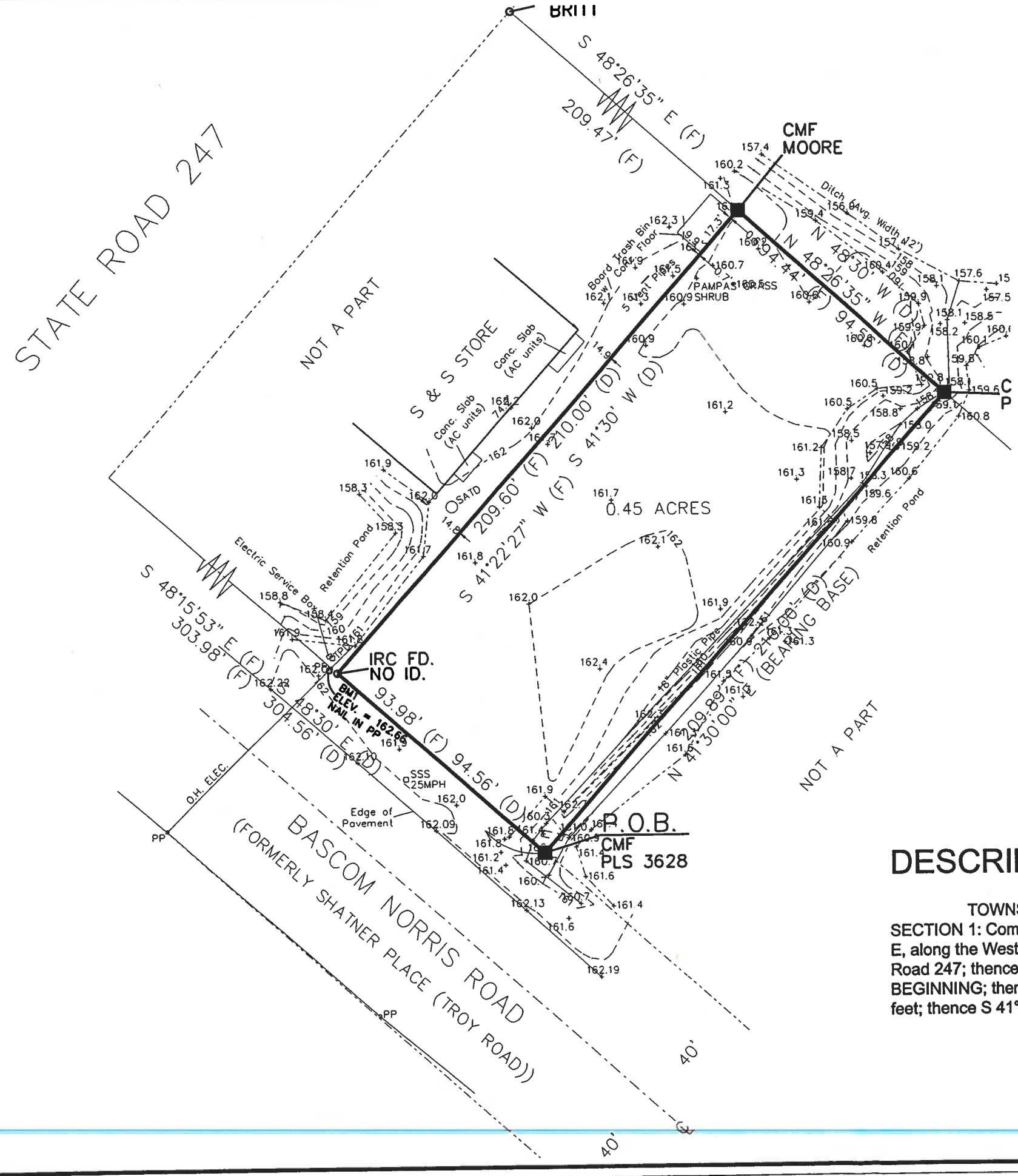
DATE	REVISION NOTES

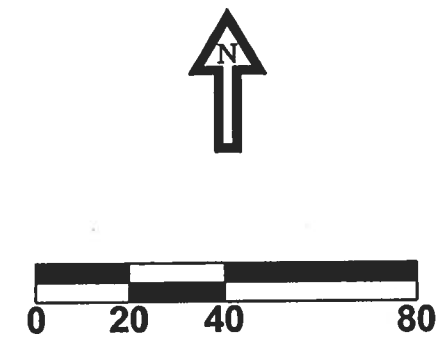
P.O. Box 187
130 West Howard Street
Live Oak FL, 32064
Phone: (386) 362-3678
Fax: (386) 362-6133
STRUCTURAL/CIVIL ENGINEERS

SLAY ALL-STATE BUILDING
GENERAL NOTES & HANDICAPP PARKING DETAIL

PROJECT NUMBER
PF06-162

SHEET
1





LEGEND	
CMF=CONCRETE MONUMENT FOUND	OH ELEC=OVERHEAD ELECTRIC LINE
CMS=CONCRETE MONUMENT SET	SEC.=SECTION
IPF=IRON PIPE FOUND	RGE.=RANGE
IPS=IRON PIPE SET	TWP.=TOWNSHIP
PLS=PROFESSIONAL LAND SURVEYOR	COR.=CORNER
P.S.M.=PROFESSIONAL SURVEYOR & MAPPER	NE=NORTHEAST
R/W=RIGHT-OF-WAY	NW=NORTHWEST
℄ =CENTER LINE	SW=SOUTHWEST
P =PROPERTY LINE	SE=SOUTHEAST
PP=POWER POLE	LB=LICENSED BUSINESS
SP=SERVICE POLE	P.O.B.=POINT OF BEGINNING
TPD=TELEPHONE PEDESTAL	(F)=FIELD MEASUREMENTS
IRC=IRON REBAR & CAP	(D)=DEED MEASUREMENTS
NO ID=NO IDENTIFICATION	FD.=FOUND
SSS=SINGLE SUPPORT SIGN	SATD=SATELLITE DISH
BM=BENCHMARK	

DESCRIPTION:

TOWNSHIP 4 SOUTH, RANGE 16 EAST
SECTION 1: Commencing at the NW corner of SE 1/4 of NW 1/4 of said Section and run S 2°04' E, along the West line of said SE 1/4 of NW 1/4 326.6 feet to the Southerly right-of-way of State Road 247; thence N 41°30' E of 480.00 feet; thence S 48°30' E 304.56 feet for a POINT OF BEGINNING; thence N 41°30' E parallel to said State Road 210 feet; thence N 48°30' W 94.56 feet; thence S 41°30' W 210.00 feet; thence S 48°30' E 94.56 feet to the POINT OF BEGINNING.

11/02/07

DATE	REVISION NOTES

P.O. Box 187
130 West Howard Street
Live Oak FL, 32064
Phone: (386) 362-3678
Fax: (386) 362-6133

dgm
STRUCTURAL/CIVIL ENGINEERS

SLAY ALL-STATE BUILDING

EXISTING CONDITIONS

PROJECT NUMBER
PF06-162

SHEET
2

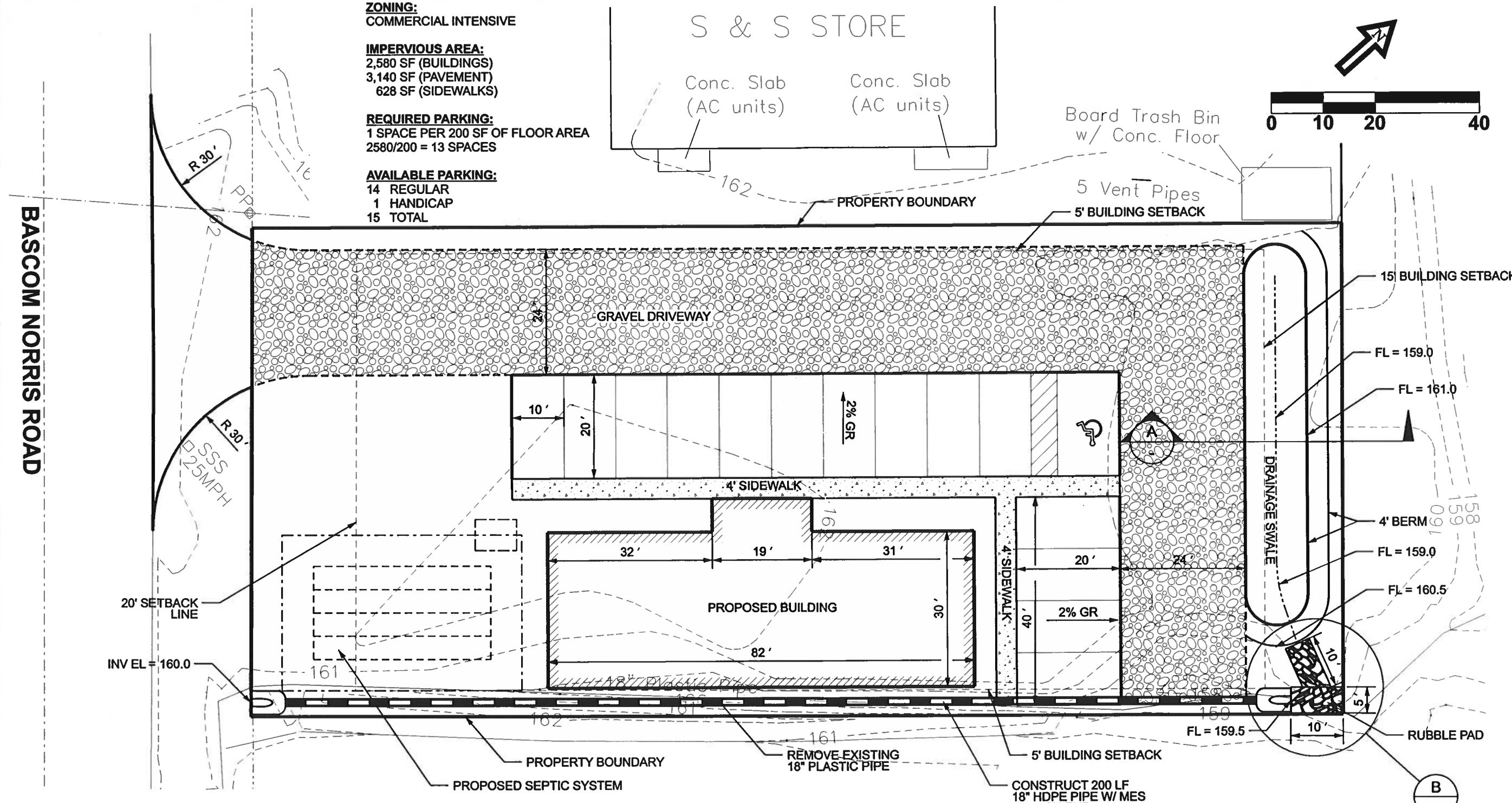
...\exc01.dgn 12/5/2006 11:55:45 AM

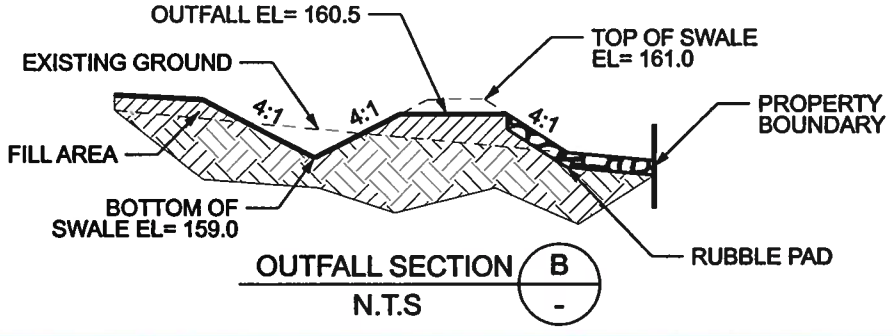
ZONING:
COMMERCIAL INTENSIVE

IMPERVIOUS AREA:
2,580 SF (BUILDINGS)
3,140 SF (PAVEMENT)
628 SF (SIDEWALKS)

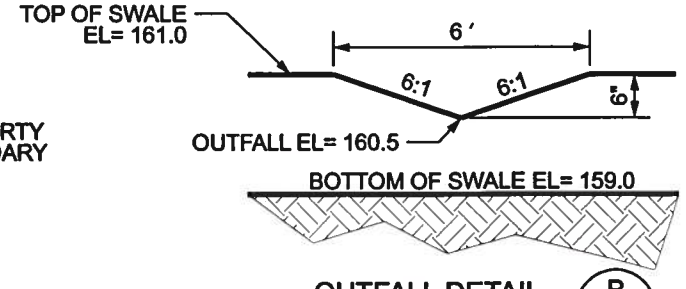
REQUIRED PARKING:
1 SPACE PER 200 SF OF FLOOR AREA
2580/200 = 13 SPACES

AVAILABLE PARKING:
14 REGULAR
1 HANDICAP
15 TOTAL

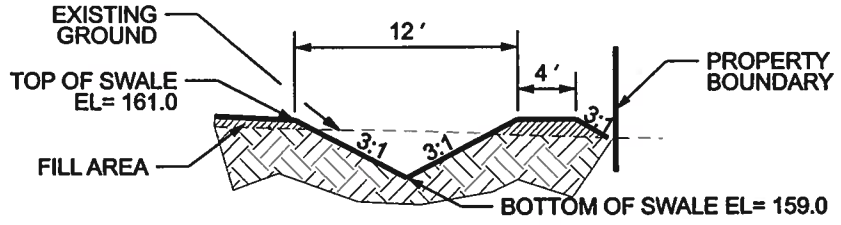




OUTFALL SECTION B / N.T.S



OUTFALL DETAIL B / N.T.S



SWALE SECTION A / N.T.S

1/2/07

REVISION NOTES | DATE

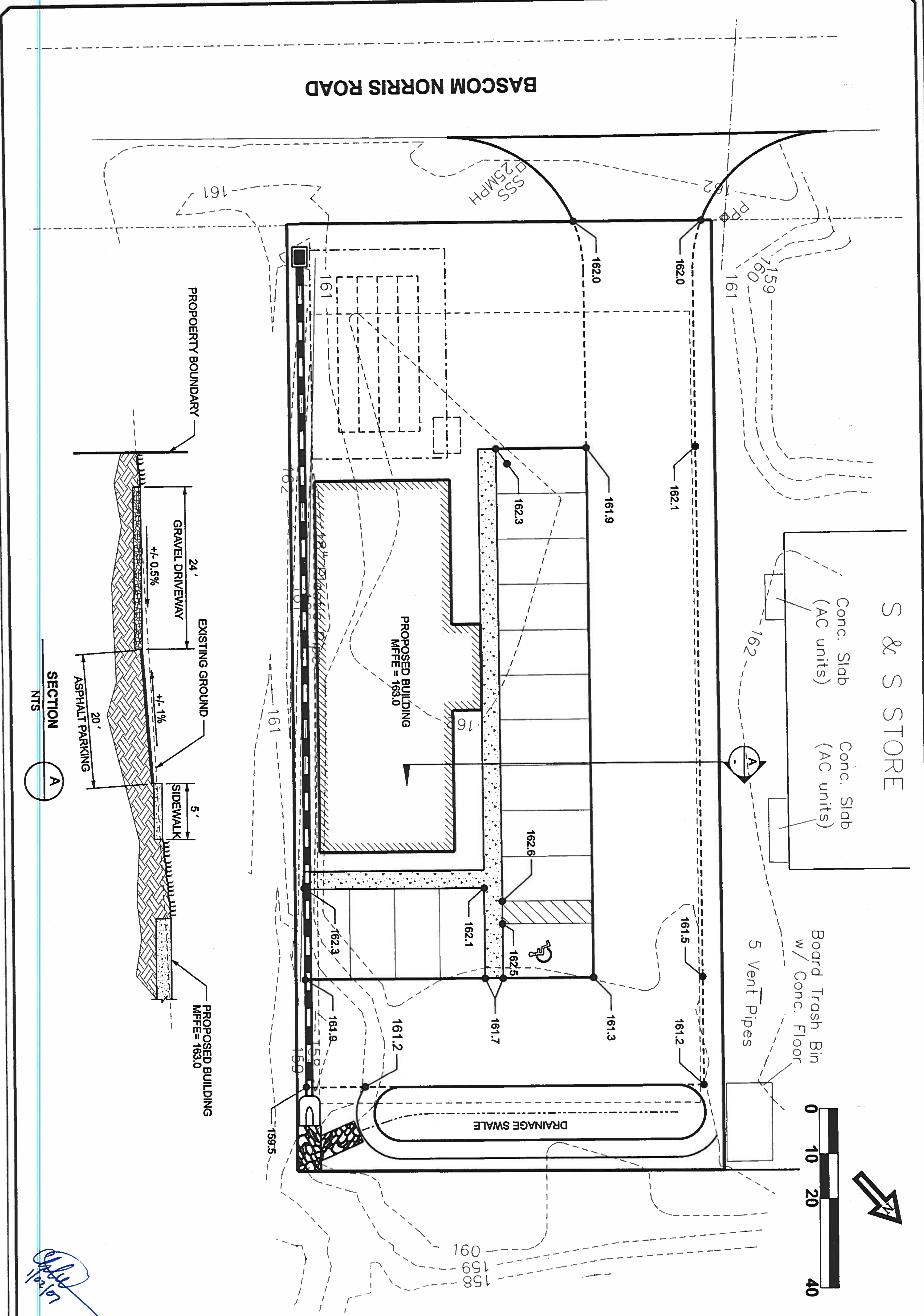
P.O. Box 187
130 West Howard Street
Live Oak FL, 32064
Phone: (386) 362-3678
Fax: (386) 362-6133
STRUCTURAL/CIVIL ENGINEERS

SLAY ALL-STATE BUILDING
SITE PLAN
AND STORMWATER PLAN

PROJECT NUMBER
PF06-162

SHEET
3

...\gra01.dgn 12/5/2006 5:58:47 PM



BASCOM NORRIS ROAD
SSS
25MPH
PROPOERTY BOUNDARY
GRAVEL DRIVEWAY
24'
+/- 0.5%
EXISTING GROUND
+/- 1%
20'
ASPHALT PARKING
SIDEWALK
5'
SECTION
NTS
A
PROPOSED BUILDING
MFFE= 163.0
PROPOSED BUILDING
MFFE = 163.0
S & S STORE
Conc. Slab
(AC units)
Conc. Slab
(AC units)
Board Trash Bin
w/ Conc. Floor
5 Vent Pipes
DRAINAGE SWALE
162.0
162.0
162.1
161.9
162.3
162.6
162.1
162.3
162.5
161.5
161.9
161.2
161.7
161.3
161.2
159.5
161
162
160
159
158
0
10
20
40

P.O. Box 187
130 West Howard Street
Live Oak FL, 32064
Phone: (386) 362-3678
Fax: (386) 362-6133
STRUCTURAL/CIVIL ENGINEERS

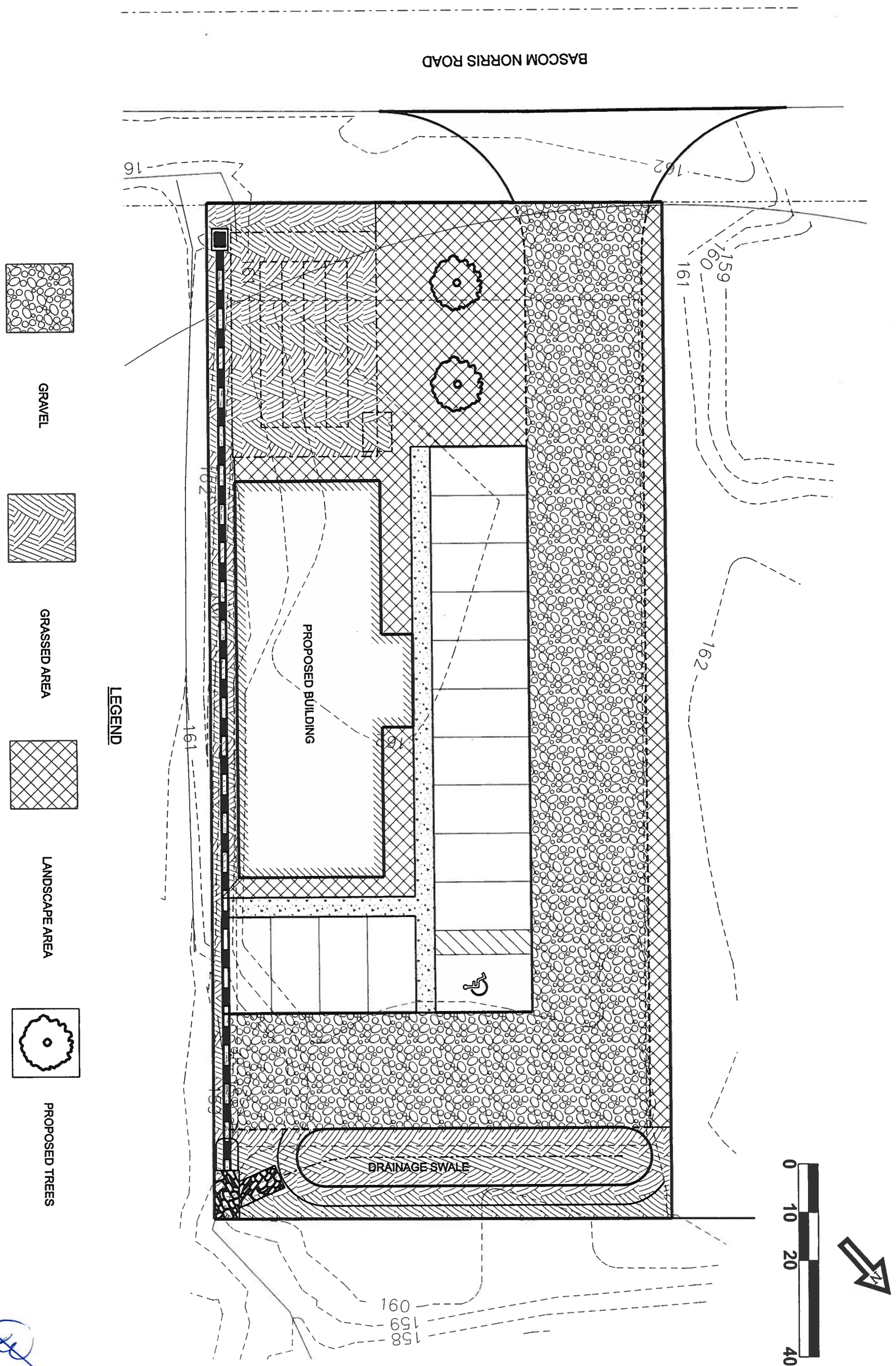
SLAY ALL-STATE BUILDING
GRADING PLAN
AND STORMWATER PLAN

PROJECT NUMBER
PF06-162

SHEET
4

DATE	REVISION NOTES

...\lan01.dgn 12/4/2006 2:48:01 PM



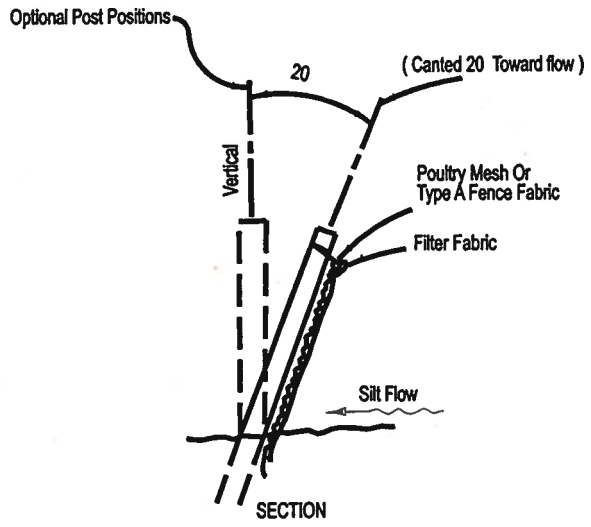
4/02/07

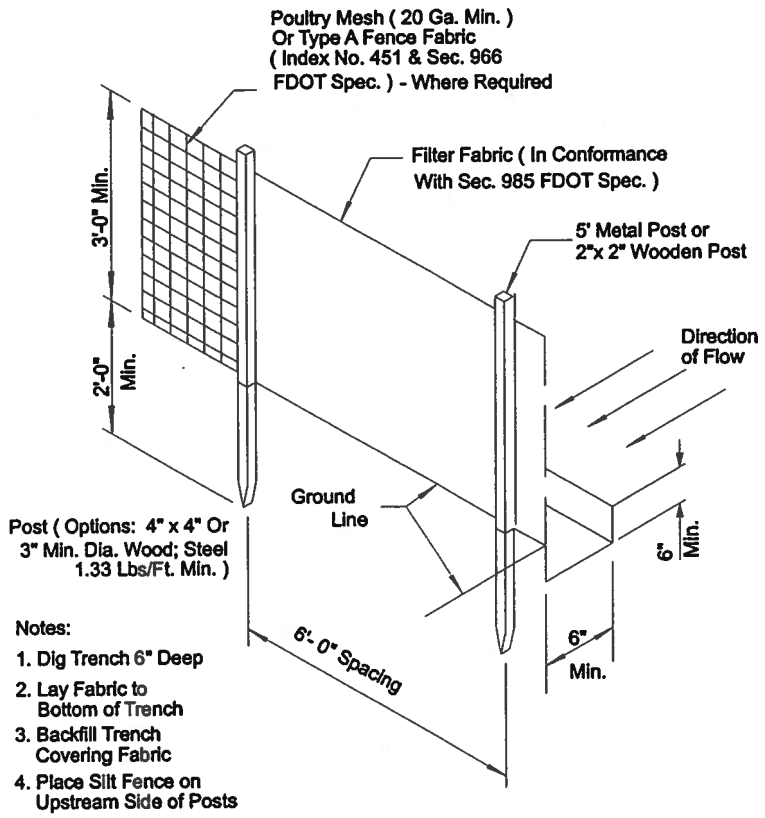
SHEET 5	PROJECT NUMBER PF06-162	**SLAY ALL-STATE BUILDING** **LANDSACPE PLAN**	STRUCTURAL/CIVIL ENGINEERS P.O. Box 187 130 West Howard Street Live Oak FL, 32064 Phone: (386) 362-3678 Fax: (386) 362-6133

DATE	REVISION NOTES

EROSION CONTROL NOTES

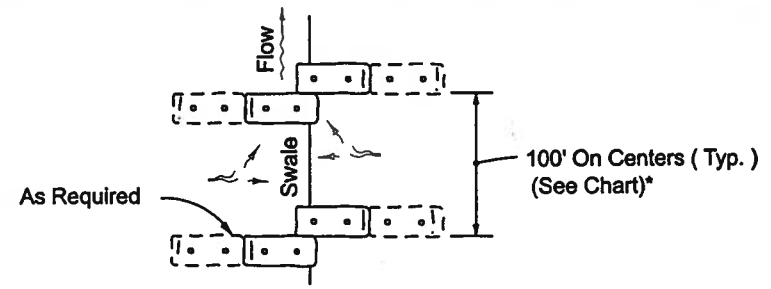
1. Contractor shall adhere to Columbia County, SRWMD and other governing authorities for erosion and sediment control regulations. Contractor shall use BMP's from "The Florida Erosion and Sediment Control Inspector's Manual".
2. Sediment and erosion control facilities, storm drainage facilities and detention basins shall be installed prior to any other construction.
3. Erosion control measures shall be inspected weekly and after each rainfall and replaced as necessary.
4. Sediment and erosion control measures shall not be removed until all construction is complete and until a permanent ground cover has been established.
5. All open drainage swales shall be grassed and riprap shall be placed as required to control erosion.
6. Silt fences shall be located on site to prevent sediment and erosion from leaving right-of-way limits.
7. Additional erosion control devices shall be used as required.
8. Silt fence shall be cleaned or replaced when silt builds up to within one foot of top of silt fence.
9. During construction and after construction is complete, all structures shall be cleaned of all debris and excess sediment.
10. All grades areas shall be stabilized immediately with a temporary fast-growing cover and/or mulch.
11. A pad of rubble riprap shall be placed at the bottom of all collection flumes and collection pipe outlets.
12. All disturbed areas not sodded shall be seeded with a mixture of long-term vegetation and quick-growing short-term vegetation for the following conditions. For the months from September through March, the mix shall consist of 70 pounds per acre of long-term seed and 20 pounds per acre of winter rye. For the months of April through August, the mix shall consist of 70 pounds per acre of long-term seed and 20 pounds per acre of millet.
13. Staked silt fences shall be placed near all box culvert extensions in accordance with FDOT Standard Index 102.
14. Disturbed areas shall be stabilized with sodding and grassing and mulching. All side slopes steeper than 3:1 shall be adequately protected from erosion through the use of hay bales or sodding.
15. All stabilization practices shall be initiated as soon as practicable in areas of the job where construction activities have temporarily or permanently stopped, but in no case shall the disturbed area be left unprotected for more than three (3) days.
16. If the proposed erosion control plan does not work, the contractor should use the BMP's in the Florida Erosion and Sediment Control Inspecor's manual to implement a plan that will work and meet actual field conditions.
17. All waste generated on the project shall be disposed of by the contractor in areas provided by contractor.
18. Loaded haul trucks shall be covered with tarps.
19. Excess dirt shall be removed daily.
20. Fertilizer shall be applied as specified in the plans and specifications.
21. This project shall comply with all water quality standards. Permit required from SRWMD has been obtained.
22. All pollution controls shall be maintained at all times.
23. Straw bales shall be placed to remove sediment. Straw bales shall be replaced after three (3) months or when sediment reaches one-half (1/2) the height of the bales.
24. Qualified personnel shall inspect the area used for storage of stockpiles, the silt fence and straw bales, the location where vehicles enter or exit the site, and the disturbed areas that have not been finally stabilized, at least once every seven (7) calendar days and within 24 hours of the end of a storm of 0.2 inches or greater.
25. Sites that have been finally stabilized with sod or grassing shall be inspected at least once every week.
26. Contractor is responsible for the construction and maintenance of all erosion and sedimentation controls during proposed construction.



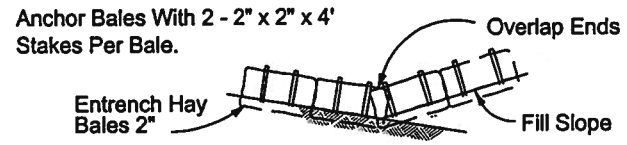


TYPE IV SILT FENCE

AS COMPARED TO TYPE III SILT FENCE, TYPE IV FENCE HAS GREATER STRENGTH AND HEIGHT WHICH REDUCES THE POSSIBILITY OF SEDIMENT AND WATER FROM OVERTOPPING THE FENCE. AS A RESULT, AVOID USING TYPE IV FENCE IN AREAS WHERE THE DETAINED WATER WOULD BACK INTO TRAVEL LANES OR OFF THE RIGHT OF WAY.

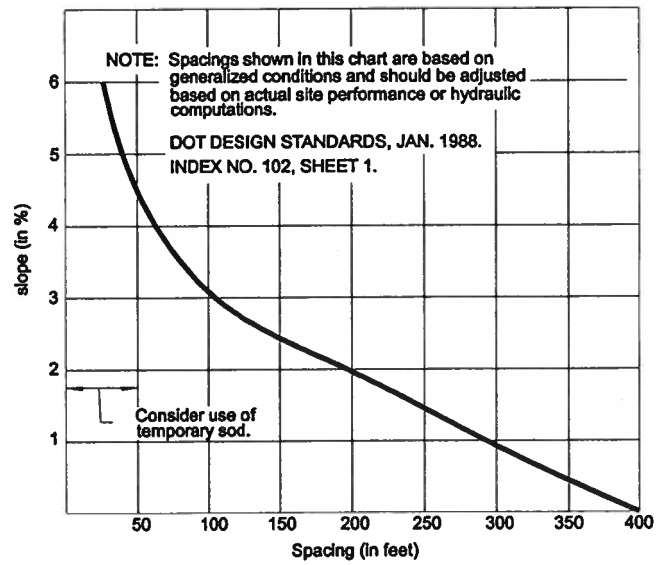


PLAN

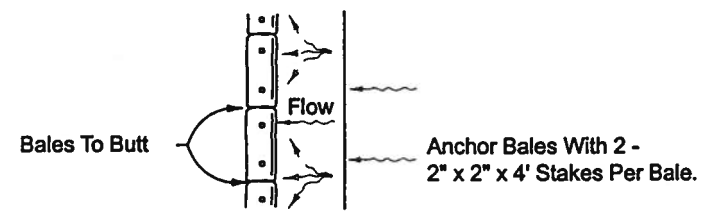


ELEVATION

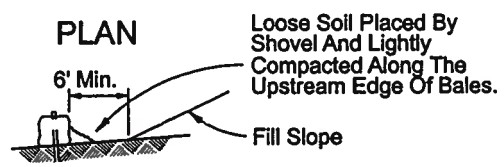
TO BE USED ALONG ALL DITCHES AND AT SELECTED SITES WHERE THE NATURAL GROUND SLOPES TOWARD THE TOE OF SLOPE



*RECOMMENDED SPACING FOR TYPE I HAY BALE BARRIERS.



PLAN



ELEVATION

TO BE USED AT SELECTED SITES WHERE THE NATURAL GROUND SLOPES AWAY FROM THE TOE OF SLOPE

STAKED HAY BALES

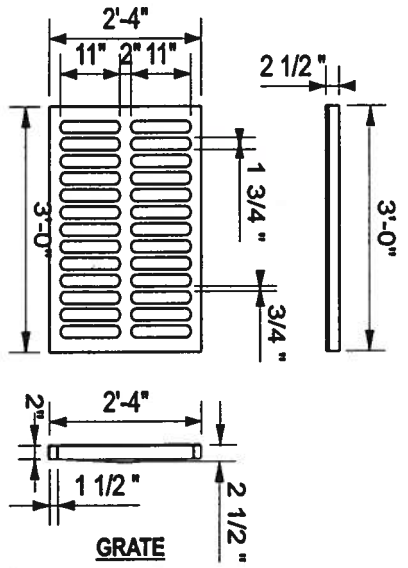
DATE	REVISION NOTES

P.O. Box 187
130 West Howard Street
Live Oak FL, 32064
Phone: (386) 362-3678
Fax: (386) 362-6133
STRUCTURAL/CIVIL ENGINEERS

SLAY ALL-STATE BUILDING
EROSION CONTROL
NOTES AND DETAILS

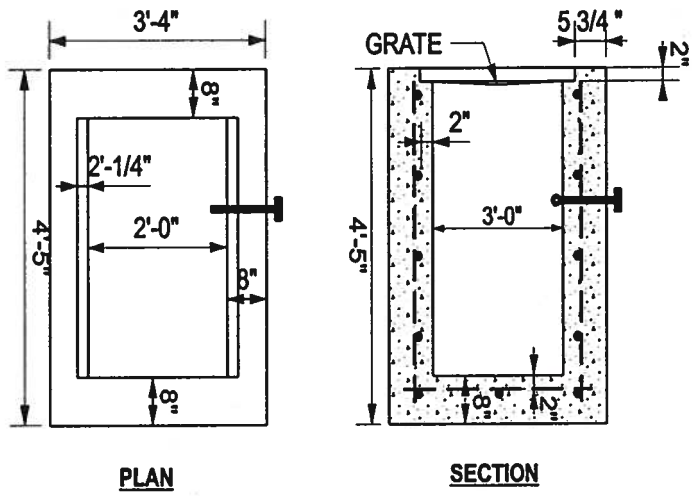
PROJECT NUMBER
PF06-162

SHEET
6



GRATE

APPROX. WEIGHT 235 Lbs.

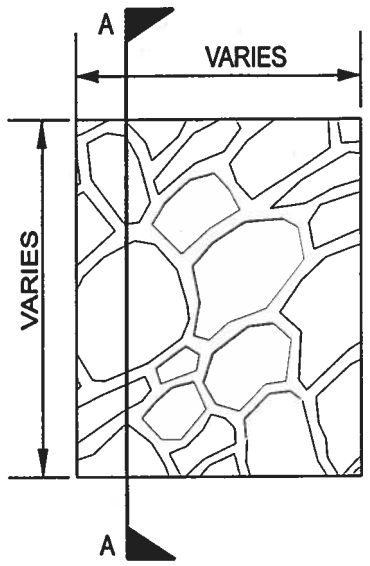


PLAN SECTION

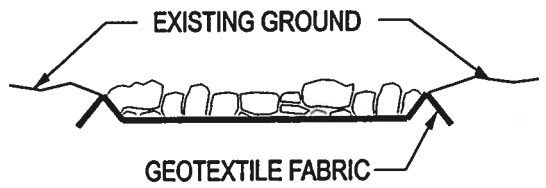
TYPE "C" INLET

NTS

RECOMMENDED MAXIMUM PIPE SIZE:
2'-0" WALL 18" PIPE
3'-1" WALL 24" PIPE (18" WHERE ON 18" PIPE ENTERS A 2'-0" WALL)



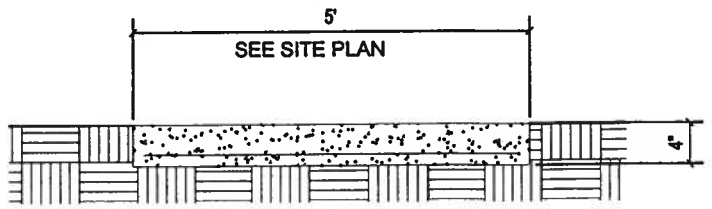
PLAN VIEW



SECTION A-A

RUBBLE PAD DETAIL

NTS

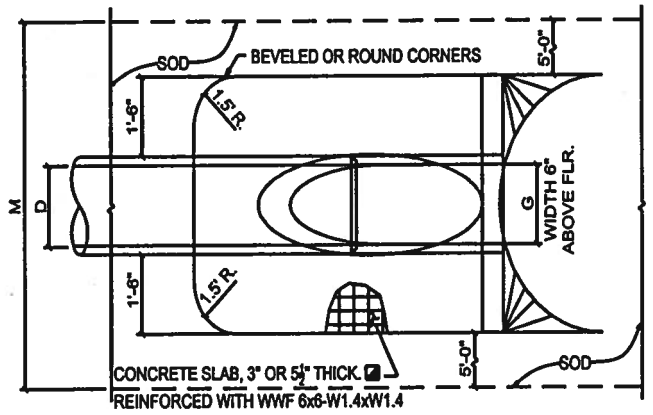


REINFORCED WITH 6x6x10/10 WWM.
PROVIDE 1/8"-1/4" CONTRACTION JOINTS AT 10' CENTERS MAXIMUM.

STANDARD SIDEWALK DETAIL

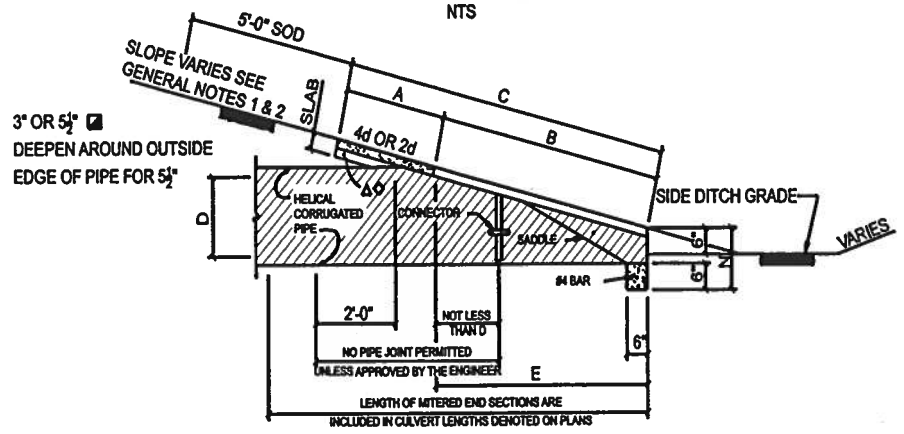
NTS

DIMENSIONS AND QUANTITIES												
4d SLOPE	D	X	A	B	C	E	F	G	M SINGLE PIPE	N	CONC. (cy) SINGLE PIPE	CONC. (sy) SINGLE PIPE
	15"	2'-7"	2.5'	3.09'	5.59'	3.0'	7"	1.23'	4.33'	1.04'	0.44	22
	18"	2'-10"	2.5'	4.12'	6.62'	4.0'	8"	1.41'	4.58'	1.04'	0.49	24
	24"	3'-5"	2.5'	6.18'	8.68'	6.0'	10'	1.73'	5.08'	1.04'	0.65	27



TOP VIEW - SINGLE PIPE

NTS



SECTION

NTS

* SLOPE: 4d MITER: TO C.L. PIPE FOR PIPES 16" AND SMALLER.
2d FOR PIPES 24" AND LARGER.
2d MITER: TO C.L. PIPE FOR PIPES 18" AND SMALLER.
1d FOR PIPES 24" AND LARGER.

DATE | REVISION NOTES

P.O. Box 187
130 West Howard Street
Live Oak FL, 32064
Phone: (386) 362-3678
Fax: (386) 362-6133
STRUCTURAL/CIVIL ENGINEERS

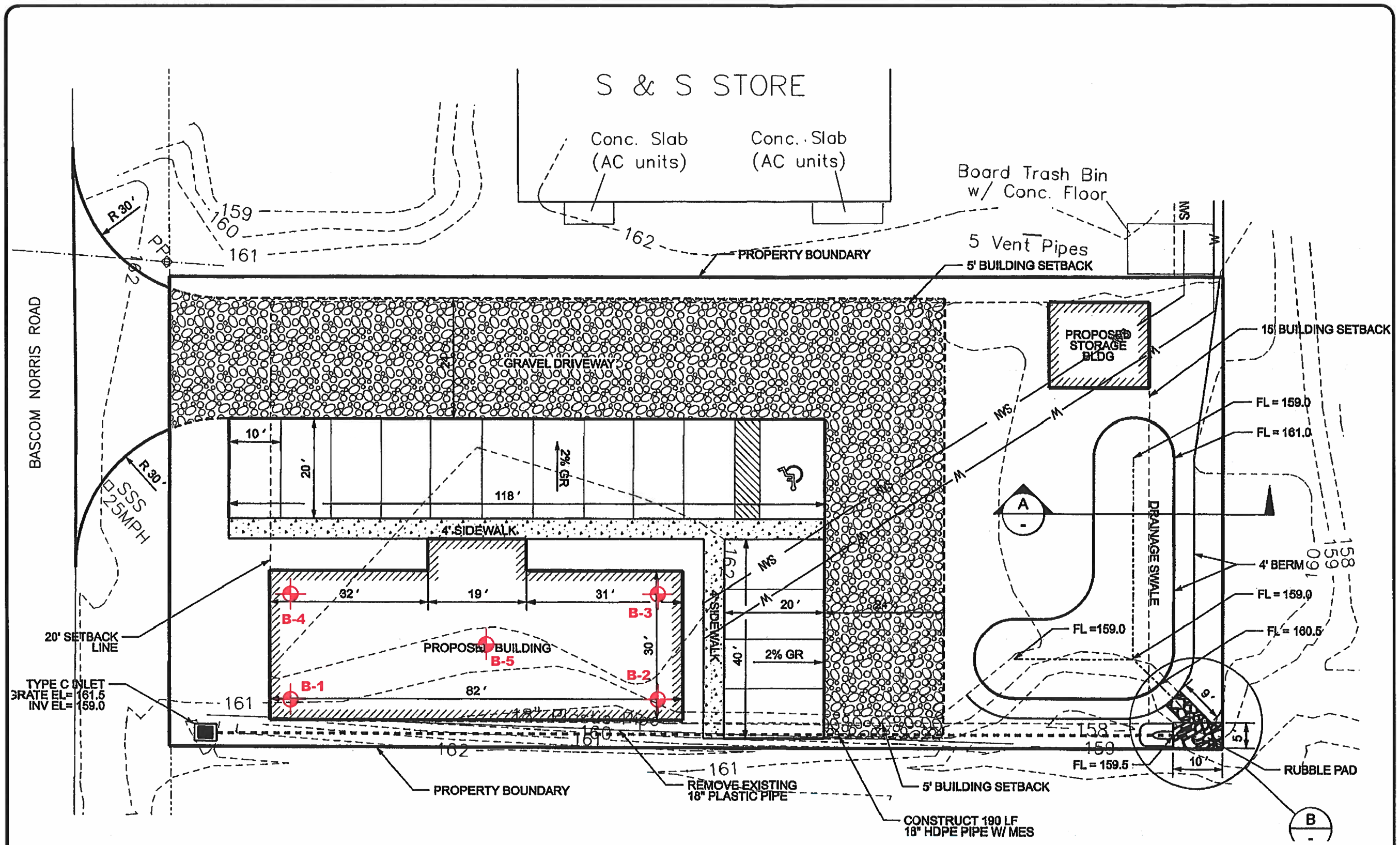
SLAY ALL-STATE BUILDING

MISCELLANEOUS DETAILS

PROJECT NUMBER
PF06-162

SHEET
7

1/02/07



LEGEND

⊕ **STANDARD PENETRATION TEST BORING**

NOTE: ALL SOIL TEST BORING LOCATIONS SHOWN ARE APPROXIMATE.

CLIENT: CONCEPT CONSTRUCTION

DRAWN BY:	K.D.	DATE:	12/14/06
CHECKED BY:	F.A.	DATE:	12/14/06
SCALE:	1"=20'	ACADFILE:	28416-E
PROJECT NO:	28416-007-02	REPORT NO:	62119

SLAY / ALL-STATE BUILDING

VICINITY OF STATE ROAD 247 & BASCOM NORRIS ROAD
LAKE CITY, COLUMBIA COUNTY, FLORIDA

BORING LOCATION PLAN

UNIVERSAL ENGINEERING SCIENCES

PAGE NO: A - 1