DATE 12/29/2011

Columbia County Building Permit

This Permit Must Be Prominently Posted on Premises During Construction

PERMIT
000029848

APPLICANT BO ROYALS PHONE 754-6737

ADDRESS 4068 US HWY 90 WEST LAKE CITY FL 32055

OWNER RANDALL DENMARK PHONE 352-672-0280

ADDRESS 759 SW WESTER DR LAKE CITY FL 32024

CONTRACTOR WILLIAM HARPER PHONE 386-623-3873

LOCATION OF PROPERTY 47 S, L WETER DR, 1/2 MILE TO PROPERTY ON LEFT

TYPE DEVELOPMENT MODULAR HOME ON FRAM ESTIMATED COST OF CONSTRUCTION 0.00

HEATED FLOOR AREA _____ TOTAL AREA _____ HEIGHT ____ STORIES ____

FOUNDATION _____ WALLS _____ ROOF PITCH _____ FLOOR _____

LAND USE & ZONING AG-3 MAX. HEIGHT 35

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

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

PARCEL ID 30-4S-17-08912-003 SUBDIVISION _____

LOT ____ BLOCK ____ PHASE ____ UNIT ____ TOTAL ACRES 2.20

Culvert Permit No.	Culvert Waiver	Contractor's License Number	Applicant/Owner/Contractor
		RR82811402	

Driveway Connection	Septic Tank Number	LU & Zoning checked by	Approved for Issuance	New Resident
EXISTING	11-0509	BK	TC	N

COMMENTS: FLOOR ONE FOOT ABOVE THE ROAD

SECTION 14.9 SPECIAL FAMILY LOT FOR GRANDSON

Check # or Cash 1188

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

Insulation _____ 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

Pool _____ date/app. by

Permanent power _____ date/app. by

C.O. Final _____ date/app. by

Culvert _____ date/app. by

Pump pole _____ date/app. by

Utility Pole _____ date/app. by

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

Reconnection _____ date/app. by

RV _____ date/app. by

Re-roof _____ date/app. by

BUILDING PERMIT FEE $ 0.00 CERTIFICATION FEE $ 0.00 SURCHARGE FEE $ 0.00

MISC. FEES $ 350.00 ZONING CERT. FEE $ 50.00 FIRE FEE $ 0.00 WASTE FEE $ _____

FLOOD DEVELOPMENT FEE $ _____ FLOOD ZONE FEE $ 25.00 CULVERT FEE $ _____ **TOTAL FEE** 425.00

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."

EVERY PERMIT ISSUED SHALL BECOME INVALID UNLESS THE WORK AUTHORIZED BY SUCH PERMIT IS COMMENCED WITHIN 180 DAYS AFTER ITS ISSUANCE, OR IF THE WORK AUTHORIZED BY SUCH PERMIT IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AFTER THE TIME THE WORK IS COMMENCED. A VALID PERMIT RECIEVES AN APPROVED INSPECTION EVERY 180 DAYS. WORK SHALL BE CONSIDERED NOT SUSPENDED, ABANDONED OR INVALID WHEN THE PERMIT HAS RECIEVED AN APPROVED INSPECTION WITHIN 180 DAYS OT THE PREVIOUS INSPECTION.

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

SUBCONTRACTOR VERIFICATION FORM

PERMIT NUMBER 29848 CONTRACTOR W/M. HARPER PHONE 386.623.3873

THIS FORM MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A PERMIT

In Columbia County one permit will cover all trades doing work at the permitted site. It is REQUIRED that we have records of the subcontractors who actually did the trade specific work under the permit. Per Florida Statute 440 and Ordinance 89-6, a contractor shall require all subcontractors to provide evidence of workers' compensation or exemption, general liability insurance and a valid Certificate of Competency license in Columbia County.

Any changes, the permitted contractor is responsible for the corrected form being submitted to this office prior to the start of that subcontractor beginning any work. Violations will result in stop work orders and/or fines.

ELECTRICAL	Print Name Kenny Moore License #: ER 0000691	Signature Phone #: 386-752-6565
MECHANICAL/ A/C _____	Print Name License #:	Signature Phone #:
PLUMBING/ GAS	Print Name License #:	Signature Phone #:
ROOFING	Print Name License #:	Signature Phone #:
SHEET METAL	Print Name License #:	Signature Phone #:
FIRE SYSTEM/ SPRINKLER	Print Name License#:	Signature Phone #:
SOLAR	Print Name License #:	Signature Phone #:

Specialty License	License Number	Sub-Contractors Printed Name	Sub-Contractors Signature
MASON			
CONCRETE FINISHER			
FRAMING			
INSULATION			
STUCCO			
DRYWALL			
PLASTER			
CABINET INSTALLER			
PAINTING			
ACOUSTICAL CEILING			
GLASS			
CERAMIC TILE			
FLOOR COVERING			
ALUM/VINYL SIDING			
GARAGE DOOR			
METAL BLDG ERECTOR			

F. S. 440.103 Building permits; identification of minimum premium policy.--Every employer shall, as a condition to applying for and receiving a building permit, show proof and certify to the permit issuer that it has secured compensation for its employees under this chapter as provided in ss. 440.10 and 440.38, and shall be presented each time the employer applies for a building permit.

RANDALL JERNIGAN

Columbia County Building Permit Application

☑ Harper LIABICITY

For Office Use Only Application # 1112-32 Date Received 12/15 By TW Permit # 29848

Zoning Official BLK Date 21 DEC 2011 Flood Zone X Land Use AG Zoning Ag3

FEMA Map # N/A Elevation N/A MFE 1' above Rd River N/A Plans Examiner T.C. Date 12.21.11

Comments Section 14.9 Special Family Lot Grandson

☑ NOC ☐ EH ☐ Deed or PA ☑ Site Plan ☐ State Road Info ☑ Well letter ☑ 911 Sheet ☐ Parent Parcel #

☐ Dev Permit # ☐ In Floodway ☑ Letter of Auth. from Contractor ☐ F W Comp. letter

IMPACT FEES: EMS Fire Corr ☑ Sub VF Form ☑ Elect. ☑ plumb

Road/Code School = TOTAL (Suspended) ☑ App Fee Paid

Septic Permit No. 11-0509 Bo Royals Fax 288. 9194

Name Authorized Person Signing Permit ~~WILLIAM L. HARPER~~ Phone 386. 288. 9194 1st

Address 119 SW HOBBY PL., LAKE CITY, FL. 32024

Owners Name RANDELL S. DENMARK Phone 352-692-0280

911 Address 759 SW WESTER, LAKE CITY, FL. 32024

Contractors Name WILLIAM L. HARPER Phone 386-623-2873 2nd

Address 119 SW HOBBY PL., LAKE CITY, FL. 32024

Fee Simple Owner Name & Address

Bonding Co. Name & Address

Architect/Engineer Name & Address CURTIS KEEN 9263 us RD 47 L.C. FL. 32060

Mortgage Lenders Name & Address FIRST FED.

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

Property ID Number 30-4S-17-08912-003 Estimated Cost of Construction $100,000.00

Subdivision Name Lot Block Unit Phase

Driving Directions GO HWY 47 SOUTH 1 mi. PAST I-75, TURN LEFT ON WESTER DR., GO ½ MILE, PROPERTY ON LEFT

Number of Existing Dwellings on Property Ø

Construction of ON FRAME MODULAR HOME Total Acreage 2.12 Lot Size

Do you need a - Culvert Permit or Culvert Waiver or (Have an Existing Drive) Total Building Height 16'

Actual Distance of Structure from Property Lines - Front 260' Side 95' Side 49' Rear 141'

Number of Stories 1 Heated Floor Area 1928' Total Floor Area 1928' Roof Pitch 6:12

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction. **CODE:** Florida Building Code 2007 with 2009 Supplements and the 2008 National Electrical Code.

OK# 1188

TIME LIMITATIONS OF APPLICATION : An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

TIME LIMITATIONS OF PERMITS: Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time work is commenced. A valid permit receives an approved inspection every 180 days. Work shall be considered not suspended, abandoned or invalid when the permit has received an approved inspection within 180 days of the previous approved inspection.

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

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

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

OWNERS CERTIFICATION: I CERTIFY THAT ALL THE FOREGOING INFORMATION IS ACCURATE AND THAT ALL WORK WILL BE DONE IN COMPLIANCE WITH ALL APPLICABLE LAWS REGULATING CONSTRUCTION AND ZONING.

NOTICE TO OWNER: There are some properties that may have deed restrictions recorded upon them. These restrictions may limit or prohibit the work applied for in your building permit. You must verify if your property is encumbered by any restrictions or face possible litigation and or fines.

(Owners Must Sign All Applications Before Permit Issuance.)

Scott Dennis

Owners Signature ****OWNER BUILDERS MUST PERSONALLY APPEAR AND SIGN THE BUILDING PERMIT.**

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

Contractor's Signature (Permitee)

Contractor's License Number RR28281140 2
Columbia County
Competency Card Number 000258

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 15th **day of** December **20**11.

Personally known ___ **or Produced Identification** ___

State of Florida Notary Signature (For the Contractor)

SEAL:

WILLIAM P. CREWS
Notary Public - State of Florida
My Comm. Expires Aug 21, 2015
Commission # EE 123888
Bonded Through National Notary Assn.

JOB SPECIFIC
FOR: DENMARK PERMIT

COLUMBIA COUNTY BUILDING DEPARTMENT
LETTER OF AUTHORIZATION TO SIGN FOR PERMITS
135 NE Hernando Ave, Suite B-21, Lake City, FL 32055
Phone: 386-758-1008 Fax: 386-758-2160

I, William L. Harper (license holder name), licensed qualifier

for W.L. Harper Construction (company name), do certify that

the below referenced person(s) listed on this form is/are **employed** by me directly or through an employee leasing arrangement; or, is an officer of the corporation; or, partner as defined in Florida Statutes Chapter 468, and the said person(s) is/are under my direct supervision and control and is/are authorized to purchase permits, call for inspections, and sign on my behalf.

Printed Name of Person Authorized	Signature of Authorized Person
1. Bo Royals	1. Bo Royals
2.	2.
3.	3.
4.	4.
5.	5.

I, the license holder, realize that I am responsible for all permits purchased, and all work done under my license and fully responsible for compliance with all Florida Statutes, Codes, and Local Ordinances. I understand that the State and County Licensing Boards have the power and authority to discipline a license holder for violations committed by him/her, his/her agents, officers, or employees and that I have full responsibility for compliance with all statutes, codes and ordinances inherent in the privilege granted by issuance of such permits.

If at any time the person(s) you have authorized is/are no longer employee(s), or officer(s), you must notify this department in writing of the changes and submit a new letter of authorization form, which will supersede all previous lists. Failure to do so may allow unauthorized persons to use your name and/or license number to obtain permits.

License Holders Signature (Notarized) | RR2828114 02 License Number | 12/30/2011 Date

NOTARY INFORMATION:
STATE OF: Florida COUNTY OF: Columbia

The above license holder, whose name is William L. Harper, personally appeared before me and is known by me or has produced identification (type of I.D.)_____ on this 30th day of December, 2011.

NOTARY'S SIGNATURE

(Seal/Stamp)
WILLIAM P. CREWS
Notary Public - State of Florida
My Comm. Expires Aug 21, 2015
Commission # EE 123888
Bonded Through National Notary Assn.

HUGHES WELL DRILLING & PUMP SERVICE, LLC

12367 N US HWY 441 OFFICE: 386.752.1840
LAKE CITY, FLORIDA 32055 FAX: 386.755.2934

hugwell1840@aol.com

Columbia County Building and Zoning
PO Box 1529
Lake City, FL. 32056-1529

Attn: Janis

Re: Randall S. Denmark 30-04-17 08912-003

1). 4" Deep well
2). 1-hp pump-18gpm
3). 81 Gallon Bladder tank eqv. To a 220 gallon galvanized tank
4). 1¼" pvc drop pipe

If you have any further questions, please feel free to phone me at the above number.

Sincerely,

Ronnie Hughes

SUBCONTRACTOR VERIFICATION FORM

APPLICATION NUMBER _____ CONTRACTOR _____ PHONE _____

THIS FORM MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A PERMIT

In Columbia County one permit will cover all trades doing work at the permitted site. It is REQUIRED that we have records of the subcontractors who actually did the trade specific work under the permit. Per Florida Statute 440 and Ordinance 89-6, a contractor shall require all subcontractors to provide evidence of workers' compensation or exemption, general liability insurance and a valid Certificate of Competency license in Columbia County.

Any changes, the permitted contractor is responsible for the corrected form being submitted to this office prior to the start of that subcontractor beginning any work. Violations will result in stop work orders and/or fines.

ELECTRICAL	Print Name Michael Conner License #: ER13013192	Signature Michael Conner Phone #: 965-9005
MECHANICAL/ A/C ____	Print Name Shatto Heat & Air License #: Jim Shatto	Signature CACO57875 Phone #: 496-8824
PLUMBING/ GAS	Print Name MARK BASS License #: CFCO 57219	Signature M B M Phone #: 386-752-8650
ROOFING	Print Name _____ License #:	Signature _____ Phone #:
SHEET METAL	Print Name _____ License #:	Signature _____ Phone #:
FIRE SYSTEM/ SPRINKLER	Print Name _____ License#:	Signature _____ Phone #:
SOLAR	Print Name _____ License #:	Signature _____ Phone #:

MASON			
CONCRETE FINISHER			
FRAMING			
INSULATION			
STUCCO			
DRYWALL			
PLASTER			
CABINET INSTALLER			
PAINTING			
ACOUSTICAL CEILING			
GLASS			
CERAMIC TILE			
FLOOR COVERING			
ALUM/VINYL SIDING			
GARAGE DOOR			
METAL BLDG ERECTOR			

F. S. 440.103 Building permits; identification of minimum premium policy.--Every employer shall, as a condition to applying for and receiving a building permit, show proof and certify to the permit issuer that it has secured compensation for its employees under this chapter as provided in ss. 440.10 and 440.38, and shall be presented each time the employer applies for a building permit.

Contractor Forms: Subcontractor Form: 1/09

TOTAL P.02

MOBILE HOME INSTALLATION SUBCONTRACTOR VERIFICATION FORM

APPLICATION NUMBER 1112-32 CONTRACTOR Bill Herpen PHONE

THIS FORM MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A PERMIT

In Columbia County one permit will cover all trades doing work at the permitted site. It is REQUIRED that we have records of the subcontractors who actually did the trade specific work under the permit. Per Florida Statute 440 and Ordinance 89-6, a contractor shall require all subcontractors to provide evidence of workers' compensation or exemption, general liability insurance and a valid Certificate of Competency license in Columbia County.

Any changes, the permitted contractor is responsible for the corrected form being submitted to this office prior to the start of that subcontractor beginning any work. Violations will result in stop work orders and/or fines.

ELECTRICAL	Print Name License #:	Signature Phone #:
✓ MECHANICAL/ A/C 770	Print Name Timothy Shatto License #: CAC057875	Signature Timothy Shatto Phone #: 386-496-8224
PLUMBING/ GAS	Print Name License #:	Signature Phone #:

Specialty Licensee	License Number	Sub-Contractor's Printed Name	Sub-Contractor's Signature
MASON			
CONCRETE FINISHER			

F. S. **440.103 Building permits; identification of minimum premium policy.**--Every employer shall, as a condition to applying for and receiving a building permit, show proof and certify to the permit issuer that it has secured compensation for its employees under this chapter as provided in ss. 440.10 and 440.38, and shall be presented each time the employer applies for a building permit.

Contractor Form, Subcontractor Sheet (2)

TOTAL P.02

THIS INSTRUMENT WAS PREPARED BY:

TERRY McDAVID
POST OFFICE BOX 1328
LAKE CITY, FL 32056-1328

RETURN TO:

TERRY McDAVID
POST OFFICE BOX 1328
LAKE CITY, FL 32056-1328

Grantee S.S. No. [redacted]

Property Appraiser's
Parcel Identification No.

Recording Fee $ 15.00
Documentary Stamp $ .70

Inst:[redacted] Date:02/28/2005 Time:12:59
Doc Stamp-Deed : 0.70
MK DC,P.DeWitt Cason,Columbia County B:1039 P:312

WARRANTY DEED

THIS INDENTURE, made this 17th day of August, 2000, BETWEEN FRANK C. JONES and his wife, EMALINE JONES, whose post office address is Route 6, Box 411, Lake City, Florida 32025, of the County of Columbia, State of Florida, grantor*, and RANDALL SCOTT DENMARK, whose post office address is ~~Route 9, Box 369~~ 201 SW Wester DR 2, Lake City, Florida 32024, of the County of Columbia, State of Florida, grantee*.

WITNESSETH: that said grantor, for and in consideration of LOVE AND AFFECTION 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 and assigns forever, the following described land, situate, lying and being in Columbia County, Florida, to-wit:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF.

SUBJECT TO: Restrictions, easements and outstanding mineral rights of record, if any, and taxes for the current year.

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

*"Grantor" and "grantee" are used for singular or plural, as context requires.

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

Inst:2005004559 Date:02/28/2005 Time:12:59
Doc Stamp-Deed : 0.70
DC,P.DeWitt Cason,Columbia County B:1039 P:313

Signed, sealed and delivered
in our presence:

(First Witness)
DeEtte F. Brown
Printed Name

FRANK C. JONES (SEAL)

(Second Witness)
Crystal L. Brunner
Printed Name

EMALINE JONES (SEAL)

STATE OF FLORIDA
COUNTY OF COLUMBIA

The foregoing instrument was acknowledged before me this 17th day of August, 2000, by FRANK C. JONES and his wife, EMALINE JONES, who are personally known to me or who have produced _____ as identification and who did not take an oath.

My Commission Expires:

Notary Public
Printed, typed, or stamped name:

DE ETTE F. BROWN
MY COMMISSION # CC 774023
EXPIRES: October 22, 2002
Bonded Thru Notary Public Underwriters

EXHIBIT "A"

Inst:2005004559 Date:02/28/2005 Time:12:59
Doc Stamp-Deed : 0.70
_____DC,P.DeWitt Cason,Columbia County B:1039 P:314

COMMENCE AT THE NORTHEAST CORNER OF THE NORTHWEST 1/4 OF SECTION 31, TOWNSHIP 4 SOUTH, RANGE 17 EAST, COLUMBIA COUNTY, FLORIDA AND RUN THENCE S 3°52'53" W ALONG THE EAST LINE OF SAID NORTHWEST 1/4, 64.36 FEET TO THE NORTH RIGHT-OF-WAY LINE OF KING ROAD; THENCE N 88°47'17" W ALONG SAID NORTH RIGHT-OF-WAY LINE, 233.98 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE N 88°47'17" W STILL ALONG SAID NORTH RIGHT-OF-WAY LINE, 215.44 FEET; THENCE N 1°24'56" W, 433.84 FEET; THENCE S 88°28'47" E, 227.93 FEET; THENCE S 0°14'05" W, 366.92 FEET TO THE SOUTH LINE OF SECTION 30, TOWNSHIP 4 SOUTH, RANGE 17 EAST; THENCE S 0°12'32" W, 65.30 FEET TO THE POINT OF BEGINNING. CONTAINING 2.20 ACRES, MORE OR LESS. SAID LANDS BEING IN THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 31 AND THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 30, ALL IN TOWNSHIP 4 SOUTH, RANGE 17 EAST.

Columbia County Property Appraiser

DB Last Updated: 11/15/2011

2011 Tax Year

Tax Collector | Tax Estimator | Property Card | Parcel List Generator | Interactive GIS Map | Print

Parcel: 30-4S-17-08912-003

<< Next Lower Parcel | Next Higher Parcel >>

<< Prev Search Result: 4 of 4

Owner & Property Info

Owner's Name	DENMARK RANDALL SCOTT		
Mailing Address	701 SW WESTER DRIVE LAKE CITY, FL 32024		
Site Address	WESTER DRIVE		
Use Desc. (code)	VACANT (000000)		
Tax District	2 (County)	**Neighborhood**	30417
Land Area	2.200 ACRES	**Market Area**	06
Description	NOTE: This description is not to be used as the Legal Description for this parcel in any legal transaction.		

COMM AT NE COR OF NW1/4 OF SEC 31-4S-17E, RUN S 64.36 FT TO N R/W KING RD, RUN W 233.98 FT TO POB, CONT W 215.44 FT, N 433.84 FT, E 227.93 FT, S 366.92 FT TO S LINE SEC 30, CONT S 65.30 FT TO POB. (SMALL PORTION LYING IN SEC 31 TWP 4S, RGE 17E). ORB 1039-312

Property & Assessment Values

2011 Certified Values		
Mkt Land Value	cnt: (0)	$19,045.00
Ag Land Value	cnt: (1)	$0.00
Building Value	cnt: (0)	$0.00
XFOB Value	cnt: (0)	$0.00
Total Appraised Value		$19,045.00
Just Value		$19,045.00
Class Value		$0.00
Assessed Value		$19,045.00
Exempt Value		$0.00
Total Taxable Value		Cnty: $19,045 Other: $19,045 | Schl: $19,045

2012 Working Values

NOTE:
2012 Working Values are NOT certified values and therefore are subject to change before being finalized for ad valorem assessment purposes.

Show Working Values

Sales History

Show Similar Sales within 1/2 mile

Sale Date	OR Book/Page	OR Code	Vacant / Improved	Qualified Sale	Sale RCode	Sale Price
8/17/2000	1039/312	WD	V	U	01	$100.00

Building Characteristics

Bldg Item	Bldg Desc	Year Blt	Ext. Walls	Heated S.F.	Actual S.F.	Bldg Value
NONE						

Extra Features & Out Buildings

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
NONE						

Land Breakdown

Lnd Code	Desc	Units	Adjustments	Eff Rate	Lnd Value
000000	VAC RES (MKT)	2.2 AC	1.00/1.00/1.00/1.00	$7,791.19	$17,140.00

COLUMBIA COUNTY 9-1-1 ADDRESSING

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

Addressing Maintenance

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

DATE REQUESTED: 9/28/2011 **DATE ISSUED:** 9/28/2011

ENHANCED 9-1-1 ADDRESS:

759 SW WESTER DR

LAKE CITY FL 32024

PROPERTY APPRAISER PARCEL NUMBER:

30-4S-17-08912-003

Remarks:

ADDRESS FOR PROPOSED STRUCTURE ON PARCEL.

Address Issued By: SIGNED: / RONAL N CROFT

Columbia County 9-1-1 Addressing / GIS Department

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

2093

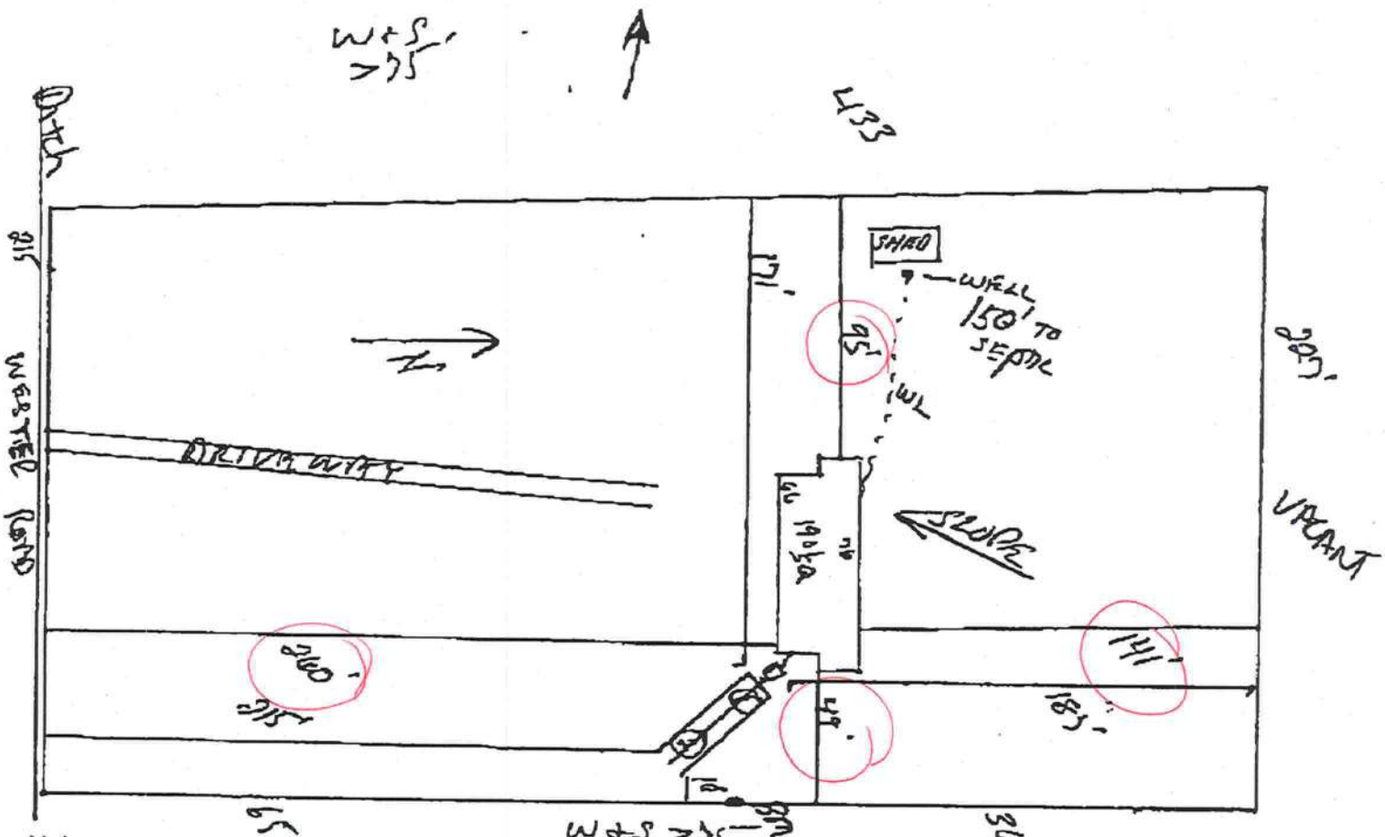
STATE OF FLORIDA
DEPARTMENT OF HEALTH
APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 11-0509

Dammark

PART II - SITEPLAN

Scale: 1 inch = 40 feet.



Notes: _____

Site Plan submitted by: Rocky D 7-0 Columbia CHD

Plan Approved X Not Approved ____

By Sallie Reed Env Health Director

MASTER CONTRACTOR

Date 12-14-11

County Health Department

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

CERTIFICATE OF

M/H 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 30-4S-17-08912-003 **Building permit No.** 000029848

Permit Holder WILLIAM HARPER

Owner of Building RANDALL DENMARK

Location: 759 SW WESTER DRIVE, LAKE CITY, FL 32024

Date: 01/24/2012

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)

FORM 1100A-08

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs Residential Performance Method A

Project Name:	EZ-476	Builder Name:	
Street:		Permit Office:	
City, State, Zip:	Lake City , FL ,	Permit Number:	
Owner:		Jurisdiction:	
Design Location:	FL, Jacksonville		

1. New construction or existing	New (From Plans)
2. Single family or multiple family	Single-family
3. Number of units, if multiple family	1
4. Number of Bedrooms	3
5. Is this a worst case?	No
6. Conditioned floor area (ft²)	1928

7. Windows

	Description	Area
a. U-Factor: SHGC:	Dbl, U=0.37 SHGC=0.28	233.67 ft²
b. U-Factor: SHGC:	N/A	ft²
c. U-Factor: SHGC:	N/A	ft²
d. U-Factor: SHGC:	N/A	ft²
e. U-Factor: SHGC:	N/A	ft²

8. Floor Types

	Insulation	Area
a. Crawlspace	R=0.0	1928.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types

	Insulation	Area
a. Frame - Wood, Exterior	R=19.0	1785.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types

	Insulation	Area
a. Under Attic (Vented)	R=35.0	1928.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts

a. Sup: Interior Ret: Interior AH: Interior Sup. R= 6, 140 ft²

12. Cooling systems

a. Central Unit — Cap: 20 kBtu/hr, SEER: 13

13. Heating systems

a. Electric Heat Pump — Cap: 20 kBtu/hr, HSPF: 7.7

14. Hot water systems

a. Electric — Cap: 40 gallons, EF: 0.97

b. Conservation features: None

15. Credits: None

Glass/Floor Area: 0.121

Total As-Built Modified Loads: 35.12

Total Baseline Loads: 54.55

PASS

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

PREPARED BY: John W Wesley

DATE: 12-21-11

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

OWNER/AGENT: _____

DATE: _____

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

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

BUILDING OFFICIAL: _____

DATE: _____

- **Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with N1110.A.3.**

COLUMBIA COUNTY BUILDING DEPARTMENT — Received for FILE COPY — Code Compliance — PLANS EXAMINER

PROJECT

Title:	EZ-476	Bedrooms:	3	Adress Type:	Street Address
Building Type:	FLAsBuilt	Bathrooms:	0	Lot #	
Owner:		Conditioned Area:	1928	SubDivision:	
# of Units:	1	Total Stories:	1	PlatBook:	
Builder Name:		Worst Case:	No	Street:	
Permit Office:		Rotate Angle:	0	County:	Columbia
Jurisdiction:		Cross Ventilation:		City, State, Zip:	Lake City , FL ,
Family Type:	Single-family	Whole House Fan:			
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

✓	Design Location	TMY Site	IECC Zone	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
____	FL, Jacksonville	FL_JACKSONVILLE_INT	2	32	93	75	70	1281	49	Medium

FLOORS

✓	#	Floor Type	Exposed Perimeter	Wall Ins. R-Value	Area	Floor Joist R-Value	Tile	Wood	Carpet
____	1	Crawlspace	1 ft	0	1928 ft²	19	0	0	1

ROOF

✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	Tested	Deck Insul.	Pitch
____	1	Gable or shed	Composition shingles	2156 ft²	482 ft²	Medium	0.96	No	0	26.6 deg

ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
____	1	Full attic	Vented	300	1928 ft²	N	N

CEILING

✓	#	Ceiling Type	R-Value	Area	Framing Frac	Truss Type
____	1	Under Attic (Vented)	35	1928 ft²	0.11	Wood

WALLS

✓	#	Ornt	Adjacent To	Wall Type	Cavity R-Value	Area	Sheathing R-Value	Framing Fraction	Solar Absor.
____	1	N	Exterior	Frame - Wood	19	622.5 ft²		0.23	0.75
____	2	S	Exterior	Frame - Wood	19	622.5 ft²		0.23	0.75
____	3	E	Exterior	Frame - Wood	19	270 ft²		0.23	0.75
____	4	W	Exterior	Frame - Wood	19	270 ft²		0.23	0.75

12-22-11

DOORS

√	#	Ornt	Door Type	Storms	U-Value	Area
____	1	W	Insulated	None	0.46	20 ft²
____	2	N	Insulated	None	0.46	20 ft²

WINDOWS

Window orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.

√	#	Ornt	Frame	Panes	NFRC	U-Factor	SHGC	Storms	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
____	1	N	Vinyl	Low-E Double	Yes	0.37	0.28	N	62 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	2	S	Vinyl	Low-E Double	Yes	0.37	0.28	N	93 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	3	S	Vinyl	Low-E Double	Yes	0.37	0.28	N	8.33 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	4	E	Vinyl	Low-E Double	Yes	0.37	0.28	N	8.33 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None
____	5	W	Vinyl	Low-E Double	Yes	0.37	0.28	N	62 ft²	1 ft 0 in	0 ft 0 in	HERS 2006	None

INFILTRATION & VENTING

√	Method	SLA	CFM 50	ACH 50	ELA	EqLA	Forced Ventilation Supply CFM	Forced Ventilation Exhaust CFM	Run Time Fraction	Fan Watts
____	Default	0.00036	1821	6.30	99.9	188.0	0 cfm	0 cfm	0	0

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Ductless
____	1	Central Unit	None	SEER: 13	20 kBtu/hr	600 cfm	0.75	False

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Ductless
____	1	Electric Heat Pump	None	HSPF: 7.7	20 kBtu/hr	False

HOT WATER SYSTEM

√	#	System Type	EF	Cap	Use	SetPnt	Conservation
____	1	Electric	0.97	40 gal	60 gal	120 deg	None

SOLAR HOT WATER SYSTEM

√	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
____	None	None			ft²		

DUCTS

√	#	Supply Location	Supply R-Value	Supply Area	Return Location	Return Area	Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF
____	1	Interior	6	140 ft²	Interior	106.5 ft	Default Leakage	Interior				

TEMPERATURES

Programable Thermostat: None

Ceiling Fans:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cooling	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Heating	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Venting	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]

Thermostat Schedule: HERS 2006 Reference

Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68

Code Compliance Cheklist

Residential Whole Building Performance Method A - Details

ADDRESS: Lake City, FL,

PERMIT #:

INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	N1106.AB.1.1	Maximum: .3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	N1106.AB.1.2.1	Caulk, gasket, weatherstrip or seal between: windows/doors & frames, surrounding wall; foundation & wall sole or sill plate; joints between exterior wall panels at corners; utility penetrations; between wall panels & top/bottom plates; between walls and floor. EXCEPTION: Frame walls where a continuous infiltration barrier is installed that extends from, and is sealed to, the foundation to the top plate.	
Floors	N1106.AB.1.2.2	Penetrations/openings > 1/8" sealed unless backed by truss or joint members. EXCEPTION: Frame floors where a continuous infiltration barrier is installed that is sealed to the perimeter, penetrations and seams.	
Ceilings	N1106.AB.1.2.3	Between walls & ceilings; penetrations of ceiling plane to top floor; around shafts, chases, soffits, chimneys, cabinets sealed to continuous air barrier; gaps in gyp board & top plate; attic access. EXCEPTION: Frame ceilings where a continuous infiltration barrier is installed that is sealed at the perimeter, at penetrations and seams.	
Recessed Lighting Fixtures	N1106.AB.1.2.4	Type IC rated with no penetrations, sealed; or Type IC or non-IC rated, installed inside a sealed box with 1/2" clearance & 3" from insulation; or Type IC with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	N1106.AB.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	N1106.AB.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA. have combustion air.	

OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	N1112.AB.3	Comply with efficiency requirements in Table N112.ABC.3. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	N1112.AB.2.3	Spas & heated pools must have covers (except solar heated). Non-commercial pools must have a pump timer. Gas spa & pool heaters must have a minimum thermal efficiency of 78%. Heat pump pool heaters shall have a minimum COP of 4.0.	
Shower heads	N1112.AB.2.4	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distribution Systems	N1110.AB	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated and installed in accordance with the criteria of Section N1110.AB. Ducts in unconditioned attics: R-6 min. insulation.	
HVAC Controls	N1107.AB.2	Separate readily accessible manual or automatic thermostat for each system.	
Insulation	N1104.AB.1 N1102.B.1.1	Ceilings-Min. R-19. Common walls-frame R-11 or CBS R-3 both sides. Common ceiling & floors R-11.	

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 64

The lower the EnergyPerformance Index, the more efficient the home.

1. New construction or existing		New (From Plans)	
2. Single family or multiple family		Single-family	
3. Number of units, if multiple family		1	
4. Number of Bedrooms		3	
5. Is this a worst case?		No	
6. Conditioned floor area (ft²)		1928	
7. Windows**	Description	Area	
a. U-Factor: SHGC:	Dbl, U=0.37 SHGC=0.28	233.67 ft²	
b. U-Factor: SHGC:	N/A	ft²	
c. U-Factor: SHGC:	N/A	ft²	
d. U-Factor: SHGC:	N/A	ft²	
e. U-Factor: SHGC:	N/A	ft²	
8. Floor Types	Insulation	Area	
a. Crawlspace	R=0.0	1928.00 ft²	
b. N/A	R=	ft²	
c. N/A	R=	ft²	
9. Wall Types	Insulation	Area	
a. Frame - Wood, Exterior	R=19.0	1785.00 ft²	
b. N/A	R=	ft²	
c. N/A	R=	ft²	
d. N/A	R=	ft²	
10. Ceiling Types	Insulation	Area	
a. Under Attic (Vented)	R=35.0	1928.00 ft²	
b. N/A	R=	ft²	
c. N/A	R=	ft²	
11. Ducts			
a. Sup: Interior Ret: Interior AH: Interior	Sup. R= 6, 140 ft³		
12. Cooling systems			
a. Central Unit	Cap: 20 kBtu/hr SEER: 13		
13. Heating systems			
a. Electric Heat Pump	Cap: 20 kBtu/hr HSPF: 7.7		
14. Hot water systems			
a. Electric	Cap: 40 gallons EF: 0.97		
b. Conservation features	None		
15. Credits	None		

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

Builder Signature: _____ Date: _____

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

GREAT SEAL OF THE STATE OF FLORIDA
IN GOD WE TRUST

*Note: The home's estimated Energy Performance Index is only available through the EnergyGauge USA - FlaRes2008 computer program. This is not a Building Energy Rating. If your Index is below 100, your home may qualify for incentives if you obtain a Florida Energy Gauge Rating. Contact the Energy Gauge Hotline at (321) 638-1492 or see the Energy Gauge web site at energygauge.com for information and a list of certified Raters. For information about Florida's Energy Efficiency Code for Building Construction, contact the Department of Community Affairs at (850) 487-1824.

**Label required by Section 13-104.4.5 of the Florida Building Code, Building, or Section B2.1.1 of Appendix G of the Florida Building Code, Residential, if not DEFAULT.

Job	Truss	Truss Type	Qty	Ply	
MH7133	P177-6FL	HINGED COMMON	1	1	I16039376

Wood Perfect Ltd, Guin, AL 35563 — Job Reference (optional) — 7.14. e Oct 1 2009 MiTek Industries, Inc. Fri Dec 04 11:26:01 2009 Page 1

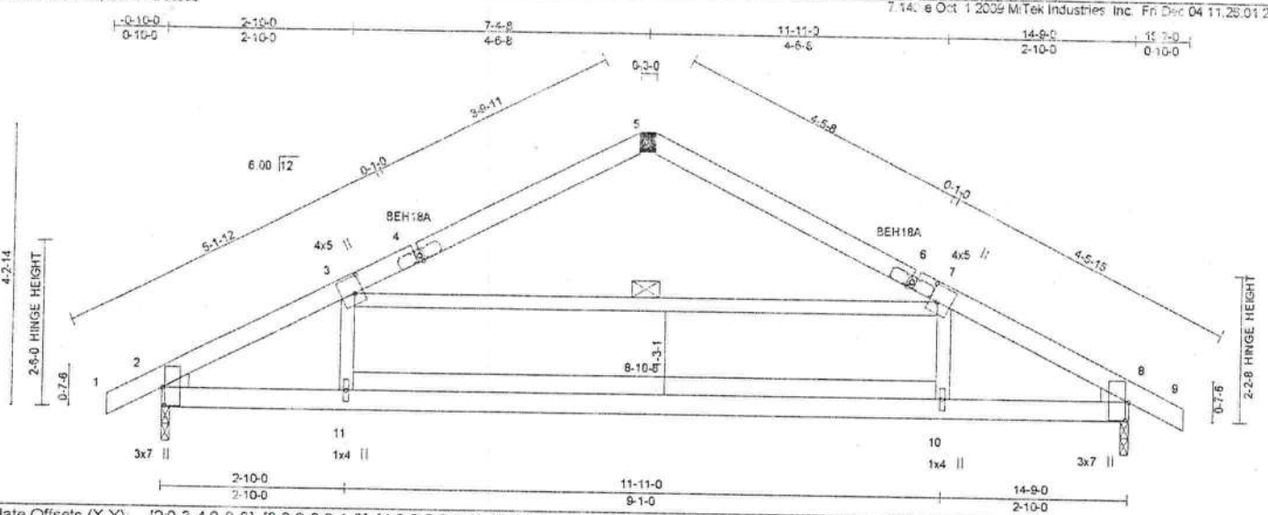


Plate Offsets (X,Y): [2:0-3-4,0-0-6], [3:0-3-0,0-1-8], [4:0-0-5,0-1-2], [6:0-0-5,0-1-2], [7:0-3-0,0-1-8], [8:0-3-4,0-0-8]

SPACING: 2-0-0		**SPACING:** 1-4-0		**SPACING**	2-0-0	**CSI**		**DEFL**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
LOADING (psf)		**LOADING** (psf)		Plates Increase	1.15	TC	0.91	Vert(LL)	0.28	10-11	>632	240	MT20	197/144
TCLL	20.0	TCLL	30.0	Lumber Increase	1.15	BC	0.91	Vert(TL)	-0.40	10-11	>443	180	MII18	141/138
TCDL	10.0	TCDL	15.0	Rep Stress Incr	YES	WB	0.60	Horz(TL)	-0.03	8	n/a	n/a		
BCLL	0.0	BCLL	0.0	Code	FBC2007/TPI2002	(Matrix)							Weight: 48 lb	
BCDL	10.0	BCDL	15.0											

LUMBER
TOP CHORD 2 X 4 SPF No.2
BOT CHORD 2 X 4 SPF No.2
WEBS 2 X 3 SPF Stud
WEDGE
Left: 2 X 3 SPF Stud, Right: 2 X 3 SPF Stud

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins [P]
BOT CHORD Rigid ceiling directly applied or 5-5-12 oc bracing.
WEBS 1 Row at midpt 3-7

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=639/0-1-8, 8=639/0-1-8
Max Horz 2=137(LC 6)
Max Uplift 2=-731(LC 6), 8=-732(LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-10/7, 2-3=-1042/1248, 3-5=-331/507, 5-7=-323/487, 7-8=-1065/1302, 8-9=-10/7
BOT CHORD 2-11=-988/869, 10-11=-988/869, 8-10=-988/869
WEBS 3-11=-35/319, 7-10=-98/339, 3-7=-642/935

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
5=209/509/268/0

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-05; 140mph (3-second gust) @24in o.c.; TCDL=2.8psf; BCDL=3.2psf; (Alt. 150mph @16in o.c.; TCDL=4.2psf; BCDL=4.8psf); h=30ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) All plates are MT20 plates unless otherwise indicated.
4) See BEH18 DETAILS for plate placement.
5) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
6) All additional member connections shall be provided by others for forces as indicated.
7) Plates checked for a plus or minus 0 degree rotation about its center.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2, 8.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 731 lb uplift at joint 2 and 732 lb uplift at joint 8.
11) This truss meets HUD WIND ZONE II (-39 psf main body,-51 psf overhang and 6 psf dead load) @ 24"oc.
12) This truss meets HUD WIND ZONE III (-47 psf main body,-62 psf overhang and 6 psf dead load) @ 16"oc.

COLUMBIA COUNTY BUILDING DEPARTMENT Received for FILE COPY Code Compliance PLANS EXAMINER

JOHN L. GALINSKY LICENSE No 60642 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL Cert. #6634

December 4,2009

MiTek
POWER TO PERFORM.
14515 N. Outer Forty, Suite #300
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Wood Perfect, LLC
WP10007 M369 SOUTHERN ~C	M373-24	HINGED DBL MONO	1	1	M373 HUD/IRC2009 24" c/c 16" c/c porch option

P.E. Robbins, Inc., Victoria, IL 61485

7.130 s Apr 26 2009 MiTek Industries, Inc. Thu Apr 29 09:07:04 2010 Page 1

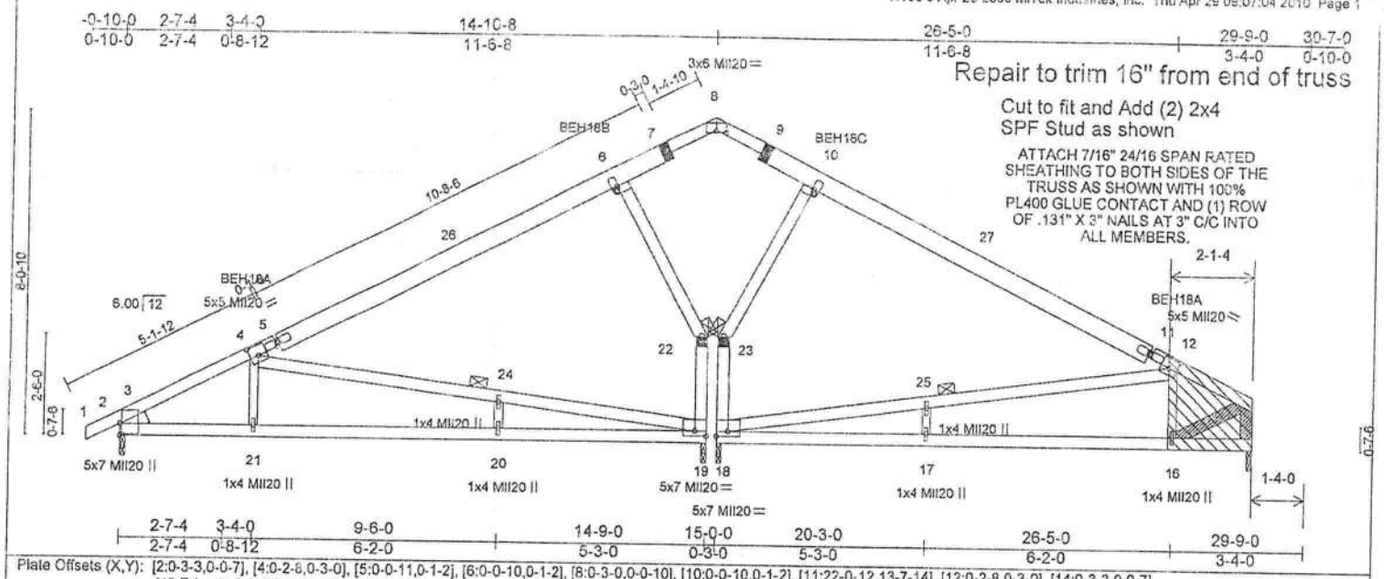
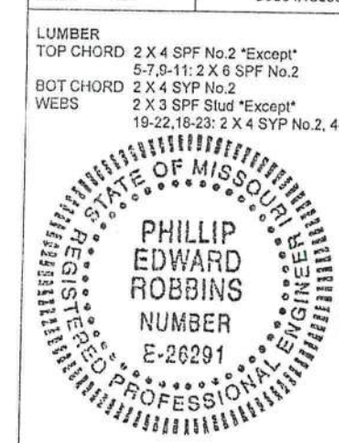


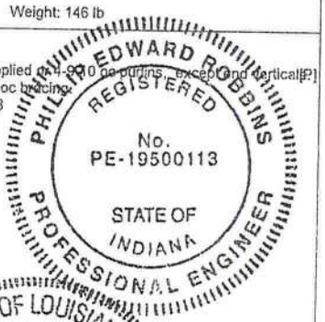
Plate Offsets (X,Y): [2:0-3-3,0-0-7], [4:0-2-8,0-3-0], [5:0-0-11,0-1-2], [6:0-0-10,0-1-2], [8:0-3-0,0-0-10], [10:0-0-10,0-1-2], [11:22-0-12,13-7-14], [12:0-2-8,0-3-0], [14:0-3-3,0-0-7], [18:Edge to 0-0-8,0-1-4 to 0-1-12], [19:Edge to 0-0-8,0-1-4 to 0-1-12]

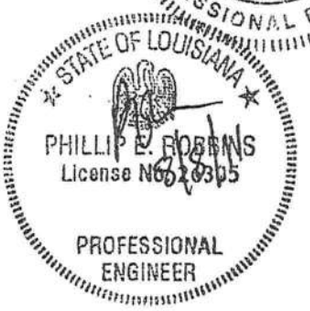
LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plates Increase	1.15	TC	0.98	Vert(LL)	-0.36	17-18	>488	240	MII20	197/144
TCDL	10.0	Lumber Increase	1.15	BC	0.82	Vert(TL)	-0.52	16-17	>333	180	MII18	141/138
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(TL)	-0.03	19	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		(Matrix)							Weight: 146 lb	

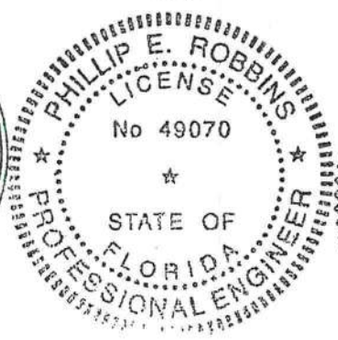
LUMBER
TOP CHORD 2 X 4 SPF No.2 *Except*
5-7,9-11: 2 X 6 SPF No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 3 SPF Stud *Except*
19-22,18-23: 2 X 4 SYP No.2, 4-19,12-18: 2 X 4 SPF No.2, 6-22,10-23: 2 X 4 SPF Stud

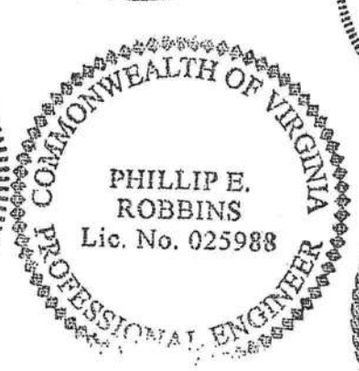
BRACING
TOP CHORD Structural wood sheathing directly applied or 9-8-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-1-4 oc bracing.
WEBS 1 Row at midpt 4-19, 12-18
JOINTS 1 Brace at Jt(s): 22, 23, 8

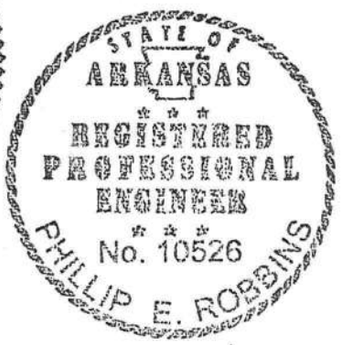












Job	Truss	Truss Type	Qty	Ply	Wood Perfect, LLC
WP10007 M369 SOUTHERN ~C	M373-24	HINGED DBL MONO	1	1	M373 HUD/IRC2009 24" o/c 16" o/c porch option

P.E. Robbins, Inc., Victoria, IL 61485

7.130 s Apr 28 2009 MiTek Industries, Inc. Thu Apr 29 09:07:04 2010 Page 1

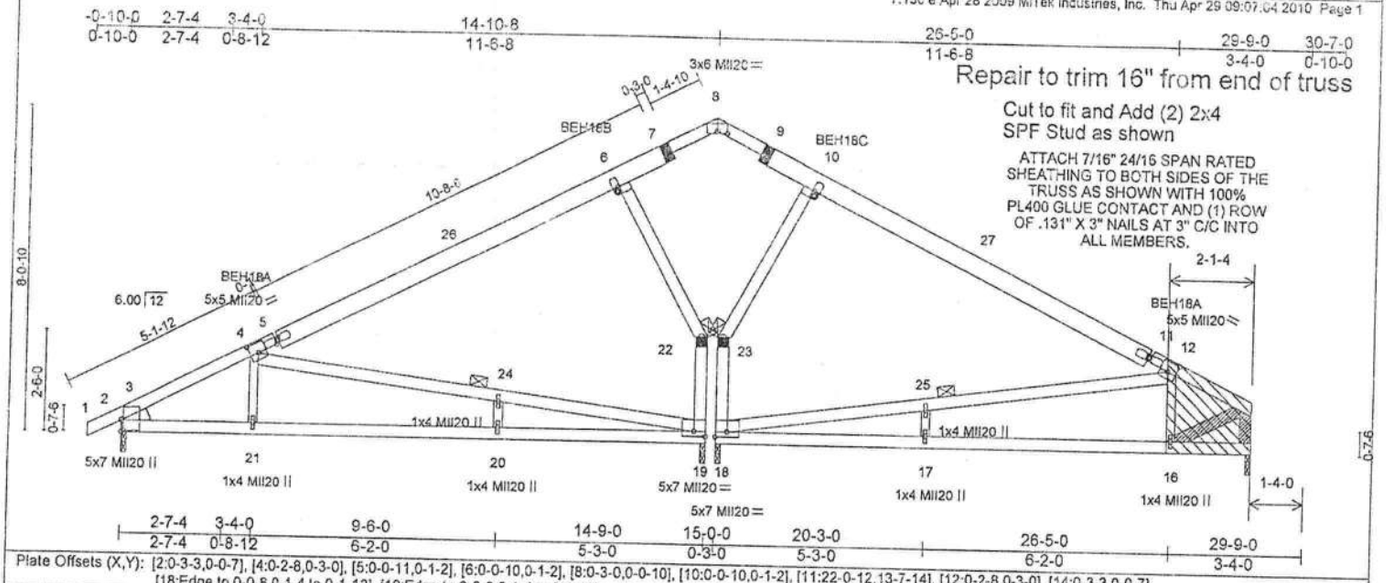


Plate Offsets (X,Y): [2:0-3-3,0-0-7], [4:0-2-8,0-3-0], [5:0-0-11,0-1-2], [6:0-0-10,0-1-2], [8:0-3-0,0-0-10], [10:0-0-10,0-1-2], [11:22-0-12,13-7-14], [12:0-2-8,0-3-0], [14:0-3-3,0-0-7], [18:Edge to 0-0-8,0-1-4 to 0-1-12], [19:Edge to 0-0-8,0-1-4 to 0-1-12]

LOADING (psf)		SPACING 2-0-0	CSI	DEFL in (loc) l/defl L/d	PLATES GRIP
TCLL	30.0	Plates Increase 1.15	TC 0.98	Vert(LL) -0.36 17-18 >488 240	MII20 197/144
TCDL	10.0	Lumber Increase 1.15	BC 0.82	Vert(TL) -0.52 16-17 >333 180	MII18 141/138
BCLL	0.0 *	Rep Stress Incr YES	WB 0.82	Horz(TL) -0.03 19 n/a n/a	
BCDL	10.0	Code IRC2009/TPI2007	(Matrix)		Weight: 146 lb

LUMBER
TOP CHORD 2 X 4 SPF No.2 *Except*
5-7,9-11: 2 X 6 SPF No.2
BOT CHORD 2 X 4 SYP No.2
WEBS 2 X 3 SPF Stud *Except*
19-22,18-23: 2 X 4 SYP No.2, 4-19,12-18: 2 X 4 SPF No.2, 6-22,10-23: 2 X 4 SPF Stud

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-9-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-1-4 oc bracing.
WEBS 1 Row at midpt 4-19, 12-18
JOINTS 1 Brace at Jt(s): 22, 23, 8

REACTIONS (lb/size) 2=848/0-1-8 (input: 0-1-8), 19=699/0-1-8 (input: 0-1-8), 14=848/0-1-8 (input: 0-1-8), 18=699/0-1-8 (input: 0-1-8)
Max Horz 2=-276(LC 2), 14=276(LC 2)
Max Uplift2=-580(LC 6), 19=-336(LC 6), 14=-580(LC 7), 18=-336(LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/9, 2-3=-1223/998, 3-4=-1188/1040, 4-5=-456/377, 5-26=-472/466, 6-26=-321/484, 6-7=-168/478, 7-8=-103/483, 8-9=-103/483, 9-10=-168/478, 10-27=-321/484, 11-27=-472/466, 11-12=-456/377, 12-13=-1186/1040, 13-14=-1223/998, 14-15=0/9, 19-22=-399/374, 18-23=-399/374
BOT CHORD 2-21=-1090/1017, 20-21=-1090/1017, 19-20=-1090/1017, 17-18=-1090/1017, 16-17=-1090/1017, 14-16=-1090/1017
WEBS 4-24=-814/907, 19-24=-827/909, 18-25=-827/909, 12-25=-814/907, 4-21=0/323, 12-16=0/323, 20-24=-12/93, 17-25=-12/93, 6-22=-453/424, 10-23=-453/424

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
7=127/484/159/0, 9=127/484/159/0, 22=453/424/213/0, 23=453/424/213/0

NOTES
1) This truss has been checked for uniform roof live load only, except as noted.
2) Wind: ASCE 7-05; 140mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -0-10-0 to 3-4-0, Exterior(2) 3-4-0 to 26-4-1, Corner(3) 26-4-1 to 30-7-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for HUD WIND ZONE II at 24" c/c (39 psf uplift truss clear span, 51 psf uplift on overhangs and porches) and 6 psf dead load. This truss has been designed for HUD WIND ZONE III at 16" c/c (47 psf uplift truss clear span, 62 psf uplift on overhangs and porches) and 6 psf dead load.
4) All plates are MT20 plates unless otherwise indicated.
5) See BEH18 DETAILS for plate placement.
6) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
7) All additional member connections shall be provided by others for forces as indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2, 19, 14, 18.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 580 lb uplift at joint 2, 336 lb uplift at joint 19, 580 lb uplift at joint 14 and 336 lb uplift at joint 18.
12) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

13) Trusses used as porch roofs shall be spaced at 16" c/c. See uplift reactions, chord forces and field connection requirements below.

REACTIONS (lb/size) 2=565/0-1-8 (input: 0-1-8), 19=467/0-1-8 (input: 0-1-8), 14=565/0-1-8 (input: 0-1-8), 18=467/0-1-8 (input: 0-1-8)
Max Horz 2=364(LC 6), 14=-364(LC 7)
Max Uplift2=-537(LC 6), 19=-551(LC 6), 14=-537(LC 7), 18=-551(LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-3=-814/1258, 3-4=-790/1313, 4-5=-302/6, 5-26=-313/60, 6-26=-212/72, 6-7=-110/65, 7-8=-67/75, 8-9=-67/75, 9-10=-110/65, 10-27=-212/72, 11-27=-313/60, 11-12=-302/6, 12-13=-789/1313, 13-14=-814/1258, 14-15=0/6, 19-22=-267/377, 18-23=-267/377
BOT CHORD 2-21=-1536/678, 20-21=-1536/678, 19-20=-1536/678, 17-18=-1536/678, 16-17=-1536/678, 14-16=-1536/678
WEBS 4-24=-542/1347, 19-24=-551/1371, 18-25=-551/1371, 12-25=-542/1347, 4-21=-344/222, 12-16=-344/222, 20-24=-135/59, 17-25=-135/59, 6-22=-303/427, 10-23=-303/427

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
7=83/71/48/0, 9=83/71/48/0, 22=303/427/201/0, 23=303/427/201/0

BEAM CONFIGURATION	GROUND SNOW LOAD (PSF)				
	20. PSF	30. PSF	40. PSF	50. PSF	
(1) 1.5x5.5 LAM beam (see chart) LAM	8 ft 3 in	7 ft 2 in	6 ft 6 in	6 ft 0 in	
(1) 1.5x7.25 LAM beam (see chart) LAM	10 ft 7 in	9 ft 4 in	8 ft 7 in	8 ft 0 in	
(1) 1.5x9.25 LAM beam (see chart) LAM	13 ft 3 in	11 ft 8 in	10 ft 9 in	9 ft 8 in	
(1) 1.5x12 LAM beam (see chart) LAM	16 ft 9 in	14 ft 9 in	13 ft 7 in	12 ft 3 in	
(1) 1.5x16 LAM beam (see chart) LAM	21 ft 11 in	19 ft 4 in	17 ft 10 in	16 ft 1 in	
(1) 1.5x20 LAM beam (see chart) LAM	27 ft 0 in	23 ft 10 in	21 ft 11 in	19 ft 9 in	
(1) 1.5x24 LAM beam (see chart) LAM	32 ft 1 in	28 ft 3 in	26 ft 0 in	23 ft 5 in	
(1) 2 x 6 #3 SPF	3 ft 8 in	3 ft 3 in	3 ft 2 in	2 ft 8 in	
(1) 2 x 8 #3 SPF	4 ft 8 in	4 ft 2 in	4 ft 0 in	3 ft 5 in	
(1) 2 x 10 #3 SPF	5 ft 9 in	5 ft 1 in	4 ft 11 in	4 ft 2 in	
(1) 2 x 12 #3 SPF	6 ft 8 in	5 ft 11 in	5 ft 8 in	4 ft 11 in	
(1) 2 x 6 #2 SPF	4 ft 11 in	4 ft 4 in	4 ft 2 in	3 ft 7 in	
(1) 2 x 8 #2 SPF	6 ft 3 in	5 ft 6 in	5 ft 4 in	4 ft 7 in	
(1) 2 x 10 #2 SPF	7 ft 8 in	6 ft 9 in	6 ft 6 in	5 ft 7 in	
(1) 2 x 12 #2 SPF	8 ft 10 in	7 ft 10 in	7 ft 7 in	6 ft 6 in	

MINIMUM RIDGEBEAM DEPTH AT CRITICAL SECTION OF TAPERED RIDGEBEAM

(MEMBER QTY) FULL BEAM DEPTH	20. PSF	30. PSF	40. PSF	50. PSF	
(1) 1.5x5.5 LAM beam (see chart) LAM	3.45"	3.82"	4.19"	4.51"	
(1) 1.5x7.25 LAM beam (see chart) LAM	4.44"	4.94"	5.52"	5.99"	
(1) 1.5x9.25 LAM beam (see chart) LAM	5.52"	6.15"	6.85"	7.18"	
(1) 1.5x12 LAM beam (see chart) LAM	6.98"	7.77"	8.65"	9.06"	
(1) 1.5x16 LAM beam (see chart) LAM	9.1"	10.12"	11.27"	11.8"	
(1) 1.5x20 LAM beam (see chart) LAM	11.18"	12.44"	13.84"	14.49"	
(1) 1.5x24 LAM beam (see chart) LAM	13.22"	14.71"	16.37"	17.13"	

APPROVED LAM BEAMS- WHEN USING GRADE LAM BEAM (SEE CHART)

2.0 MasterPlank

Murphy 2.0E 3100 Fb LVL

2.0e Microllam LVL

JOHN W. WELDY LICENSE No. 54556 STATE OF FLORIDA PROFESSIONAL ENGINEER 2/18/11

GENERAL NOTES:

1 180" MAX. UNIT.

2 WIND SPEED: 130 MPH MAX.

3 MIN. DEPTH AT CRITCAL SECTION IS MEASURED AT INSIDE FACE OF EXTERIOR WALL.

4 THIS DETAIL IS APPLICABLE TO ONLY LVL BEAMS WITH AN FV=135 PSI OR BETTER.

5 RIDGE BEAM MUST BE IN FULL WOOD TO WOOD CONTACT WITH TOP PLATE FOR SPECIFIED BEARING LENGTH.

6 SEE COLUMN DESIGNS FOR MINIMUM BEARING LENGTH OR BEAM STIFFENER REQUIREMENTS.

7 (F): INDICATES THAT BEAM MEMBERS ARE LAYED FLAT; OTHERWISE ALL BEAMS ARE ON EDGE.

8 DESIGN IN ACCORDANCE WITH THE IRC (2006)

9 DOUBLE BEAMS MAY BE STACKED VERSES DOUBLE PLY IF MEMBERS ARE SAME SIZE AND MATERIAL AND REQUIRED FASTENERS ARE EQUALLY DIVIDED BETWEEN BEAMS.

MAXIMUM LIVE AND DEAD LOADS:

BOTTOM CHORD LIVE LOAD: 10 PSF

TOP CHORD DEAD: 7 PSF

BOTTOM CHORD DEAD: 8 PSF

FLOOR LIVE LOAD: 0 PSF

BEAMS SUPPORT SECOND FLOOR LIVING AREA

CMH Engineering

calc. ref. CRC-60.3.R.K.K_.20-2.20

1 STORY- W.O ATTIC

RIDGE BEAM SPAN CHART

Drawn by: jww Ver. 6.1

Date: 01/19/10

APPROVAL #:

RC-60.3.R.K.K_.20-2

Southern Energy Homes, Inc.
P.O. Box 390 - 16025 Co. Rd. 41 Addison, AL 35540
Ph: (256) 747-8589 Fax: (256) 747-8586
Email: semodular@sehomes.com

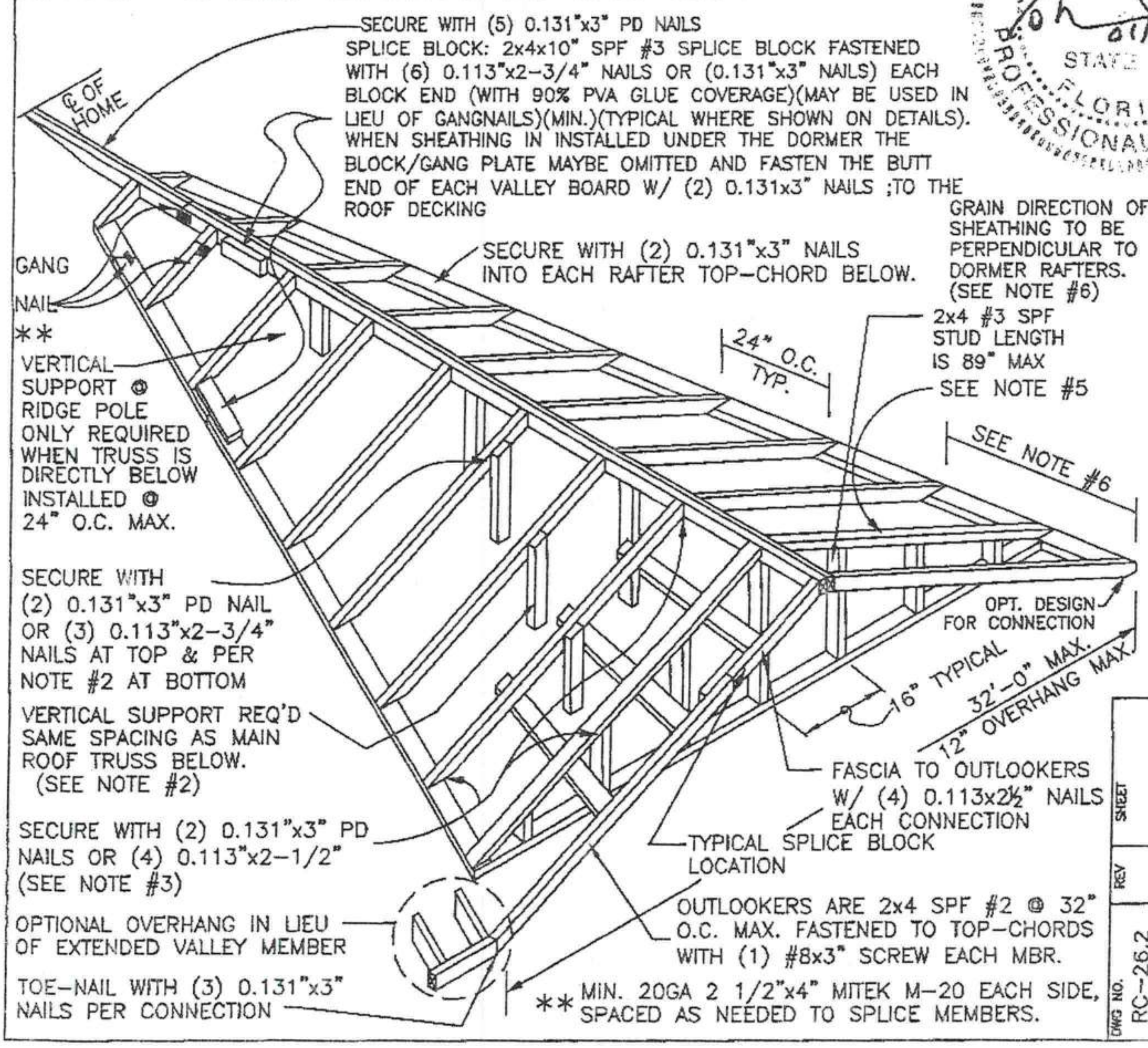
APPROVAL STAMP

TITLE
TYPICAL DORMER DETAIL
UP TO 120 MPH (3 SEC. GUSTS)

BY	DATE
MDW	8-1-05

NOTES:
1. ALL WOOD TO BE #3 SPF OR BETTER 2x4 MIN. OR AS NOTED.
2. VERTICAL SUPPORT POSTS SHALL BE SECURED TO TOP CHORD OF TRUSS (24" O.C. MAX) DIRECTLY BELOW WITH (2) #8x3" SCREWS. TOENAILED ONLY.
3. FRONT DORMER TRUSS SHEATHING W/ HARDBOARD SIDING, 3/8" MIN. RATED SHEATHING (ANY INDEX) OR EQUIV. SECURED TO ALL FRAMING W/ 0.099"x1 3/4" NAILS @ 2-1/2" O.C.
4. REFERENCE OTHER DETAILS FOR LADDER OVERHANG CONSTRUCTION.
5. SECURE FRONT DORMER WALL TO ROOF BELOW WITH (2) #8x3" @ EACH TRUSS.
6. ROOF SHEATHING TO BE CONTINUOUS THRU THIS AREA. ROOF SHEATHING SHALL NOT BE JOINTED OVER FRONT DORMER TRUSS.
7. O.S.B. OR PLYWOOD SHEATHING TO BE 24/16 INDEX MIN.
8. TRUSSES BENEATH DORMER CONSTRUCTION TO BE LISTED FOR 10 PSF DEAD LOAD.
9. TOENAIL DORMER RIDGE TOGETHER WITH 0.131"x3" NAILS @ 8" O.C.
10. REFER TO RC SECTION FOR TRUSS TO SIDEWALL CONNECTION.

JOHN C. DOEDEN LICENSE No. [illegible] 01/21/2030 STATE OF FLORIDA PROFESSIONAL ENGINEER



SHEET

REV

DWG NO. RC-26.2

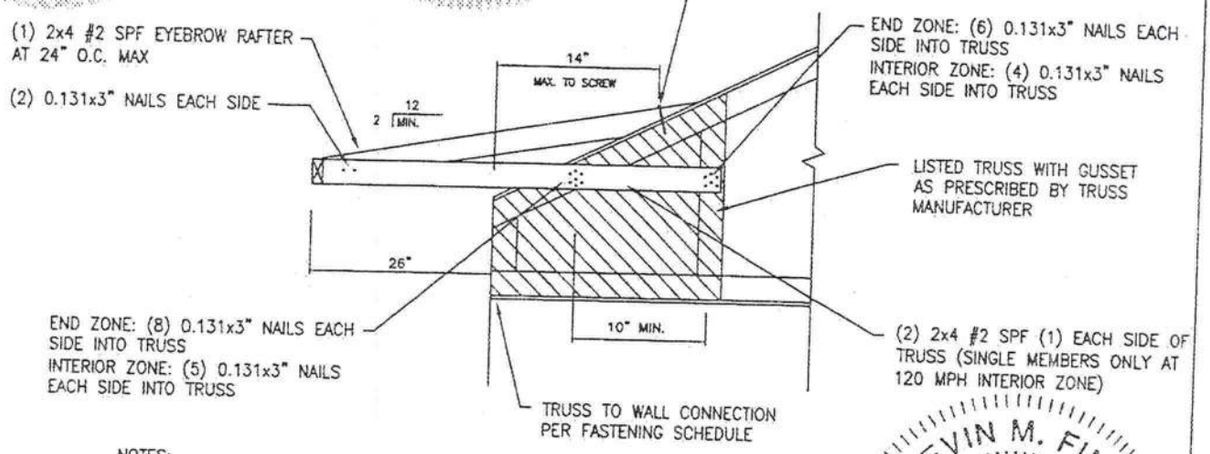
Southern Energy Homes, Inc.
P.O. Box 390 - 18025 Co. Rd. 41 Addison, AL 35540
Ph: (256) 747-8569 Fax: (256) 747-8566
Email: semodular@sehomes.com

APPROVAL STAMP

TITLE

EYEBROW DORMER

BY	DATE		
JFB	6/15/10		



NOTES:

1. END ZONE IS 3' FROM END OF ROOF AND INTERIOR ZONE IS IN BETWEEN.
2. ALL LUMBER TO BE #2 SPF UNLESS OTHERWISE NOTED
3. MINIMUM SCREW PENETRATION INTO RECEIVING MEMBERS IS TO BE 2" (INCLUDES SHEATHING WHERE APPLICABLE)
4. SIDEWALL FRAMING PER CHARTS FOR 26" EAVE AND APPLICABLE UNIT WIDTH
5. DESIGNED FOR 120 AND 140 MPH WIND SPEED, EXPOSURE C WITH 6on12 MAX ROOF SLOPE.
6. DESIGNED FOR 30 PSF ROOF LIVE LOAD.

SHEET	REV	DWG NO.

JOHN C. DOEDEN, P.E.
15133 County Road 22, Goshen, IN 46528

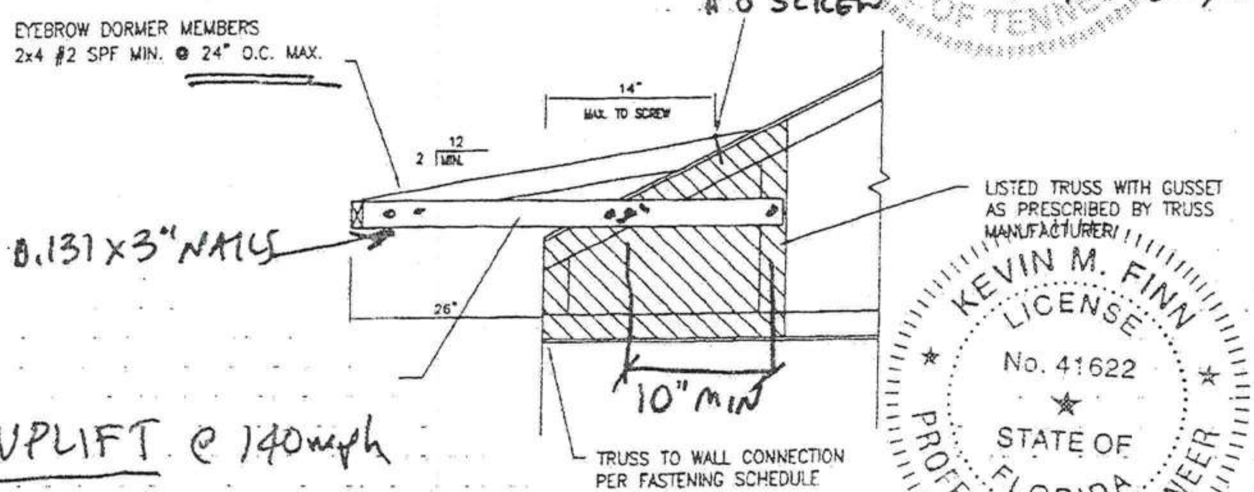
DATE: 06/17/2010 REV.

CALCULATION FOR: S.E. HOMES

SUBJECT: EYEBROW EAVE

REFERENCE: IRC & ASCE 7

140 mph EXP C
MRH = 25' MAX



1) UPLIFT @ 140 mph

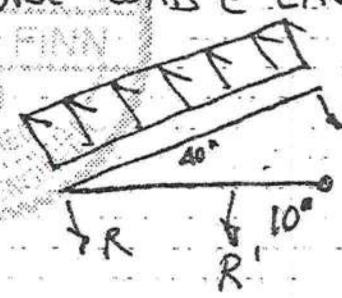
EAVE LOADS @ 10 ft² TRIB FROM ASCE 7-05 Fig 6-3 } V.L. = 110.6 (1.35) = 149.3 PSF ↑

INT. = 65.7 (1.35) = 88.7 PSF

D.L. IS NEGLIGIBLE

LINE LOAD @ EAVE FRAME = 2 × 149.3 = 298.6 #/ft

INT = 2 × 88.7 = 177.4 #/ft



$R = 298.6 \left(\frac{40}{24}\right) = 498\#$

MIN. $p = \frac{498}{82 \times 1.6} = 3.8"$

USE (2) #8 × 4" @ ENDS

$R_I = 177.4 \left(\frac{40}{24}\right) = 296\#$

p = 2.25 ⟹ (1) #8 × 4 @ INT

2) NAIL CONNECTION FOR 498# & 296#

L.R. = 82 (1.6) = 131# ⟹ N.R. = ... 3 nails

JOHN C. DOEDEN, P.E.
15133 County Road 22, Goshen, IN 46528

DATE: 06/17/2010 REV

CALCULATION FOR S.E. Homes

SUBJECT: EYEBROW

REFERENCE: IRC & ASCE 7

3) LOAD @ R' = 498(40)/10 = 1992 #

No. NAILS ⇒ 1992/131 = 15.2 ⇒ 16

@ END ZONE ⇒ USE (2) 2x4 HORZ

@ INT = 1184/131 = 9 W/ (8) NAILS EACH SIDE

4) HORZ 2X4 STRESSES

- BENDING M = Pa = 30"(498) = 14,940 in-#

(2) No. 2 S-P-F ⇒ $F_b S_x$ = 875(0.5)(1.6)(1.15)(2x3.06)
= 14,780 ≈ 14,940 @

- SHEAR ⇒ 498/2 = 249 #

$f_v = \frac{249}{3.5} = 71$ psi < 135(1.6)

- DEFL $\Delta = \frac{Pa^2(\ell+a) \times 0.7}{3EI}$ per IRC

$= \frac{249(30)^2(40)}{3(1.4 \times 10^6)(5.36)} = 0.279"$

ALLOW = 29/180 > 29/215 @

5) CONNECTION @ PIVOT

$R'' = \frac{30(498)}{60} = 1494$ # @ END ⇒ 12 NAILS

888 # @ INT ⇒ 7 NAILS

STATE OF ARKANSAS ★★★ REGISTERED PROFESSIONAL ENGINEER ★★★ NO. 9559 KEVIN M. FINN

COMMONWEALTH OF VIRGINIA KEVIN M. FINN Lic. No. 025540 PROFESSIONAL ENGINEER

KEVIN M. FINN LICENSE No. 41622 STATE OF FLORIDA PROFESSIONAL ENGINEER

JOHN C. DOEDEN, P.E.
15133 County Road 22, Goshen, IN 46528

DATE: 06/17/2010 REV.

CALCULATION FOR S.E. HOMES

SUBJECT: EYERROW

REFERENCE:

6) SINGLE RAFTER MEMBER

- BENDING $M = \frac{wl^2}{8} = \frac{298.4/12\,(40)^2}{8} = 4973$ in-#

No. 2 S-P-F 2x4 $F_b S_x = 875(1.5)(1.6)(1.15)(3.06)$
$= 7390$ in-# (OK)

- SHEAR $f_v = \frac{298.4(40)}{24(3.5)} = 142$ psi $< 135(1.6)$ (OK)

- DEFL. $\Delta = \frac{5wl^4}{384EI} = \frac{5(24.9 \times 0.7)(40)^4}{384(1.4 \times 10^6)(5.36)} = 0.077''$
$= l/517$ (OK)

7) 120 mph W/ SINGLE HORZ MEMBER

INT. ZONE $\Rightarrow \delta = \frac{12^2}{14^2} = 0.735$

- BENDING $M = 30(296 \times 0.735) = 6524$ in-#

2x4 No. 2 SPF $\Rightarrow F_b S_x = 875(1.5)(1.6)(1.15)(3.06) = 7390$ (OK)

- SHEAR

STATE OF ARKANSAS ★★★ REGISTERED PROFESSIONAL ENGINEER ★★★ NO: 9559 KEVIN M. FINN

COMMONWEALTH OF VIRGINIA KEVIN M. FINN Lic. No. 025540 PROFESSIONAL ENGINEER

KEVIN M. FINN LICENSE No. 41622 STATE OF FLORIDA PROFESSIONAL ENGINEER

SOUTHERN ENERGY HOMES
P.O. BOX 390
ADDISON, ALABAMA 35540

APPROVAL STAMP

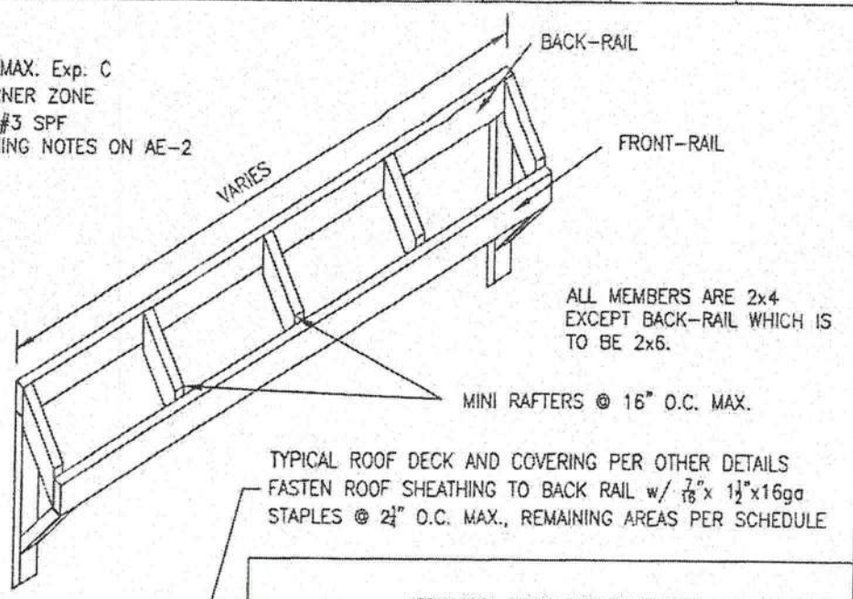
TITLE

ALTERNATE EYEBROW CONSTRUCTION AND ATTACHMENT

BY	DATE	CHECKED	DATE
JFB / WJR	11-15-11		

NOTES:
1. WIND SPEED: 130 MPH MAX. Exp. C
2. NOT LOCATED IN 3' CORNER ZONE
3. ALL FRAMING MEMBERS #3 SPF
4. SEE SPECIAL WALL FRAMING NOTES ON AE-2

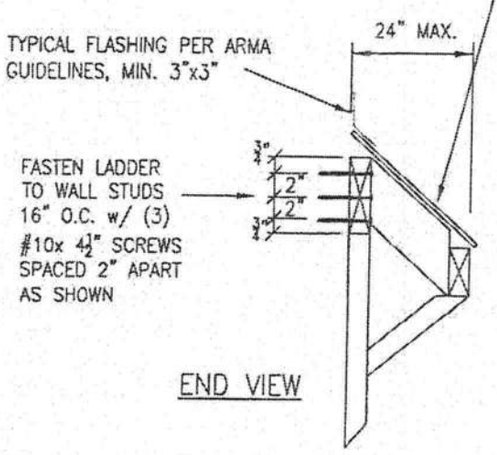
JOHN C. DOEDEN LICENSE No 45484 STATE OF FLORIDA PROFESSIONAL ENGINEER



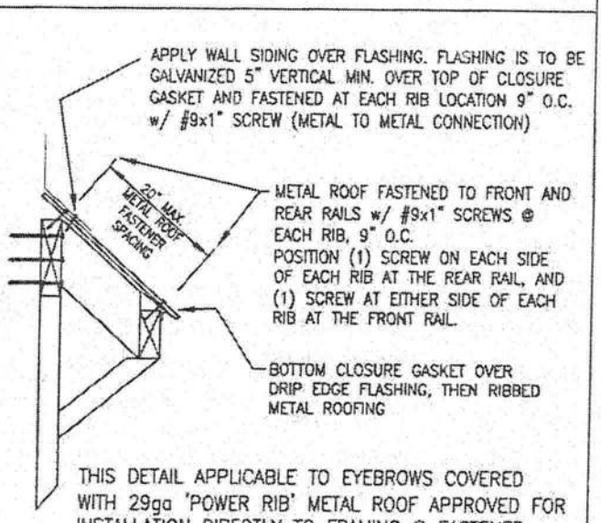
ALL MEMBERS ARE 2x4 EXCEPT BACK-RAIL WHICH IS TO BE 2x6.

END VIEW

TYPICAL ROOF DECK AND COVERING PER OTHER DETAILS
FASTEN ROOF SHEATHING TO BACK RAIL w/ $\frac{7}{16}$"x $1\frac{1}{2}$"x16ga STAPLES @ $2\frac{1}{4}$" O.C. MAX., REMAINING AREAS PER SCHEDULE

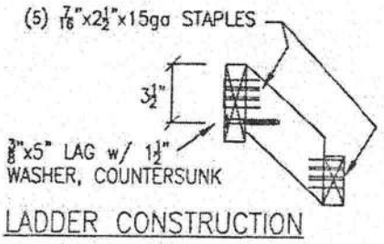


END VIEW



THIS DETAIL APPLICABLE TO EYEBROWS COVERED WITH 29ga 'POWER RIB' METAL ROOF APPROVED FOR INSTALLATION DIRECTLY TO FRAMING @ FASTENER SPACING BETWEEN RAILS MIN.

PROCEDURE:
1. FASTEN RAILS TO RAFTERS w/ STAPLES
2. WITH $1\frac{1}{2}$" WOOD BUTTERFLY BIT, DRILL A $\frac{3}{8}$" DEEP COUNTERSINK HOLE @ $3\frac{1}{2}$" FROM TOP OF BACK-RAIL
3. DRILL A $\frac{1}{4}$" HOLE INTO RAFTERS @ LAG LOCATION
4. INSERT 1 $\frac{1}{2}$" WASHER ON LAG AND LAG BACK-RAIL TO RAFTER
5. INSTALL LADDER ON HOME w/ SCREWS
6. ATTACH SHEATHING, FLASHING AND ROOF COVERING



LADDER CONSTRUCTION

SHEET
REV
DWG NO. AE-1

SOUTHERN ENERGY HOMES
P.O. BOX 390
ADDISON, ALABAMA 35540

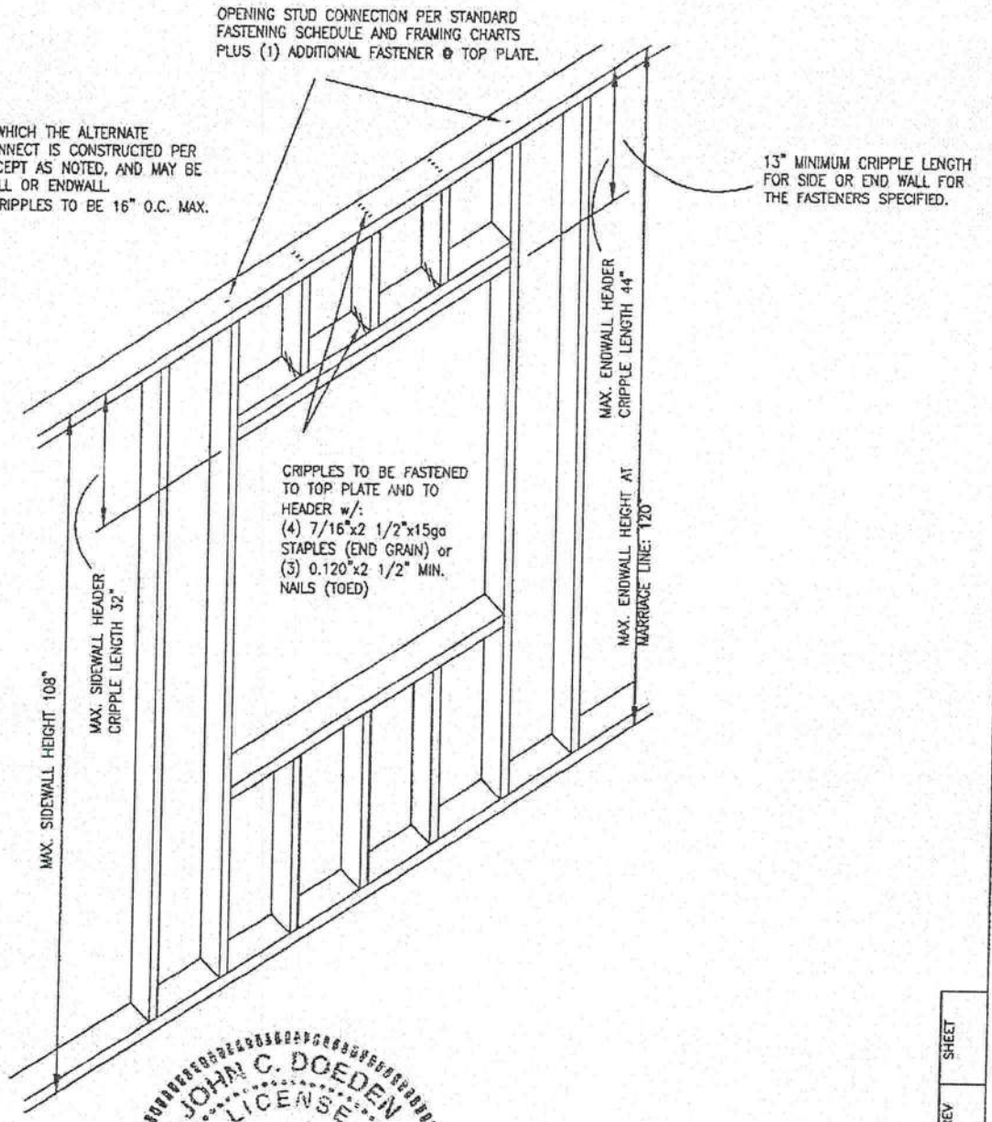
APPROVAL STAMP

TITLE

ALTERNATE EYEBROW CONSTRUCTION AND ATTACHMENT

BY	DATE	CHECKED	DATE
JFB / MJR	11-15-11		

WIND SPEED: 130 MPH MAX. Exp. C
WITH AN ATTACHED EYEBROW OVERHANG, MAX. 24" PROJECTION
EYEBROW NOT LOCATED IN 3' CORNER ZONE



JOHN C. DOEDEN
LICENSE
No 45484
11/14/11
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DWG NO.	REV	SHEET
AE-2		

JOHN C. DOEDEN, P.E.
15133 County Road 22, Goshen, IN 46528

DATE: 11/14/2011 REV

CALCULATION FOR S.E. HOMES

SUBJECT: EYEBROW W/EXPOSED RAFTERS

REFERENCE: ASCE 7, FBC-R

11/14/2011
JOHN C. DOEDEN, P.E.
FL LIC. NO. 48548 STATE OF FLORIDA

JOHN C. DOEDEN LICENSE NO. 48548 STATE OF FLORIDA PROFESSIONAL ENGINEER

130 mph EXP C
MRH = 30'

NOT IN CORNER ZONE

TABLE Fig 6-3

UPLIFT = 56.7(1.4)
= 79.4 PSF
4 PSF D.L. RESISTING
ASSUME 0

#10 x 4½" SCREWS INTO WALL STUDS @ 16" o.c. (3 ROWS)

(4) ½" x 2" x 16GA STAPLES

3/8" MIN. RATED SHEATHING FASTENED TO BACK RAIL W/ 7/16" x 1½" x 16GA. STAPLES @ 2½" o.c. (PER SCHEDULE ELSEWHERE)

3/8 x 5" LAG COUNTERSUNK

2x6 No. 3 S-P-F BACK RAIL

2x4 No. 3 S-P-F RAFTERS @ 16" o.c.

24" MAX

1) NET UPLIFT @ RAFTER

$w_{22} = \frac{(79.4)(1.33)}{12} = 8.82$ #/in

GRAVITY $\frac{(20+8)(1.33)}{12} = 3.11$ #/in

2) MOMENT IN FRAME

$M = \frac{wa^2}{2} = \frac{8.82(24)^2}{2} = 2540$ in-#

2x4 $F_b S_x = 500(1.5)(1.6)(1.15)(3.06) = 4223$ in-# > 2540 ok

- SHEAR $= wa = 8.82(24) = 212$ #

$f_v = \frac{212}{3.5} = 60.5$ psi < 135(1.6) ok

- DEFL $\Delta = \frac{wa^4}{8EI} = \frac{8.82(24)^4}{8(1.2\times10^6)(9.36)} = 0.057" \Rightarrow 2a/844$ ok

JOHN C. DOEDEN, P.E.
15133 County Road 22, Goshen, IN 46528

DATE 11/14/2011 REV

CALCULATION FOR S.E. HOMES

SUBJECT: EYEBROW

REFERENCE:

JOHN C. DOEDEN LICENSE No 45484 STATE OF FLORIDA PROFESSIONAL ENGINEER

11/14/11
JOHN C. DOEDEN, P.E.
FLLIC. NO. 45484

3) CONNECTIONS

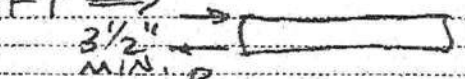
BACK RAIL TO RAFTER w/ 7/16 X 2½ X 15GA. STAPLES

- SHEAR = 227#

L.R. = 45.0 (2/3) (1.6)
= 48 #

N.R. = 212 / 48 = 4.4
say 5

- MOMENT UPLIFT ⇒



$R = \frac{254.0 \text{ in\#}}{3.5} = 726\#$

3/8 X 5" LAG (E-E = 2 25/32") W/D = 2.78 (235) (1.6) (0.75)
= 784 # (M) E.G.

GRAVITY ⇒ $R = \frac{3.11 (24)^2/2}{3.5} = 256\#$

SHEATHING FASTENING w/ 7/16 X 16 GA. STAPLES

L.R. = 32.8 (1.15) = 37.7#

SPACING = $\frac{37.7 (12)}{256 / 1.33} = 2.36 \Rightarrow 2\frac{1}{4}$" o.c. MAX @ BACK RAIL

- BACK RAIL TO WALL STUDS
w/ #10 X 5" SCREWS ⇒ W/D = 95 x 3.33 x 1.6
= 507 #

p = 3.33"

MIN. DISTANCE BETWEEN ROWS = 2"

JOHN C. DOEDEN, P.E.
15133 County Road 22, Goshen, IN 46528

DATE: 11/14/11 REV

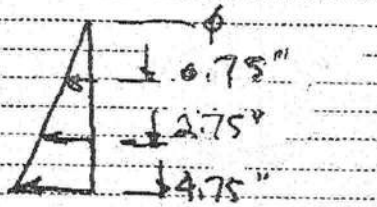
CALCULATION FOR

SUBJECT:

REFERENCE:

JOHN C. DOEDEN LICENSE No 45484 STATE OF FLORIDA PROFESSIONAL ENGINEER

11/14/11
JOHN C. DOEDEN, P.E.
FL LIC. NO. 45484



$$M_R = 507\left(\frac{4.75^2+2.75^2+0.75^2}{4.75}\right) \quad 6.46$$

$= 3275$ in-# > 2540 (OK)

MIN. $\rho = \frac{2540}{(95\times1.6)(6.46)} = 2.6$"

∴ #10 x 4½" SCREW @

SHEAR > 227#

L.R. = 99(1.6) = 158# 1.43 ROWS

3 ROWS (OK)

- LAG SCREW WASHER FOR 726# LOAD

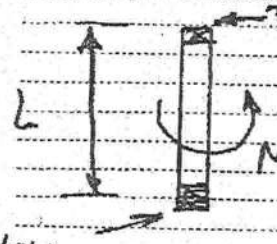
$A_{REQ'D} = \frac{726}{425\ psi} = 1.71$ [11"

MIN. DIA. = $\sqrt{1.71(4)/\pi} + (3/8)^2 = 1.52$

Say 1½" DIA.

4) WALL FRAMING @ WINDOW OPENINGS W/ EYEBROW ABOVE

WINDWARD (ONLY) CONDITION INDUCES UPLIFT & RESULTING MOMENT



OPNG STUDS & CRIPPLES

$M = 2540$ in-# $\rightarrow R_{END} = \frac{M}{L} = 192$#

CRIPPLE $L_{MIN} = \frac{2540}{192} = 13$"

CRIPPLES FASTENED W/ (4) 7/16 x 2½ x 15GA. STAPLES

L.R. = 4(48)
= 192#

OPENING STUDS $R_{ADD'L} = \frac{2540}{84"} = 30$#

ADD ONE FASTENER @ TOP

ALT (3) 0.120 x 2½" NAILS (TOED) = (3)(62 x 5/6 x 1.6) = 247 > 192 (OK)

John C. Doeden
15133 County Road 22 , Goshen , IN 46528

JOHN C. DOEDEN , P.E.

DATE: 11/06/11 REV.

CALCULATION FOR

SUBJECT : STAPLE LATERAL RESISTANCE - 15 GA

REFERENCE: ESR-1539

JOHN C. DOEDEN, P.E.
FL LIC. NO. 45484

STATE OF FLORIDA PROFESSIONAL ENGINEER

1) NAIL YIELD MODE 0.072 NAILS

	SIDE PIECE		MAIN MEMBER		
LUMBER s.g. =	0.42		0.42	Kd=	2.20
Fe =	4260	Fe =	4260		
WIRE DIAMETER =	0.072	Fyb =	100000		
SIDE PLATE t =	1.500	FASTENER LENGTH p			2.5
	Re = Fem / Fes =		1		
	Res = Fes / Fem =		1		

MODE IIIs Z = -2 ts Fes D/Kd (2Res + 1) + 2FesD/Kd x
[ts^2/(2Res+1)^2 + ts^2/(2Res+1) + 4M/Fes/D/(2Res=1)^.5

=====> 141.83

MODE IV Z = 4 Fem D/ Kd * SQRT(M / Fem D (1 + Re)) = 45.03
M = 4 in-lbs

THEN Z = 45.03 LBS.
Zbase = 45.03 LBS. where Cd = 1 OK

John C. Doeden
15133 County Road 22 , Goshen , IN 46528

JOHN C. DOEDEN , P.E.

DATE: 11/06/11 REV.

CALCULATION FOR

SUBJECT : STAPLE LATERAL RESISTANCE - 16 GA

REFERENCE: ESR-1539

11/14/11

JOHN C. DOEDEN, P.E.
FL LIC. NO. 45484

JOHN C. DOEDEN 45484
STATE OF FLORIDA
PROFESSIONAL ENGINEER

1) NAIL YIELD MODE 0.0625 NAILS

	SIDE PIECE		MAIN MEMBER		
LUMBER s.g. =	0.42		0.42	Kd=	2.20
Fe =	4260	Fe =	4260		
WIRE DIAMETER =	0.0625	Fyb =	100000		
SIDE PLATE t =	0.375	FASTENER LENGTH p			1.5
SHEATHING	Re = Fem / Fes =		1		
	Res = Fes / Fem =		1		

MODE IIIs Z = -2 ts Fes D/Kd (2Res + 1) + 2FesD/Kd x
[ts^2/(2Res+1)^2 + ts^2/(2Res+1) + 4M/Fes/D/(2Res=1)^.5

=====> 38.43

MODE IV Z = 4 Fem D/ Kd * SQRT(M / Fem D (1 + Re)) = 39.80
M = 3.6 in-lbs

THEN Z = 38.43 LBS.
Zbase = 38.43 LBS. where Cd = 1 OK

K2 ENGINEERING, Inc
Structural Designers - Consulting Engineers
JOHN C. DOEDEN , P.E.
15133 County Road 22 , Goshen , IN 46528

DATE 11/ 08 / 11 REV.

CALCULATION FOR S.E Homes

SUBJECT : # 7/16 x 1-1/2 x 16 Ga. Staple
0.375 x LUMBER SIDE PLATE

REFERENCE: NDS-

JOHN C. DOEDEN, P.E.
FLA. LIC. NO. 45484
STATE OF FLORIDA PROFESSIONAL ENGINEER

SCREW YIELD MODE FOR LOADS 90 DEGREES TO GRAIN. Angle to Grain is Not Applicable for 7/16 x 1-1/2 x 16 Ga. Staple

	SIDE PIECE		MAIN MEMBER		
LUMBER s.g. =	0.42		0.42	Kd=	2.20
Fe =	3350	Fe =	3350		
FASTENER DIA. =	0.0625	Fyb =	100000		
SIDE PLATE t =	0.375	FASTENER LENGTH p =	1.5		
	Re =	1			

MODE Is	Z=	D ts Fes / Rd =	35.69		Rd= Kd x Ktheta for D<.25	
MODE Im	Z=	D tm Fem / Rd =	107.07		Kd = 2.2	Ktheta = 1.25
MODE II	Z=	k1 D ts Fes / Rd =	35.69	where k1= 1.00	Rt = tm/ts= 3	
MODE IIIm	Z =	k2 D tm Fem / (1+2Re) Rd	37.30	where k2= 1.05		
MODE IIIs	Z =	k3 D ts Fem / (2+Re) Rd =	16.40	where k3= 1.38		
MODE IV	Z =	D^2/Rd * SQRT(2 Fem Fyb / 3 (1 + Re)) =	18.76			

THEN Z = 16.40 LBS. x 2 Legs = 32.80 lbs < 38.4 ∴ USE 32.8 #

& p min = 6 D = 0.375 OK

JOHN C. DOEDEN, P.E.
15133 County Road 22, Goshen, IN 46528

DATE: 11/14/2011 REV.

CALCULATION FOR S.E. HOMES

SUBJECT: EYEBROW W/EXPOSED RAFTERS

REFERENCE: IRC & ASCE-7

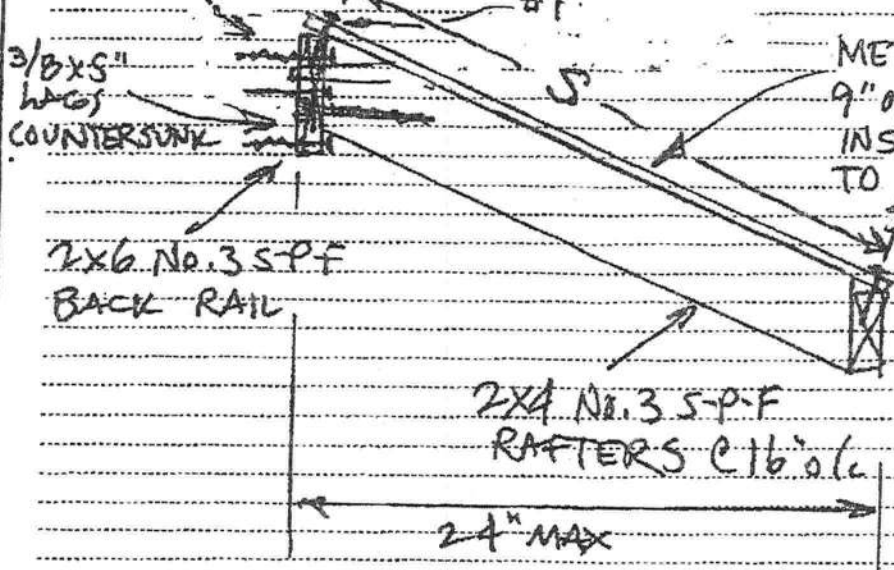
JOHN C. DOEDEN, P.E.
FL LIC. NO. 45484

STATE OF FLORIDA PROFESSIONAL ENGINEER

ANY EYEBROW DESIGN

OPT. METAL ROOF APPLICATION

UPLIFT = 79.4 PSF



4 PSF D.L. RESISTING

METAL ROOF W/ RIBS (29GA) 9" o/c & APPROVED FOR INSTALLATION DIRECTLY TO FRAMING @ FASTENER SPACING = DIST. BETWEEN RAILS

1) NET UPLIFT @ RAFTER

EAVE = $\frac{(79.4)(1.33)}{1.2}$ = 8.82 #/in

GRAVITY $\frac{(20+8)(1.33)}{12}$ = 3.11 #/in

2) SHEET FASTENING @ RAILS

LOAD = $\frac{S}{24}(79.4) = 3.31S$

GRAVITY = (20+6) = 26 PSF

W/D w/ #9 x 1" SCREWS PER INSTRUCTIONS

W/D = 89#(1.6) = 142#

PULL OVER w/ ¼" DIA. WASHER HEAD = 0.4(80 KSI)(¼ x π)(0.0135) = 339# > 142 (OK)

LOAD @ SCREWS (EA. RIB) 9" o/c = 3.31(0.75) S = 142# ⇒ S = 57"

∴ SCREWS @ 9" o/c (OK) INTO RAILS ONLY

JOHN C. DOEDEN, P.E.
15133 County Road 22, Goshen, IN 46528

DATE: 11/14/11 REV

CALCULATION FOR

SUBJECT :

REFERENCE:

JOHN C. DOEDEN, P.E.
FL LIC. NO. 46484
STATE OF FLORIDA PROFESSIONAL ENGINEER

3) RIBBED ROOFING CAPACITY BASED ON POWER-RIB FEATURES PAGE

FOR 2' SPACING OF PURLINS/FASTENERS

MAX. LOAD = 111 PSF BASED ON DEFL. @ 3-SPAN CONDITION

SINCE EYEBROW IS SINGLE SPAN

$\Delta = \frac{5 w_1 l^4}{384 EI}$ VS 3-SPAN $\Delta = \frac{0.0069 w_2 l_2^4}{EI}$

EI & l CONSTANT $\therefore$ $w_1 = 0.53 w_2$

ALLOW. UPLIFT = 0.53(111) = 58.8 PSF < 79.4 NG

FIND l_2 FOR 79.4 PSF

LOAD BASED ON l/180

then $w_1 l_1^3 = 0.53 w_2 l_2^3$

MAX $l_1 = \sqrt[3]{\frac{0.53(111)}{79.4}(24)^3} = 21.7''$ say 21.5"

4) FASTENER RESISTANCE FOR

LATERAL LOADS $\Longrightarrow$ GRAVITY = LOAD ON BACK RAIL

$= 3.31(21.5)^2/2 = 219\#/1.33 = 164\#/ft$

L.L. $= 53.9(1.15) = 62\# \Longrightarrow /0.75' = 82.6\#/ft < 164$

$\therefore$ install 1 screw ea. side of Rib

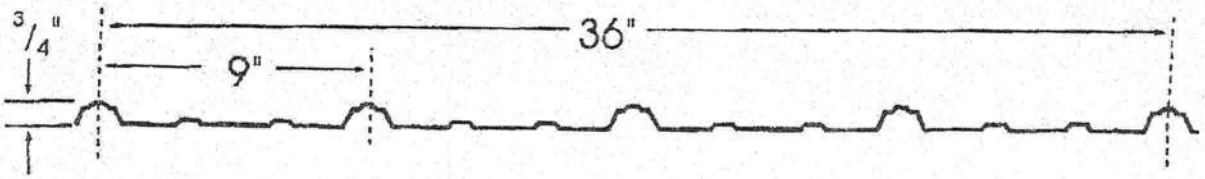
$= 165\#/ft > 164$ OK

3/9

POWER-RIB FEATURES:

Ref. Appendix

- Durable baked on finish.
- Available in 29 gauge (inquire for other gauges).
- Unique double trapezoidal 9" on center major rib with two intermediate ribs gives you maximum load carrying capacity with minimum deflection for exceptional strength and rigidity.
- A wide variety of beautiful colors.
- A complete line of trim and accessories.
- The 3/4" Power-Rib™ and specially designed Anti-Leak Lap Joint keeps your valuable assets safe and dry.
- Guaranteed not to crack, peel, chip, check or fade for a full twenty years* making the Power-Rib™ Panel your best choice.
  **See terms of Warranty for specific information.*



SECTION PROPERTIES										
GAUGE	NOM. THICK (In.)	WT. (PSF)	Fy (KSI)	NET COVERAGE (In.)	PANEL TOP IN COMPRESSION			PANEL BOTTOM IN COMPRESSION		
					Ix (In.4/ft.)	Sx (In.3/ft.)	Ma In-kips/ft.	Ix (In.4/ft.)	Sx (In.3/ft.)	Ma In-kips/ft.
29	.015	0.78	80.0	36.0	.0143	.0241	0.87	.0071	.0159	0.57

ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT																		
GAUGE	WIND LOAD (STRESS)						LIVE LOAD (STRESS)						LIVE LOAD (DEFLECTION)					
29	2'	2.5'	3'	3.5'	4'	4.5'	2'	2.5'	3'	3.5'	4'	4.5'	2'	2.5'	3'	3.5'	4'	4.5'
	148	94	65	48	37	29	111	72	50	37	28	22	111	72	50	37	28	22

NOTES:

1. Section properties and allowable stresses are calculated in accordance with the 1986 AISI specifications for light gauge structural members.
2. Steel minimum yield strength is 80 KSI conforming to ASTM A635-95 (galvanized)
3. Values shown as allowable loads are based on panel covering three equal spans. Multiply by 0.8 for two span allowable loads.
4. Allowable loads for wind have been increased by 33%. Panel weight has not been deducted. Minimum bearing length must be checked. Not so
5. For agricultural structures, the UBC and SBCCI building codes require a minimum of 10 PSF roof live loads.
6. Deflection loads are limited by a maximum deflection ration of L/180 of span.

Storage and Handling:
See Application Guide for specific Storage, Handling and Safety Precautions.

Distributed by:

K2 ENGINEERING, Inc
Structural Designers - Consulting Engineers
JOHN C. DOEDEN , P.E.
15133 County Road 22 , Goshen , IN 46528

DATE: 04/22/2011 REV

CALCULATION FOR S.E. Homes

SUBJECT : # 9 SCREW - CUT THREAD OR ROLLED THREAD
29 GA. METAL (33 ksi STEEL) SIDE PLATE

REFERENCE: NDS- . . .

JOHN C. DOEDEN, P.E.
FL LIC. NO. 45484
STATE OF FLORIDA PROFESSIONAL ENGINEER

SCREW YIELD MODE

	SIDE PIECE		MAIN MEMBER		
LUMBER s.g. =	0.42		0.42	Kd=	2.20
Fe =	61850	Fe =	3350		
FASTENER DIA. =	0.142	Fyb =	100000		
SIDE PLATE t =	0.0135	FASTENER LENGTH p =	3		
	Re =	0.054163298			

MODE Is	Z=	D ts Fes / Rd =	53.89		Rd= Kd for D<.25	
MODE Im	Z=	D tm Fem / Rd =	645.76		Kd = 2.2	
MODE II	Z=	k1 D ts Fes / Rd =	264.64	where k1=	4.91	Rt = tm/ts= 221.22222
MODE IIIm	Z =	k2 D tm Fem / (1+2Re) Rd	273.18	where k2=	0.47	
MODE IIIs	Z =	k3 D ts Fem / (2+Re) Rd =	94.56	where k3=	66.54	

MODE IV Z = D^2/Kd * SQRT(2 Fem Fyb / 3 (1 + Re)) = 133.41

THEN Z = 53.89 LBS. & p min = 10 D = 1.42 OK

ADJ. Factor= 1

L.R.= 53.89 LBS.

CMH MANUFACTURING

Ver. 11

DESIGNER GUIDE FOR ALTERNATIVE FOUNDATIONS:

FLORIDA

UNIT WIDTH: 180 in
ROOF PITCH: 6/12 TO 6/12
WIND: 100 MPH EXPOSURE C
1 STORY- W.O ATTIC
PLANT #: 943
MODEL NUMBER: EZ-476
MAX. STRUCTURE LENGTH: 76 ft.

Mating wall is a roof load bearing wall; therefore the column supports of all first floor mating wall opening must be supported for the concentrated gravity and uplift loads based on the opening span as provided in table A:

TABLE A: Mating wall column roof loads:

	Colum ID	First Floor Span (ft.)	Location (Ft)	Roof Loads at 1st floor opening per Snow load (lbs.)[1]: 20 psf					Net Uplift
THE FOLLOWING PIERS ARE LOCATED UNDER (A/B) MATING WALL COLUMNS	1	8'	36.333'	2148 #					400 #
	2	8'	44.333'	2148 #					400 #
	3	7'	48.333'	1879 #					350 #
	4	7'	55.166'	1879 #					350 #
	5	7'	60.166'	1879 #					350 #
	6	7'	67.166'	1879 #					350 #

COLUMBIA COUNTY BUILDING DEPARTMENT
Received for FILE COPY
Code Compliance
PLANS EXAMINER

1.Table A reflects roof load at mating wall opening supports from roof load only. To determine the load at a foundation adjacent floor and wall loads must be added per table B. In lue of using above load may be derivied by multiplying half mating wall opening span times mating wall at 1st floor ceiling uniform load as specified in table B.

TABLE B: UNIFORM LOAD (PLF) AT FLOOR LINE AT:

	Floor Load Only[3]	Uniform Load under wall per Ground Snow (lbs/ft.): 20 psf					Net Uplift (lb/ft.) NC	Corner
SIDEWALL AT 1st FLOOR CEILING	. plf	298.7 plf					94. plf	115.4 plf
SIDEWALL AT FLOOR TO SILL:	. plf	596.8 plf					. plf	27.1 plf
MAX. SIDEWALL RIM RAIL SPANS (in.)[1]	NA	NA						
MATING WALL AT 1st FLOOR CEILING:	. plf	536.9 plf					100. plf	100. plf
MATING WALL AT FLOOR TO SILL:	. plf	1140.4 plf					. plf	. plf
MAX. MATING RIM RAIL SPANS (in.)[2]	NA	NA						
SIDEWALL & MATING WALL SUPPORTED[6]:		N						
CHASSIS BEAM SUPPORTS (PLF):	360. plf	607.6 plf						
MAXIMUM CHASSIS PIER SPACING (FT.):	13.4' o/c	10.3' o/c						

FOOTNOTES:

1. SIDEWALL SPANS BASED ON RIM JOIST(S): (2) 2X8 #2 SPF WITH EACH RIM MEMBER SPLICED WITH 5" X 8" MiTeK M20 metal plates each side
2. MATING GIRDER SPANS BASED ON RIM JOIST(S): (4) 2X8 #2 SPF WITH EACH RIM MEMBER SPLICED WITH 5" X 8" MiTeK M20 metal plates each side
3. FLOOR ONLY- INDICATES LOAD OR ALLOWABLE SPANS UNDER MATING WALL OPENINGS (FLOOR LOAD ONLY).

4. EACH ENDWALL SHALL BE ANCHORED TO FOUNDATION FOR SHEAR DUE TO HOR. WIND FOR 4339 Lbs. &. EACH SIDEWALL SHALL BE ANCHORED TO FOUNDATION FOR SHEAR DUE TO HOR. WIND FOR 3019 Lbs.
5. GRAVITY LOADS DO NOT INCLUDE WEIGHT OF FOUNDATION WALLS AND FOOTERS.
6. INDICATES UNIFORM LOAD OR ALLOWABLE SPANS UNDER MATING WALLS (FLOOR + ROOF LOADS).
7. UPLIFT LOAD AT SIDES OF FIRST FLOOR OPENINGS=(PLF)*OPENING/2
8. "Y"- SIDEWALL & MATING WALL IS SUPPORTED BY PIERS. OR "N"-SIDEWALL OR MATING WALL NOT SUPPORTED BY PIERS AT 8' OC. MAX.

NOTES TO ALTERNATE FOUNDATION DESIGN PROFFESIONAL:

1. THIS PACKAGE CONTAINS A COMPLETE RECOMMENDED FOUNDATION SUPPORT AND ANCHORAGE SYSTEM DESIGNED TO CARRY ALL IMPOSED LOADS ON THE STRUCTURE. ALTERNATIONS TO THESE DIRECTIONS MUST BE PREFORMED BY A LICENSED PROFESSIONAL ENGINEER TO CARRY ALL IMPOSED LOADS IN A MANNOR THAT DOES NOT OVERSTRESS THE HOME STRUCTURE.
2. THE LOAD ON THIS PAGE HAS BEEN PREPARED TO COMMUNICATE THE IMPOSED LOAD REQUIREMENTS FOR THE HOME AND IS INTENDED TO BE UTILIZED BY A PROFESSIONAL ENGINEERING IN CONFORMANCE WITH LOCAL BUILDING CODES.
3. FOUNDATION LOADS ABOVE REFLECTS THE FOLLOWING:
   a. ON FRAME CRAWL (perimeter anchored) FOUNDATION DESIGN FOR: 30' - 0 " 2-SECTION MODULAR 1 STORY- W.O ATTIC
   b. 100 MPH EXPOSURE C
   c. 20 PSF, MAX. GROUND SNOW LOAD.
   d. 40 PSF FL. LL., 7PSF T.C.D.L., 8PSF B.C. D.L., 8PSF FL. DL. &, 10PSF B.C.L.L MAX. GROUND SNOW LOAD
   e. SEISMIC DESIGN CATEGORY C SDS=0.5

12-22-21

4. ALL DESIGN AND CONSTRUCTION IS SUBJECT TO THE AUTHORITY HAVING JURISDICTION. CONTACT LOCAL BUILDING DEPARTMENT FOR FROST LINE AND SOIL REQUIREMENTS.
5. FLOOR OR FOUNDATION WALL MUST BE INSULATED TO MEET A CONDITION SPACE AS REQUIRED BY HVAC DESIGN AS APPROVED BY BUILDING JURISDICTION. FOUNDATION WALL INSULATION SHALL BE PROVIDED AND INSTALLED BY OTHESR ON-SITE.
6. ALL FOUNDATION AND SITE WORK TO BE PERFORMED BY A LICENSED PROFESSIONAL CONTRACTOR.
7. THIS IS NOT INTENDED FOR CONSTUCTION DESIGN. FOUNDATION MUST BE DESIGNED TO CARRY ALL IMPOSED LOADS INCLUDING BUT NOT LIMITED TO FORCES INDICATED ABOVE FOR SPECIFIC STRUCTURE BY REGISTERED PROFESSIONAL ENGINEER IN ACCORDANCE WITH APPLICABLE BUILDING CODES.
8. PLEASE REFER TO THE PROVIDED FOUNDATION DESIGN PACKAGE FOR ALL FOUNDATION CONSTRUCTION REQUIREMENTS.
9. PLEASE CONTACT JOHN WELDY DIRECTOR OF ENGINEERING AT 574.825.7500 FOR ADDITIONAL INFORMATION. PLEASE PROVIDE FILENAME:943K-3.R.K.E.22.2.210(4)

CMH MANUFACTURING

Ver. 11

DESIGNER GUIDE FOR ALTERNATIVE FOUNDATIONS:

FLORIDA

UNIT WIDTH: 180 in
ROOF PITCH: 6/12 TO 6/12
WIND: 100 MPH EXPOSURE C
1 STORY- W.O ATTIC
PLANT #: 943
MODEL NUMBER: EZ-476
MAX. STRUCTURE LENGTH: 76 ft.

Mating wall is a roof load bearing wall; therefore the column supports of all first floor mating wall opening must be supported for the concentrated gravity and uplift loads based on the opening span as provided in table A:

TABLE A: Mating wall column roof loads:

	Colum ID	First Floor Span (ft.)	Location (Ft)	Roof Loads at 1st floor opening per Snow load (lbs.)[1]: 20 psf				Net Uplift
THE FOLLOWING PIERS ARE LOCATED UNDER (A/B) MATING WALL COLUMNS	1	8'	36.333'	2148 #				400 #
	2	8'	44.333'	2148 #				400 #
	3	7'	48.333'	1879 #				350 #
	4	7'	55.166'	1879 #				350 #
	5	7'	60.166'	1879 #				350 #
	6	7'	67.166'	1879 #				350 #

1.Table A reflects roof load at mating wall opening supports from roof load only. To determine the load at a foundation adjacent floor and wall loads must be added per table B. In lue of using above load may be derivied by multiplying half mating wall opening span times mating wall at 1st floor ceiling uniform load as specified in table B.

TABLE B: UNIFORM LOAD (PLF) AT FLOOR LINE AT:

	Floor Load Only[3]	Uniform Load under wall per Ground Snow (lbs/ft.): 20 psf					Net Uplift (lb/ft.) NC	Corner
SIDEWALL AT 1st FLOOR CEILING	397.5 plf	298.7 plf					94. plf	115.4 plf
SIDEWALL AT FLOOR TO SILL:	397.5 plf	623.5 plf					. plf	7. plf
MAX. SIDEWALL RIM RAIL SPANS (in.)[1]	57.1"	75.8"						
MATING WALL AT 1st FLOOR CEILING:	795. plf	536.9 plf					100. plf	100. plf
MATING WALL AT FLOOR TO SILL:	795. plf	1193.8 plf					. plf	. plf
MAX. MATING RIM RAIL SPANS (in.)[2]	95.9"	81.1"						

FOOTNOTES:

1. SIDEWALL SPANS BASED ON RIM JOIST(S): (2) 2X10 #2 SPF WITH EACH RIM MEMBER SPLICED WITH 5" X 8" MiTeK M20 metal plates each side
2. MATING GIRDER SPANS BASED ON RIM JOIST(S): (4) 2X10 #2 SPF WITH EACH RIM MEMBER SPLICED WITH 5" X 8" MiTeK M20 metal plates each side
3. FLOOR ONLY- INDICATES LOAD OR ALLOWABLE SPANS UNDER MATING WALL OPENINGS (FLOOR LOAD ONLY).

4. EACH ENDWALL SHALL BE ANCHORED TO FOUNDATION FOR SHEAR DUE TO HOR. WIND FOR 4339 Lbs. &. EACH SIDEWALL SHALL BE ANCHORED TO FOUNDATION FOR SHEAR DUE TO HOR. WIND FOR 3019 Lbs.
5. GRAVITY LOADS DO NOT INCLUDE WEIGHT OF FOUNDATION WALLS AND FOOTERS.
6. INDICATES UNIFORM LOAD OR ALLOWABLE SPANS UNDER MATING WALLS (FLOOR + ROOF LOADS).
7. UPLIFT LOAD AT SIDES OF FIRST FLOOR OPENINGS=(PLF)*OPENING/2

NOTES TO ALTERNATE FOUNDATION DESIGN PROFFESIONAL:

1. THIS PACKAGE CONTAINS A COMPLETE RECOMMENDED FOUNDATION SUPPORT AND ANCHORAGE SYSTEM DESIGNED TO CARRY ALL IMPOSED LOADS ON THE STRUCTURE. ALTERNATIONS TO THESE DIRECTIONS MUST BE PREFORMED BY A LICENSED PROFESSIONAL ENGINEER TO CARRY ALL IMPOSED LOADS IN A MANNOR THAT DOES NOT OVERSTRESS THE HOME STRUCTURE.
2. THE LOAD ON THIS PAGE HAS BEEN PREPARED TO COMMUNICATE THE IMPOSED LOAD REQUIREMENTS FOR THE HOME AND IS INTENDED TO BE UTILIZED BY A PROFESSIONAL ENGINEERING IN CONFORMANCE WITH LOCAL BUILDING CODES.
3. FOUNDATION LOADS ABOVE REFLECTS THE FOLLOWING:
   a. OFF FRAME BASEMENT & CRAWL FOUNDATION DESIGN FOR: 30' - 0 " 2-SECTION MODULAR 1 STORY- W.O ATTIC
   b. 100 MPH EXPOSURE C
   c. 20 PSF, MAX. GROUND SNOW LOAD.
   d. 40 PSF FL. LL., 7PSF T.C.D.L., 8PSF B.C. D.L., 13PSF FL. DL. &, 10PSF B.C.L.L MAX. GROUND SNOW LOAD
   e. SEISMIC DESIGN CATEGORY C SDS=0.5
4. ALL DESIGN AND CONSTRUCTION IS SUBJECT TO THE AUTHORITY HAVING JURISDICTION. CONTACT LOCAL BUILDING DEPARTMENT FOR FROST LINE AND SOIL REQUIREMENTS.
5. FLOOR OR FOUNDATION WALL MUST BE INSULATED TO MEET A CONDITION SPACE AS REQUIRED BY HVAC DESIGN AS APPROVED BY BUILDING JURISDICTION. FOUNDATION WALL INSULATION SHALL BE PROVIDED AND INSTALLED BY OTHESR ON-SITE.
6. ALL FOUNDATION AND SITE WORK TO BE PERFORMED BY A LICENSED PROFESSIONAL CONTRACTOR.
7. THIS IS NOT INTENDED FOR CONSTUCTION DESIGN. FOUNDATION MUST BE DESIGNED TO CARRY ALL IMPOSED LOADS INCLUDING BUT NOT LIMITED TO FORCES INDICATED ABOVE FOR SPECIFIC STRUCTURE BY REGISTERED PROFESSIONAL ENGINEER IN ACCORDANCE WITH APPLICABLE BUILDING CODES.
8. PLEASE REFER TO THE PROVIDED FOUNDATION DESIGN PACKAGE FOR ALL FOUNDATION CONSTRUCTION REQUIREMENTS.
9. PLEASE CONTACT JOHN WELDY DIRECTOR OF ENGINEERING AT 574.825.7500 FOR ADDITIONAL INFORMATION. PLEASE PROVIDE FILENAME:943I-3.R.K.E.22.2.210(

John W Weldy
12-2-21

CMH MANUFACTURING

Ver. 11

DESIGNER GUIDE FOR ALTERNATIVE FOUNDATIONS:

FLORIDA

UNIT WIDTH: 180 in
ROOF PITCH: 6/12 TO 6/12
WIND: 100 MPH EXPOSURE C
1 STORY- W.O ATTIC
PLANT #: 943
MODEL NUMBER: EZ-476
MAX. STRUCTURE LENGTH: 76 ft.

Mating wall is a roof load bearing wall; therefore the column supports of all first floor mating wall opening must be supported for the concentrated gravity and uplift loads based on the opening span as provided in table A:

TABLE A: Mating wall column roof loads:

	Colum ID	First Floor Span (ft.)	Location (Ft)	Roof Loads at 1st floor opening per Snow load (lbs.)[1]: 20 psf					Net Uplift
THE FOLLOWING PIERS ARE LOCATED UNDER (A/B) MATING WALL COLUMNS	1	8'	36.333'	2148 #					400 #
	2	8'	44.333'	2148 #					400 #
	3	7'	48.333'	1879 #					350 #
	4	7'	55.166'	1879 #					350 #
	5	7'	60.166'	1879 #					350 #
	6	7'	67.166'	1879 #					350 #

1.Table A reflects roof load at mating wall opening supports from roof load only. To determine the load at a foundation adjacent floor and wall loads must be added per table B. In lue of using above load may be derivied by multiplying half mating wall opening span times mating wall at 1st floor ceiling uniform load as specified in table B.

TABLE B: UNIFORM LOAD (PLF) AT FLOOR LINE AT:

	Floor Load Only[3]	Uniform Load under wall per Ground Snow (lbs/ft.): 20 psf					Net Uplift (lb/ft.) NC	Net Uplift (lb/ft.) Corner
SIDEWALL AT 1st FLOOR CEILING	. plf	298.7 plf					94. plf	115.4 plf
SIDEWALL AT FLOOR TO SILL:	. plf	596.8 plf					. plf	27.1 plf
MAX. SIDEWALL RIM RAIL SPANS (in.)[1]	NA	NA						
MATING WALL AT 1st FLOOR CEILING:	. plf	536.9 plf					100. plf	100. plf
MATING WALL AT FLOOR TO SILL:	. plf	1140.4 plf					. plf	. plf
MAX. MATING RIM RAIL SPANS (in.)[2]	NA	NA						
SIDEWALL & MATING WALL SUPPORTED[8]:		N						
CHASSIS BEAM SUPPORTS (PLF):	360. plf	607.6 plf						
MAXIMUM CHASSIS PIER SPACING (FT.):	13.4' o/c	10.3' o/c						

FOOTNOTES:

1. SIDEWALL SPANS BASED ON RIM JOIST(S): (2) 2X8 #2 SPF WITH EACH RIM MEMBER SPLICED WITH 5" X 8" MiTeK M20 metal plates each side
2. MATING GIRDER SPANS BASED ON RIM JOIST(S): (4) 2X8 #2 SPF WITH EACH RIM MEMBER SPLICED WITH 5" X 8" MiTeK M20 metal plates each side
3. FLOOR ONLY- INDICATES LOAD OR ALLOWABLE SPANS UNDER MATING WALL OPENINGS (FLOOR LOAD ONLY).
4. EACH ENDWALL SHALL BE ANCHORED TO FOUNDATION FOR SHEAR DUE TO HOR. WIND FOR 4339 Lbs. &. EACH SIDEWALL SHALL BE ANCHORED TO FOUNDATION FOR SHEAR DUE TO HOR. WIND FOR 3019 Lbs.
5. GRAVITY LOADS DO NOT INCLUDE WEIGHT OF FOUNDATION WALLS AND FOOTERS.
6. INDICATES UNIFORM LOAD OR ALLOWABLE SPANS UNDER MATING WALLS (FLOOR + ROOF LOADS).
7. UPLIFT LOAD AT SIDES OF FIRST FLOOR OPENINGS=(PLF)*OPENING/2
8. "Y"- SIDEWALL & MATING WALL IS SUPPORTED BY PIERS. OR "N"-SIDEWALL OR MATING WALL NOT SUPPORTED BY PIERS AT 8' OC. MAX.

NOTES TO ALTERNATE FOUNDATION DESIGN PROFFESIONAL:

1. THIS PACKAGE CONTAINS A COMPLETE RECOMMENDED FOUNDATION SUPPORT AND ANCHORAGE SYSTEM DESIGNED TO CARRY ALL IMPOSED LOADS ON THE STRUCTURE. ALTERNATIONS TO THESE DIRECTIONS MUST BE PREFORMED BY A LICENSED PROFESSIONAL ENGINEER TO CARRY ALL IMPOSED LOADS IN A MANNOR THAT DOES NOT OVERSTRESS THE HOME STRUCTURE.
2. THE LOAD ON THIS PAGE HAS BEEN PREPARED TO COMMUNICATE THE IMPOSED LOAD REQUIREMENTS FOR THE HOME AND IS INTENDED TO BE UTILIZED BY A PROFESSIONAL ENGINEERING IN CONFORMANCE WITH LOCAL BUILDING CODES.
3. FOUNDATION LOADS ABOVE REFLECTS THE FOLLOWING:
   a. PIER SET (FRAME TIED) FOUNDATION DESIGN FOR: 30' - 0 " 2-SECTION MODULAR 1 STORY- W.O ATTIC
   b. 100 MPH EXPOSURE C
   c. 20 PSF, MAX. GROUND SNOW LOAD.
   d. 40 PSF FL. LL., 7PSF T.C.D.L., 8PSF B.C. D.L., 8PSF FL. DL. &, 10PSF B.C.L.L MAX. GROUND SNOW LOAD
   e. SEISMIC DESIGN CATEGORY C SDS=0.5

John Weldy 12-2-11

4. ALL DESIGN AND CONSTRUCTION IS SUBJECT TO THE AUTHORITY HAVING JURISDICTION. CONTACT LOCAL BUILDING DEPARTMENT FOR FROST LINE AND SOIL REQUIREMENTS.
5. FLOOR OR FOUNDATION WALL MUST BE INSULATED TO MEET A CONDITION SPACE AS REQUIRED BY HVAC DESIGN AS APPROVED BY BUILDING JURISDICTION. FOUNDATION WALL INSULATION SHALL BE PROVIDED AND INSTALLED BY OTHESR ON-SITE.
6. ALL FOUNDATION AND SITE WORK TO BE PERFORMED BY A LICENSED PROFESSIONAL CONTRACTOR.
7. THIS IS NOT INTENDED FOR CONSTUCTION DESIGN. FOUNDATION MUST BE DESIGNED TO CARRY ALL IMPOSED LOADS INCLUDING BUT NOT LIMITED TO FORCES INDICATED ABOVE FOR SPECIFIC STRUCTURE BY REGISTERED PROFESSIONAL ENGINEER IN ACCORDANCE WITH APPLICABLE BUILDING CODES.
8. PLEASE REFER TO THE PROVIDED FOUNDATION DESIGN PACKAGE FOR ALL FOUNDATION CONSTRUCTION REQUIREMENTS.
9. PLEASE CONTACT JOHN WELDY DIRECTOR OF ENGINEERING AT 574.825.7500 FOR ADDITIONAL INFORMATION. PLEASE PROVIDE FILENAME:943N-3.R.K.E.22.2.210(4)

APPLICATION ENGINEERING FOR HEATING AND COOLING

SOUTHERN ENERGY HOMES
Hwy 41 N, PO Box 269
Addison, AL 35540

Manufacturer's Model #: EZ-476-MOD-FL
HVAC System Type: OVERHEAD GRAD FLEX FOR UPFLOW (SPLIT A/C)

Prepared By LaSalle Air Systems 11/22/2011 {Method & Output C 2009}

Calculations on this page are based on design parameters set forth in ASHRAE and ACCA Manuals J and D.
Design calculations are based on ACTUAL orientation. Room loads may vary based on actual conditions.

ENTIRE HOUSE VALUES - DESIGN ZONE: FL- DCA, North ORANGE ORIENTATION

COOLING LOAD:	**22,131**	Btuh based on outside temp of	94 ° F (34 C)	with inside temp reduced to	75 °	F (23 C)
HEATING LOAD:	**33,753**	Btuh based on outside temp of	17 ° F (-9 C)	with inside temp raised to	70 °	F (21 C)
GRAINS DIFFERENCE:	**40**	outside wet bulb	83.2 ° F	outside RH:	72.8 %	

CONSTRUCTION DETAILS & U FACTORS: (19-19-35)

TOTAL FLOOR AREA:	1908.50 s.f.	TRUE OUTSIDE PERIMETER:	202.33 ft				
Lowest Ceiling Height:	90 in.	Highest Ceiling Height:	108 in.				
NET Ext Wall Area:	1250.42 s.f.	ROOF:	0.032	FLOOR DUCTS (U):	0		
TOTAL Low-E window	251.67 s.f.	WALLS:	0.061	ATTIC DUCTS (U):	0.167		
TOTAL S.G.D.	0.00 s.f.	FLOOR:	0.054	EXT. DUCTS (U):	0.167		
TOTAL Glass Block	0.00 s.f.	Low-E wi	0.350	ATTIC DUCT AREA:	54.873	s.f exposed	
TOTAL Skylite	0.00 s.f.	S.G.D.	0.510	EXT. DUCT AREA:	0	s.f exposed	
TOTAL Door1 Area:	64.92 s.f.	Glass Blc	0.790	PEOPLE:	4		
TOTAL Door2 Area:	0.00 s.f.	Skylite	0.790	FIREPLACES:	0		
WINDOW % OF FLOOR	13.19 %	Door 1:	0.360	DUCT GAIN:	2051	Btuh	@ 83 TD/ 47 TD
WINDOW % OF WALL	16.06 %	Door 2:	0.670	DUCT LOSS:	2855	Btuh	@ 108 TD
LATENT GAIN:	3776 Btuh			SUMMER INFILTR:	105.2	cfm	
Mech. Ventilation :	0 cfm	Altitude:	40 ft	WINTER INFILTR:	210.4	cfm	

ROOM BY ROOM VALUES:

695.6 FPM, max velocity in trunk #: 8
0.14 Max pressure at A/H

Requirements based on actual house loads without incorporating duct friction losses.

ROOM NAME	HEATING LOSS (Btu)	COOLING GAIN (Btu)	CFM DIST	Cooling Air Values for 2.5 ton unit CFM	Btuh	Heating Air Values for 48 Gas/Oil CFM	Btuh	15 KW Elec Btuh	Maximum A/C capacity Calibrated Blower Test Btuh (alt adj)
Kitchen	2,431	1,376	60	55	1,632	50	2,331	2,737	2,672
Dining	4,374	3,120	132	127	3,757	115	5,365	6,301	6,123
Living Rm	6,249	4,355	175	175	5,168	158	7,380	8,667	8,435
Foyer	1,499	802	35	49	1,448	44	2,067	2,428	2,370
Bedroom #3	3,419	2,492	105	106	3,134	96	4,476	5,256	5,047
Hall Bath	1,175	693	28	37	1,096	33	1,565	1,837	1,771
Bedroom #2	3,838	2,610	108	129	3,800	116	5,427	6,373	6,081
M. Bath	3,924	2,209	94	119	3,516	107	5,021	5,897	5,731
WIC	1,761	1,007	43	49	1,433	44	2,046	2,403	2,346
M. Bedroom	3,115	2,390	102	132	3,876	118	5,535	6,501	6,318
Utility	1,969	1,077	46	47	1,391	42	1,986	2,333	2,277
TOTALS	33,753	22,131	928	1,026	30,252	924	43,200	50,735	49,172

APPLICATION ENGINEERING
DUCT AIR FLOW AND SIZING WORKSHEET (MANUAL D)

Manufacturer: SOUTHERN ENERGY HOMES
Hwy 41 N, PO Box 269
Addison, AL 35540

Model #: EZ-476-MOD-FL
HVAC System Type: OVERHEAD GRAD FLEX FOR UPFLOW (SPLIT A/C)
Design Zone: FL- DCA, North

Prepared by LaSalle Air Systems 11/22/2011 All rights reserved. This information proprietary to LaSalle Bristol Co. and clients.
Calculations include factors for duct air temperature change and pressure drops through ducts. All joints are tightly fitted or sealed.

Blower CFM 892 @ 0.7 E.S.P. TEL= 485.8117 FR= 0.0803 *(A/C Coil included)*
Altitude = 40 ft

BRANCH DUCT LISTING ANALYSIS

BR #		Trunk #	Metal (ft)	F. G. (ft)	Flex (ft)	Bends/ Fittings(ft)	Total Eq. Length	Heat Btuh	Cool Btuh	Heat cfm	Cool cfm	Design cfm	Round Size	User Input Rectangle Size (i.d.) x (i.d.)	Final Round Size	Final Velocity fpm
1	Living Rm	4	0	0	26	346.133	372.133	3,705	2,582	89	103	103	7.17		7.0	385.4
2	Living Rm	4	0	0	19	339.875	358.875	2,544	1,773	61	70	70	6.22		6.0	358.1
3	Foyer	3	0	4	12	307.946	323.946	1,499	802	35	31	35	4.69		5.0	259.1
4	Bedroom #3	5	0	0	17	344.275	361.275	3,419	2,492	82	99	99	7.01		7.0	370.1
5	Hall Bath	6	0	0	26	409.812	435.812	1,175	693	29	28	29	4.45		5.0	210.4
6	Bedroom #2	6	0	0	36	396.044	432.044	3,838	2,610	94	107	107	7.49		8.0	306.5
7	Dining	7	0	4	20	271.653	295.653	4,374	3,120	102	120	120	7.56		7.0	450.3
8	Kitchen	7	0	4	10	266.459	280.459	2,431	1,376	56	53	56	5.26		5.0	414.3
9	Utility	2	0	4	14	320.867	338.867	1,969	1,077	47	42	47	5.12		5.0	341.9
10	M. Bedroom	8	0	4	17	263.559	284.559	3,115	2,390	72	92	92	6.45		7.0	343.3
11	WIC	8	0	4	32	291.54	327.54	1,761	1,007	42	39	42	5.08		5.0	304.6
12	M. Bath	8	0	4	39	276.9	319.9	3,924	2,209	92	86	92	6.75		7.0	345.5
N/A	Other Rooms							-	-							
								33,753	22,131	800	872	892				

TRUNK DUCT LISTING ANALYSIS

TRUNK # 1	4	90	94	33,753	22,131	892	12.13			16.0	639.0
TRUNK # 2	4	94	98	33,753	22,131	892	12.13	14	18	17.3	509.9
TRUNK # 3	4	194.551	198.551	16,180	10,952	443	10.19			12.0	564.3
TRUNK # 4	11	257.675	268.675	6,249	4,355	173	7.60			8.0	496.5
TRUNK # 5	9	257.075	266.075	8,432	5,795	235	8.52			9.0	531.0
TRUNK # 6	9	316.998	325.998	5,013	3,303	136	7.38			8.0	388.7
TRUNK # 7	8	179.859	187.859	6,804	4,496	177	7.20			8.0	506.6
TRUNK # 8	15	181.959	196.959	8,799	5,606	226	7.88			9.0	510.7
TRUNK # 9				-	-	0		0	0		
TRUNK # 10				-	-	0		0	0		
TRUNK # 11				-	-	0		0	0		
TRUNK # 12				-	-	0		0	0		
TRUNK # 13				-	-	0		0	0		
TRUNK # 14				-	-	0		0	0		
TRUNK # 15				-	-	0		0	0		
LONGEST RETURN DUCT	0	50	50			892	11.39	19	19	20.8	355.9

NEC 220.82

Southern Energy
Residential Electrical Feeder
Load Calculation for 120 / 240 Volt

DATE: 11/28/11
BY: SMP

MODEL : MTF-2530-EZ-476

(B)(1) LIGHTING LOAD

Main Floor Size =		Tag Floor Size =		2nd. Floor Size =	
length =	76.00 ft.	length =	ft.	length =	ft.
width =	30.00 ft.	width =	ft.	width =	ft.

Total area = 1928 sq. ft.
x 3 VA
5784 VA

Minimum number of 15 Amp circuits = 4

(B)(2) SMALL APPLIANCE LOAD

No. of circuits = 4
x 1500 VA
6000 VA

LAUNDRY LOAD

No. of circuits = 1
x 1500 VA
1500 VA

(B)(3) APPLIANCE LOAD & (B)(4) MOTOR LOAD

Electric Range =	11900 VA
Electric Water Heater =	3800 VA
Electric Clothes Dryer =	5600 VA
Electric Cooktop =	0 VA
Electric Wall Oven =	0 VA
Trash Compactor =	0 VA
Dishwasher =	744 VA
Garbage Disposal =	0 VA
Hydromassage Tub Motor =	0 VA
Gas/Oil furnace blower motor =	0 VA
Microwave oven =	1580 VA
Other =	0 VA
Exhaust Fans (total of all) =	840 VA
	24464 VA

1 Kitchen @ 120 VA each
3 Bath @ 240 VA each

TOTAL OF LOADS (B)

(1) Lighting load =	5784 VA
(2) Small appliance load =	6000 VA
(2) Laundry load =	1500 VA
(3) Appliance & (4) Motor load	24464 VA
Subtotal =	37748 VA

Demand Factor

First 10000 VA @ 100% =	10000 VA
Remaining 27748 VA @ 40% =	11099 VA
General Load Total =	21099 VA

(C) HEATING AND AIR-CONDITIONING LOAD (USE LARGEST)

(1) Air conditioning & cooling @ 100% =	0 VA
(2) Heat pump w/o supplemental electric heating @ 100% =	0 VA
(3) Electric thermal storage @ 100% =	0 VA
(4) Heat pump @ 100% & supplemental electric heating @ 65% =	0 VA
(5) Electric space heating (less than 4 units) @ 65% =	13260 VA

Total VA = 34359 VA / 240 Volts =

TOTAL OF ALL LOADS =	143	AMPS
Minimum Main Panel Size Required =	150	AMPS
Actual Main Panel Size Installed =	**200**	**AMPS**

Service Feeder Conductor Size Required = **4/0** AWG AL or CU-Clad AL
Table 310.15(B)(6) **2/0** AWG CU

Grounding Electrode Conductor Size = **2** AWG AL or CU-Clad AL
Table 250.66 **4** AWG CU

220.61
NEUTRAL LOAD

Lighting, Small Appliance & Laundry Loads =	13284 VA
First 3000 VA @ 100% =	3000 VA
Remaining 10284 VA @ 35% =	3599.4 VA
Subtotal =	6599.4 VA
Total Cooking Appliances @ 70% =	8330 VA
Clothes Dryer @ 70% =	3920 VA
Sum of other 120 V Loads =	3164 VA
Total =	22013.4 VA / 240 V =

Neutral wire size based on amps = **92 AMPS**

PRODUCT APPROVAL SPECIFICATION SHEET

Manufacturer: Southern Energy Homes Plan #: MTF-2530-EZ-476

As required by Florida Statue 553.842 and Florida Administrative Code 9N-3, the below listed information and the product approval number(s) on these building components reflect those utilized on the manufactured building for which a DCA insignia is sought.

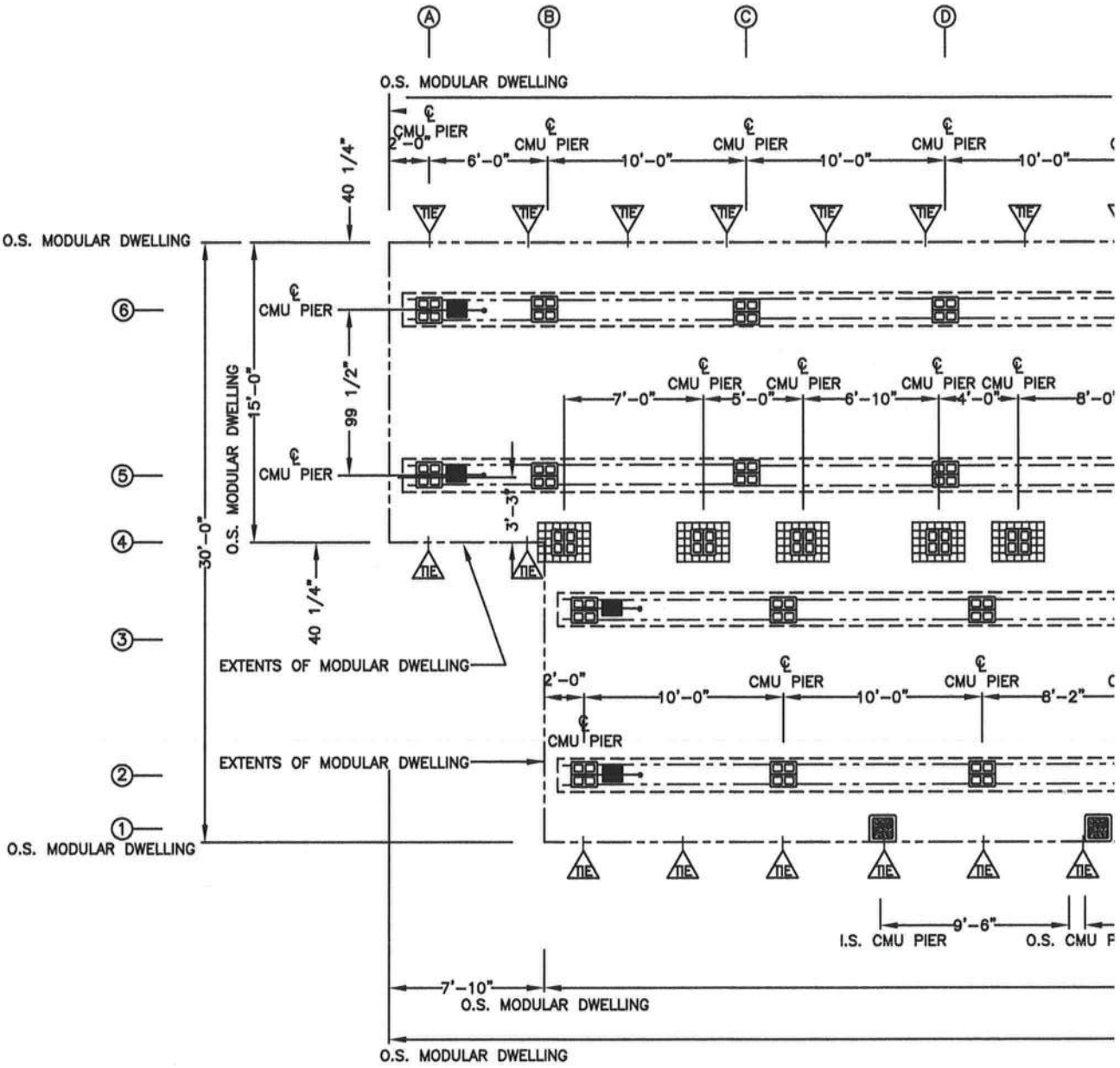
Category	Manufacturer	Product Description	Approval #(s)
EXTERIOR DOORS			
Swing / Patio	Dunbarton		FL2623
WINDOWS			
Single Hung	Kinro	9750	FL993.1, FL993.2
PANEL WALL			
Vinyl Siding	Georgia Pacific	Variform	FL2224-R3
Soffit	James Hardie	Hardie Soffit/Cem Soffit	FL13265.1
ROOFING PRODUCT			
Shingles	Owens Corning	Classic	FL10674
Underlayment	Shepherd Distribution	Ply Dry III	FL13512
Asphalt Cement	Tamko	Tam-Pro 856 Premium SBS Adhesive	FL1960.7
Asphalt Cement	Tamko	Tam-Pro Q-20 Premium SBS Flash	FL1960.10
SHUTTERS			
N/A			
SKYLIGHT			
N/A			
STRUCTURAL COMPONENTS			
Truss Plates (16, 18 & 20ga)	MiTek		FL2197-R3
Uplift Strap	SimpsonStrongTie	LSTA18, CS22, CS16, CS14	FL10852
Uplift Strap	SimpsonStrongTie	LTS18, HTS16	FL10456
NEW EXTERIOR ENVELOPE PRODUCTS			
N/A			

The products listed below did not demonstrate product approval at plan review. I understand that at the time of inspection of these products, the following information must be available to the inspector at the manufacturing plant: (1) Copy of product approval from the Local or State Building Commission, or supply all of the information listed on Form No. 9B-72.130(5). (2) Copy of the applicable manufacturer's installation requirements.

I understand these products may have to be removed if approval cannot be demonstrated during inspection.

Manufacturer's Authorized Agent Signature

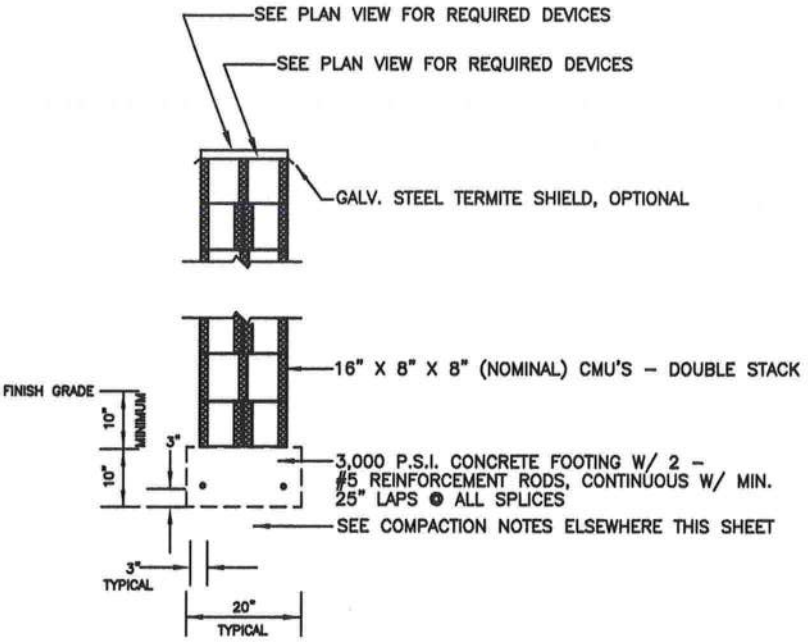
Steven Phillips 11-28-11
Printed Name Date



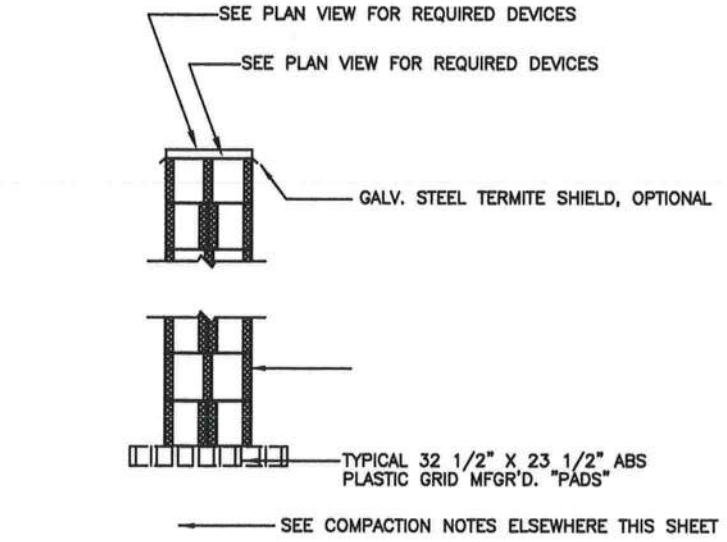
1 / S1.0.0 DIMENSIONED FOUNDATION PLAN VIEW

SCALE: 1/8" = 1'-0

PROJECT No. ENERGY2-S1.0.0.DWG	DATE 11/06/11	DIMENSIONED FOUNDATION SYSTEM PLAN VIEW MISC. NOTES, REFERNCES & INSTRUCTIONS	Curtis E. Keen, PE #23836 Certification of Authorization #3761 DATE:
SHEET No. S1.0.0			



1 / S1.1.0 SECTION THROUGH DOUBLE STACKED CMU'S – CONCRETE
SCALE: N.T.S.



3 / S1.1.0 SECTION THROUGH DOUBLE STACKED CMU'S – ABS GRID
SCALE: N.T.S.

REINFORCING STEEL	REINFORCING STI ALL REINFORCIN SPLICES SHALL FOR MINIMUM C ALL REINFORCEM
GENERAL	FOOTINGS SHALL 1,800 P.S.F. SO

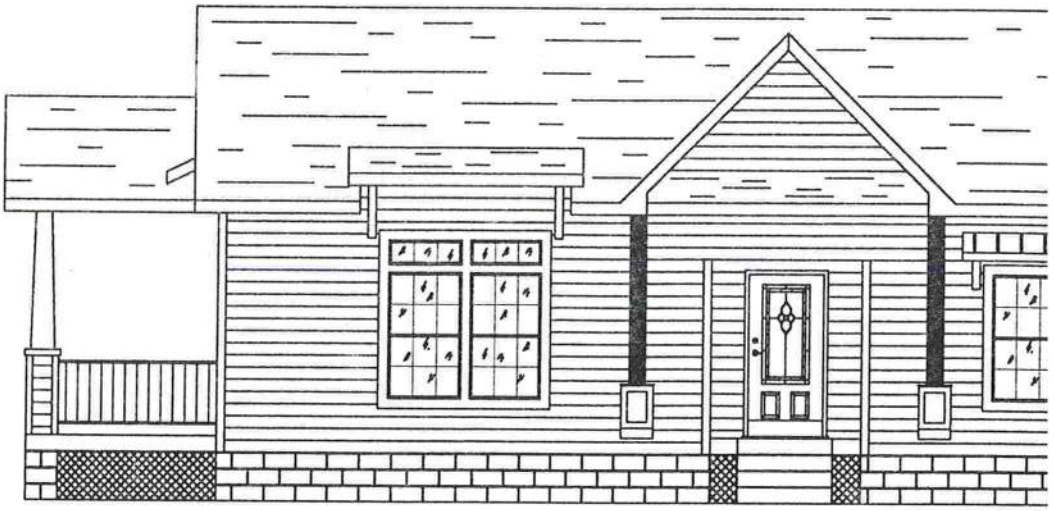
ADDITIONAL CONCRETE

1 Concrete construction shall
"Building Code requirements
Concrete Practice, Part 1 A
2 Cement for concrete shall
3 Aggregates for concrete shal
4 Water for concrete shall be
5 Optional: Test concrete for
concrete placed on a given
28 days. Testing will be pa
6 Concrete shall have strength
7 Reinforcing steel shall meet
noted.
8 Concrete temperature shall n
9 Concrete shall be placed in
10 Concrete shall not be allowe
11 Areas to receive concrete sh
properly positioned prior to
12 Anchor Bolts shall meet the
13 Anchor bolts and dowels sha
length shall be covered with
14 Lap splices shall be 40 bar
15 Detailing, fabrication, and pla
CRSI and ACI specifications.
16 Reinforcing steel shall be fre
or destroy bond.
17 Reinforcing bars shall not be
18 Support reinforcing steel on

PROJECT No.	ENERGY2–S1.1.0.DWG
SHEET No.	S1.1.0
DATE	11/06/11

REFERENCED SECTIONS & DETAILS
MISC. NOTES, REFERNCES & INSTRUCTIONS

Curtis E. Keen, PE #23836
Certification of Authorization #3761
DATE: 12/19/11



FRONT OF HO

NOTE:
EXTERIOR SOFFIT IN PORCH AR
ON-SITE BY-OTHERS.

INDEX

ATTACHMENTS

- HVAC CALCULATIONS
- ELECTRICAL LOAD CALCULATIONS
- TRUSS CALCULATIONS
- FLORIDA PRODUCT APPROVAL LIST
- FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION
- MICROLAM RIDGE BEAM & CLAC's
- DORMER DETAILS
- ALTERNATE EYEBROW CONTRUCTION

NOTES:
1. THESE PLANS COMPLY WITH RULE 9N-3 FOR P
2. THE RAISED SEAL SET OF PLANS ARE ON FILE AGENCY'S OFFICE AS DIRECTED BY THE DCA.
3. THIS BUILDING HAS NOT BEEN DESIGNED OR PLACEMENT IN HIGH VELOCITY HURRICANE Z
4. THIS BUILDING IS SUBJECT TO REVIEW AND A FIRE INSPECTOR ON SITE WITH COMPLIANCE W FIRE SAFETY CODE.
5. THE MANUFACTURER'S DATA SHEET AND STA BE PERMANENTLY MOUNTED TO OR ABOUT TH
6. THIS STRUCTURE HAS BEEN DESIGNED FOR E ON A SITE BUILT PERMANENT FOUNDATION A BE MOVED ONCE SO ERECTED OR INSTALLED.

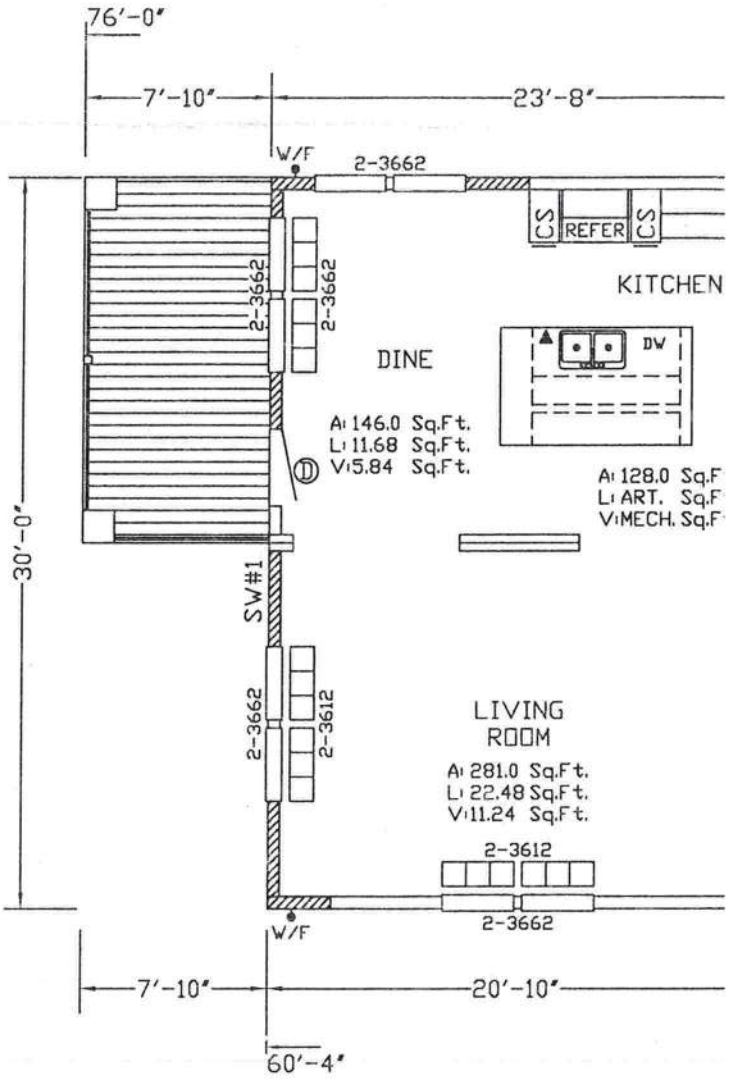
DESIGN CODES

2007 FLORIDA RESIDENTIAL CODE W/2009 SUPPLE
2008 NEC
ENERGY EFFICIENCY-FL BUILDING CODE 2007-
RESIDENTIAL, CHAPTER 11 W/APPENDIX G & 200

COMPONENTS & CLADDING LOADS	
ROOF	WALLS
ZONE-1: 19.1 PSF	INTERIOR: 21.0 PSF
ZONE-2: 31.6 PSF	CORNER: 26.8 PSF
ZONE-3: 48.3 PSF	

WIND IMPORTANCE FACTOR (I)=1
BUILDING CATEGORY=2
INTER. PRESSURE COEFFICIENT=.18 & -.18

NOTE:
1. WHEN 26ga. STRAP IS CALLED FOR IN CALCULATION, USE SIMPSON CS-22 OR BETTER.
2. TRUSES IN PORCH AREA TO BE DESIGNED FOR PARTIALLY ENCLOSED OR EXPOSED STRUCTURE OR DOUBLED IN PORCH AREA.



● STATE LABEL
▲ DATA PLATE
■ ALABAMA OUT-OF-STATE LABEL

NOTES:
1. ALL WINDOWS TO BE THERMOPANES.
2. ATTIC ACCESS OPENING 22"x30" Min.
3. FLAME SPREAD: INSULATION MATERIAL SHALL HAVE A FLAME SPREAD RATING OF NOT GREATER THAN 25, WALL AND CEILING FINISHES SHALL HAVE A FLAME SPREAD RATING NOT GREATER THAN 200 AND A SMOKE DENSITY RATING NOT GREATER THAN 450 (CLASS-C). THE FLAME SPREAD REQUIREMENTS DO NOT APPLY TO TRIM OR ORNAMENTAL MATERIALS. TESTING SHALL CONFORM TO ASTM-E84.
4. ALL EXHAUST FROM FANS TO BE RUN THROUGH DUCT TO THE OUTSIDE OF HOUSE AND TERMINATED IN A VENT CAP.
5. IF HOME IS PLACED ON SITE WHERE ANY WINDOW SILL IS LESS THAN 24" ABOVE FINISHED FLOOR AND 72" OR GREATER ABOVE THE EXTERIOR GRADE, A WINDOW GAURD MUST BE INSTALLED THAT COMPLIES WITH ASTM F2006 OR F2090.
6. THESE PLANS MAY BE FLIPPED END TO END, FRONT TO BACK OR ROTAED 180°.
7. NO FUEL BURNING APPLIANCES INSTALLED IN BUILDING.

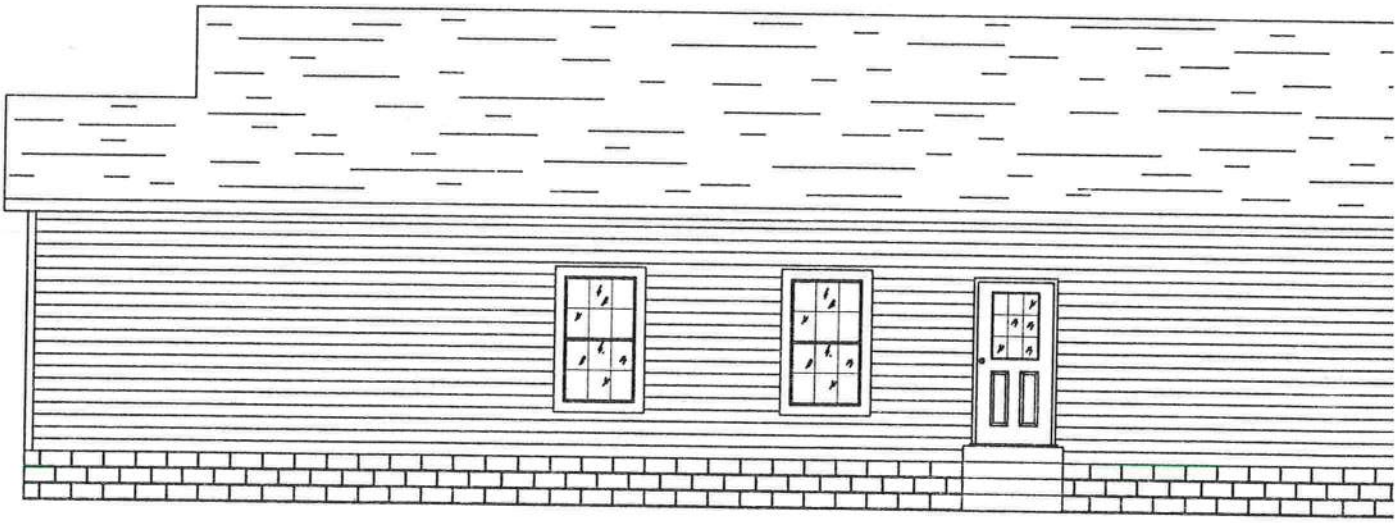
SHEARWALLS: 108" SIDEWALLS						
CATEGORY-C	MIN. LENGTH		CATEGORY-C		MIN. LENGTH	
100 MPH	SIDE	END			SIDE	END
SW#1: 631 PLF	32"	87"	SW#1:	PLF		
SW#2: 489 PLF	42"	75"	SW#2:	PLF		
SW#3: 489 PLF	42"	126"	SW#3:	PLF		
SW#4: N/A PLF	N/A	N/A	SW#4:	PLF		

PLF CONSTRUCTION PER SW-31.3._.K.E.22_[119], SW-31.3._.K.E.22_[119]-1,

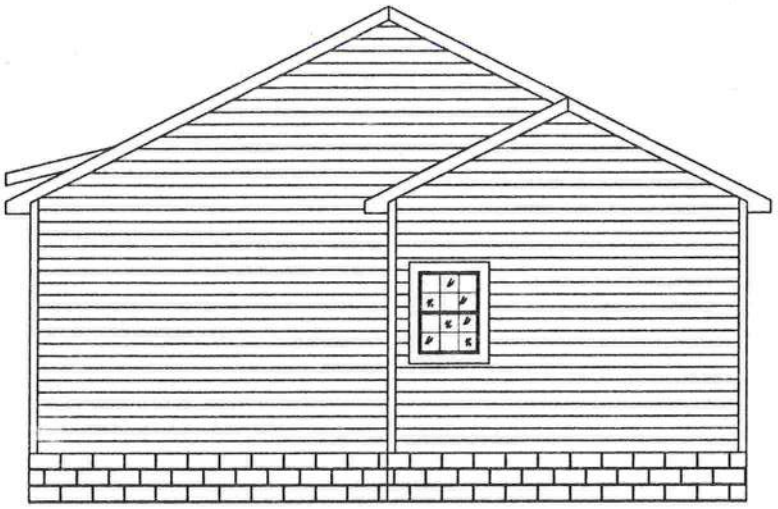
SIZE	QUAN.	DESCRIPTION
3612	6	FIXED TRANSOM (TH
3040	2	VERTICAL SLIDER W/MULL
3662	12	VERTICAL SLIDER W/MULL

SYM	SIZE	QUAN.	D
Ⓐ	2668(30")	7	INTERI
Ⓑ	3068(36")	1	INTERI
Ⓒ	3068(36")	1	EXTERI
Ⓓ	3068(36")	1	EXTERIO
Ⓔ	3068(36")	1	EXTERIOR RI

FRONT ELEVATION



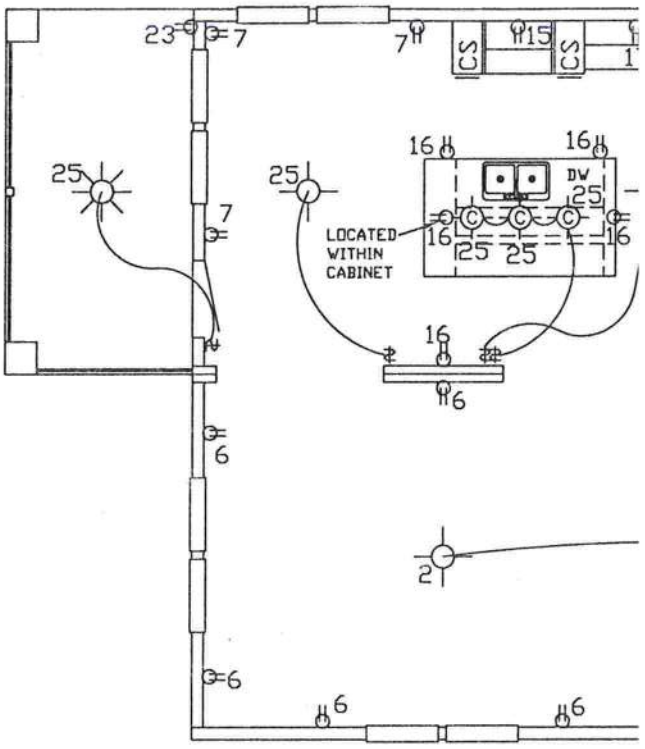
REAR ELEVATION



RIGHT ELEVATION

LEFT ELEVATION

RANGE:18/19
VF:25
DW:21



*12" MIN. TO SHELF
**LIGHT TO BE OF THE ENCLOSED AND GASKETED TYPE, LISTED FOR WET LOCATIONS.

NOTES:
1. ALL 15 & 20 AMP RECEPTS ARE TO BE TAMPER RESISTANT.
2. ALL SMOKE ALARMS ARE TO BE INTERCONNECTED.
3. ALL SMOKE ALARMS SHALL BE PROVIDE WITH BOTH PRIMARY POWER FROM THE BUILDINGS WIRING AND SECONDARY POWER FROM A BATTERY BACK-UP.
4. MAIN BREAKER SIZE: 200 AMP.
5. SERVICE ENTRANCE CONDUCTOR:
   COPPER=2/0
   ALUMINUM OR COPPER CLAD ALUM.=4/0

LEGEND

- FLUORESCENT LIGHT
- OVERHEAD GLOBE LIGHT
- RECESSED CAN LIGHT
- PB PANEL BOX
- (T) THERMOSTAT LOCATION
- EXTERIOR LIGHT W/P
- RECEPTACLE PLUG
- $ SWITCH
- VENT FAN SYMBOL:
  75 CFM VENTED TO OUTSIDE FOR BATHS
  100 CFM VENTED TO OUTSIDE FOR KITCHEN
- CEILING MOUNTED SMOKE ALARM
- CEILING MOUNTED CARBON MONOXIDE DETECTOR
- EXTERIOR FLOOD LIGHT W/P
- (PJ) PHONE JACK

CIRCUIT#	DESCRIP
1	RECEPS (
2	GENERAL LIGH
3	GENERAL LIGH
4	RECEPS. (
5	RECEPS. (
6	RECEPS. (
7	DINE (A
8/9	WATER HEA
10	WASH
11/12	DRYER
13/14	FURNAC
15	REFER(SMA

1. ALUMINUM CONDUCTORS SHALL NOT BE USED.
2. DISTRIBUTION EQUIPMENT SHALL BE LOCATED A MINIMUM OF 24" ABOVE THE FLOOR LEVEL OF THE HOME.
3. RECEPTACLE OUTLETS LOCATED IN COMPARTMENTS ACCESSIBLE FROM OUTDOORS SHALL BE PROVIDED WITH A GFCI PROTECTED OUTLET.
4. EACH BASIN WITHIN A BATHROOM SHALL BE PROVIDED WITH A GFCI PROTECTED OUTLET AT COUNTERTOP AREA. THIS OUTLET SHALL BE ON A SEPARATE 20 AMP. CIRCUIT.
5. LIGHTING FIXTURES INSTALLED OVER A BATHTUB OR SHOWER SHALL BE OF THE ENCLOSED AND GASKETED TYPE, LISTED FOR WET AREA USE.
6. EVERY APPLIANCE SHALL BE ACCESSIBLE FOR INSPECTION, SERVICE REPAIR OR REPLACEMENT WITHOUT REMOVAL OF PERMANENT CONSTRUCTION.
7. NONMETALLIC BOXES ARE USED WITH NONMETALLIC CABLE ONLY.
8. NONMETALLIC CABLE IN STORAGE AREAS AND/OR LESS THAN 15" ABOVE THE FLOOR SHALL BE PROTECTED FROM DAMAGE.
9. ELECTRICAL CABLES SHALL BE SECURED IN PLACE AT INTERVALS NOT EXCEEDING 4 1/2 FT. AND WITHIN 12" FROM EVERY CABINET BOX OR FITTING.
10. ELECTRICAL CABLES LESS THAN 1 1/4" FROM ANY SURFACE OF WOOD FRAMING MEMBERS IT PASSES THROUGH SHALL BE PROTECTED WITH A STEEL DEVICE OF 16 ga. THICKNESS IN IN WALL STUDS 3 1/2" AND LARGER OR USE A CABLE STACKER ON WALL STUDS LESS THAN 3 1/2".
11. METALLIC FACE PLATES SHALL BE EFFECTIVELY GROUNDED.
12. APPLIANCES CONNECTED BY METAL-CLAD CABLE OR FLEXIBLE CONDUIT SHALL HAVE AT LEAST 3' OF FREE CABLE OR CONDUIT TO PERMIT MOVING THE APPLIANCE.
13. TYPE "NM" OR TYPE "SE" CABLE SHALL NOT BE USED TO CONNECT A RANGE OR DRYER DIRECTLY BUT CAN BE USED TO A JUNCTION BOX OR RECEPTACLE FOR RANGE OR DRYER.
14. SWITCHES SHALL BE ADEQUATELY RATED FOR LOAD CONTROL.
15. AT LEAST 6" OF FREE CONDUCTOR, MEASURED FROM THE FACE OF THE OUTLET BOX, SHALL BE LEFT AT EACH OUTLET BOX UNLESS CONDUCTORS LOOP WITHOUT JOINTS.
16. EXPOSED WIRING OUTSIDE THE HOME SHALL BE IN CONDUIT.
17. OUTLET BOXES SHALL FIT CLOSELY TO OPENINGS AND SHALL BE FLUSH WITH THE SURFACE.
18. GROUNDING OF ALL ELECTRICAL AND NON-ELECTRICAL METAL PARTS SHALL BE THROUGH A CONNECTION TO THE GROUNDING BUS IN THE MAIN DISTRIBUTION PANEL.
19. THE GREEN COLORED WIRE IN THE SUPPLY CORD OR FEEDER WIRING SHALL BE CONNECTED TO THE GROUNDING BUS IN THE MAIN DISTRIBUTION PANEL.
20. OUTDOOR ELECTRICAL FIXTURES AND EQUIPMENT SHALL BE LISTED FOR OUTDOOR USE. OUTDOOR RECEPTACLES SHALL BE OF A GASKETED TYPE AND GFCI PROTECTED. WET LOCATION EXTERIOR GFCI RECEPTACLES SHALL HAVE AN ENCLOSURE THAT IS WEATHERPROOF WITH THE ATTACHMENT PLUG CAP INSERTED OR REMOVED.
21. ARRANGEMENTS SHALL BE MADE TO ASSURE THAT THE COLOR CODING MATERIALS ARE NOT OBLITERATED BY PAINTING.
22. AT LEAST TWO (2) EXTERIOR RECEPTACLES, APPROVED FOR SUCH USE, SHALL BE INSTALLED ON THE EXTERIOR OF THE HOMEACCESIBLE AT GRADE LEVEL. ONE (1) ON THE FRONT DOOR SIDE AND ONE (1) ON THE REAR DOOR SIDE (OPPOSITE LONG WALL SIDE). AN ADDITIONAL EXTERIOR RECEPTACLE SHAAL BE INSTALLED WITHIN THE PERIMETER OF ALL BALCONIES, DECKS, OR PORCHES GREATER THAN 20 Sq.Ft. IN AREA THAT ARE ACCESSIBLE FROM INSIDE THE DWELLING UNIT (THIS ADDITIONAL RECEPTACLE SHALL BE PROVIDED AND INSTALLED BY OTHERS ON SITE).
23. ALL ELECTRICAL MATERIALS, DEVICES, APPLIANCES, FITTINGS AND OTHER EQUIPMENT SHALL BE LISTED OR LABELED BY A NATIONALLY RECOGNIZED TESTING AGENCY AND SHALL BE CONNECTED IN AN APPROVED MANNER WHEN IN SERVICE.
24. EACH STRAP OR YOKE CONTAINING ONE OR MORE DEVICE MUST BE COUNTED AS (2) CONDUCTORS FOR BOX FILL.
25. ALL KITCHEN COUNTERTOP RECEPTACLES SHALL BE GFCI PROTECTED AND CANNOT BE SPACED MORE THAN 48" O.C..
26. EXTERIOR GFCI RECEPTACLES SHALL BE SUPPLIED BY AN ADJACENT LIGHTING CIRCUIT.
27. NO WIRING IS TO BE INSTALLED IN THE RETURN AIR PLENUMS.
28. ELECTRICAL TYPE HEATING ELEMENTS ARE TO BE SUBDIVIDED WITHIN THE UNIT SUCH THAT EACH SUBDIVIDED LOAD DOES NOT EXCEED 48 AMPS.
29. BOXES USED AT LUMINAIRES OUTLETS IN CEILINGS SHALL BE DESIGNED FOR THAT PURPOSE AND REQUIRED TO SUPPORT A MIN. OF 50 Lbs.. BOXES USED AT LUMINAIRE OUTLETS IN A WALL SHALL BE DESIGNED FOR THAT PURPOSE AND MARKED ON INTERIOR TO INDICATE THE MAX. WEIGHT THAT IS PERMITTED IF OTHER THAN 50 Lbs.. A WALL MOUNTED LUMINAIRE WEIGHING NOT MORE THAN 6 Lbs. MAT BE SUPPORTED ON OTHER BOXES OR PLASTER RINGS.
30. OPENINGS AROUND ELECTRICAL PENETRATIONS THROUGH FIRE RESISTANT WALLS, PARTITIONS, FLOORS OR CEILINGS SHALL BE FIRE STOPPED USING APPROVED METHODS TO MAINTAIN THE FIRE RESISTANCE RATING.
31. SERVICE EQUIPMENT SHALL BE SUITABLE FOR THE SHORT CIRCUIT (FAULT) CURRENT AVAILABLE AT ITS SUPPLY TERMINALS.
32. ALL RECEPTACLES TO BE OF THE GROUNDING TYPE.
33. ALL WIRING TO BE PER 2008 NEC W/TYPE "NM" ROMEX (CU) W/GROUND.
34. MAIN PANEL TO BE MARKED "SUITABLE FOR USE AS SERVICE EQUIPMENT" AND BE EQUIPPED WITH BREAKER/FUSE TYPE OVER CURRENT PROTECTION. 30" WIDE x 36" DEEP CLEAR WORKING SPACE SHALL BE PROVIDED IN FRONT OF THE ELECTRICAL PANEL.
35. PROPER THERMAL OVERLOAD PROTECTION TO BE PROVIDED FOR ALL MOTORS.
36. DISCONNECTING MEANS TO BE LOCATED WITHIN SIGHT FOR ALL MOTORS.
37. WEATHERPROOF PROTECTION REQUIRED FOR ALL OUTDOOR LIGHTS, RECEPTACLES AND DISCONNECTS. ALL EXTERIOR RECEPTACLE DEVICES SHALL BE LISTED AND LABELED AS WEATHER RESISTANT (WR).

38. PROF
ALL ELE
39. ALL E
AND PR
40. COM
WITH T
41. EXIT
CONNE
42. ALL E
43. PROV
SERVIC
44. ALL E
SUNRO
A LISTE
45. REQU
THE OVI
46. ALL 1
47. A WA
ADDITI
PLACEM
48. A MI
SEE PLA

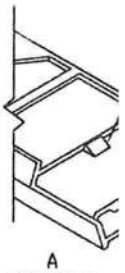
BECAUS
A QUAL

EACH U
FLOOR.
FOR RA
CONNE

SOME H
INSTRU

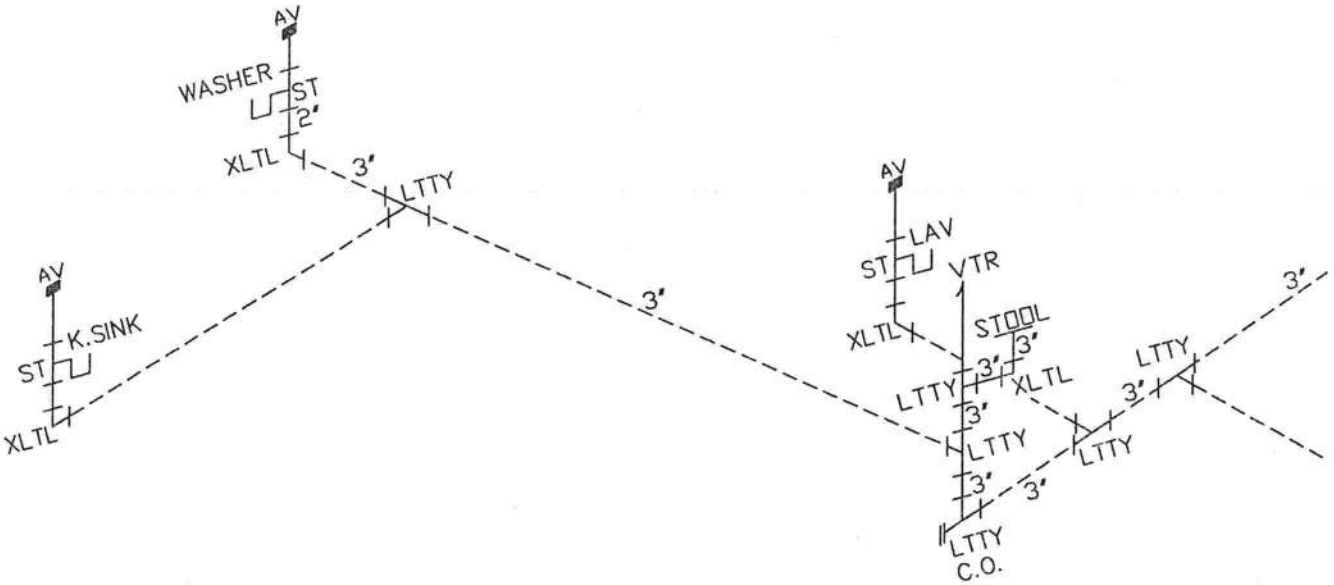
ALL ELE

DANGI



A
SECTION

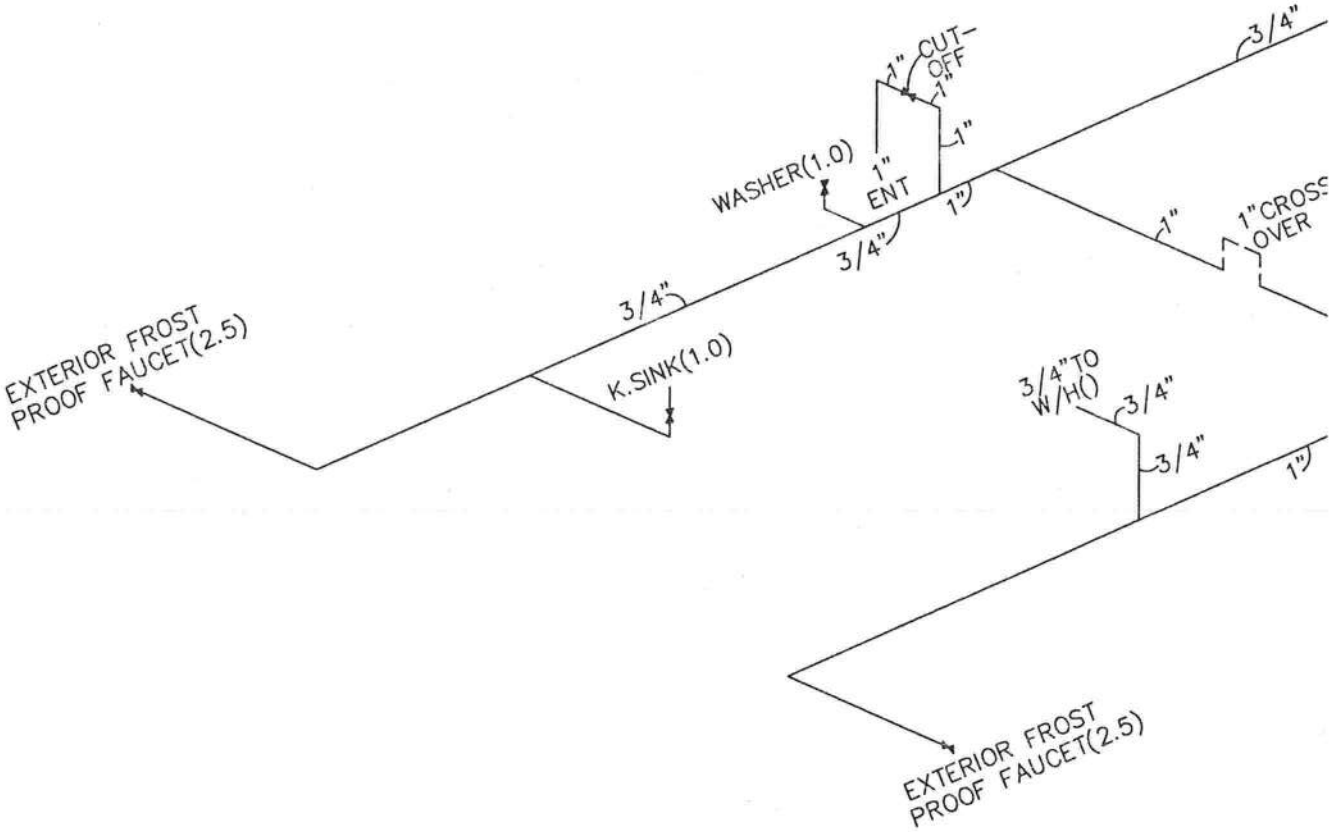
MAT
FA


AV
WASHER
ST
2"
XLTL
3"
LTTY
AV
K.SINK
ST
XLTL
3"
AV
LAV
ST
VTR
XLTL
STOOL
3"
3"
LTTY
XLTL
3"
LTTY
3"
LTTY
3"
LTTY
3"
LTTY
C.O.
3"

FIXTURE UNITS PER TABLE P2903.6
(2)FULL BATH GROUPS: 3.0-HOT, 5.4-COLD, 7.2-COMBINED
KITCHEN GROUP: 1.9-HOT, 1.0-COLD, 2.5-COMBINED
LAUNDRY GROUP: 1.0-HOT, 1.0-COLD, 1.4-COMBINED
WATER HEATER: 7.9-COLD
HOSE BIBB: 10.0-COLD

TOTAL FIXTURE UNITS ON COLD WATER SUPPLY: 19.9
TOTAL FIXTURE UNITS ON HOT WATER SUPPLY: 7.9
TOTAL FIXTURE UNITS (INLET): 27.8

MAXIMUM FIXTURE UNITS ON A SUPPLY LINE
PER TABLE P2903.6 FOR 50-60 PSI AND 60' MAXIMUM ALLOWABLE LENGTH
1/2"=3
3/4"=9.5
1"=32
1 1/4"=80



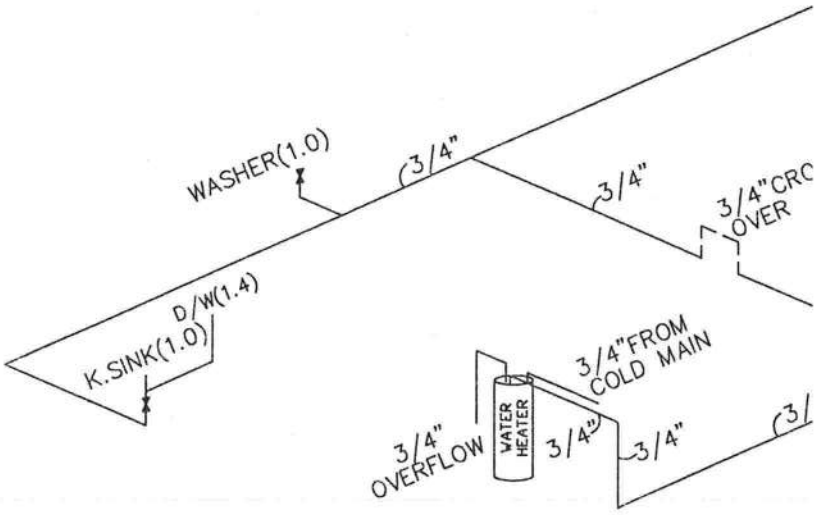
SUPPLY LINE NOTES:

1. ALL PIPE 1/2"Ø UNLESS NOTED.
2. CUT OFF FOR ALL WATER TO HOME.
3. WATER HEATER IS A 40 Gal. Min., 80 Gal. Max ELECTRIC.
4. REFERENCE SHT-A4c FOR PLUMBING GENERAL NOTES.
5. - - - - = FIELD INSTALLED PLUMBING.

FIXTURE UNITS PER TABLE P2903.6
(2)FULL BATH GROUPS: 3.0-HOT, 5.4-COLD, 7.2-COMBINED
KITCHEN GROUP: 1.9-HOT, 1.0-COLD, 2.5-COMBINED
LAUNDRY GROUP: 1.0-HOT, 1.0-COLD, 1.4-COMBINED
WATER HEATER: 7.9-COLD
HOSE BIBB: 10.0-COLD

TOTAL FIXTURE UNITS ON COLD WATER SUPPLY: 19.9
TOTAL FIXTURE UNITS ON HOT WATER SUPPLY: 7.9
TOTAL FIXTURE UNITS (INLET): 27.8

MAXIMUM FIXTURE UNITS ON A SUPPLY LINE
PER TABLE P2903.6 FOR 50-60 PSI AND 60' MAXIMUM ALLOWABLE LENGTH
1/2"=3
3/4"=9.5
1"=32
1 1/4"=80



SUPPLY LINE NOTES:

1. ALL PIPE 1/2"Ø UNLESS NOTED.
2. CUT-OFF FOR ALL WATER TO HOME.
3. WATER HEATER IS A 40 Gal. Min., 80 Gal. Max ELECTRIC.
4. REFERENCE SHT-A4c FOR PLUMBING GENERAL NOTES.
5. - - - - - = FIELD INSTALLED PLUMBING.

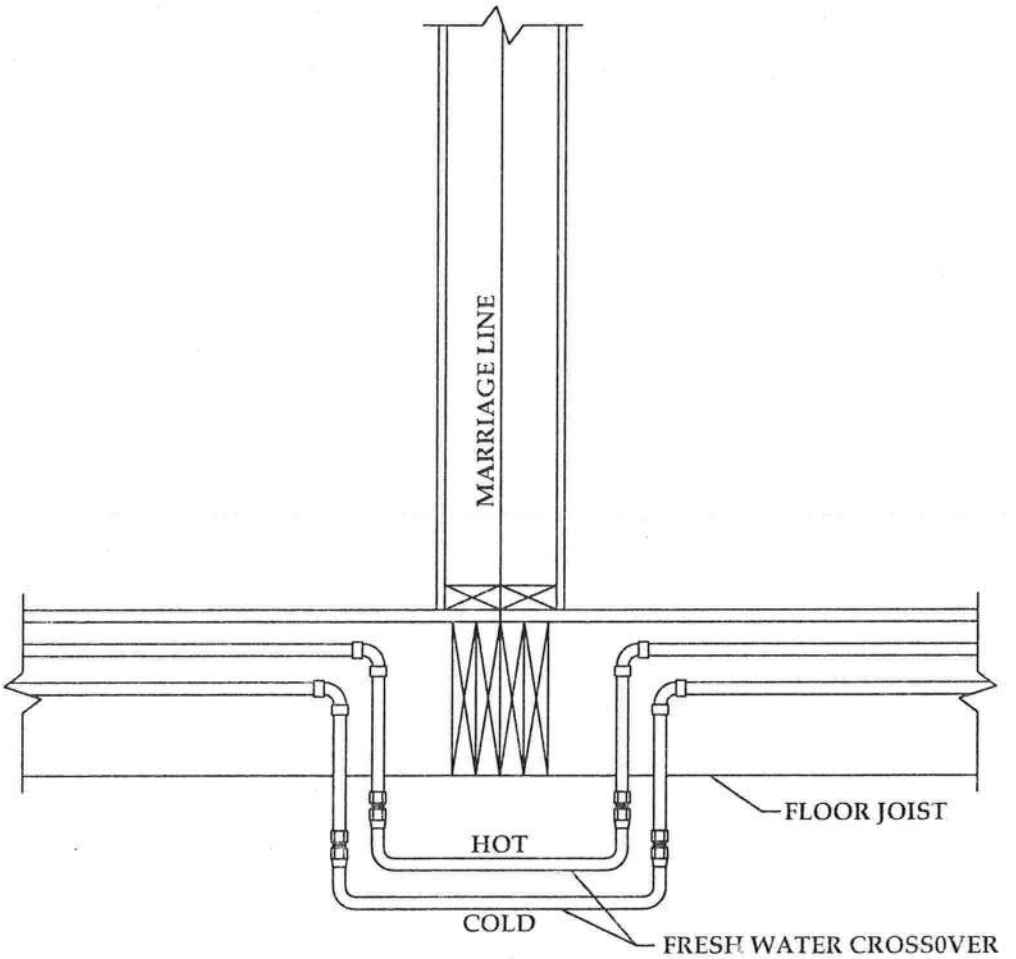
1. ALL PLUMBING MATERIALS, DEVICES, FIXTURES, FITTING, EQUIPMENT, APPLIANCES AND ACCESSORIES INSTALLED SHALL BE LISTED OR CERTIFIED BY AN APPROVED LISTING AGENCY (NSF, LAPMO, GPT, ETC...) OR SHALL BE SPECIFICALLY APPROVED.
2. ALL VALVES, PIPES AND FITTINGS SHALL BE INSTALLED IN CORRECT RELATIONSHIP TO THE DIRECTION OF FLOW.
3. ALL PIPING, PIPE THREADS, HANGERS AND SUPPORTS WHICH ARE EXPOSED TO THE WEATHER, WATER, MUD AND/OR ROAD DAMAGE SHALL BE ADEQUATELY PROTECTED FROM DETERIORATION AND/OR DAMAGE DURING TRANSIT.
4. ALL EXTERIOR OPENINGS AROUND PIPING AND EQUIPMENT SHALL BE SEALED TO RESIST THE ENTRANCE OF RODENTS. FIRE BLOCKING SHALL BE PROVIDED AT OPENINGS AROUND VENTS, PIPES AND DUCTS AT CEILING AND FLOOR LEVEL, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION.
5. PLUMBING, PIPING AND ELECTRICAL WIRING SHALL NOT PASS THROUGH THE SAME HOLES IN WALLS, FLOORS OR ROOFS.
6. PLASTIC PIPING SHALL NOT BE EXPOSED TO HEAT IN EXCESS OF MANUFACTURERS RECOMMENDATION OR RADIATION FROM HEAT PRODUCING APPLIANCES.
7. TWO LAVATORIES CONNECTED WITH CONTINUOUS WASTE CONNECTED TO ONE "P" TRAP SHALL HAVE THEIR WASTE OUTLETS NOT MORE THAN 30 INCHES APART.
8. EACH "P" TRAP SHALL HAVE WATER SEAL OF NOT LESS THAN 2 INCHES AND NOT MORE 4 INCHES AND SHALL BE SET TRUE TO ITS SEAL.
9. FIXTURE TAILPIECES SHALL NOT EXCEED 24 INCHES IN LENGTH.
10. TRAP ARMS SHALL BE GRADED 1/4 INCH PER FOOT TOWARDS VENT AND SHALL NOT HAVE A SLOPE GREATER THAN ITS DIAMETER.
11. TRAPS SHALL BE ACCESSIBLE FOR REPAIR AND INSPECTION AND SHALL BE DESIGNED AND INSTALLED SO THE U BEND IS REMOVABLE.
12. CLEAN OUTS SHALL BE THE SAME NOMINAL SIZE AS THE PIPE THEY ARE CONNECTED TO UP TO 4" (102 mm). FOR PIPES LARGER THAN 4" (102 mm) NOMINAL SIZE, THE MINIMUM SIZE OF THE CLEAN OUT SHALL BE 4" (102 mm).
13. CLEAN OUTS ON 6" (153 mm) ANS SMALLER PIPES SHALL BE PROVIDED WITH A CLEARANCE OF NOT LESS THAN 18" (457 mm) FOR RODDING. CLEAN OUTS ON 8" (203 mm) AND LARGER PIPES SHALL GBE PROVIDED WITH A CLEARANCE OF NOT LESS THAN 36" (914 mm) FOR RODDING.
14. WATER CLOSET FLOOR FLANGE SECUREMENT TO THE FLOOR SHALL BE MADE USING CORROSION RESISTANT SCREWS AND THE TOILET SHALL BE SECURED TO THE FLANGE USING BOLTS MADE OF OF BRASS OR OTHER CORROSION RESISTANT MATERIAL.
15. THE WALLS OF SHOWER COMPARTMENT SHALL BE CONSTRUCTED OF SMOOTH, NON-CORROSIVE AND NONABSORBENT WATERPROOF MATERIALS TO HEIGHT NOT LESS THAN 6 FEET ABOVE BATHROOM FLOOR LEVEL. SUCH WALLS SHALL FORM A WATER TIGHT JOINT WITH EACH OTHER AND WITH THE BATHTUB, RECEPTOR OR SHOWER FLOOR.
16. CLOTHES WASHING MACHINE STANDPIPE SHALL EXTEND NOT LESS THAN 18 INCHES OR MORE THAN 42 INCHES ABOVE ITS "P" TRAP.
17. EACH PLUMBING FIXTURE AND STANDPIPE RECEPTOR SHALL BE LOCATED AND INSTALLED IN A MANNER TO BE ACCESSIBLE FOR USAGE, CLEANING, REPAIR AND REPLACEMENT.
18. FIXTURES SHALL BE SET LEVEL AND IN TRUE ALIGNMENT WITH ADJACENT WALLS AND WHERE PRACTICAL PIPING FROM FIXTURES SHALL EXTEND TO NEAREST WALL.
19. WALL HUNG FIXTURES SHALL BE RIGIDLY ATTACHED TO WALLS BY METAL BRACKETS OR SUPPORTS WITHOUT ANY STRAIN BEING TRANSMITTED TO THE PIPING CONNECTION.
20. FLUSH TANKS SHALL BE SECURELY FASTENED TO TOILETS WITH CORROSION-RESISTANT MATERIALS.
21. BATHTUB RIMS AT WALL SHALL BE SUPPORTED ON METAL HANGERS OR ON WOOD BLOCKING ATTACHED TO THE WALL UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER OF THE TUB.
22. PIPING SHALL BE INSTALLED WITHOUT UNDUE STRAIN AND STRESS WITH PROVISION FOR EXPANSION, CONTRACTION AND STRUCTURAL SETTLEMENT.
23. ABS OR PVC PIPING SHALL BE SUPPORTED AT 4 FOOT INTERVALS UNLESS OTHERWISE STATED IN THE APPLICABLE MATERIAL STANDARDS OR BY THE PIPING MANUFACTURER.
24. THE OUTLETS OF FAUCETS, SPOUTS AND SIMILAR DEVICES SHALL BE SPACED AT LEAST 1 INCH ABOVE THE FLOOD LEVEL OF THE FIXTURE.
25. FLUSH TANKS SHALL BE EQUIPPED WITH AN APPROVED OR LISTED ANTI SIPHON BALL COCK INSTALLED AND MAINTAINED WITH ITS OUTLET OR CRITICAL LEVEL MARK NOT LESS THAN 1 INCH ABOVE THE FULL OPENING OF THE OVERFLOW PIPE.
26. PIPE JOINT COMPOUNDS SHALL BE APPLIED TO MALE THREADS ONLY.
27. LINE VALVES WHICH CONTROL THE WATER FLOW TO MORE THAN ONE FIXTURE SHALL HAVE A CROSS-SECTIONAL AREA OF AT LEAST EQUAL TO THAT OF THE PIPING WHEN FULLY OPENED.
28. VENT PIPES SHALL EXTEND THROUGH THEIR FLASHING AND TERMINATE VERTICALLY NOT LESS THAN 6 INCHES (MIN.) ABOVE THE ROOF AT THE HIGHEST POINT.
29. VENT CAPS, IF APPROVED, SHALL BE OF THE REMOVABLE TYPE WITHOUT REMOVING THE FLASHING FROM THE ROOF.
30. ALL HOMES EQUIPPED WITH HOSE BIBS SHALL BE SUPPLIED WITH APPROPRIATE BACK FLOW PREVENTION DEVICES ON EACH HOSE BIB. APPROPRIATE BACK FLOW PREVENTION DEVICES SHALL INCLUDE THREADED DEVICES WHICH CONNECT THE OUTLET AS WELL AS INLINE DEVICES.
31. DIELECTRIC FITTINGS OR OTHER APPROPRIATE MATERIALS SHALL BE USED WHEN DISSIMILAR METALS ARE JOINED.
32. EACH HOME SHALL HAVE A 3 INCH MAIN VENT EXTENDING THROUGH AND TERMINATING 6 INCHES (MIN.) ABOVE THE ROOF AT THE HIGHEST POINT.

33. BI
COM
INST
34. AI
35. PL
36. EX
REIN
37. W
38. W
39. A
40. FU
41. W
BE W
42. D'
43. M
1 1
1 1
2"
3"
4"
44. AI
45. AI
46. AI
BE O
47. SI
A ST
BAR
48. D(
1 1/2
49. DI
APPI
50. TH
BY U
WAS
51. W
GAL
(PB F
52. W
CON
SHA
APPI
MAN
TO A
53. AI
TEM
VAL'
54. AI
WILI
55. SH
WITI
COM
IN A
WAT
56. IN
LESS
PRO'
OF T
2 INC
57. TH
58. TH
THA'
59. "P
PAN
AND

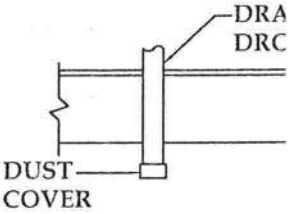
WATER SUPPLY CONNECTIONS

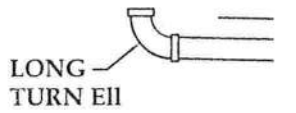
FRESH WATER CROSSOVER CONNECTION UNDER FLOOR

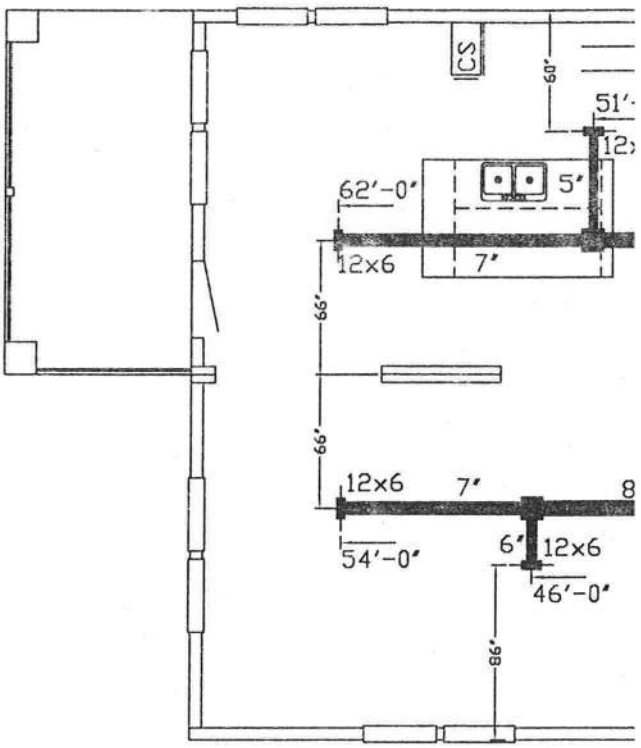
NOTES:
1. WATER LINES TO BE CAPPED OR PLUGGED WHEN NOT CONNECTED.
2. CONNECT WATER LINES, HOT TO HOT, COLD TO COLD. HOT WATER LINES ARE COLOR CODED FOR IDENTIFICATION.
3. TO PROTECT WATER LINES FROM FREEZING, WRAP LINE IN INSULATION (Min. R7) INSULATION. WRAP INSULATION IN PLASTIC OR SIMPLEX TO PROTECT INSULATION.
4. ALL FIELD CONNECTIONS MUST BE TESTED FOR LEAKS AFTER COMPLETION.



1. REMOVE SHIPPING C
AND FITTINGS AND C
2. USING THE DRAIN SC
SYSTEM STARTING A
WORKING TOWARDS
SUPPORT THE PIPING
DIAGRAM, PROVIDE
LEVEL. WHERE A SLO
PER FOOT AND INSTA
3. CONNECT THE MAIN
4. INSTALL PERMANEN
5. REPLACE ALL INSULA
SYSTEM ARE WELL IN
6. ALL FIELD CONNECT

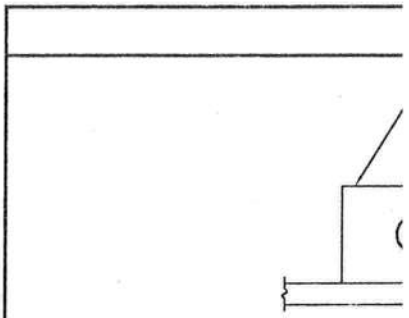




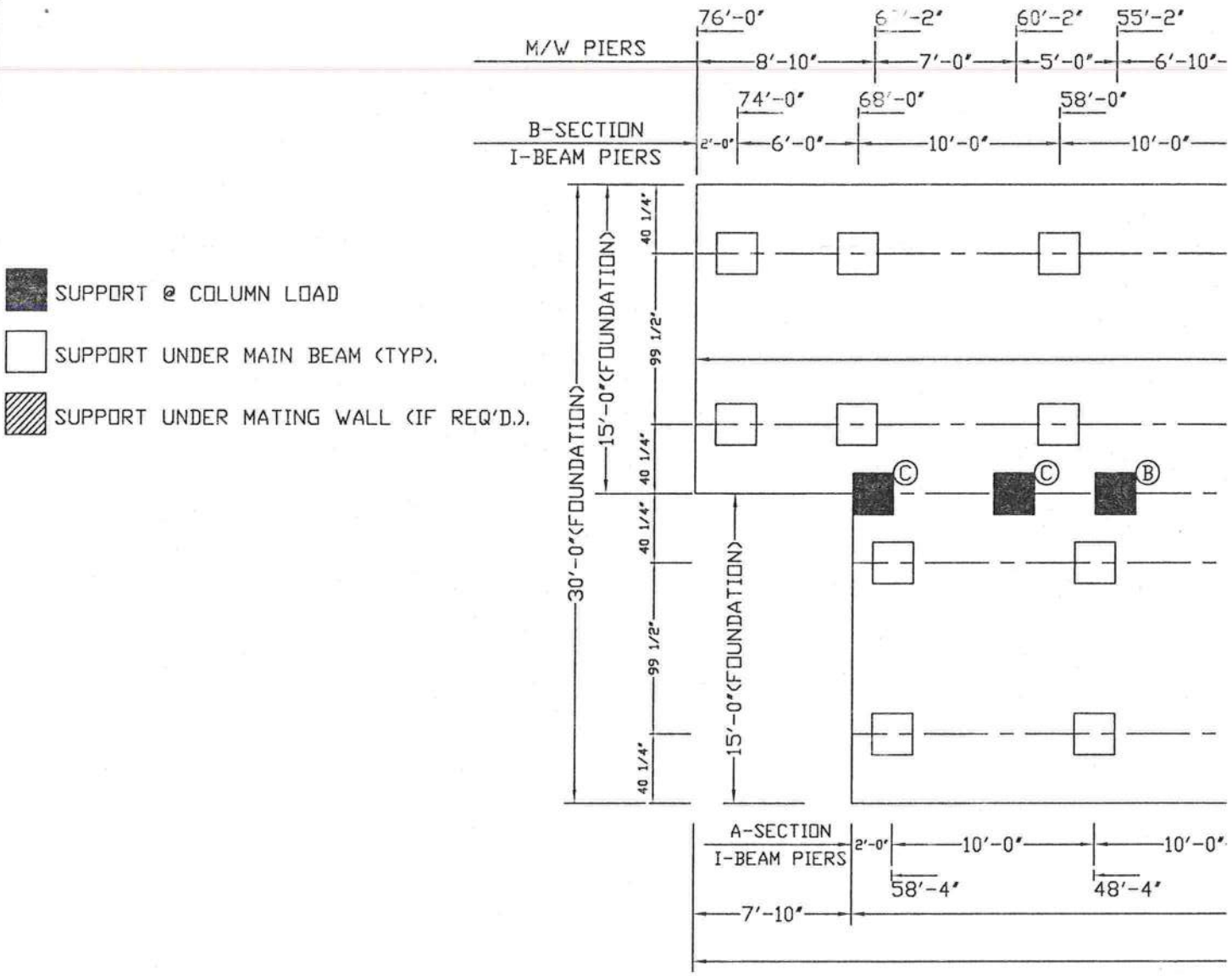


NOTES:

1. ALL APPLIANCES ARE TO BE LISTED.
2. .016 METAL REGISTERS W/ALUM. RISER AND 3/4" FIBERGLASS REGISTER BOX (TYP).
3. ALL FLEX DUCT INSULATED R-8 (TYP).
4. CROSS OVER DUCT 12" FLEX, INSULATED TO R-8 (FIELD INSTALLED)
5. PRIMARY RETURN PROVIDED BY METAL LOUVERED DOOR AT FURNACE.
6. ALL INTERIOR DOORS, EXCEPT CLOSETS AND SECONDARY BATHROOMS WILL HAVE A 24"x4" RETURN AIR GRILL PROVIDED IN THEM. THIS 24"x4" GRILL MANUFACTURED BY CARPATHIAN INDUSTRIES PROVIDES 70 Sq. In.. OF FREE AIR WHICH WILL ACCOMMODATE A ROOM AREA UP TO 350 Sq. Ft... ANY ROOM OR COMBINATION OF ROOMS GREATER THAN 350 Sq. Ft.. WILL HAVE AN INDICATION OF "RAG" ON THE SUBMITTED FLOOR PLAN INDICATING ADDITIONAL RETURN AIR PROVISIONS SHALL BE PROVIDED.
7. WHEN A FURNACE OR AIR-HANDLER IS INSTALLED IN THE UTILITY ROOM WHICH IS PROVIDED WITH A DOOR, THE UTILITY ROOM DOOR SHALL BE PROVIDED WITH A "RAG" SATISFYING THE RETURN AIR REQUIREMENTS OF THE FURNACE/AIR-HANDLER.
8. DUCT INSULATION: ALL PORTIONS OF THE AIR DISTRIBUTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION M1601 AND BE INSULATED TO AN INSTALLED R-5 WHEN THE SYSTEM COMPONENTS ARE LOCATED WITHIN THE BUILDING, BUT OUTSIDE THE OF CONDITIONED SPACE, AND R-8 WHEN LOCATED OUTSIDE OF THE BUILDING. WHEN LOCATED WITHIN A BUILDING ENVELOPE ASSEMBLY, AT-LEAST R-8 SHALL BE APPLIED BETWEEN THE DUCT AND THAT PORTION OF THE ASSEMBLY FURTHEST FROM CONDITIONED SPACE.
9. FURNACE TO BE A NORDYNE, E3EB-O20H.
10. PORTIONS OF THE FLOOR PLAN HAVE BEEN REMOVED FOR CLARITY.
11. AIR TO BE PROVIDED BY OTHERS.



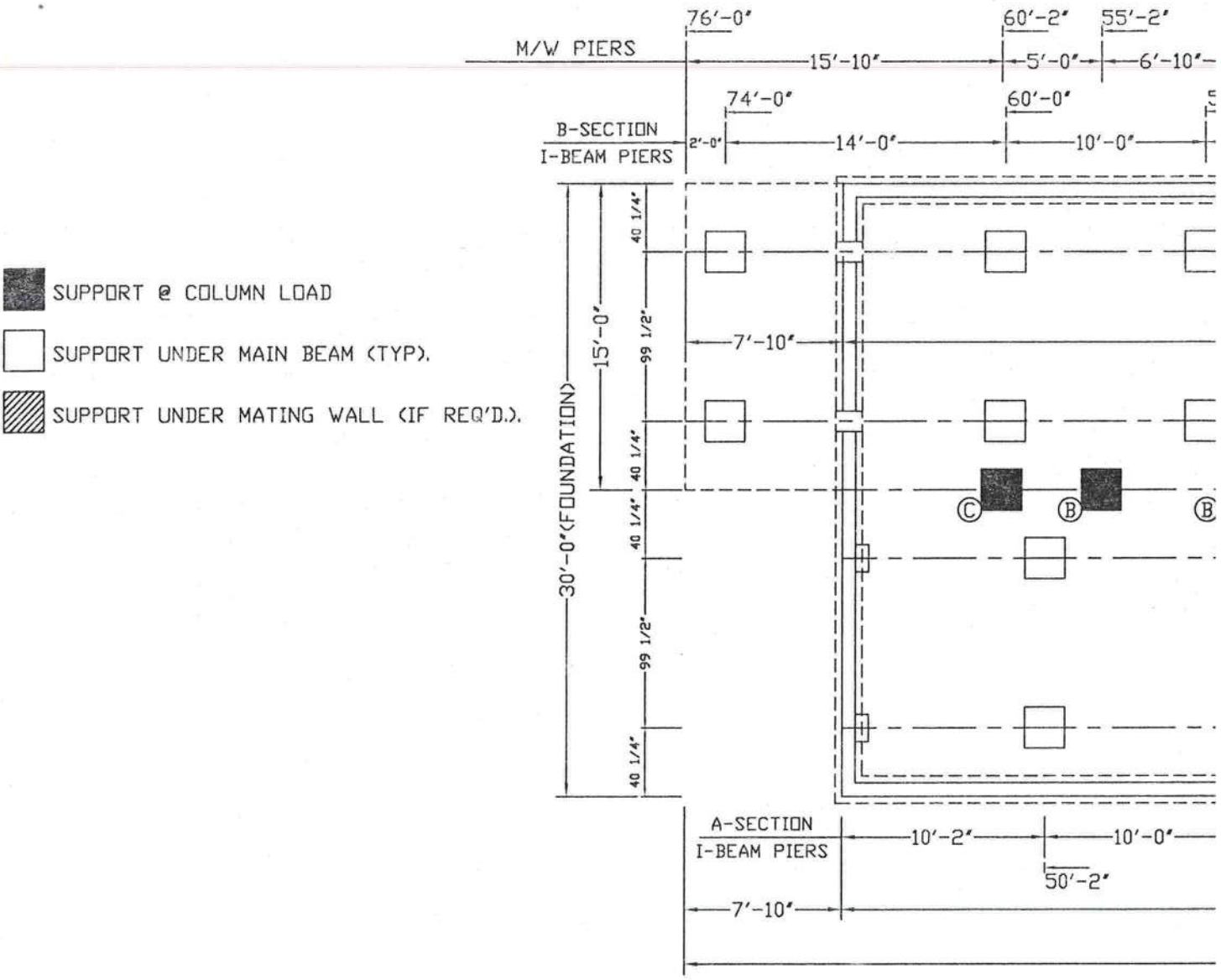
1. ONE SIDE OF THE CROSS-O
   THE FACTORY. AN ADEQUA
   THE CROSS-OVER PROCESS.
2. ACCESS THE CROSS-OVER L
   TEMPORARY SHIPPING PRO
3. USING THE PROVIDED FLEX
   SHOWN IN THE DETAIL ABO
   POSSIBLE. THE DUCT MUST
4. AT EACH CONNECTION POI
   LINER WITH A NYLON STRA
   INSULATION AND OUTER LI
5. REINSTALL AND SECURE TH



NOTE:
THIS IS A SUGGESTED FOUNDATION TO PROVIDE DIMENSIONAL AND LOAD INFORMATION ONLY. THE FOUNDATION MUST BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR THE EXISTING SITE CONDITIONS AND IN ACCORDANCE WITH ALL STATE AND LOCAL LOCAL CODES. THE LOADS & SPACING REQUIREMENTS SHOWN ARE BASED ON THE FOLLOWING INFORMATION.

BUILDING CODE INFORMATION: IRC (2006), ASCE 7-05
BUILDING SITE INFORMATION:
MAXIMUM WIND SPEED & EXPOSURE: 100 MPH, EXPOSURE- C
MINIMUM SOIL BEARING CAPACITY: 2000
MAXIMUM GROUND SNOW(S): 20 PSF
SEISMIC DESIGN CATEGORY: C
DESIGN SPECTRAL RESPONSE (Sps): 0.50
SEISMIC SOIL SITE CLASS: D

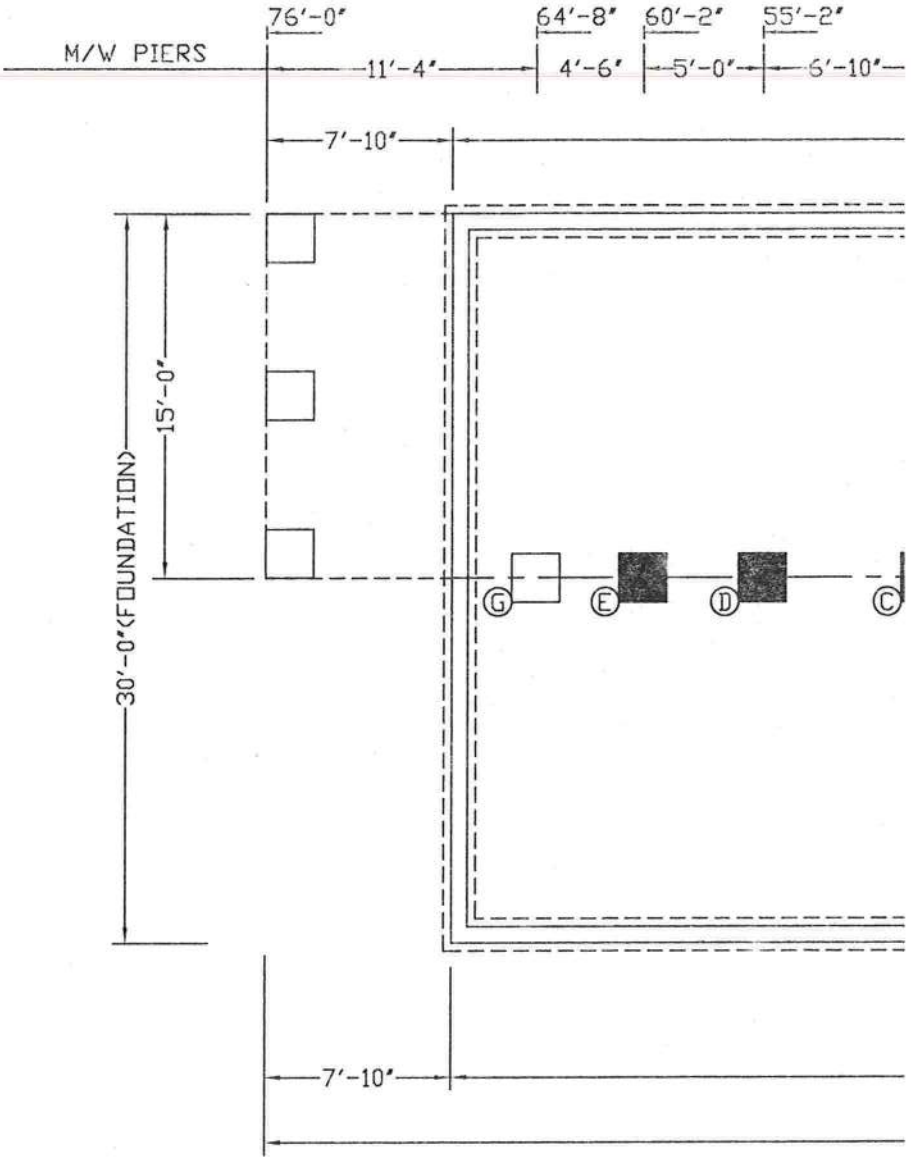
HOMES INFORMATION:
UNIT WIDTH: 30'-0"
MAX. UNIT LENGTH: 76'-0"
ROOF PITCH: 6/12
DESIGN LOADS: 40 PSF FL. LL., 7 PSF T.C.
8 PSF FL. DL. & 10 PSF
MAX. SIDEWALL HEIGHT: 108" INCHES
TOTAL MATING WALL RIM JOIST BEAM
RIM JOIST SPLICES: 5"x8" MiTeK M20 ME
CHASSIS BEAM: 12"x10.8plf
DESIGN TYPE: PIER SET (FRAME TIED) F



NOTE:
THIS IS A SUGGESTED FOUNDATION TO PROVIDE DIMENSIONAL AND LOAD INFORMATION ONLY. THE FOUNDATION MUST BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR THE EXISTING SITE CONDITIONS AND IN ACCORDANCE WITH ALL STATE AND LOCAL LOCAL CODES. THE LOADS & SPACING REQUIREMENTS SHOWN ARE BASED ON THE FOLLOWING INFORMATION.

BUILDING CODE INFORMATION: IRC (2006), ASCE 7-05
BUILDING SITE INFORMATION:
MAXIMUM WIND SPEED & EXPOSURE: 100 MPH, EXPOSURE- C
MINIMUM SOIL BEARING CAPACITY: 2000
MAXIMUM GROUND SNOW(S): 20 PSF
SEISMIC DESIGN CATEGORY: C
DESIGN SPECTRAL RESPONSE (Sps): 0.50
SEISMIC SOIL SITE CLASS: D

HOMES INFORMATION:
UNIT WIDTH: 30'-0"
MAX. UNIT LENGTH: 76'-0"
ROOF PITCH: 6/12
DESIGN LOADS: 40 PSF FL. LL., 7 PSF T.C.
8 PSF FL. DL. & 10 PSF
MAX. SIDEWALL HEIGHT: 108" INCHES
TOTAL MATING WALL RIM JOIST BEAM
RIM JOIST SPLICES: 5"x8" MiTeK M20 ME
CHASSIS BEAM: 12"x10.8plf
DESIGN TYPE: ON FRAME CRAWL SPACE



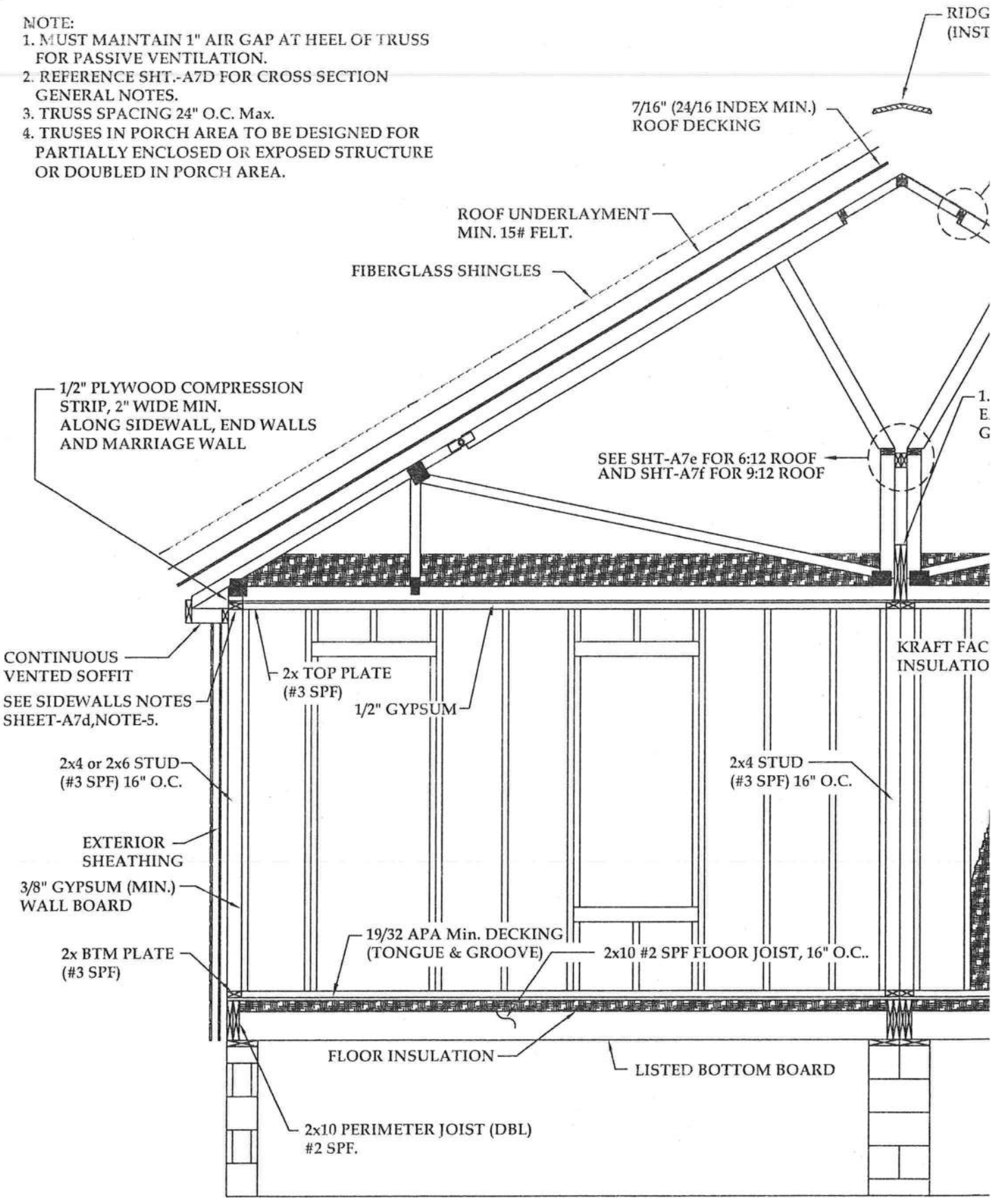
NOTE:
THIS IS A SUGGESTED FOUNDATION TO PROVIDE DIMENSIONAL AND LOAD INFORMATION ONLY. THE FOUNDATION MUST BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR THE EXISTING SITE CONDITIONS AND IN ACCORDANCE WITH ALL STATE AND LOCAL LOCAL CODES. THE LOADS & SPACING REQUIRMENTS SHOWN ARE BASED ON THE FOLLOWING INFORMATION.

BUILDING CODE INFORMATION: IRC (2006), ASCE 7-05
BUILDING SITE INFORMATION:
- MAXIMUM WIND SPEED & EXPOSURE: 100 MPH, EXPOSURE- C
- MINIMUM SOIL BEARING CAPACITY: 2000
- MAXIMUM GROUND SNOW(S): 20 PSF
- SEISMIC DESIGN CATEGORY: C
- DESIGN SPECTRAL RESPONSE (Sps): 0.50
- SEISMIC SOIL SITE CLASS: D

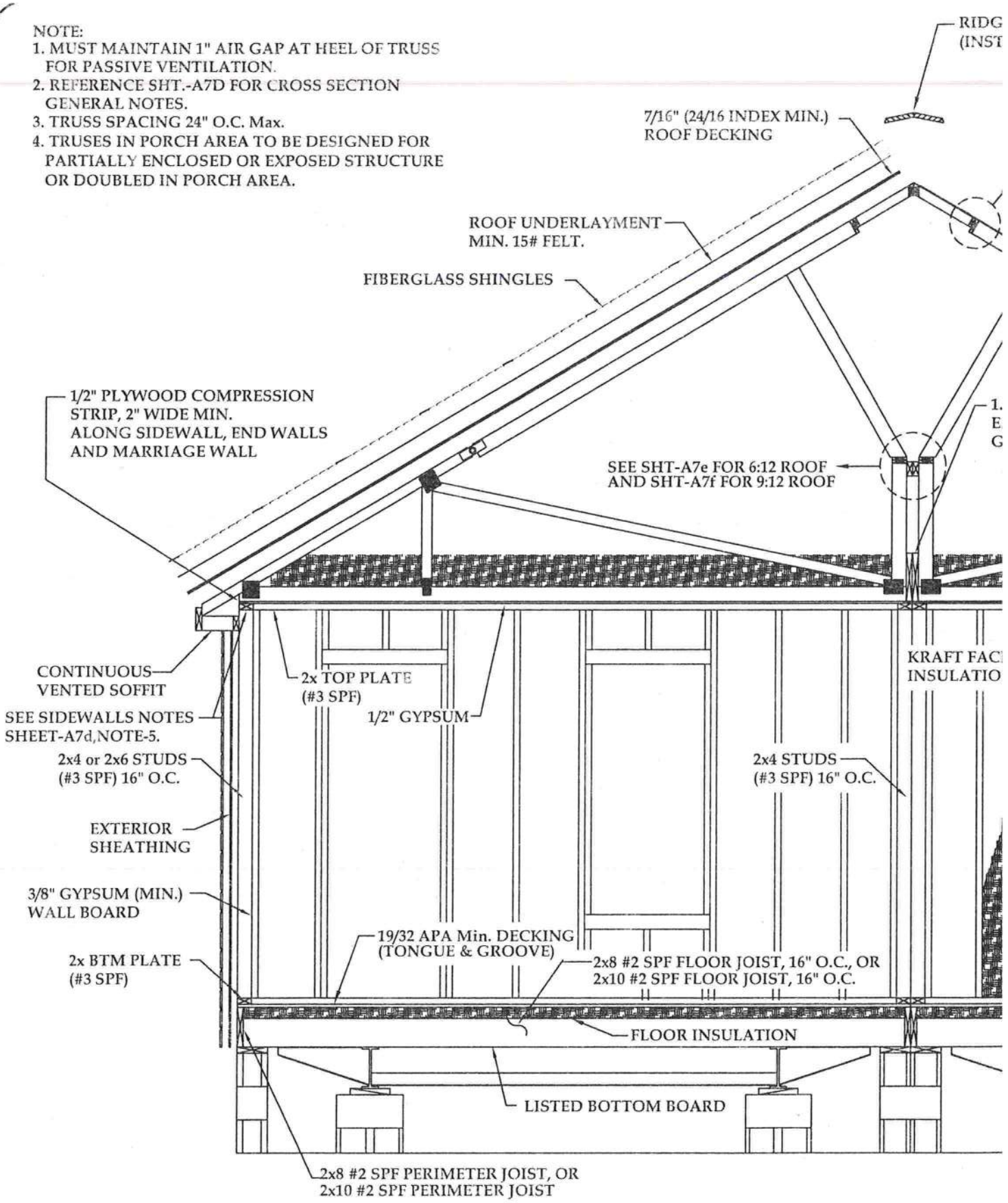
HOMES INFORMATION:
- UNIT WIDTH: 30'-0"
- MAX. UNIT LENGTH: 76'-0"
- ROOF PITCH: 6/12
- DESIGN LOADS: 40 PSF FL. LL., 7 PSF T.C.D.L., 8 PSF B.C.D.L., 13 PSF FL. DL. & 10 PSF B.C.L.L.
- MAX. SIDEWALL HEIGHT: 108 INCHES
- TOTAL MATING WALL RIM JOIST BEAMS: (4) 2x10 #2 SPF
- RIM JOIST SPLICES: 5"x8" MiTeK M20 METAL PLATES EACH SIDE
- CHASSIS BEAM: 12"x10.8plf
- DESIGN TYPE: OFF FRAME BASEMENT & CRAWL SPACE FOUNDATION

SUPPORT @ COLUMN LOAD
SUPPORT UNDER CLEAR SPAN
SUPPORT UNDER MATING WALL

NOTE:
1. MUST MAINTAIN 1" AIR GAP AT HEEL OF TRUSS FOR PASSIVE VENTILATION.
2. REFERENCE SHT.-A7D FOR CROSS SECTION GENERAL NOTES.
3. TRUSS SPACING 24" O.C. Max.
4. TRUSES IN PORCH AREA TO BE DESIGNED FOR PARTIALLY ENCLOSED OR EXPOSED STRUCTURE OR DOUBLED IN PORCH AREA.



NOTE:
1. MUST MAINTAIN 1" AIR GAP AT HEEL OF TRUSS FOR PASSIVE VENTILATION.
2. REFERENCE SHT.-A7D FOR CROSS SECTION GENERAL NOTES.
3. TRUSS SPACING 24" O.C. Max.
4. TRUSES IN PORCH AREA TO BE DESIGNED FOR PARTIALLY ENCLOSED OR EXPOSED STRUCTURE OR DOUBLED IN PORCH AREA.



GENERAL NOTES

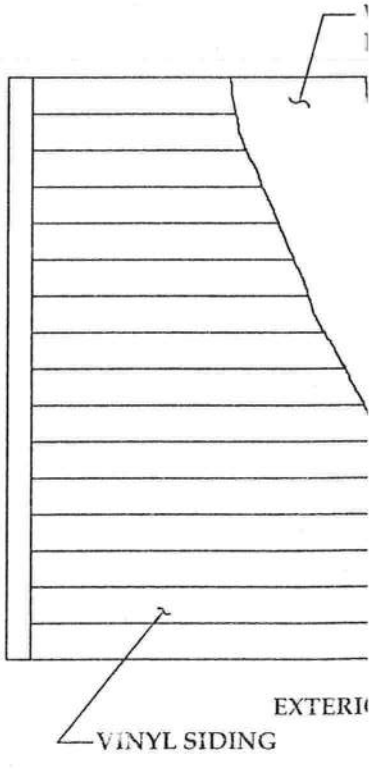
1. EXTERIOR SIDING WILL COMPLY WITH ASTM D3679 AND IS LIMITED TO TYPE V CONSTRUCTION.
2. TRUSSES/REFTERS TO BE ENGINEERED FOR THE LISTED LOADS AND APPLICATIONS USED.
3. INTERIOR PARTITIONS TO BE CONSTRUCTED TO WITHSTAND "5" PSF HORIZONTAL LOAD.
4. ALL LUMBER TO BE GRADED AND MARKED.
5. WOOD TO WOOD CONTACT TO OCCUR AT ALL ROOF TO BEARING WALL LOCATIONS. COMPRESSION STRIP MUST BE 1/2 THE WALL PLATE WIDTH, FOR 2x4 WALL 1 3/4" MIN., FOR 2x6 WALL 2 3/4" MIN..
6. DADO AND NOTCHING ARE NOT TO OCCUR IN THE CENTER 1/3 OF THE LENGTH OF THE WALL STUDS.
7. ALL PLYWOOD USED FOR STRUCTURAL APPLICATIONS WILL COMPLY WITH PRODUCT STANDARD PSI.
8. ALL LUMBER AND PLYWOOD TWO (2) INCHES AND LESS IN THICKNESS WILL HAVE A MOISTURE CONTENT NOT EXCEEDING 19%.
9. RIM JOIST AND ANY BLOCKING TO BE #2 SPF EQUAL OR BETTER, SAME SIZE AND GRADE AS FLOOR JOIST, UNLESS NOTED OTHERWISE.
10. ONE (1) JOIST IN A GIVEN LOCATION MAY BE MOVED UP TO (3) INCHES MAX. FOR OBSTRUCTIONS (I.E. PLUMBING DROPS, HEAT REGISTERS AND PLENUM DROPS.
11. 2x10 FLOOR SYSTEMS DO NOT REQUIRE BLOCKING OR BRIDGING. FRONT AND REAR JOIST ARE STABILIZED BY THE DECKING.
12. HOLES BORED IN THE JOIST SHALL HAVE A DIAMETER NOT EXCEEDING 1/3 OF THE DEPTH AND CANNOT BE WITHIN (2) INCHES OF THE TOP OR BOTTOM EDGE.
13. NOTCHES IN THE JOIST SHALL NOT EXCEED 1/6 OF THE DEPTH OF THE JOIST AND THE WIDTH OF THE NOTCH CANNOT EXCEED 1/3 OF THE DEPTH OF THE JOIST. NOTCHES SHALL NOT OCCUR IN THE CENTER 1/3 OF THE JOIST.
14. KRAFT FACED INSULATION STAPLED TO WIDE FACE OF THE STUD WITH STAPLES ALONG EACH SIDE OF BATT, WITH VAPOR BARRIER TO BE VINYL COVERING ON THE GYPSUM OR A PAINT RATED AT LESS THAN 1 PERM, ON FINISHED SHEETROCK.
15. INTERIOR FINISH:
    a) 3/8" GYPSUM: FASTEN WITH 13ga., 1 3/8" LONG, 19/64" HEAD; 0.098Ø, 1 1/4" LONG, ANNULAR-RINGED; OR 4d COOLER NAIL, 0.080"Ø, 1 3/8" LONG, 7/32" HEAD.
    b) 1/2" GYPSUM: FASTEN WITH 13ga., 1 3/8" LONG, 19/64" HEAD; 0.098"Ø, 1 1/4" LONG, ANNULAR-RINGED, OR 5d COOLER NAIL, 0.086"Ø, 1 5/8" LONG, 15/64" HEAD, OR GYPSUM BOARD NAIL, 0.086"Ø, 1 5/8" LONG, 9/32" HEAD.
    c) SPACING
    WITHOUT ADHESIVE, SCREWS: 16" O.C., NAIL: 8" O.C..
    WITH ADHESIVE, SCREW: 24" O.C., NAILS: 16" O.C.
16. WALL BRACING (SHEATHING):
    3/8" STRUCTURALLY RATED SHEATHING FASTENED WITH 7/16"x1 3/8", 6" O.C. ALONG EDGES AND IN THE FIELD.
17. 3"x6"x.036" GALV. STEEL PLATE WITH (6) 8d NAILS AT EACH WALL SEGMENT. REF:EW-10.0 NOTE-9 OF THE Q.C. MANUAL.

SIDE WALLS:

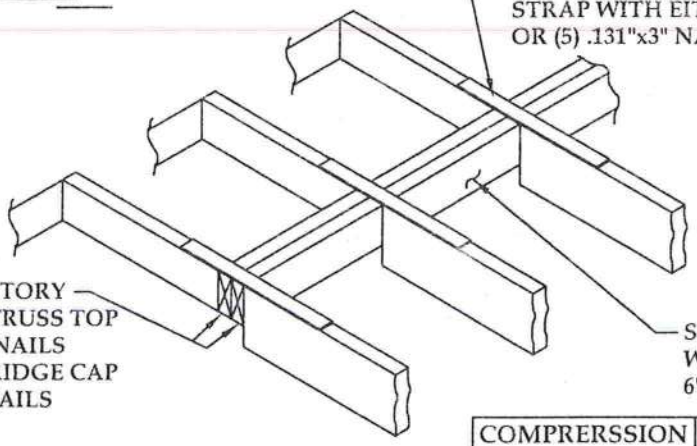
100 M.P.H. EXPOSURE-C:

108"-SIDEWALLS:

2x4 #3 SPF STUDS, 16" O.C.

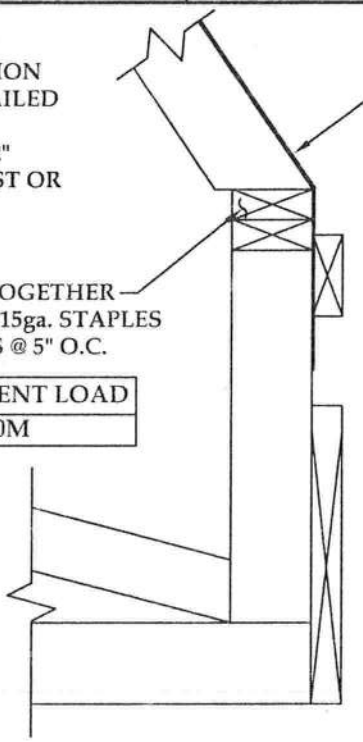


DETAIL-A



COMPRERSSION	TENSION	SHEAR	MOMENT LOAD
250	484	159	0M

2x4 PLATE FACTORY ISTALLED TO EACH SECTION OF THE KINGPOST W/(6)0.131"x3" NAILS TOENAILED THROUGH KINGPOST INTO 2x4 PLATE ((3) ON ONE SIDE, (3) ON THE OTHER) OR (13)15ga.x2 1/2" STAPLES THROUGH 2x4 PLATE INTO KING POST OR (7) 0.131"x3" NAILS THROUGH 2x4 PLATE INTO KINGPOST.



COMPRERSSION	TENSION	SHEAR	MOMENT LOAD
453	424	213	0M

DETAIL-B