H Stabl signature

845

Columbia County New Building Permit Application

☑ Harvey - Elk Camp

For Office Use Only Application # 1905-69 Date Received 5/1 By JC Permit # 38214

Zoning Official J.C./LH Date 6-5-19 Flood Zone X Land Use AG Zoning A-3

FEMA Map # N/A Elevation N/A MFE 1' Above the Road River N/A Plans Examiner J.C Date 6-5-19

Comments Floor 1' Above Rd. Front 30' Sides 25' Rear 25'

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

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

☐ Owner Builder Disclosure Statement ☑ Land Owner Affidavit ☐ Ellisville Water ☑ App Fee Paid ☑ Sub VF Form

Septic Permit No. 19-0384 OR City Water ☐ Fax

Applicant (Who will sign/pickup the permit) Gerald Harvey Phone 352-258-9051

Address PO BOX 526 NEWBERRY, FL 32669

Owners Name Kim Sargent & Robert Staab Phone 352-346-4969

911 Address 2196 CR 18, Fort White, FL 32038

Contractors Name Gerald Harvey Phone 352-258-9051

Address PO Box 526 Newberry, FL 32669

Contractor Email harveybuilding@gmail.com ***Include to get updates on this job.

Fee Simple Owner Name & Address

Bonding Co. Name & Address

* Architect/Engineer Name & Address DONALD A. YANSKEY, AR 2421 49th AVE Grille, FL 32605

Mortgage Lenders Name & Address N/A

Circle the correct power company ☐ FL Power & Light ☒ Clay Elec. ☐ Suwannee Valley Elec. ☐ Duke Energy

Property ID Number 30-6S-17-09807-105 Estimated Construction Cost 189,900

Subdivision Name Meadows of Tuskenoogee Lot 5 Block Unit Phase 5'12

Driving Directions from a Major Road N on NE Hernando Ave, turn (L) onto NE Madison St, turn (L) @ the 1st Cross street onto US 441 S/N (Marion Ave) turn (L) onto US 41S/US 441S, turn (R) onto SW Tuskenoogee Ave, turn (L) onto SW Fellowship St.

Construction of New Home ☐ Commercial OR ☒ Residential

Proposed Use/Occupancy residential Number of Existing Dwellings on Property 00

Is the Building Fire Sprinkled? No If Yes, blueprints included Or Explain

* Circle Proposed ☐ Culvert Permit or ☐ Culvert Waiver or ☐ D.O.T. Permit or ☑ Have an Existing Drive

Actual Distance of Structure from Property Lines - Front 235' Side 123' Side 123' Rear 453'

Number of Stories 1 Heated Floor Area 1623 Total Floor Area 1995 Acreage 5.01

Zoning Applications applied for (Site & Development Plan, Special Exception, etc.)

JC sent email 5.21.19 + 5.22.19 + 6.6.19

Columbia County Building Permit Application

CODE: Florida Building Code 2014 and the 2011 National Electrical Code.

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.

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 pursued in good faith or a permit has been issued.

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

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.

Kim Sargent — **Print Owners Name**

Kim Sargent — **Owners Signature**

****Property owners must sign here before any permit will be issued.**

****If this is an Owner Builder Permit Application then, ONLY the owner can sign the building permit when it is issued.**

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

Contractor's License Number CRC 058134
Columbia County Competency Card Number 675

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 21 **day of** March **20** 19.

Personally known X **or Produced Identification** _____

Theresa E Yancey — **State of Florida Notary Signature (For the Contractor)**

SEAL:

THERESA E. YANCEY
MY COMMISSION # GG 179853
EXPIRES: March 10, 2022
Bonded Thru Notary Public Underwriters

Prepared by and return to:
Ashley M. Taylor

Haile Title Company, LLC
4715 NW 53rd Avenue Suite C
Gainesville, FL 32653
352-371-6264
File Number: **13-011**
Will Call No.: **ASHLEY**
#160,000

Inst 201312001238 Date 1/25/2013 Time 12:19 PM
Doc Stamp-Deed 420.00
DC,P.DeWitt Cason,Columbia County Page 1 of 2 B 1248 P 1287

[Space Above This Line For Recording Data]

Warranty Deed

This Warranty Deed made this **22nd** day of **January, 2013** between **David S. Rowett, a married man** whose post office address is **11405 NW 129th Terrace, Alachua, FL 32615**, grantor, and **Kim Sargent, a single woman and Robert Staab, a single man** whose post office address is **3430 Webber Street, Sarasota, FL 34239**, grantee.

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) 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:

Lot 5 of THE MEADOWS OF TUSKENOOGEE SUBDIVISION, according to the Plat thereof as recorded in Plat Book 6, Page 203, of the Public Records of Columbia County, Florida.

Parcel Identification Number: 30S17-09807-105

Subject to taxes for 2013 and subsequent years; covenants, conditions, restrictions, easements, reservations and limitations of record, if any.

Grantor warrants that at the time of this conveyance, the subject property is not the Grantor's homestead within the meaning set forth in the constitution of the state of Florida, nor is it contiguous to or a part of homestead property.

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to **December 31, 2012**.

nee

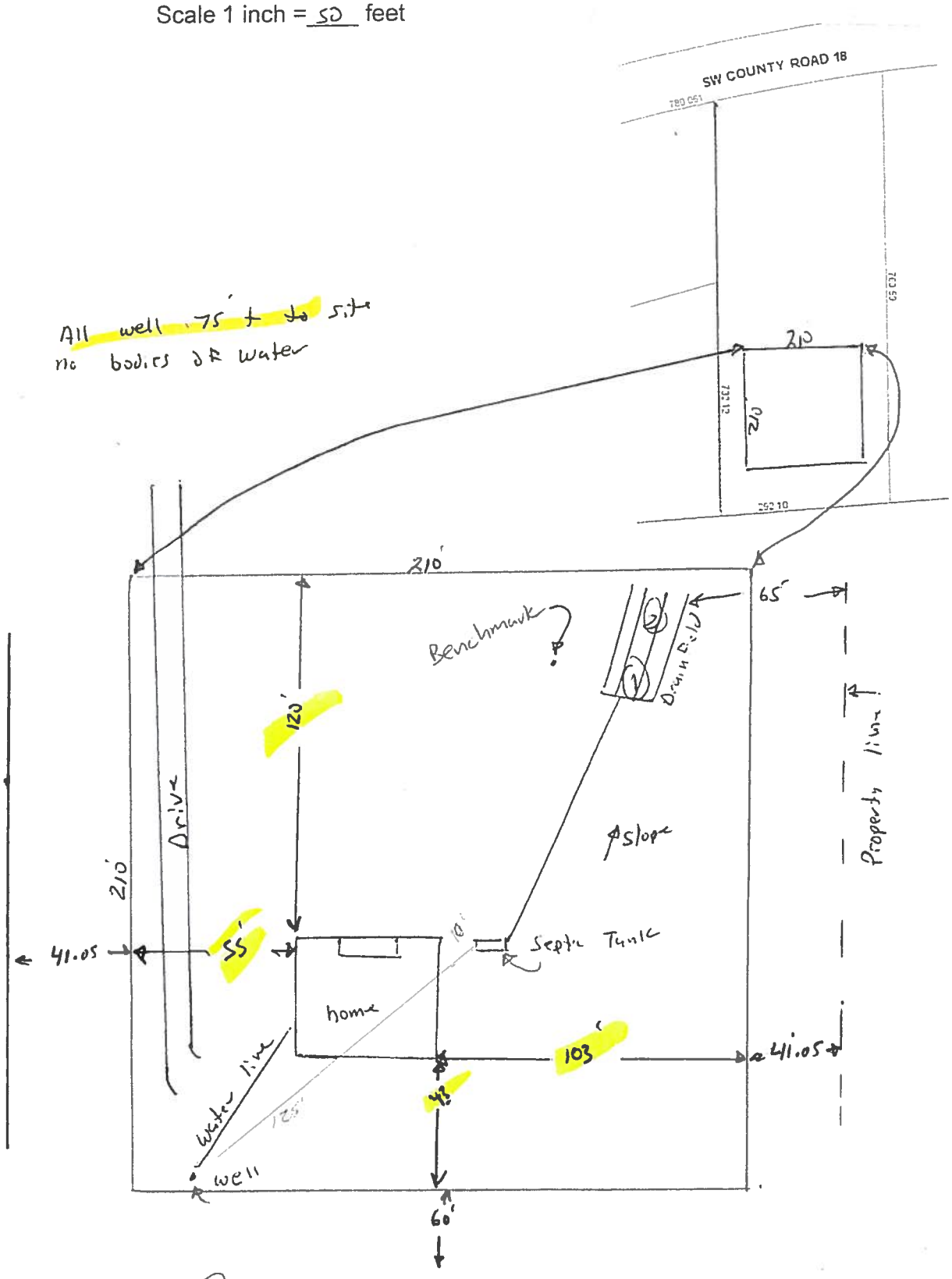
DoubleTimee

Permit # 19-0384

Property ID# 30-65-17-05807-105

N

Scale 1 inch = 50 feet



Site Plan submitted by Ron Moon M.S.T.C.

Plan Approved _____ Not Approved _____ Date _____

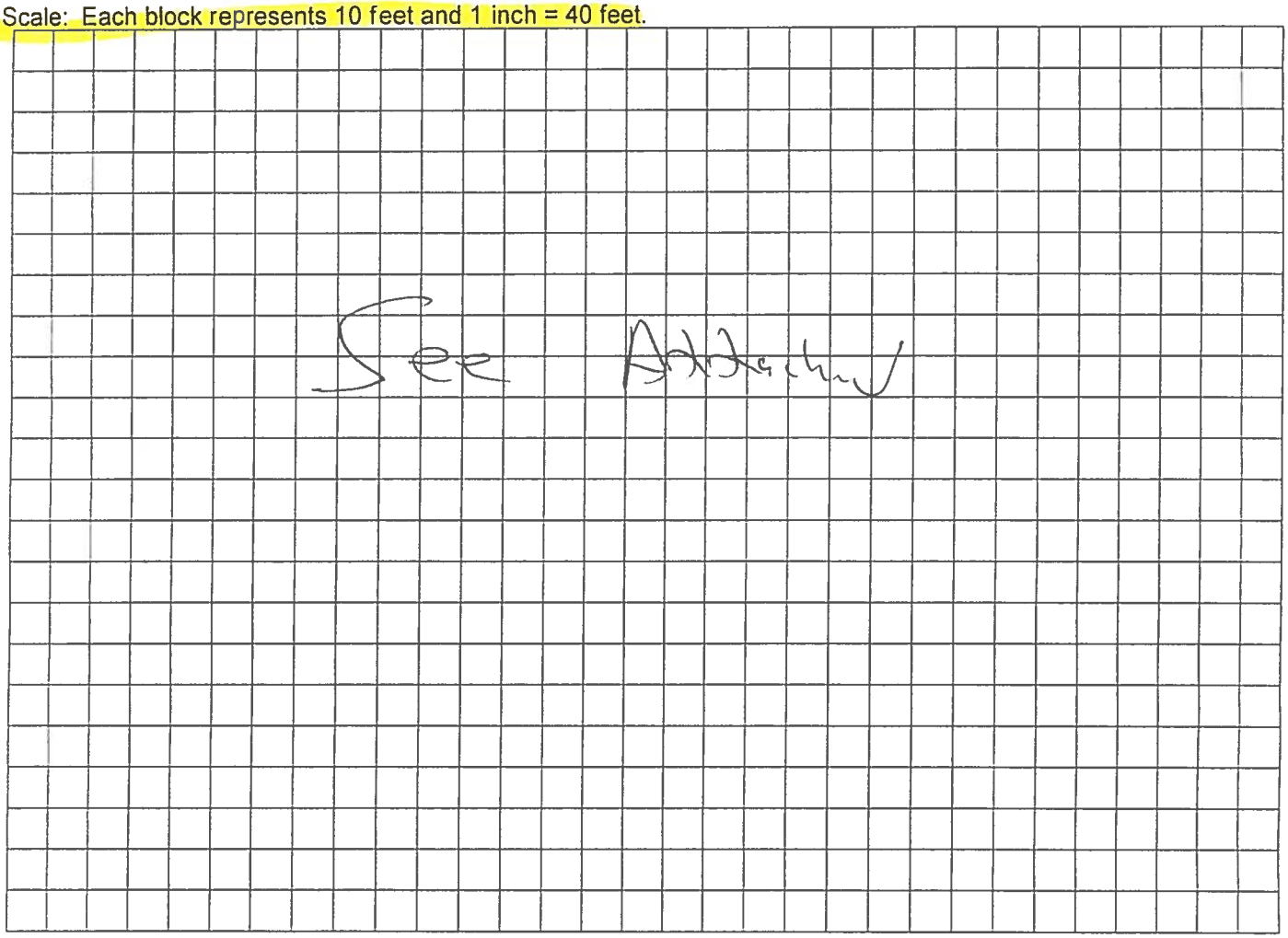
By _____ County Health Department

STATE OF FLORIDA
DEPARTMENT OF HEALTH
APPLICATION FOR CONSTRUCTION PERMIT

Permit Application Number 19-0984

---------- PART II - SITEPLAN ----------

Scale: Each block represents 10 feet and 1 inch = 40 feet.



Notes: _____

Site Plan submitted by: [signature] Mann 05/08/19 M.S. T.C.

Plan Approved X Not Approved ____ Date 5/9/19

By [signature] EST Columbia County Health Department

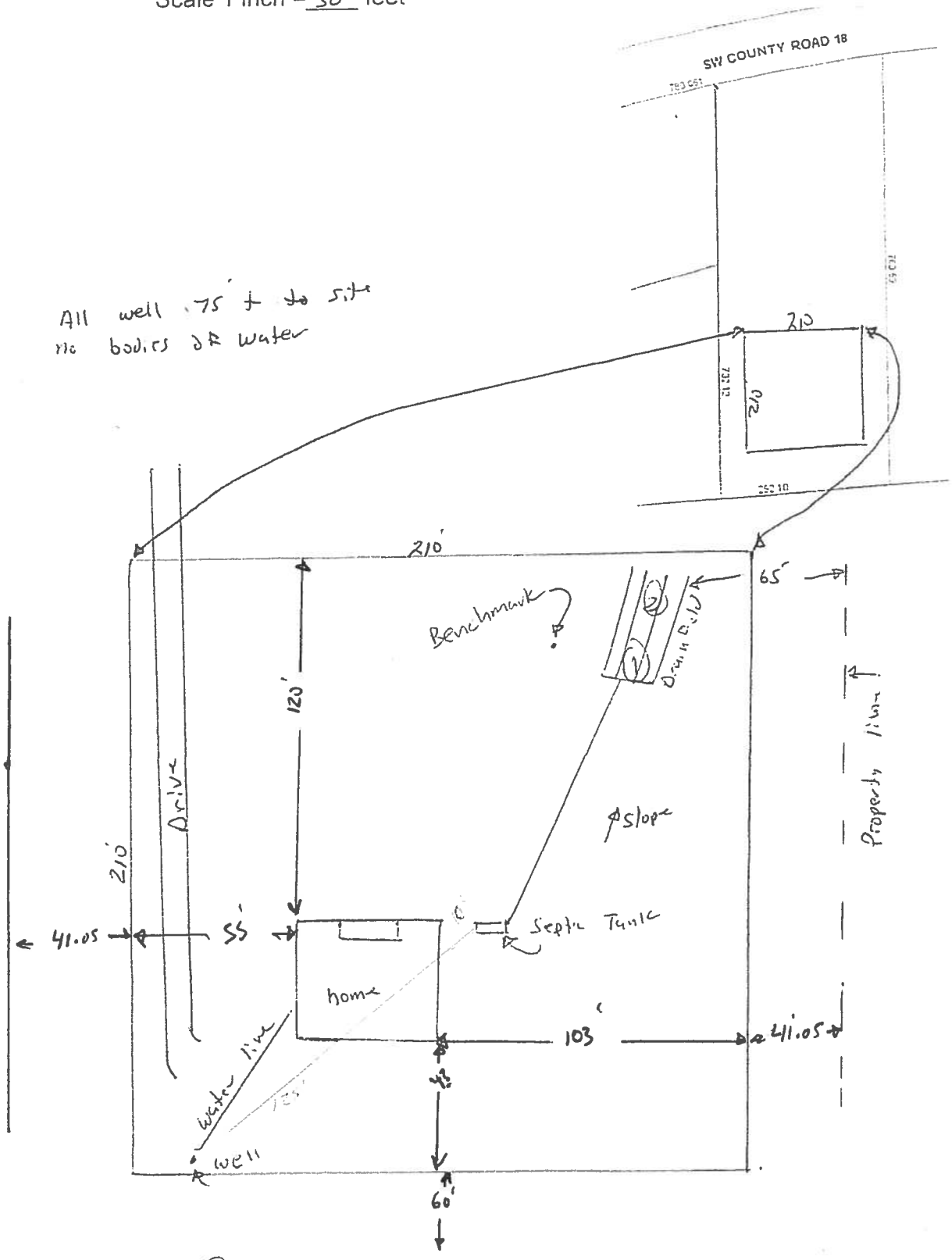
ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

Permit # 19-0284

Property ID# 30-65-17-05807-105

N

Scale 1 inch = 50 feet



Site Plan submitted by _____ M.S.T.C. _____

Plan Approved _____ Not Approved _____ Date _____

By _____ County Health Department

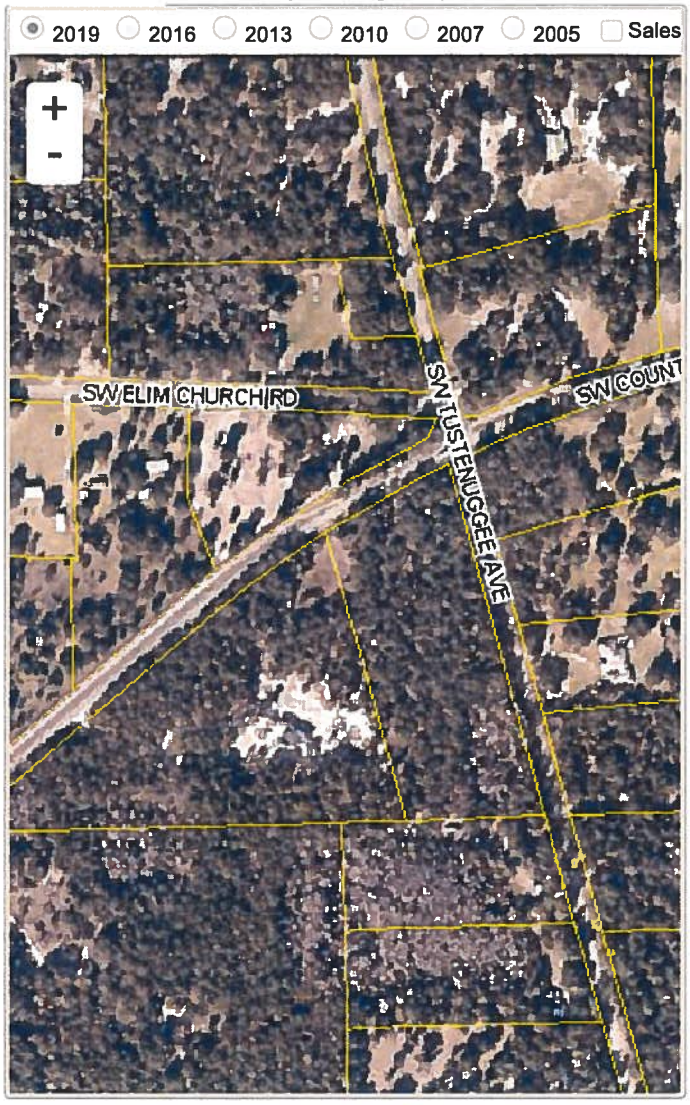
Columbia County Property Appraiser

Jeff Hampton

2018 Tax Roll Year
updated: 5/9/2019

Parcel: << **30-6S-17-09807-105** >>

Aerial Viewer | Pictometery | Google Maps



Owner & Property Info

Result: 1 of 1

Owner	SARGENT KIM & ROBERT STAAB 2196 SW COUNTY ROAD 18 FT WHITE, FL 320383834		
Site	2196 COUNTY RD 18 , FT WHITE		
Description*	LOT 5 THE MEADOWS OF TUSKENOOGEE S/D. ORB 875-2358, 938-1727,963-1492,WD 1071-2200 WD 1144-506,WD 1248-1287		
Area	5.01 AC	S/T/R	29-6S-17E
Use Code**	MISC RES (000700)	Tax District	3

*The Description above is not to be used as the Legal Description for this parcel in any legal transaction.
**The Use Code is a FL Dept. of Revenue (DOR) code and is not maintained by the Property Appraiser's office. Please contact your city or county Planning & Zoning office for specific zoning information.

Property & Assessment Values

2018 Certified Values		2019 Working Values	
Mkt Land (3)	$32,000	Mkt Land (3)	$33,250
Ag Land (0)	$0	Ag Land (0)	$0
Building (0)	$0	Building (0)	$0
XFOB (4)	$10,470	XFOB (4)	$10,470
Just	$42,470	Just	$43,720
Class	$0	Class	$0
Appraised	$42,470	Appraised	$43,720
SOH Cap [?]	$0	SOH Cap [?]	$0
Assessed	$42,470	Assessed	$43,720
Exempt	$0	Exempt	$0
Total Taxable	county:$40,807 city:$40,807 other:$40,807 school:$42,470	Total Taxable	county:$43,720 city:$43,720 other:$43,720 school:$43,720

Sales History

Sale Date	Sale Price	Book/Page	Deed	V/I	Quality (Codes)	RCode
1/22/2013	$60,000	1248/1287	WD	V	U	40
2/26/2008	$47,500	1144/0506	WD	V	Q	
10/7/2005	$100	1071/2200	QC	V	U	01
9/27/2002	$31,500	963/1492	WD	V	Q	
10/23/2001	$0	938/1727	QC	V	U	01
3/4/1999	$27,900	875/2358	WD	V	Q	

Building Characteristics

Bldg Sketch	Bldg Item	Bldg Desc*	Year Blt	Base SF	Actual SF	Bldg Value
NONE						

Extra Features & Out Buildings (Codes)

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
0020	BARN,FR	2013	$4,720.00	1.000	0 x 0 x 0	(000.00)
0166	CONC,PAVMT	2013	$200.00	1.000	0 x 0 x 0	(000.00)
0030	BARN,MT	2013	$4,500.00	450.000	18 x 25 x 0	(000.00)

SUBCONTRACTOR VERIFICATION

APPLICATION/PERMIT # 190569 JOB NAME Sargent

THIS FORM MUST BE SUBMITTED BEFORE A PERMIT WILL BE ISSUED

Columbia County issues combination permits. 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 general contractors permit.

NOTE: *It shall be the responsibility of the general contractor to make sure that all of the subcontractors are licensed with the Columbia County Building Department.*
Use website to confirm licenses: http://www.columbiacountyfla.com/PermitSearch/ContractorSearch.aspx

NOTE: If this should change prior to completion of the project, it is your responsibility to have a corrected form submitted to our office, before that work has begun.

Violations will result in stop work orders and/or fines.

			Need
ELECTRICAL ☑ CC# 811	Print Name Ryan Beville	Signature Ryan Beville	☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name: RBJ Electric		
	License #: EC 1300-4236	Phone #: 352-514-3882	
MECHANICAL/ A/C ☑ CC# 768	Print Name Robert Bounds	Signature Robert Bounds	☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name: Bounds Heating + Air		
	License #: CAC057642	Phone #: 352-255-4000	
PLUMBING/ GAS ☑ CC# 578	Print Name Hodge - Wayne	Signature Wayne Hodge	☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name: Hodge Plumbing Systems		
	License #: CFC1426382	Phone #: 352-538-9647	
ROOFING ☑ CC# 1129	Print Name Dana Johnson	Signature Dana Johnson	☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name: Mac Johnson Roofing		
	License #: CCC1325497	Phone #: 352-339-0940	
SHEET METAL ☐ CC#	Print Name	Signature	☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name:		
	License #:	Phone #:	
FIRE SYSTEM/ SPRINKLER ☐ CC#	Print Name	Signature	☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name:		
	License#:	Phone #:	
SOLAR ☐ CC#	Print Name	Signature	☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name:		
	License #:	Phone #:	
STATE SPECIALTY ☐ CC#	Print Name	Signature	☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
	Company Name:		
	License #:	Phone #:	

Ref: F.S. 440.103; ORD. 2016-30

NOTICE OF COMMENCEMENT

Tax Parcel Identification Number: 09907-105

30-65 14-06801 05

Clerk's Office Stamp

Inst: 201912011605 Date: 05/21/2019 Time: 11:01AM
Page 1 of 1 B: 1384 P: 2729, P.DeWitt Cason, Clerk of Court
Columbia, County, By: LK
Deputy Clerk

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

1. Description of property *(legal description)*: Lot 5 The Meadows of Tuskenoogee S/D.
   a) Street *(job)* Address: 2196 SW County Road 18, Fort White, FL 32038
2. General description of improvements: Single Family Home
3. Owner Information or Lessee information if the Lessee contracted for the improvements:
   a) Name and address: Kim + Robert Sargent, 2196 SW County Road 18, Fort White, FL 32038
   b) Name and address of fee simple titleholder (if other than owner) _____
   c) Interest in property _____
4. Contractor Information
   a) Name and address: Gerald Harvey Harvey Bldg + Const. PO Box 526, Newberry FL 32669
   b) Telephone No.: 352-258-9851
5. Surety Information (if applicable, a copy of the payment bond is attached):
   a) Name and address: — _____
   b) Amount of Bond: _____
   c) Telephone No.: _____
6. Lender
   a) Name and address: —
   b) Phone No. _____
7. Person within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a)7., Florida Statutes:
   a) Name and address: _____
   b) Telephone No.: _____
8. In addition to himself or herself, Owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(l)(b), Florida Statutes:
   a) Name: _____ OF _____
   b) Telephone No.: _____
9. Expiration date of Notice of Commencement **(the expiration date will be 1 year from the date of recording unless a different date is specified)**: _____

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

STATE OF FLORIDA
COUNTY OF COLUMBIA

10. Kim P. Sargent
Signature of Owner or Lessee, or Owner's or Lessee's Authorized Office/Director/Partner/Manager

Kim P. Sargent
Printed Name and Signatory's Title/Office

The foregoing instrument was acknowledged before me, a Florida Notary, this 20 day of May, 20 19, by:

Kim P Sargent as _____ for Self .
(Name of Person) (Type of Authority) (name of party on behalf of whom instrument was executed)

Personally Known ____ OR Produced Identification V Type FLDL

Notary Signature Danay Harvey

Notary Stamp or Seal:

DANAY HARVEY
MY COMMISSION # GG 152314
EXPIRES: February 17, 2022
Bonded Thru Notary Public Underwriters

District No. 1 - Ronald Williams
District No. 2 - Rocky Ford
District No. 3 - Bucky Nash
District No. 4 - Toby Witt
District No. 5 - Tim Murphy

BOARD OF COUNTY COMMISSIONERS • COLUMBIA COUNTY

Address Assignment and Maintenance Document

To maintain the county wide 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 addressing 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 Services 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/Time Issued:	**9/27/2016 3:14:52 PM**
Address:	**2196 SW COUNTY ROAD 18**
City:	**FORT WHITE**
State:	**FL**
Zip Code	**32038**
Parcel ID	**09807-105**

REMARKS: Address Verification.

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

Address Issued By: **Signed:/ Matt Crews**

Columbia County GIS/911 Addressing Coordinator

COLUMBIA COUNTY
911 ADDRESSING / GIS DEPARTMENT
263 NW Lake City Ave., Lake City, FL 32055 Telephone: (386) 758-1125
Email: gis@columbiacountyfla.com

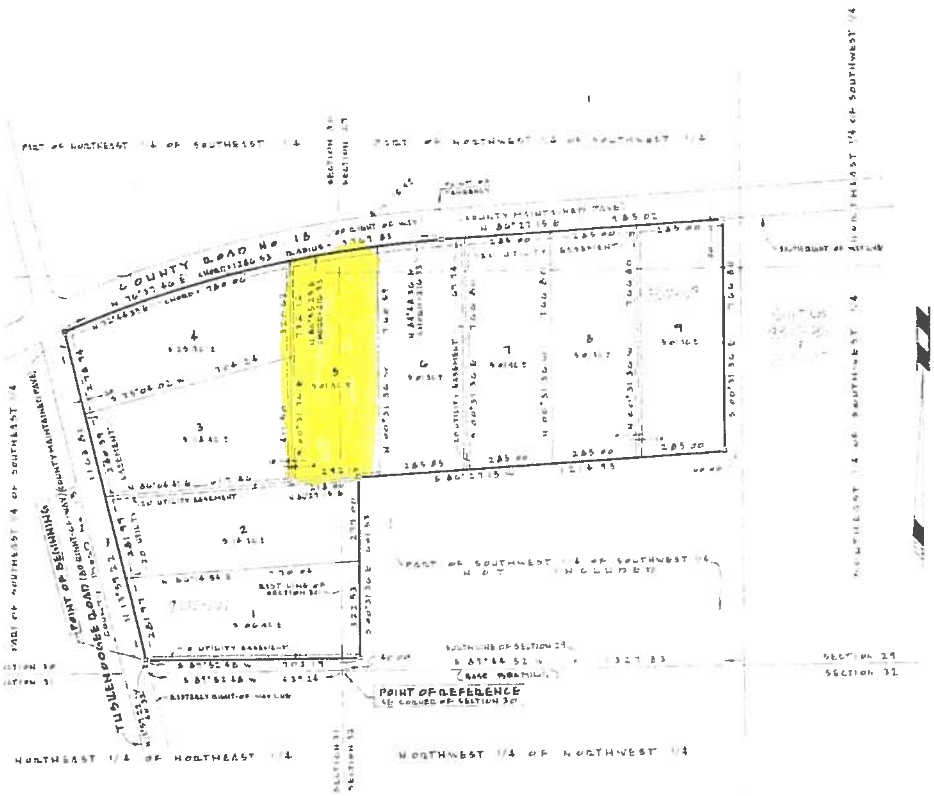
Kim Sargent

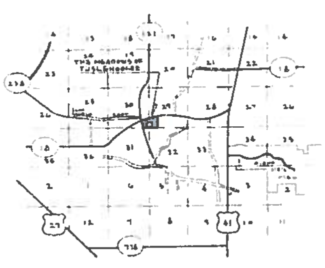
THE MEADOWS OF TUSKENOOGEE

203

SITUATED IN: PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 29 AND PART OF THE EAST 1/2 OF THE SOUTHEAST 1/4 OF SECTION 30, TOWNSHIP 6 SOUTH, RANGE 17 EAST, COLUMBIA COUNTY, FLORIDA

DESCRIPTION: PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 29 AND PART OF THE EAST 1/2 OF THE SOUTHEAST 1/4 OF SECTION 30, TOWNSHIP 6 SOUTH, RANGE 17 EAST, COLUMBIA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: FOR POINT OF REFERENCE COMMENCE AT THE SOUTHEAST CORNER OF SAID SECTION 30, THENCE RUN SOUTH 89°44'46" WEST ALONG THE SOUTH LINE OF SAID SECTION 30, A DISTANCE OF 830.24 FEET TO THE EAST RIGHT-OF-WAY LINE OF COUNTY ROAD NO. 131 (TUSKENOOGEE ROAD); THENCE RUN NORTH 1°59'23" WEST ALONG SAID EAST RIGHT-OF-WAY LINE A DISTANCE OF 40.22 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE NORTH 1°59'23" WEST ALONG SAID EAST RIGHT-OF-WAY LINE A DISTANCE OF 1163.31 FEET TO THE SOUTH RIGHT-OF-WAY LINE OF COUNTY ROAD NO. 18, SAID SOUTH RIGHT-OF-WAY LINE BEING IN A CURVE CONCAVED SOUTHEASTERLY, HAVING A RADIUS OF 3769.83 FEET; THENCE RUN ALONG AND AROUND SAID CURVE A CHORD BEARING AND DISTANCE OF NORTH 79°37'46" EAST, 1286.53 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE CONTINUE ALONG SAID SOUTH RIGHT-OF-WAY LINE NORTH 86°27'15" EAST, A DISTANCE OF 985.02 FEET; THENCE RUN SOUTH 00°31'36" EAST, A DISTANCE OF 766.80 FEET; THENCE RUN SOUTH 86°27'15" WEST, A DISTANCE OF 1214.96 FEET; THENCE RUN SOUTH 00°31'36" EAST, A DISTANCE OF 501.53 FEET; THENCE RUN SOUTH 89°44'46" WEST, A DISTANCE OF 703.13 FEET TO THE POINT OF BEGINNING. CONTAINING 42.68 ACRES MORE OR LESS





VICINITY MAP

NOT TO SCALE

GRAPHIC SCALE

NOTICE: THERE MAYBE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAYBE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY

LEGEND AND NOTES

DENOTES PERMANENT CONTROL POINT (PCP)

DENOTES PERMANENT REFERENCE MONUMENT (PRM)

1) CLOSURE EXCEEDS 1:10,000

2) BEARINGS BASED ON THE SOUTH LINE OF SAID SECTION 30: S 89°44'46" W

3) FOR SECTION BREAKDOWN SEE JOB FILE, THIS OFFICE

4) CONCRETE MONUMENTS SET ON ALL CORNERS

5) IF THEY EXIST, NO UNDERGROUND ENCROACHMENTS AND OR UTILITIES LOCATED BY THIS SURVEY

6) PRELIMINARY APPROVAL DATE: MARCH 5, 1998

DENOTES 20' UTILITY EASEMENT AS SHOWN. EASEMENTS SHOWN HEREON FOR UTILITIES SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES

ADOPTION AND D

KNOWN ALL MEN BY THESE PRESENT THA
HAS CAUSED THE LANDS HEREON DESCRI
THE MEADOWS OF TUSKENOOGEE AND THA
EASEMENTS FOR UTILITIES, DRAINAGE AN
HEREON ARE HEREBY DEDICATED TO THE

RON W. TURBEVILLE, PRESIDENT
A BAR X LAND AND CATTLE COMPANY
P.O. BOX 830
LAKE CITY, FLORIDA 32056
904 752 3085

STATE OF FLOR

I HEREBY CERTIFY ON THIS 23
APPEARED RON W. TURBEVILLE, PRESI
TO ME KNOWN TO BE THE PERSON DE
ACKNOWLEDGE THE EXECUTION THERE
THEREIN EXPRESSED. IN WITNESS WHE

WITNESS MY HAN
THIS 23rd DAY

NOTARY PUBLIC, STATE OF FL

PUBLIC WORKS
COLUMBIA COUN

I HEREBY CERTIFY THAT THE IMPROVEMEN
ACCORDANCE WITH COUNTY SPECIFICATIONS
OF $ ______ HAS BEEN POST
MAINTENANCE IN CASE OF DEFAULT

DATE 3 5 98

APPROVED BY B
COMMISSIONERS,

THIS PLAT IS HEREBY APPROVED BY THE

CHAIRMAN

COUNTY ATTORNEY CERTIFICATE

DATE May 7, 1998

CE

I HERE
THE BO

SU

STATE OF FLORIDA
COUNTY OF COLUMBIA

LAND OWNER AFFIDAVIT

This is to certify that I, (We), Kim Sargent + Robert Stabb,

as the owner of the below described property:

Property tax Parcel ID number 30-6S17-06801O5

Subdivision (Name, lot, Block, Phase) Lot 5 The Meadows of Tuskenogee S/D

Give my permission for Kim Sargent & Robert Stabb to place a

Circle one - Mobile Home / Travel Trailer / Utility Pole Only / Single Family ~~Home~~ /
Barn – Shed – Garage / Culvert / Other _____

I (We) understand that the named person(s) above will be allowed to receive a building permit on the property number I (we) have listed above and this could result in an assessment for solid waste and fire protection services levied on this property.

Kim Sargent — Owner Signature — 6/6/19 — Date

Robert Stabb — Owner Signature — 6/6/19 — Date

PEE LH

_____ — Owner Signature — _____ — Date

Sworn to and subscribed before me this 6 day of June, 2019. This

(These) person(s) are personally known to me or produced ID _____.
(Type)

Danay Harvey — Notary Public Signature — Danay Harvey — Notary Printed Name

Notary Stamp/

DANAY HARVEY
MY COMMISSION # GG 152314
EXPIRES: February 17, 2022
Bonded Thru Notary Public Underwriters

COLUMBIA COUNTY BUILDING DEPARTMENT
RESIDENTIAL CHECK LIST

MINIMUM PLAN REQUIREMENTS: FLORIDA BUILDING CODE RESIDENTIAL 2014 EFFECTIVE 1 JULY 2015 AND THE NATIONAL ELECTRICAL CODE 2011 EFFECTIVE 1 JULY 2015

ALL REQUIREMENTS ARE SUBJECT TO CHANGE

ALL BUILDING PLANS MUST INDICATE COMPLIANCE WITH THE CURRENT 2014 FLORIDA BUILDING CODES RESIDENTIAL, EFFECTIVE 1 JULY 2015. NATIONAL ELECTRICAL CODE 2011 EFFECTIVE 1 JULY 2015. ALL PLANS OR DRAWINGS SHALL PROVIDE CALCULATIONS AND DETAILS THAT HAVE THE SEAL AND SIGNATURE OF A CERTIFIED ARCHITECT OR ENGINEER REGISTERED IN THE STATE OF FLORIDA, OR ALTERNATE METHODOLOGIES, APPROVED BY THE STATE OF FLORIDA BUILDING COMMISSION FOR ONE-AND-TWO FAMILY DWELLINGS.

FOR DESIGN PURPOSES THE FOLLOWING BASIC WIND SPEEDS ARE PER FLORIDA BUILDING CODE FIGURE 1609-A THROUGH 1609-C ULTIMATE DESIGN WIND SPEEDS FOR RISK CATEGORY AND BUILDINGS AND OTHER STRUCTURES
Revised 12/2016

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Marked as Applicable
		Select From the Dropbox
1	Two (2) complete sets of plans containing the following:	-
2	All drawings must be clear, concise, drawn to scale, details that are not used shall be marked void	-
3	Condition space (Sq. Ft.) 1023 Total (Sq. Ft.) under roof 1995	YES / NO / N/A

Designers name and signature shall be on all documents and a licensed architect or engineer, signature and official embossed seal shall be affixed to the plans and documents as per the FLORIDA BUILDING CODES RESIDENTIAL R101.2.1

Site Plan information including:

4	Dimensions of lot or parcel of land	- ✓
5	Dimensions of all building set backs	- ✓
6	Location of all other structures (include square footage of structures) on parcel, existing or proposed well and septic tank and all utility easements.	- ✓
7	Provide a full legal description of property.	- ✓

Wind-load Engineering Summary, calculations and any details are required.

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Marked as Applicable
8	**Plans or specifications must show compliance with FBCR Chapter 3**	YES / NO / N/A
		Select From the Dropbox
9	Basic wind speed (3-second gust), miles per hour	-
10	(Wind exposure – if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated)	-
11	Wind importance factor and nature of occupancy	-
12	The applicable internal pressure coefficient, Components and Cladding	-
13	The design wind pressure in terms of psf (kN/m²), to be used for the design of exterior component, cladding materials not specifally designed by the registered design professional.	-

Elevations Drawing including:

14	All side views of the structure	- ✓
15	Roof pitch	- ✓
16	Overhang dimensions and detail with attic ventilation	- ✓
17	Location, size and height above roof of chimneys	- ✓
18	Location and size of skylights with Florida Product Approval	-
18	Number of stories	- ✓
20A	Building height from the established grade to the roofs highest peak	- ✓

Floor Plan including:

20	Dimensioned area plan showing rooms, attached garage, breeze ways, covered porches, deck, balconies	- ✓
21	Raised floor surfaces located more than 30 inches above the floor or grade	- ✓
22	All exterior and interior shear walls indicated	- ✓
23	Shear wall opening shown (Windows, Doors and Garage doors)	- ✓
24	Show compliance with Section FBCR 310 Emergency escape and rescue opening shown in each bedroom (net clear opening shown) and Show compliance with Section FBC 1405.13.2 where the opening of an operable window is located more than 72 inches above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches above the finished floor of the room in which the window is located. Glazing between the floor and 24 inches shall be fixed or have openings through which a 4-inch-diameter sphere cannot pass.	- ✓
25	Safety glazing of glass where needed	- ✓
26	Fireplaces types (gas appliance) (vented or non-vented) or wood burning with Hearth (see chapter 10 and chapter 24 of FBCR)	- ✓
27	Show stairs with dimensions (width, tread and riser and total run) details of guardrails, Handrails	-
28	Identify accessibility of bathroom (see FBCR SECTION 320)	- ✓

All materials placed within opening or onto/into exterior walls, soffits or roofs shall have Florida product approval number and mfg. installation information submitted with the plans (see Florida product approval form)

GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Marked as Applicable

YES / NO / N/A

FBCR 403: Foundation Plans

Select From the Dropbox

29	Location of all load-bearing walls footings indicated as standard, monolithic, dimensions, size and type of reinforcing.	- ✓
30	All posts and/or column footing including size and reinforcing	- ✓
31	Any special support required by soil analysis such as piling.	-
32	Assumed load-bearing valve of soil_____ Pound Per Square Foot	-
33	Location of horizontal and vertical steel, for foundation or walls (include # size and type) **For** structures with foundation which establish new electrical utility companies service connection a Concrete Encased Electrode will be required within the foundation to serve as an grounding electrode system. Per the National Electrical Code article 250.52.3	- ✓

FBCR 506: CONCRETE SLAB ON GRADE

34	Show Vapor retarder (6mil. Polyethylene with joints lapped 6 inches and sealed)	- ✓
35	Show control joints, synthetic fiber reinforcement or welded fire fabric reinforcement and Supports	- ✓

FBCR 318: PROTECTION AGAINST TERMITES

36	Indicate on the foundation plan if soil treatment is used for subterranean termite prevention or Submit other approved termite protection methods. **Protection shall be provided by registered termiticides**	- ✓

FBCR 606: Masonry Walls and Stem walls (load bearing & shear Walls)

37	Show all materials making up walls, wall height, and Block size, mortar type	-
38	Show all Lintel sizes, type, spans and tie-beam sizes and spacing of reinforcement	-

Metal frame shear wall and roof systems shall be designed, signed and sealed by Florida Prof. Engineer or Architect

Floor Framing System: First and/or second story

39	Floor truss package shall including layout and details, signed and sealed by Florida Registered Professional Engineer	-

40	Show conventional floor joist type, size, span, spacing and attachment to load bearing walls, stem walls and/or priers	-
41	Girder type, size and spacing to load bearing walls, stem wall and/or priers	-
42	Attachment of joist to girder	-
43	Wind load requirements where applicable	-
44	Show required under-floor crawl space	-
45	Show required amount of ventilation opening for under-floor spaces	-
46	Show required covering of ventilation opening	-
47	Show the required access opening to access to under-floor spaces	-
48	Show the sub-floor structural panel sheathing type, thickness and fastener schedule on the edges & intermediate of the areas structural panel sheathing	-
49	Show Draftstopping, Fire caulking and Fire blocking	-
50	Show fireproofing requirements for garages attached to living spaces, per FBCR section 302.6	-
51	Provide live and dead load rating of floor framing systems (psf).	-

FBCR CHAPTER 6 WOOD WALL FRAMING CONSTRUCTION

YES / NO / N/A

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Marked as Applicable Select From the Dropbox
52	Stud type, grade, size, wall height and oc spacing for all load bearing or shear walls	-
53	Fastener schedule for structural members per table IRC 602.3 are to be shown	-
54	Show Wood structural panel's sheathing attachment to studs, joist, trusses, rafters and structural members, showing fastener schedule attachment on the edges & intermediate of the areas structural panel sheathing	-
55	Show all required connectors with a max uplift rating and required number of connectors and oc spacing for continuous connection of structural walls to foundation and roof trusses or rafter systems	-
56	Show sizes, type, span lengths and required number of support jack studs, king studs for shear wall opening and girder or header per IRC Table 502.5 (1)	-
57	Indicate where pressure treated wood will be placed	-
58	Show all wall structural panel sheathing, grade, thickness and show fastener schedule for structural panel sheathing edges & intermediate areas	-
59	A detail showing gable truss bracing, wall balloon framing details or/ and wall hinge bracing detail	-

FBCR :ROOF SYSTEMS:

60	Truss design drawing shall meet section FBCR 802.1.6.1 Wood trusses	-
61	Include a layout and truss details, signed and sealed by Florida Professional Engineer	-
62	Show types of connector's assemblies' and resistance uplift rating for all trusses and rafters	-
63	Show gable ends with rake beams showing reinforcement or gable truss and wall bracing details	-
64	Provide dead load rating of trusses	-

FBCR 802:Conventional Roof Framing Layout

65	Rafter and ridge beams sizes, span, species and spacing	-
66	Connectors to wall assemblies' include assemblies' resistance to uplift rating	-
67	Valley framing and support details	-
68	Provide dead load rating of rafter system	-

FBCR 803 ROOF SHEATHING

69	Include all materials which will make up the roof decking, identification of structural panel sheathing, grade, thickness	-
70	Show fastener Size and schedule for structural panel sheathing on the edges & intermediate areas	-

ROOF ASSEMBLIES FRC Chapter 9

71	Include all materials which will make up the roof assembles covering	-
72	Submit Florida Product Approval numbers for each component of the roof assembles covering	-

FBCR Chapter 11 Energy Efficiency Code for residential building

Residential construction shall comply with this code by using the following compliance methods in the FBCR chapter11 Residential buildings compliance methods. **Two of the required forms are to be submitted**, *N1100.1.1.1 As an alternative to the computerized Compliance Method A, the Alternate Residential Point System Method hand calculation, Alternate Form 600A, may be used. All requirements specific to this calculation are located in Sub appendix C to Appendix G. Buildings complying by this alternative shall meet all mandatory requirements of this chapter. Computerized versions of the Alternate Residential Point System Method shall not be acceptable for code compliance.*

YES / NO / N/A

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Marked as Applicable Select From the Dropbox
73	Show the insulation R value for the following areas of the structure	- ✓
74	Attic space	- ✓
75	Exterior wall cavity	- ✓
76	Crawl space	-
	HVAC information	
77	Submit two copies of a Manual J sizing equipment or equivalent computation study	- ✓
78	Exhaust fans shown in bathrooms **Mechanical exhaust capacity of 50 cfm intermittent or 20 cfm continuous required**	- ✓
79	Show clothes dryer route and total run of exhaust duct	- ✓
	Plumbing Fixture layout shown	
80	All fixtures waste water lines shall be shown on the foundation plan	- ✓
81	Show the location of water heater	- ✓
	Private Potable Water	
82	Pump motor horse power	N/A Existing
83	Reservoir pressure tank gallon capacity	-
84	Rating of cycle stop valve if used	-
	Electrical layout shown including	
85	Show Switches, receptacles outlets, lighting fixtures and Ceiling fans	- ✓
86	Show all 120-volt, single phase, 15- and 20-ampere branch circuits outlets required to be protected by **Ground-Fault Circuit Interrupter (GFCI) Article 210.8 A**	- ✓
87	Show the location of smoke detectors & Carbon monoxide detectors	- ✓
88	Show service panel, sub-panel, location(s) and total ampere ratings	- ✓
89	On the electrical plans identify the electrical service overcurrent protection device for the main electrical service. This device shall be installed on the exterior of structures to serve as a disconnecting means for the utility company electrical service. Conductors used from the exterior disconnecting means to a panel or sub panel shall have four-wire conductors, of which one conductor shall be used as an equipment ground. Indicate if the utility company service entrance cable will be of the overhead or underground type. **For structures** with foundation which establish new electrical utility companies service connection a Concrete Encased Electrode will be required within the foundation to serve as an Grounding electrode system. Per the National Electrical Code article 250.52.3	-
90	Appliances and HVAC equipment and disconnects	- ✓
91	Show all 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms or areas shall be protected by a listed **Combination arc-fault circuit interrupter,** Protection device.	- ✓

GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable

THE FOLLOWING ITEMS MUST BE SUBMITTED WITH BUILDING PLANS

		YES	NO	N/A
92	**Building Permit Application** A current Building Permit Application is to be completed, by following the Checklist all supporting documents must be submitted. There is a **$15.00** application fee. The completed application with attached documents and application fee can be mailed.	NO		
93	**Parcel Number** The parcel number (Tax ID number) from the Property Appraisers Office (386) 758-1083 is required. A copy of property deed is also required. www.columbiacountyfla.com	NO		
94	**Town of Fort White** (386) 497-2321 If the parcel in the application for building permit is within the Corporate city limits of Fort White, an approval land use development letter issued by the Town of Fort is required to be submitted with the application for a building permit.	NO		
***	**BELOW ITEMS ONLY NEEDED AFTER ZONING APPROVAL HAS GIVEN.**	****	***	***
95	**Environmental Health Permit or Sewer Tap Approval** A copy of a approved Columbia County Environmental Health (386) 758-1058	NO		
96	**City of Lake City** A City Water and/or Sewer letter. Call 386-752-2031	NO		
97	**Flood Information:** All projects within the Floodway of the Suwannee or Santa Fe Rivers shall require permitting through the Suwannee River Water Management District, before submitting a application to this office. Any project located within a flood zone where the base flood elevation (100 year flood) has been established shall meet the requirements of Section 8.5.2 of the Columbia County Land Development Regulations. Any project located within a flood zone where the base flood elevation has not been established (Zone A) shall meet the requirements of Section 8.5.3 of the Columbia County Land Development Regulations	NO		
98	**CERTIFIED FINISHED FLOOR ELEVATIONS** will be required on any project where the approved FIRM Flood Maps show the property is in a AE, Floodway, and AH flood zones. Additionally One Foot Rise letters are required for AE and AH zones. In the Floodway Flood zones a Zero Rise letter is required.			
99	A Flood development permit is also required for AE, Floodway & AH. Development permit cost is **$50.00**			
100	**Driveway Connection:** If the property does not have an existing access to a public road, then an application for a culvert permit (**$25.00**) must be made. County Public Works Dept. determines the size and length of every culvert before instillation and completes a final inspection before permanent power is granted. If the applicant feels that a culvert is not needed, they may apply for a culvert waiver (**$50.00**) Separate Check when issued. If the project is to be located on an F.D.O.T. maintained road, then an F.D.O.T. access permit is required.	NO		
101	**911 Address:** An application for a 911address must be applied for and **received** through the Columbia County Emergency Management Office of 911 Addressing Department (386) 758-1125.	NO		

TOILET FACILITIES SHALL BE PROVIDED FOR ALL CONSTRUCTION SITES. NO

Disclosure Statement for Owner Builders *If you as the applicant will be acting as an owner/builder under section 489.103(7) of the Florida Statutes, submit the required owner builder disclosure statement form.*

Notice Of Commencement

A notice of commencement form **recorded** in the Columbia County Clerk Office is required to be filed with the building department Before Any Inspections can be preformed.

Section R101.2.1 of the Florida Building Code Residential:

The provisions of Chapter 1, Florida Building Code shall govern the administration and enforcement of the Florida Building Code, Residential.

PRODUCT APPROVAL SPECIFICATION SHEET

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and approval numbers on the building components listed below if they will be utilized on the construction project for which you are applying for a building permit. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products.

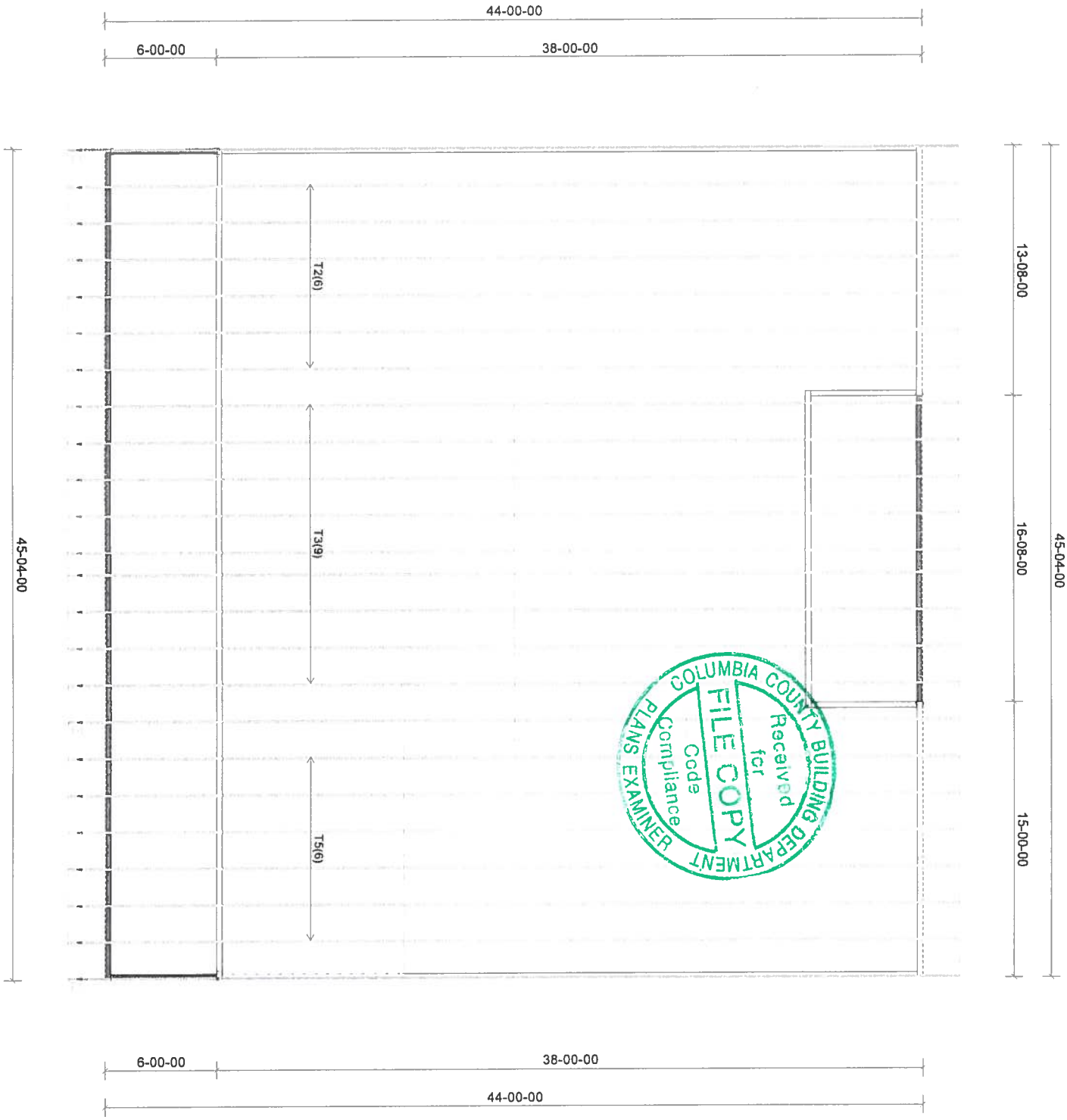
Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
1. EXTERIOR DOORS			
A. SWINGING	Plastpro	Fiberglass door	FL 17347-9
B. SLIDING			
C. SECTIONAL			
D. ROLL UP			
E. AUTOMATIC			
F. OTHER			
2. WINDOWS			
A. SINGLE HUNG	MI	Vinyl Window	FL 17676.1
B. HORIZONTAL SLIDER			
C. CASEMENT			
D. DOUBLE HUNG			
E. FIXED			
F. AWNING			
G. PASS THROUGH			
H. PROJECTED			
I. MULLION			
J. WIND BREAKER			
K. DUAL ACTION			
L. OTHER			
3. PANEL WALL			
A. SIDING	Cem plank ACM	Primed hardi Board Aluminum Soffit	FL 13192.R FL 12019
B. SOFFITS			
C. EIFS			
D. STOREFRONTS			
E. CURTAIN WALLS			
F. WALL LOUVER			
G. GLASS BLOCK			
H. MEMBRANE			
I. GREENHOUSE			
J. OTHER			
4. ROOFING PRODUCTS			
A. ASPHALT SHINGLES			
B. UNDERLAYMENTS	Trinity ERD	Rhino Underlayment	22492-R1
C. ROOFING FASTENERS			
D. NON-STRUCTURAL METAL ROOFING	Tri County Metal	Ultra Rib Roof Panel	45951.64
E. WOOD SHINGLES AND SHAKES			
F. ROOFING TILES			
G. ROOFING INSULATION			
H. WATERPROOFING			
I. BUILT UP ROOFING ROOF SYSTEMS			
J. MODIFIED BITUMEN			
K. SINGLE PLY ROOF SYSTEMS			
L. ROOFING SLATE			
M. CEMENTS-ADHESIVES COATINGS			

I. ROOF SYSTEMS			
O. ROOF TILE ADHESIVE			
P. SPRAY APPLIED POLYURETHANE ROOF			
Q. OTHER			
5. SHUTTERS			
A. ACCORDION			
B. BAHAMA			
C. STORM PANELS			
D. COLONIAL			
E. ROLL-UP			
F. EQUIPMENT			
G. OTHERS			
6. SKYLIGHTS			
A. SKYLIGHT			
B. OTHER			
7. STRUCTURAL COMPONENTS			
A. WOOD CONNECTORS/ ANCHORS	Simpson	-Rafter Ties H10	FI 474.109
B. TRUSS PLATES	Simpson	Flat Straps -MSTA24	FI 19057
C. ENGINEERED LUMBER	Simpson	Top plate ties - SPH4	FI 538
D. RAILING			
E. COOLERS-FREEZERS			
F. CONCRETE ADMIXTURES			
G. MATERIAL			
H. INSULATION FORMS	Simpson	Rafter ties H2.5A	FI 5035
I. PLASTICS			
J. DECK-ROOF			
K. WALL			
L. SHEDS			
M. OTHER Lintels	Simpson	Bottom Mount LTBL42	FI 47421
8. NEW EXTERIOR ENVELOPE PRODUCTS			
A.			
B.			

The products listed below did not demonstrate product approval at plan review. I understand that at the time of inspection of these roducts, the following information must be available to the inspector on the jobsite; 1) copy of the product approval, 2) the performance haracteristics which the product was tested and certified to comply with, 3) copy of the applicable manufacturers installation equirements. Further, I understand these products may have to be removed if approval cannot be demonstrated during inspection.

APPLICANT SIGNATURE

DATE



JOB NO. **S0630**	Customer: 84 LUMBER Description: SARGENT / SKIP HARVEY Designer: Jack Duley	Pitch: --- Overhang: ---	PRODUCT APPROVAL NUMBER FL 2197.4 MT20 PLATES MITEK INDUSTRIES, INC.	DULEY TRUSS INC. (352) 465-0964

Lumber design values are in accordance with ANSI/TPI 1 section 6.3
These truss designs rely on lumber values established by others.

RE: S0630 - SARGENT / SKIP HARVEY

MiTek USA, Inc.
6904 Parke East Blvd.
Tampa, FL 33610-4115

Site Information:
Customer Info: 84 LUMBER - SARGENT / SKIP HARVEY Project Name: - Model: -
Lot/Block: - Subdivision: -
Address: -, -
City: - State: FL

Name Address and License # of Structural Engineer of Record, If there is one, for the building.
Name: License #:
Address:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):
Design Code: FRC2017/TPI2014 Design Program: MiTek 20/20 8.2
Wind Code: ASCE 7-10 Wind Speed: 140 mph
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 5 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date
1	T17063699	T1	5/15/19
2	T17063700	T2	5/15/19
3	T17063701	T3	5/15/19
4	T17063702	T4	5/15/19
5	T17063703	T5	5/15/19

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

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Duley Truss.
Truss Design Engineer's Name: Albani, Thomas
My license renewal date for the state of Florida is February 28, 2021.

THOMAS A. ALBANI
LICENSE
No. 39380
STATE OF FLORIDA
PROFESSIONAL ENGINEER

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Thomas A. Albani PE No.39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
May 15,2019

Job	Truss	Truss Type	Qty	Ply	SARGENT / SKIP HARVEY	T17063699
S0630	T1	Roof Special Supported Gable	2	1	Job Reference (optional)	

Duley Truss, Dunnellon, FL - 34430, 8.220 s Nov 16 2018 MiTek Industries, Inc. Wed May 15 06:42:29 2019 Page 1

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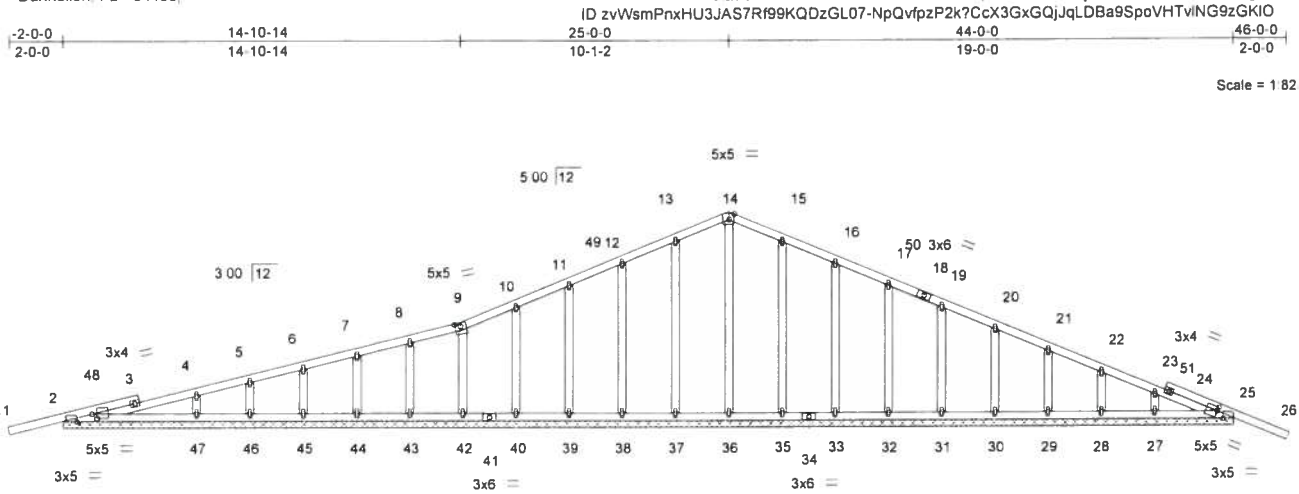


Plate Offsets (X,Y)-- [2:0-2-4,0-2-0], [2:0-6-12,Edge], [9:0-2-8,0-1-8], [14:0-2-4,Edge], [25:0-0-4,0-1-12], [25:0-2-13,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.42	Vert(LL)	-0.02	26	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.16	Vert(CT)	-0.02	26	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01	25	n/a	n/a		
BCDL	10.0	Code FRC2017/TPI2014		Matrix-S							Weight: 251 lb	FT = 20%

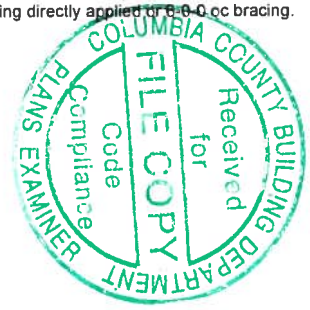
LUMBER-
TOP CHORD 2x4 SP No.2D
BOT CHORD 2x4 SP No.2D
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 44-0-0.
(lb) - Max Horz 2=214(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 37, 38, 39, 40, 42, 43, 44, 45, 46, 47, 35, 33, 32, 31, 30, 29, 28, 27 except 2=-211(LC 12), 25=-207(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 36, 37, 38, 39, 40, 42, 43, 44, 45, 46, 35, 33, 32, 31, 30, 29, 28, 27 except 2=293(LC 1), 47=319(LC 1), 25=251(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 10-11=-90/251, 11-12=-85/310, 12-13=-106/373, 13-14=-127/428, 14-15=-127/436, 15-16=-106/379, 16-17=-85/317, 17-19=-64/257

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph (3-second gust) Vasd=108mph; TCDL=4.2psf; BCDL=6.0psf, h=25ft; B=45ft; L=44ft; eave=2ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Corner(3) -2-0-7 to 2-4-6, Exterior(2) 2-4-6 to 25-0-0, Corner(3) 25-0-0 to 29-4-13, Exterior(2) 29-4-13 to 46-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 37, 38, 39, 40, 42, 43, 44, 45, 46, 47, 35, 33, 32, 31, 30, 29, 28, 27 except (jt=lb) 2=211, 25=207.



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Date:

May 15,2019

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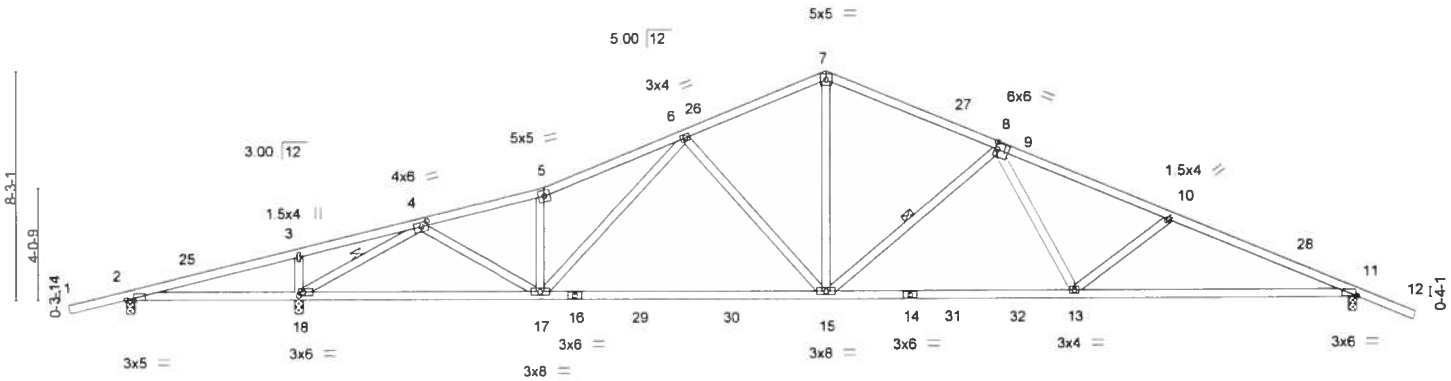
Job	Truss	Truss Type	Qty	Ply	SARGENT / SKIP HARVEY	T17063700
S0630	T2	Roof Special	6	1	Job Reference (optional)	

Duley Truss, Dunnellon, FL - 34430, 8 220 s Nov 16 2018 MiTek Industries, Inc Wed May 15 06 42 30 2019 Page 1
ID zvWsmPnxHU3JAS7Rf99KQDzGL07-r?_Hs9z1p173EheSVzxyr1uMXzJAX8mRiZVxoczGKIN

-2-0-0	6-1-12	10-6-5	14-10-14	19-11-7	25-0-0	31-1-6	37-2-13	44-0-0	46-0-0
2-0-0	6-1-12	4-4-9	4-4-9	5-0-9	5-0-9	6-1-6	6-1-6	6-9-3	2-0-0

Scale = 1 78 5



6-1-12	14-10-14	25-0-0	33-10-7	44-0-0
6-1-12	8-9-2	10-1-2	8-10-7	10-1-9

Plate Offsets (X,Y)-- [2:0-3-4,Edge], [4:0-2-12,0-1-12], [9:0-0-0,0-1-12], [9:0-1-0,0-3-0], [11:0-0-6,0-0-0], [18:0-1-12,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20 0	Plate Grip DOL	1.25	TC	0 57	Vert(LL)	-0.33	15-17	>999	240	MT20	244/190
TCDL	7 0	Lumber DOL	1.25	BC	0 96	Vert(CT)	-0.63	15-17	>724	180		
BCLL	0 0 *	Rep Stress Incr	YES	WB	0 63	Horz(CT)	0.09	11	n/a	n/a		
BCDL	10 0	Code FRC2017/TPI2014		Matrix-MS							Weight: 223 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2D
BOT CHORD 2x4 SP No.2D
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-18, 8-15

REACTIONS. (lb/size) 2=17/0-3-8, 18=2000/0-3-8, 11=1460/0-3-8
Max Horz 2=222(LC 11)
Max Uplift 2=-152(LC 8), 18=-700(LC 12), 11=-630(LC 12)
Max Grav 2=87(LC 21), 18=2000(LC 1), 11=1460(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-443/1184, 3-4=-380/1162, 4-5=-2206/933, 5-6=-2358/1074, 6-7=-1745/877, 7-8=-1759/863, 8-10=-2565/1074, 10-11=-2860/1192
BOT CHORD 2-18=-1108/534, 17-18=-471/1368, 15-17=-609/1870, 13-15=-726/2088, 11-13=-985/2605
WEBS 3-18=-330/230, 4-18=-2867/1176, 4-17=-248/911, 5-17=-598/353, 6-17=-140/471, 6-15=-521/363, 7-15=-411/1040, 8-15=-747/427, 8-13=-78/532, 10-13=-384/286

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph (3-second gust) Vasd=108mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=44ft; eave=5ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-7 to 2-4-6, Interior(1) 2-4-6 to 25-0-0, Exterior(2) 25-0-0 to 29-4-13, Interior(1) 29-4-13 to 46-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=152, 18=700, 11=630.

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May 15,2019

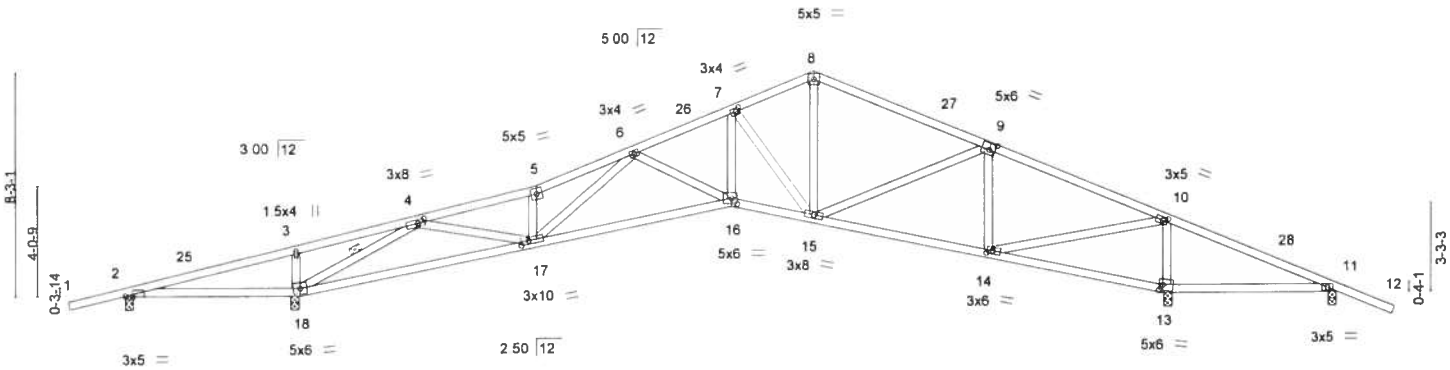
Job	Truss	Truss Type	Qty	Ply	SARGENT / SKIP HARVEY	T17063701
S0630	T3	Roof Special	9	1	Job Reference (optional)	

Duley Truss, Dunnellon, FL - 34430, 8.220 s Nov 16 2018 MiTek Industries, Inc. Wed May 15 06:42:31 2019 Page 1

ID:zvWsmPnxHU3JAS7Rf99KQDzGL07-JCYf3V_gZLFwsrDf3hSBOFRU8NiMGZxaxDEUK2zGKIM

-2-0-0	6-4-0	10-7-7	14-10-14	18-5-7	22-0-0	25-0-0	31-4-0	37-8-0	44-0-0	46-0-0
2-0-0	6-4-0	4-3-7	4-3-7	3-6-9	3-6-9	3-0-0	6-4-0	6-4-0	6-4-0	2-0-0

Scale = 1:79.8



6-0-0	6-4-0	14-10-14	22-0-0	25-0-0	31-4-0	37-8-0	38-0-0	44-0-0
6-0-0	0-4-0	8-6-14	7-1-2	3-0-0	6-4-0	6-4-0	0-4-0	6-0-0

Plate Offsets (X,Y)-- [2:0-3-4,Edge], [4:0-3-0,0-1-8], [7:0-1-12,0-1-8], [9:0-2-12,0-3-0], [10:0-2-0,0-1-8], [13:0-1-8,0-2-8], [14:0-2-8,0-1-8], [16:0-2-8,0-2-8], [17:0-3-7,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.71	Vert(LL)	0.20	16-17	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.71	Vert(CT)	-0.37	16-17	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.15	13	n/a	n/a		
BCDL	10.0	Code FRC2017/TPI2014		Matrix-MS							Weight: 221 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2D
BOT CHORD	2x4 SP No.2D
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-11-3 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 4-8-7 oc bracing.
WEBS	1 Row at midpt 4-18

REACTIONS. (lb/size) 2=-105/0-3-8, 18=1823/0-3-8, 13=1957/0-3-8, 11=-199/0-3-8
Max Horz 2=222(LC 11)
Max Uplift 2=-148(LC 17), 18=-632(LC 12), 13=-655(LC 12), 11=-318(LC 21)
Max Grav 18=1823(LC 1), 13=1957(LC 1), 11=2(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	2-3=-586/1719, 3-4=-543/1725, 4-5=-2204/851, 5-6=-2361/979, 6-7=-1890/782, 7-8=-1159/600, 8-9=-1209/570, 9-10=-797/403, 10-11=-443/1387
BOT CHORD	2-18=-1624/673, 17-18=-251/713, 16-17=-605/2061, 15-16=-375/1747, 14-15=-153/687, 13-14=-1342/589, 11-13=-1214/531
WEBS	3-18=-341/228, 4-18=-2751/1098, 4-17=-372/1467, 5-17=-563/306, 6-17=-91/290, 6-16=-378/258, 7-16=-269/1021, 7-15=-1108/443, 8-15=-232/615, 9-15=-27/494, 9-14=-675/366, 10-14=-697/2012, 10-13=-1546/689

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph (3-second gust) Vasd=108mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=44ft; eave=5ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-7 to 2-4-6, Interior(1) 2-4-6 to 25-0-0, Exterior(2) 25-0-0 to 29-4-13, Interior(1) 29-4-13 to 46-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=148, 18=632, 13=655, 11=318.

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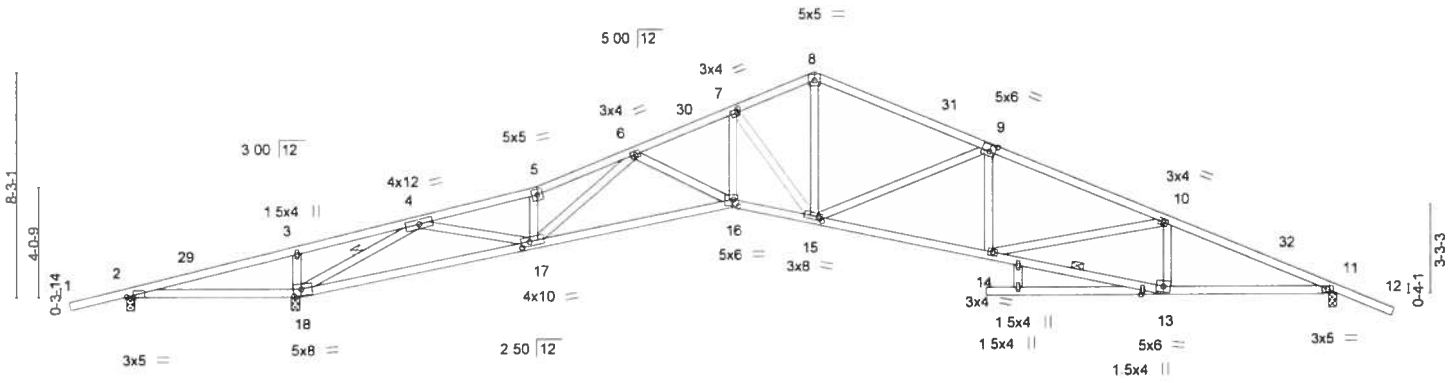
Job	Truss	Truss Type	Qty	Ply	SARGENT / SKIP HARVEY	T17063702
S0630	T4	Roof Special	1	1	Job Reference (optional)	

Duley Truss, Dunnellon, FL - 34430,

8.220 s Nov 16 2018 MiTek Industries, Inc. Wed May 15 06:42:32 2019 Page 1
ID:zvWsmPnxHU3JAS7Rf99KQDzGL07-nO61Hr?IKfNnU?ordO_QwSzbLn1e?_SkAt_1tUzGKIL

-2-0-0	6-4-0	10-7-7	14-10-14	18-5-7	22-0-0	25-0-0	31-4-0	37-8-0	44-0-0	46-0-0
2-0-0	6-4-0	4-3-7	4-3-7	3-6-9	3-6-9	3-0-0	6-4-0	6-4-0	6-4-0	2-0-0

Scale = 1:79.8



6-0-0	6-4-0	14-10-14	22-0-0	25-0-0	31-4-0	37-8-0	44-0-0
6-0-0	0-4-0	8-6-14	7-1-2	3-0-0	6-4-0	6-4-0	6-4-0

Plate Offsets (X,Y)-- [2:0-3-0,Edge], [7:0-1-4,0-1-8], [9:0-2-12,0-3-0], [15:0-1-11,0-1-8], [16:0-2-8,0-3-0], [17:0-3-11,0-2-0], [18:0-3-4,0-2-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	1.00	Vert(LL)	0.36	16-17	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.83	Vert(CT)	-0.64	16-17	>708	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.28	11	n/a	n/a		
BCDL	10.0	Code FRC2017/TPI2014		Matrix-MS							Weight: 231 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2D
BOT CHORD 2x4 SP No.2D
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 3-6-13 oc bracing. Except:
6-6-0 oc bracing: 13-14
WEBS 1 Row at midpt 4-18

REACTIONS. (lb/size) 2=-404/0-3-8, 18=2502/0-3-8, 11=1379/0-3-8
Max Horz 2=222(LC 11)
Max Uplift 2=-404(LC 1), 18=-858(LC 12), 11=-604(LC 12)
Max Grav 2=21(LC 9), 18=2502(LC 1), 11=1379(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1036/2897, 3-4=-991/2900, 4-5=-2884/1111, 5-6=-3086/1256, 6-7=-3162/1268, 7-8=-2210/1004, 8-9=-2269/966, 9-10=-2857/1190, 10-11=-2742/1108
BOT CHORD 2-18=-2764/1109, 17-18=-188/581, 16-17=-994/3080, 15-16=-833/2946, 14-15=-902/2648, 13-14=-927/2528, 11-13=-915/2483
WEBS 3-18=-364/236, 4-18=-3914/1542, 4-17=-691/2303, 5-17=-680/351, 6-17=-292/115, 7-16=-404/1374, 7-15=-1436/562, 8-15=-526/1426, 9-15=-665/386, 10-13=-394/249

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph (3-second gust) Vasd=108mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=44ft; eave=5ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-7 to 2-4-6, Interior(1) 2-4-6 to 25-0-0, Exterior(2) 25-0-0 to 29-4-13, Interior(1) 29-4-13 to 46-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=404, 18=858, 11=604.

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May 15,2019

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Job	Truss	Truss Type	Qty	Ply	SARGENT / SKIP HARVEY	T17063703
S0630	T5	Roof Special	6	1	Job Reference (optional)	

Duley Truss, Dunnellon, FL - 34430, 8.220 s Nov 16 2018 MiTek Industries, Inc. Wed May 15 06:42:33 2019 Page 1

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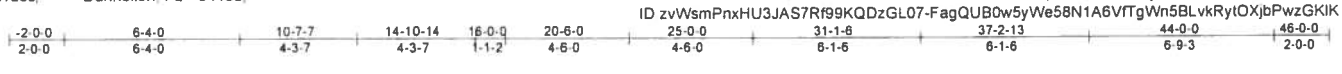

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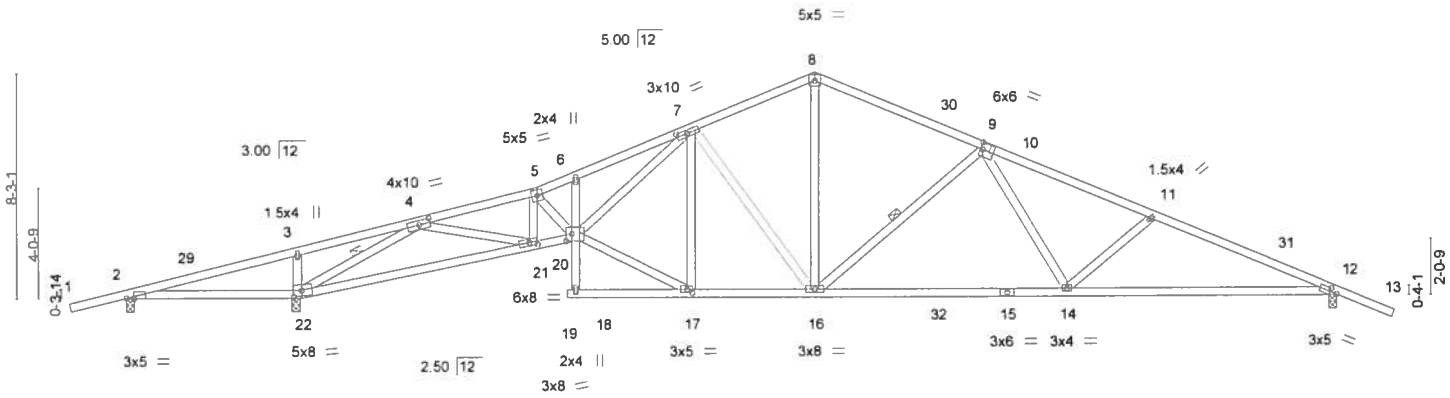

Plate Offsets (X,Y)-- [2:0-3-4,Edge], [4:0-4-12,0-2-0], [7:0-4-10,0-1-8], [10:0-1-0,0-3-0], [10:0-0-0,0-1-12], [12:0-3-0,0-1-8], [17:0-2-4,0-1-8], [20:0-2-8,0-3-4], [21:0-3-8,0-1-8], [22:0-3-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.93	Vert(LL)	0.30	19	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.96	Vert(CT)	-0.56	14-16	>810	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.19	12	n/a	n/a		
BCDL	10.0	Code FRC2017/TPI2014		Matrix-MS							Weight: 241 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2D

BOT CHORD 2x4 SP No.2D *Except*
6-18: 2x4 SP No.3

WEBS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.

BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:
10-0-0 oc bracing: 18-20

WEBS 1 Row at midpt 4-22, 9-16

REACTIONS. (lb/size) 2=-335/0-3-8, 22=2426/0-3-8, 12=1392/0-3-8
Max Horz 2=222(LC 11)
Max Uplift 2=-355(LC 17), 22=-836(LC 12), 12=-606(LC 12)
Max Grav 2=19(LC 9), 22=2426(LC 1), 12=1392(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-953/2622, 3-4=-908/2626, 4-5=-3072/1153, 5-6=-3292/1334, 6-7=-3267/1382, 7-8=-1554/814, 8-9=-1578/802, 9-10=-1900/950, 10-11=-2421/1013, 11-12=-2700/1119

BOT CHORD 2-22=-2498/1028, 21-22=-250/784, 20-21=-950/3039, 16-17=-471/1594, 14-16=-666/1931, 12-14=-919/2457

WEBS 3-22=-360/235, 4-22=-3864/1518, 4-21=-670/2262, 5-21=-700/394, 17-20=-503/1662, 7-20=-680/1941, 7-17=-673/264, 7-16=-415/272, 8-16=-380/906, 9-16=-777/428, 10-14=-83/581, 11-14=-384/285

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=140mph (3-second gust) Vasd=108mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=44ft; eave=5ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-7 to 2-4-6, Interior(1) 2-4-6 to 25-0-0, Exterior(2) 25-0-0 to 29-4-13, Interior(1) 29-4-13 to 46-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=355, 22=836, 12=606.

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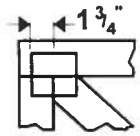
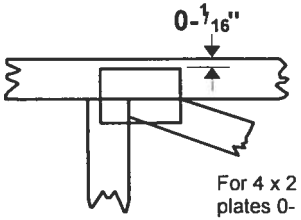
May 15,2019

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

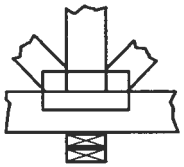
4 x 4

The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION

Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

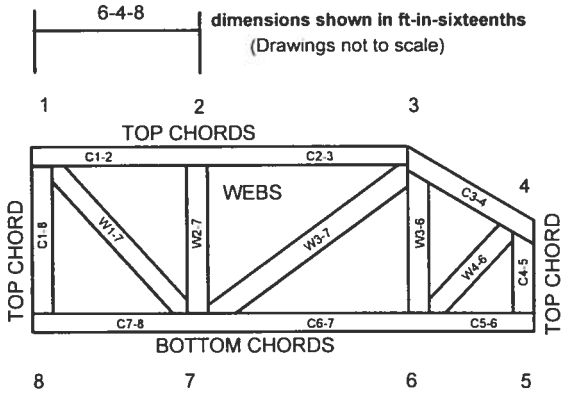


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

MiTek

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

FORM R405-2017

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	New Project Sargent	Builder Name:	Harvey Building
Street:	2196 SW CR 18	Permit Office:	
City, State, Zip:	, FL ,	Permit Number:	
Owner:	Robert & Kim Sargent	Jurisdiction:	
Design Location:	FL, Gainesville	County:	Columbia (Florida Climate Zone 2)

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 above grade (ft²)	1623
Conditioned floor area below grade (ft²)	0

7. Windows(175.0 sqft.)	Description	Area
a. U-Factor: SHGC:	Dbl, U=0.33 SHGC=0.22	175.00 ft²
b. U-Factor: SHGC:	N/A	ft²
c. U-Factor: SHGC:	N/A	ft²
d. U-Factor: SHGC:	N/A	ft²
Area Weighted Average Overhang Depth:		5.291 ft.
Area Weighted Average SHGC:		0.220

8. Floor Types (1623.0 sqft.)	Insulation	Area
a. Slab-On-Grade Edge Insulation	R=0.0	1623.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types (1429.3 sqft.)	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	1429.30 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types (1623.0 sqft.)	Insulation	Area
a. Under Attic (Vented)	R=38.0	1623.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts	R	ft²
a. Sup: Attic, Ret: Attic, AH: Main	6	302

12. Cooling systems	kBtu/hr	Efficiency
a. Central Unit	28.6	SEER:14.00

13. Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	28.6	HSPF:8.20

14. Hot water systems	
a. Electric	Cap: 50 gallons EF: 0.990
b. Conservation features None	
15. Credits	Pstat

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

Glass/Floor Area: 0.108

Total Proposed Modified Loads: 47.88

Total Baseline Loads: 48.20

PASS

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

PREPARED BY: SUNCOAST INSULATORS
825 NW 253rd Terrace
Newberry, FL 32669
(352) 472-8595
Fax: (352) 472-2633
DATE: 5-20-19

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

OWNER/AGENT:
DATE: 5/20/19

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 R403.3.2.1.

- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires an envelope leakage test report with envelope leakage no greater than 5.00 ACH50 (R402.4.1.2).

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	New Project Sargent	Bedrooms:	3	Address Type:	Street Address
Building Type:	User	Conditioned Area:	1530	Lot #	
Owner Name:	Robert & Kim Sargent	Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	Harvey Building	Rotate Angle:	0	Street:	2196 SW CR 18
Permit Office:		Cross Ventilation:		County:	Columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	, FL ,
Family Type:	Single-family				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

√	Design Location	TMY Site	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, Gainesville	FL_GAINESVILLE_REGI	32	92	70	75	1305.5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Block1	1623	12984

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1623	12984	Yes	2	3	1	Yes	Yes	Yes

FLOORS

√	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	Main	178.8 ft	0	1623 ft²	----	0	0	1

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Gable or shed	Metal	1758 ft²	338 ft²	Unfinishe	N	0.96	No	0.7	No	0	22.6

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	150	1623 ft²	N	N

CEILING

√	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	38	Blown	1623 ft²	0.11	Wood

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

WALLS

√	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area	Sheathing R-Value	Framing Fraction	Solar Absor	Below Grade%
____	1	N	Exterior	Frame - Wood	Main	13	45	4	8		362.7 ft²		0.23	0.75	0
____	2	E	Exterior	Frame - Wood	Main	13	44		8		352.0 ft²		0.23	0.75	0
____	3	S	Exterior	Frame - Wood	Main	13	45	4	8		362.7 ft²		0.23	0.75	0
____	4	W	Exterior	Frame - Wood	Main	13	44		8		352.0 ft²		0.23	0.75	0

DOORS

√	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
_____	1	N	Insulated	Main	None	.46	3		6	8	20 ft²
_____	2	S	Insulated	Main	None	.46	3		6	8	20 ft²

WINDOWS

Orientation shown is the entered, Proposed orientation.

√	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
_____	1	N	1	Vinyl	Low-E Double	Yes	0.33	0.22	N	90.0 ft²	8 ft 0 in	1 ft 0 in	Drapes/blinds	Exterior 5
_____	2	E	2	Vinyl	Double (Clear)	Yes	0.33	0.22	N	30.0 ft²	2 ft 0 in	1 ft 0 in	Drapes/blinds	Exterior 5
_____	3	E	2	Vinyl	Double (Clear)	Yes	0.33	0.22	N	16.0 ft²	2 ft 0 in	1 ft 0 in	Drapes/blinds	Exterior 5
_____	4	S	3	Vinyl	Double (Clear)	Yes	0.33	0.22	N	9.0 ft²	6 ft 0 in	1 ft 0 in	Drapes/blinds	Exterior 5
_____	5	W	4	Vinyl	Double (Clear)	Yes	0.33	0.22	N	30.0 ft²	2 ft 0 in	1 ft 0 in	Drapes/blinds	Exterior 5

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000254	1082	59.4	111.71	.0956	5

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
_____	1	Electric Heat Pump/	None	HSPF:8.2	28.6 kBtu/hr	1	sys#1

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
_____	1	Central Unit/	None	SEER: 14	28.6 kBtu/hr	858 cfm	0.75	1	sys#1

HOT WATER SYSTEM

√	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
_____	1	Electric	None	Main	0.99	50 gal	60 gal	120 deg	None

RESIDENTIAL ENERGY CONSERVATION CODE DOCUMENTATION CHECKLIST

Florida Department of Business and Professional Regulation
Simulated Performance Alternative (Performance) Method

Applications for compliance with the 2017 Florida Building Code, Energy Conservation via the residential Simulated Performance Method shall include:

- ☐ *This checklist*
- ☐ *A Form R405 report that documents that the Proposed Design complies with Section R405.3 of the Florida Energy Code. This form shall include a summary page indicating home address, e-ratio and the pass or fail status along with summary areas and types of components, whether the home was simulated as a worst-case orientation, name and version of the compliance software tool, name of individual completing the compliance report (one page) and an input summary checklist that can be used for field verification (usually four pages/may be greater).*
- ☐ *Energy Performance Level (EPL) Display Card (one page)*
- ☐ *HVAC system sizing and selection based on ACCA Manual S or per exceptions provided in Section R403.7*
- ☐ *Mandatory Requirements (five pages)*

Required prior to CO for the Performance Method:

- ☐ *Air Barrier and Insulation Inspection Component Criteria checklist (Table R402.4.1.1 - one page)*
- ☐ *A completed Envelope Leakage Test Report (usually one page)*
- ☐ *If Form R405 duct leakage type indicates anything other than "default leakage", then a completed Form R405 Duct Leakage Test Report (usually one page)*

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

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 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	HVAC # Cool
_____	1	Attic	6	302 ft²	Attic	81.15 ft	Default Leakage	Main	(Default)	(Default)			1	1

TEMPERATURES

Programable Thermostat: Y

Ceiling Fans:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cooling	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[X]	[X]	[ ]	[ ]	[ ]
Heating	[X]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]
Venting	[ ]	[ ]	[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	80	80	80	80
	PM	80	80	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	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66
Heating (WEH)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66

MASS

Mass Type	Area	Thickness	Furniture Fraction	Space
Default(8 lbs/sq.ft.	0 ft²	0 ft	0.3	Main

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 99

The lower the Energy Performance Index, the more efficient the home.

1. New home or, addition	1. New (From Plans)
2. Single-family or multiple-family	2. Single-family
3. No. of units (if multiple-family)	3. 1
4. Number of bedrooms	4. 3
5. Is this a worst case? (yes/no)	5. No
6. Conditioned floor area (sq. ft.)	6. 1623
7. Windows, type and area	
a) U-factor:(weighted average)	7a. 0.330
b) Solar Heat Gain Coefficient (SHGC)	7b. 0.220
c) Area	7c. 175.0
8. Skylights	
a) U-factor:(weighted average)	8a. NA
b) Solar Heat Gain Coefficient (SHGC)	8b. NA
9. Floor type, insulation level:	
a) Slab-on-grade (R-value)	9a. 0.0
b) Wood, raised (R-value)	9b.
c) Concrete, raised (R-value)	9c.
10. Wall type and insulation:	
A. Exterior:	
1. Wood frame (Insulation R-value)	10A1. 13.0
2. Masonry (Insulation R-value)	10A2.
B. Adjacent:	
1. Wood frame (Insulation R-value)	10B1.
2. Masonry (Insulation R-value)	10B2.
11. Ceiling type and insulation level	
a) Under attic	11a. 38.0
b) Single assembly	11b.
c) Knee walls/skylight walls	11c.
d) Radiant barrier installed	11d. No

12. Ducts, location & insulation level	
a) Supply ducts	R 6.0
b) Return ducts	R 6.0
c) AHU location	Main
13. Cooling system:	Capacity 28.6
a) Split system	SEER
b) Single package	SEER
c) Ground/water source	SEER/COP
d) Room unit/PTAC	EER
e) Other	14.0
14. Heating system:	Capacity 28.6
a) Split system heat pump	HSPF
b) Single package heat pump	HSPF
c) Electric resistance	COP
d) Gas furnace, natural gas	AFUE
e) Gas furnace, LPG	AFUE
f) Other	8.20
15. Water heating system	
a) Electric resistance	EF 0.99
b) Gas fired, natural gas	EF
c) Gas fired, LPG	EF
d) Solar system with tank	EF
e) Dedicated heat pump with tank	EF
f) Heat recovery unit	HeatRec%
g) Other	
16. HVAC credits claimed (Performance Method)	
a) Ceiling fans	
b) Cross ventilation	No
c) Whole house fan	No
d) Multizone cooling credit	
e) Multizone heating credit	
f) Programmable thermostat	Yes

*Label required by Section R303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.

I certify that this home has complied with the Florida Building Code, Energy Conservation, 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: 2196 SW CR 18 City/FL Zip: , FL

2017 - AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

TABLE 402.4.1.1
AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

				CHECK
Project Name:	New Project Sargent	Builder Name:	Harvey Building	
Street:	2196 SW CR 18	Permit Office:		
City, State, Zip:	, FL ,	Permit Number:		
Owner:	Robert & Kim Sargent	Jurisdiction:		
Design Location:	FL, Gainesville			

COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA	
General requirements	A continuous air barrier shall be installed in the building envelope. The exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed.	Air-permeable insulation shall not be used as a sealing material.	
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed. Access openings, drop down stairs or knee wall doors to unconditioned attic spaces shall be sealed.	The insulation in any dropped ceiling/soffit shall be aligned with the air barrier.	
Walls	The junction of the foundation and sill plate shall be sealed. The junction of the top plate and the top of exterior walls shall be sealed. Knee walls shall be sealed.	Cavities within corners and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance of R-3 per inch minimum. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.	
Windows, skylights and doors	The space between window/door jambs and framing, and skylights and framing shall be sealed.		
Rim joists	Rim joists shall include the air barrier.	Rim joists shall be insulated.	
Floors (including above-garage and cantilevered floors)	The air barrier shall be installed at any exposed edge of insulation.	Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking, or floor framing cavity insulation shall be permitted to be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing and extends from the bottom to the top of all perimeter floor framing members.	
Crawl space walls	Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.	Where provided instead of floor insulation, insulation shall be permanently attached to the crawlspace	
Shafts, penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.		
Narrow cavities		Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity spaces.	
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.		
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be sealed to the drywall.	Recessed light fixtures installed in the building thermal envelope shall be air tight and IC rated.	
Plumbing and wiring		Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.	
Shower/tub on exterior wall	The air barrier installed at exterior walls adjacent to showers and tubs shall separate them from the showers and tubs.	Exterior walls adjacent to showers and tubs shall be insulated.	
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.		
HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the sub-floor or drywall.		
Concealed sprinklers	When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.		

a. In addition, inspection of log walls shall be in accordance with the provisions of ICC-400.

Florida Building Code, Energy Conservation, 6th Edition (2017)
Mandatory Requirements for Residential Performance, Prescriptive and ERI Methods

ADDRESS:	2196 SW CR 18 , FL ,	Permit Number:

MANDATORY REQUIREMENTS See individual code sections for full details.

✓

SECTION R401 GENERAL

☐ **R401.3 Energy Performance Level (EPL) display card (Mandatory).** The building official shall require that an energy performance level (EPL) display card be completed and certified by the builder to be accurate and correct before final approval of the building for occupancy. Florida law (Section 553.9085, Florida Statutes) requires the EPL display card to be included as an addendum to each sales contract for both presold and nonpresold residential buildings. The EPL display card contains information indicating the energy performance level and efficiencies of components installed in a dwelling unit. The building official shall verify that the EPL display card completed and signed by the builder accurately reflects the plans and specifications submitted to demonstrate code compliance for the building. A copy of the EPL display card can be found in Appendix RD.

☐ **R402.4 Air leakage (Mandatory).** The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections R402.4.1 through R402.4.5.

Exception: Dwelling units of R-2 Occupancies and multiple attached single family dwellings shall be permitted to comply with Section C402.5.

☐ **R402.4.1 Building thermal envelope.** The building thermal envelope shall comply with Sections R402.4.1.1 and R402.4.1.2. The sealing methods between dissimilar materials shall allow for differential expansion and contraction.

☐ **R402.4.1.1 Installation.** The components of the building thermal envelope as listed in Table R402.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table R402.4.1.1, as applicable to the method of construction. Where required by the code official, an approved third party shall inspect all components and verify compliance.

☐ **R402.4.1.2 Testing.** The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding seven air changes per hour in Climate Zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380 and reported at a pressure of 0.2 inch w.g. (50 pascals). Testing shall be conducted by either individuals as defined in Section 553.993(5) or (7), Florida Statutes, or individuals licensed as set forth in Section 489.105(3)(f), (g) or (i) or an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

Exception: Testing is not required for additions, alterations, renovations, or repairs, of the building thermal envelope of existing buildings in which the new construction is less than 85 percent of the building thermal envelope.

During testing:
1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.
2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
3. Interior doors, if installed at the time of the test, shall be open.
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.
5. Heating and cooling systems, if installed at the time of the test, shall be turned off.
6. Supply and return registers, if installed at the time of the test, shall be fully open.

☐ **R402.4.2 Fireplaces.** New wood-burning fireplaces shall have tight-fitting flue dampers or doors, and outdoor combustion air. Where using tight-fitting doors on factory-built fireplaces listed and labeled in accordance with UL 127, the doors shall be tested and listed for the fireplace. Where using tight-fitting doors on masonry fireplaces, the doors shall be listed and labeled in accordance with UL 907.

☐ **R402.4.3 Fenestration air leakage.** Windows, skylights and sliding glass doors shall have an air infiltration rate of no more than 0.3 cfm per square foot (1.5 L/s/m2), and swinging doors no more than 0.5 cfm per square foot (2.6 L/s/m2), when tested according to NFRC 400 or AAMA/ WDMA/CSA 101/I.S.2/A440 by an accredited, independent laboratory and listed and labeled by the manufacturer.

Exception: Site-built windows, skylights and doors.

MANDATORY REQUIREMENTS - (Continued)

☐ **R402.4.4 Rooms containing fuel-burning appliances.** In Climate Zones 3 through 8, where open combustion air ducts provide combustion air to open combustion fuel burning appliances, the appliances and combustion air opening shall be located outside the building thermal envelope or enclosed in a room, isolated from inside the thermal envelope. Such rooms shall be sealed and insulated in accordance with the envelope requirements of Table R402.1.2, where the walls, floors and ceilings shall meet not less than the basement wall R-value requirement. The door into the room shall be fully gasketed and any water lines and ducts in the room insulated in accordance with Section R403. The combustion air duct shall be insulated where it passes through conditioned space to a minimum of R-8.

Exceptions:

1. Direct vent appliances with both intake and exhaust pipes installed continuous to the outside.
2. Fireplaces and stoves complying with Section R402.4.2 and Section R1006 of the Florida Building Code, Residential.

☐ **R402.4.5 Recessed lighting.** Recessed luminaires installed in the building thermal envelope shall be sealed to limit air leakage between conditioned and unconditioned spaces. All recessed luminaires shall be IC-rated and labeled as having an air leakage rate not more than 2.0 cfm (0.944 L/s) when tested in accordance with ASTM E283 at a 1.57 psf (75 Pa) pressure differential. All recessed luminaires shall be sealed with a gasket or caulk between the housing and the interior wall or ceiling covering.

SECTION R403 SYSTEMS

R403.1 Controls.

☐ **R403.1.1 Thermostat provision (Mandatory).** At least one thermostat shall be provided for each separate heating and cooling system.

☐ **R403.1.3 Heat pump supplementary heat (Mandatory).** Heat pumps having supplementary electric-resistance heat shall have controls that, except during defrost, prevent supplemental heat operation when the heat pump compressor can meet the heating load.

☐ **R403.3.2 Sealing (Mandatory)** All ducts, air handlers, filter boxes and building cavities that form the primary air containment passageways for air distribution systems shall be considered ducts or plenum chambers, shall be constructed and sealed in accordance with Section C403.2.9.2 of the Commercial Provisions of this code and shall be shown to meet duct tightness criteria below.

Duct tightness shall be verified by testing in accordance with ANSI/RESNET/ICC 380 by either individuals as defined in Section 553.993(5) or (7), Florida Statutes, or individuals licensed as set forth in Section 489.105(3)(f), (g) or (i), Florida Statutes, to be "substantially leak free" in accordance with Section R403.3.3.

☐ **R403.3.2.1 Sealed air handler.** Air handlers shall have a manufacturer's designation for an air leakage of no more than 2 percent of the design airflow rate when tested in accordance with ASHRAE 193.

☐ **R403.3.3 Duct testing (Mandatory).** Ducts shall be pressure tested to determine air leakage by one of the following methods:

1. Rough-in test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure if installed at the time of the test. All registers shall be taped or otherwise sealed during the test.
2. Postconstruction test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test.

Exceptions:

1. A duct air leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.
2. Duct testing is not mandatory for buildings complying by Section 405 of this code.

A written report of the results of the test shall be signed by the party conducting the test and provided to the code official.

☐ **R403.3.5 Building cavities (Mandatory).** Building framing cavities shall not be used as ducts or plenums.

☐ **R403.4 Mechanical system piping insulation (Mandatory).** Mechanical system piping capable of carrying fluids above 105°F (41°C) or below 55°F (13°C) shall be insulated to a minimum of R-3.

☐ **R403.4.1 Protection of piping insulation.** Piping insulation exposed to weather shall be protected from damage, including that caused by sunlight, moisture, equipment maintenance and wind, and shall provide shielding from solar radiation that can cause degradation of the material. Adhesive tape shall not be permitted.

☐ **R403.5.1 Heated water circulation and temperature maintenance systems (Mandatory).** Heated water circulation systems shall be in accordance with Section R403.5.1.1. Heat trace temperature maintenance systems shall be in accordance with Section R403.5.1.2. Automatic controls, temperature sensors and pumps shall be accessible. Manual controls shall be readily accessible.

☐ **R403.5.1.1 Circulation systems.** Heated water circulation systems shall be provided with a circulation pump. The system return pipe shall be a dedicated return pipe or a cold water supply pipe. Gravity and thermosiphon circulation systems shall be prohibited. Controls for circulating hot water system pumps shall start the pump based on the identification of a demand for hot water within the occupancy. The controls shall automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is no demand for hot water.

☐ **R403.5.1.2 Heat trace systems.** Electric heat trace systems shall comply with IEEE 515.1 or UL 515. Controls for such systems shall automatically adjust the energy input to the heat tracing to maintain the desired water temperature in the piping in accordance with the times when heated water is used in the occupancy.

MANDATORY REQUIREMENTS - (Continued)

☐ **R403.5.5 Heat traps (Mandatory).** Storage water heaters not equipped with integral heat traps and having vertical pipe risers shall have heat traps installed on both the inlets and outlets. External heat traps shall consist of either a commercially available heat trap or a downward and upward bend of at least 3 ½ inches (89 mm) in the hot water distribution line and cold water line located as close as possible to the storage tank.

R403.5.6 Water heater efficiencies (Mandatory).

☐ **R403.5.6.1.1 Automatic controls.** Service water-heating systems shall be equipped with automatic temperature controls capable of adjustment from the lowest to the highest acceptable temperature settings for the intended use. The minimum temperature setting range shall be from 100°F to 140°F (38°C to 60°C).

☐ **R403.5.6.1.2 Shut down.** A separate switch or a clearly marked circuit breaker shall be provided to permit the power supplied to electric service systems to be turned off. A separate valve shall be provided to permit the energy supplied to the main burner(s) of combustion types of service water-heating systems to be turned off.

☐ **R403.5.6.2 Water-heating equipment.** Water-heating equipment installed in residential units shall meet the minimum efficiencies of Table C404.2 in Chapter 4 of the Florida Building Code, Energy Conservation, Commercial Provisions, for the type of equipment installed. Equipment used to provide heating functions as part of a combination system shall satisfy all stated requirements for the appropriate water-heating category. Solar water heaters shall meet the criteria of Section R403.5.6.2.1.

☐ **R403.5.6.2.1 Solar water-heating systems.** Solar systems for domestic hot water production are rated by the annual solar energy factor of the system. The solar energy factor of a system shall be determined from the Florida Solar Energy Center Directory of Certified Solar Systems. Solar collectors shall be tested in accordance with ISO Standard 9806, Test Methods for Solar Collectors, and SRCC Standard TM-1, Solar Domestic Hot Water System and Component Test Protocol. Collectors in installed solar water-heating systems should meet the following criteria:

1. Be installed with a tilt angle between 10 degrees and 40 degrees of the horizontal; and
2. Be installed at an orientation within 45 degrees of true south.

☐ **R403.6 Mechanical ventilation (Mandatory).** The building shall be provided with ventilation that meets the requirements of the Florida Building Code, Residential, or Florida Building Code, Mechanical, as applicable, or with other approved means of ventilation including: Natural, Infiltration or Mechanical means. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

☐ **R403.6.1 Whole-house mechanical ventilation system fan efficacy.** When installed to function as a whole-house mechanical ventilation system, fans shall meet the efficacy requirements of Table R403.6.1.

Exception: Where whole-house mechanical ventilation fans are integral to tested and listed HVAC equipment, they shall be powered by an electronically commutated motor.

☐ **R403.6.2 Ventilation air.** Residential buildings designed to be operated at a positive indoor pressure or for mechanical ventilation shall meet the following criteria:

1. The design air change per hour minimums for residential buildings in ASHRAE 62.2, Ventilation for Acceptable Indoor Air Quality, shall be the maximum rates allowed for residential applications.
2. No ventilation or air-conditioning system make-up air shall be provided to conditioned space from attics, crawlspaces, attached enclosed garages or outdoor spaces adjacent to swimming pools or spas.
3. If ventilation air is drawn from enclosed space(s), then the walls of the space(s) from which air is drawn shall be insulated to a minimum of R-11 and the ceiling shall be insulated to a minimum of R-19, space permitting, or R-10 otherwise.

R403.7 Heating and cooling equipment (Mandatory).

☐ **R403.7.1 Equipment sizing.** Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on the equipment loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies, based on building loads for the directional orientation of the building. The manufacturer and model number of the outdoor and indoor units (if split system) shall be submitted along with the sensible and total cooling capacities at the design conditions described in Section R302.1. This Code does not allow designer safety factors, provisions for future expansion or other factors that affect equipment sizing. System sizing calculations shall not include loads created by local intermittent mechanical ventilation such as standard kitchen and bathroom exhaust systems. New or replacement heating and cooling equipment shall have an efficiency rating equal to or greater than the minimum required by federal law for the geographic location where the equipment is installed.

TABLE R403.6.1
WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM FAN EFFICACY

FAN LOCATION	AIRFLOW RATE MINIMUM (CFM)	MINIMUM EFFICACY [a] (CFM/WATT)	AIRFLOW RATE MAXIMUM (CFM)
Range hoods	Any	2.8 cfm/watt	Any
In-line fan	Any	2.8 cfm/watt	Any
Bathroom, utility room	10	1.4 cfm/watt	<90
Bathroom, utility room	90	2.8 cfm/watt	Any

For SI: 1 cfm = 28.3 L/min. a. When tested in accordance with HVI Standard 916

MANDATORY REQUIREMENTS - (Continued)

☐ **R403.7.1.1 Cooling equipment capacity.** Cooling only equipment shall be selected so that its total capacity is not less than the calculated total load but not more than 1.15 times greater than the total load calculated according to the procedure selected in Section 403.7, or the closest available size provided by the manufacturer's product lines. The corresponding latent capacity of the equipment shall not be less than the calculated latent load.
The published value for AHRI total capacity is a nominal, rating-test value and shall not be used for equipment sizing. Manufacturer's expanded performance data shall be used to select cooling-only equipment. This selection shall be based on the outdoor design dry-bulb temperature for the load calculation (or entering water temperature for water-source equipment), the blower CFM provided by the expanded performance data, the design value for entering wet-bulb temperature and the design value for entering dry-bulb temperature.

Design values for entering wet-bulb and dry-bulb temperatures shall be for the indoor dry bulb and relative humidity used for the load calculation and shall be adjusted for return side gains if the return duct(s) is installed in an unconditioned space.

Exceptions:

1. Attached single- and multiple-family residential equipment sizing may be selected so that its cooling capacity is less than the calculated total sensible load but not less than 80 percent of that load.
2. When signed and sealed by a Florida-registered engineer, in attached single- and multiple-family units, the capacity of equipment may be sized in accordance with good design practice.

R403.7.1.2 Heating equipment capacity.

☐ **R403.7.1.2.1 Heat pumps.** Heat pump sizing shall be based on the cooling requirements as calculated according to Section R403.7.1.1, and the heat pump total cooling capacity shall not be more than 1.15 times greater than the design cooling load even if the design heating load is 1.15 times greater than the design cooling load.

☐ **R403.7.1.2.2 Electric resistance furnaces.** Electric resistance furnaces shall be sized within 4 kW of the design requirements calculated according to the procedure selected in Section R403.7.1.

☐ **R403.7.1.2.3 Fossil fuel heating equipment.** The capacity of fossil fuel heating equipment with natural draft atmospheric burners shall not be less than the design load calculated in accordance with Section R403.7.1.

☐ **R403.7.1.3 Extra capacity required for special occasions.** Residences requiring excess cooling or heating equipment capacity on an intermittent basis, such as anticipated additional loads caused by major entertainment events, shall have equipment sized or controlled to prevent continuous space cooling or heating within that space by one or more of the following options:

1. A separate cooling or heating system is utilized to provide cooling or heating to the major entertainment areas.
2. A variable capacity system sized for optimum performance during base load periods is utilized.

☐ **R403.8 Systems serving multiple dwelling units (Mandatory).** Systems serving multiple dwelling units shall comply with Sections C403 and C404 of the IECC—Commercial Provisions in lieu of Section R403.

☐ **R403.9 Snow melt and ice system controls (Mandatory)** Snow- and ice-melting systems, supplied through energy service to the building, shall include automatic controls capable of shutting off the system when the pavement temperature is above 50°F (10°C), and no precipitation is falling and an automatic or manual control that will allow shutoff when the outdoor temperature is above 40°F (4.8°C).

☐ **R403.10 Pools and permanent spa energy consumption (Mandatory).** The energy consumption of pools and permanent spas shall be in accordance with Sections R403.10.1 through R403.10.5.

☐ **R403.10.1 Heaters.** The electric power to heaters shall be controlled by a readily accessible on-off switch that is an integral part of the heater mounted on the exterior of the heater, or external to and within 3 feet (914 mm) of the heater. Operation of such switch shall not change the setting of the heater thermostat. Such switches shall be in addition to a circuit breaker for the power to the heater. Gas-fired heaters shall not be equipped with continuously burning ignition pilots.

☐ **R403.10.2 Time switches.** Time switches or other control methods that can automatically turn off and on according to a preset schedule shall be installed for heaters and pump motors. Heaters and pump motors that have built-in time switches shall be in compliance with this section.

Exceptions:

1. Where public health standards require 24-hour pump operation.
2. Pumps that operate solar- and waste-heat-recovery pool heating systems.
3. Where pumps are powered exclusively from on-site renewable generation.

☐ **R403.10.3 Covers.** Outdoor heated swimming pools and outdoor permanent spas shall be equipped with a vapor-retardant cover on or at the water surface or a liquid cover or other means proven to reduce heat loss.

Exception: Where more than 70 percent of the energy for heating, computed over an operation season, is from site-recovered energy, such as from a heat pump or solar energy source, covers or other vapor-retardant means shall not be required.

☐ **R403.10.4 Gas- and oil-fired pool and spa heaters.** All gas- and oil-fired pool and spa heaters shall have a minimum thermal efficiency of 82 percent for heaters manufactured on or after April 16, 2013, when tested in accordance with ANSI Z 21.56. Pool heaters fired by natural or LP gas shall not have continuously burning pilot lights.

☐ **R403.10.5 Heat pump pool heaters.** Heat pump pool heaters shall have a minimum COP of 4.0 when tested in accordance with AHRI 1160, Table 2, Standard Rating Conditions-Low Air Temperature. A test report from an independent laboratory is required to verify procedure compliance. Geothermal swimming pool heat pumps are not required to meet this standard.

☐ **R403.11 Portable spas (Mandatory).** The energy consumption of electric-powered portable spas shall be controlled by the requirements of APSP-14.

SECTION R404

ELECTRICAL POWER AND LIGHTING SYSTEMS

☐ **R404.1 Lighting equipment (Mandatory).** Not less than 75 percent of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps or not less than 75 percent of the permanently installed lighting fixtures shall contain only high-efficacy lamps.

Exception: Low-voltage lighting.

R404.1.1 Lighting equipment (Mandatory). Fuel gas lighting systems shall not have continuously burning pilot lights.

Envelope Leakage Test Report (Blower Door Test)

Residential Prescriptive, Performance or ERI Method Compliance

2017 Florida Building Code, Energy Conservation, 6th Edition

Jurisdiction:	Permit #:

Job Information

Builder:	Harvey Building	Community:		Lot:	NA
Address:	2196 SW CR 18				
City:		State:	FL	Zip:	

Air Leakage Test Results *Passing results must meet either the Performance, Prescriptive, or ERI Method*

○ **PRESCRIPTIVE METHOD**-The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 7 air changes per hour at a pressure of 0.2 inch w.g. (50 Pascals) in Climate Zones 1 and 2.

○ **PERFORMANCE or ERI METHOD**-The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding the selected ACH(50) value, as shown on Form R405-2017 (Performance) or R406-2017 (ERI), section labeled as infiltration, sub-section ACH50.

ACH(50) specified on Form R405-2017-Energy Calc (Performance) or R406-2017 (ERI): 5.000

_____ x 60 ÷ 12984 = _____
CFM(50) Building Volume ACH(50)

☐ **PASS**

☐ When ACH(50) is less than 3, Mechanical Ventilation installation must be verified by building department.

Method for calculating building volume:

○ Retrieved from architectural plans

● Code software calculated

○ Field measured and calculated

R402.4.1.2 Testing. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Testing shall be conducted by either individuals as defined in Section 553.993(5) or (7), *Florida Statues*.or individuals licensed as set forth in Section 489.105(3)(f), (g), or (i) or an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the*code official.* Testing shall be performed at any time after creation of all penetrations of the *building thermal envelope.*

During testing:
1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.
2. Dampers including exhaust, intake, makeup air, back draft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
3. Interior doors, if installed at the time of the test, shall be open.
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.
5. Heating and cooling systems, if installed at the time of the test, shall be turned off.
6. Supply and return registers, if installed at the time of the test, shall be fully open.

Testing Company

Company Name: _____ Phone: _____

I hereby verify that the above Air Leakage results are in accordance with the 2017 6th Edition Florida Building Code Energy Conservation requirements according to the compliance method selected above.

Signature of Tester: _____ Date of Test: _____

Printed Name of Tester: _____

License/Certification #: _____ Issuing Authority: _____

Load Short Form
Entire House
Bounds Heating & Air

Job:
Date: May 15, 2019
By:

Newberry, FL

Project Information

For: robert sargent, Harvey building
2196 SW CR 18, FL

Design Information

	Htg	Clg
Outside db (°F)	33	92
Inside db (°F)	70	75
Design TD (°F)	37	17
Daily range	-	M
Inside humidity (%)	30	50
Moisture difference (gr/lb)	10	47

Infiltration

Method	Simplified
Construction quality	Semi-tight
Fireplaces	1 (Semi-tight)

HEATING EQUIPMENT

Make	Carrier
Trade	CARRIER
Model	CH14NB03000G0A0
AHRI ref	9162305

Efficiency	8.2 HSPF	
Heating input		
Heating output	28600	Btuh @ 47°F
Temperature rise	27	°F
Actual air flow	953	cfm
Air flow factor	0.044	cfm/Btuh
Static pressure	0.50	in H2O
Space thermostat		

Capacity balance point = 27 °F

Backup:
Input = 0 kW. Output = 0 Btuh. 100 AFUE

COOLING EQUIPMENT

Make	Carrier
Trade	CARRIER
Cond	CH14NB03000G0A0
Coil	FB4CNP030L
AHRI ref	9162305

Efficiency	11.5 EER, 14 SEER	
Sensible cooling	20020	Btuh
Latent cooling	8580	Btuh
Total cooling	28600	Btuh
Actual air flow	953	cfm
Air flow factor	0.053	cfm/Btuh
Static pressure	0.50	in H2O
Load sensible heat ratio	0.85	

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Master Bedroom	215	3490	2644	154	140
WIC 1	33	900	325	40	17
Master toilet	25	1355	435	60	23
Laundry	39	1339	1261	59	67
WIC 2	23	40	68	2	4
Master bathroom	137	1472	935	65	50
Kitchen/dining	260	1514	3227	67	171
Pantry	10	0	0	0	0
living room	334	2051	3372	91	179
sitting	131	2430	1506	107	80
WIC 3	28	51	86	2	5
Bedroom 3	127	2060	1548	91	82
Bedroom 2	120	3269	1856	144	98
Hall	28	0	0	0	0

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Project Summary
Entire House
Bounds Heating & Air

Job:
Date: May 15, 2019
By:

Newberry, FL

Project Information

For: robert sargent, Harvey building
2196 SW CR 18, FL

Notes:

Design Information

Weather: Gainesville Regional AP, FL, US

Winter Design Conditions

Outside db	33	°F
Inside db	70	°F
Design TD	37	°F

Summer Design Conditions

Outside db	92	°F
Inside db	75	°F
Design TD	17	°F
Daily range	M	
Relative humidity	50	%
Moisture difference	47	gr/lb

Heating Summary

Structure	16380	Btuh
Ducts	5196	Btuh
Central vent (0 cfm) (none)	0	Btuh
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	21576	Btuh

Sensible Cooling Equipment Load Sizing

Structure	11604	Btuh
Ducts	6378	Btuh
Central vent (0 cfm) (none)	0	Btuh
Blower	0	Btuh
Use manufacturer's data	n	
Rate/swing multiplier	0.97	
Equipment sensible load	17443	Btuh

Infiltration

Method	Simplified
Construction quality	Semi-tight
Fireplaces	1 (Semi-tight)

	Heating	Cooling
Area (ft²)	1624	1624
Volume (ft³)	12990	12990
Air changes/hour	0.32	0.14
Equiv. AVF (cfm)	69	30

Latent Cooling Equipment Load Sizing

Structure	1771	Btuh
Ducts	1380	Btuh
Central vent (0 cfm) (none)	0	Btuh
Equipment latent load	3151	Btuh
Equipment Total Load (Sen+Lat)	20594	Btuh
Req. total capacity at 0.70 SHR	2.1	ton

Heating Equipment Summary

Make	Carrier
Trade	CARRIER
Model	CH14NB03000G0A0
AHRI ref	9162305

Efficiency	8.2 HSPF	
Heating input		
Heating output	28600	Btuh @ 47°F
Temperature rise	27	°F
Actual air flow	953	cfm
Air flow factor	0.044	cfm/Btuh
Static pressure	0.50	in H2O
Space thermostat		

Capacity balance point = 27 °F

Backup:
Input = 0 kW, Output = 0 Btuh, 100 AFUE

Cooling Equipment Summary

Make	Carrier
Trade	CARRIER
Cond	CH14NB03000G0A0
Coil	FB4CNP030L
AHRI ref	9162305

Efficiency	11.5 EER, 14 SEER	
Sensible cooling	20020	Btuh
Latent cooling	8580	Btuh
Total cooling	28600	Btuh
Actual air flow	953	cfm
Air flow factor	0.053	cfm/Btuh
Static pressure	0.50	in H2O
Load sensible heat ratio	0.85	

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Duct System Summary
Entire House
Bounds Heating & Air

Job:
Date: May 15, 2019
By:

Newberry, FL

Project Information

For: robert sargent, Harvey building
2196 SW CR 18, FL

	Heating	Cooling
External static pressure	0.50 in H2O	0.50 in H2O
Pressure losses	0 in H2O	0 in H2O
Available static pressure	0.50 in H2O	0.50 in H2O
Supply / return available pressure	0.250 / 0.250 in H2O	0.250 / 0.250 in H2O
Lowest friction rate	0.144 in/100ft	0.144 in/100ft
Actual air flow	953 cfm	953 cfm
Total effective length (TEL)	348 ft	

Supply Branch Detail Table

Name		Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
Bathroom	h	1095	48	27	0.249	***4.0***	***0x0***	VlFx	15.7	185.0	st3
Bedroom 2	h	3269	144	98	0.205	***6.0***	***0x0***	VlFx	23.4	220.0	st3
Bedroom 3	h	2060	91	82	0.269	***6.0***	***0x0***	VlFx	10.6	175.0	st3
Kitchen/dining	c	3227	67	171	0.397	7.0	0x0	VlFx	11.0	115.0	st2
Laundry	c	1261	59	67	0.148	***5.0***	***0x0***	VlFx	48.5	290.0	st5
Master Bedroom	h	3490	154	140	0.144	***7.0***	***0x0***	VlFx	38.0	310.0	st5
Master bathroom	h	1472	65	50	0.149	***5.0***	***0x0***	VlFx	35.5	300.0	st5
Master toilet	h	1355	60	23	0.148	***4.0***	***0x0***	VlFx	48.0	290.0	st5
WIC 1	h	900	40	17	0.160	***4.0***	***0x0***	VlFx	33.5	280.0	st5
WIC 2	c	68	2	4	0.189	***4.0***	***0x0***	VlFx	29.1	235.0	st5
WIC 3	c	86	2	5	0.198	***4.0***	***0x0***	VlFx	18.1	235.0	st3
WIC 4	h	511	23	11	0.228	***4.0***	***0x0***	VlFx	14.8	205.0	st3
living room	c	1686	45	89	0.407	***6.0***	***0x0***	VlFx	8.0	115.0	st2
living room-A	c	1686	45	89	0.174	***6.0***	***0x0***	VlFx	38.1	250.0	st5
sitting	h	2430	107	80	0.214	***6.0***	***0x0***	VlFx	23.1	210.0	st3

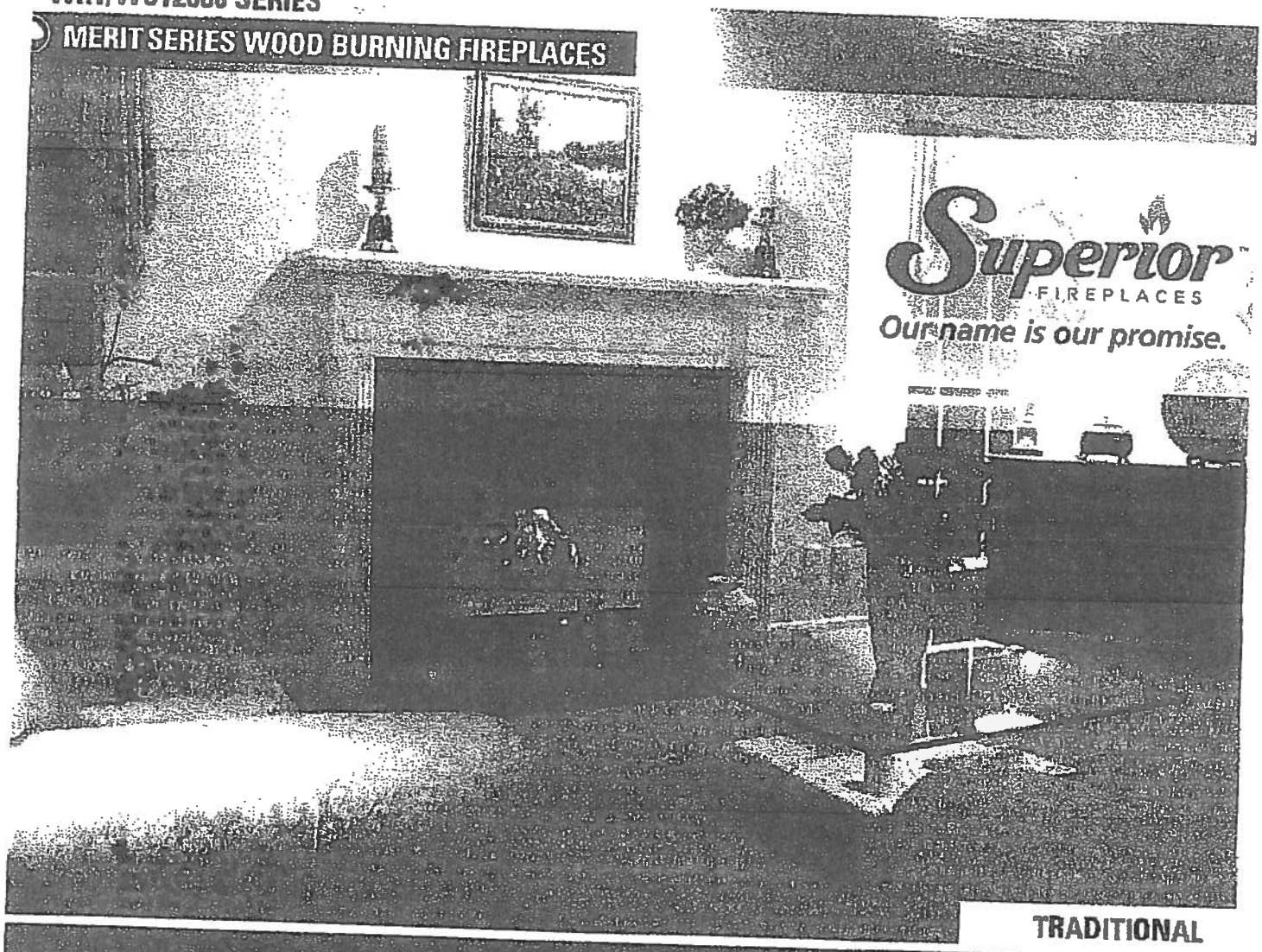
Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st2	Peak AVF	537	650	0.144	828	***12.0***	***0*** x ***0***	VinlFlx	
st4	Peak AVF	425	390	0.144	541	***12.0***	***0*** x ***0***	VinlFlx	st2
st3	Peak AVF	416	303	0.198	416	***11.0***	***12*** x ***12***	RectFbg	st1
st1	Peak AVF	416	303	0.198	529	***12.0***	***0*** x ***0***	VinlFlx	
st5	Peak AVF	425	390	0.144	425	***7.0***	***12*** x ***12***	RectFbg	st4

Bold/italic values have been manually overridden

WRT/WCT2000 SERIES

MERIT SERIES WOOD BURNING FIREPLACES



TRADITIONAL

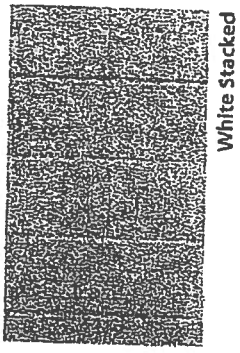
Value and quality construction come together to provide long-lasting warmth in a traditional hearth setting.

FEATURES

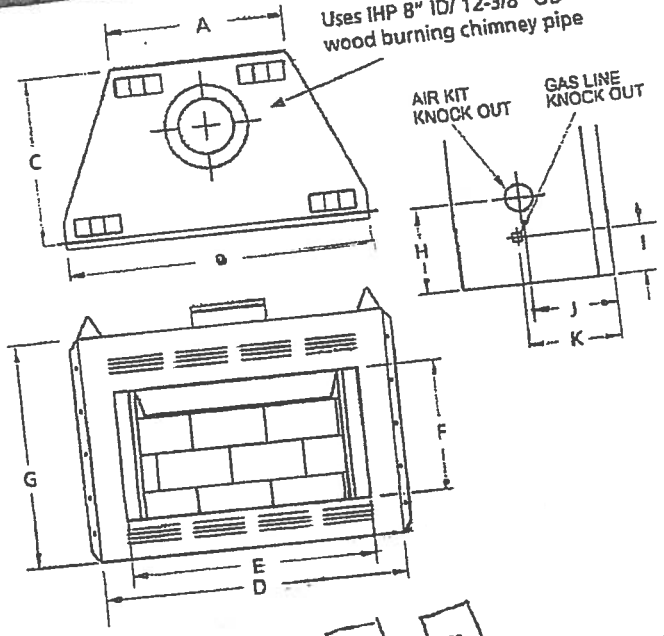
- Available in 36" and 42" models
- Radiant smooth-faced or circulating rolled louver models
- Fully insulated firebox (on select models)
- White stacked refractory panels
- Log grate
- Push/pull damper control
- Includes mesh fire screens
- Barometric outside air damper
- Fan kit available (for circulating models only)
- Durable textured powder coat finish
- Uses IHP 8 DM (1700°) double wall air cooled wood burning chimney
- 20 year limited warranty

INTERIOR

(Required)



APPLIANCE SPECIFICATIONS



	WRT/WCT2036	WRT/WCT2042
A	22-1/2"	28-1/2"
B	36"	42"
C	21-1/8"	21-1/8"
D	38"	44"
E	36"	42"
F	21-1/2"	21-1/2"
G	34"	33"
H	13-7/8"	13-7/8"
I	9-1/8"	8-1/4"
J	9-5/8"	9-5/8"
K	10-3/16"	10-3/16"

ON THE COVER: WCT2036 with white stacked refractory panels

IMPORTANT NOTES:
As with any fireplace, this appliance is extremely hot during operation. Read and understand all operating instructions before using this appliance. For further information, consult your dealer.

Local conditions, such as elevation, wind, vent configuration and choice of fuel will affect overall appearance of the fire and heating performance. Performance can also vary with home design and insulation, climate, condition and type of fuel used, appliance location, burn rate, accessories chosen, chimney installation and how the appliance is operated.

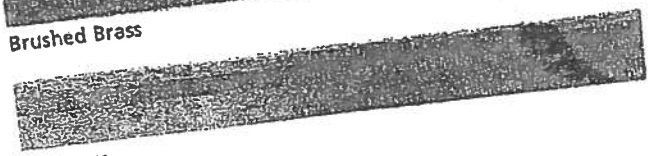
Diagrams, illustrations and photographs are not to scale—consult installation instructions. Product designs, materials, dimensions, specifications, colors and prices are subject to change or discontinuance without notice.

OPTIONAL ACCESSORIES

Bi-Fold Glass Doors

Black

Brushed Brass



Platinum

ADDITIONAL ACCESSORIES

A. Outside air kit

B. Gas Logs

FRAMING SPECIFICATIONS

	WRT/WCT2036	WRT/WCT2042
WIDTH	38-1/4"	44-1/4"
HEIGHT	38-5/8"	37-5/8"
DEPTH	22"	22"

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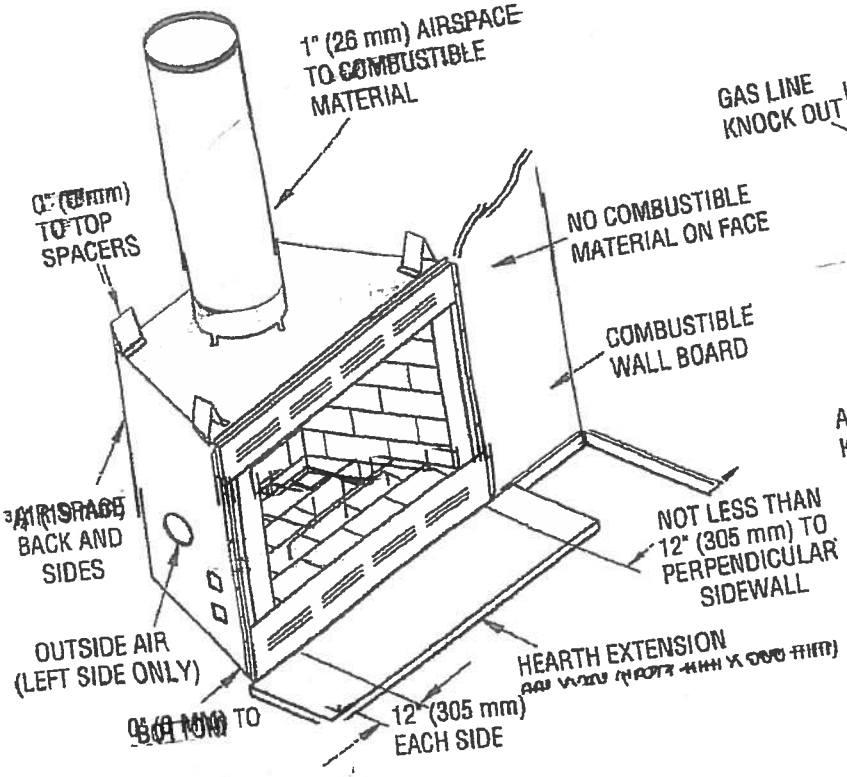
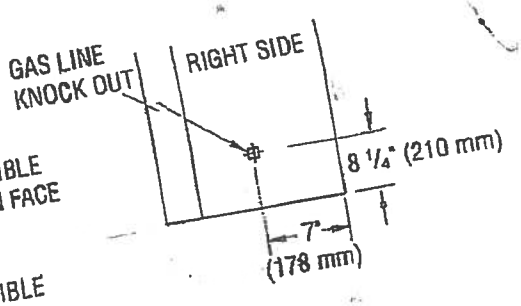
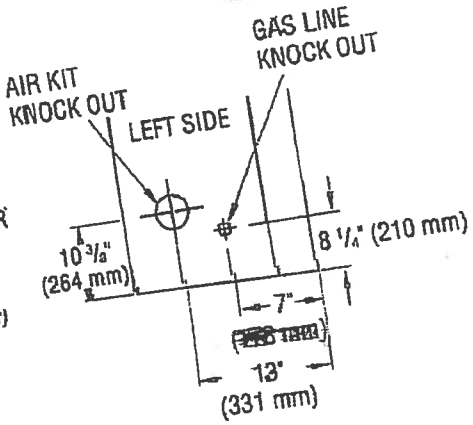
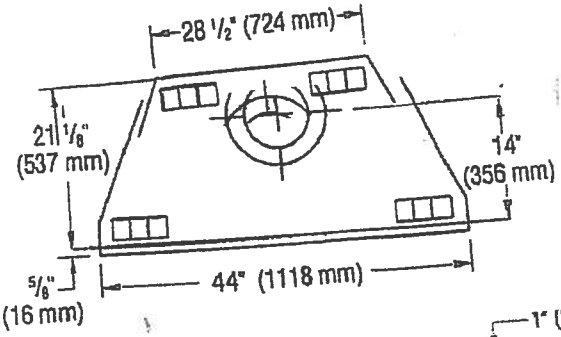
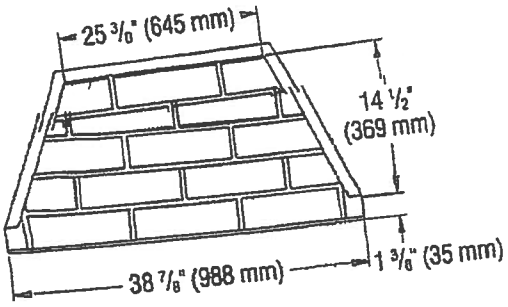
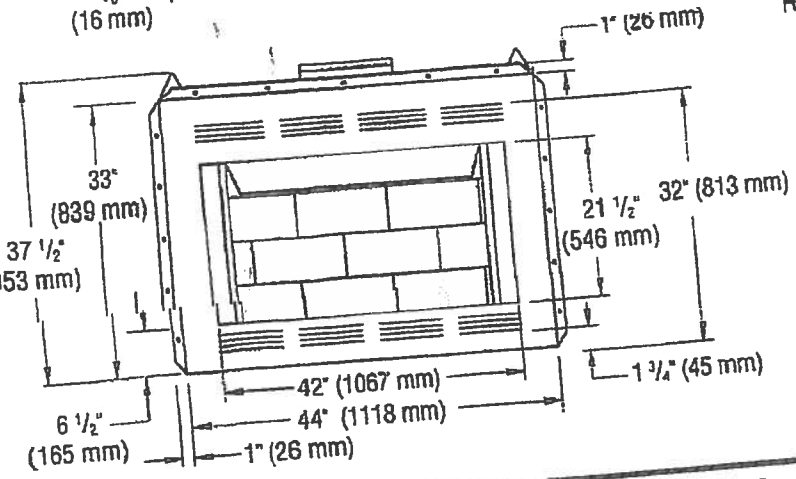




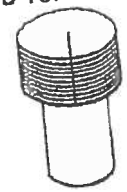




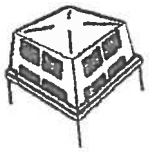




ROUND TOP TERMINATION



SQUARE CHASE-TOP TERMINATION



SELECTING LOCATION

To determine safest and most efficient location for fireplace, you must take into consideration the following guidelines:

1. Location must allow for proper clearances (see Figures 1 and 2).
2. Consider a location where fireplace will not be affected by drafts, air conditioning ducts, windows or doors.
3. A location that avoids cutting of joists or roof rafters will make installation easier.
4. An outside air kit is available with this fireplace (see Optional Outside Air Kit on page 7).

MINIMUM CLEARANCE TO COMBUSTIBLES

Back and sides of fireplace	3/4" (19 mm) minimum*
Floor**	0" (0 mm) minimum
Perpendicular wall to opening	12" (305 mm) minimum
Top spacers	0" (0 mm) minimum
Mantel clearances	see Mantels, page 6
Chimney outer pipe surface	1" (26 mm) minimum

* Not required at nailing flanges

** See step 2 of Framing

⚠ WARNING: DO NOT PACK REQUIRED AIR SPACES WITH INSULATION OR OTHER MATERIALS.

Minimum/Maximum Chimney Height

Minimum height of chimney, measured from base of fireplace to flue gas outlet of termination, is 14.5 feet for straight flue or a flue with one elbow set. Maximum distance between elbows is 6 feet. For systems with two elbow sets, minimum height is 22 feet. Maximum height of any system is 50 feet. This measurement includes fireplace, chimney sections and height of termination assembly at level of flue gas outlet (see Figure 20, page 12).

FRAMING

1. Frame opening for fireplace using dimensions shown in Figures 1 and 2.
2. If fireplace is to be installed directly on carpeting, tile or any combustible material other than wood flooring, fireplace must be installed upon a metal or wood panel extending full width and depth of fireplace.
3. Set fireplace directly in front of this opening and slide unit back until nailing flanges touch side framing.
4. Check level of fireplace and shim with sheet metal if necessary.
5. Before securing fireplace to prepared framing, ember protector must be placed between hearth extension (not included) and under bottom front edge of fireplace to protect against glowing embers falling through. If fireplace is to be installed on a raised platform, a Z-type ember protector (not included) must be fabricated to fit your required platform height. Ember protector should extend under fireplace a minimum of 1 ½". Ember protector should be made of galvanized sheet metal (28 gauge minimum) to prevent corrosion.
6. Using screws or nails, secure fireplace to framing through flanges located on sides of fireplace.

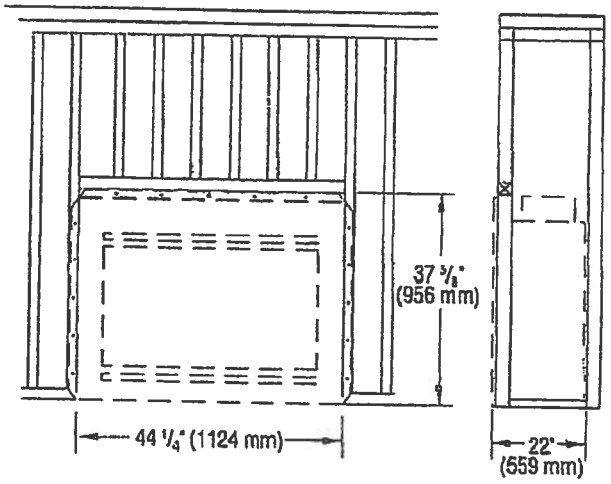


Figure 1 - Framing Dimensions

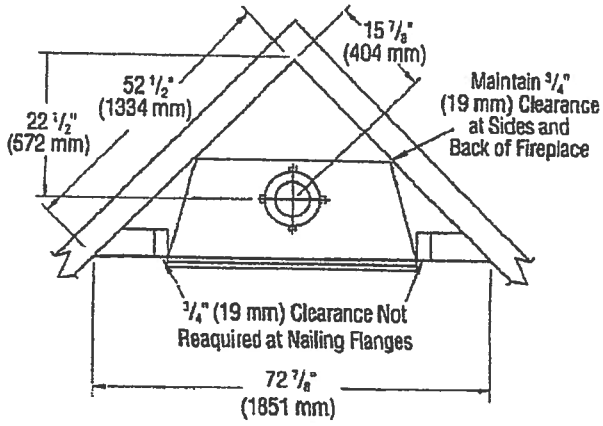


Figure 2 - Corner Installation

HEARTH EXTENSION

A hearth extension projecting a minimum of 20" in front of and a minimum of 12" beyond each side of fireplace opening is required to protect combustible floor construction in front of fireplace. Fabricate a hearth extension using a material which meets the following specifications: a layer of noncombustible, inorganic material having a thermal conductivity of k = .84 BTU IN/FT² HR °F (or less) at 1" thick. For example, if material selected has a k factor of 0.25, such as glass fiber, the following formula would apply:

$$\frac{0.25}{0.84} \times 1.0" = 0.30" \text{ thickness required}$$

Thermal conductivity "k" of materials can be obtained from manufacturer or supplier of noncombustible material. If hearth extension is to be covered, use noncombustible material such as tile, slate, brick, concrete, metal, glass, marble, stone, etc. Provide a means to prevent hearth extension from shifting and seal gap between fireplace frame and hearth extension with a non-combustible material such as sand-cement grout (see Figure 3, page 6).

FIREPLACE INSTALLATION *Continued*

⚠ WARNING: Hearth extension is to be installed only as shown in Figure 3.

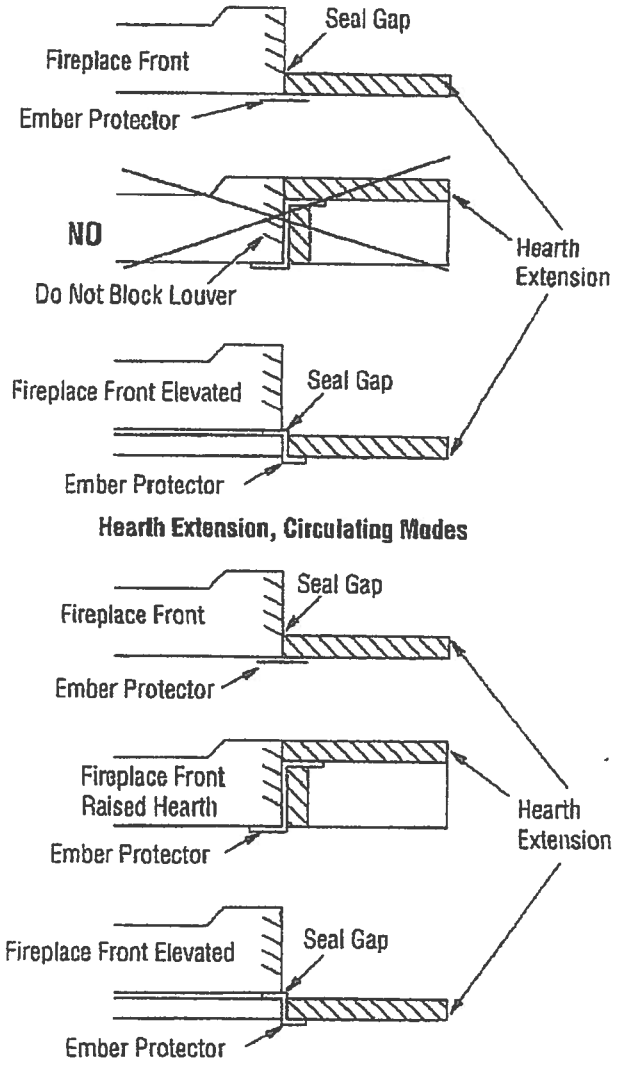


Figure 3 - Hearth Extension

MANTELS

A mantel may be installed if desired (see Figure 4). Woodwork such as wood trims, mantels or any other combustible material projecting from front face must not be placed within 9" of fireplace opening (and within 9" of top louver opening). Combustible materials above 9" and projecting more than 1 ½" from fireplace must not be placed less than 12" from top opening of fireplace (NFPA 211, Section - Clearance from Combustible Material).

Mantels or any other combustible material may come up to side edge of black metal face of fireplace if projection from front face falls within limits shown in Figure 5.

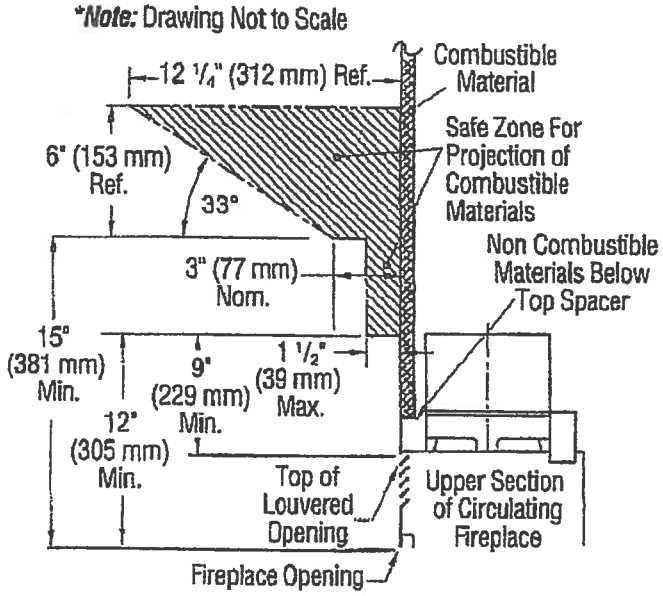


Figure 4 - Mantel Clearances to Combustible Material

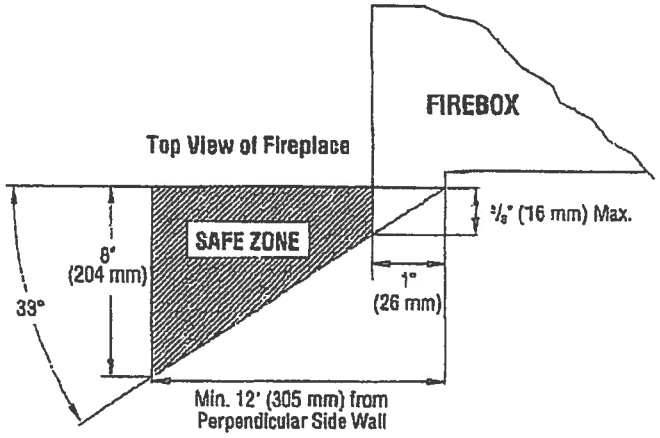


Figure 5 - Side Mantel Clearance