



City of Belle Isle

Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811
Tel 407-581-8161 * Fax 407-581-0313 * www.universalengineering.com

RECEIVED
MAY 02 2018

REVISION APPLICATION

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY 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 WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

Date: 5-2-18

Permit Number: 208-03-072
Original Permit Number Issued

Contact Name Scott Berner Phone: _____

Project Address 6910 Semucle Dr. Belle Isle, FL 32809 32812

Nature of Change Add partial second story over kitchen per plans

Change in Job Cost \$5,000.-

Messina Construction

Do revisions affect: Site Architectural Structural Mechanical Electrical Plumbing

Itemize below for each drawing specific proposed changes. Attach additional sheets, if necessary.

Examiner Approval: Dale Bohan WO 109876

Date _____ Finalized/Inspected by: _____

Fee: \$ 555.04

Cash/Check #: 1467

Date Rec'd: 5-2-18

Rec'd By: [Signature]

$$541.50 + 19\% = 5.42 + 1.59 \quad 8.12 = 555.04$$

To schedule an inspection please email your request to: BDscheduling@UniversalEngineering.com

Record Notarized Document at OC Comptroller's Office - 109 E. Church Street, Suite 300, Orlando

Permit Number: 2018-03-072
 Folio/Parcel Identification Number: 302329438902120
 Prepared by: _____

DOCM 20180442104
 07/25/2018 11:48:45 AM Page 1 of 1
 Rec Fee: \$10.00
 Phil Diamond, Comptroller
 Orange County, FL
 IP - Ret To: SCOTT BERNER



Return to: _____

NOTICE OF COMMENCEMENT

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

- Description of property** (legal description of the property, and street address if available)
Lake Conway Park G 1138 Lot 12 6910 Seminole Dr. Belle Isle FL 32812 - 3713
- General description of improvement**
COMPLETE REMODEL WITH SECOND STORY ADDITION
- Owner information or Lessee information if the Lessee contracted for the improvement**

Name Aimee Wilkins
 Address 6910 Seminole Dr. Belle Isle FL 32812
 Interest in Property Owner
 Name and address of fee simple titleholder (if different from Owner listed above)
 Name _____
 Address _____

Contractor
 Name Scott Berner Telephone Number 407-474-5637
 Address 4018 Gallagher Loop Casselberry FL 32707

Surety (if applicable, a copy of the payment bond is attached)
 Name _____ Telephone Number _____
 Address _____ Amount of Bond \$ _____

Lender
 Name _____ Telephone Number _____
 Address _____

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

In addition to himself or herself, Owner designates the following to receive a copy of the Lienor's Notice as provided in §713.13(1)(b), Florida Statutes.
 Name _____ Telephone Number _____
 Address _____
- Expiration date of notice of commencement** (the expiration date may not be before the completion of construction and final payment to the contractor, but will be 1 year from the date of recording unless a different date is specified) 3/1/19

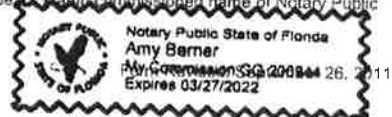
WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED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

Under penalty of perjury, I declare that I have read the foregoing notice of commencement and that the facts stated in it are true to the best of my knowledge and belief.

[Signature]
 Signature of Owner or Lessee, or Owner's or Lessee's Authorized Officer/Director/Partner/Manager _____ Signatory's Title/Office _____

The foregoing instrument was acknowledged before me this 15TH day of MAY by AIMEE WILKINS
 as owner for Above listed property
Type of authority, e.g., officer, trustee, attorney in fact month/year name of person
[Signature] Amy Berner
 Signature of Notary Public - State of Florida Name of party on behalf of whom instrument was executed
Print, type or stamp commissioned name of Notary Public

Personally Known _____ OR Produced ID X
 Type of ID Produced FL W425-005-64-676-0



I hereby certify that this is a true copy of the document as reflected in the Official Records of FLORIDA, County of ORANGE
 PHIL DIAMOND, COMPTROLLER
 ORANGE COUNTY, FLORIDA
 DATED: 7/26/2018



City of Belle Isle
 Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811
 Tel 407-581-8161 * Fax 407-581-0313 * www.universalengineering.com

Product Approval Form

DATE: 5-2-18

PERMIT # 2018-03-072

PROJECT ADDRESS 6910 Sembole, Belle Isle, FL 32809 32812

As required by Florida Statue 553.842 and Florida Administrative Code 9B-72m, please provide the information and approval numbers of the building components listed below if they will be utilized on the building or structure. FL Approved products are listed online at www.floridabuilding.org or can be obtained from the local product supplier. The following information must be turned in with permit application and available onsite for inspections:

- NOTE: The Installation instructions must be posted on-site before your first inspection!!**

Product Type	Manufacturer	Model/Series	FL Product Approval #	Product Type	Manufacturer	Model/Series	FL Product Approval #
EXTERIOR DOORS				WALL PANELS			
Swinging				Sliding			
Sliding ✓	<u>REF Industries</u>	<u>SI630HS</u>	<u>FL-21179-RD</u>	Soffits			
Sectional/Rollup				Storefront			
Other				Glass Block			
				Other			
WINDOWS				ROOFING PRODUCTS			
Single/Dbl Hung ✓	<u>NEW Windows</u>	<u>3500HP</u>	<u>FL 7845-R</u>	Asphalt Shingles			
Horizontal Slider				Non Struct Metal			
Casement				Roofing Tiles			
Fixed				Single Ply Roof			
Mullion							
Skylights				Other			
Other				<u>Separate Ref Permit 2018-05-041</u>			
STRUCTURAL COMPONENTS				OTHER			
Wood Connectors							
Wood Anchors							
Truss Plates							
Insulation Forms							
Lintels							
Other							

It is the applicant's responsibility to verify that specific products have been installed in accordance with their limitations and with the minimum required design pressures for the structure. Specific compliance will be verified during field inspections.

Applicant Signature _____

Date _____



Alpine, an ITW Company
 6750 Forum Drive, Suite 305
 Orlando, FL 32837
 Phone: (800)755-6001
 alpineitw.com

Site Information:

Customer: Accu-Span Truss Company	Job Number: 20621
Job Description: Wilkins Res /Wilkins Res	
Address: 6910 Seminole Dr.	City, State, Zip: BELLE ISLE, FL

Name, Address and License # of Structural EOR if one exists for the building:

Name:	License #:	State:
Address:	City, State, Zip:	

Job Engineering Criteria:

Design Code: FBC2017RES	View Version: 17.02.02.1213.21	JRef #: 1WaZ4080024
Wind Standard: ASCE7_10	Wind Speed (mph): 139	Roof Load (psf): 20.00-10.00- 0.00- 10.00 Floor Load (psf): 40.00-10.00- 0.00- 5.00

This package contains a job notes page, 11 truss drawings and 2 details.

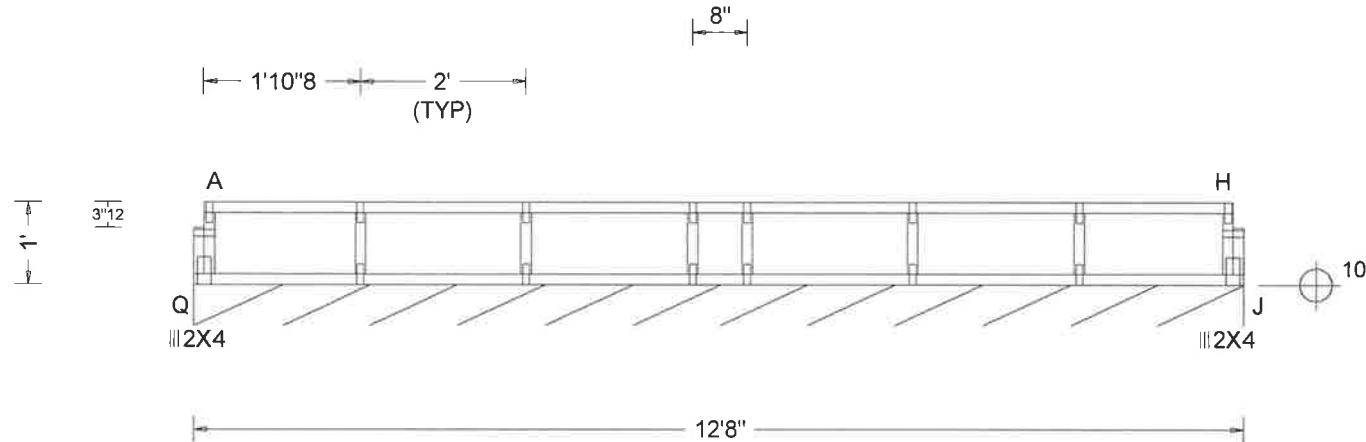
Item	Seal #	Truss
1	136.18.0805.14780	F1
3	136.18.0805.23627	F3
5	136.18.0805.27240	F5
7	136.18.0805.57803	B2
9	136.18.0806.01687	HJ7
11	136.18.0806.27167	CJ1

Item	Seal #	Truss
2	136.18.0805.19717	F2
4	136.18.0805.25650	F4
6	136.18.0805.28687	B1
8	136.18.0805.58917	EJ5
10	136.18.0806.19007	CJ3

This document has been electronically signed using a Digital Signature. Printed copies without an original signature must be verified using the original electronic version.



05/16/2018



Loading Criteria (psf) TCLL: 40.00 TCDL: 10.00 BCLL: 0.00 BCDL: 5.00 Des Ld: 55.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.00 Spacing: 24.0 "	Wind Criteria Wind Std: NA Speed: NA mph Enclosure: NA Category: NA EXP: NA Mean Height: NA ft TCDL: NA psf BCDL: NA psf MWFRS Parallel Dist: NA C&C Dist a: NA ft Loc. from endwall: NA I: NA GCpi: NA Wind Duration: NA	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Code / Misc Criteria Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Factors Used: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.000 H 999 360 VERT(TL): 0.001 H 999 240 HORZ(LL): -0.000 Q - - HORZ(TL): 0.000 Q - - Creep Factor: 2.0 Max TC CSI: 0.195 Max BC CSI: 0.043 Max Web CSI: 0.047 VIEW Ver: 17.02.02A.1213.21	▲ Maximum Reactions (lbs), or *=PLF Loc R /U /Rw /Rh /RL /W J* 108 /- /- /- /- /152 J Min Brg Width Req = - Bearing Q is a rigid surface. Members not listed have forces less than 375#
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Lumber
 Top chord 4x2 SP #2 Dense
 Bot chord 4x2 SP #2 Dense
 Webs 4x2 SP #3

Bracing
 Sheathing is required for any longitudinal(drag) forces. All connections to be designed by the building designer.
 Fasten rated sheathing to one face of this frame.

Plating Notes
 All plates are 1X3 except as noted.

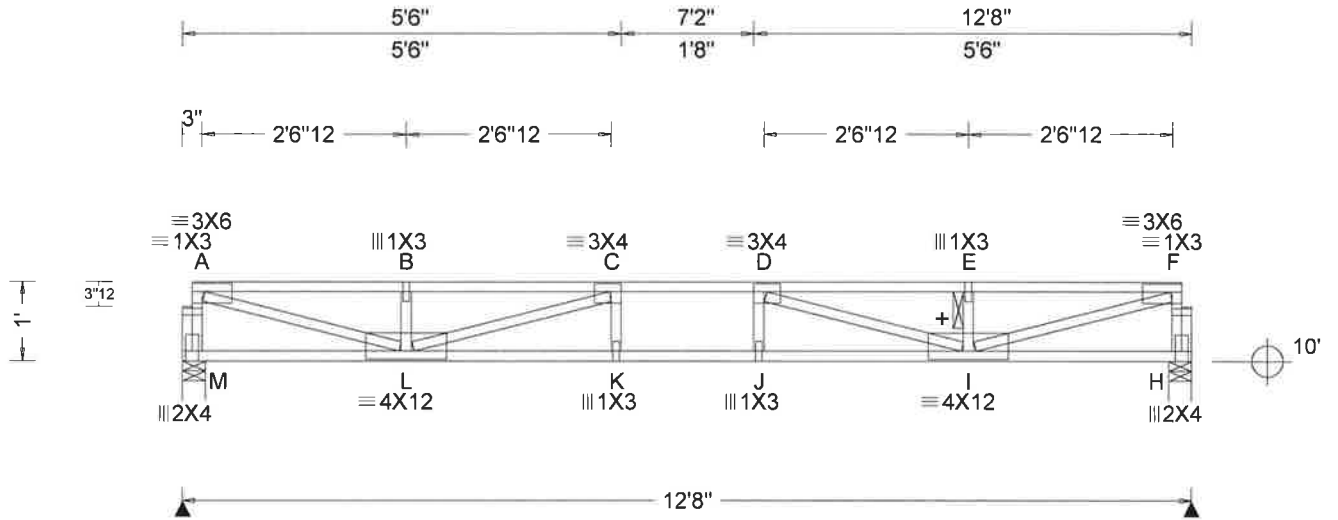
Additional Notes
 See detail STRBRIBR1014 for bracing and bridging recommendations.
 Webs are square cut except dbl diagonals or as otherwise shown.
 Truss must be installed as shown with top chord up.



COA #0278
 05/16/2018

****WARNING** READ AND FOLLOW ALL NOTES ON THIS DRAWING!**
****IMPORTANT** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS**
 Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-2 for standard plate positions.
 Alpine, a division of ITW Building Components Group Inc, shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.
 For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinet.org; SBCA: www.sbcaindustry.com; ICC: www.iccsafe.org

ALPINE
 AN ITW COMPANY
 6750 Forum Drive
 Suite 305
 Orlando FL, 32821



Loading Criteria (psf)

TCLL: 40.00
 TCCL: 10.00
 BCCL: 0.00
 BCDL: 5.00
 Des Ld: 55.00
 NCBCCL: 10.00
 Soffit: 2.00
 Load Duration: 1.00
 Spacing: 24.0"

Wind Criteria

Wind Std: NA
 Speed: NA mph
 Enclosure: NA
 Category: NA
 EXP: NA
 Mean Height: NA ft
 TCCL: NA psf
 BCDL: NA psf
 MWFRS Parallel Dist: NA
 C&C Dist a: NA ft
 Loc. from endwall: NA
 I: NA GCpi: NA
 Wind Duration: NA

Snow Criteria (Pg, Pf in PSF)

Pg: NA Ct: NA CAT: NA
 Pf: NA Ce: NA
 Lu: NA Cs: NA
 Snow Duration: NA

Code / Misc Criteria

Bldg Code: FBC 2017 RES
 TPI Std: 2014
 Rep Factors Used: Yes
 FT/RT: 12(0)/10(0)
 Plate Type(s):
 WAVE

Defl/CSI Criteria

PP Deflection in loc L/def L/#
 VERT(LL): 0.194 K 753 360
 VERT(TL): 0.344 K 593 240
 HORZ(LL): 0.017 I - -
 HORZ(TL): 0.024 B - -
 Creep Factor: 2.0
 Max TC CSI: 0.462
 Max BC CSI: 0.686
 Max Web CSI: 0.805

VIEW Ver: 17.02.02A.1213.21

Maximum Reactions (lbs)

Loc	R	/U	/Rw	/Rh	/RL	/W
M	684	-	-	-	-	/3.5
H	684	-	-	-	-	/3.5
M	Min Brg Width Req = 1.5					
H	Min Brg Width Req = 1.5					

Bearings M & H are a rigid surface.

Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens.Comp.
A - B	0 - 1599	D - E	0 - 1599
B - C	0 - 1599	E - F	0 - 1599
C - D	0 - 2287		

Lumber

Top chord 4x2 SP #2 Dense
 Bot chord 4x2 SP #2 Dense
 Webs 4x2 SP #3

Deflection

Max JT VERT DEFL: LL: 0.19" DL: 0.20". See detail DEFLCAMB1014 for camber recommendations.

Additional Notes

+ 2x6 continuous strongback. See detail STRBRIBR1014 for bracing and bridging recommendations.

Webs are square cut except dbl diagonals or as otherwise shown.

Truss must be installed as shown with top chord up.

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens.Comp.
L - K	2285 0	J - I	2285 0
K - J	2287 0		

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens.Comp.
A - M	0 - 633	D - I	0 - 820
A - L	1691 0	I - F	1691 0
L - C	0 - 820	F - H	0 - 633



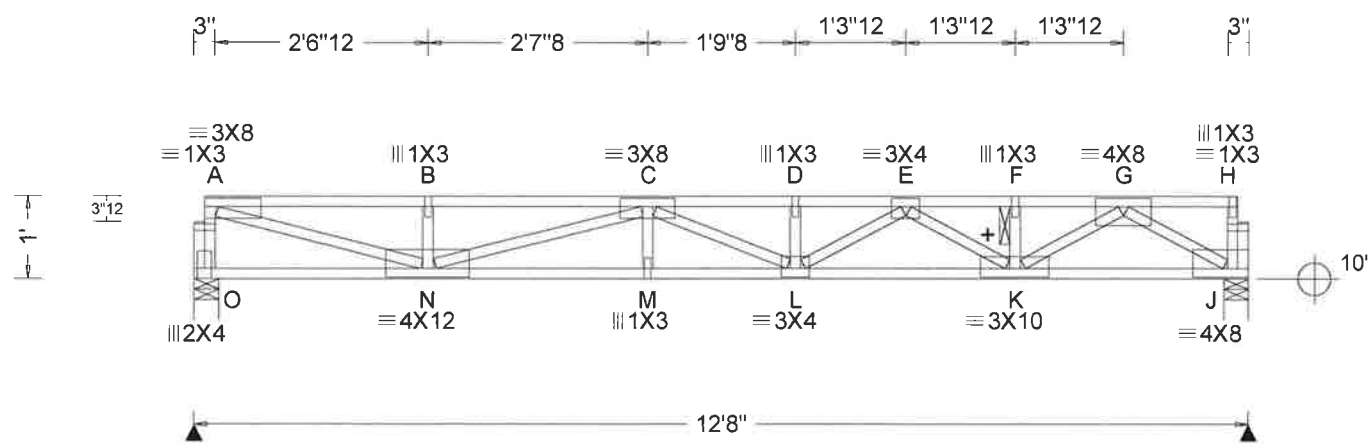
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Lumber
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 Bot chord 4x2 SP #2 Dense
 Webs 4x2 SP #3

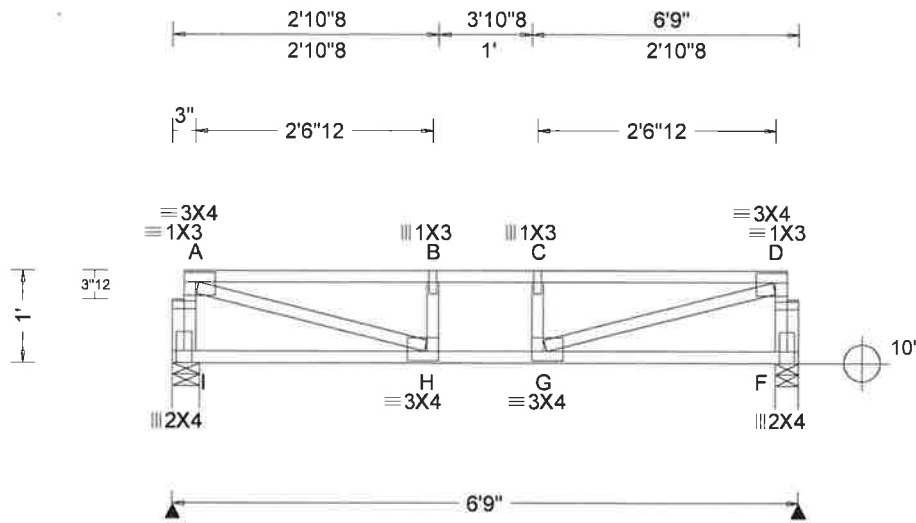
Special Loads
 -----(Lumber Dur.Fac.=1.00 / Plate Dur.Fac.=1.00)
 TC: From 100 plf at 0.13 to 100 plf at 9.99
 TC: From 50 plf at 9.99 to 50 plf at 12.54
 BC: From 10 plf at 0.00 to 10 plf at 9.99
 BC: From 5 plf at 9.99 to 5 plf at 12.67
 TC: 197 lb Conc. Load at 9.99,10.98,11.99

Additional Notes
 + 2x6 continuous strongback. See detail STRBRIBR1014 for bracing and bridging recommendations.
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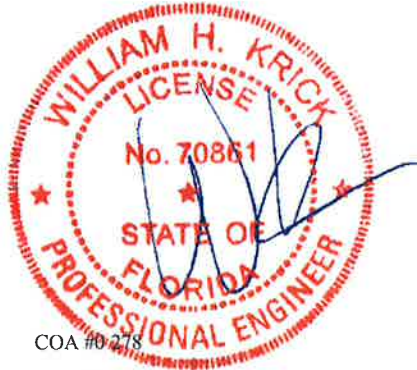




Loading Criteria (psf) TCLL: 40.00 TCDL: 10.00 BCLL: 0.00 BCDL: 5.00 Des Ld: 55.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.00 Spacing: 24.0 "	Wind Criteria Wind Std: NA Speed: NA mph Enclosure: NA Category: NA EXP: NA Mean Height: NA ft TCDL: NA psf BCDL: NA psf MWFRS Parallel Dist: NA C&C Dist a: NA ft Loc. from endwall: NA I: NA GCpi: NA Wind Duration: NA	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Code / Misc Criteria Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Factors Used: Yes FT/RT:12(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.036 B 999 360 VERT(TL): 0.072 B 999 240 HORZ(LL): -0.004 D - - HORZ(TL): 0.007 D - - Creep Factor: 2.0 Max TC CSI: 0.447 Max BC CSI: 0.249 Max Web CSI: 0.312 VIEW Ver: 17.02.02A,1213,21	▲ Maximum Reactions (lbs) <table border="1"> <thead> <tr> <th>Loc</th> <th>R</th> <th>/U</th> <th>/Rw</th> <th>/Rh</th> <th>/RL</th> <th>/W</th> </tr> </thead> <tbody> <tr> <td>I</td> <td>359</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>3.5</td> </tr> <tr> <td>F</td> <td>359</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>3.0</td> </tr> </tbody> </table> <p>I Min Brg Width Req = 1.5 F Min Brg Width Req = 1.5 Bearings I & F are a rigid surface.</p> <p>Members not listed have forces less than 375#</p> Maximum Top Chord Forces Per Ply (lbs) <table border="1"> <thead> <tr> <th>Chords</th> <th>Tens</th> <th>Comp.</th> <th>Chords</th> <th>Tens</th> <th>Comp.</th> </tr> </thead> <tbody> <tr> <td>A - B</td> <td>0</td> <td>-617</td> <td>C - D</td> <td>0</td> <td>-617</td> </tr> <tr> <td>B - C</td> <td>0</td> <td>-632</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> Maximum Bot Chord Forces Per Ply (lbs) <table border="1"> <thead> <tr> <th>Chords</th> <th>Tens</th> <th>Comp.</th> </tr> </thead> <tbody> <tr> <td>H - G</td> <td>632</td> <td>0</td> </tr> </tbody> </table> Maximum Web Forces Per Ply (lbs) <table border="1"> <thead> <tr> <th>Webs</th> <th>Tens</th> <th>Comp.</th> <th>Webs</th> <th>Tens</th> <th>Comp.</th> </tr> </thead> <tbody> <tr> <td>A - H</td> <td>655</td> <td>0</td> <td>G - D</td> <td>655</td> <td>0</td> </tr> </tbody> </table>	Loc	R	/U	/Rw	/Rh	/RL	/W	I	359	-	-	-	-	3.5	F	359	-	-	-	-	3.0	Chords	Tens	Comp.	Chords	Tens	Comp.	A - B	0	-617	C - D	0	-617	B - C	0	-632				Chords	Tens	Comp.	H - G	632	0	Webs	Tens	Comp.	Webs	Tens	Comp.	A - H	655	0	G - D	655	0
Loc	R	/U	/Rw	/Rh	/RL	/W																																																							
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Lumber
 Top chord 4x2 SP #2 Dense
 Bot chord 4x2 SP #2 Dense
 Webs 4x2 SP #3

Additional Notes
 Webs are square cut except dbi diagonals or as otherwise shown.
 Truss must be installed as shown with top chord up.

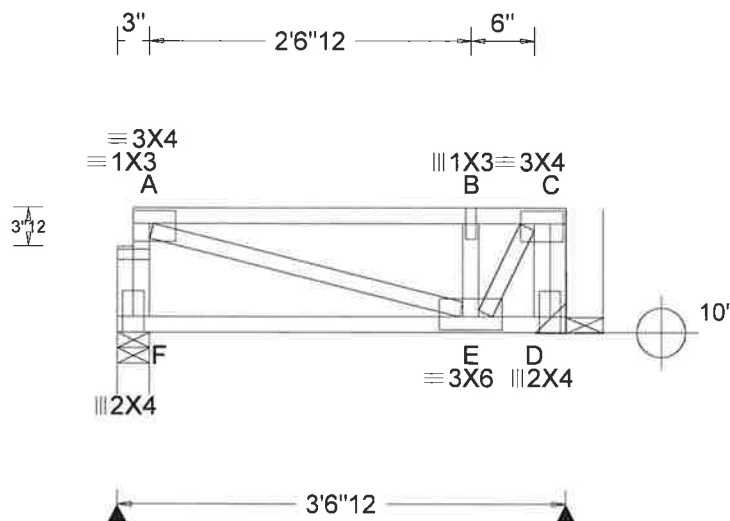


Reviewed for Code Compliance
 Universal Engineering Sciences

COA #0278
 05/16/2018

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ALPINE
 AN ITW COMPANY
 6750 Forum Drive
 Suite 305
 Orlando FL, 32821



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 40.00 TCDL: 10.00 BCLL: 0.00 BCDL: 5.00 Des Ld: 55.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.00 Spacing: 24.0 "	Wind Std: NA Speed: NA mph Enclosure: NA Category: NA EXP: NA Mean Height: NA ft TCDL: NA psf BCDL: NA psf MWFRS Parallel Dist: NA C&C Dist a: NA ft Loc. from endwall: NA I: NA GCpi: NA Wind Duration: NA	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Code / Misc Criteria Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Factors Used: Yes FT/RT:12(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.005 B 999 360 VERT(TL): 0.008 B 999 240 HORZ(LL): -0.002 C - - HORZ(TL): 0.002 C - - Creep Factor: 2.0 Max TC CSI: 0.342 Max BC CSI: 0.084 Max Web CSI: 0.134 VIEW Ver: 17.02.02A.1213.21	Loc R /U /Rw /Rh /RL /W F 183 /- /- /- /- /3.0 D 197 /- /- /- /- /- F Min Brg Width Req = 1.5 D Min Brg Width Req = - Bearing F is a rigid surface. Members not listed have forces less than 375#

Lumber
Top chord 4x2 SP #2 Dense
Bot chord 4x2 SP #2 Dense
Webs 4x2 SP #3

Additional Notes
Webs are square cut except dbl diagonals or as otherwise shown.
Truss must be installed as shown with top chord up.



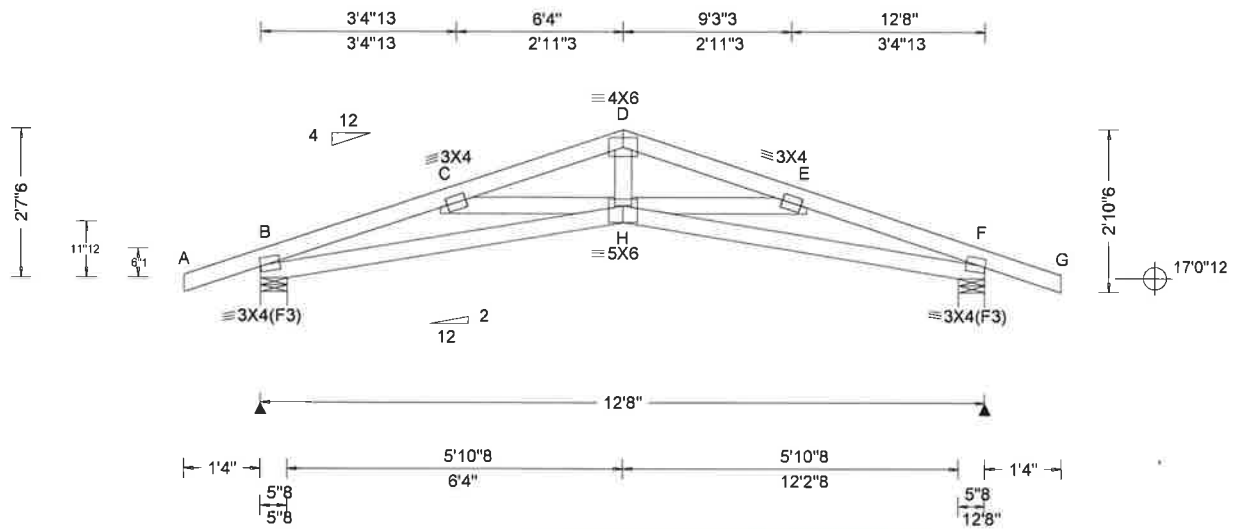
COA #0278

05/16/2018



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ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821



Loading Criteria (psf) TCLL: 20.00 TCCL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Criteria Wind Std: ASCE 7-10 Speed: 139 mph Enclosure: Closed Risk Category: II EXP: B Mean Height: 18.40 ft TCCL: 4.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc, from endwall: not in 4.50 ft GCpi: 0.18 Wind Duration: 1.33	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Code / Misc Criteria Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Factors Used: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.086 H 999 240 VERT(TL): 0.253 H 886 240 HORZ(LL): 0.043 H - - HORZ(TL): 0.085 H - - Creep Factor: 2.0 Max TC CSI: 0.459 Max BC CSI: 0.588 Max Web CSI: 0.194 VIEW Ver: 17.02.02A.1213.21	▲ Maximum Reactions (lbs) <table border="1"> <thead> <tr> <th>Loc</th> <th>R</th> <th>U</th> <th>Rw</th> <th>Rh</th> <th>RL</th> <th>W</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>602</td> <td>/106</td> <td>/304</td> <td>/-</td> <td>/42</td> <td>/5.5</td> </tr> <tr> <td>F</td> <td>602</td> <td>/106</td> <td>/304</td> <td>/-</td> <td>/-</td> <td>/5.5</td> </tr> </tbody> </table> <p>Wind reactions based on MWFRS B Min Brg Width Req = 1.5 F Min Brg Width Req = 1.5 Bearings B & F are a rigid surface.</p> <p>Members not listed have forces less than 375#</p> Maximum Top Chord Forces Per Ply (lbs) <table border="1"> <thead> <tr> <th>Chords</th> <th>Tens.Comp.</th> <th>Chords</th> <th>Tens. Comp.</th> </tr> </thead> <tbody> <tr> <td>B - C</td> <td>399 - 1356</td> <td>D - E</td> <td>308 - 1255</td> </tr> <tr> <td>C - D</td> <td>317 - 1255</td> <td>E - F</td> <td>405 - 1356</td> </tr> </tbody> </table> Maximum Bot Chord Forces Per Ply (lbs) <table border="1"> <thead> <tr> <th>Chords</th> <th>Tens.Comp.</th> <th>Chords</th> <th>Tens. Comp.</th> </tr> </thead> <tbody> <tr> <td>B - H</td> <td>1246 - 327</td> <td>H - F</td> <td>1246 - 346</td> </tr> </tbody> </table> Maximum Web Forces Per Ply (lbs) <table border="1"> <thead> <tr> <th>Webs</th> <th>Tens.Comp.</th> </tr> </thead> <tbody> <tr> <td>D - H</td> <td>509 - 65</td> </tr> </tbody> </table>	Loc	R	U	Rw	Rh	RL	W	B	602	/106	/304	/-	/42	/5.5	F	602	/106	/304	/-	/-	/5.5	Chords	Tens.Comp.	Chords	Tens. Comp.	B - C	399 - 1356	D - E	308 - 1255	C - D	317 - 1255	E - F	405 - 1356	Chords	Tens.Comp.	Chords	Tens. Comp.	B - H	1246 - 327	H - F	1246 - 346	Webs	Tens.Comp.	D - H	509 - 65
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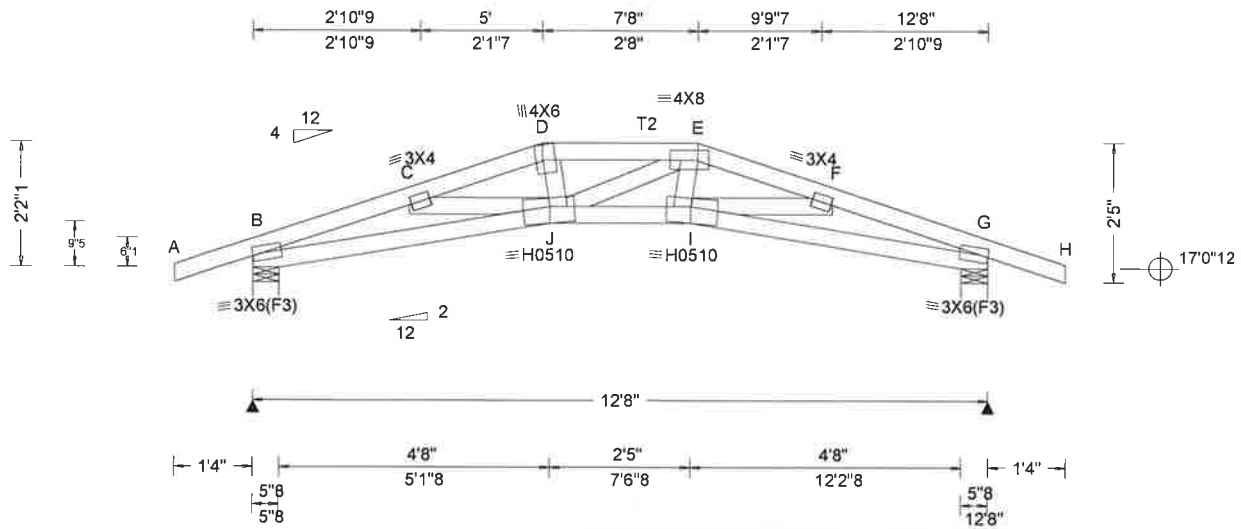
Lumber
 Top chord 2x4 SP #2 Dense
 Bot chord 2x4 SP #2 Dense
 Webs 2x4 SP #3

Wind
 Wind loads based on MWFRS with additional C&C member design.



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Loading Criteria (psf)	
TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00
Load Duration:	1.25
Spacing:	24.0"

Wind Criteria	
Wind Std:	ASCE 7-10
Speed:	139 mph
Enclosure:	Closed
Risk Category:	II
EXP:	B
Mean Height:	18.18 ft
TCDL:	4.0 psf
BCDL:	5.0 psf
MWFRS Parallel Dist:	0 to h/2
C&C Dist a:	3.00 ft
Loc. from endwall:	Any
GCpi:	0.18
Wind Duration:	1.33

Snow Criteria (Pg,Pf in PSF)	
Pg: NA	Ct: NA
CAT: NA	Ce: NA
Lu: NA	Cs: NA
Snow Duration: NA	
Code / Misc Criteria	
Bldg Code:	FBC 2017 RES
TPI Std:	2014
Rep Factors Used:	Yes
FT/RT:	20(0)/10(0)
Plate Type(s):	
WAVE:	HS

Defl/CSI Criteria	
PP Deflection in loc L/defl L/#	
VERT(LL):	0.177 J 848 240
VERT(TL):	0.525 J 428 240
HORZ(LL):	0.087 I - -
HORZ(TL):	0.172 I - -
Creep Factor:	2.0
Max TC CSI:	0.835
Max BC CSI:	0.942
Max Web CSI:	0.295
VIEW Ver:	17.02.02A.1213.21

▲ Maximum Reactions (lbs)					
Loc	R	/U	/Rw	/Rh	/RL /W
B	1105	/178	-/-	-/-	/5.5
G	1105	/178	-/-	-/-	/5.5
Wind reactions based on MWFRS					
B	Min Brg Width Req = 1.5				
G	Min Brg Width Req = 1.5				
Bearings B & G are a rigid surface.					
Members not listed have forces less than 375#					
Maximum Top Chord Forces Per Ply (lbs)					
Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	444	-2974	E - F	493	-3624
C - D	492	-3623	F - G	444	-2974
D - E	466	-3531			

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

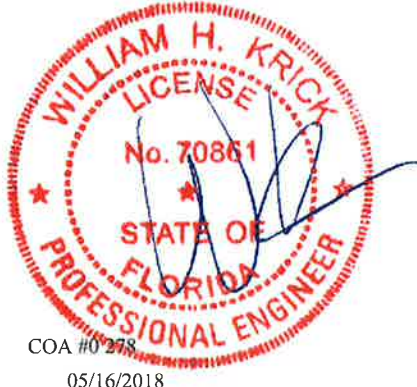
Special Loads
-----(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)

TC:	From 61 plf at -1.33 to 61 plf at 5.00
TC:	From 31 plf at 5.00 to 31 plf at 7.67
TC:	From 61 plf at 7.67 to 61 plf at 14.00
BC:	From 4 plf at -1.33 to 4 plf at 0.00
BC:	From 20 plf at 0.00 to 20 plf at 5.13
BC:	From 10 plf at 5.13 to 10 plf at 7.54
BC:	From 20 plf at 7.54 to 20 plf at 12.67
BC:	From 4 plf at 12.67 to 4 plf at 14.00
TC:	217 lb Conc. Load at 5.04, 7.62
TC:	134 lb Conc. Load at 6.33
BC:	225 lb Conc. Load at 5.04, 7.62
BC:	95 lb Conc. Load at 6.33

Maximum Bot Chord Forces Per Ply (lbs)					
Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - J	2763	-401	I - G	2763	-401
J - I	3533	-467			

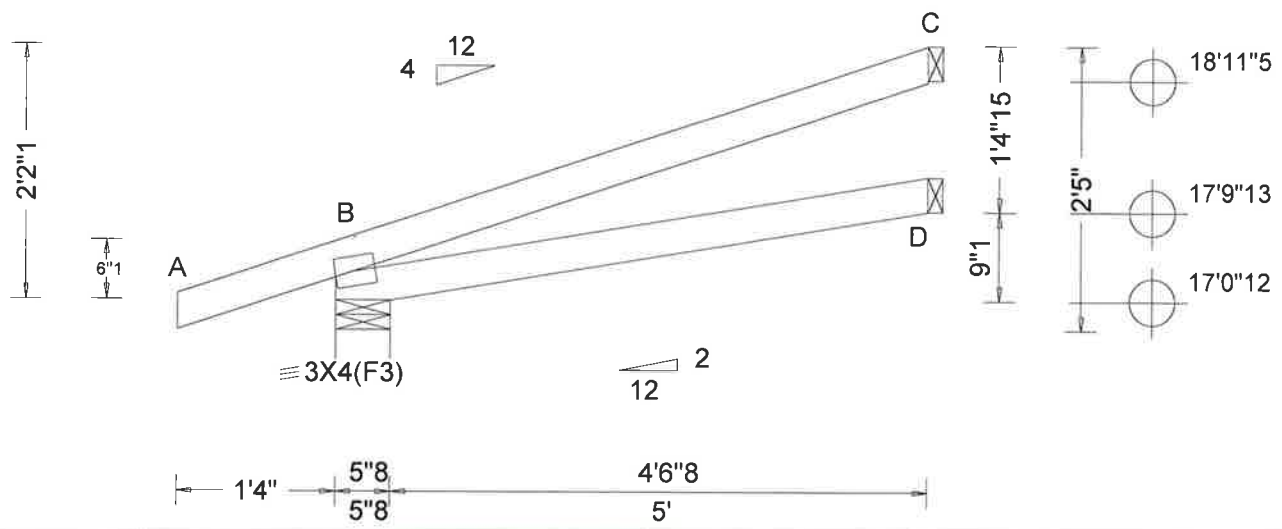
Maximum Web Forces Per Ply (lbs)					
Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - J	773	-73	I - E	603	0
D - J	603	0	I - F	774	-74

Wind
Wind loads and reactions based on MWFRS.



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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Std: ASCE 7-10 Speed: 139 mph Enclosure: Closed Risk Category: II EXP: B Mean Height: 18,18 ft TCDL: 4.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.18 Wind Duration: 1.33	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Code / Misc Criteria Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Factors Used: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.001 D 999 240 VERT(TL): 0.005 D 999 240 HORZ(LL): 0.003 D - - HORZ(TL): 0.006 D - - Creep Factor: 2.0 Max TC CSI: 0.323 Max BC CSI: 0.241 Max Web CSI: 0.000 VIEW Ver: 17.02.02A.1213.21	Loc R / U / Rw / Rh / RL / W B 306 / 51 / 164 / - / 58 / 5.5 D 95 / - / 61 / - / - / 1.5 C 134 / 44 / 42 / - / - / 1.5 Wind reactions based on MWFRS B Min Brg Width Req = 1.5 D Min Brg Width Req = - C Min Brg Width Req = - Bearing B is a rigid surface. Members not listed have forces less than 375#

Lumber
Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense

Wind
Wind loads based on MWFRS with additional C&C member design.

Additional Notes
Shim all supports to solid bearing.
Provide (2) 16d common(0.162"x3.5") toe-nails at top chord.
Provide (2) 16d common(0.162"x3.5") toe-nails at bottom chord.



COA #0 278
05/16/2018

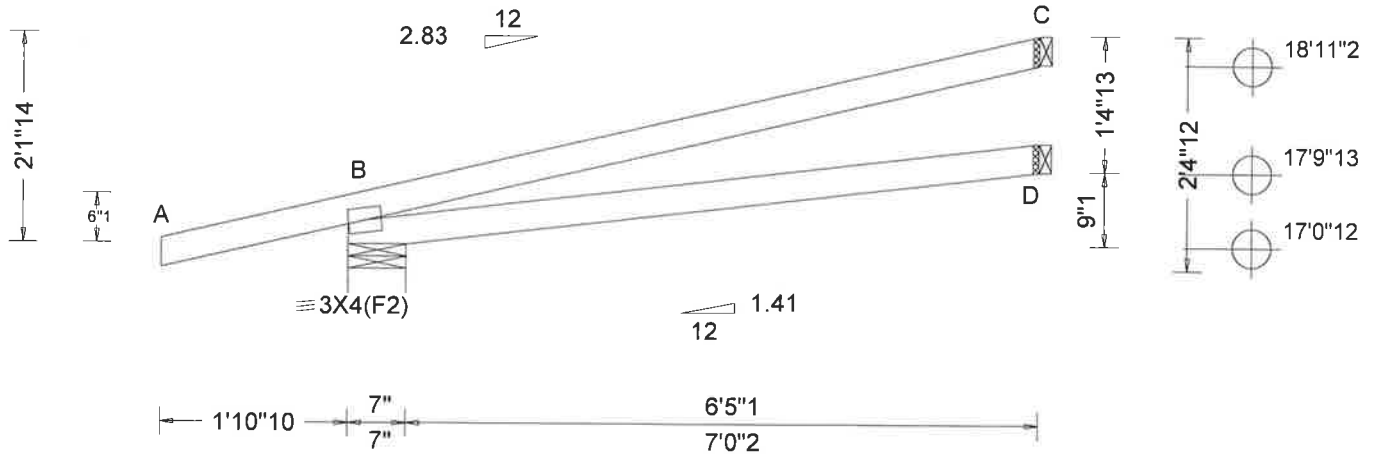
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TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-10 Speed: 139 mph Enclosure: Closed Risk Category: II EXP: B Mean Height: 18,17 ft TCDL: 4.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.33	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Code / Misc Criteria Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Factors Used: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/def L/# VERT(LL): 0.004 D 999 240 VERT(TL): 0.015 D 999 240 HORZ(LL): 0.006 D - - HORZ(TL): 0.012 D - - Creep Factor: 2.0 Max TC CSI: 0.588 Max BC CSI: 0.536 Max Web CSI: 0.000 VIEW Ver: 17.02.02A,1213.21	Loc R / U / Rw / Rh / RL / W B 269 / 72 / - / - / - / 7.0 D 131 / - / 17 / - / - / 1.5 C 82 / 24 / - / - / - / 1.5 Wind reactions based on MWFRS B Min Brg Width Req = 1.5 D Min Brg Width Req = - C Min Brg Width Req = - Bearing B is a rigid surface. Members not listed have forces less than 375#

Lumber
Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense

Special Loads
----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)
TC: From 0 plf at -1.89 to 61 plf at 0.00
TC: From 2 plf at 0.00 to 2 plf at 7.01
BC: From 0 plf at -1.89 to 4 plf at 0.00
BC: From 2 plf at 0.00 to 2 plf at 7.01
TC: -25 lb Conc. Load at 1.41
TC: 139 lb Conc. Load at 4.24
BC: 28 lb Conc. Load at 1.41
BC: 111 lb Conc. Load at 4.24

Wind
Wind loads and reactions based on MWFRS.

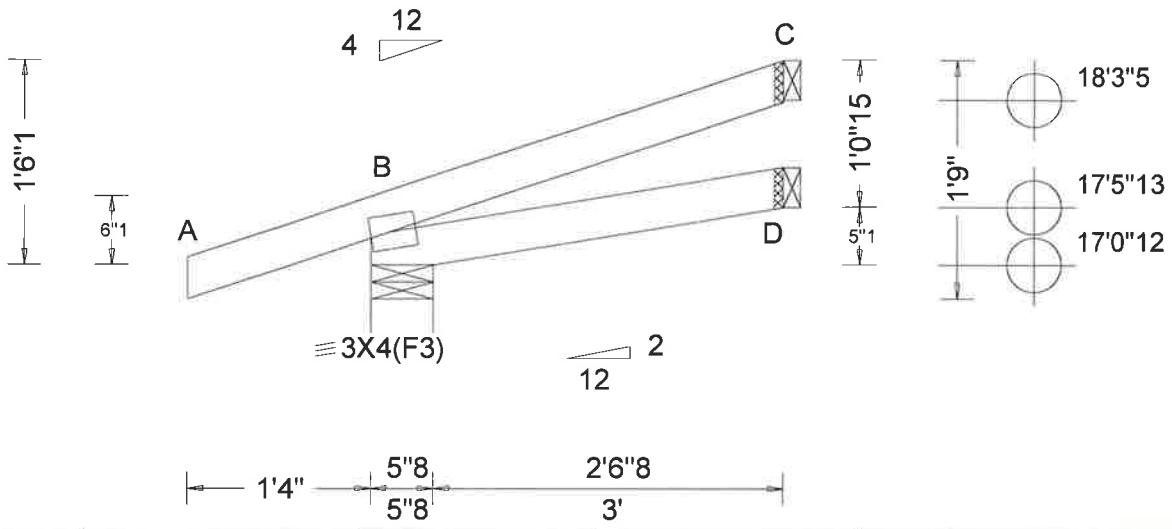
Additional Notes
Shim all supports to solid bearing.
Provide (2) 16d common(0.162"x3.5") toe-nails at top chord.
Provide (2) 16d common(0.162"x3.5") toe-nails at bottom chord.



COA #0 378
05/16/2018



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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Criteria Wind Std: ASCE 7-10 Speed: 139 mph Enclosure: Closed Risk Category: II EXP: B Mean Height: 17.84 ft TCDL: 4.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.33	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Code / Misc Criteria Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Factors Used: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl U# VERT(LL): 0.000 D 999 240 VERT(TL): 0.001 D 999 240 HORZ(LL): 0.000 D - - HORZ(TL): 0.001 D - - Creep Factor: 2.0 Max TC CSI: 0.214 Max BC CSI: 0.076 Max Web CSI: 0.000 VIEW Ver: 17.02.02A.1213.21	▲ Maximum Reactions (lbs) <table border="1"> <thead> <tr> <th>Loc</th> <th>R</th> <th>/U</th> <th>/Rw</th> <th>/Rh</th> <th>/RL</th> <th>/W</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>234</td> <td>/45</td> <td>/125</td> <td>/-</td> <td>/39</td> <td>/5.5</td> </tr> <tr> <td>D</td> <td>55</td> <td>/-</td> <td>/36</td> <td>/-</td> <td>/-</td> <td>/1.5</td> </tr> <tr> <td>C</td> <td>70</td> <td>/24</td> <td>/20</td> <td>/-</td> <td>/-</td> <td>/1.5</td> </tr> </tbody> </table> Wind reactions based on MWFRS B Min Brg Width Req = 1.5 D Min Brg Width Req = - C Min Brg Width Req = - Bearing B is a rigid surface. Members not listed have forces less than 375#	Loc	R	/U	/Rw	/Rh	/RL	/W	B	234	/45	/125	/-	/39	/5.5	D	55	/-	/36	/-	/-	/1.5	C	70	/24	/20	/-	/-	/1.5
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Lumber
 Top chord 2x4 SP #2 Dense
 Bot chord 2x4 SP #2 Dense

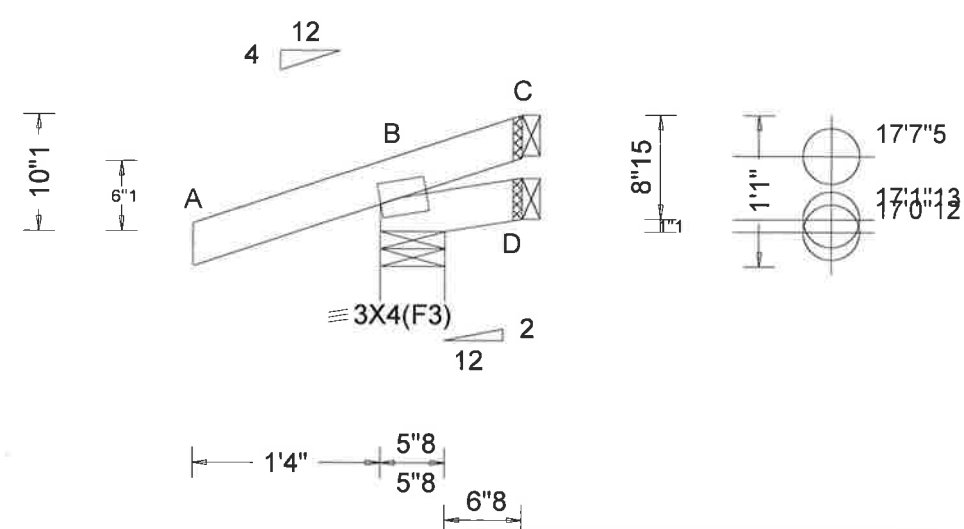
Wind
 Wind loads based on MWFRS with additional C&C member design.

Additional Notes
 Shim all supports to solid bearing.
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Loading Criteria (psf) TCLL: 20.00 TCCL: 10.00 BCCL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Criteria Wind Std: ASCE 7-10 Speed: 139 mph Enclosure: Closed Risk Category: II EXP: B Mean Height: 17.51 ft TCCL: 4.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.33	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Code / Misc Criteria Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Factors Used: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.000 D 999 240 VERT(TL): 0.000 D 999 240 HORZ(LL): -0.000 C - - HORZ(TL): 0.001 C - - Creep Factor: 2.0 Max TC CSI: 0.214 Max BC CSI: 0.023 Max Web CSI: 0.000 VIEW Ver: 17.02.02A.1213.21	▲ Maximum Reactions (lbs) <table border="1"> <thead> <tr> <th>Loc</th> <th>R</th> <th>/U</th> <th>/Rw</th> <th>/Rh</th> <th>/RL</th> <th>/W</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>199</td> <td>/62</td> <td>/109</td> <td>/-</td> <td>/20</td> <td>/5.5</td> </tr> <tr> <td>D</td> <td>14</td> <td>/2</td> <td>/11</td> <td>/-</td> <td>/-</td> <td>/1.5</td> </tr> <tr> <td>C</td> <td>-30</td> <td>/30</td> <td>/19</td> <td>/-</td> <td>/-</td> <td>/1.5</td> </tr> </tbody> </table> <p>Wind reactions based on MWFRS B Min Brg Width Req = 1.5 D Min Brg Width Req = - C Min Brg Width Req = - Bearing B is a rigid surface.</p> <p>Members not listed have forces less than 375#</p>	Loc	R	/U	/Rw	/Rh	/RL	/W	B	199	/62	/109	/-	/20	/5.5	D	14	/2	/11	/-	/-	/1.5	C	-30	/30	/19	/-	/-	/1.5
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 Wind loads based on MWFRS with additional C&C member design.

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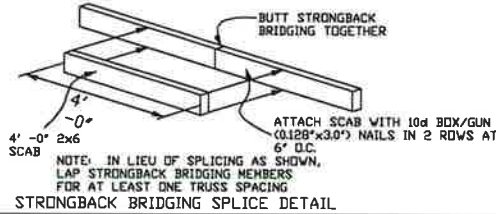


05/16/2018

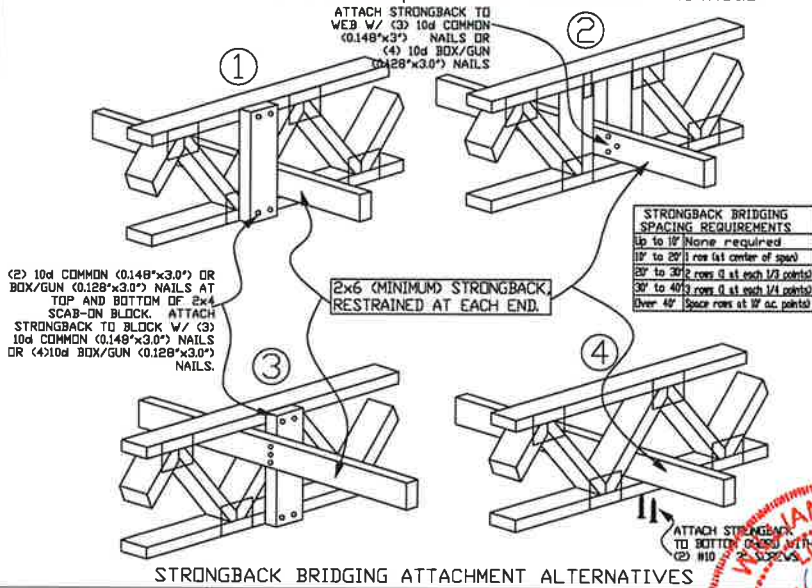
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STRONGBACK BRIDGING RECOMMENDATIONS



NOTE: Details 1 and 2 are the preferred attachment methods



- ▶ All scab-on blocks shall be a minimum 2x4 'stress graded lumber.'
- ▶ All strongback bridging and bracing shall be a minimum 2x6 'stress graded lumber.'
- ▶ The purpose of strongback bridging is to develop load sharing between individual trusses, resulting in an overall increase in the stiffness of the floor system. 2x6 strongback bridging, positioned as shown in details, is recommended at 10' -0" o.c. (max.)
- ▶ The terms 'bridging' and 'bracing' are sometimes mistakenly used interchangeably. 'Bracing' is an important structural requirement of any floor or roof system. Refer to the Truss Design Drawing (TDD) for the bracing requirements for each individual truss component. 'Bridging,' particularly 'strongback bridging' is a recommendation for a truss system to help control vibration. In addition to aiding in the distribution of point loads between adjacent truss, strongback bridging serves to reduce 'bounce' or residual vibration resulting from moving point loads, such as footsteps.

The performance of all floor systems are enhanced by the installation of strongback bridging and therefore is strongly recommended by Alpine.

For additional information regarding strongback bridging, refer to BCSI (Building Component Safety Information).



13723 Riverport Drive
Suite 200
Maryland Heights, MO 63043

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 For more information see the job's general notes page and these web sites:
 ALPINE: www.alpine.com TPI: www.tpi.org BCSA: www.bcsaindustry.org ICC: www.iccsafe.org



TC LL	PSF	REF	STRONGBACK
TC DL	PSF	DATE	10/01/14
BC DL	PSF	DRWG	STRBRIBR1014
BC LL	PSF		
TOT. LD.	PSF		
DUR. FAC.	1.00		
SPACING			



Commentary: Deflection and Camber

Camber may be built into trusses to compensate for the vertical deflection that results from the application of loads. Providing camber has the following advantages:

- Helps to ensure level ceilings and floors after dead loads are applied.
- Facilitates drainage to avoid ponding on flat or low slope roofs.
- Compensates for different deflection characteristics between adjacent trusses.
- Improves appearance of garage door headers and other long spans that can appear to "sag."
- Avoids "dips" in roof ridgelines at the transition from the gable to adjacent clear span trusses.

In accordance with ANSI/TPI 1 the Building Designer, through the Construction Documents, shall provide the location, direction, and magnitude of all loads attributable to ponding that may occur due to the design of the roof drainage system. The Building Designer shall also specify any dead load, live load, and in-service creep deflection criteria for flat or low-slope roofs subject to ponding loads.

The amount of camber is dependent on the truss type, span, loading, application, etceteras.

More restrictive limits for allowable deflection and slenderness ratio (L/D) may be required to help control vibration.

The following tables are provided as guidelines for limiting deflection and estimating camber. Conditions or codes may exist that require exceeding these recommendations, or past experience may warrant using more stringent limitations.

L = Span of Truss (inches)
D = Depth of Truss at Deflection Point (inches)

Recommended Truss Deflection Limits

Truss Type	L/D	Deflection Limits	
		Live Load	Total Load
Pitched Roof Trusses	24	L/240 (vertical)	L/180 (vertical)
Floor of Room-In-Attic Trusses	24	L/360 (vertical)	L/240 (vertical)
Flat or Shallow Pitched Roof Trusses	24	L/360 (vertical)	L/240 (vertical)
Residential Floor Trusses	24	L/360 (vertical)	L/240 (vertical)
Commercial Floor Trusses	20	L/480 (vertical)	L/240 (vertical)
Scissors Trusses	24	0.75' (horizontal)	1.25' (horizontal)

Truss Type	Recommended Camber
Pitched Trusses	1.00 x Deflection from Actual Dead Load
Stoping Parallel Chord Trusses	1.5 x Vertical Deflection from Actual Dead Load
Floor Trusses	(0.25 x Deflection from Live Load) + Actual Dead Load
Flat Roof Trusses	(0.25 x Deflection from Live Load) + (1.5 x Design Dead Load Deflection)

Note: The actual dead load may be considerably less than the design dead load.

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DRWG	DEFLCAMB1014								



Manual S Compliance Report
Entire House
SPEEDY CALC'S LLC



Job: 6910 SEMINOLE DRIVE
Date: May 01, 2018
By: TRICIA HIGGINS
Plan: ADDITION

2805 STATEN DRIVE, DELTONA, FL 32738 Phone: 407 314-8495 Fax: 407 322-5788 Email: SPEEDYCALCS@YAHOO.COM Web: WWW.SPEEDYCALCS.COM

Project Information

For: AIMEE & JOHN WILIKINS, MESSINA CONSTRUCTION
6910 SEMINOLE DRIVE, BELLE ISLE, FL 32812

Cooling Equipment

Design Conditions

Outdoor design DB:	92.4°F	Sensible gain:	6867 Btuh	Entering coil DB:	75.0°F
Outdoor design WB:	76.3°F	Latent gain:	2525 Btuh	Entering coil WB:	62.5°F
Indoor design DB:	75.0°F	Total gain:	9392 Btuh		
Indoor RH:	50%	Estimated airflow:	383 cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type: Split ASHP
Manufacturer: LIFES GOOD Model: LSU120HSV5+LSN120HSV5
Actual airflow: 383 cfm
Sensible capacity: 8100 Btuh 118% of load
Latent capacity: 2700 Btuh 107% of load
Total capacity: 10800 Btuh 115% of load SHR: 75%

Heating Equipment

Design Conditions

Outdoor design DB:	41.9°F	Heat loss:	3501 Btuh	Entering coil DB:	70.0°F
Indoor design DB:	70.0°F				

Manufacturer's Performance Data at Actual Design Conditions

Equipment type: Split ASHP
Manufacturer: LIFES GOOD Model: LSU120HSV5+LSN120HSV5
Actual airflow: 383 cfm
Output capacity: 13600 Btuh 388% of load
Supplemental heat required: 0 Btuh
Capacity balance: 12 °F
Economic balance: -99 °F

Backup equipment type: Elec strip
Manufacturer: Model:
Actual airflow: 383 cfm
Output capacity: 6.8 kW 666% of load Temp. rise: 50 °F



Meets all requirements of ACCA Manual S.



wrightsoft

Right-Suite@ Universal 2018 18.0.11 RSU08373

...cuments\Wrightsoft HVAC\6910 SEMINOLE DRIVE.rup Calc = MJ8 Front Door faces: NE

2018-May-02 17:01:49

Page 1

Project Summary
Entire House
SPEEDY CALC'S LLC

Job: 6910 SEMINOLE DRIVE
 Date: May 01, 2018
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Project Information

For: AIMEE & JOHN WILKINS, MESSINA CONSTRUCTION
 6910 SEMINOLE DRIVE, BELLE ISLE, FL 32812

Notes: Load Calculation was obtained via electronic copy of drawing

Design Information

Weather: Orlando Intl AP, FL, US

Winter Design Conditions

Outside db 42 °F
 Inside db 70 °F
 Design TD 28 °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 3501 Btuh
 Ducts 0 Btuh
 Central vent (0 cfm)
 (none) 0 Btuh
 Humidification 0 Btuh
 Piping 0 Btuh
 Equipment load 3501 Btuh

Infiltration

Method Simplified
 Construction quality Average
 Fireplaces 0

	Heating	Cooling
Area (ft ²)	312	312
Volume (ft ³)	3120	3120
Air changes/hour	0.61	0.32
Equiv. AVF (cfm)	32	17

Heating Equipment Summary

Make LIFES GOOD
 Trade LG
 Model LSU120HSV5
 AHRI ref 10570123

Efficiency 11.4 HSPF
 Heating input 13600 Btuh @ 47°F
 Heating output 32 °F
 Temperature rise 383 cfm
 Actual air flow 0.109 cfm/Btuh
 Air flow factor 0.50 in H2O
 Static pressure
 Space thermostat
 Capacity balance point = 12 °F

Backup:
 Input = 7 kW, Output = 23326 Btuh, 100 AFUE

Sensible Cooling Equipment Load Sizing

Structure 6867 Btuh
 Ducts 0 Btuh
 Central vent (0 cfm)
 (none) 0 Btuh
 Blower 0 Btuh

Use manufacturer's data y
 Rate/swing multiplier 1.00
 Equipment sensible load 6867 Btuh

Latent Cooling Equipment Load Sizing

Structure 2525 Btuh
 Ducts 0 Btuh
 Central vent (0 cfm)
 (none) 0 Btuh
 Equipment latent load 2525 Btuh

Equipment Total Load (Sen+Lat) 9392 Btuh
 Req. total capacity at 0.75 SHR 0.8 ton

Cooling Equipment Summary

Make LIFES GOOD
 Trade LG
 Cond LSU120HSV5
 Coil LSN120HSV5
 AHRI ref 10570123

Efficiency 12.5 EER, 22.7 SEER
 Sensible cooling 9000 Btuh
 Latent cooling 3000 Btuh
 Total cooling 12000 Btuh
 Actual air flow 383 cfm
 Air flow factor 0.056 cfm/Btuh
 Air flow factor 0.50 in H2O
 Static pressure
 Load sensible heat ratio 0.73



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

Component Constructions
SECOND FL
SPEEDY CALC'S LLC

Job: 6910 SEMINOLE DRIVE
 Date: May 01, 2018
 By: TRICIA HIGGINS
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Project Information

For: AIMEE & JOHN WILIKINS, MESSINA CONSTRUCTION
 6910 SEMINOLE DRIVE, BELLE ISLE, FL 32812

Design Conditions

Location: Orlando Intl AP, FL, US Elevation: 105 ft Latitude: 28°N			Indoor: Indoor temperature (°F) 70 Design TD (°F) 28 Relative humidity (%) 50 Moisture difference (gr/lb) 23.4	Heating 70 28 50 23.4	Cooling 75 17 50 46.6
Outdoor: Dry bulb (°F) 42 Daily range (°F) - Wet bulb (°F) - Wind speed (mph) 15.0	Heating 42 - -	Cooling 92 17 (M) 76 7.5	Infiltration: Method Simplified Construction quality Average Fireplaces 0		

Construction descriptions

	Or	Area ft²	U-value Btuh/ft²-°F	Insul R ft²-°F/Btuh	Htg HTM Btuh/ft²	Loss Btuh	Clg HTM Btuh/ft²	Gain Btuh
Walls								
Frame wall 2 X 4 FOAM SPRAY R13: Frm wall, stucco ext, 1/2" wood shth, r-13 cav ins, 1/2" gypsum board int fnsh, 2"x4" wood frm, 16" o.c. stud	ne	130	0.091	13.0	2.56	332	2.32	301
	se	240	0.091	13.0	2.56	614	2.32	556
	sw	85	0.091	13.0	2.56	217	2.32	197
	nw	228	0.091	13.0	2.56	583	2.32	528
	all	683	0.091	13.0	2.56	1746	2.32	1582
Partitions (none)								
Windows								
CODE MINIMUM: 2 glazing, clr low-e outr, argon gas, insulated vinyl frm sw mat, clr innr, 1/2" gap, 1/4" thk; NFRC rated (SHGC=0.23); 50% blinds 45°, medium; 50% outdoor insect screen; 1 ft overhang (5 ft w indow ht, 1 ft sep.); 6.67 ft head ht		45	0.330	0	9.27	417	16.5	741
CODE MINIMUM: 2 glazing, clr low-e outr, argon gas, insulated vinyl frm nw mat, clr innr, 1/2" gap, 1/4" thk; NFRC rated (SHGC=0.23); 50% blinds 45°, medium; 50% outdoor insect screen; 1 ft overhang (2 ft w indow ht, 1 ft sep.); 6.67 ft head ht		12	0.330	0	9.27	111	17.2	206
Doors (none)								
Ceilings								
ICYNENE R20 ENCAPSULATED ATTIC W SHINGLE: Attic ceiling, asphalt shingles roof mat, r-20 roof ins, 1/2" gypsum board int fnsh		312	0.050	20.0	0.80	249	0.67	210
Floors (none)								



AED Assessment
Entire House
SPEEDY CALC'S LLC

Job: 6910 SEMINOLE DRIVE
 Date: May 01, 2018
 By: TRICIA HIGGINS
 Plan: ADDITION

2805 STATEN DRIVE, DELTONA, FL 32738 Phone: 407 314-8495 Fax: 407 322-5788 Email: SPEEDYCALCS@YAHOOO.COM Web: WWW.SPEEDYCALCS.COM

Project Information

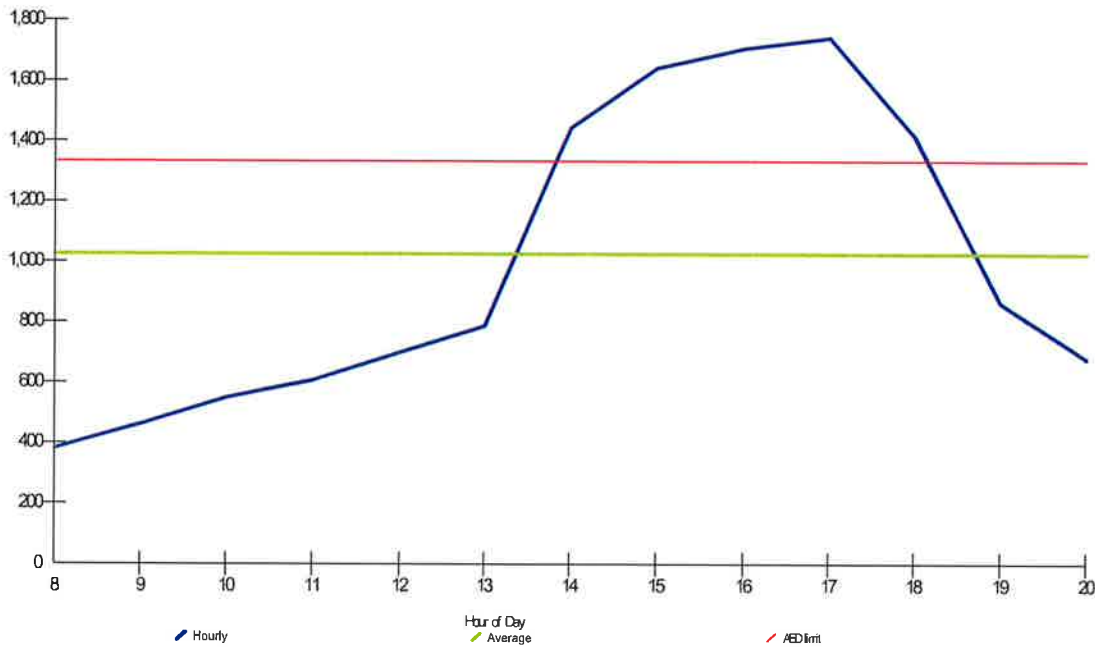
For: AIMEE & JOHN WILIKINS, MESSINA CONSTRUCTION
 6910 SEMINOLE DRIVE, BELLE ISLE, FL 32812

Design Conditions

Location:	Orlando Intl AP, FL, US	Indoor:	Indoor temperature (°F)	70	Heating	75
	Elevation: 105 ft		Design TD (°F)	28		17
	Latitude: 28°N		Relative humidity (%)	50		50
Outdoor:			Moisture difference (gr/lb)	23.4		46.6
	Heating	Cooling	Infiltration:			
Drybulb (°F)	42	92				
Dailyrange (°F)	-	17 (M)				
Wet bulb (°F)	-	76				
Wind speed (mph)	15.0	7.5				

Test for Adequate Exposure Diversity

Hourly Glazing Load



Maximum hourly glazing load exceeds average by 70.0%.

House does not have adequate exposure diversity (AED), based on AED limit of 30%.

AED excursion: 410 Btuh (PFG - 1.3*AFG)



Right-J8® Form J1
Entire House
SPEEDY CALC'S LLC

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1 Name of Room		Entire House				SECOND FL						
2 Running Feet of Exposed Wall		74.0 ft				74.0 ft						
3 Ceiling Ht (Ft) and Gross Wall Area (SqFt)		10.0 ft		740.0 ft ²		10.0 ft		740.0 ft ²				
4 Room Dimensions (Ft) and Floor Plan Area (SqFt)				312.0 ft ²		13.0 x 24.0 ft		312.0 ft ²				
5 Ceiling Slope (Deg.) and Gross Ceiling Area (SqFt)		0 °		312.0 ft ²		0 °		312.0 ft ²				
Type of Exposure	Const., Number	Panel Faces	HTM		Area or Length	Btuh			Area or Length	Btuh		
			Htg.	Clg.		Heating	S-Clg	L-Clg		Heating	S-Clg	L-Clg
6 Wall	Frame wall 2 X 4 FO	ne	2.56	2.32	130	332	301		130	332	301	
Wall	Frame wall 2 X 4 FO	se	2.56	2.32	240	614	556		240	614	556	
Wall	Frame wall 2 X 4 FO	sw	2.56	2.32	130	217	197		130	217	197	
Glaz	CODE MINIMUM	sw	9.27	16.47	45	417	741		45	417	741	
11 Wall	Frame wall 2 X 4 FO	nw	2.56	2.32	240	583	528		240	583	528	
Glaz	CODE MINIMUM	nw	9.27	17.20	12	111	206		12	111	206	
Ceilt	ICYNENE R20 EN...	-	0.80	0.67	312	249	210		312	249	210	
12 Infiltration	Heating Load (Btuh)		Effect ACH		0.61	977			977			
	Sensible Load (Btuh)		0.32		WAR 1.00		317		WAR 1.00		317	
	Latent Load (Btuh)							525				
13 Internal	a Occupants at 230 and 200 Btuh			0		0	0		0	0	0	
	b Scenario number					0				0		
	c Default Adjustments											
	d Custom Appliances					3400	2000			3400	2000	
	e Plants						0				0	
14 Subtotals	Sum lines 6 through 12					3501	6867	2525		3501	6867	
15 Duct Loads	EHLF & ESGF		0	0		0	0			0	0	
	ELG							0				0
16 Ventilation Loads	Vent Cfm	0	E Cfm	0		0	0	0				
17 Winter Humidification Load	Gal/Day		0			0						
18 Piping Load						0						
19 Blower Heat							0					
20 AED Excursion & Latent Moisture Migration Load							410				410	
21 Total Load	Sum lines 13 through 19					3501	6867	2525		3501	6867	



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

J1 Form - Worksheet A
Entire House
SPEEDY CALC'S LLC

Job: 6910 SEMINOLE DRIVE
 Date: May 01, 2018
 By: TRICIA HIGGINS
 Plan: ADDITION

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Supporting Detail	
Project Name: 6910 SEMINOLE DRIVE	Date: May 01, 2018
Address: 6910 SEMINOLE DRIVE, BELLE ISLE, FL 32812	
Phone:	Job ID: 6910 SEMINOLE DRIVE

Worksheet A	
Location and Design Conditions	
Weather Location: Orlando Intl AP, FL, US	Elevation = 105 Latitude = 28
Indoor Conditions, Heating: DB = 70 °F RH = 50 %	Indoor Conditions, Cooling: DB = 75 °F RH = 50 %
Table 1 Conditions 99% DB = 42 °F 1% DB = 92 °F	Grains Difference = 47 gr/lb Daily Range = M
Design Temperature Differences	HTD = 28 °F CTD = 17 °F

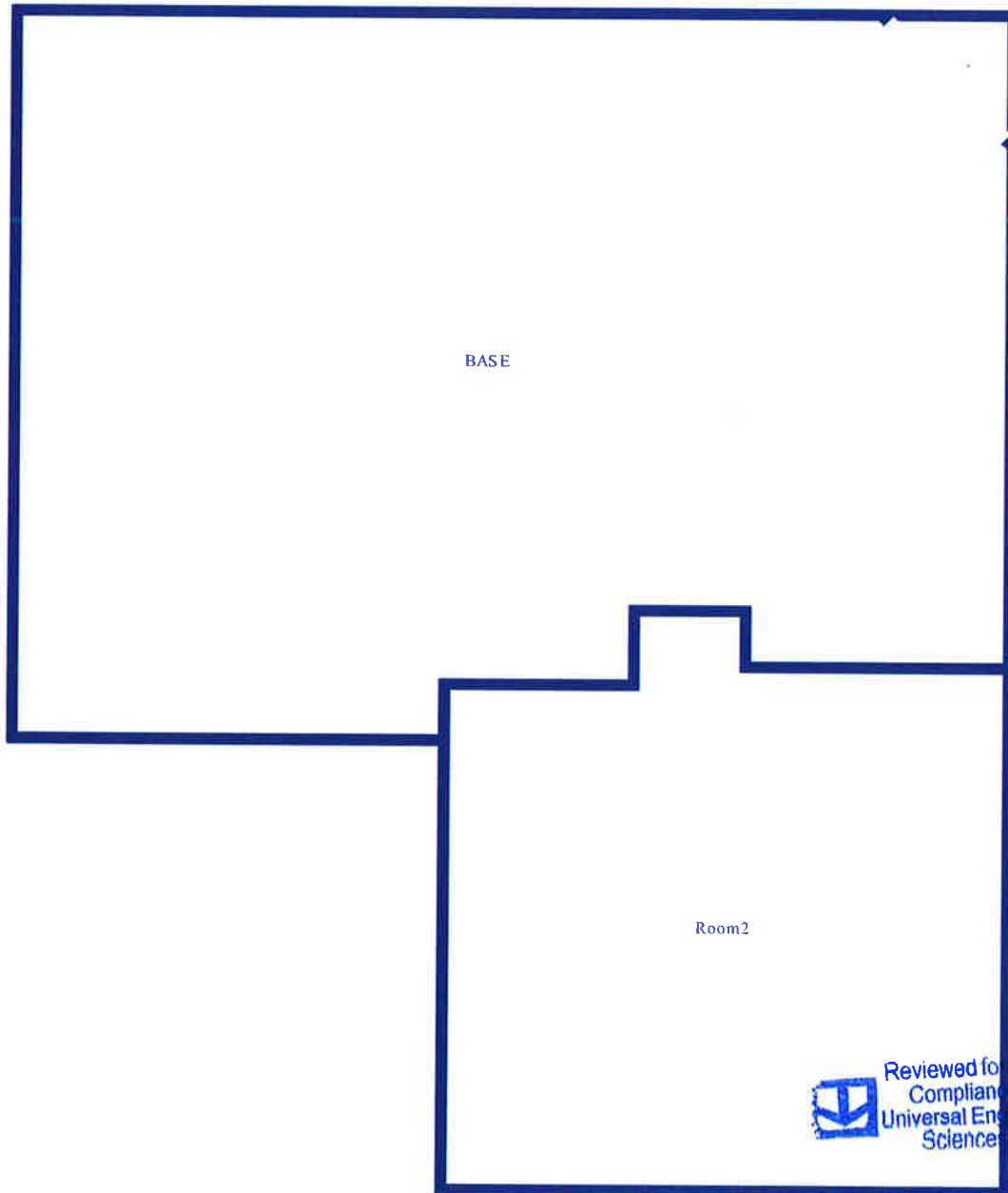


Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



Sheet 1

FINAL DUCT DESIGN TO BE COMPLETED ON JOB SITE BY HVAC CONTRACTOR DUE TO VARIATION IN TRUSS PACKET. THE MANUAL D WILL BE USED FOR CORRECT SUPPLY AIR AND RETURN AIR SIZING PER 2017 FL BLDG CODE 6TH EDITION



 Reviewed for Code Compliance
Universal Engineering Sciences

Job #: 6910 SEMINOLE DRIVE
Performed by TRICIA HIGGINS for:

AIMEE & JOHN WILKINS
6910 SEMINOLE DRIVE
BELLE ISLE, FL 32812

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Scale: 1 : 112

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SECOND FLOOR



Reviewed for Code
Compliance
Universal Engineering
Sciences

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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)



FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: SECOND FLOOR ADDITION Street: 6910 SEMINOLE DRIVE City, State, Zip: BELL ISLE, FL, 32812 Owner: AIMEE & JOHN WILKINS Design Location: FL, Orlando	Builder Name: MESSINA CONSTRUCTION Permit Office: BELLE ISLE Permit Number: Jurisdiction: County: ORANGE (Florida Climate Zone 2)
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<table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:30%;">1. New construction or existing</td> <td style="width:30%;">Addition</td> <td style="width:40%;"></td> </tr> <tr> <td>2. Single family or multiple family</td> <td>Single-family</td> <td></td> </tr> <tr> <td>3. Number of units, if multiple family</td> <td>1</td> <td></td> </tr> <tr> <td>4. Number of Bedrooms (Bedrms In Addition)</td> <td>0(0)</td> <td></td> </tr> <tr> <td>5. Is this a worst case?</td> <td>No</td> <td></td> </tr> <tr> <td>6. Conditioned floor area above grade (ft²)</td> <td>312</td> <td></td> </tr> <tr> <td> Conditioned floor area below grade (ft²)</td> <td>0</td> <td></td> </tr> <tr> <td>7. Windows (57.0 sqft.)</td> <td>Description</td> <td>Area</td> </tr> <tr> <td> a. U-Factor:</td> <td>DbI, U=0.40</td> <td>57.00 ft²</td> </tr> <tr> <td> SHGC:</td> <td>SHGC=0.25</td> <td></td> </tr> <tr> <td> b. U-Factor:</td> <td>N/A</td> <td>ft²</td> </tr> <tr> <td> SHGC:</td> <td></td> <td></td> </tr> <tr> <td> c. U-Factor:</td> <td>N/A</td> <td>ft²</td> </tr> <tr> <td> SHGC:</td> <td></td> <td></td> </tr> <tr> <td> d. U-Factor:</td> <td>N/A</td> <td>ft²</td> </tr> <tr> <td> SHGC:</td> <td></td> <td></td> </tr> <tr> <td> Area Weighted Average Overhang Depth:</td> <td>1.333 ft</td> <td></td> </tr> <tr> <td> Area Weighted Average SHGC:</td> <td>0.250</td> <td></td> </tr> <tr> <td>8. Floor Types (0.0 sqft.)</td> <td>Insulation</td> <td>Area</td> </tr> <tr> <td> a. N/A</td> <td>R=</td> <td>ft²</td> </tr> <tr> <td> b. N/A</td> <td>R=</td> <td>ft²</td> </tr> <tr> <td> c. N/A</td> <td>R=</td> <td>ft²</td> </tr> </table>	1. New construction or existing	Addition		2. Single family or multiple family	Single-family		3. Number of units, if multiple family	1		4. Number of Bedrooms (Bedrms In Addition)	0(0)		5. Is this a worst case?	No		6. Conditioned floor area above grade (ft ²)	312		Conditioned floor area below grade (ft ²)	0		7. Windows (57.0 sqft.)	Description	Area	a. U-Factor:	DbI, U=0.40	57.00 ft ²	SHGC:	SHGC=0.25		b. U-Factor:	N/A	ft ²	SHGC:			c. U-Factor:	N/A	ft ²	SHGC:			d. U-Factor:	N/A	ft ²	SHGC:			Area Weighted Average Overhang Depth:	1.333 ft		Area Weighted Average SHGC:	0.250		8. Floor Types (0.0 sqft.)	Insulation	Area	a. N/A	R=	ft ²	b. N/A	R=	ft ²	c. N/A	R=	ft ²	<table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:30%;">9. Wall Types (600.0 sqft.)</td> <td style="width:30%;">Insulation</td> <td style="width:40%;">Area</td> </tr> <tr> <td> a. Frame - Wood, Exterior</td> <td>R=13.0</td> <td>600.00 ft²</td> </tr> <tr> <td> b. N/A</td> <td>R=</td> <td>ft²</td> </tr> <tr> <td> c. N/A</td> <td>R=</td> <td>ft²</td> </tr> <tr> <td> d. N/A</td> <td>R=</td> <td>ft²</td> </tr> <tr> <td>10. Ceiling Types (312.0 sqft.)</td> <td>Insulation</td> <td>Area</td> </tr> <tr> <td> a. Roof Deck (Unvented)</td> <td>R=20.0</td> <td>312.00 ft²</td> </tr> <tr> <td> b. N/A</td> <td>R=</td> <td>ft²</td> </tr> <tr> <td> c. N/A</td> <td>R=</td> <td>ft²</td> </tr> <tr> <td>11. Ducts</td> <td></td> <td>R ft²</td> </tr> <tr> <td>12. Cooling systems</td> <td>kBtu/hr</td> <td>Efficiency</td> </tr> <tr> <td> a. Central Unit</td> <td>12.0</td> <td>SEER:22.70</td> </tr> <tr> <td>13. Heating systems</td> <td>kBtu/hr</td> <td>Efficiency</td> </tr> <tr> <td> a. Electric Heat Pump</td> <td>13.6</td> <td>HSPF:11.40</td> </tr> <tr> <td>14. Hot water systems - None required</td> <td></td> <td></td> </tr> <tr> <td> a.</td> <td></td> <td>Cap: N/A</td> </tr> <tr> <td></td> <td></td> <td>EF: 0.000</td> </tr> <tr> <td> b. Conservation features</td> <td></td> <td></td> </tr> <tr> <td> None</td> <td></td> <td></td> </tr> <tr> <td>15. Credits</td> <td></td> <td>Pstat</td> </tr> </table>	9. Wall Types (600.0 sqft.)	Insulation	Area	a. Frame - Wood, Exterior	R=13.0	600.00 ft ²	b. N/A	R=	ft ²	c. N/A	R=	ft ²	d. N/A	R=	ft ²	10. Ceiling Types (312.0 sqft.)	Insulation	Area	a. Roof Deck (Unvented)	R=20.0	312.00 ft ²	b. N/A	R=	ft ²	c. N/A	R=	ft ²	11. Ducts		R ft ²	12. Cooling systems	kBtu/hr	Efficiency	a. Central Unit	12.0	SEER:22.70	13. Heating systems	kBtu/hr	Efficiency	a. Electric Heat Pump	13.6	HSPF:11.40	14. Hot water systems - None required			a.		Cap: N/A			EF: 0.000	b. Conservation features			None			15. Credits		Pstat
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Glass/Floor Area: 0.183	Total Proposed Modified Loads: 7.91	PASS
	Total Baseline Loads: 13.04	


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

PREPARED BY: Speedy Codes LLC
 DATE: 5-2-18

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

OWNER/AGENT: _____
 DATE: _____

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



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 7.00 ACH50 (R402.4.1.2).



ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 61

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

6910 SEMINOLE DRIVE, BELL ISLE, FL, 32812

1. New construction or existing	Addition		9. Wall Types	Insulation	Area
2. Single family or multiple family	Single-family		a. Frame - Wood, Exterior	R=13.0	600.00 ft²
3. Number of units, if multiple family	1		b. N/A	R=	ft²
4. Number of Bedrooms	0(0)		c. N/A	R=	ft²
5. Is this a worst case?	No		d. N/A	R=	ft²
6. Conditioned floor area (ft²)	312		10. Ceiling Types	Insulation	Area
7. Windows**	Description	Area	a. Roof Deck (Unvented)	R=20.0	312.00 ft²
a. U-Factor:	Dbl, U=0.40	57.00 ft²	b. N/A	R=	ft²
SHGC:	SHGC=0.25		c. N/A	R=	ft²
b. U-Factor:	N/A	ft²	11. Ducts		R ft²
SHGC:					
c. U-Factor:	N/A	ft²	12. Cooling systems	kBtu/hr	Efficiency
SHGC:			a. Central Unit	12.0	SEER:22.70
d. U-Factor:	N/A	ft²	13. Heating systems	kBtu/hr	Efficiency
SHGC:			a. Electric Heat Pump	13.6	HSPF:11.40
Area Weighted Average Overhang Depth:		1.333 ft.	14. Hot water systems - None required		
Area Weighted Average SHGC:		0.250	a.		Cap: N/A
8. Floor Types	Insulation	Area	b. Conservation features		EF:
a. N/A	R=	ft²	None		
b. N/A	R=	ft²	15. Credits		Pstat
c. N/A	R=	ft²			

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

Builder Signature: _____ Date: _____

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



*Note: This is not a Building Energy Rating. If your Index is below 70, your home may qualify for energy efficient mortgage (EEM) incentives if you obtain a Florida EnergyGauge Rating. Email EnergyGauge tech support at techsupport@energygauge.com or see the EnergyGauge web site at energygauge.com for information and a list of certified Raters. For information about the Florida Building Code, Energy Conservation, contact the Florida Building Commission's support staff.

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



PROJECT															
Title:	SECOND FLOOR ADDITION			Bedrooms:	0		Address Type:	Street Address							
Building Type:	User			Conditioned Area:	312		Lot #								
Owner Name:	AIMEE & JOHN WILKINS			Total Stories:	1		Block/Subdivision:								
# of Units:	1			Worst Case:	No		PlatBook:								
Builder Name:	MESSINA CONSTRUCTION			Rotate Angle:	0		Street:	6910 SEMINOLE DRIV							
Permit Office:	BELLE ISLE			Cross Ventilation:			County:	ORANGE							
Jurisdiction:				Whole House Fan:			City, State, Zip:	BELL ISLE , FL , 32812							
Family Type:	Single-family														
New/Existing:	Addition														
Comment:															
CLIMATE															
✓	Design Location	TMY Site		Design Temp	97.5 %	2.5 %	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily Temp Range			
___	FL, Orlando	FL_ORLANDO_INTL_AR		41	91		70	75	526	44	Medium				
BLOCKS															
Number	Name	Area	Volume												
1	Block1	312	2496												
SPACES															
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated					
1	Main	312	2496	No	0		1	Yes	Yes	Yes					
ROOF															
✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)			
___	1	Hip	Composition shingles	338 ft²	0 ft²	Medium	0.96	No	0.9	No	20	22.6			
ATTIC															
✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
___	1	Full attic	Unvented	0	312 ft²	N	Y								
CEILING															
✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type							
___	1	Under Attic (Unvented)	Main	0	Blown	312 ft²	0.11	Wood							
WALLS															
✓	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor	Below Grade%
___	1	NE	Exterior	Frame - Wood	Main	13	13	2	8		105.3 ft²		0	0.300000	0
___	2	SE	Exterior	Frame - Wood	Main	13	24	4	8		194.7 ft²		0	0.300000	0
___	3	SW	Exterior	Frame - Wood	Main	13	13	2	8		105.3 ft²		0	0.300000	0
___	4	NW	Exterior	Frame - Wood	Main	13	24	4	8		194.7 ft²		0	0.300000	0



WINDOWS

Orientation shown is the entered, Proposed orientation.

✓ #	Wall		Panels	NFRC	U-Factor	SHGC	Imp	Area	Overhang		Int Shade	Screening
	Ornt	ID							Depth	Separation		
1	SW	3	Vinyl Low-E Double	Yes	0.4	0.25	N	45.0 ft²	1 ft 4 in	1 ft 4 in	Drapes/blinds	Exterior 5
2	NW	4	Vinyl Low-E Double	Yes	0.4	0.25	N	12.0 ft²	1 ft 4 in	1 ft 4 in	Drapes/blinds	Exterior 5

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	000356	291.2	15.99	30.06	2598	7

HEATING SYSTEM

✓ #	System Type	Subtype	Efficiency	Capacity	Block	Ducts
1	Electric Heat Pump/Suppleme	None	HSPF: 11.4	13.6 kBtu/hr	1	Ductless

COOLING SYSTEM

✓ #	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
1	Central Unit/Supplemental for	None	SEER: 22.7	12 kBtu/hr	383 cfm	0.75	1	Ductless

SOLAR HOT WATER SYSTEM

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

TEMPERATURES

Programable Thermostat: Y		Ceiling Fans:											
Cooling	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Venting	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Thermostat Schedule: HERS 2006 Reference		Hours											
Schedule Type		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



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

ADDRESS: 6910 SEMINOLE DRIVE
BELL ISLE, FL, 32812

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

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.

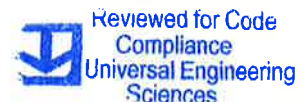
Exceptions:

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.



2017 - AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

TABLE 402.4.1.1
AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

Project Name:	SECOND FLOOR ADDITION	Builder Name:	MESSINA CONSTRUCTION
Street:	6910 SEMINOLE DRIVE	Permit Office:	BELLE ISLE
City, State, Zip:	BELL ISLE, FL, 32812	Permit Number:	
Owner:	AIMEE & JOHN WILKINS	Jurisdiction:	
Design Location:	FL, Orlando		
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 walls.	
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 or 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 ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Envelope Leakage Test Report Performance Method

Project Name: SECOND FLOOR ADDITION Street: 6910 SEMINOLE DRIVE City, State, Zip: BELL ISLE, FL, 32812 Design Location: FL, Orlando Cond. Floor Area: 312 sq.ft.	Builder Name: MESSINA CONSTRUCTION Permit Office: BELLE ISLE Permit Number: Jurisdiction: Cond. Volume: 2496 cu ft.
--	---

Envelope Leakage Test Results

Regression Data:

C: _____ n: _____ R: _____

Single or Multi Point Test Data

	HOUSE PRESSURE	FLOW:	
1	Pa	cfm	
2	Pa	cfm	
3	Pa	cfm	
4	Pa	cfm	
5	Pa	cfm	
6	Pa	cfm	

Leakage Characteristics

Required ACH(50) from
FORM R405-2017 : _____

Tested ACH(50) * : _____

*Tested leakage must be less than or equal to the required ACH(50) shown on Form R405-2017 for this building. If the tested ACH(50) is less than 3 the building must have a mechanical ventilation system.

R402.4.1.2 Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 7 air changes per hour in Climate Zones 1 and 2 ... Testing shall be conducted with a blower door at a pressure of 0.2 inches 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.

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; and
6. Supply and return registers, if installed at the time of the test, shall be fully open.

I hereby certify that the above envelope leakage performance results demonstrate compliance with Florida Energy Code requirements in accordance with Section R402.4.1.2.

SIGNATURE: _____

PRINTED NAME: _____

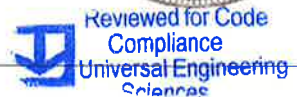
DATE: _____

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 third party conducting the test and provided to the code official.



BUILDING OFFICIAL: _____

DATE: _____



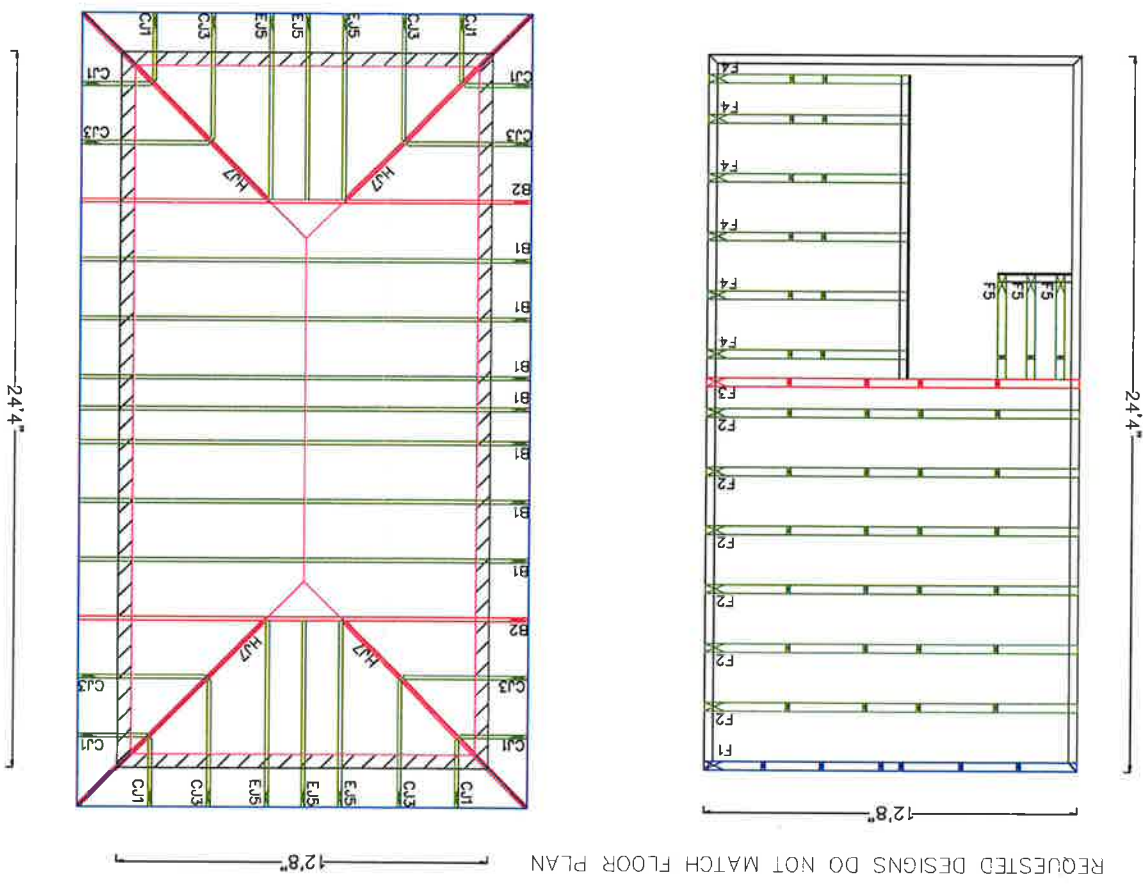
ALWAYS SET TRUSSES PER LAYOUT AND ENGINEERING THAT ACCOMPANY THE TRUSSES AT DELIVERY
 Refer to truss engineering to verify all girder ply quantities and required nailing/ bolting pattern.

RECEIVED
 MAY 17 2018
 BY: _____

Reviewed for Code Compliance
 Universal Engineering Sciences

BUILDER TO REVIEW AND APPROVE ALL DIMENSIONS, WALL HEIGHTS, FLOOR HEIGHTS, ROOFING AND WIND EXPOSURE AND ALL FLOOR, CEILING AND ROOF CONDITIONS REFLECTED ON THIS LAYOUT AND THE SHOP DRAWINGS BY SIGNING BELOW AND SUBMITTING IT TO OUR OFFICE PRIOR TO FABRICATION

WILL ADJUST LAYOUT PER CUSTOMER FINAL PLACE DESIGN



SCALE: 1/8" = 1'-0"
 DATE: 05/15/18
 DRAWN BY: BCW
 JOB NUMBER: 20621
 LOT/BLK/SUBDIV: 6910 SEMINOLE DR
 JOB NAME: WILKINS RES
 CUSTOMER: MESSINA CONST
 407-321-1440 / 386-872-5098 / 352-557-4901
 LONGWOOD / ORMOND BEACH / MASCOTTE
 ACCU-SPAN TRUSS CO.
 FLOOR TRUSSES
 ROOF TRUSSES

APPROVAL OF THIS TRUSS LAYOUT IS NECESSARY BEFORE FABRICATION CAN BEGIN. VERIFY SPANS, PITCHES, OVERHANGS, HEELS AND BEARING CONDITIONS. ACCEPTANCE OF THIS LAYOUT ASSUMES TOTAL RESPONSIBILITY. TRUSSES WILL BE BUILT PER THIS LAYOUT.

ATTENTION
 TRUSSES SHALL BE INSTALLED IN A STRAIGHT AND PLUMB POSITION WHERE NO SHEATHING IS APPLIED DIRECTLY TO TOP OF TRUSSES. BRACING OR BRACING OF METAL PLATE CONNECTED TO TRUSSES SHALL BE INSTALLED IN ACCORDANCE WITH THE DESIGNER'S REQUIREMENTS. TRUSSES SHALL BE MAINTAINED IN A STRAIGHT AND PLUMB POSITION THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS. TRUSSES SHALL BE MAINTAINED IN A STRAIGHT AND PLUMB POSITION THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS. TRUSSES SHALL BE MAINTAINED IN A STRAIGHT AND PLUMB POSITION THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS.

WARNING
 CONVENTIONAL FRAMING, ERECTION AND/OR PERMANENT BRACING IS NOT THE RESPONSIBILITY OF THE TRUSS DESIGNER. PLATE MANUFACTURER, OR TRUSS MANUFACTURER PERSONS ERECTING TRUSSES ARE CAUTIONED TO SEEK PROFESSIONAL ADVICE REGARDING ERECTION BRACING WHICH IS ALWAYS REQUIRED TO PREVENT TOPPING AND DOMING DURING ERECTION. AND PERMANENT BRACING WHICH MAY BE REQUIRED IN SPECIFIC APPLICATIONS. SEE GUIDE TO GOOD PRACTICE FOR HANDLING TRUSSES. BRACING AND BRACING OF METAL PLATE CONNECTED TO TRUSSES SHALL BE INSTALLED IN ACCORDANCE WITH THE DESIGNER'S REQUIREMENTS. TRUSSES SHALL BE MAINTAINED IN A STRAIGHT AND PLUMB POSITION THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS. TRUSSES SHALL BE MAINTAINED IN A STRAIGHT AND PLUMB POSITION THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS.

NOTE
 IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER OR ARCHITECT TO PROVIDE AN APPROPRIATE CONNECTION FOR TRUSSES TO SUPPORTING STRUCTURE PER REACTIONS SHOWN ON TRUSSES. ENGINEERING, SECTIONS FOR MECHANICAL EQUIPMENT AND/OR PILING (AND THEIR CONNECTIONS) IN TRUSS SPACE MUST BE OBTAINED BY BUILDER ON APPROVED TRUSS LAYOUT PRIOR TO FABRICATION.
 THIS COMPANY IS A TRUSS MANUFACTURER WHOSE RESPONSIBILITIES ARE LIMITED TO THOSE DESCRIBED IN WTC-1-1995. DESIGN RESPONSIBILITY ACCORDING TO IBC-1995. ANY RESPONSIBILITIES AND/OR LIABILITY FOR THE CONSTRUCTION DESIGN, DRAWINGS, DOCUMENTS INCLUDING THE INSTALLATION AND BRACING OF TRUSSES MANUFACTURED BY THIS COMPANY.

BEARING HEIGHTS

THA422	3	- 8'-0" HEIGHT
HGU5262	0	- 17'-3/4" HEIGHT - LUS24
		- 00'-0" HEIGHT

HANGER TAKEOFF

