

Received 01/03/2019



Initial Application Date: 1/2/19

Application # SFD1901-0004

CU# \_\_\_\_\_

COUNTY OF HARNETT RESIDENTIAL LAND USE APPLICATION  
Central Permitting 108 E. Front Street, Lillington, NC 27546 Phone: (910) 893-7525 ext:2 Fax: (910) 893-2793 www.harnett.org/permits

"A RECORDED SURVEY MAP, RECORDED DEED (OR OFFER TO PURCHASE) & SITE PLAN ARE REQUIRED WHEN SUBMITTING A LAND USE APPLICATION"

LANDOWNER: H&H Constructors of Fayetteville, LLC. Mailing Address: 2919 Breezewood Ave. Ste. 400  
City: Fayetteville State: NC Zip: 28303 Contact No: 910-486-4864 Email: Stacysimmons@hhhomes.com

APPLICANT: Same As Above Mailing Address: Same As Above  
City: Fayetteville State: NC Zip: 28303 Contact No: 910-486-4864 Email: Stacysimmons@hhhomes.com

\*Please fill out applicant information if different than landowner  
CONTACT NAME APPLYING IN OFFICE: Stacy Simmons Phone # 910-486-4864  
ADDRESS: 151 Pittfield Run PIN: 9595-40-2119  
DEED OR OTP: 3593-237

- PROPOSED USE:
- SFD: (Size 36 x 54) # Bedrooms: 4 # Baths: 2.5 Basement (w/wo bath):  Garage:  Deck:  Crawl Space:  Slab:  Monolithic Slab:   
(Is the bonus room finished?  yes  no w/ a closet?  yes  no (if yes add in with # bedrooms)
  - Mod: (Size \_\_\_\_\_ x \_\_\_\_\_) # Bedrooms \_\_\_\_\_ # Baths \_\_\_\_\_ Basement (w/wo bath)  Garage:  Site Built Deck:  On Frame  Off Frame   
(Is the second floor finished?  yes  no Any other site built additions?  yes  no
  - Manufactured Home:  SW  DW  TW (Size \_\_\_\_\_ x \_\_\_\_\_) # Bedrooms: \_\_\_\_\_ Garage:  site built?  Deck:  site built?
  - Duplex: (Size \_\_\_\_\_ x \_\_\_\_\_) No. Buildings: \_\_\_\_\_ No. Bedrooms Per Unit: \_\_\_\_\_
  - Home Occupation: # Rooms: \_\_\_\_\_ Use: \_\_\_\_\_ Hours of Operation: \_\_\_\_\_ #Employees: \_\_\_\_\_
  - Addition/Accessory/Other: (Size \_\_\_\_\_ x \_\_\_\_\_) Use: \_\_\_\_\_ Closets in addition?  yes  no

Water Supply:  County \_\_\_\_\_ Existing Well \_\_\_\_\_ New Well (# of dwellings using well \_\_\_\_\_) \*Must have operable water before final  
(Need to Complete New Well Application at the same time as New Tank)  
Sewage Supply: \_\_\_\_\_ New Septic Tank \_\_\_\_\_ Expansion \_\_\_\_\_ Relocation \_\_\_\_\_ Existing Septic Tank  County Sewer  
(Complete Environmental Health Checklist on other side of application if Septic)  
Does owner of this tract of land, own land that contains a manufactured home within five hundred feet (500') of tract listed above?  yes  no  
Does the property contain any easements whether underground or overhead  yes  no  
Structures (existing or proposed): Single family dwellings: Proposed Manufactured Homes: \_\_\_\_\_ Other (specify): \_\_\_\_\_

If permits are granted I agree to conform to all ordinances and laws of the State of North Carolina regulating such work and the specifications of plans submitted. I hereby state that foregoing statements are accurate and correct to the best of my knowledge. Permit subject to revocation if false information is provided.

Stacy Simmons Signature of Owner or Owner's Agent Date 1/2/19

\*\*\*It is the owner/applicants responsibility to provide the county with any applicable information about the subject property, including but not limited to: boundary information, house location, underground or overhead easements, etc. The county or its employees are not responsible for any incorrect or missing information that is contained within these applications.\*\*\*  
\*This application expires 6 months from the initial date if permits have not been issued\*\*  
APPLICATION CONTINUES ON BACK

strong roots • new growth

strong roots • new growth



Application # SFD1901-0004

Harnett County Central Permitting

PO Box 65 Lillington, NC 27546

910-893-7525 Fax 910-893-2793 www.harnett.org/permits

Each section below to be filled out by whomever performing work. Must be owner or licensed contractor. Address, company name & phone must match information on license!

**Application for Residential Building and Trades Permit**

Owner's Name: H&H Constructors of Fayetteville, LLC. Date: 1/2/19  
Site Address: 151 Pittfield Run Phone: 910-486-4864  
Subdivision: Manor @ Lexington Plantation Lot: 759  
Description of Proposed Work: New Single Family Residential

**General Contractor Information**

H&H Constructors of Fayetteville, LLC. 910-486-4864  
Building Contractor's Company Name Telephone  
2919 Breezewood Ave. Ste. 400 Fayetteville, NC 28303 Stacysimmons@hhhomes.com  
Address Email Address  
74158  
License #

**Electrical Contractor Information**

Description of Work Single Family Electric Service Size: 200 Amps T-Pole:  Yes  No  
JM Pope Electric, Inc. 919-776-5144  
Electrical Contractor's Company Name Telephone  
409 Chatham Street Sanford, NC 27330 Electricpope@windstream.net  
Address Email Address  
21326  
License #

**Mechanical/HVAC Contractor Information**

Description of Work Single Family HVAC  
Carolina comfort Air, Inc. 910-891-1239  
Mechanical Contractor's Company Name Telephone  
703 N. Clinton Ave. Dunn, NC 28334 Carolinacomfortair@yahoo.com  
Address Email Address  
29077 H-3-1  
License #

**Plumbing Contractor Information**

Description of Work Single Family Plumbing # Baths 2.5  
Dell Haire Plumbing 910-429-9939  
Plumbing Contractor's Company Name Telephone  
PO Box 65048/ 620 Gillespie St. Fay. NC 28306 dellhaireplumbing@hotmail.com  
Address Email Address  
32886 P-1  
License #

**Insulation Contractor Information**

Tricity Insulation Inc. 418 Person St. Fay. NC 28301 910-486-8855  
Insulation Contractor's Company Name & Address Telephone

\*NOTE: General Contractor / owner must fill out and sign the second page of this application.



I hereby certify that I have the authority to make necessary application, that the application is correct and that the construction will conform to the regulations in the Building, Electrical, Plumbing and Mechanical codes, and the Harnett County Zoning Ordinance. I state the information on the above contractors is correct as known to me and that by signing below, I have obtained all subcontractors permission to obtain these permits and if any changes occur including listed contractors, site plan, number of bedrooms, building and trade plans, Environmental Health permit changes or proposed use changes, I certify it is my responsibility to notify the Harnett County Central Permitting Department of any and all changes.

**EXPIRED PERMIT FEES:** 6 Months to 2 years permit re-issue fee is \$150.00. After 2 years re-issue fee is as per current fee schedule.

Hayden Simmons  
Signature of Owner/Contractor/Officer(s) of Corporation

1/2/19  
Date

**Affidavit for Worker's Compensation N.C.G.S. 87-14**

The undersigned applicant being the:

General Contractor     Owner     Officer/Agent of the Contractor or Owner

Do hereby confirm under penalties of perjury that the person(s), firm(s) or corporation(s) performing the work set forth in the permit:

Has three (3) or more employees and has obtained workers' compensation insurance to cover them.

Has one (1) or more subcontractors(s) and has obtained workers' compensation insurance to cover them.

Has one (1) or more subcontractors(s) who has their own policy of workers' compensation insurance covering themselves.

Has no more than two (2) employees and no subcontractors.

While working on the project for which this permit is sought it is understood that the Central Permitting Department issuing the permit may require certificates of coverage of worker's compensation insurance prior to issuance of the permit and at any time during the permitted work from any person, firm or corporation carrying out the work.

Sign w/Title Hayden Simmons / Permit Coordinator Date: 1/2/19

I, MICHAEL P. GRIFFIN, certify that under my direction and supervision this map was drawn from an actual field survey; that the error of closure of the survey as calculated by coordinates is 1:10,000+; that the area shown hereon was calculated by coordinates.  
 Witness my hand and seal this day of MONTH 2008.

MAP 2017 PGS 98-99  
 HARNETT CO. REGISTRY

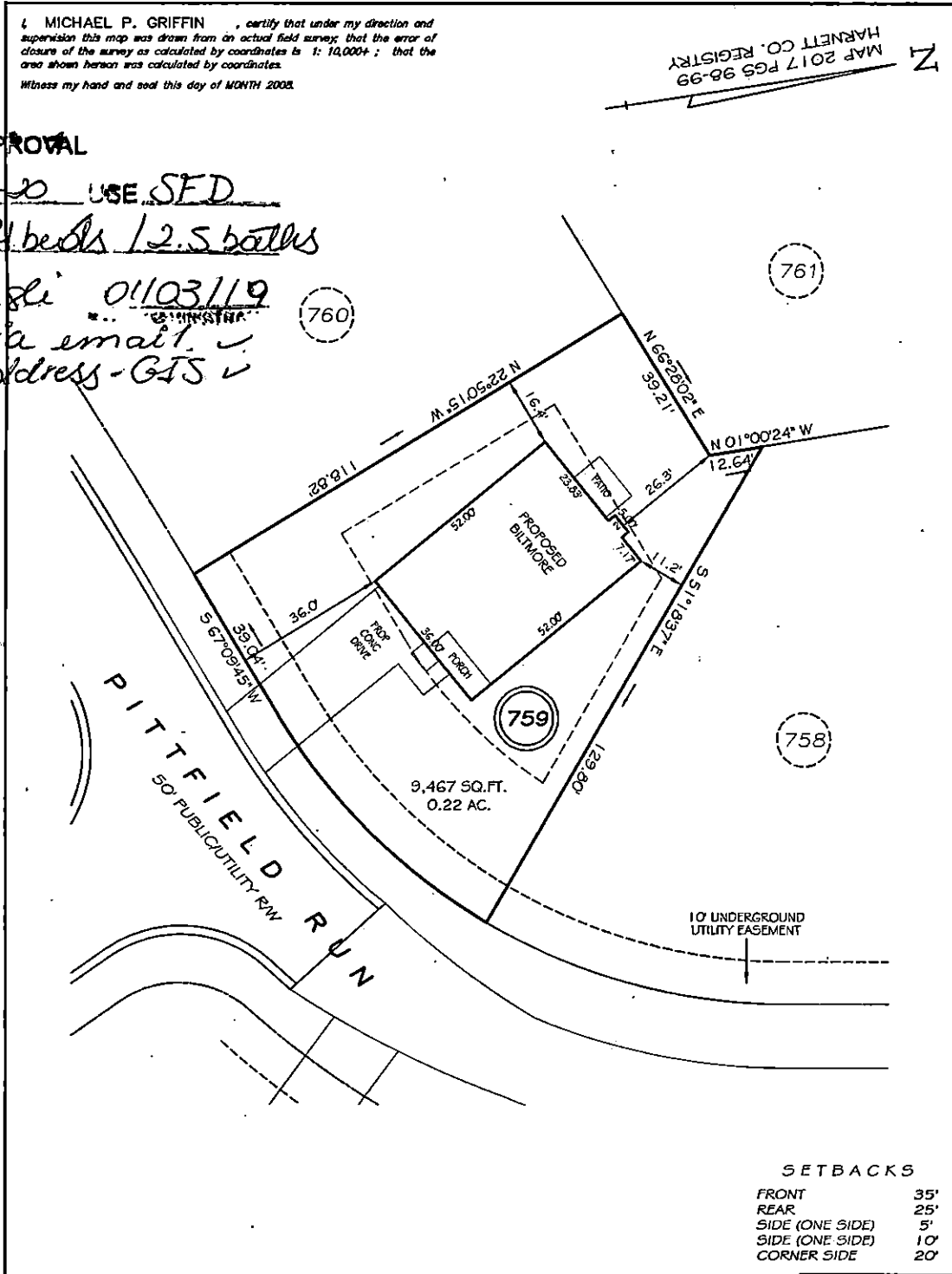
**SITE PLAN APPROVAL**

DISTRICT RA-20 USE SFD

#BEDROOMS 4 beds / 2.5 baths

Okaszwski 01103/119

*Received via email ✓  
 Verified address - GIS ✓*



**SETBACKS**

FRONT	35'
REAR	25'
SIDE (ONE SIDE)	5'
SIDE (ONE SIDE)	10'
CORNER SIDE	20'

CI R=140.00' L=69.57' N52°55'34"E 68.86'

**PRELIMINARY**  
 NOT FOR RECORDATION,  
 SALES OR CONVEYANCE.

**LEGEND**

EIP	EXISTING IRON PIPE	FES	FLARED END SECTION
IPS	IRON PIPE SET	WM	WATER METER
RW	RIGHT OF WAY	CO	CLEAN OUT
N/F	NOW OR FORMERLY	FH	FIRE HYDRANT
EIS	EXISTING IRON STAKE	CB	CATCH BASIN

**LS** GRIFFIN LAND SURVEYING, INC.  
 P.O. BOX 148  
 FUQUAY-VARINA, NC 27526  
 (919) - 567-1963

**PLOT PLAN**  
 FOR  
**H & H HOMES**  
 LEXINGTON PLANTATION  
 LOT 759  
 PITTFIELD RUN  
 NORTH CAROLINA  
 HARNETT COUNTY ANDERSON CREEK TOWNSHIP

DRAWN BY <u>NMF</u>	DATE <u>11/15/18</u>
CHECKED BY <u>MPG</u>	SCALE <u>1" = 30'</u>


**DO NOT REMOVE!**

**Details: Appointment of Lien Agent**

Entry #: 966488

Filed on: 12/18/2018

Initially filed by: meaganbradshaw

<p><b>Designated Lien Agent</b></p> <p>First American Title Insurance Company</p> <p>Online: <a href="http://www.liensnc.com">www.liensnc.com</a></p> <p>Address: 19 W. Hargett St., Suite 507 / Raleigh, NC 27601</p> <p>Phone: 888-690-7384</p> <p>Fax: 913-489-5231</p> <p>Email: <a href="mailto:support@liensnc.com">support@liensnc.com</a></p>	<p><b>Project Property</b></p> <p>MLP000759 Lot 759 Manor at Lexington 151 Pittfield Run Cameron, NC 28326 Harnett County</p>	<p><b>Print &amp; Post</b></p>  <p><b>Contractors:</b> Please post this notice on the Job Site.</p> <p><b>Suppliers and Subcontractors:</b> Scan this image with your smart phone to view this filing. You can then file a Notice to Lien Agent for this project.</p>
<p><b>Owner Information</b></p> <p>H &amp; H Constructors of Fayetteville, LLC 2919 Breezewood Avenue Suite 400 Fayetteville, NC 28303 United States Email: <a href="mailto:stacysimmons@hhhomes.com">stacysimmons@hhhomes.com</a> Phone: 910-486-4864</p>	<p><b>Property Type</b></p> <p>1-2 Family Dwelling</p> <p><b>Date of First Furnishing</b></p> <p>12/15/2018</p>	

View Comments (0)

Technical Support Hotline: (888) 690-7384

# Truss/Rafter to Wood Double Top Plates

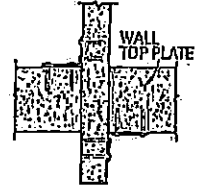


Model No.	Qty Reqd	Fasteners		DF/SP Allowable Loads				SPF Allowable Loads			
		To Rafters	To Plates	Uplift		Parallel to Plate (F <sub>1</sub> ) (133/160)	Perp. to Plate (F <sub>2</sub> ) (133/160)	Uplift		Parallel to Plate (F <sub>1</sub> ) (133/160)	Perp. to Plate (F <sub>2</sub> ) (133/160)
				(133)	(160)			(133)	(160)		
H2.5	1	5-8d	5-8d	415	415	150	150	365	365	130	130
H5A	1	3-8d	3-8d	350	420	115	180	245	245	100	120
HGA10	1	4-SDS <sup>1/2</sup> x1 1/2	4-SDS <sup>3/4</sup> x3	435	435	1165	940	375	375	870	815
H5	1	4-8d	4-8d	455	465	115	200	265	265	100	170
H1	1	6-8dx1 1/2	4-8d	490	585	485	165	400	400	415	140
H2.5A	1	5-8d	5-8d	600	600	110	110	520	535	110	110
LTS12	1	6-10dx1 1/2	6-10dx1 1/2	720	720	75	125	620	620	75	125
H8	1	5-10dx1 1/2	5-10dx1 1/2	620	745	—	—	530	565	—	—
H10-2	1	6-10d	6-10d	760	760	455	395	655	655	390	340
H2.5	2	10-8d	10-8d	830	830	300	300	730	730	260	260
H5	2	8-8d	8-8d	810	930	230	400	530	530	200	340
H10	1	8-8dx1 1/2	8-8dx1 1/2	905	990	585	525	780	850	505	450
MTS12	1	7-10dx1 1/2	7-10dx1 1/2	840	1000	75	125	730	860	75	125
H1	2	12-8dx1 1/2	8-8d	980	1170	970	330	800	800	830	280
H2.5A	2	10-8d	10-8d	1200	1200	220	220	1040	1070	220	220
LTS12	2	12-10dx1 1/2	12-10dx1 1/2	1440	1440	160	250	1240	1240	150	250
HTS20	1	12-10dx1 1/2	12-10dx1 1/2	1460	1450	75	125	1245	1245	75	125
H16S	1	2-10dx1 1/2	10-10dx1 1/2	1470	1470	—	—	1265	1265	—	—
H16	1	2-10dx1 1/2	10-10dx1 1/2	1470	1470	—	—	1265	1265	—	—
H10	2	6-8dx1 1/2	6-8dx1 1/2	1810	1980	1170	1050	1560	1700	1010	900
MTS12	2	14-10dx1 1/2	14-10dx1 1/2	1680	2000	150	250	1460	1720	160	250

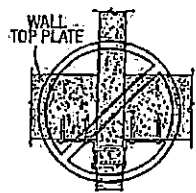
1. "—" in the tables indicates that the product has not been tested in the particular load direction listed.
2. For connections to single top plates, see page 12.
3. Fasten multiple members together to act as a single unit.



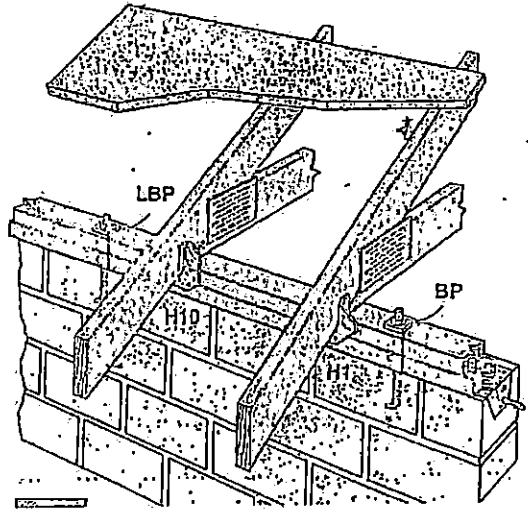
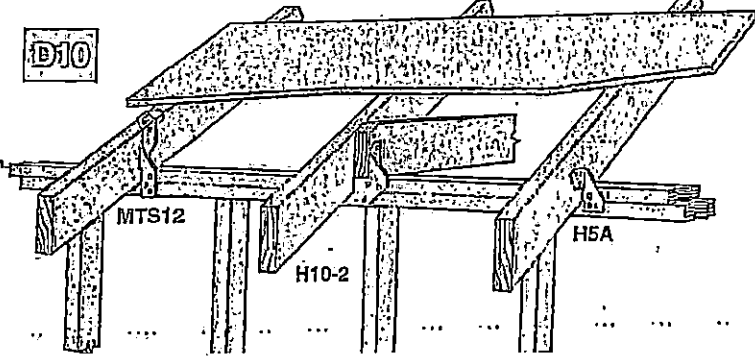
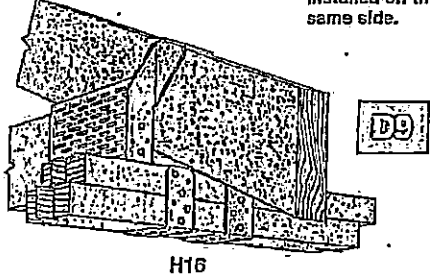
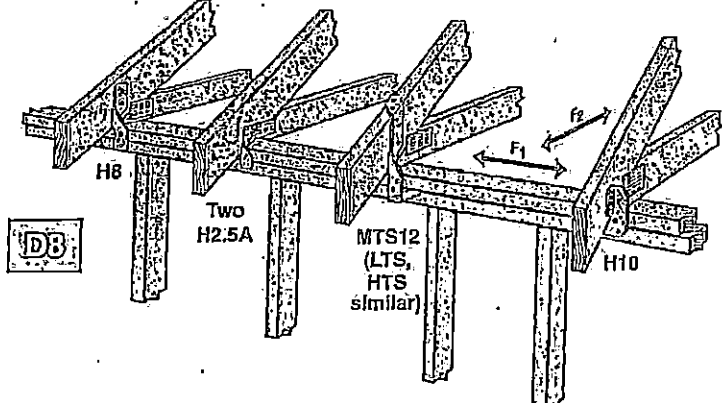
Hurricane Tie installations to Achieve Twice the Load (Top View)

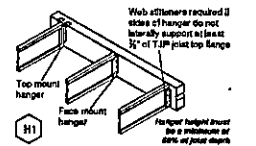
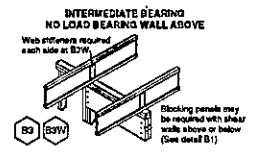
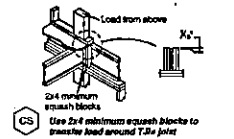
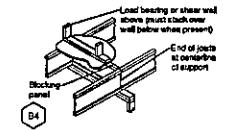
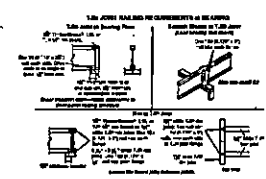
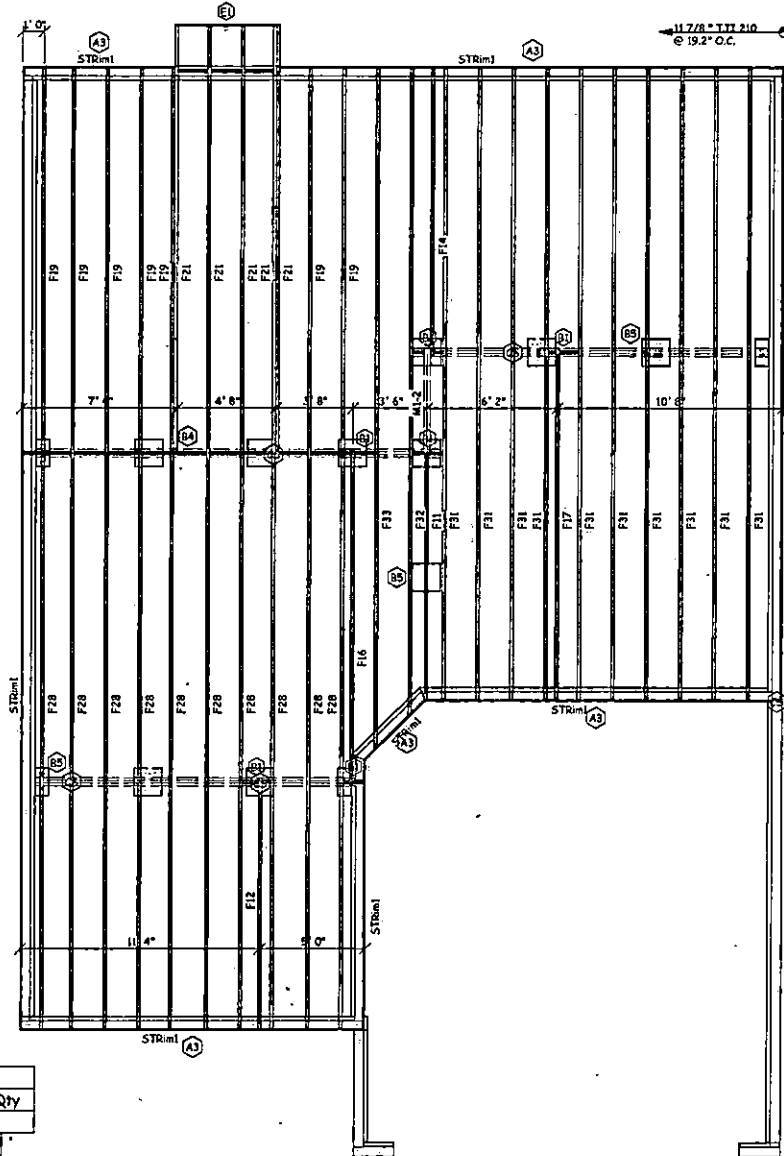


Install diagonally across from each other for minimum 2x truss.



Nailing into both sides of a single ply 2x truss may cause the wood to split. A minimum rafter thickness of 2 1/2" must be used when connectors are installed on the same side.





**WARNING**

**WARNING**  
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 V 301.624.5454

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 FAYETTEVILLE, NC 28405  
 V 910.483.1111

1188 NC HIGHWAYS  
 ASHCOVEEN, NC 28315  
 V 910.844.2516

**GENERAL NOTES:**  
 1. ALL JOIST AND BEAM CONNECTIONS AS SHOWN.  
 2. ALL JOIST AND BEAM CONNECTIONS TO BE MADE IN ACCORDANCE WITH THE T&E CONNECTION MANUAL, LATEST EDITION.  
 3. ALL JOIST AND BEAM CONNECTIONS TO BE MADE IN ACCORDANCE WITH THE T&E CONNECTION MANUAL, LATEST EDITION.  
 4. ALL JOIST AND BEAM CONNECTIONS TO BE MADE IN ACCORDANCE WITH THE T&E CONNECTION MANUAL, LATEST EDITION.  
 5. ALL JOIST AND BEAM CONNECTIONS TO BE MADE IN ACCORDANCE WITH THE T&E CONNECTION MANUAL, LATEST EDITION.

**H & H HOMES**  
**BILTMORE - MASTER**  
**FIRST FLOOR EWP PLACEMENT PLAN**  
 BFG - Greensboro, Aberdeen, & Fayetteville, MK  
 DWYER: JG  
 DATE: 3/30/2017  
 JOB FILE: 15175

**MINIMUM DESIGN DATA**  
 LIVE LOAD: 40 PSF  
 CEILING LOAD: 10 PSF  
 TOTAL LOAD: 50 PSF  
 STRESS DURATION: 1.00H  
 DEFLECTION CRITERIA: L/160 (interior)

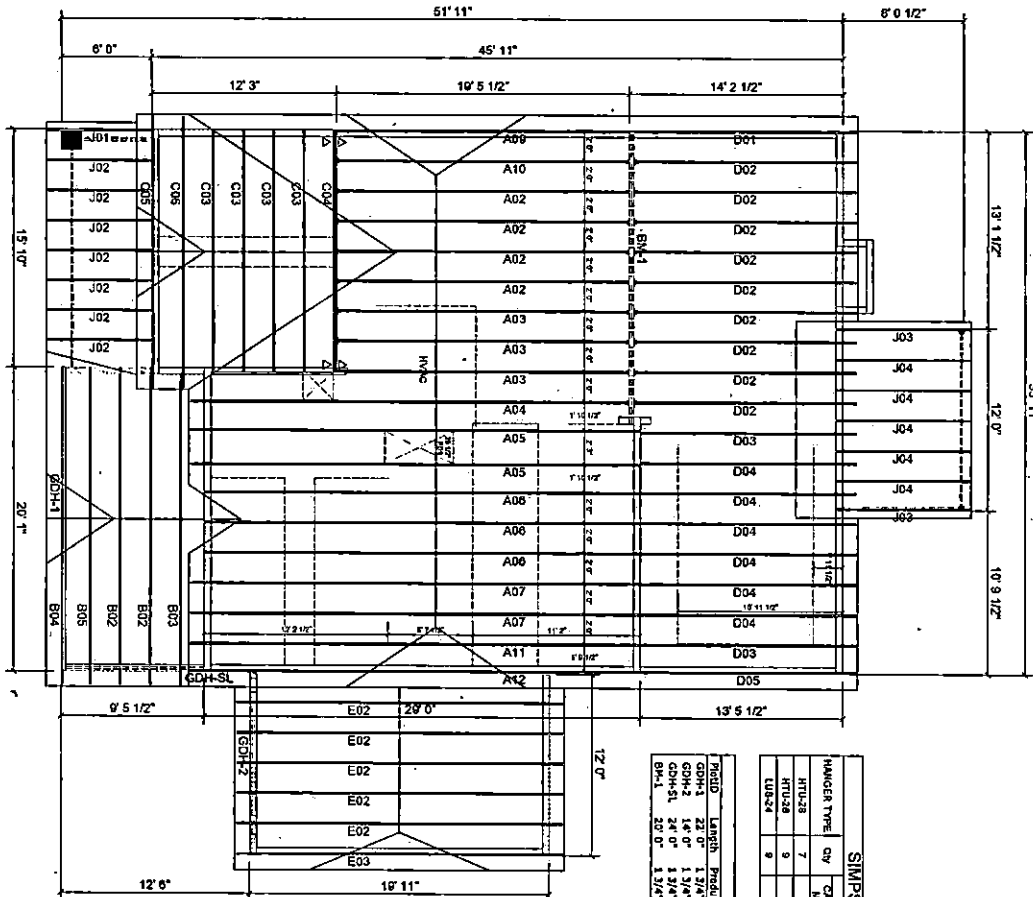
**FRAMER NOTE #1:**  
 SOLID BLOCK POST LOADS WITH 2x4 BUSHING BLOCKS FROM ABOVE TO BEARING PLATE BELOW. (ALL EXTERIOR DOOR HEADER JACK)

**BILTMORE**  
 SEAL DATE 02/17/16  
 1ST FLOOR TJI PLACEMENT PLAN

TJIs				
PlotID	Length	Product	Plies	Net Qty
F33	32' 10 1/2"	11 7/8" TJI@ 210	1	1
F32	31' 3 1/4"	11 7/8" TJI@ 210	1	1
F31	30' 1 3/4"	11 7/8" TJI@ 210	1	10
F28	27' 5"	11 7/8" TJI@ 210	1	10
F21	20' 5"	11 7/8" TJI@ 210	1	5
F19	18' 5"	11 7/8" TJI@ 210	1	7
F17	16' 9 1/4"	11 7/8" TJI@ 210	1	1
F16	16' 0 1/2"	11 7/8" TJI@ 210	1	1
F14	13' 9 1/4"	11 7/8" TJI@ 210	1	1
F12	11' 11 1/4"	11 7/8" TJI@ 210	1	1
F11	11' 9"	11 7/8" TJI@ 210	1	1
FBk1	2' 0"	11 7/8" TJI@ 210	1	12
FBk1	1' 0"	11 7/8" TJI@ 210	1	2
FBk2	1' 0"	11 7/8" TJI@ 210	1	11

Microllam				
PlotID	Length	Product	Plies	Net Qty
MI-2	6' 0"	1 3/4" x 11 7/8" 2.0E Microllam@ LVL	2	2

TJ Rim Board				
PlotID	Length	Product	Plies	Net Qty
STRim1	16' 0"	1 1/8" x 11 7/8" TJI@ Rim Board	1	11



**SIMPSON CONNECTOR SCHEDULE**

MEMBER TYPE	MEMBER	CONNECTOR	MEMBER	CONNECTOR	MEMBER	CONNECTOR
HTU-28	7	20-184	20-104-1 1/4	CG4	A02-20	A02-20
HTU-28	9	20-184	20-104-1 1/4	BM-1	A02-24	A02-24
UB-24	9	4-104	2-104	BM-1	D02	D02

GRID	Length	Enduse	LV	BLT	BLT QTY
GDH-1	22' 0"	1 3/4" x 1 1/2" 1.9E Microlink®	LV	2	2
GDH-2	14' 0"	1 3/4" x 1 1/2" 1.9E Microlink®	LV	2	2
GDH-5L	24' 0"	1 3/4" x 1 1/2" 1.9E Microlink®	LV	3	3
BM-1	20' 0"	1 3/4" x 2 1/4" 1.9E Microlink®	LV	2	2

**ALL TIE-DOWNS HO-4 UNLESS OTHERWISE NOTED**

Symbol	DESCRIPTION
○	FEELER
△	HOLD
▽	TRUSS
□	BEAM
◇	TRUSS
◇	TRUSS
◇	TRUSS

**ROOF TRUSS NOTES:**

1. This Truss Placement Diagram is intended to serve as a guide for truss installation. The Diagram has been prepared by the Designer and is based on the information provided by the Owner. The Designer has been engaged to design, fabricate, and erect the truss system and is not responsible for the accuracy of the information provided by the Owner.
2. The responsibility of the Owner, Building Designer, Contractor, Truss Designer, and Truss Manufacturer is to ensure that the truss system is installed in accordance with the design and specifications shown on this diagram and to be used in any service (positive and/or negative) and for any purpose for which it is intended.
3. The steel members shown on this diagram are to be installed in accordance with the design and specifications shown on this diagram and are to be installed in accordance with the design and specifications shown on this diagram.
4. The Truss Placement Diagram and Truss Design are to be used in accordance with the design and specifications shown on this diagram and are to be installed in accordance with the design and specifications shown on this diagram.
5. The Truss Manufacturer shall provide Truss-Truss Connection Requirements. Any special or other Connection Requirements shall be provided to the Building Designer. The Building Designer shall be responsible for the Building Designer's design.
6. The Truss Placement Diagram and Truss Design are to be used in accordance with the design and specifications shown on this diagram and are to be installed in accordance with the design and specifications shown on this diagram.
7. The Truss Manufacturer shall be responsible for the design and construction of the truss system and shall be responsible for the design and construction of the truss system.
8. The Truss Manufacturer shall be responsible for the design and construction of the truss system and shall be responsible for the design and construction of the truss system.
9. The Truss Manufacturer shall be responsible for the design and construction of the truss system and shall be responsible for the design and construction of the truss system.
10. The Truss Manufacturer shall be responsible for the design and construction of the truss system and shall be responsible for the design and construction of the truss system.
11. The Truss Manufacturer shall be responsible for the design and construction of the truss system and shall be responsible for the design and construction of the truss system.
12. The Truss Manufacturer shall be responsible for the design and construction of the truss system and shall be responsible for the design and construction of the truss system.
13. The Truss Manufacturer shall be responsible for the design and construction of the truss system and shall be responsible for the design and construction of the truss system.

**WARNING:**

TRUSSES MUST BE INSTALLED ACCORDING TO THE DESIGN AND SPECIFICATIONS SHOWN ON THIS DIAGRAM AND TO BE USED IN ACCORDANCE WITH THE DESIGN AND SPECIFICATIONS SHOWN ON THIS DIAGRAM. THE TRUSS MANUFACTURER SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE TRUSS SYSTEM AND SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE TRUSS SYSTEM.

**REVISIONS**

NO.	DATE	DESCRIPTION
1		X
2		X
3		X
4		X

H&H  
Biltmore C  
Base + COP + 3CG  
Lot - Sub  
Roof Truss

SUMTER TRUSS PLANT  
P.O. BOX 1546  
SUMTER, SC 29151  
PHONE: (803) 778-1921  
FAX: (803) 773-4731

DRAWN BY: JR  
DATE: 2/25/16  
JOB NUMBER: XXXXXX  
SHEET NUMBER: 1 of 1



**GENERAL NOTES**

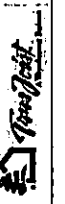
1. ALL MATERIALS SHALL BE AS SHOWN OR APPROVED BY THE ARCHITECT.

2. ALL MATERIALS SHALL BE USED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

3. ALL MATERIALS SHALL BE USED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

4. CONTACT THE LOCAL BRANCH FOR MORE INFORMATION.

5. A REGIONAL REPRESENTATIVE SHALL BE CONTACTED FOR ALL INFORMATION.



**H & H HOMES**

**BILTMORE - MASTER**

SECOND FLOOR FRM PLACEMENT PLAN

BFS - Greensboro, Aberdeen, & Fayetteville Mkt

DATE: 06/20/24

SCALE: 1/8" = 1'-0"

DESIGNER: JCS

DATE: 06/20/24

**MINIMUM DESIGN DATA**

MINIMUM LOAD TO BE DEAD LOAD TO BE TOTAL LOAD IN PSF

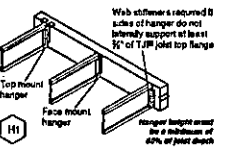
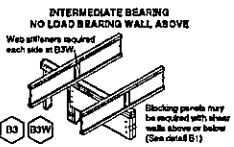
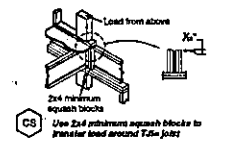
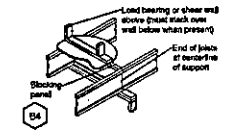
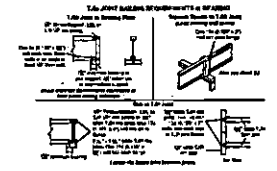
ATRS-35 DURATION = 100%

**DEFLECTION CRITERIA**

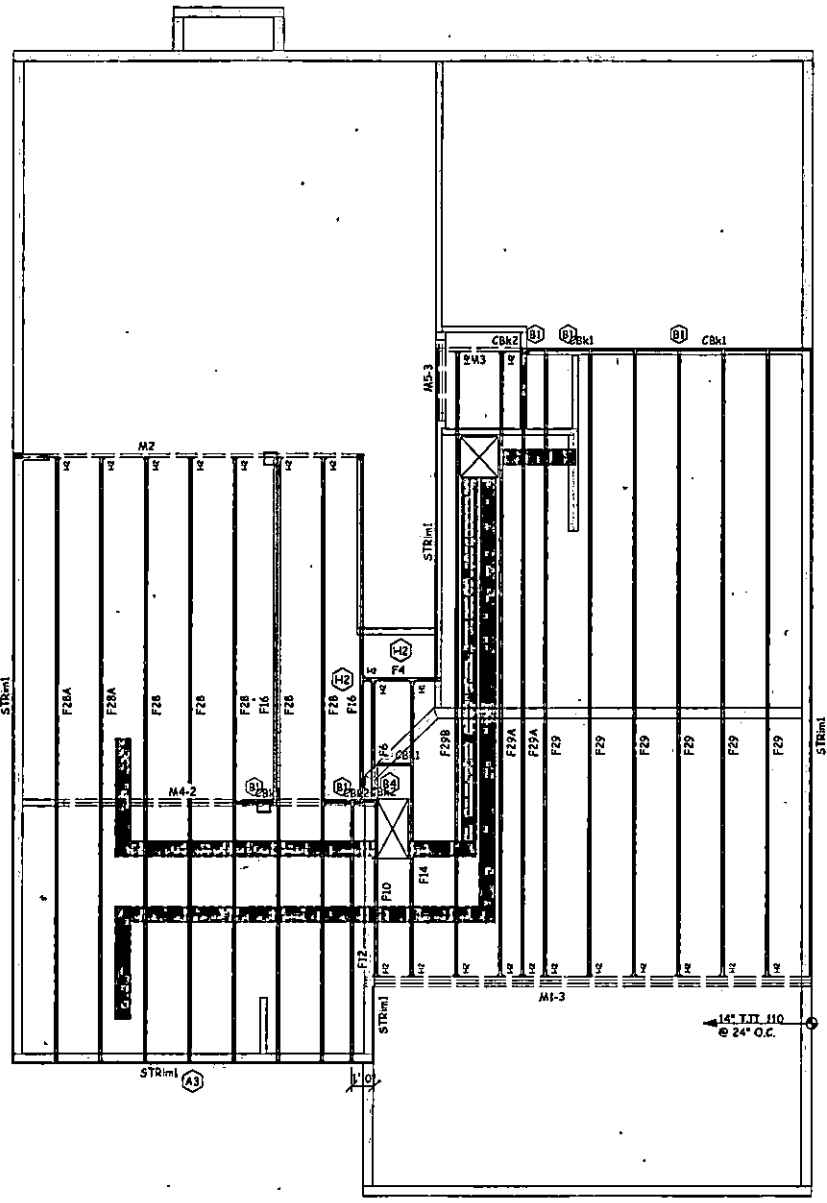
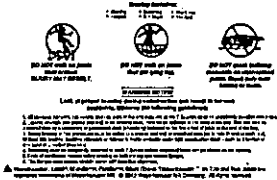
LOAD DEFLECTION

**FRAMER NOTE III**

SOLID BLOCK POST LOADS WITH 2x4 SOLING BLOCKS FROM ABOVE TO BEARING PLATE BELOW. ALL EXTERIOR DOOR/HEADER JACK



**WARNING**



**BILTMORE**  
SEAL DATE 02/17/16  
2ND FLOOR TJI PLACEMENT PLAN

TJIs				
PlotID	Length	Product	Plies	Net Qty
F29	28' 6 1/2"	14" TJI @ 110	1	6
F29A	28' 4 3/4"	14" TJI @ 110	1	2
F29B	28' 4 3/4"	14" TJI @ 110	1	1
F28	27' 5 1/4"	14" TJI @ 110	1	5
F28A	27' 5 1/4"	14" TJI @ 110	1	2
F16	15' 10"	14" TJI @ 110	1	2
F14	13' 5"	14" TJI @ 110	1	1
F12	11' 10 3/4"	14" TJI @ 110	1	1
F10	10' 0 1/2"	14" TJI @ 110	1	1
F6	5' 4 1/2"	14" TJI @ 110	1	1
F4	3' 6"	14" TJI @ 110	1	1
CBK1	2' 0"	14" TJI @ 110	1	8
CBK2	2' 0"	14" TJI @ 110	1	1
CBK2	1' 0"	14" TJI @ 110	1	3

Microllam				
PlotID	Length	Product	Plies	Net Qty
M1-3	22' 0"	1 3/4" x 18" 2.0E Microllam @ LVL	3	3
M2	16' 0"	1 3/4" x 14" 2.0E Microllam @ LVL	1	1
M3	4' 0"	1 3/4" x 14" 2.0E Microllam @ LVL	1	1
M4-2	16' 0"	1 3/4" x 9 1/4" 2.0E Microllam @ LVL	2	2
M5-3	4' 0"	1 3/4" x 9 1/4" 2.0E Microllam @ LVL	3	3

TJ Rim Board				
PlotID	Length	Product	Plies	Net Qty
STRim1	16' 0"	1 1/8" x 14" TJI @ Rim Board	1	6

Framing Connector Summary			
PlotID	Qty	Manuf	Product
H1	1	Simpson	HU14
H2	22	Simpson	IUS1.81/14



# REScheck Software Version 4.6.2.1 Compliance Certificate

Project Title: Biltmore worst case - slab foundation

Energy Code: North Carolina Energy Conservation Code  
 Location: Lillington, North Carolina  
 Construction Type: Single Family  
 Project Type: New construction  
 Building Orientation: Bldg. faces 90 deg. from North  
 Glazing Area Percentage: 7%  
 Heating Degree Days: 3502  
 Climate Zone: 4

Construction Site:  
NC

Owner/Agent:  
H&H Homes  
2919 Breezewood Avenue, Suite 400  
Fayetteville, NC 28303

Designer/Contractor:  
Justin Smith  
Southern Energy Management  
101 Kitty Hawk Dr  
Morrisville, NC 27560  
(919) 836-0330  
jsmith@southern-energy.com

**Compliance: Passes using UA trade-off**

Compliance: **1.8% Better Than Code**    Maximum UA: **507**    Your UA: **498**    Maximum SHGC: **0.30**    Your SHGC: **0.27**

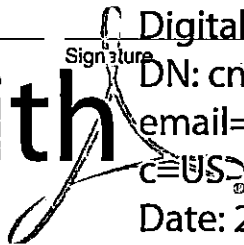
The % Better or Worse Than Code index reflects how close to compliance the house is based on code trade-off rules.  
 It DOES NOT provide an estimate of energy use or cost relative to a minimum-code home.

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Glazing or Door U-Factor	UA
Ceiling 1: Flat Ceiling or Scissor Truss	969	26.0	12.0		26
Ceiling 2: Cathedral Ceiling	858	30.0	0.0		29
Wall 1: Wood Frame, 16" o.c. Orientation: Front	648	19.0	0.0		32
Window 1: Vinyl Frame:Double Pane with Low-E SHGC: 0.27 Orientation: Front	75			0.350	26
Door 1: Solid Orientation: Front	20			0.200	4
Door 2: Solid Orientation: Front	18			0.200	4
Wall 2: Wood Frame, 16" o.c. Orientation: Left Side	924	19.0	0.0		53
Window 2: Vinyl Frame:Double Pane with Low-E SHGC: 0.27 Orientation: Left Side	38			0.350	13
Wall 3: Wood Frame, 16" o.c. Orientation: Right Side	924	19.0	0.0		53
Window 3: Vinyl Frame:Double Pane with Low-E SHGC: 0.27 Orientation: Right Side	45			0.350	16
Wall 4: Wood Frame, 16" o.c. Orientation: Back	648	19.0	0.0		35
Window 4: Vinyl Frame:Double Pane with Low-E SHGC: 0.27 Orientation: Back	63			0.350	22
slab: Slab-On-Grade:Unheated Insulation depth: 0.0"	163		0.0		170
over garage: All-Wood Joist/Truss:Over Unconditioned Space	322	19.0	0.0		15

*Compliance Statement:* The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the North Carolina Energy Conservation Code requirements in REScheck Version 4.6.2.1 and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.

Name - Title

**Justin Smith**

Signature  


Digitally signed by Justin Smith

DN: cn=Justin Smith, o=SEM, ou,  
email=jsmith@southern-energy.com,

C=US

Date: 2016.11.22 11:30:47 -05'00'



# REScheck Software Version 4.6.2.1 Inspection Checklist

Energy Code: North Carolina Energy Conservation Code  
Location: Lillington, North Carolina  
Construction Type: Single Family  
Project Type: New construction  
Building Orientation: Bldg. faces 90 deg. from North  
Glazing Area Percentage: 7%  
Heating Degree Days: 3502  
Climate Zone: 4

## Ceilings:

- Ceiling 1: Flat Ceiling or Scissor Truss, R-26.0 cavity + R-12.0 continuous insulation

Comments: \_\_\_\_\_

- Ceiling 2: Cathedral Ceiling, R-30.0 cavity insulation

Comments: \_\_\_\_\_

## Above-Grade Walls:

- Wall 1: Wood Frame, 16" o.c., R-19.0 cavity insulation

Comments: \_\_\_\_\_

- Wall 2: Wood Frame, 16" o.c., R-19.0 cavity insulation

Comments: \_\_\_\_\_

- Wall 3: Wood Frame, 16" o.c., R-19.0 cavity insulation

Comments: \_\_\_\_\_

- Wall 4: Wood Frame, 16" o.c., R-19.0 cavity insulation

Comments: \_\_\_\_\_

## Windows:

- Window 1: Vinyl Frame:Double Pane with Low-E, U-factor: 0.350, SHGC: 0.27,

For windows without labeled U-factors, describe features:

#Panels \_\_\_\_\_ Frame Type \_\_\_\_\_ Thermal Break? \_\_\_\_\_ Yes \_\_\_\_\_ No

Comments: \_\_\_\_\_

- Window 2: Vinyl Frame:Double Pane with Low-E, U-factor: 0.350, SHGC: 0.27,

For windows without labeled U-factors, describe features:

#Panels \_\_\_\_\_ Frame Type \_\_\_\_\_ Thermal Break? \_\_\_\_\_ Yes \_\_\_\_\_ No

Comments: \_\_\_\_\_

- Window 3: Vinyl Frame:Double Pane with Low-E, U-factor: 0.350, SHGC: 0.27,

For windows without labeled U-factors, describe features:

#Panels \_\_\_\_\_ Frame Type \_\_\_\_\_ Thermal Break? \_\_\_\_\_ Yes \_\_\_\_\_ No

Comments: \_\_\_\_\_

- Window 4: Vinyl Frame:Double Pane with Low-E, U-factor: 0.350, SHGC: 0.27,

For windows without labeled U-factors, describe features:

#Panels \_\_\_\_\_ Frame Type \_\_\_\_\_ Thermal Break? \_\_\_\_\_ Yes \_\_\_\_\_ No

Comments: \_\_\_\_\_

## Doors:

- Door 1: Solid, U-factor: 0.200

Comments: \_\_\_\_\_

- Door 2: Solid, U-factor: 0.200

Comments: \_\_\_\_\_

**Floors:**

- slab: Slab-On-Grade:Unheated, R-0 (uninsulated)

Comments: \_\_\_\_\_

Slab insulation extends down from the top of the slab to at least 0.0 ft. OR down to at least the bottom of the slab then horizontally for a total distance of 0.0 ft. Slab edge insulation must have a 2 inch termite inspection gap.

- over garage: All-Wood Joist/Truss:Over Unconditioned Space, R-19.0 cavity insulation

Comments: \_\_\_\_\_

Floor insulation is installed to maintain permanent continuous contact with the underside of the subfloor decking, and insulation ends are blocked. Insulation supports that are noncontinuous (i.e., tension support wires) are spaced no more than 18 inches apart and are within 6 inches from each end of the insulation.

**Solar Heat Gain Coefficient:**

- Solar Heat Gain Coefficient (SHGC) values are determined in accordance with the NFRC test procedure or taken from the default table.

**Air Leakage:**

- Joints (including rim joist junctions), attic access openings, penetrations, and all other such openings in the building envelope that are sources of air leakage are sealed with caulk, gasketed, weatherstripped or otherwise sealed with an air barrier material, suitable film or solid material.
- Air barrier and sealing exists on common walls between dwelling units, on exterior walls behind tubs/showers, and in openings between window/door jambs and framing.
- Recessed lights in the building thermal envelope are 1) type IC rated and ASTM E283 labeled and 2) sealed with a gasket or caulk between the housing and the interior wall or ceiling covering.
- Access doors separating conditioned from unconditioned space (e.g., attic, unconditioned basements and crawlspaces) are weather-stripped and insulated (without insulation compression or damage). Where loose fill insulation exists, a wood framed or equivalent baffle is installed to maintain insulation application. Required insulation values are as follows:
  - (1) Hinged vertical doors have a minimum of R-5 insulation.
  - (2) Hatches/scuttle hole covers have a minimum of R-10 insulation.
  - (3) Pull down stairs have a minimum of R-5 rigid insulation.
- Site-built masonry fireplaces have doors and comply with Section R1006 of the North Carolina Residential Code for combustion air.

**Air Sealing and Insulation:**

- Building envelope air tightness and insulation installation complies with one of the following (mark the method that was applied):
  - (1) \_\_\_ Post rough-in blower door test result of less than or equal to 5 ACH at 50 pascals.
  - (2) \_\_\_ Post rough-in blower door test result of less than or equal to 0.30 CFM50/square foot of surface area.
  - (3) \_\_\_ Visual inspection. The following items, along with all other air leakage requirements in this report, are certified by the builder, permit holder or registered design professional as completed.
    - (a) Ceiling/attic: Sealants or gaskets provide a continuous air barrier system joining the top plate of framed walls with either the ceiling drywall or the top edge of wall drywall to prevent air leakage. Top plate penetrations are sealed.
    - (b) Ceiling/attic: For ceiling finishes that are not air barrier systems such as tongue-and-groove planks, air barrier systems (e.g., taped house wrap) are used above the finish.
    - (c) Above Grade Walls: Sill plate is gasketed or sealed to subfloor or slab.
    - (d) Windows/doors: Space between window and door jambs and framing are sealed.
    - (e) Floors: Air barrier system is installed at any exposed edge of insulation.

**Sunrooms:**

- Sunrooms that are thermally isolated from the building envelope have a maximum fenestration U-factor of 0.40 and the maximum skylight U-factor of 0.75.
- Sunrooms with cooling systems shall have a maximum fenestration SHGC or 0.40 for all glazing.

**Materials Identification and Installation:**

- Materials and equipment are installed in accordance with the manufacturer's installation instructions.
- Materials and equipment are identified so that compliance can be determined.
- Manufacturer manuals for all installed heating and cooling equipment and service water heating equipment have been provided.
- Insulation R-values and glazing U-factors are clearly marked on the building plans or specifications.

**Duct Insulation:**

- Supply and return ducts in unconditioned space and outdoors are insulated to R-8. Supply ducts inside semi-conditioned space are insulated to R-4.

### Duct Construction and Testing:

- Building framing cavities are not used as supply ducts.
- All joints and seams of air ducts, air handlers, filter boxes, and building cavities used as return ducts are sealed. Joints and seams comply with Part V - Mechanical, Section 603.9 of the North Carolina Residential Code.
- Postconstruction total duct leakage test (including air handler enclosure) has been performed and results are less than or equal to 147.1 cfm (6 cfm per 100 ft<sup>2</sup> of conditioned floor area) pressure differential of 0.1 inches w.g. Tests are performed according to North Carolina Energy Conservation Code guidelines (Section 403.2.2).

### Temperature Controls:

- Where the primary heating system is a forced air-furnace, at least one programmable thermostat is installed to control the primary heating system and has set-points initialized at 70 degree F for the heating cycle and 78 degree F for the cooling cycle.
- Heat pumps having supplementary electric-resistance heat have controls that prevent supplemental heat operation when the compressor can meet the heating load.

### Heating and Cooling Equipment Sizing:

- Heating and cooling equipment shall be sized in accordance with the North Carolina Mechanical Code.
- For systems serving multiple dwelling units documentation has been submitted demonstrating compliance with 2009 IECC Commercial Building Mechanical and/or Service Water Heating (Sections 503 and 504).

### Circulating Service Hot Water Systems:

- Circulating service hot water pipes are insulated to R-2.
- Circulating service hot water systems include an automatic or accessible manual switch to turn off the circulating pump when the system is not in use.

### Heating and Cooling Piping Insulation:

- HVAC piping conveying fluids above 105 degrees F or chilled fluids below 55 degrees F are insulated to R-3.

### Swimming Pools:

- Heated swimming pools have an on/off heater switch.
- Pool heaters operating on natural gas or LPG have an electronic pilot light.
- Timer switches on pool heaters and pumps are present.

#### Exceptions:

Where public health standards require continuous pump operation.

Where pumps operate within solar- and/or waste-heat-recovery systems.

- Heated swimming pools and in-ground permanently installed spas have a vapor-retardant cover.

#### Exceptions:

Covers are not required when 70% of the heating energy is from site-recovered energy or solar energy source.

### Lighting Requirements:

- A minimum of 75 percent of the lamps in permanently installed lighting fixtures can be categorized as one of the following:
  - (a) Compact fluorescent
  - (b) T-8 or smaller diameter linear fluorescent
  - (c) 40 lumens per watt for lamp wattage  $\leq 15$
  - (d) 50 lumens per watt for lamp wattage  $> 15$  and  $\leq 40$
  - (e) 60 lumens per watt for lamp wattage  $> 40$ .

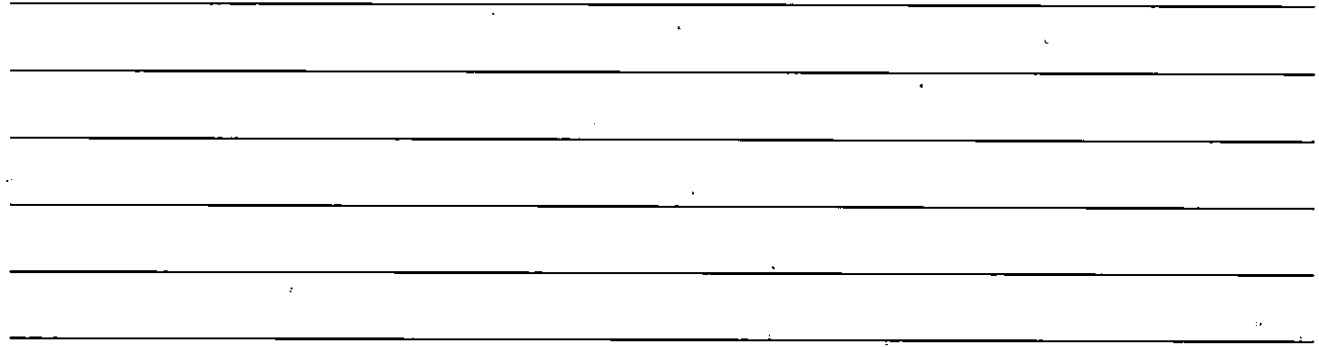
### Other Requirements:

- Snow- and ice-melting systems with energy supplied from the service to a building shall include automatic controls capable of shutting off the system when a) the pavement temperature is above 50 degrees F, b) no precipitation is falling, and c) the outdoor temperature is above 40 degrees F (a manual shutoff control is also permitted to satisfy requirement 'c').

### Certificate:

- A permanent certificate is provided on or in the electrical distribution panel listing the predominant insulation R-values; window U-factors; type and efficiency of space-conditioning and water heating equipment. The certificate does not cover or obstruct the visibility of the circuit directory label, service disconnect label or other required labels.

NOTES TO FIELD: (Building Department Use Only)





# North Carolina Energy Efficiency Certificate

Insulation Rating	R-Value
Ceiling / Roof	38.00
Above-Grade Wall	19.00
Below-Grade Wall	0.00
Floor	19.00
Ductwork (unconditioned spaces):	_____

Glass & Door Rating	U-Factor	SHGC
Window	0.35	0.27
Door	0.20	NA

Heating & Cooling Equipment	Efficiency
Heating System: _____	_____
Cooling System: _____	_____
Water Heater: _____	_____

## Building Air Leakage and Duct Test Results

Air Leakage Compliance Method:  Visual Inspection  
 Air Leakage Test

Building Air Leakage Test Results \_\_\_\_\_  
Name of Air Leakage Tester \_\_\_\_\_  
Duct Tightness Test Results \_\_\_\_\_  
Name of Duct Tester \_\_\_\_\_

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Comments: