

01129119



Harnett COUNTY NORTH CAROLINA

Initial Application Date: 4/23/19

Application # SFD1901-0023

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

PF Development Group
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: 38 Kettering Court PIN: 9595-41-5932

DEED OR OTP: UC

- PROPOSED USE:
SFD: (Size 42 x 44) # Bedrooms: 4 # Baths: 2.5 Basement (w/wo bath): Garage: Deck: Crawl Space: Slab: Monolithic Slab:
Mod: (Size x) # Bedrooms # Baths Basement (w/wo bath) Garage: Site Built Deck: On Frame Off Frame
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.

Signature of Owner or Owner's Agent

Date 4/23/19

It is the owner/applicant's 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 # _____

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: 1/23/19
Site Address: 38 Kettering Court Phone: 910-486-4864
Subdivision: Manor @ Lexington Plantation Lot: 660
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@hfhomes.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.

Handwritten signature

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

4/23/19

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:

Handwritten signature: Tracy Jimms / Permit Coordinator

Date:

4/23/19

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.

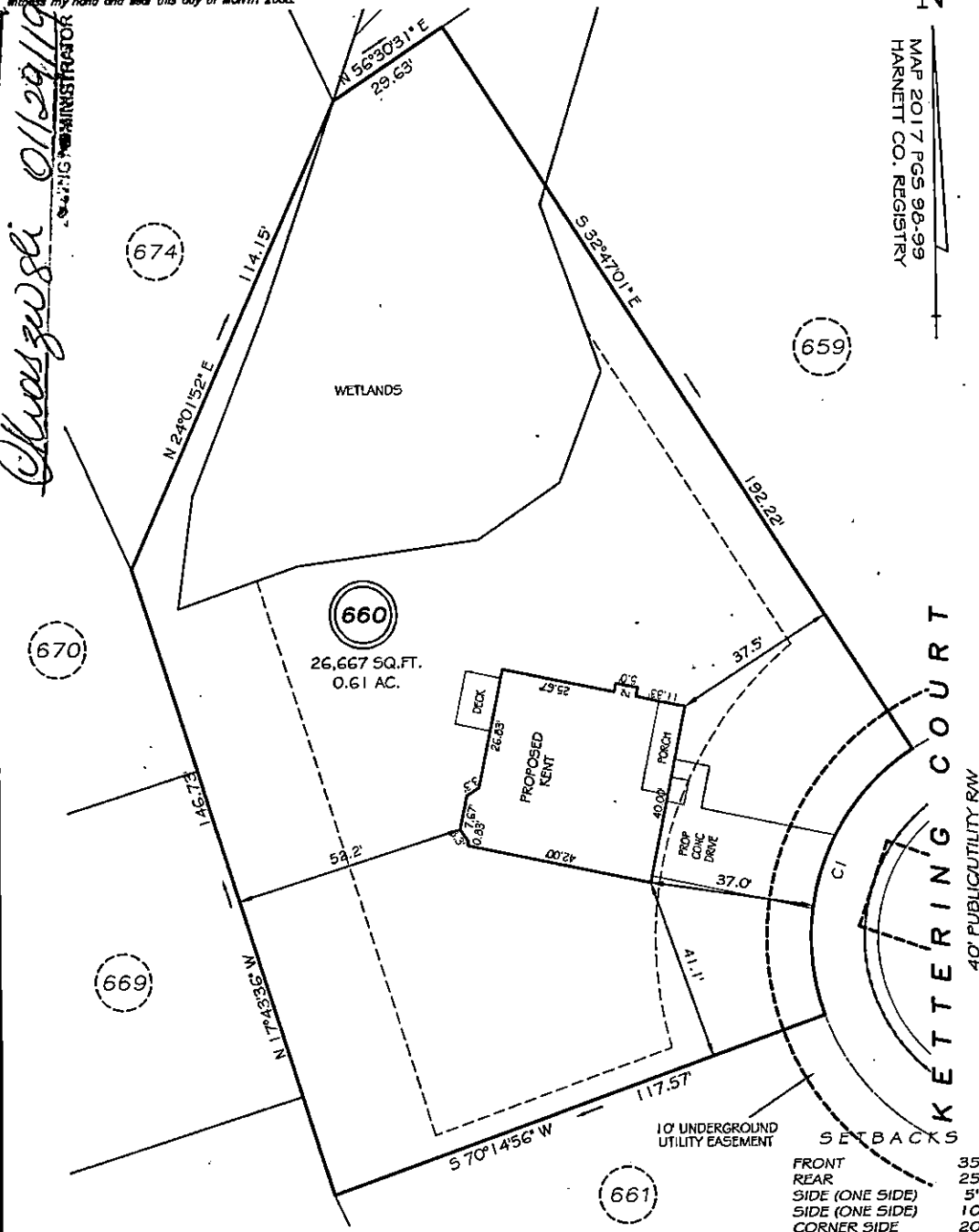
SITE PLAN APPROVAL

DISTRICT RA-20 USE SFD

3 BEDROOMS 4 beds 1 2.5 baths

Chas zowski 01/29/19
 PLANNING ADMINISTRATOR

N
 MAP 2017 PGS 98-99
 HARNETT CO. REGISTRY



CI R=50.00' L=67.27' S18°40'21"W 62.31'

PRELIMINARY
 NOT FOR RECORDATION,
 SALES OR CONVEYANCE

LEGEND

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

LS INC GRIFFIN LAND SURVEYING, INC.
 P.O. BOX 148
 FUQUAY-VARINA, NC 27528
 (919) 567-1963

PLOT PLAN
 FOR
H & H HOMES
 LEXINGTON PLANTATION
 LOT 660
 38 KETTERING COURT
 NORTH CAROLINA
 HARNETT COUNTY ANDERSON CREEK TOWNSHIP

DRAWN BY <u>NMF</u>	DATE <u>1/14/19</u>
CHECKED BY <u>MPG</u>	SCALE <u>1" = 30'</u>

10' UNDERGROUND UTILITY EASEMENT

SETBACKS

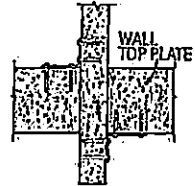
FRONT	35'
REAR	25'
SIDE (ONE SIDE)	5'
SIDE (ONE SIDE)	10'
CORNER SIDE	20'

Truss/Rafter to Wood Double Top Plates

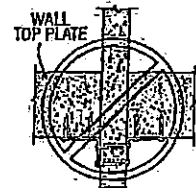


D7

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

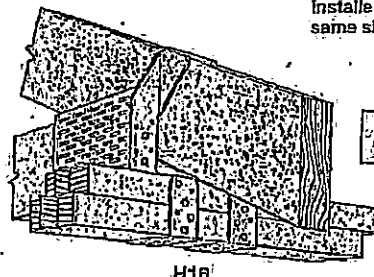


Install diagonally across from each other for minimum 2x truss.



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.

D9

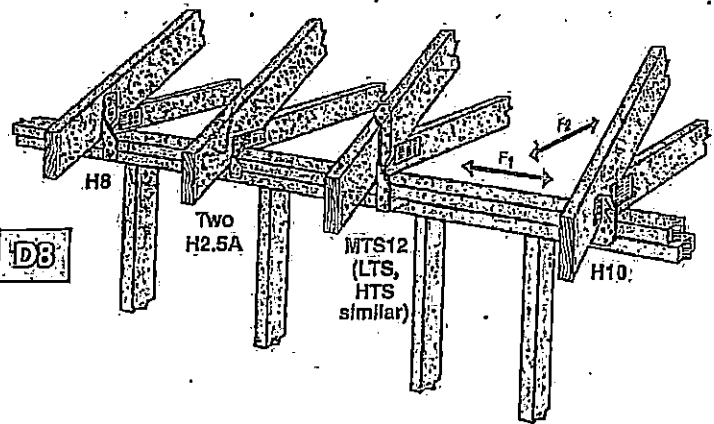


H16

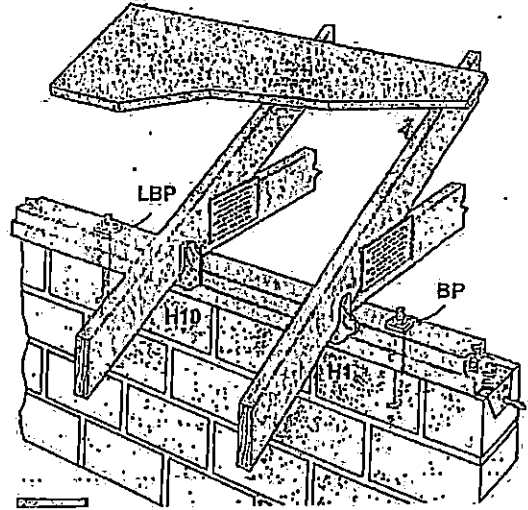
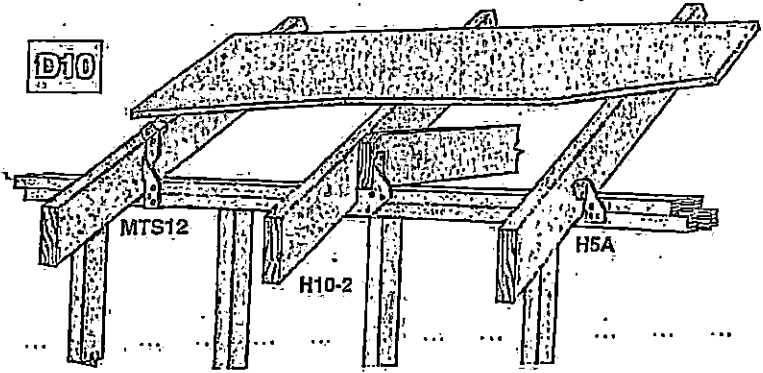
Model No.	Qty Req'd	Fasteners		DF/SP Allowable Loads				SPF Allowable Loads			
		To Rafter	To Plates	Uplift		Parallel to Plate (F ₁) (133/160)	Perp. to Plate (F ₂) (133/160)	Uplift		Parallel to Plate (F ₁) (133/160)	Perp. to Plate (F ₂) (133/160)
				(133)	(160)			(133)	(160)		
H2.5	1	5-8d	5-8d	415	415	150	150	365	365	130	130
H6A	1	3-8d	3-8d	350	420	115	180	245	245	100	120
HGA10	1	4-SDS 3/4x1 1/2	4-SDS 3/4x3	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	820	820	75	125
H6	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
H6	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	790	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
HTS12	2	12-10dx1 1/2	12-10dx1 1/2	1440	1440	150	250	1240	1240	150	250
HTS20	1	12-10dx1 1/2	12-10dx1 1/2	1450	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	170	1050	1560	1700	1010	900
MTS12	2	4-10dx1 1/2	4-10dx1 1/2	1680	2000	150	250	1460	1720	150	250

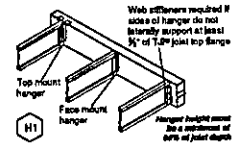
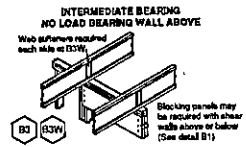
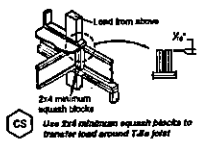
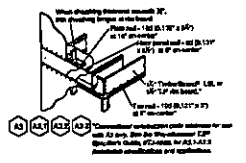
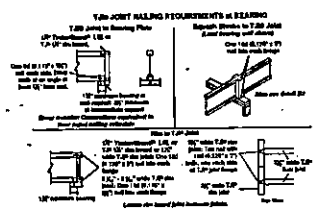
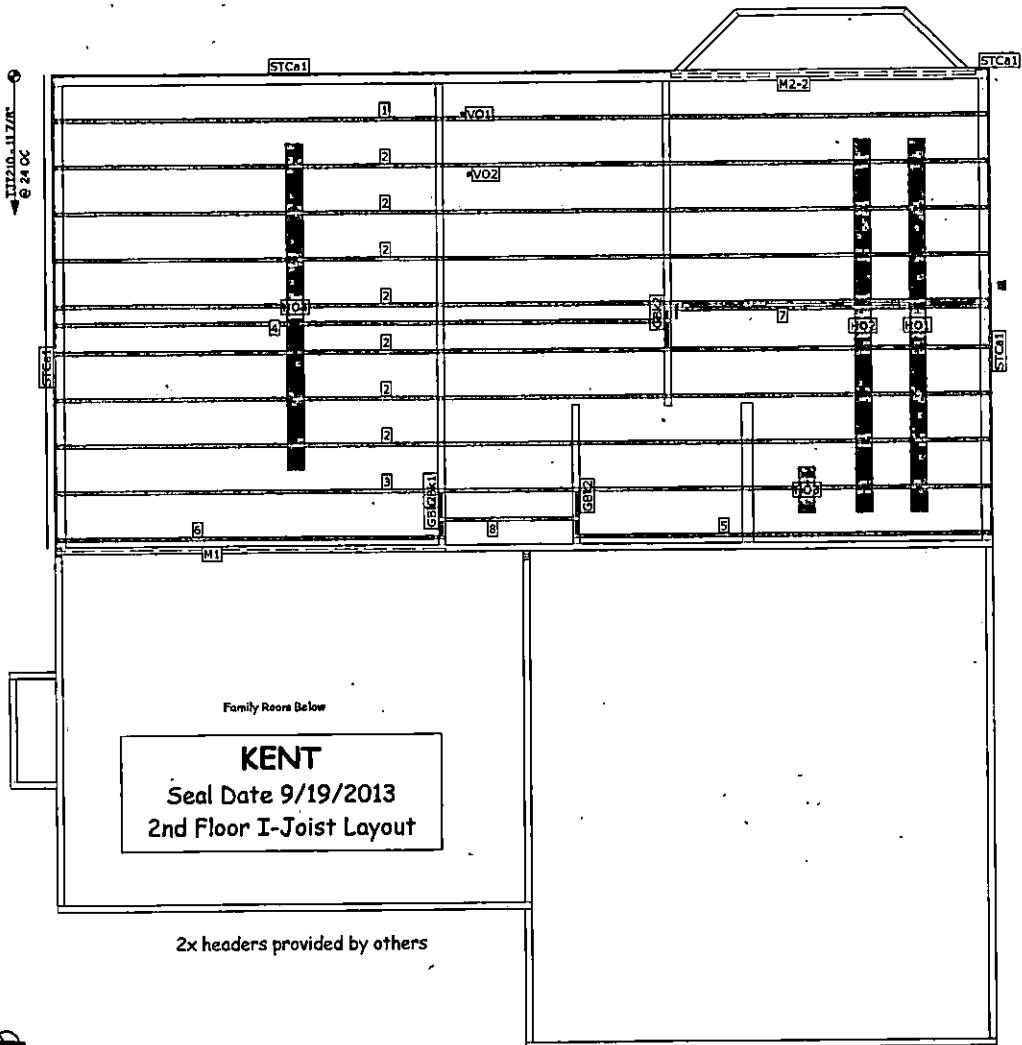
1. "—" in the tables indicates that the product has not been tested in the particular load direction listed.
2. For connections to single top plates, see page 12.
3. Fasten multiple members together to act as a single unit.

D8



D10





891 CENTURY CIRCLE
DORVAY, DC 28026
P: 843.224.8234
F: 843.820.3017

8413 MARKET STREET
WILMINGTON, NC 28405
P: 910.798.0898
F: 910.798.0863

2651 N. CRATER FREIGHTWAY
WECOLA, NC 28038
P: 843.987.0810
F: 843.987.0803

GENERAL NOTES:
1. ALL JOIST MANUFACTURERS SHOULD BE NOTIFIED OF ANY CHANGES TO THE JOIST LAYOUT.
2. ALL JOIST MANUFACTURERS SHOULD BE NOTIFIED OF ANY CHANGES TO THE JOIST LAYOUT.
3. ALL JOIST MANUFACTURERS SHOULD BE NOTIFIED OF ANY CHANGES TO THE JOIST LAYOUT.
4. ALL JOIST MANUFACTURERS SHOULD BE NOTIFIED OF ANY CHANGES TO THE JOIST LAYOUT.

H & H HOMES
KENT - MASTER
SECOND FLOOR ENP DUGGALL/JOIST PLACEMENT PLAN
Builders FirstSource, Coastal SC Markets
DATE: 10/05/13
SCALE: 1/4" = 1'

AMERICAN DESIGN DATA
LIVE LOAD 60 PSF
DEAD LOAD 10 PSF
TOTAL LOAD 70 PSF
STRESS RATIO = 100%
DEFLECTION CRITERIA
LIVE PASSING
FRAMER NOTE (H)
SOLID BLOCK PORT LOADS
WITH 2x4 BOLAUGH BLOCKS
FROM ABOVE TO BEARING
PLATE BELOW. (ALL EXTERIOR
DOOR HEADER JACK)

WARNING
Read and understand all instructions before using this product.
Do not use on roofs or other overhead applications.
Do not use on roofs or other overhead applications.
Do not use on roofs or other overhead applications.

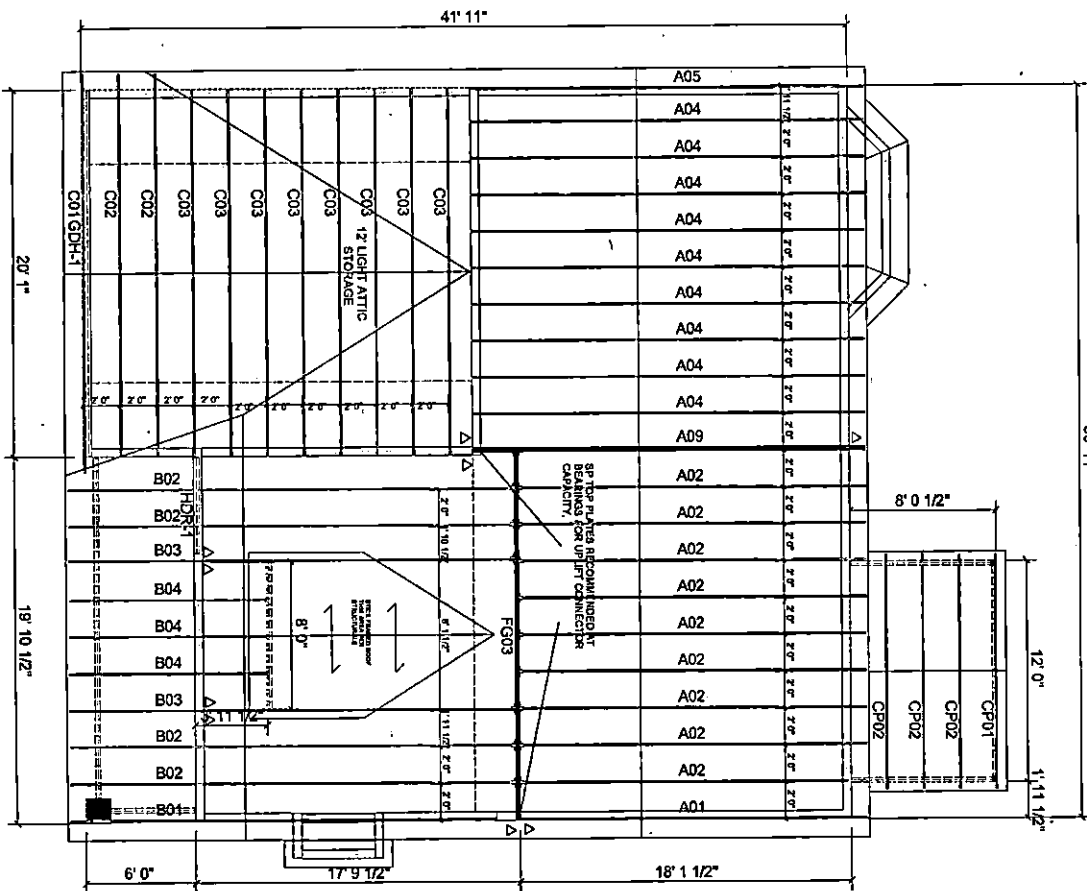


PLATE ID	Length	Product	LVL	Pieces	Net Qty
HDS-1	6'-0"	1 3/4" x 9 1/4" 1.9E Microlam®	LVL	2	2
GDH-1	22'-0"	1 3/4" x 11 7/8" 1.9E Microlam®	LVL	2	2

SIMPSON CONNECTOR SCHEDULE					
HANGER TYPE	Qty	MEMBERS CARRIED		CARRYING MEMBER	CARRIED MEMBER
		MEMBER	MEMBER		
HTU2C	15	20-10d	20-10d x 1 1/4"	FG03	A02, B02, B03
HDS-210d	1	40-10d	10-10d	A09	FG03

IT IS ASSUMED THAT THE HANGERS, CONNECTIONS AND TRUSSING FOR GENERAL TRUSSING ARE TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ALL DIMENSIONS ARE TO FACE UNLESS NOTED OTHERWISE. ALL DIMENSIONS ARE TO FACE UNLESS NOTED OTHERWISE.

ATTACHED HIDA UNLESS OTHERWISE NOTED	
○	H25K
△	H10A
☆	H1520
◇	H14
□	H82
◇	H12
◇	M01

GENERAL NOTES

- This placement plan has been prepared by a truss technician and is not an engineered drawing.
- The responsibilities and duties of the truss designer and truss manufacturer shall be according to TPI 1 as referenced by the building code unless otherwise defined by contract as signed upon by the parties involved.
- The wood components on this drawing are to be installed in accordance with the manufacturer's instructions. All metal plates and hangers are galvanized to meet or exceed G90.
- Specific truss information can be located on the truss design drawing.
- Locate all plumbing, HVAC, and floor-raft ceiling openings prior to placing trusses. Trusses may be opened a maximum of 18" for NOTCH TRUSSES. Openings shall be cut by hand.
- The building designer shall specify connections of the trusses to the supporting structure. The members are not designed by the truss designer.
- This truss placement plan and design drawings are the property of Builders FirstSource and may not be reproduced in part or in total under any circumstances unless written authorization is received from Builders FirstSource.
- Some field framing may be required to achieve final appearance shown on construction documents.
- Field framing, including valley rafters, installed over trusses shall have a maximum interval of 48" on center or less. Stagger truss hangers from adjacent rafters such that the load is distributed over at least two trusses. Truss hangers and not connections shall be attached or have lateral bracing (building framed supports or connections) to bottom chord of truss. Bottom chord bracing shall not exceed the maximum shown on the truss design drawing.
- This placement diagram is prepared assuming the support structure is structurally adequate for the building components provided. This includes, but is not limited to foundation design, structural design, and the truss design. The truss designer and the truss manufacturer shall be responsible for the building codes. Refer to TPI 1 as referenced by the building code for Building Designer responsibilities.
- If project trusses are included in this job, please refer to the truss project connection information for the trusses in the assembly, reviewed upon truss delivery.

WARNING

Until the building is completely erected in accordance with the building code, the truss manufacturer shall not be responsible for the safety hazard. Truss instability may increase with building weight, height and length. Buildings under construction are vulnerable to high winds and present a safety hazard. It is the responsibility of the contractor and truss manufacturer to properly and appropriately brace the building to prevent the building from blowing over or to prevent the building from blowing over.

IMPORTANT

This diagram and any other truss placement or design information provided by Builders FirstSource are for the sole purpose of aiding the builder in the erection of trusses supplied by Builders FirstSource and are not meant to replace architectural details for any dimensions or details.

REVISIONS	1	2	3	4
	X	X	X	X

H&H
Kent "A"
Base + COP
Roof Truss

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

DRAWN BY
JRM/JJ
DATE
9-8-2017
JOB NUMBER
1218305
SHEET NUMBER
1 OF 1

DO NOT REMOVE!

Details: Appointment of Lien Agent
Entry #: 981334

Filed on: 01/23/2019
Initially filed by: meaganbradshaw

Designated Lien Agent

First American Title Insurance Company

Online: www.liensnc.com
Address: 19 W. Hargett St., Suite 507 /
Raleigh, NC 27601
Phone: 888-690-7384
Fax: 913-489-5231
Email: support@liensnc.com

Owner Information

H & H Constructors of Fayetteville, LLC
2919 Breezewood Avenue Suite 400
Fayetteville, NC 28303
United States
Email: stacysimmons@hhhomes.com
Phone: 910-486-4864

Project Property

MLP000660 Lot 660 Manor @ Lexington
Plantation
38 Kettering Court
Cameron, NC 28326
Harnett County

Property Type

1-2 Family Dwelling

Date of First Furnishing

01/14/2019

Print & Post



Contractors:
Please post this notice on the Job Site.

Suppliers and Subcontractors:
Scan this image with your smart
phone to view this filing. You can then
file a Notice to Lien Agent for this
project.

View Comments (0)

Technical Support Hotline: (888) 690-7384



REScheck Software Version 4.4.4 Compliance Certificate

Project Title: Kent worst case

Energy Code: **North Carolina Energy Conservation Code**
 Location: **Lillington, North Carolina**
 Construction Type: **Single Family**
 Project Type: **New construction**
 Building Orientation: **Bldg. faces 0 deg. from North**
 Glazing Area Percentage: **8%**
 Heating Degree Days: **3502**
 Climate Zone: **4**

Construction Site:
NC

Owner/Agent:
H&H Homes
2919 Breezewood Ave, 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: **2.4% Better Than Code** Maximum UA: **421** Your UA: **411** Maximum SHGC: **0.40** 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	1170	19.0	19.0		30
Wall 1: Wood Frame, 16" o.c. Orientation: Front	688	19.0	0.0		36
Window 1: Vinyl Frame:Double Pane with Low-E SHGC: 0.27 Orientation: Front	50			0.350	18
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	620	19.0	0.0		36
Window 5: Vinyl Frame:Double Pane with Low-E SHGC: 0.27 Orientation: Left Side	14			0.350	5
Wall 3: Wood Frame, 16" o.c. Orientation: Right Side	620	19.0	0.0		35
Window 4: Vinyl Frame:Double Pane with Low-E SHGC: 0.27 Orientation: Right Side	41			0.350	14
Wall 4: Wood Frame, 16" o.c. Orientation: Back	688	19.0	0.0		35
Window 3: Vinyl Frame:Double Pane with Low-E SHGC: 0.27 Orientation: Back	97			0.350	34
Floor 1: Slab-On-Grade:Unheated Insulation depth: 0.0'	154		0.0		160

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 4.4.4 and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.

Name - Title

Signature

Date



REScheck Software Version 4.4.4 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 0 deg. from North
Glazing Area Percentage: 8%
Heating Degree Days: 3502
Climate Zone: 4

Ceilings:

- Ceiling 1: Flat Ceiling or Scissor Truss, R-19.0 cavity + R-19.0 continuous 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:
#Panes ____ Frame Type _____ Thermal Break? ____ Yes ____ No
Comments: _____

- Window 5: Vinyl Frame:Double Pane with Low-E, U-factor: 0.350, SHGC: 0.27,
For windows without labeled U-factors, describe features:
#Panes ____ 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:
#Panes ____ 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:
#Panes ____ 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:

- Floor 1: 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.

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 120.0 cfm (6 cfm per 100 ft² 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-retardent 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 <= 15
 - (d) 50 lumens per watt for lamp wattage > 15 and <= 40
 - (e) 60 lumens per watt for lamp wattage > 40

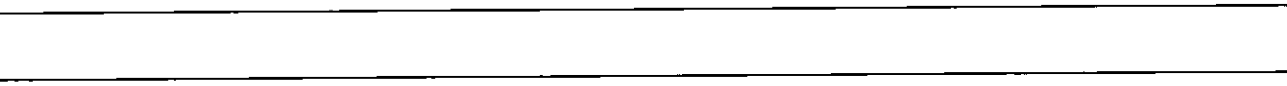
Other Requirements:

- 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
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Ceiling / Roof	38.00
Wall	19.00
Floor / Foundation	0.00
Ductwork (unconditioned spaces):	_____

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

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

Building Air Leakage and Duct Test Results
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Air Leakage Compliance Method:	<input type="checkbox"/> Visual Inspection
	<input type="checkbox"/> Air Leakage Test

Building Air Leakage Test Results	_____
Name of Air Leakage Tester	_____
Duct Tightness Test Results	_____
Name of Duct Tester	_____

Name: _____ Date: _____

Comments:

