NTA INC.

ENGINEERS
PLANNERS
CONSULTANTS

305 NORTH OAKLAND AVENUE • P.O. BOX 490 • NAPPANEE, INDIANA 46550
WEB: WWW.NTAINC.COM

PHONE: 574-773-7975
FAX: 574-773-2732

August 6, 2015

Mr. Alan Greene, P.E.
State of North Carolina
Department of Insurance
Manufactured Building Division
322 Chapanoke Road
Suite 200
Raleigh, NC 27603

RE: R-Anell Housing Group. LLC
Model: RJ553-A1 -NC

Dear Mr. Greene,

Enclosed, you will find one (1) copy of the above mentioned project for your files.

Should you have any questions or comments, please contact me at your earliest convenience.

Sincerely,

Michael Faller

Michael Faller
Modular Building Specialist

Enclosures

Adopted Codes: State of North Carolina

2012 North Carolina Residential Code
2011 North Carolina Electrical Code
2012 North Carolina Energy Code
2012 North Carolina Mechanical Code
2012 North Carolina Plumbing Code

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Project Location:

22019 Hwy 17
Hampstead NC 28443
Pender County

Occupancy:

Occupancy: ..... IRC - Single Family Dwelling
Construction Type: ..... 5B (Wood Frame - Unprotected)
Number of Stories: ..... One Story Cape

Design Load:

Floor Area: ..... 2040 Sq.Ft.
Ground Snow Load: ..... 20 psf
Top Chord Dead Load: ..... 7 psf
Wind Speeds: IRC = 130 mph, ASCE 7-10 Ult. = N/A mph
Seismic Design Category: ... C
Floor Live Load: ..... 40 psf
Floor Dead Load: ..... 10 psf
Bottom Chord Live Load:..... See Truss psf
Wind Exposure Category: C
IECC Geographical Code: 3

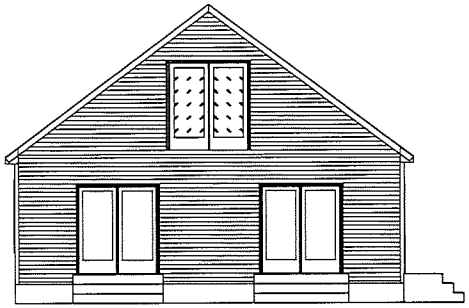
Insulation

Reference RESCheck for Requirements.

Attention Local Inspection Departments:

1. Set-up instructions for this modular unit are included by attachment to these plans. Any plans set that does not include an attachment entitled "MODULAR HOME INSTALLATION MANUAL" is incomplete.
2. The following items are not completed by the home manufacturer, are not inspected by in-factory third party inspectors, and are not certified by the modular compliance label: (A) Components or connections for heating or air conditioning systems which are NOT part of the factory installation. (B) Below floor ducts and DWV. (C) Electrical service disconnect. (D) Foundation designs and attachments. In order to verify that all required systems connections are complete, refer to the "Inspection Check Sheet" in the manufacturer's modular home installation manual. Regardless of factory or site installation, the furnace, water heater, and all elements of heating system must be per applicable codes, (refer to ResCheck if applicable).
3. Site installed furnace must meet IECC Energy Efficiency Certificate if applicable.
4. This unit must be connected to a public water supply and sewer system if these are available.
5. ***If this structure is in a thermal zone more stringent than that listed on these plans, is set on pilings, or is installed at a mountain region or coastal high hazard site such that wind or other design parameters are increased, the design must be determined to be adequate for actual site conditions. Alterations may be required to bring the home into compliance with the more stringent conditions.***
6. Soffit materials for this unit assume that the building face will be 10 feet or greater from the property line when installed on site. Where the building face is less than 10 feet from the property line, underlayment materials and ventilation in accordance with **Section R703.11.3, NC Residential Code** , must be provided and installed at the site and inspected by the local jurisdiction.
7. If after installation of this home, the lowest part of the clear opening of any window is more than 72" above the finished grade, guards will be required to be installed onsite in accordance with **Section R612**; subject to local inspection.

Model: RJ553-A1
Customer: Stock
Dealer: Custom Built Homes
Builder:
R-Anell Housing Group, LLC
Subsidiary of The Commodore Corporation
235 Anthony Grove Rd.
Crouse, NC 28033



Drawing Index

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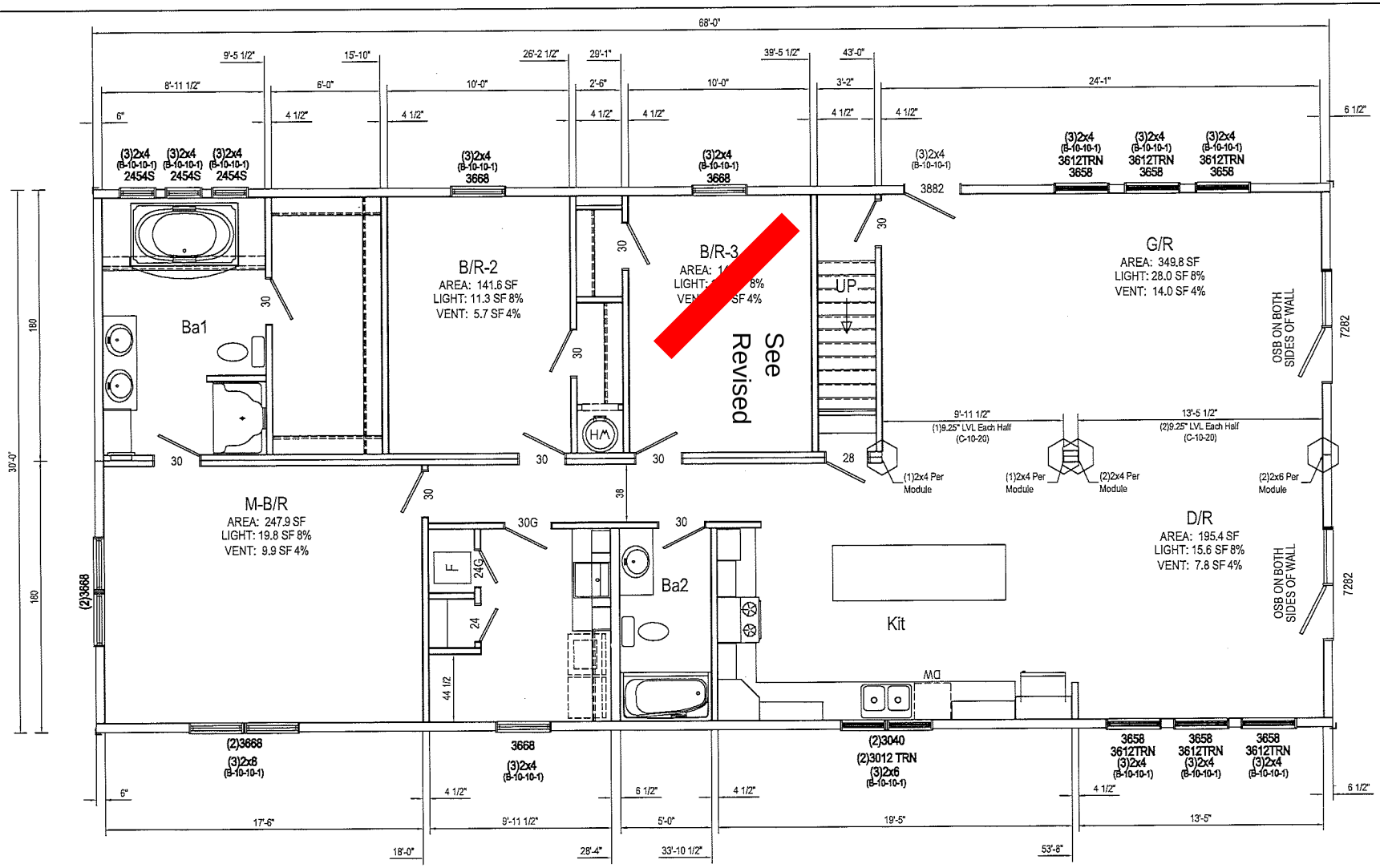
Michael Faller



Notes:
1. Exterior opening headers and jack studs are SPF #2 unless otherwise noted.
2. Sidewall headers may use alternate construction per section B-10 of Systems Manual.
3. LVL's where specified to be minimum of 1 1/2" wide, M.O.E. = 2.0 and fb = 2900 PSI.

Note:
* LVLs noted must extend past column on at least one end 24" minimum and be overlayed with OSB sheathing.

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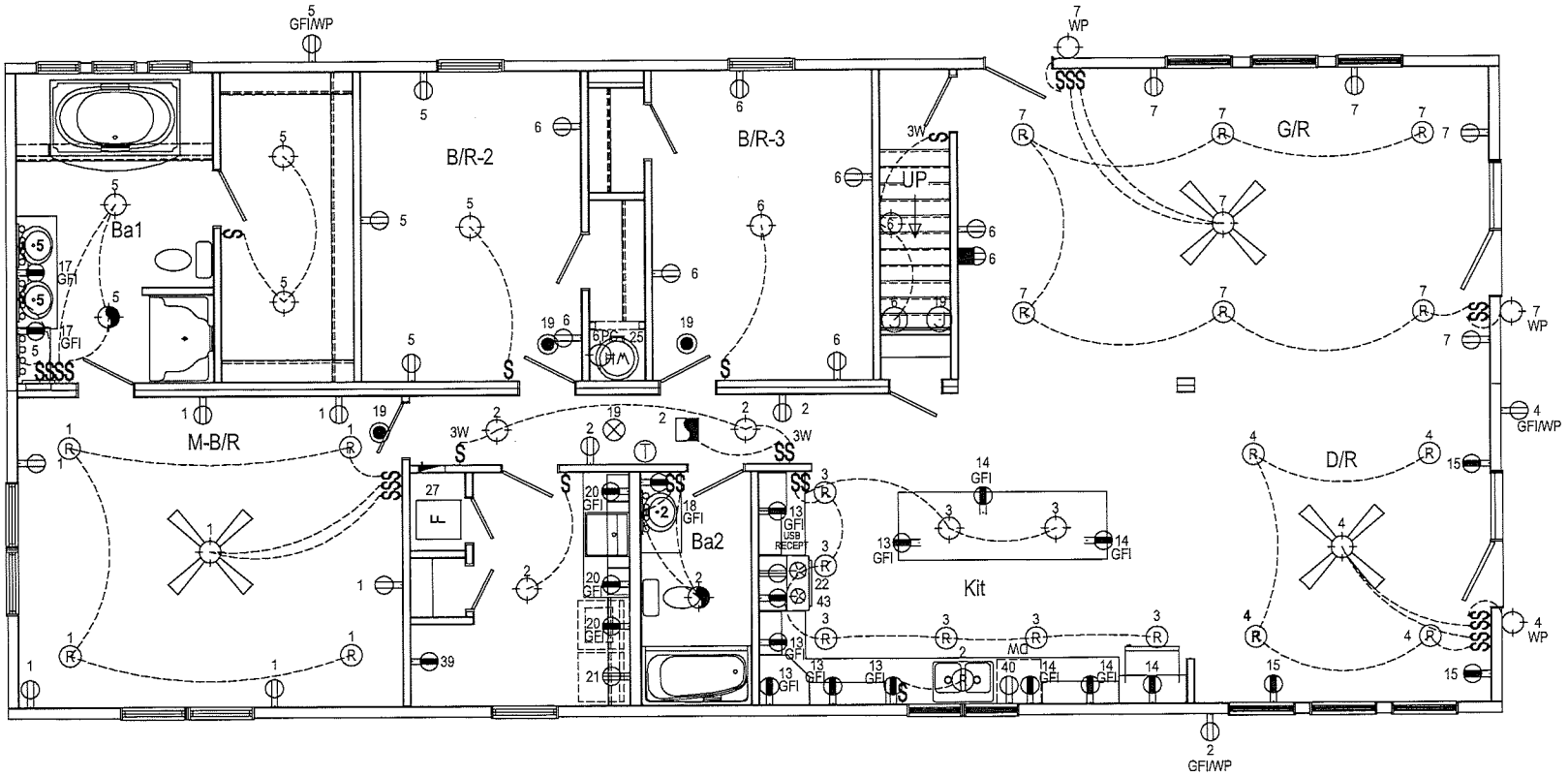
See Schedules and General Notes Page

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Callout: 3268	Revisions Date / Number	Scale: 3/16" = 1'-0"	Date: 08/03/2015	Cust: Stock	Model/Eng. No.: RJ553-A1
Title: Floor Plan			Drawn By: NE	Reference: NONE	Dlr: Custom Built Homes S/N: 40299	Pg: FP



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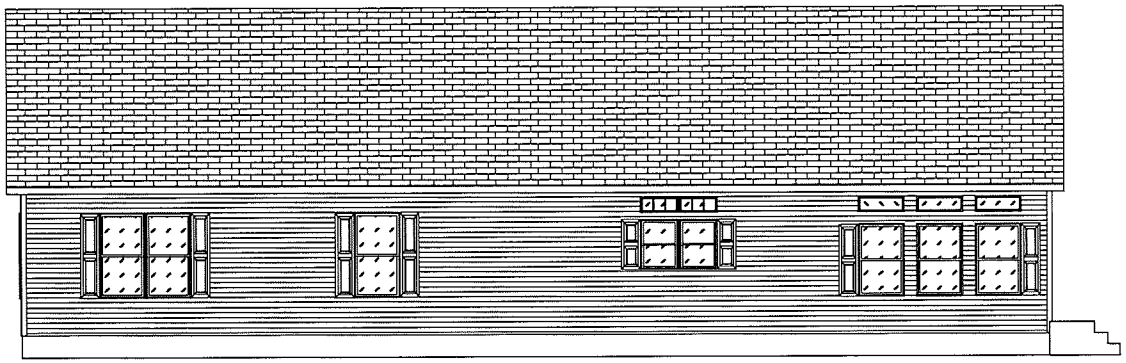
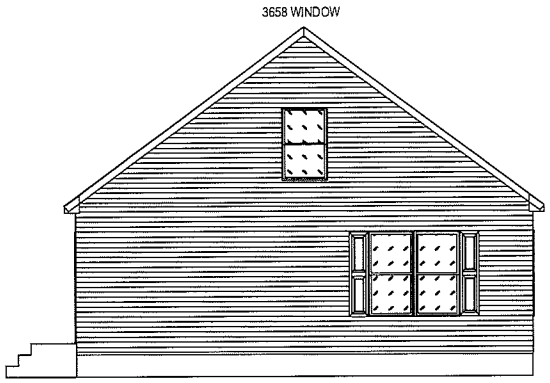
See Schedules and General Notes Page

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Callout: 3268	Revisions: Data / Number	Scale: 3/16" = 1'-0"	Date: 08/03/2015	Cust: Stock	Model/Eng. No.: RJ553-A1
Title: Electrical Plan			Drawn By: NE	Reference: NONE	Dir: Custom Built Homes / S/N: 40299	Pg.: EP

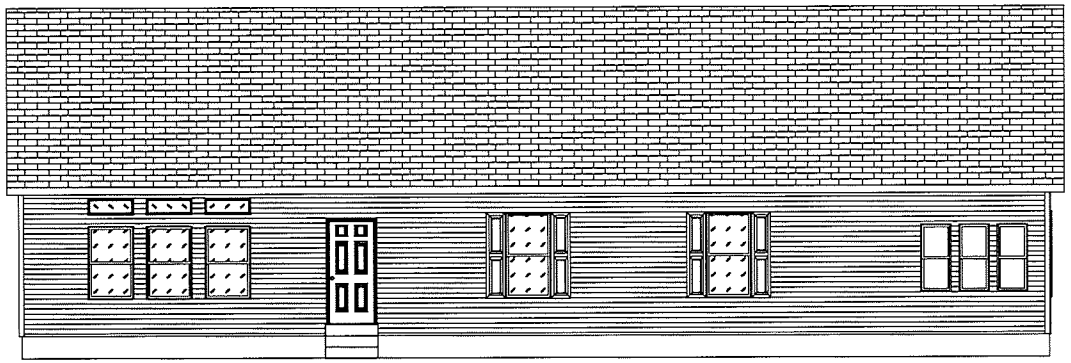
ELEVATIONS SHOWN ON THIS PAGE REPRESENT BASIC COMPONENTS AND ARE NOT INTENDED TO BE ALL INCLUSIVE, NOR DO THESE ELEVATIONS DETAIL EVERY CODE REQUIRED ASPECT OF THIS BUILDING. SITE BUILT STOOPS, STEPS, DECKS, PORCHES, HANDRAILS AND/OR SIMILAR ITEMS MUST BE PROVIDED BY OTHERS ON SITE FOR COMPLIANCE WITH APPLICABLE CODES. COMPLIANCE WITH ALL APPLICABLE CODES PER LOCAL AUTHORITY HAVING JURISDICTION, WHETHER DETAILED IN THIS SET OR NOT, MUST BE MET.



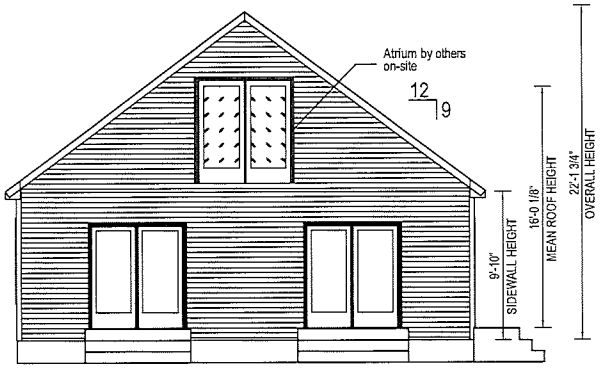
LEFT VIEW



REAR VIEW



RIGHT VIEW



FRONT VIEW

-NOTES-

1. FOUNDATION SHALL BE DESIGNED AND CONSTRUCTED BY OTHERS WHERE "OTHERS" REFERS TO THE DEALER BUILDER.
2. GUTTERS AND LEADERS SHALL BE INSTALLED BY OTHERS.
3. TYPICAL 12" OR 15" VINYL SHUTTERS PROVIDED BY MANUFACTURERS.
4. ALL FOOTINGS, RAILINGS AND STEPS SHALL BE FIELD INSTALLED IN COMPLIANCE WITH APPLICABLE STATE AND LOCAL CODES.
5. SIDING SHALL BE VINYL SIDING WITH VINYL TRIM, AND MAY BE PARTIALLY INSTALLED ON SITE.
6. EXTERIOR LIGHTS MAY BE SHIPPED LOOSE FOR INSTALLATION ON SITE.
7. ROOFING SHINGLES MAY BE PARTIALLY SITE INSTALLED.
8. PORCH RAILINGS ARE PVC. TREATED LUMBER PORCH POSTS MAY BE COVERED WITH VINYL. PORCH DECKING SHALL BE TREATED.
9. ALL EXTERIOR COVERINGS SHALL BE WEATHER AND DECAY RESISTIVE TO PROVIDE PROPER PROTECTION FOR UNTREATED MATERIALS.

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Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Callout: 3268	Revisions Date / Number		Scale: N.T.S.	Date: 07/17/2015	Cust: Stock	Model/Eng. No.: RJ553-A1	
Title: Elevations				Drawn By: JLR	Reference: NONE	Dlr: Custom Built Homes	Pg.: EL	
						S/N: 40299		

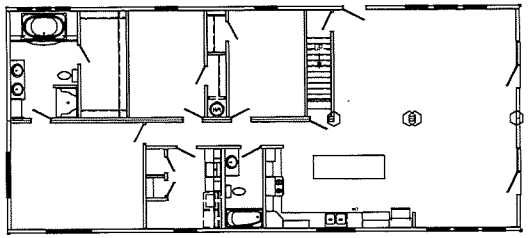
FOOTING SIZE BASED ON 2000 PSF	
FOOTING SIZE	SIZE MAX. LOAD (LBS.)
*16"x16"x6"	3.4K
*20"x20"x6"	5.3K
24"x24"x8"	7.6K
30"x30"x10"	11.6K
36"x36"x15"	16.3K
42"x42"x16"	21.9K

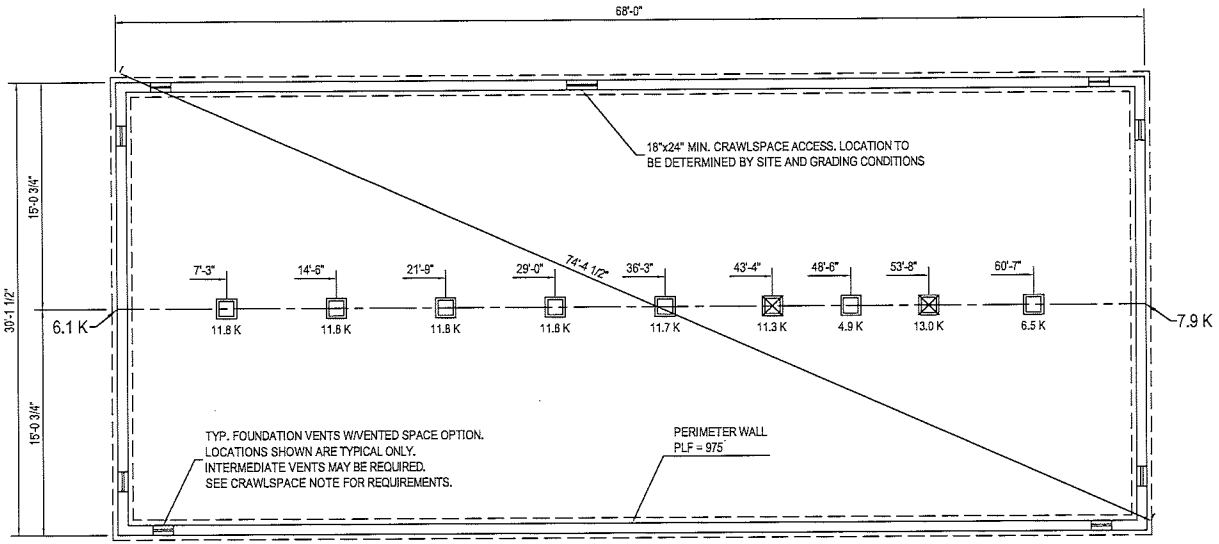
COLUMNS & FOOTINGS MUST BE RATED TO MEET THE CENTER LINE LOADS LISTED	GROUND SNOW LOAD 20 PSF

* = A 4" THICK PRE-CAST FOOTER OF EQUIVALENT WIDTH AND LENGTH MAY BE USED IN PLACE OF A 6" THICK CAST IN PLACE FOOTER.

FOR CONNECTION OF THE HOME TO FOUNDATION AT BRACING WALLS, REFER TO "BRACED WALLS-CALCULATED" PAGE, IF APPLICABLE. WHEN THIS PAGE IS PRESENT, HORIZONTAL AND OVERTURNING (RACKING) LOADS AT BRACING WALL LOCATIONS ARE INDICATED FOR THESE FOUNDATION CONNECTIONS. THESE LOADS MAY BE RECALCULATED AND REDESIGNED PER LOCAL CODES TO CONFORM TO SITE CONDITIONS AS REQUIRED. REFER TO CHAPTER 4 (4.5.3 FOUNDATION TIE-DOWNS) OF THE "MODULAR HOME INSTALLATION MANUAL" FOR ADDITIONAL INFORMATION. REFER TO IRC GUIDELINES FOR CONNECTION OF HOME TO FOUNDATION WHEN "BRACED WALLS-PRESCRIPTIVE" PAGE IS APPLICABLE.

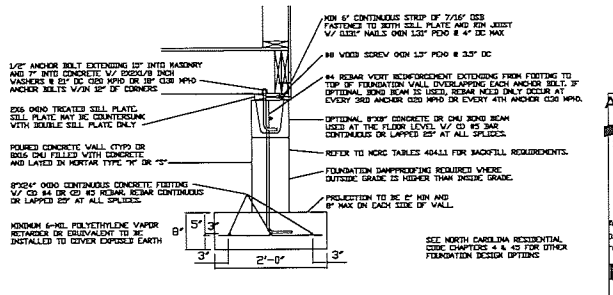
FOUNDATION SHOWN MUST BE DESIGNED BY OTHERS TO THE SITE CONDITIONS. THIS INCLUDES SEISMIC DESIGN AND ATTACHING THE HOME TO THE FOUNDATION, ALONG WITH RESISTANCE TO LATERAL, LONGITUDINAL SHEAR, UPLIFT AND DOWNLIFT FORCES IN BOTH DIRECTIONS.





- 2X10 OR TRUSS FLOOR NOTES -

1. FOUNDATION LAYOUT IS APPLICABLE TO NOTED MAXIMUM SNOW LOADING AND MINIMUM SOIL BEARING PRESSURE. REFER TO INSTALLATION MANUAL FOR OTHER APPLICABLE INFORMATION. CONSULT LOCAL OFFICIALS AND THE APPLICABLE LOCAL CODES FOR OTHER REQUIREMENTS (I.E. DRAINAGE, DAMP-PROOFING, BACKFILL SUPPORT, ETC.).
2. WIDTH DIMENSIONS SHOWN INCLUDE A 3/4" ALLOWANCE PER HOME SECTION FOR HOMES WITH FACTORY-INSTALLED O.S.B. ON THE MARRIAGE WALL MATE LINE. THIS ALLOWANCE TAKES INTO ACCOUNT THE 7/16" O.S.B. MATERIAL INSTALLED ON EACH MARRIAGE WALL PLUS ALLOWANCE DUE TO OTHER FACTORS. IF HOME DOES NOT INCLUDE O.S.B. ON THE MARRIAGE WALL MATE LINE, FOUNDATION WIDTH IS TO BE SIZED EQUAL TO ACTUAL MANUFACTURED FLOOR WIDTH. LESSER DIMENSION, IF SHOWN, INDICATES ACTUAL FLOOR WIDTH. THESE DIMENSIONS DO NOT ALLOW FOR ANY VARIANCE THAT MAY OCCUR IN SITE INSTALLATION SUCH AS GAPPING, OFF CENTER SET OR OTHER FIELD-ENCOUNTERED VARIABLES. ANY ADJUSTMENTS NEEDED IN FOUNDATION WIDTH DUE TO SUCH VARIANCES ARE AT THE DISCRETIONOF THE INSTALLER.
3. FOR DEVIATIONS &/OR OTHER FOUNDATION DESIGNS CONSULT A LOCAL PROFESSIONAL ENGINEER & YOUR LOCAL BUILDING OFFICIAL.
4. SILL PLATE FASTENING TO BE PER INSTALLATION MANUAL AND/OR LOCAL CODES. SILL FASTENING REQUIREMENT IS PER APPLICABLE WIND SPEED AND SEISMIC ZONES. SEE YOUR HOME DATA PLATE FOR APPLICABLE ZONES.
5. CONCRETE COMPRESSIVE STRENGTH (FC'): 2500 PSI MINIMUM.
6. CENTERLINE LINE SUPPORTS AND SPACING ARE BASED ON (2) 2X10's SPF#2 ON EACH HALF (4-2X10'S TOTAL).
7. CRAWLSPACE VENTILATION IS NOT REQUIRED WHEN INSULATION IS APPLIED TO CRAWLSPACE WALLS AS REQUIRED BY RESCHECK (CONDITIONED AIR). INSTALLATION OF VENTS IN CRAWLSPACE WALLS WOULD MANDATE INSULATING THE FLOOR SYSTEM PER APPLICABLE THERMAL CALCULATIONS. REFER TO IRC 408.2 (1 SQ. FT. NET PER EACH 150 SQ. FT. OF FOUNDATION AREA).
8. FOUNDATION CONSTRUCTION AND TIE DOWN REQUIREMENTS FOR HOMES LOCATED IN 90 MPH OR LESS WIND ZONES MAY USE IRC GUIDELINES UNLESS NOTED OTHERWISE.



APPLICABLE TO SEISMIC ZONE C, (B), A) WITH MINIMUM SOIL BEARING CAPACITY OF 1500 PSF, CONCRETE 2500 PSI (CDC C MAX), 3000 PSI (CDC (B), (A)). WIND SPEED UP TO 130 MPH MAX. REFER TO WIND BRACING PAGES FOR ADDITIONAL TIE DOWN REQUIREMENTS AT BRACED WALL LOCATIONS. FOUNDATION SHOWN IS IN ACCORDANCE, PRESCRIPTIVELY, WITH THE NORTH CAROLINA RESIDENTIAL CODE. REFER TO NCRC FOR FURTHER REQUIREMENTS.

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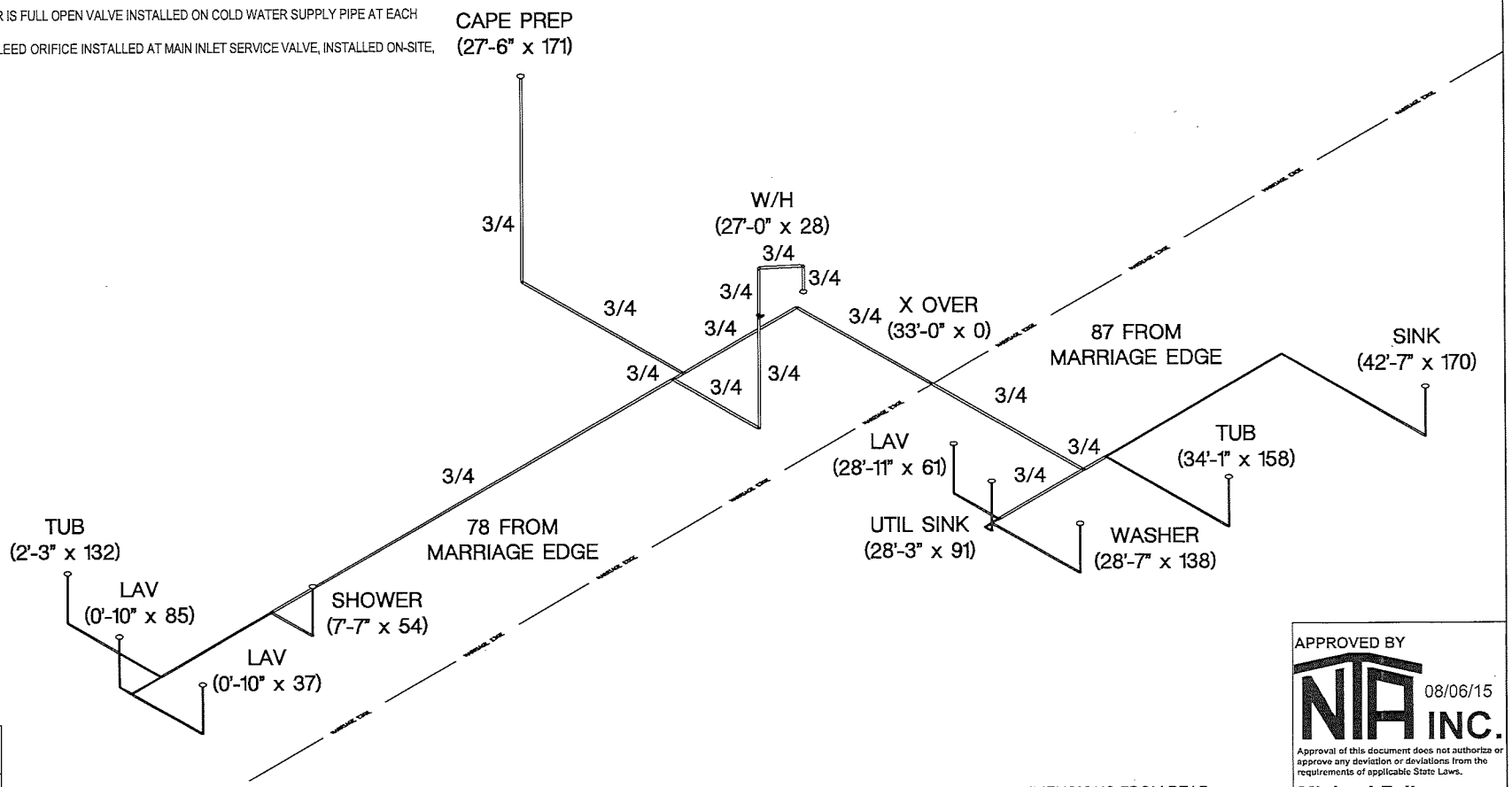
Michael Faller

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Callout: 3268	Revisions: Date / Number	Scale: 1/8" = 1'-0"	Date: 08/03/2015	Cust: Stock	Model/Eng. No.: RJ553-A1
Title: 2x10 Marriage Line without Stair Foundation			Drawn By: NE	Reference: NONE	Dir: Custom Built Homes S/N: 40299	Pg.: FD20#

NOTE:

1. 3/4" GALVANIZED, OR COPPER RELIEF DRAIN (NOT SHOWN) THRU FLOOR w/VISIBLE AIR GAP
2. INLET WITH 1" CAP & CHAIN.
3. ALL WATER SUPPLY PIPING CONSTRUCTED OF PEX MATERIAL
4. ANTI-SCALD DEVICE ON ALL SHOWER, AND TUB/SHOWER COMBINATIONS.
5. WATER-HAMMER ARRESTORS AT BATTERY OF FIXTURES INSTALLED WHEREVER THERE IS A QUICK-CLOSING VALVE CONFORMING TO ASSE 1010 & MANUFACTURER'S INSTRUCTIONS.
6. SHUT-OFF VALVE IS REQUIRED AT EACH FIXTURE
7. BATHROOMS WITH DOUBLE LAVS ARE FED FROM THE SAME RISER.
8. ANY LINE NOT LABELED IS 1/2"
9. WATER HEATER TEMPERATURE & PRESSURE RELIEF VALVE AND RELIEF DRAIN PIPE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
10. SHUT-OFF VALVE AT WATER HEATER IS FULL OPEN VALVE INSTALLED ON COLD WATER SUPPLY PIPE AT EACH WATER HEATER, PER CODE.
11. FULLWAY SHUT-OFF VALVE WITH BLEED ORIFICE INSTALLED AT MAIN INLET SERVICE VALVE, INSTALLED ON-SITE, PER CODE.



HANGER SPACING - PEX PIPE (SUPPLY)	
MAX HORIZONTAL SPACING (FT.)	MAX VERTICAL SPACING (FT.)
2'-8"	4'-0"

ALL DIMENSIONS FROM REAR AND MARRIAGE EDGE

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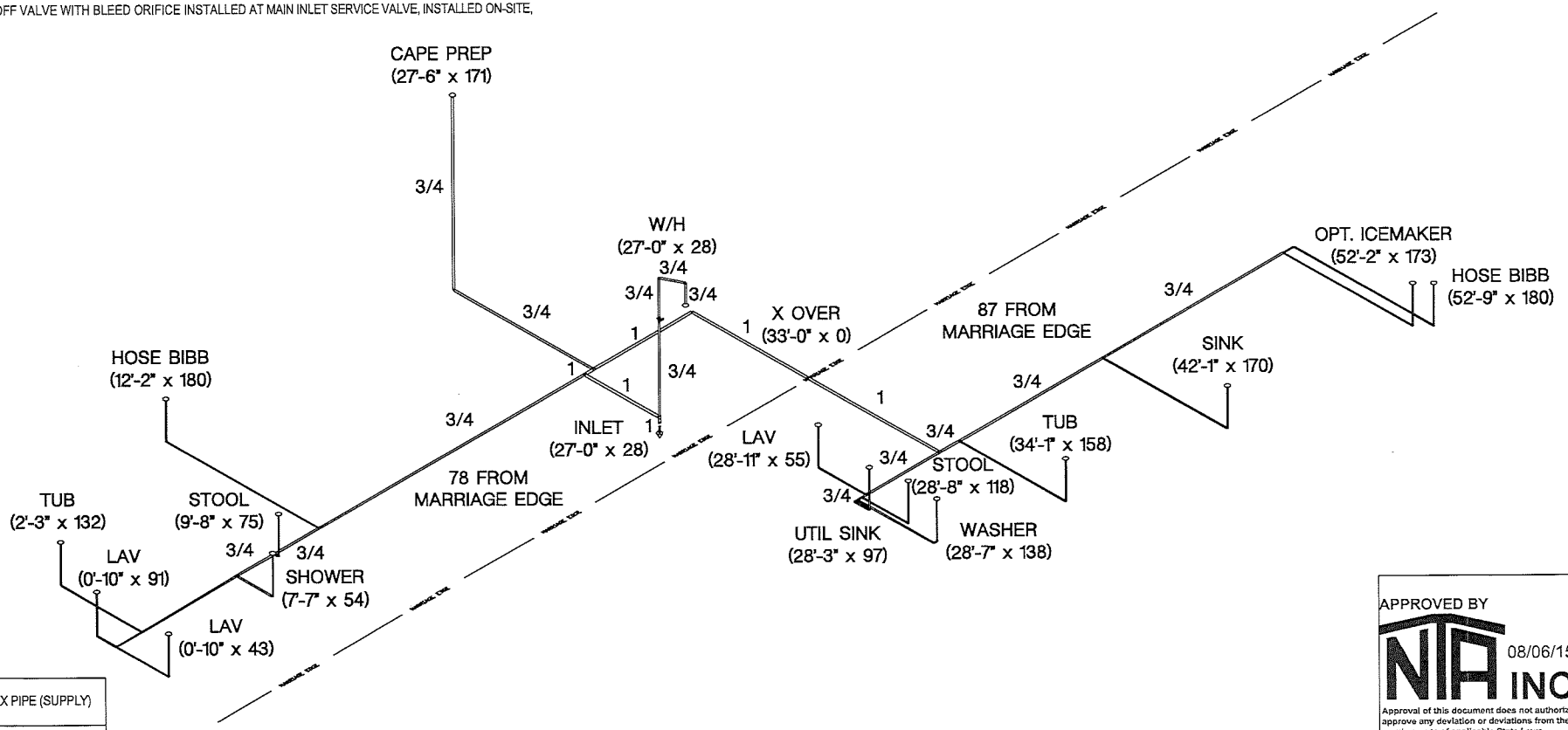
Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.

Title: Hot Water Lines

Callout:	Revisions				Scale:	Date:	Cust: Stock	Model/Eng. No.:
326B	Date	Number			CUSTOM	08/03/2015	Dir: Custom Built Homes	RJ553-A1
					Drawn By: NE	Reference: NONE	S/N: 40299	Pg.: WH

NOTE:

1. 3/4" GALVANIZED, OR COPPER RELIEF DRAIN (NOT SHOWN) THRU FLOOR w/VISIBLE AIR GAP
2. INLET WITH 1" CAP & CHAIN.
3. ALL WATER SUPPLY PIPING CONSTRUCTED OF PEX MATERIAL
4. ANTI-SCALD DEVICE ON ALL SHOWER, AND TUB/SHOWER COMBINATIONS.
5. WATER-HAMMER ARRESTORS AT BATTERY OF FIXTURES INSTALLED WHEREVER THERE IS A QUICK-CLOSING VALVE CONFORMING TO ASSE 1010 & MANUFACTURER'S INSTRUCTIONS.
6. SHUT-OFF VALVE IS REQUIRED AT EACH FIXTURE
7. BATHROOMS WITH DOUBLE LAVS ARE FED FROM THE SAME RISER.
8. ANY LINE NOT LABELED IS 1/2"
9. WATER HEATER TEMPERATURE & PRESSURE RELIEF VALVE AND RELIEF DRAIN PIPE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
10. SHUT-OFF VALVE AT WATER HEATER IS FULL OPEN VALVE INSTALLED ON COLD WATER SUPPLY PIPE AT EACH WATER HEATER, PER CODE.
11. FULLWAY SHUT-OFF VALVE WITH BLEED ORIFICE INSTALLED AT MAIN INLET SERVICE VALVE, INSTALLED ON-SITE, PER CODE.



HANGER SPACING - PEX PIPE (SUPPLY)	
MAX HORIZONTAL SPACING (FT.)	MAX VERTICAL SPACING (FT.)
2'-8"	4'-0"

ALL DIMENSIONS FROM REAR AND MARRIAGE EDGE

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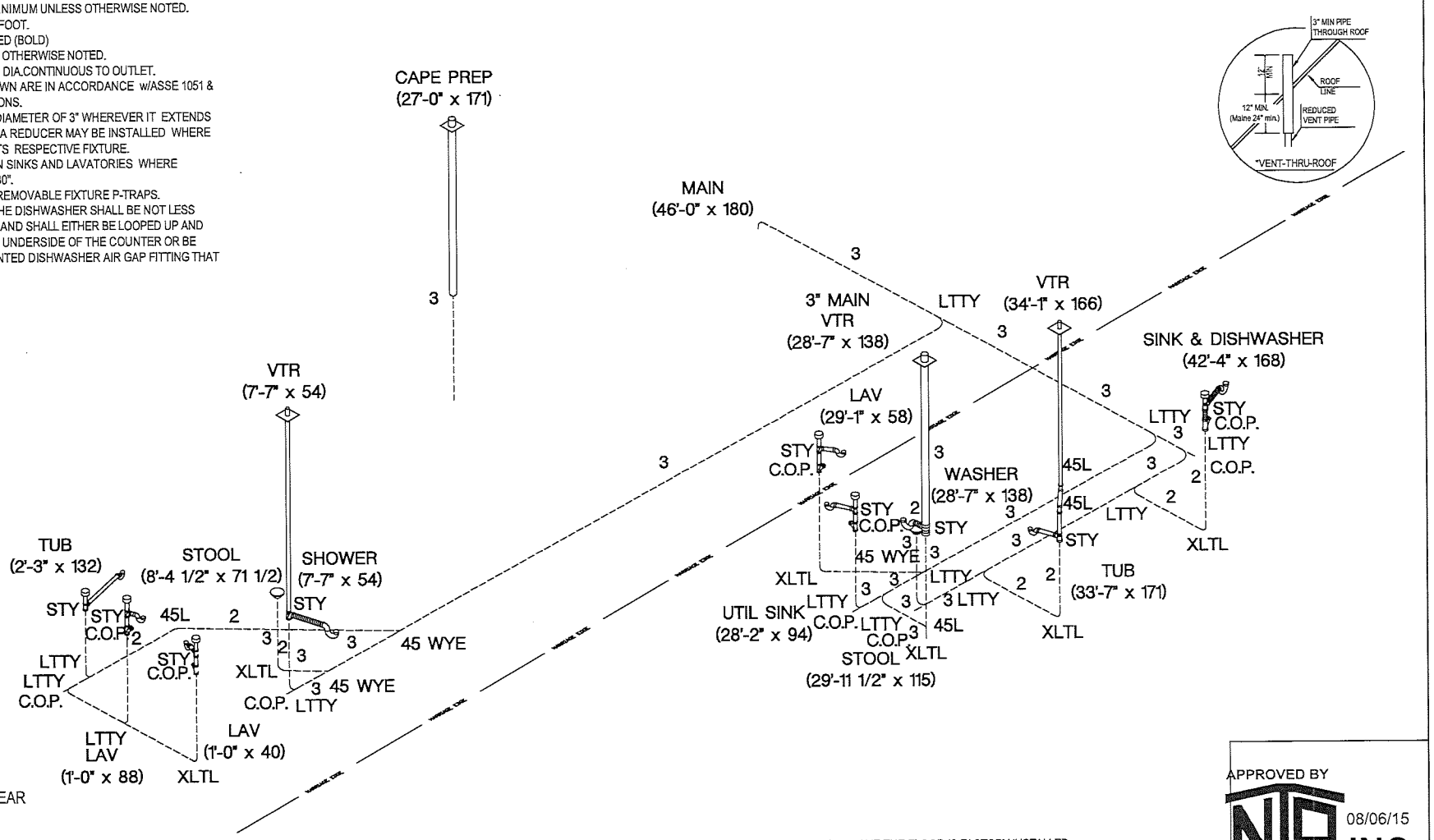
Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.

Title: Cold Water Lines

Callout:	Revisions		Scale:	Date:	Cust: Stock	Model/Eng. No.:
3268	Date / Number		CUSTOM	08/03/2015	Dlr: Custom Built Homes	RJ553-A1
			Drawn By: NE	Reference: NONE	S/N: 40299	Pg.: WC

NOTE:

1. ALL LINES 1/4" SLOPE/FOOT MINIMUM UNLESS OTHERWISE NOTED.
2. ←o— DENOTES 1/8" SLOPE/FOOT.
3. ALL 2" DIA. LINES SHOWN FILLED (BOLD)
4. ALL LINES 1-1/2" DIA. MINIMUM OTHERWISE NOTED.
5. LINES SERVING STOOL ARE 3" DIA.CONTINUOUS TO OUTLET.
6. AIR ADMITTANCE VALVES SHOWN ARE IN ACCORDANCE w/ASSE 1051 & MANUFACTURER'S INSTRUCTIONS.
7. VENT STACK MUST BE A MIN. DIAMETER OF 3" WHEREVER IT EXTENDS THROUGH ROOF TO OUTSIDE. A REDUCER MAY BE INSTALLED WHERE STACK IS LESS THAN 3" OFF ITS RESPECTIVE FIXTURE.
8. CONTINUOUS WASTE APPL. ON SINKS AND LAVATORIES WHERE SPACING DOES NOT EXCEED 30".
9. STACKS CLEANED THROUGH REMOVABLE FIXTURE P-TRAPS.
10. THE DISCHARGE LINE FROM THE DISHWASHER SHALL BE NOT LESS THAN 1/2 INCH NOMINAL SIZE AND SHALL EITHER BE LOOPED UP AND SECURELY FASTENED TO THE UNDERSIDE OF THE COUNTER OR BE CONNECTED TO A DECK-MOUNTED DISHWASHER AIR GAP FITTING THAT IS LISTED.



ALL DIMENSIONS FROM REAR AND MARRIAGE EDGE

HANGER SPACING - DRAIN PIPE (DWV)	
MAX HORIZONTAL SPACING (FT.)	VERTICAL SPACING
4'-0"	Vertical piping shall be supported at each story or floor level.

DWV FITTING IDENTIFICATION			
XLTL	LONG TURN 90° ELBOW	4X3CB	90° CLOSET ELBOW
XLSL	LONG TURN 90° STREET ELBOW	3-WAY-L	DOUBLE 90° ELBOW
45L	45° ELBOW	STY	SANITARY TEE
45SL	45° STREET ELBOW	LTTY	LONG RADIUS TY
22.5L	22 1/2° ELBOW	45 WYE	45° WYE
22.5SL	22 1/2° STREET ELBOW		

PLUMBING ABOVE THE FLOOR IS FACTORY INSTALLED. PLUMBING BELOW THE FLOOR INCLUDING CONNECTIONS SHALL BE INSTALLED ON SITE BY OTHERS ACCORDING TO SITE CONDITIONS, SUBJECT TO APPROVAL OF LOCAL INSPECTION. ON SITE PLUMBING SHOWN IS SUGGESTIVE AND TYPICAL ONLY.

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Michael Faller

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.

Title: DWV System

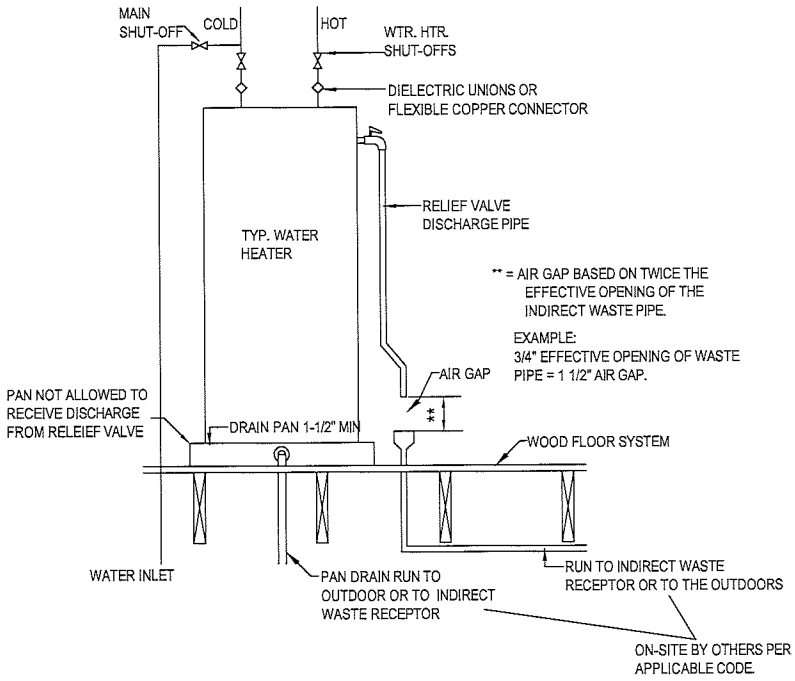
Callout: 3268	Revisions: Date / Number	Scale: CUSTOM	Date: 08/03/2015	Cust: Stock	Model/Eng. No.: RJ553-A1
		Drawn By: NE	Reference: NONE	Dir: Custom Built Homes	Pg.: DL
				S/N: 40299	

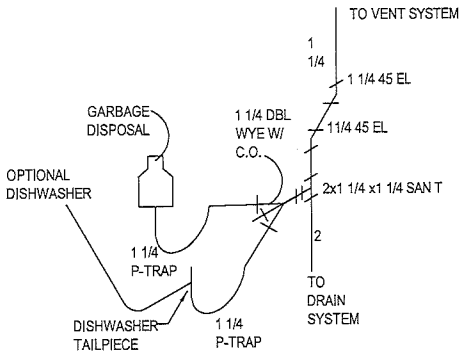
PIPE SUPPORT:

VERTICAL PIPING:
SUPPORTS AT 10' O.C. MAX. OR BETWEEN FLOOR LEVELS.

HORIZONTAL PIPING:
SUPPORTS AT 4' O.C. MAX. ENDS OF BRANCHES, AND AT CHANGES IN ELEVATION AND/OR DIRECTION.

TRAP ARMS:
SUPPORT LOCATED AS CLOSE TO TRAP AS POSSIBLE WHEN TRAP TO VENT EXCEEDS 3'.





OPTIONAL GARBAGE DISPOSAL PLUMBING ILLINOIS MODELS ONLY - USE DETAIL ABOVE FOR OPTIONAL GARBAGE DISPOSAL.

NOTES:
ALL BELOW FLOOR PLUMBING BY OTHERS. ALL FITTINGS BELOW BOTTOM CAN BE SHIPPED LOOSE.
ALL BELOW FLOOR PLUMBING ILLUSTRATIONS ARE RECOMMENDATIONS ONLY. ON-SITE CONDITIONS AND/OR RESTRICTIONS MAY REQUIRE SOME MODIFICATIONS.
OPT. GARBAGE DISPOSAL TO BE LOCATED ON KITCHEN SINK WASTE ASSEMBLY. ALL VENTS THRU ROOF TO BE 3", 12" MIN. ABOVE AND BELOW ROOF PENETRATION.
ALL P-TRAPS TO BE 1 1/2" UNLESS NOTED.
HORIZONTAL VENT SLOPE : 1/8" PER FOOT
HORIZONTAL DRAIN SLOPE: 1/4" PER FOOT
DRAIN, WASTE, AND VENT PLUMBING TO BE PVC PLASTIC OR EQUAL, APPROVED FOR DWV APPLICATIONS.
ANY TRANSITIONS TO MATERIALS, OTHER THAN THE SPECIFIED MATERIAL, MUST INCORPORATE AN APPROVED FITTING FOR CONNECTION.
ALL TUBS WITH WHIRLPOOL MUST BE PROVIDED WITH ACCESS TO MOTOR. ALL PLUMBING TO MEET OR EXCEED CURRENT ADOPTED PLUMBING CODES.
IN CONCEALED SPACES WHERE PIPING IS INSTALLED THRU HOLES OR NOTCHES IN STUDS, JOISTS, TRUSSES, OR SIMILAR MEMBERS LESS THAN 1 1/2" FROM NEAREST EDGE OF THE MEMBER, THE PIPE SHALL BE PROTECTED BY SHIELD PLATES. PROTECTIVE SHIELD PLATES SHALL BE A MINIMUM OF 16 GA. STEEL. PLATES SHALL COVER AREA OF THE PIPE WHERE THE MEMBERS ARE NOTCHED OR BORED, AND SHALL EXTEND A MINIMUM OF 2" ABOVE SOLE PLATES AND BELOW TOP PLATES.
ALL WATER HEATERS AND WATER HEATER PLUMBING TO BE SUPPLIED AND INSTALLED IN BASEMENT BY OTHERS IN ACCORDANCE WITH ALL RECOGNIZED PLUMBING CODES.
AIR ADMITTANCE VALVES MAY SUBSTITUTE ROOF VENTS AT VARIOUS LOCATIONS PER APPLICABLE STATE AND LOCAL PLUMBING CODES. THE 3" MAIN VENT MUST BE VENTED THRU THE ROOF AND CANNOT BE MECHANICALLY VENTED.

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Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Callout: 3268	Revisions: Date / Number	Scale: N.T.S.	Date: 08/03/2015	Cust: Stock	Model/Eng. No.: RJ553-A1
Title: DWV Notes			Drawn By: NE	Reference: NONE	Dlr: Custom Built Homes	Pg.: DN
					S/N: 40299	

NOTE:
1. TOTAL BTU's = 0
2. MAX. COLUMN LENGTH = 0'
3. SHUT-OFF VALVE REQ'D. FOR EACH APPLIANCE.
4. ONLY ONE F.P. AVAILABLE.
5. ALL LINES NOT SPECIFIED ARE 1/2" (OPTION FIXTURES NOT CONSIDERED)
6. GAS LINE MATERIAL IS BLACK STEEL PIPE AND CONFORMS TO ASTM A53 Gr. A.

ALL DIMENSIONS FROM REAR AND MARRIAGE EDGE

NO GAS APPLIANCES

FINISHED AND INSPECTED ON-SITE BY OTHERS PER APPLICABLE CODES

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HANGER SPACING - STEEL PIPE (GAS)	
MAX HORIZONTAL SPACING (FT.)	MAX VERTICAL SPACING (FT.)
6'-0"	6'-0"

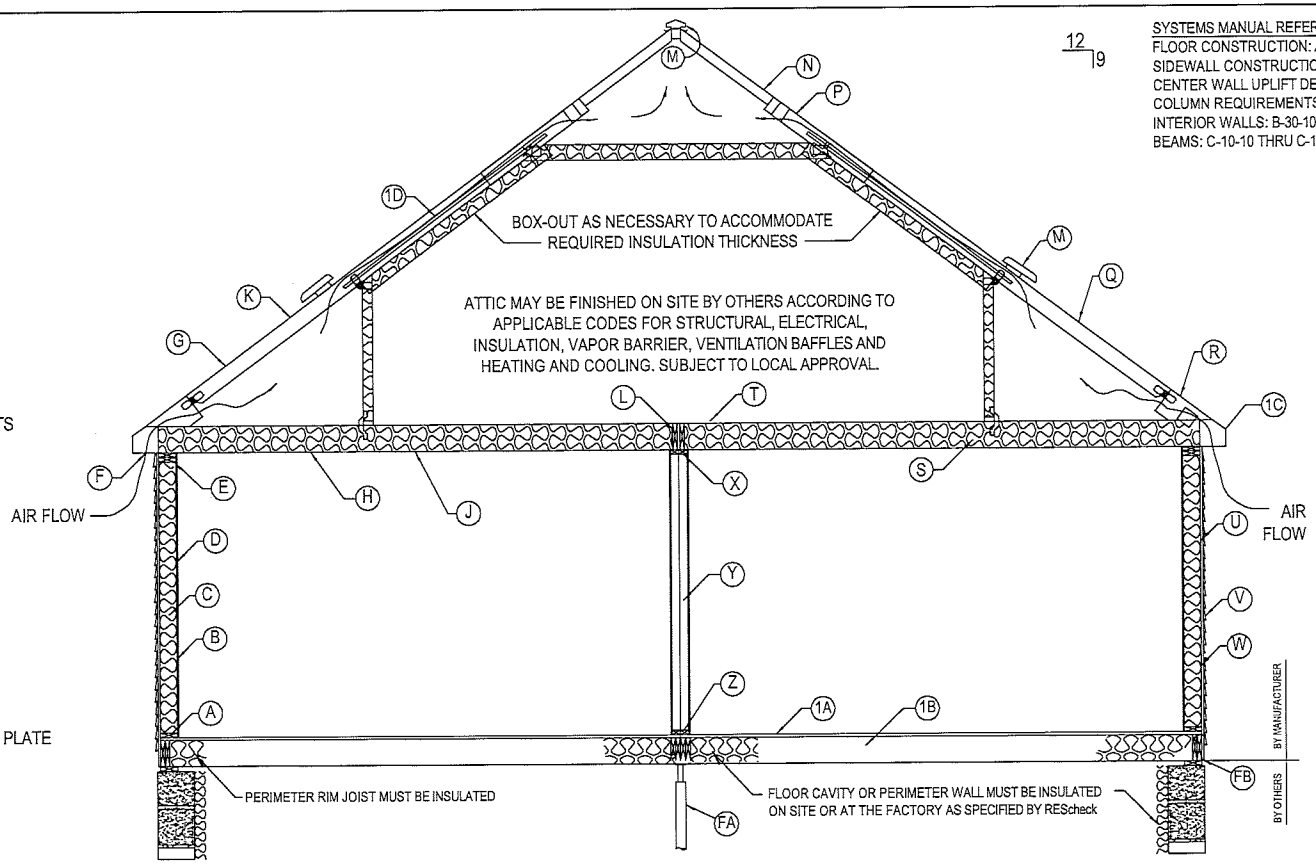
GAS PIPE SIZING BASED ON TABLE 402.4(2) FOR NATURAL GAS OR TABLE 402.4(26) FOR LPG. ALL PIPING IS SCHEDULE 40 METALLIC PIPE.

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.
Title: Gas Lines
Callout: 3268
Revisions: Date / Number
Scale: CUSTOM
Date: 08/03/2015
Drawn By: NE
Reference: NONE
Cust: Stock
Dlr: Custom Built Homes
S/N: 40299
Model/Eng. No.: RJ553-A1
Pg.: GA

Ⓐ 2x6 #3 SPF SIDEWALL BOTTOM PLATE
Ⓑ 2x6 #3 SPF EXTERIOR WALL STUDS, 24" OR 16" O.C.
Ⓒ EXTERIOR WALL INSULATION WITH VAPOR BARRIER PER THERMAL REQUIREMENTS.
Ⓓ WALL COVERING (MIN. 1/2" GYPSUM)
Ⓔ 2x6 #3 SPF DOUBLE TOP PLATE
Ⓕ VENTED SOFFIT 50% OF LOWER ROOF VENTILATION
Ⓖ ENGINEERED TRUSSES SPACED TO MEET DESIGNED GROUND SNOW LOAD.
Ⓗ VAPOR BARRIER
Ⓙ CEILING BOARD 1/2" GYPSUM.
Ⓚ 7/16" 24/16 RATING ROOF DECKING MIN. TYP.
Ⓛ MIN 2x6 #3 SPF BOTTOM RAIL OR BEAM OVER OPEN SPANS TYP.
Ⓜ ROOF VENT (OPT RIDGE VENT) MIN. 50% VENTILATION OF ROOF CAVITY (UPPER PORTION), INSTALLED PER CODE REQUIREMENTS
Ⓝ TYPICAL SHINGLES, INSTALLED PER MFGR'S INSTRUCTIONS
Ⓟ SHINGLE UNDERLAYMENT TYP.
Ⓠ 1" MIN SPACE FOR ATTIC VENTILATION
Ⓡ TYPICAL ICE BARRIER PER IRC 905.2.7.1
Ⓢ CEILING INSULATION TYP. (PER THERMAL REQUIREMENTS.)
Ⓣ DECKING BY OTHERS
Ⓤ 7/16" RATED SHEATHING
Ⓥ VINYL OR HARDBOARD SIDING (RAN VERT. OR HORZ.) INSTALLED PER MFGR.'S INSTRUCTIONS
Ⓦ AIR INFILTRATION AND WATER RESISTANT BARRIER
Ⓧ 2x4 #3 SPF SINGLE OR DOUBLE TOP PLATE INTERIOR WALL TOP PLATE
Ⓨ 2x4 #3 SPF INTERIOR WALL STUD, 24" OR 16" OC.
Ⓩ 2x4 #3 SPF BOTTOM PLATE INTERIOR WALLS, TYP
1Ⓐ FLOOR DECKING RATED FOR 19.2" O.C JOIST SPACING, MIN
1Ⓑ MIN 2x10 #2 SPF FLOOR JOIST 16" O.C.
1Ⓒ ALUM., VINYL, OR HARDIE BOARD FACIA & DRIP EDGE.
1Ⓓ BAFFLE REQUIRED.
ⒻⒶ JACK POST, PIER OR CONCRETE FILLED POST THAT MEETS OR EXCEEDS REQUIRED SUPPORT CAPACITY PER FOUNDATION DESIGN.
ⒻⒷ 2x6 TREATED SILL PLATE. FASTENING OF SILL AND HOME TO FOUNDATION ON SITE PER CODES

12/9

SYSTEMS MANUAL REFERENCES
FLOOR CONSTRUCTION: A-10-10 & 20
SIDEWALL CONSTRUCTION: B-10-10
CENTER WALL UPLIFT DETAIL: B-20-10
COLUMN REQUIREMENTS: B-20-20, 21 & 30
INTERIOR WALLS: B-30-10 & 11
BEAMS: C-10-10 THRU C-10-30



NOTES:

CRAWLSPACE STANDARD - HOME MAY BE PLACED ON BASEMENT (REFER TO FOUNDATION PLAN).
FOLLOW RECOMMENDED ATTACHMENTS FOR FASTENING OF HOME TO FOUNDATION. FOUNDATIONS TO BE BUILT AND CONSTRUCTED BY OTHERS ON SITE.
FOUNDATIONS (BY OTHERS) MUST MEET ALL APPLICABLE CODES.
NOTES AND/OR ILLUSTRATIONS SHOWN ARE TYPICAL AND MAY NOT APPLY TO ALL HOMES CONSTRUCTED. CONSTRUCTION & SPECS MAY VARY PER PLAN.
REFERENCE THE APPROVED SYSTEMS PACKAGE FOR ADDITIONAL AND SPECIFIC CROSS SECTION INFORMATION

TRIMLINE RIDGE VENT: ALLOWS 13" OF NET FREE AIR PER LINEAL FOOT

FULL LENGTH OF HOUSE AIR FLO SOFFIT: FULL VENTED 5.89 SQ IN PER LINEAL FOOT

FULL LENGTH OF HOUSE 2040/300 = 6.8 VENT REQUIRED

SEE PAGES 30-32 IN THE COMMODORE INSTALLATION MANUAL FOR FIELD CONNECTIONS AT THE ROOF AND FLOOR SECTIONS.

IMPORTANT!
MAIN LEVEL FLOORS, OVER ENCLOSED FOUNDATIONS, CONSTRUCTED WITH OPTIONAL ENGINEERED WEB FLOOR JOISTS (OPEN JOISTS) OR WITH JOISTS OF NOMINAL LUMBER LESS THAN 2X10, MAY BE SUBJECT TO SPECIAL FIRE PROTECTIVE REQUIREMENTS TO BE PERFORMED BY OTHERS ON SITE. CONSULT ADOPTED LOCAL CODES FOR COMPLIANCE WITH FIRE PROTECTION OF FLOORS.

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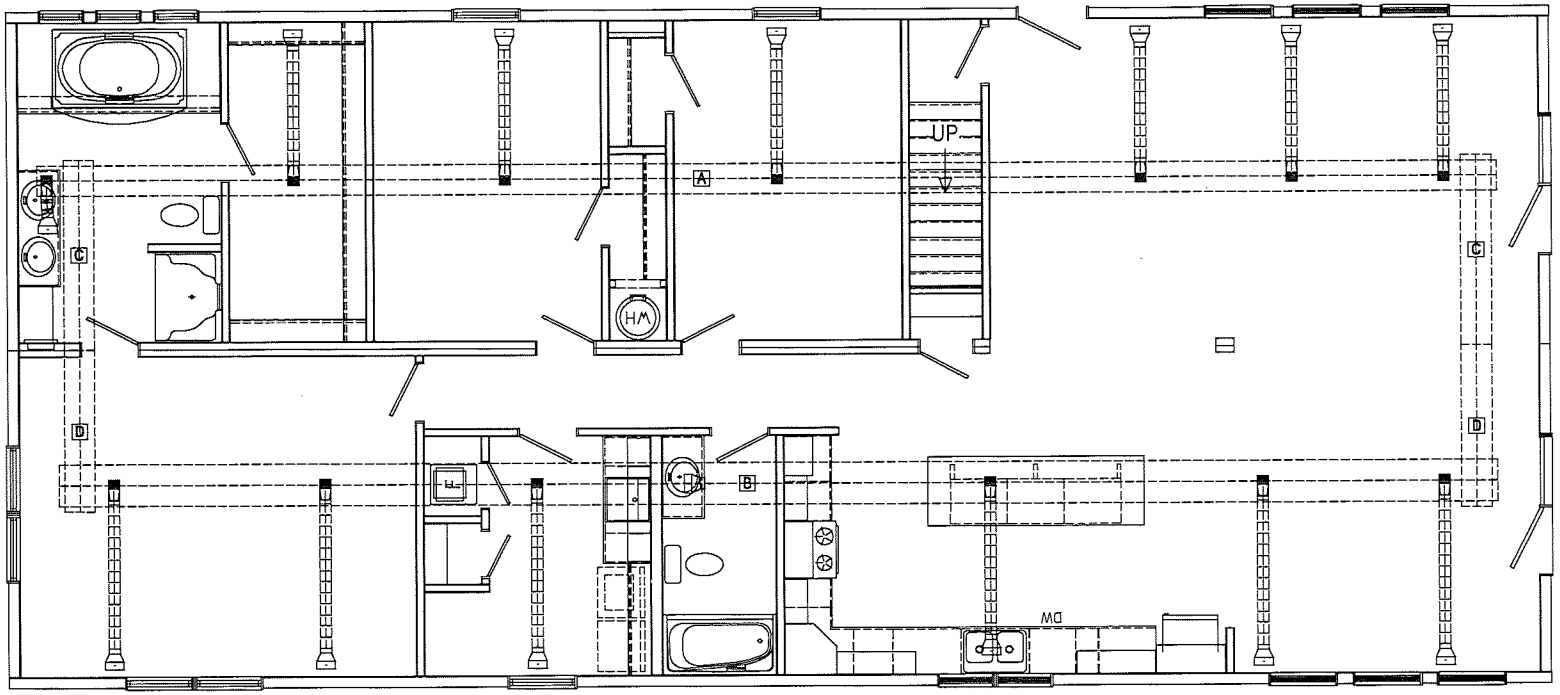
Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.
Title: Cross Section

Callout: 3268	Revisions Date	Number	Scale: N.T.S.	Date: 08/03/2015	Cust: Stock	Model/Eng. No.: RJ553-A1
			Drawn By: NE	Reference: NONE	Dir: Custom Built Homes	Pg.: XS
					S/N: 40299	



HVAC SCHEDULE			
LABEL	QTY	DESCRIPTION	LENGTH
A	1	DUCT - 7.5x16.13	64'-4 1/8"
B	1	DUCT - 7.5x22.13	63'-5 1/8"
C	2	DUCT - 7.5x16.13	8'-5 1/8"
D	2	DUCT - 7.5x16.13	7'-2 1/8"

HVAC MUST BE INSTALLED BY A LICENSED
HVAC TECHNICIAN - PER CODE REQUIREMENTS

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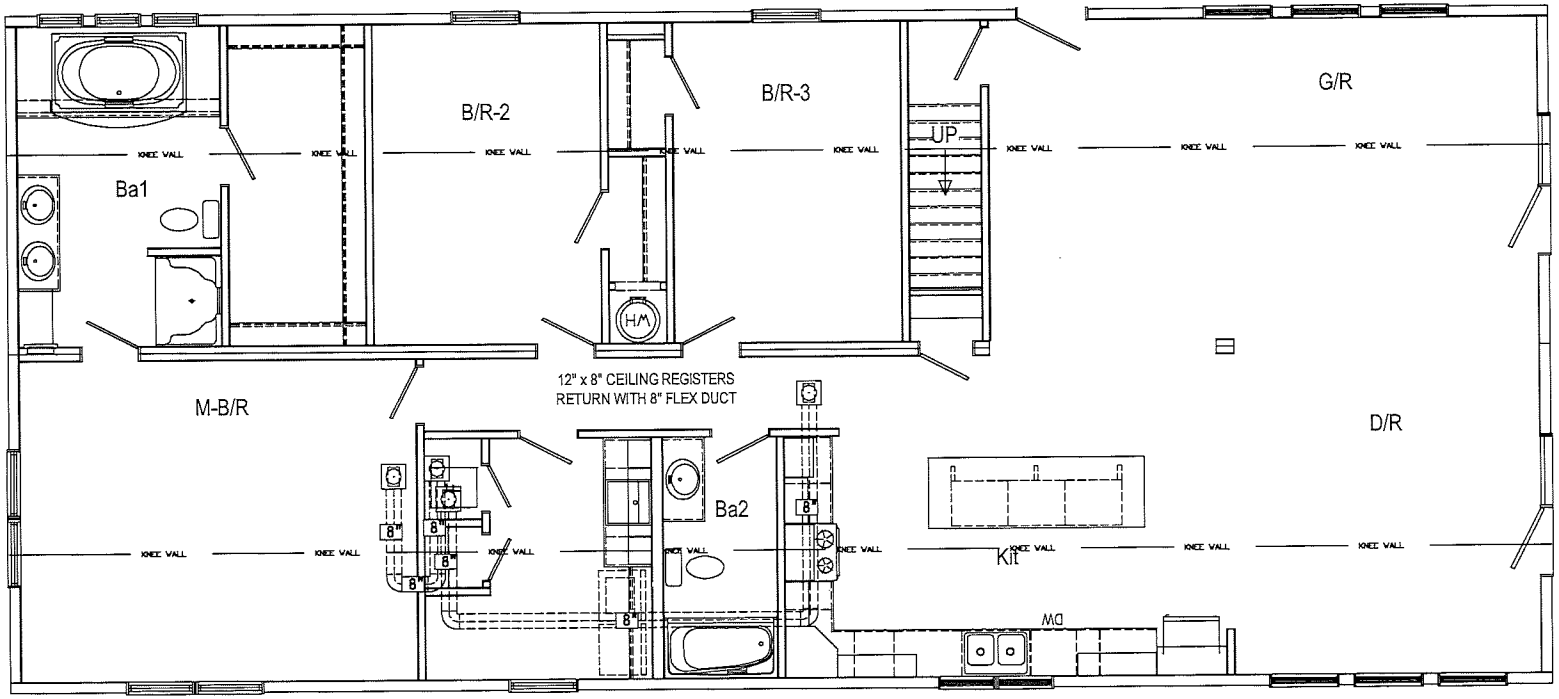
Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.
Title: Perimeter Heat Duct Layout

Callout: 3268
Revisions: Data / Number
Scale: 3/16" = 1'-0"
Drawn By: NE
Date: 08/03/2015
Reference: NONE
Cust: Stock
Dlr: Custom Built Homes
S/N: 40299
Model/Eng. No.: RJ553-A1
Pg.: HS



Return Air Material/Quantity List	
Storage Box (13x13x9)	4
12x8 Ceiling Grille	4
8" Insulated Flex Duct	42'
8" Start Collar	4

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RETURNS IN CEILING IN ADDITION TO AIR THRU GRILLES/OPENINGS

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.
Title: Ceiling Return Air System

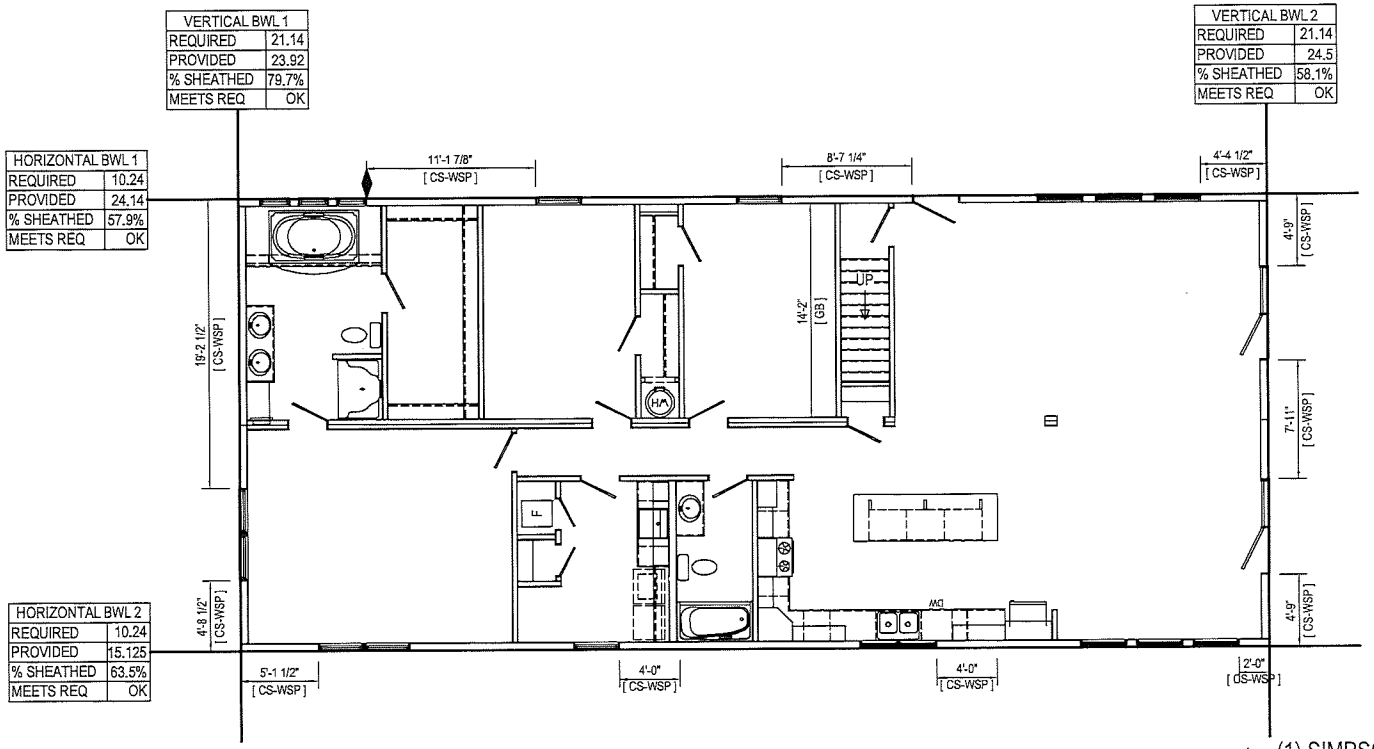
Callout: 3268	Revisions Date	Number	Scale: 3/16" = 1'-0"	Date: 08/03/2015	Cust: Stock	Model/Eng. No.: RJ553-A1
			Drawn By: NE	Reference: NONE	Dir: Custom Built Homes	Pg.: HR
					S/N: 40299	

VERTICAL BWL 1	
REQUIRED	21.14
PROVIDED	23.92
% SHEATHED	79.7%
MEETS REQ	OK

VERTICAL BWL 2	
REQUIRED	21.14
PROVIDED	24.5
% SHEATHED	58.1%
MEETS REQ	OK

HORIZONTAL BWL 1	
REQUIRED	10.24
PROVIDED	24.14
% SHEATHED	57.9%
MEETS REQ	OK

HORIZONTAL BWL 2	
REQUIRED	10.24
PROVIDED	15.125
% SHEATHED	63.5%
MEETS REQ	OK



◆ = (1) SIMPSON CS16 W/ (7) 10D NAILS PER END FACTORY INSTALLED FROM STUD TO RIM BELOW

Braced Wall									
Unit	Method	Wind Load	Width	Length	Exposure	Roof Pitch	Sidewall Height	Seismic	Max. Mean Roof Height
MAIN	NC_2012	130 mph	30'-0"	68'-0"	C	9/12	9'-0"	C	IRC

FOUNDATION TIE-DOWN MUST BE CONNECTED ON-SITE BY POINT LOAD LOCATIONS AS NOTED (BY OTHERS). ALTERNATIVE TIE DOWN CONNECTION METHODS APPROVED BY A LOCAL ENGINEER MAY BE USED. REFER TO THE IRC FOR FOUNDATION TIE DOWN REQUIREMENTS FOR 100 MPH OR LESS WIND ZONES

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Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.
Title: Braced Walls-Prescriptive

Callout: 3268	Revisions Date	Number	Scale: 1/8" = 1'-0"	Date: 08/06/2015	Cust: Stock	Model/Eng. No.: RJ553-A1
			Drawn By: NE	Reference: NONE	Dir: Custom Built Homes	Pg.: BWP
					S/N: 40299	

ELECTRICAL LOAD CALCULATIONS

State: Except ND
Model #: RJ553-A1

30 FT. x 68 FT. x 3 W / SQ.FT.= 6.12 KVA
6.12 KVA / 120 VOLTS = 51 AMPS
51 AMPS / 15 AMPS = 3.40 CIRCUITS

MINIMUM NUMBER OF CIRCUITS REQUIRED:
4 - GENERAL PURPOSE @ 15 AMPS
3 - SMALL APPLIANCE @ 20 AMPS
1 - LAUNDRY @ 20 AMPS
1 - BATH @ 20 AMPS
0 - GARAGE @ 20 AMPS

COMPUTE MINIMUM SERVICE:

GENERAL LIGHTING	6.12 KVA
SMALL APPLIANCE	4.5 KVA
LAUNDRY	1.5 KVA
BATH	1.5 KVA
RANGE	9.7 KVA
WATER HEATER	4.5 KVA
DRYER	5.3 KVA
FURNACE (GAS OR OIL)	1.5 KVA
VENT FANS(4 TL)	0.3 KVA
MICROWAVE OVEN	1.5 KVA
DISHWASHER	1.1 KVA
GARBAGE DISPOSAL	0.5 KVA
GARAGE	0 KVA
TOTAL	38.12 KVA

10 KVA @ 100% = 10 KVA
38.12 KVA - 10 KVA = 28.12 KVA @ 40% = 11.25 KVA
10 KVA + 11.25 KVA = 21.25 KVA / 240 VOLTS = 88.54 AMPS
MINIMUM ENTRANCE TO BE: 100 AMPERE SERVICE

ELECTRIC SPACE HEATING IN PLACE OF GAS/OIL.....
(AIR CONDITIONER LOAD LESS THAN SPACE HEATING)
17 KVA ELECTRIC FURNACE @ 65 % = 11.05 KVA
20.648 KVA + 11.05 KVA = 31.698 KVA / 240 VOLTS = 132.075 AMPS
MINIMUM ENTRANCE TO BE: 200 AMPERE SERVICE

COMPUTE NEUTRAL LOAD
GENERAL LIGHTING + SMALL APPLIANCE = 12.12 KVA
FIRST 3.0 KVA @ 100% = 3 KVA
12.12 KVA - 3.0 KVA = 9.12 KVA x 35% = 3.19 KVA
NET TOTAL = 3.0 KVA + 3.19 KVA = 6.19 KVA

RANGE (8 KVA @ 70%)	5.6 KVA
DRYER (5 KVA @ 70%)	3.71 KVA
DISHWASHER	1.1 KVA
FURNACE	1.5 KVA
MICROWAVE OVEN	1.5 KVA
FANS	0.3 KVA
GARBAGE DISPOSAL	#REF! KVA

TOTAL = #REF! KVA / 240 VOLTS= #REF! AMPS

200 AMP SERVICE PANEL INSTALLED
MINIMUM SERVICE ENTRANCE CONDUCTOR SIZE: 4/0 AL OR 2/0 CU

REFER TO RESCHECK FOR DOOR AND WINDOW U-VALUES

LEGEND

=15 AMP RECPT | =15 AMP FLOOR RECPT | =STD LIGHT | =RECESSED LIGHT
=SWITCHED RECPT | =WIRE | =STANDARD VENT | S =SWITCH
=20 AMP RECPT | =20 AMP FLOOR RECPT | =DOORBELL | =CHIMES
=220 VOLT RECPT | S3DM =3-WAY DIMMER SWITCH | SDM =DIMMER SWITCH
=24" STRIPLIGHT | S3W =3-WAY SWITCH | =SMOKE/CO DETECTOR
=THERMOSTAT | =STANDARD FAN | =STANDARD FAN w/LIGHT
=SMOKE DETECTOR
=PHONE JACK | =DATA JACK | =TV JACK | =JUNCTION BOX | =HOSE BIBB
GFI =GROUND FAULT CIRCUIT INTERRUPTER | =BULLET | =PANEL BOX
WP =WET LOCATION | =SPEAKER | =AV JACK | =MEDIA RECEPT
FLOURESCENT =18" | =48" | =UNDER CABINET LIGHT / WALL LIGHT | =PULL CHAIN LIGHT | = FIRE EXTINGUISHER
=UNDER CABINET STEREO | =VENTILATION FAN | DIAMETER = 4" CFM = 110 WATTS = 16.4

CIRCUIT ID NO.	LOAD	AMPS	POLES REQ'D	WIRE SIZE	MAX CONNECTED LOAD (KW)
1-12	General Lighting	15	1	NM14-2/WG	1.44
13-16	Small Appliance	20	1	NM12-2/WG	1.50
17-18	Bath (GFCI)	20	1	NM12-2/WG	1.50
19	Smoke Alarms	15	1	NM14-2/WG	1.44
20	Laundry	20	1	NM12-2/WG	1.50
21	Electric Dryer	30	2	NM10-3/WG	5.76
22	Electric Range	50	2	NM6-3/WG	13.10
23	Electric Cooktop	40	2	NM8-3/WG	7.6
24	Electric Wall Oven	20	2	NM12-2/WG	3.4
25	Electric W/H	20	2	NM12-2/WG	1.92
44	Electric W/H	25	2	NM10-2/WG	5.76
26	Gas Furnace	15	1	NM14-2/WG	1.44
27	Electric Furnace	60/30	4	NM4-2/WG	20.40
	Electric Furnace	60/60	4	NM4-2/WG	
28-37	Electric BB Heat	20	2	NM12-2/WG	1.92
38	A/C	50	2	NM6-2/WG	10.56
39	Freezer	20	1	NM12-2/WG	1.92
40	Dishwasher	15	1	NM14-2/WG	1.44
41	Disposal	15	1	NM14-2/WG	1.44
42	Whirlpool Tub (GFCI)	20	1	NM12-2/WG	1.92
43	Microwave Oven	20	1	NM12-2/WG	1.92
45	Garage (GFCI)	20	1	NM12-2/WG	1.50

Doors Exterior

Door Type	Size	Width	Height	RO SF	Light	Vent	Design Load	Air Infil
8 Lite	3476	2'-10"	6'-4"	17.94	-	-	50	0.27
6 Panel Fire Rated	3680	3'-1"	6'-9 1/8"	20.85	-	-	50	0.04
2 Lite	3882	3'-2"	6'-10"	21.64	0.51	20	50	0.27
Oval	3882	3'-2"	6'-10"	21.64	5.73	20	50	0.27
9 Lite	3882	3'-2"	6'-10"	21.64	4.378	20	50	0.27
Sunburst	3882	3'-2"	6'-10"	21.64	0.853	20	50	0.27
15 Lite	3882	3'-2"	6'-10"	21.64	7.073	20	50	0.27
Slider	7280	6'-0"	6'-8"	40.00	32.13	16.2	50	0.13
Exterior Door	3482	2'-10"	6'-10"	20.00	-	-	50	0.27
Atrium	7582	6'-3"	6'-4"	42.70	14.69	19.45	50	0.11
Atrium	7276	6'-3 1/2"	6'-4 1/4"	39.98	18.5	17.72	50	0.30
French	7282	6'-3 5/8"	6'-10 1/4"	43.15	18.4	38.4	18	0.10
Slido Light	1782	1'-4 1/2"	6'-10"	10.25	1.85	-	50	0.10
Half Lite	3882	3'-2"	6'-10 1/4"	21.70	9.25	19.13	0	0.00
Atrium	7280	6'-3 1/8"	6'-10"	42.78	18.4	19.2	35	0.04
1-Lite	3882	3'-2"	6'-10 1/4"	21.70	5.45	19.125	50	0.27

Doors Interior

Door Type	Size	Width	Height
Int. Passage	24	2'-2 1/8"	6'-10 1/2"
Int. Passage	28	2'-6 1/8"	6'-10 1/2"
Int. Passage	30	2'-8 1/8"	6'-10 1/2"
Int. Passage	32	2'-10 1/8"	6'-10 1/2"
Int. Passage	36	3'-2 1/8"	6'-10 1/2"
Int. Passage	48	4'-1"	6'-10"

FLOOR PLAN NOTES
ALL EXTERIOR OPTIONS SUCH AS DORMERS, BOX BAYS, ETC. MAY VARY PER HOME. SEE SYSTEMS MANUAL FOR CONSTRUCTION SPECS.
BOOTS, REGISTERS, AND/OR R.A.G.'S MAY BE INSTALLED IN FLOOR, WALL, AND/OR DOOR FOR FIELD INSTALLED HVAC SYSTEMS BY OTHERS-PER HVAC MFG'S INSTALLATION INSTRUCTIONS.
TOE KICK REGISTERS MAY BE USED WHERE VENT SLOT IS 1" MIN. FROM EDGE TO FINISHED FLOOR.
EXTERIOR AND MARRIAGE WALL SPANS: REFER TO SYSTEMS MANUAL. SEE COLUMN CHARTS FOR REQUIREMENTS.
HVAC SYSTEMS AND GAS LINE SYSTEMS MAY BE SUPPLIED, INSTALLED, AND INSPECTED ON SITE BY OTHERS.
ANY FURNACE INSTALLED MUST HAVE A MINIMUM AFUE OF 90.0.
SERVICE PANEL MAY BE LOCATED IN GARAGE.
DOOR AT THE BOTTOM OF ATTIC STORAGE STAIRS MUST BE REMOVED (WHEN APPLICABLE) FOR PROPER LANDING WHEN STORAGE SPACE IS CONVERTED TO HABITABLE SPACE. SEE CROSS SECTION FOR ADDITIONAL REQUIREMENTS.
[A] = 22 1/2"x30 1/2" ATTIC ACCESS REQUIRED WHEN CLEAR HEIGHT OF ATTIC IS 30" OR GREATER (5/12 ROOF OR GREATER).
[AP] = 22 1/2"x54" PULL DOWN ATTIC ACCESS.
FIREPLACE BY MANUFACTURER, FLUE BY OUTSIDE CONTRACTOR
⬡ : COLUMN SUPPORT LOCATION

FOR PERMANENTLY CONNECTED APPLIANCES RATED AT OVER 300 VOLT-AMPERES OR 1/8 HP,THE BRANCH CIRCUIT BREAKER SHALL BE PERMITTED TO SERVE AS THE DISCONNECTING MEANS WHERE THE CIRCUIT BREAKER IS WITHIN SIGHT FROM THE APPLIANCE OR IS CAPABLE OF BEING LOCKED IN THE OPEN POSITION. THE LOCKING MEANS SHALL REMAIN IN PLACE WITH OR WITHOUT THE LOCK INSTALLED. MAIN DISCONNECT SHALL BE LOCATED ON THE EXTERIOR OF THE HOME.

STAIRWAYS
RISER HEIGHT - 8 1/4" MAX.
TREAD DEPTH - 9" MIN.
HEAD ROOM 80" MIN.
NOTE: THE STAIRWELL GEOMETRY IN THIS HOME HAS BEEN DESIGNED TO THE CRITERIA ABOVE. IF IRC STAIR GEOMETRY IS REQUIRED OR DESIRED, PLEASE CONTACT THE PLANT OF MANUFACTURE FOR PLAN ADJUSTMENTS.

ELECTRICAL PLAN NOTES:
1. ALL KITCHEN AND BATHROOM COUNTER RECEPTS TO BE GFCI PROTECTED.
2. ALL CLOSET LIGHTS TO BE ENCLOSED SURFACE MOUNT FIXTURES, 12" MIN. FROM STORAGE SPACE.
3. ALL RECEPTS TO BE GROUNDINGTYPE, PER 210-7/NEC.
4. SPECS, WIRING, INSTALLATIONS, ETC. TO COMPLY WITH NEC REGULATIONS.
5. SERVICE PANEL MAY BE LOCATED IN GARAGE.
6. ALTERNATE GAS APPLIANCES MAY BE USED.
7. ALL SMOKE DETECTORS TO HAVE BATTERY BACK-UP AND TO BE INTERCONNECTED WITH A 14 GA. MIN. INTERCONNECTION WIRE OR EQUIVALENT PER MFG.S RECOMMENDATIONS.
8. EXTERIOR LIGHT AT GARAGE SIDE MAY BE REPLACED.
9. GAS APPLIANCES MAY BE SUBSTITUTED FOR ELECTRIC APPLIANCES WHERE APPLICABLE. WHEN GAS APPLIANCES ARE INSTALLED, ALL GAS PIPING, CONNECTIONS, HOOK-UPS, ETC, TO BE INSTALLED ON SITE BY OTHERS. THE OPTIONAL GARBAGE DISPOSAL CONNECTED TO INDEPENDENT RECEPTACLE AND WALL SWITCH.
10. 200 AMP PANEL BOX INSTALLED
11. ALL 120V RECEPTACLES ARE TAMPER RESISTANT.
12. ALL EXTERIOR RECEPTACLES ARE GFI, TAMPER RESISTANT AND LISTED FOR WET LOCATIONS.
13. COMBINATION TYPE AFCI BREAKERS ARE REQUIRED FOR ALL 120 V CIRCUITS EXCEPT THOSE SERVING KITCHENS, LAUNDRY AREAS, UTILITY ROOMS, BATHROOMS, GARAGE AND BASEMENTS.
14. ALL ELECTRICAL BOXES SUPPORTING LIGHTING FIXTURES MUST BE RATED @ 50# AND IDENTIFIED ON THE BOX.
15. WHIRLPOOL RECEPTACLES MUST BE GFCI, TAMPER RESISTANT AND READILY ACCESSIBLE PER NEC 680.71
16. A CIRCUIT BREAKER LOCKING DEVICE SHALL BE PROVIDED TO LOCK THE APPLICABLE BREAKERS IN THEIR "OFF" POSITION. THIS APPLIES TO CIRCUIT BREAKERS WHICH SERVE AS THE DISCONNECT FOR ELECTRIC WATER HEATERS, ELECTRIC BASEBOARD HEATERS, AND ANY APPLIANCE RATED OVER 300 WATTS OR 1/8 HORSEPOWER, WHICH ARE NOT LOCATED WITHIN CLEAR SIGHT OF THEIR DISCONNECT
17. IF THE PERIMETERS OF THE AREAS OF THE ON-SITE INSTALLED STOOPS, PORCHES OR DECKS ARE NOT UNDER THE EXTERIOR ELECTRICAL RECEPTACLES SHOWN IN THE ELECTRICAL FLOOR PLAN, THEN ADDITIONAL RECEPTACLES SHALL BE SITE INSTALLED WITHIN THESE AREAS BY THE CONTRACTOR.

WINDOW SCHEDULE - MOD SINGLE HUNG

S SUFFIX DENOTES SAFETY GLAZING

Mfg	Label	Width R/O	Height R/O	R/O SF	Light	Vent	Room SF	U Value	Egress No	Egress Yes	SHGC w/o Grids	SHGC w/ Grids	Air Infil
KINRO	(2)3012 TRN	61	12.5	5.17	3.54	0.00	0.00	0.32	●		0.35	0.32	0.10
KINRO	3612TRN	36.5	12.5	3.08	2.15	0.00	0.00	0.32	●		0.35	0.32	0.10
KINRO	2454S	24.25	54.125	9.12	6.82	3.38	84.50	0.35	●		0.33	0.30	0.10
KINRO	3658	36.5	58.5	14.66	11.76	5.76	144.00	0.34		●	0.24	0.28	0.10
KINRO	3668	36.5	68.5	17.18	14.06	5.99	149.75	0.34		●	0.24	0.28	0.10
KINRO	(2)3040	61	40.5	17.16	12.56	6.04	151.00	0.34	●		0.24	0.28	0.10
KINRO	(2)3668	73	68.5	34.45	28.12	11.98	299.50	0.34		●	0.24	0.28	0.10

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Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Callout: 3268	Revisions: Date / Number	Scale: N.T.S.	Date: 08/03/2015	Cust: Stock	Model/Eng. No.: RJ553-A1
Title: Schedules and General Notes			Drawn By: NE	Reference: NONE	Dir: Custom Built Homes	Pg.: NG
					S/N: 40299	

RES*check* Software Version 4.6.2.0
Compliance Certificate

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Project Title: RJ553-A1

Energy Code:	**North Carolina Energy Conservation Code**
Location:	**Pender County, North Carolina**
Construction Type:	**Single Family**
Project Type:	**New construction**
Glazing Area Percentage:	**18%**
Heating Degree Days:	**2999**
Climate Zone:	**3**

Construction Site:
22019 Hwy 17
Hampstead, NC 28443

Owner/Agent:
Stock
Custom Built Homes

Designer/Contractor:
R-Anell Housing Group, LLC
Subsidiary of The Commodore Corporation
235 Anthony Grove Rd.
Crouse, NC 28033

Compliance: Passes using UA trade-off

Compliance: **7.5% Better Than Code** Maximum UA: **442** Your UA: **409** 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
Wall 1 [1walls]: Wood Frame, 16" o.c.	1764	19.0	0.0		83
Keystone Swing Patio Door 7282 [Qty 2]: Glass SHGC: 0.30	86			0.350	30
Hinged - Exterior - 6 Panel [Qty 1]: Solid	22			0.220	5
Kinro 3658 [Qty 6]: Vinyl Frame:Double Pane with Low-E SHGC: 0.24	88			0.340	30
Kinro 3612TRN [Qty 6]: Vinyl Frame:Double Pane with Low-E SHGC: 0.35	18			0.320	6
(2) Kinro 3012 Transoms [Qty 1]: Vinyl Frame:Double Pane with Low-E SHGC: 0.35	5			0.320	2
(2) Kinro 3040 [Qty 1]: Vinyl Frame:Double Pane with Low-E SHGC: 0.24	17			0.340	6
Kinro 2454 [Qty 3]: Vinyl Frame:Double Pane with Low-E SHGC: 0.33	27			0.350	9
(2) Kinro 3668 [Qty 2]: Vinyl Frame:Double Pane with Low-E SHGC: 0.24	69			0.340	23
Kinro 3668 [Qty 3]: Vinyl Frame:Double Pane with Low-E SHGC: 0.24	52			0.340	18
Walls around stairway: Wood Frame, 24" o .c.	284	13.0	0.0		21
30" Door for stairway: Solid	17			0.500	9
Floor 1: All-Wood Joist/Truss:Over Outside Air	2040	19.0	0.0		96
Ceiling 1: Flat Ceiling or Scissor Truss	839	31.0	0.0		29
Ceiling 2 [Between knee walls]: Flat Ceiling or Scissor Truss	1201	30.0	0.0		42

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 RES*check* Version 4.6.2.0 and to comply with the mandatory requirements listed in the RES*check* Inspection Checklist.

N. Edwards		8/3/2015
Name - Title	Signature	Date

Project Notes:

9/12 roof pitch 24" o.c.
9 ft. walls
30'-0" x 68'-0"
Kinro windows without grids

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RES*check* Software Version 4.6.2.0
Inspection Checklist

Energy Code:	**North Carolina Energy Conservation Code**
Location:	**Pender County, North Carolina**
Construction Type:	**Single Family**
Project Type:	**New construction**
Glazing Area Percentage:	**18%**
Heating Degree Days:	**2999**
Climate Zone:	**3**

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Ceilings:

❑ Ceiling 1: Flat Ceiling or Scissor Truss, R-31.0 cavity insulation
Comments: _____

❑ Ceiling 2 [Between knee walls]: Flat Ceiling or Scissor Truss, R-30.0 cavity insulation
Comments: _____

Above-Grade Walls:

❑ Wall 1 [1walls]: Wood Frame, 16" o.c., R-19.0 cavity insulation
Comments: _____

❑ Walls around stairway: Wood Frame, 24" o .c., R-13.0 cavity insulation
Comments: _____

Windows:

❑ Kinro 3658 [Qty 6]: Vinyl Frame:Double Pane with Low-E, U-factor: 0.340, SHGC: 0.24,
For windows without labeled U-factors, describe features:
#Panes ____ Frame Type _____ Thermal Break? ____ Yes ____ No
Comments: _____

❑ Kinro 3612TRN [Qty 6]: Vinyl Frame:Double Pane with Low-E, U-factor: 0.320, SHGC: 0.35,
For windows without labeled U-factors, describe features:
#Panes ____ Frame Type _____ Thermal Break? ____ Yes ____ No
Comments: _____

❑ (2) Kinro 3012 Transoms [Qty 1]: Vinyl Frame:Double Pane with Low-E, U-factor: 0.320, SHGC: 0.35,
For windows without labeled U-factors, describe features:
#Panes ____ Frame Type _____ Thermal Break? ____ Yes ____ No
Comments: _____

❑ (2) Kinro 3040 [Qty 1]: Vinyl Frame:Double Pane with Low-E, U-factor: 0.340, SHGC: 0.24,
For windows without labeled U-factors, describe features:
#Panes ____ Frame Type _____ Thermal Break? ____ Yes ____ No
Comments: _____

❑ Kinro 2454 [Qty 3]: Vinyl Frame:Double Pane with Low-E, U-factor: 0.350, SHGC: 0.33,
For windows without labeled U-factors, describe features:
#Panes ____ Frame Type _____ Thermal Break? ____ Yes ____ No
Comments: _____

❑ (2) Kinro 3668 [Qty 2]: Vinyl Frame:Double Pane with Low-E, U-factor: 0.340, SHGC: 0.24,
For windows without labeled U-factors, describe features:
#Panes ____ Frame Type _____ Thermal Break? ____ Yes ____ No
Comments: _____

❑ Kinro 3668 [Qty 3]: Vinyl Frame:Double Pane with Low-E, U-factor: 0.340, SHGC: 0.24,

For windows without labeled U-factors, describe features:

#Panes ____ Frame Type _____ Thermal Break? ____ Yes ____ No

Comments: _____

Doors:

☐ Keystone Swing Patio Door 7282 [Qty 2]: Glass, U-factor: 0.350, SHGC: 0.30,

Comments: _____

☐ Hinged - Exterior - 6 Panel [Qty 1]: Solid, U-factor: 0.220

Comments: _____

☐ 30" Door for stairway: Solid, U-factor: 0.500

Comments: _____

This door is exempt from the U-factor requirement.

Floors:

☐ Floor 1: All-Wood Joist/Truss:Over Outside Air, 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.

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 122.4 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.

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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 permenantly 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)

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North Carolina Energy Efficiency Certificate

Insulation Rating	R-Value
Ceiling / Roof	30.00
Above-Grade Wall	19.00
Below-Grade Wall	0.00
Floor	19.00
Ductwork (unconditioned spaces):	_____

Glass & Door Rating	U-Factor	SHGC
Window	0.34	0.24
Door	0.35	0.30

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:

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Collar Tie to Rafter Connection Information

The truss manufacturer, Universal Forest Products has issued a bulletin 05-02 that provides details for the collar tie to rafter connection requirements when the truss design states that the collar tie must be "Rigid". The following detail sheet shows the appropriate connection using 100% coverage of adhesive and fasteners for the collar tie connection for the "Rigid" requirement. The following sheets have been included: roof truss print and the connection requirements according to the size of the rafter and collar tie.

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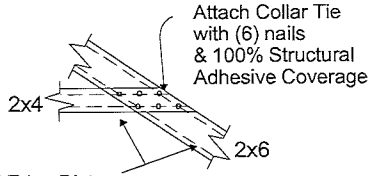
Job	Truss	Truss Type	Qty	Ply	UFP ENGINEERING
32802	A098602	RIGID COLLAR TIE CONNECTION DETAILS	1	1	Bulletin 05-02 REF # 2001092

Universal Forest Products Inc., Grand Rapids, MI 49525,

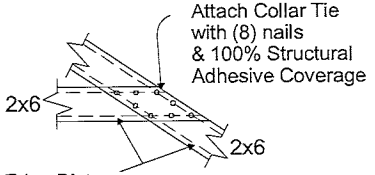
2x4 Collar Tie Nailed to 2x6 Chord



1" Edge Distance,
Typ. On All Sides ○ Nail This Face

Detail (A)

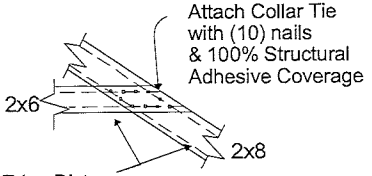
2x6 Collar Tie Nailed to 2x6 Chord



1" Edge Distance,
Typ. On All Sides ○ Nail This Face

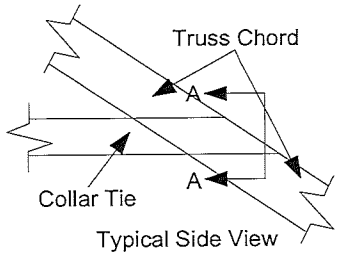
Detail (B)

2x6 Collar Tie Nailed to 2x8 Chord



1" Edge Distance,
Typ. On All Sides ○ Nail This Face

Detail (C)



Typical Side View

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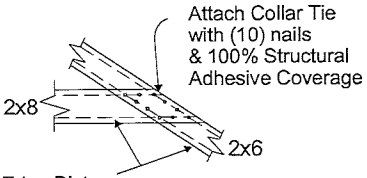
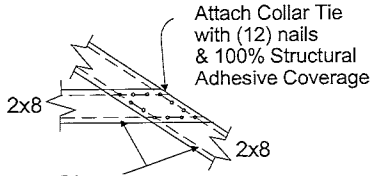
2x8 Collar Tie Nailed to 2x6 Chord



1" Edge Distance,
Typ. On All Sides ○ Nail This Face

Detail (D)

2x8 Collar Tie Nailed to 2x8 Chord

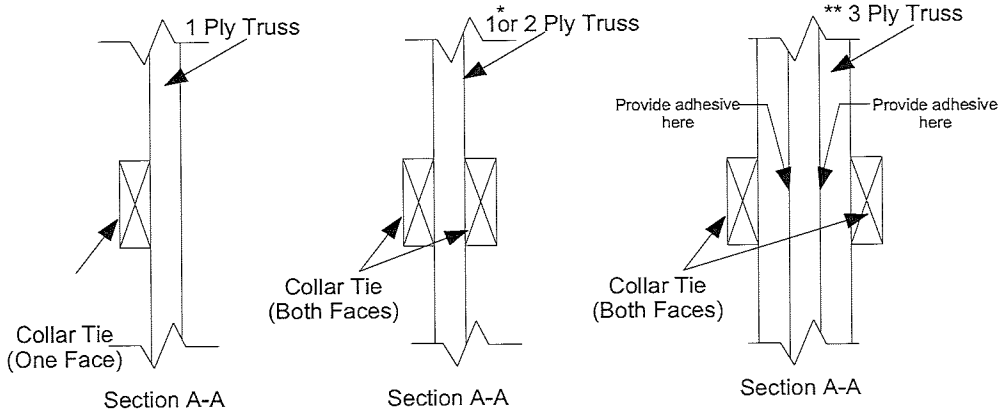


1" Edge Distance,
Typ. On All Sides ○ Nail This Face

Detail (E)

Acceptable Alternate Applications

See truss print for which detail is actually used



* For 1 ply, offset nails with respect to each face. Consult the reviewing engineer when using this option.

** Consult the reviewing engineer when using this option.

Power Driven Nails Rigid Collar Tie Connection Details

A) Side member shall be fastened with structural adhesive that meets the requirements of CA25-4 or ASTM-2559. Maximum wood to wood gap = 1/16".

B) Bostitch .131" Dia. x 3" nails (or equal)

C) Refer to Bulletin 05-02 chart entitled "Typical Allowable Design Properties for Rigid Side Members" issued April 25, 2005.

Replaces CC784607 (D30C9F)

Job	Truss	Truss Type	Qty	Ply	Commodore 315	# 266
63229	CC784608	HINGED ATTIC	1	1	D30C9F	

Universal Forest Products Inc., Grand Rapids, MI 49525, Mike Patten 7.330 e Feb 17 2012 MiTek Industries, Inc. Wed May 02 13:53:07 2012 Page 1 of 2

** Gusset material may be plywood or OSB. Plywood shall conform with PS-1. OSB shall comply with PS-2. Thickness and grain direction as specified.
** Where specified, metal staples shall be 16 gauge, D=0.063, 7/16" O.D. crown, with 1" minimum penetration into main member. Ref. NER 272 for staple details.

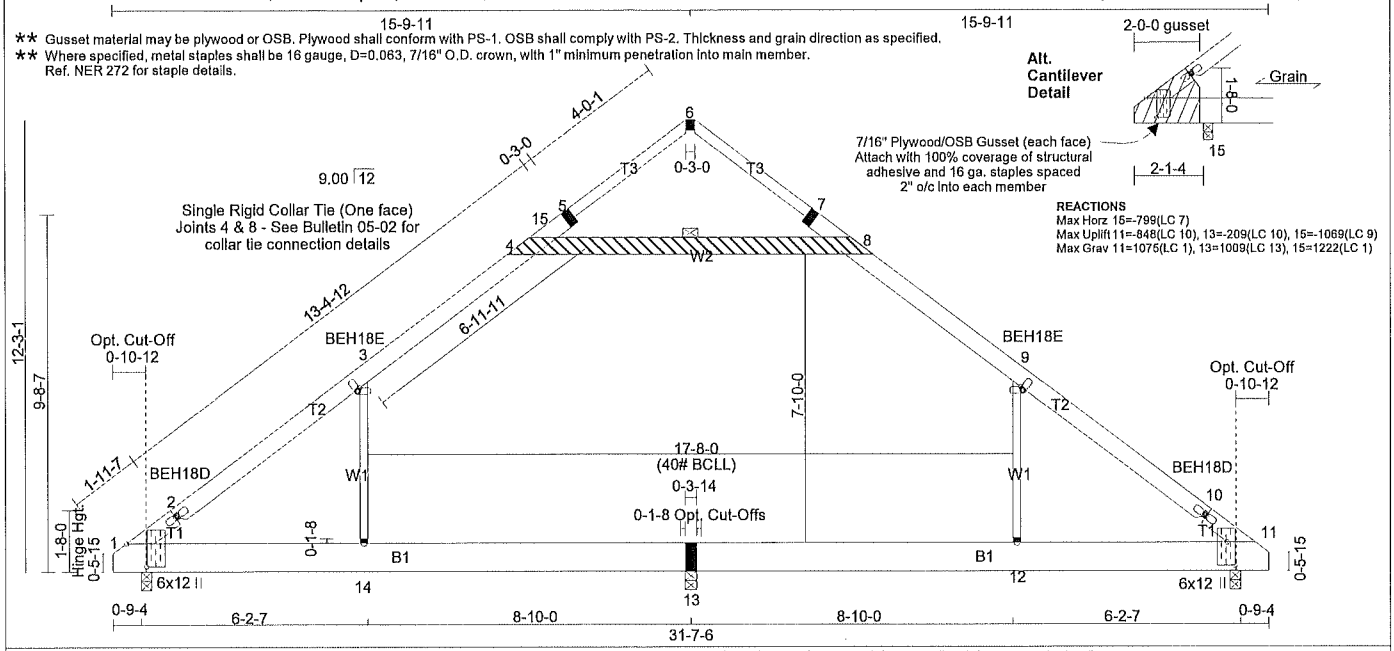


Plate Offsets (X,Y): [1:0-8-5,0-6-12], [2:0-0-11,0-0-0], [3:0-0-11,0-1-2], [9:0-0-11,0-1-2], [10:0-0-11,0-0-0], [11:0-8-5,0-2-7]

SPACING: 2-0-0		SPACING: 1-4-0				CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
LOADING (psf)		LOADING (psf)		Plates Increase	1.15	TC	0.62	Vert(LL)	0.54	13-14	>337	240	MT20	197/144
TCLL	23.1	TCLL	34.7	Lumber Increase	1.15	BC	0.78	Vert(TL)	-0.53	12-13	>342	180	MII18	141/138
(Ground Snow=30.0)		(Ground Snow=45.0)		Rep Stress Incr	YES	WB	0.72	Horz(TL)	0.02	11	n/a	n/a		
TCDL	7.0	TCDL	10.5	Code	IBC2009/TPI2007	(Matrix)		Attic	-0.36	13-14	595	360	Weight: 166 lb	
BCLL	0.0	BCLL	0.0										FT = 0%	
BCDL	7.0	BCDL	10.5											

LUMBER
TOP CHORD 2x6 SPF No.2 *Except* T3: 2x4 SPF No.2
BOT CHORD 2x10 SPF No.2
WEBS 2x3 SPF Stud *Except* W2: 2x6 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. [P]
BOT CHORD Rigid ceiling directly applied or 5-5-2 oc bracing.
WEBS 1 Row at midpt

REACTIONS (lb/size) 1=1110/0-3-8 (min. 0-1-12), 11=1110/0-3-8 (min. 0-1-12), 13=937/0-3-14 (min. 0-1-8)
Max Horz 1=-799(LC 7)
Max Uplift 1=-873(LC 9), 11=-875(LC 10), 13=-251(LC 9)
Max Grav 1=1110(LC 1), 11=1110(LC 1), 13=1051(LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1164/845, 2-3=-984/830, 3-4=-984/1036, 4-15=-307/205, 5-15=-284/205, 5-6=-170/220, 6-7=-168/218, 7-8=-301/205, 8-9=-985/1036, 9-10=-982/824, 10-11=-1162/839
BOT CHORD 1-14=-447/794, 13-14=-444/794, 12-13=-444/794, 11-12=-445/794
WEBS 9-12=-279/529, 3-14=-286/535, 4-8=-690/1054

REQUIRED FIELD JOINT CONNECTIONS
- Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
4=690/1054/153/7625, 5=264/210/182/0, 6=142/221/182/0, 7=266/208/183/0, 8=690/1054/153/7573, 12=279/529/0/0, 13=444/794/526/0, 14=286/535/0/0

NOTES
1) Wind: ASCE 7-05; 130mph @24in o.c.; TCDL=2.8psf; BCDL=2.8psf; (Alt. 150mph @16in o.c.; TCDL=4.2psf; BCDL=4.2psf); h=30ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

The professional engineering seal indicates that a licensed professional has reviewed the design under the standards referenced within this document, not necessarily the current state building code. The engineering seal is not an approval to use in a specific state. The final determination on whether a truss design is acceptable under the locally adopted building code rest with the building official or designated appointee.

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Michael Faller
E-signed by Kevin Freeman

NORTH CAROLINA PROFESSIONAL SEAL 026074 ENGINEER KEVIN W. FREEMAN
5/3/2012

Universal Forest Products, Inc. 2801 EAST BELTLINE RD, NE
PHONE (616)-364-6161 FAX (616)-365-0060 GRAND RAPIDS, MI 49525

Job	Truss	Truss Type	Qty	Ply	Commodore 315
63229	CC784608	HINGED ATTIC	1	1	D30C9F

2) TCLL: ASCE 7-05; Pg=30.0 psf (ground snow); Ps=23.1 psf (roof snow); Category II; Exp C; Partially Exp.; Ct=1.1
3) Roof design snow load has been reduced to account for slope.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
6) All plates are MT20 plates unless otherwise indicated.
7) See BEH18 DETAILS for plate placement.
8) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
9) All additional member connections shall be provided by others for forces as indicated.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) Ceiling dead load (5.0 psf) on member(s). 3-4, 8-9, 4-8
12) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-14, 12-13
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 873 lb uplift at joint 1, 875 lb uplift at joint 11 and 251 lb uplift at joint 13.
14) Fixity of members 1 - 2, 10 - 11, 1 - 14, 12 - 11, 4 - 8 have been changed.
15) This truss has been designed in accordance with the 2009 IBC Section 2303.4.6, 2009 IRC Section 802.10.2.
16) Attic room checked for L/360 deflection.
17) This truss has been designed in accordance with the 2006 IBC Sec 2303.4.2, 2006 IRC Sec 802.10.2
18) Take precaution to keep the chords in plane, any bending or twisting of the hinge plate must be repaired before the building is put into service.
19) If shown, field installed members are an integral part of this design. To ensure proper performance, all field installed members must be installed prior to applying any loading to the truss.
20) Based on CC784607
21) Added cantilever detail

APPROVED BY

NTA INC. 08/06/15

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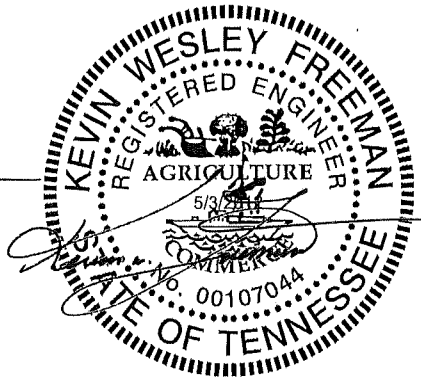
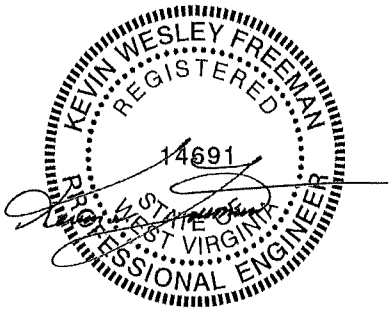
Michael Faller

The professional engineering seal indicates that a licensed professional has reviewed the design under the standards referenced within this document, not necessarily the current state building code. The engineering seal is not an approval to use in a specific state. The final determination on whether a truss design is acceptable under the locally adopted building code rest with the building official or designated appointee.

UNIVERSAL FOREST PRODUCTS, INC.

Job	Truss	Customer	MFG
63229	CC784608	COMMODORE	315





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Michael Faller

Corporate Engineering
2801 East Beltline, NE Grand Rapids, MI 49525-9736 (616) 364-6161 Fax (616) 365-0060
ufpi.com

wrightsoft®

Load Short Form
Entire House
AMS of Indiana, Inc.

Job: RJ553-A1
Date: 8/4/15
By: AMS of Indiana, Inc.

APPROVED BY
08/06/15

3933 E. Jackson Blvd., Elkhart, IN 46516 Phone: 574-293-5526 Fax: 574-294-1366 Email: eng-ams@comcast.net

Project Information

For: The Commodore Corporation
RJ553-A1

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Michael Faller

Design Information

	Htg	Clg
Outside db (°F)	14	88
Inside db (°F)	70	75
Design TD (°F)	56	13
Daily range	-	M
Inside humidity (%)	50	50
Moisture difference (gr/lb)	50	30

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

HEATING EQUIPMENT

Make	Generic
Trade	
Model	AFUE 100
AHRI ref	

Efficiency	100 AFUE	
Heating input	9.1	kW
Heating output	31103	Btuh
Temperature rise	28	°F
Actual air flow	1109	cfm
Air flow factor	0.038	cfm/Btuh
Static pressure	0.50	in H2O
Space thermostat		

COOLING EQUIPMENT

Make	Generic
Trade	
Cond	SEER 13.0
Coil	
AHRI ref	

Efficiency	11.6 EER, 13 SEER	
Sensible cooling	17429	Btuh
Latent cooling	7469	Btuh
Total cooling	24898	Btuh
Actual air flow	1109	cfm
Air flow factor	0.057	cfm/Btuh
Static pressure	0.50	in H2O
Load sensible heat ratio	0.83	

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
M BED	274	4820	3420	184	195
UTILITY	120	1639	1291	62	74
BA	62	682	191	26	11
KIT\DIN	503	7484	6127	285	350
HALL	50	0	0	0	0
GREAT	424	6874	3744	262	214
BED 3	154	1945	1392	74	80
CLOS	41	0	0	0	0
BED 2	154	1963	1400	75	80
WIC	94	862	249	33	14
M BA	143	2831	1596	108	91

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

Entire House Other equip loads Equip. @ 0.93 RSM Latent cooling	d	2018	29099 2692	19411 625 18653 4207	1109	1109
TOTALS		2018	31791	22860	1109	1109

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Michael Faller

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

wrightsoft®

Project Summary
Entire House
AMS of Indiana, Inc.

Job: RJ553-A1
Date: 8/4/15
By: AMS of Indiana, Inc.

3933 E. Jackson Blvd., Elkhart, IN 46516 Phone: 574-293-5526 Fax: 574-294-1366 Email: eng-ams@comcast.net

Project Information

For: The Commodore Corporation
RJ553-A1

Notes:

NTA INC. 08/06/15

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Michael Faller

Design Information

Weather: Asheville Regional AP, NC, US

Winter Design Conditions

Outside db	14	°F
Inside db	70	°F
Design TD	56	°F

Summer Design Conditions

Outside db	88	°F
Inside db	75	°F
Design TD	13	°F
Daily range	M	
Relative humidity	50	%
Moisture difference	30	gr/lb

Heating Summary

Structure	25634	Btuh
Ducts	3464	Btuh
Central vent (47 cfm)	2692	Btuh
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	31791	Btuh

Sensible Cooling Equipment Load Sizing

Structure	18394	Btuh
Ducts	1016	Btuh
Central vent (47 cfm)	625	Btuh
Blower	0	Btuh
Use manufacturer's data	n	
Rate/swing multiplier	0.93	
Equipment sensible load	18653	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

	Heating	Cooling
Area (ft²)	2018	2018
Volume (ft³)	16140	16140
Air changes/hour	0.39	0.16
Equiv. AVF (cfm)	106	43

Latent Cooling Equipment Load Sizing

Structure	1802	Btuh
Ducts	1530	Btuh
Central vent (47 cfm)	875	Btuh
Equipment latent load	4207	Btuh
Equipment total load	22860	Btuh
Req. total capacity at 0.70 SHR	2.2	ton

Heating Equipment Summary

Make	Generic
Trade	
Model	AFUE 100
AHRI ref	

Efficiency	100	AFUE
Heating input	9.1	kW
Heating output	31103	Btuh
Temperature rise	28	°F
Actual air flow	1109	cfm
Air flow factor	0.038	cfm/Btuh
Static pressure	0.50	in H2O
Space thermostat		

Cooling Equipment Summary

Make	Generic
Trade	
Cond	SEER 13.0
Coil	
AHRI ref	

Efficiency	11.6 EER, 13 SEER	
Sensible cooling	17429	Btuh
Latent cooling	7469	Btuh
Total cooling	24898	Btuh
Actual air flow	1109	cfm
Air flow factor	0.057	cfm/Btuh
Static pressure	0.50	in H2O
Load sensible heat ratio	0.83	

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

N

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NTA INC. 08/06/15

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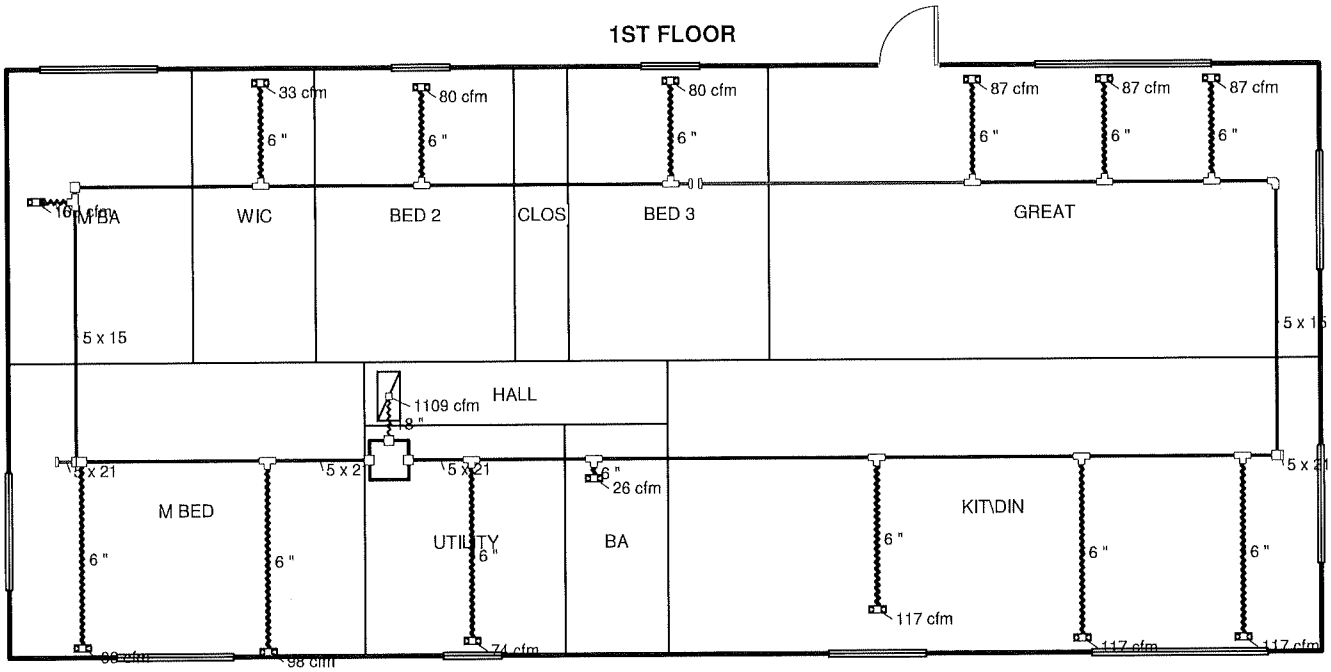
Michael Faller



Job #: RJ553-A1 **Performed by AMS of Indiana, Inc. for:** The Commodore Corporation RJ553-A1	**AMS of Indiana, Inc.** 3933 E. Jackson Blvd. Elkhart, IN 46516 Phone: 574-293-5526 Fax: 574-294-1366 eng-ams@comcast.net	Scale: 1 : 113 Page 1 Right-Suite® Universal 2015 15.0.05 RSU02009 2015-Aug-04 11:08:56 F:\DS\Commodore\RJ553-A1.rup

wrightsoft®

Duct System Summary
Entire House
AMS of Indiana, Inc.

Job: RJ553-A1
Date: 8/4/15
By: AMS of Indiana, Inc.

3933 E. Jackson Blvd., Elkhart, IN 46516 Phone: 574-293-5526 Fax: 574-294-1366 Email: eng-ams@comcast.net

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INC.
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Michael Faller

Project Information

For: The Commodore Corporation
RJ553-A1

	Heating	Cooling
External static pressure	0.50 in H2O	0.50 in H2O
Pressure losses	0.26 in H2O	0.26 in H2O
Available static pressure	0.24 in H2O	0.24 in H2O
Supply / return available pressure	0.199 / 0.041 in H2O	0.199 / 0.041 in H2O
Lowest friction rate	0.066 in/100ft	0.066 in/100ft
Actual air flow	1109 cfm	1109 cfm
Total effective length (TEL)	364 ft	

Supply Branch Detail Table

Name	Design (Btuh)		Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
BA	h	682	26	11	0.113	6.0	0x 0	VIFx	10.5	165.0	st1
BED 2	c	1400	75	80	0.072	6.0	0x 0	VIFx	51.8	225.0	st5
BED 3	c	1392	74	80	0.071	6.0	0x 0	VIFx	64.8	215.0	st5
GREAT	h	2291	87	71	0.068	6.0	0x 0	VIFx	79.3	215.0	st4
GREAT-A	h	2291	87	71	0.066	6.0	0x 0	VIFx	67.0	235.0	st4
GREAT-B	h	2291	87	71	0.067	6.0	0x 0	VIFx	72.5	225.0	st4
KIT\DIN	c	2042	95	117	0.104	6.0	0x 0	VIFx	31.8	160.0	st1
KIT\DIN-A	c	2042	95	117	0.103	6.0	0x 0	VIFx	43.8	150.0	st1
KIT\DIN-B	c	2042	95	117	0.104	6.0	0x 0	VIFx	52.0	140.0	st1
M BA	h	2831	108	91	0.085	6.0	0x 0	VIFx	30.3	205.0	st5
M BED	c	1710	92	98	0.121	6.0	0x 0	VIFx	24.3	140.0	st2
M BED-A	c	1710	92	98	0.121	6.0	0x 0	VIFx	15.0	150.0	st2
UTILITY	c	1291	62	74	0.106	6.0	0x 0	VIFx	12.5	175.0	st1
WIC	h	862	33	14	0.071	6.0	0x 0	VIFx	43.8	235.0	st5

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st4	Peak AVF	262	214	0.066	503	9.6	15 x 5	RectFbg	st1
st5	Peak AVF	290	265	0.071	556	9.8	15 x 5	RectFbg	st2
st1	Peak AVF	636	649	0.066	890	13.4	21 x 5	RectFbg	
st2	Peak AVF	473	460	0.071	649	11.8	21 x 5	RectFbg	

Return Branch Detail Table

Name	Grill Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x0	1109	1109	62.3	0.066	628	18.0	0x 0		VlFx	

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NTA INC. 08/06/15

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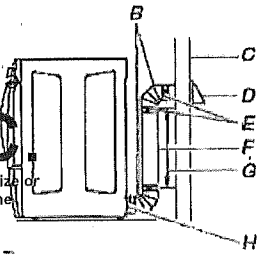
CLOTHES DRYER EXHAUST VENT INSTALLATION

PER THE NORTH CAROLINA RESIDENTIAL CODE. DRYER INSTALLATION MUST MEET SECTION 402.4.1 OF THE 2012 NORTH CAROLINA ENERGY CONSERVATION CODE AND SECTIONS 504.1 THRU 506.4.6.2 OF THE 2012 NORTH CAROLINA MECHANICAL CODE.

Recommended exhaust installations
Typical installations vent the dryer from the rear of the dryer. Other installations are possible.



A. DRYER
B. ELBQW
C. WALL
D. EXHAUST HOOD WITH BACK DRAFT DAMPER
E. CLAMPS
F. RIDID METAL OR FLEXIBLE METAL VENT
G. VENT LENGTH NECESSARY TO CONNECT ELBOWS
H. EXHAUST OUTLET

2012 North Carolina Energy Conservation Code

402.4.1 Building thermal envelope. The building thermal envelope shall be durably sealed to limit infiltration. The sealing methods between dissimilar materials shall allow for differential expansion and contraction. The following shall be caulked, gasketed, weatherstripped or otherwise sealed with an air barrier material, suitable film or solid material. 1. Deleted. 2. Site-built windows, doors and skylights. 3. Opening between window and door assemblies and their respective jambs and framings. 4. Utility penetrations. 5. Dropped ceilings or chases adjacent to the thermal envelope. 6. Floor framing under knee walls. 7. Walls and ceilings separating the garage from conditioned spaces. 8. Behind tubs and showers on exterior walls. 9. Common walls between dwelling units. 10. Other sources of infiltration.
402.5 Moisture control. (Mandatory). The building design shall not create conditions of accelerated deterioration from moisture condensation. Above-grade frame walls, floors and ceiling not ventilated to allow moisture to escape shall be provided with an approved vapor retarder. The vapor retarder shall be installed on the warm-in-winter side of the thermal insulation. **Exceptions:** 1. In construction where moisture or its freezing will not damage the materials. 2. Frame walls, floors and ceiling sin jurisdictions in Zones 3 and 4A. (Crawl space floor vapor retarders are not exempted.) 3. Where other approved means to avoid condensation are provided.

403.2.2 Sealing. Ducts, air handlers, filter boxes and building cavities used as ducts shall be sealed. Joints and seams shall comply with the North Carolina Mechanical Code. Exception: Ducts exposed within the conditioned space they serve shall not be required to be sealed.

2012 North Carolina Mechanical Code

Chapter 5
504.6 Domestic clothes dryer ducts. Exhaust ducts for domestic clothes dryers shall be constructed of metal and shall have a smooth interior finish. With the exception of the transition duct, flexible ducts are prohibited. The exhaust duct shall be a minimum nominal size of 4 inches (102 mm) in diameter. The entire exhaust system shall be supported and secured in place and shall terminate not less than 12 inches above finished grade. The male end of the duct at overlapped duct joints shall extend in the direction of airflow. Clothes dryer transition ducts used to connect the appliance to the exhaust duct system shall be limited to single lengths not to exceed 8 feet (2438 mm) and shall be listed and labeled for the application. Transition ducts shall not be concealed within construction and must remain entirely within the room in which the appliance is installed. Exception: Where the duct termination is less than 12 inches above finished grade an area way shall be provided with a cross sectional area not less than 200 square feet. The bottom of the duct termination shall be no less than 12 inches above the area way bottom.
504.6.1 Maximum length. The maximum length of a clothes dryer exhaust duct shall not exceed 45 feet (13716 mm) from the dryer location to the outlet terminal. The maximum length of the duct shall be reduced 5 feet (1524 mm) for each 45 degree (0.79 rad) bend and 10 feet (3048 mm) for each 90 degree (1.6 rad) bend. The maximum length of the exhaust duct does not include the transition duct. **Exception:** Where the make and model of the clothes dryer to be installed is known and the manufacturer's installation instructions for such dryer are provided to the code official, the maximum length of the exhaust duct, including any transition duct, shall be permitted to be in accordance with the dryer manufacturer's installation instructions. See Table 603.4 for gage thickness. Where exhaust ducts are installed in concealed locations, the developed length of the exhaust duct system shall be indicated by permanent labels or tags installed in an observable location.
504.6.2 Rough-in required. Where a compartment or space for a domestic clothes dryer is provided, and exhaust duct system shall be installed in accordance with Sections 504.6 and 504.6.1.

NORTH CAROLINA			
MODULAR PLANS REVIEW CHECKLIST			
		PAGE 1 of 3	revised MAY 2011
Manufacturer		R-Anell Housing Group	
Model number/name		RJ553-A1	
3rd Party		NTA	
Review Date		8/6/15	
Reviewer		MICHAEL FALLER	
		Plan Sheet Page # and NOTES	
	QC MANUAL (current and complete)	OK	
	APPENDIX B (required and attached)	N/A - Does Not Apply to Residential Modulars	
	PLAN SHEETS		
	Each plan sheet third-party stamped with approver's name	OK	
	Each plan sheet is numbered and/or indexed	OK	
	GENERAL (cover sheet)		
	Code References	Cover sheet	
	Statement regarding connection to public utilities	Cover sheet	
	Statement regarding bathrooms if not included	NA	
	Construction type	Cover sheet - 5B (Wood Frame - Unprotected)	
	Occupancy classification	Cover sheet - Single Family Residential	
	Fire resistance ratings (if required)	NA	
	Floor live load	Cover sheet	
	Roof live load	Cover sheet	
	Design wind velocity	Cover sheet	
	Seismic information (commercial projects)	NA	
	Thermal zones	Cover sheet	
	Notice to Inspections department regarding items to be site installed	Cover sheet	
	FLOOR PLANS		
	Interior and exterior wall layouts	Page FP	
	Door and window schedule	Schedules and General Notes Page	
	Light and Ventilation requriements	Schedules and General Notes Page	
	Attic access (size and locaiton)	Page FP	
	Non-prescriptive headers	N/A	
	Safety glazing requirements	Shown on floor plan with "S" symbol	
	Fire rating of Exterior walls (if applicable)	NA	
	EXTERIOR ELEVATIONS		
	Exterior materials	Page EL	
	Attic ventilation requirements	Page XS	
	PLUMBING		
	Plan	Pages WH, WC, DL, DN, & GA	
	All fixtures furnished by mfg. shown on plans	Pages WH, WC, DL, DN, GA (references design manual	
	Materials (water supply & distribution, DWV, storm drainage)	Pages WH, WC, DL, DN, & GA	
	Supply and waste risers, including DWV system	Pages WH, WC, DL, DN, & GA	
	(generic) beneath the building.		
	Water heater (type and capacity)	Electric 50 gal	

NORTH CAROLINA MODULAR PLANS REVIEW CHECKLIST			
		PAGE 2 of 3	revised MAY 2011
		Plan Sheet Page # and NOTES	
	MECHANICAL		
	Design calculations	N/A	
	Installed unit capacity	ResCheck	
	Supply and returns (locations and sizes)	Pages HS & HR	
	Duct sizes	Page HS	
	Specifications (units, ducts)	Page HS (reference design manual)	
	All appliances furnished by mfg. shown on plans	Page FP	
	ELECTRICAL		
	Plan	Page EP	
	Location of all electrical boxes	Page EP	
	Electrical panel location	Page EP	
	Note regarding main disconnect (if applicable)	Page NG	
	Exterior lighting and receptacles	Page EP	
	Ground level receptacles (if applicable)	Page EP	
	Smoke detector location(s)	Page EP	
	Electrical load calculations	Page NG	
	Electrical panel layout (breaker and wire sizes, circuit schedule)	Page NG	
	Panel and service entrance sizes	Page NG	
	All fixtures furnished by mfg. shown on plans	Page EP	
	ACCESSIBILITY		
	(for other than 1 & 2 family dwellings)		
	Entrances and means of egress	N/A	
	Doors, doorways, and door hardware	N/A	
	Stairs and handrails	N/A	
	Toilet rooms, plumbing fixtures, grab bars, etc	N/A	
	Bathrooms and shower rooms	N/A	
	Occupancy specifica requirements	N/A	
	Multi-family dwellingsL Typa A and B units	N/A	
	FLOOR X-SECTION		
	Joist and beam sizes and spacing	Page XS	
	Materials species and grade	Page XS	
	Sheathing, decking, and concrete as applicable	Page XS	
	Fastening Instructions	Page XS	
	Insulation	ResCheck	
	Details as required for clarification	N/a	
	WALL X-SECTION		
	Stud and column sizes and spacing	Page XS	
	Materials species and grade	Page XS	
	Sheathing and bracing	Page XS	
	Headers and lintels	Page XS	
	Finishes	Page XS	
	Fastening Instructions	Cover Sheet (references Installation Manual)	
	Insulation	ResCheck	
	Details as required for clarificaiton	ResCheck	

MODULAR PLANS REVIEW CHECKLIST

PAGE 3 of 3 | revised MAY 2011

	Plan Sheet Page # and NOTES
CEILING/ROOF X-SECTION	
Truss, rafter, and beam spacing	Page XS, Cover Sheet, truss dwgs.
Lumber species and grade	Design Manual
Sheathing and decking	Page XS
Finishes	Page XS
Fastening instructions	Installation Manual
Insulation	ResCheck
Details including NC sealed truss designs or manual reference	Design Manual
FOUNDATION PLAN	
Footings, pier, and curtain wall locations and specifications	Page FD20# & Installation Manual
X-sections with dimensions	Page FD20# & Installation Manual
Anchorage - sill plate to piers and curtain wall	Page FD20# & Installation Manual
Anchorage - building to sill plate	Page FD20# & Installation Manual
Anchorage - tie downs (lateral and longitudinal)	Page FD20# & Installation Manual
Soil bearing capacity	Page FD20# & Installation Manual
Minimum concrete compressive strength	Page FD20# & Installation Manual
Motar type	Page FD20# & Installation Manual
Ventilation requirements (with and without vapor barrier)	Page FD20# & Installation Manual
Crawl space access requirements	Page FD20# & Installation Manual
ENERGY COMPLIANCE	
Demonstrate compliance	ResCheck
SET-UP INSTRUCTIONS	
Floor and ceiling connections	Page 32 of Installation Manual
Marriage wall connections	Page 32 of Installation Manual
Roof set-up connections	Page 32 of Installation Manual
Plumbing connections	Pages 48-50 of Installation Manual
Mechanical connections	Page 50 of Installation Manual
Electrical connections	Page 46-48 of Installation Manual
Fire stopping	not specifically addressed in installtion manual (inherent in design)
Air infiltration elimination	not specifically addressed in installtion manual (part of IRC requirements)
Notice to inspections department attachment if set-up instructions are by attachment	Cover Sheet
ITEMS NOT INSPECTED IN PLANT	
List of items not inspected by 3rd. Party	Cover Sheet
Notice to inspections department	Code page

Harnett COUNTY NORTH CAROLINA

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: _____ Date: _____

Site Address: _____ Phone: _____

Subdivision: _____ Lot: _____

Description of Proposed Work: _____ Total Job Cost: _____

General Contractor Information

_____ _____
Building Contractor's Company Name Telephone

_____ _____
Address Email Address

_____
License #

Electrical Contractor Information

Description of Work _____ Service Size: _____Amps T-Pole: ___Yes ___No

_____ _____
Electrical Contractor's Company Name Telephone

_____ _____
Address Email Address

_____
License #

Mechanical/HVAC Contractor Information

Description of Work _____

_____ _____
Mechanical Contractor's Company Name Telephone

_____ _____
Address Email Address

_____
License #

Plumbing Contractor Information

Description of Work _____ # Baths_____

_____ _____
Plumbing Contractor's Company Name Telephone

_____ _____
Address Email Address

_____
License #

Insulation Contractor Information

_____ _____
Insulation Contractor's Company Name & Address Telephone

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

Harnett COUNTY NORTH CAROLINA

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.

_____ _____

Signature of Owner/Contractor/Officer(s) of Corporation 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:_____ Date:_____

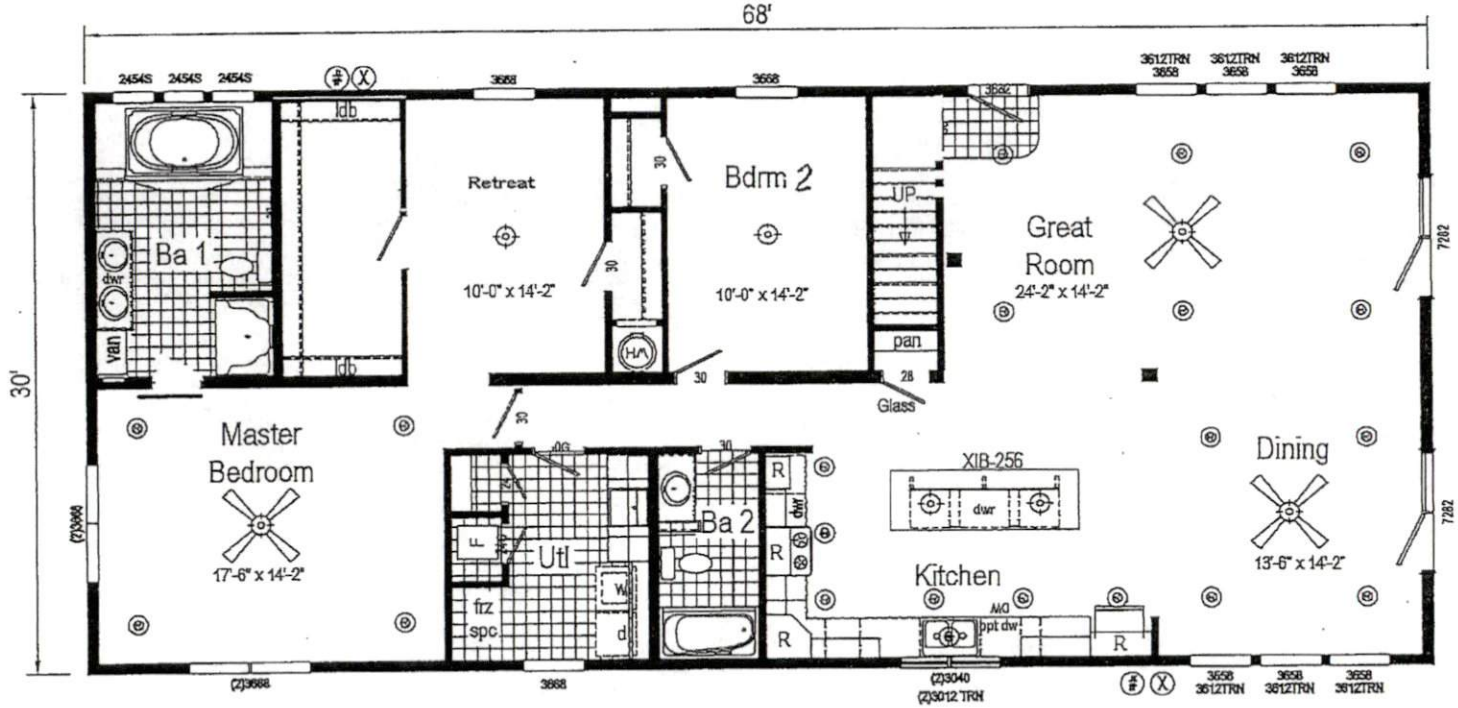
Final Interior

Make bath to closet a solid wall Flip Shelf
Make closet opening from old BR 2
Make opening from Hall to BR 2
Add Door in Hall to enter MBR or retreat
Remove MBR and Mbath Door
Install Barn Door at Mbath

Make LR an Open Stairwell We need to order Railing and trim from factory

Remove Rock on column and replace with sheetrock column

RJ553-A1



RJ553-A1 3268 Approx. 2040 Sq. Ft.

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Cabinet: 3268	Revisions: Date 08/10/15, Number 300			Scale: 3/16" = 1'-0"	Date: 08/03/2015	Cust. Stock:		Layout No.: RJ553-A1
Title: Literature					Drawn By: NE	Reference: NONE	Cst: Custom Built Homes		Pg: LIT
							S.N.: 42359		

x _____ 8/24/2020

x Denied 8/24/2020

Door ways are 30 inch

The Atrium Door is a 7282

Windows are 3658's