Adopted Codes: State of North Carolina

2018 North Carolina Residential Code
2017 North Carolina Electrical Code (2017 NEC)
2018 North Carolina Energy Code
2018 North Carolina Mechanical Code
2018 North Carolina Plumbing Code
2018 North Carolina Fuel Gas Code
.

Project Location:

379 Suggs Rd Erwin, NC 28339 HARNETT County

Occupancy:

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

Design Load:

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. (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). (E) The following items are onsite by others: furnace, heat ducts, ceiling return air jumpers.
- 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 R302.1.1, 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 R312**; subject to local inspection.
- 8. Partial plumbing installation (stubbed in) requires full DWV testing in field. Testing of factory portion of DWV is not required unless partial testing is mandated by code.
- 9. Smoke detectors required by code that are not shown on the plan will be site installed by others and are subject to inspection by the authority having jurisdiction.
- 10. Where required, window protection designed and provided on site by others to meet applicable local codes.

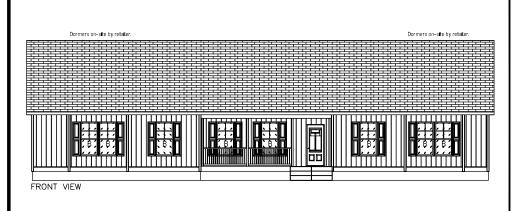
Model: 1R2039-V70

Customer: KESICK Builder: HBV

Manufacturer:

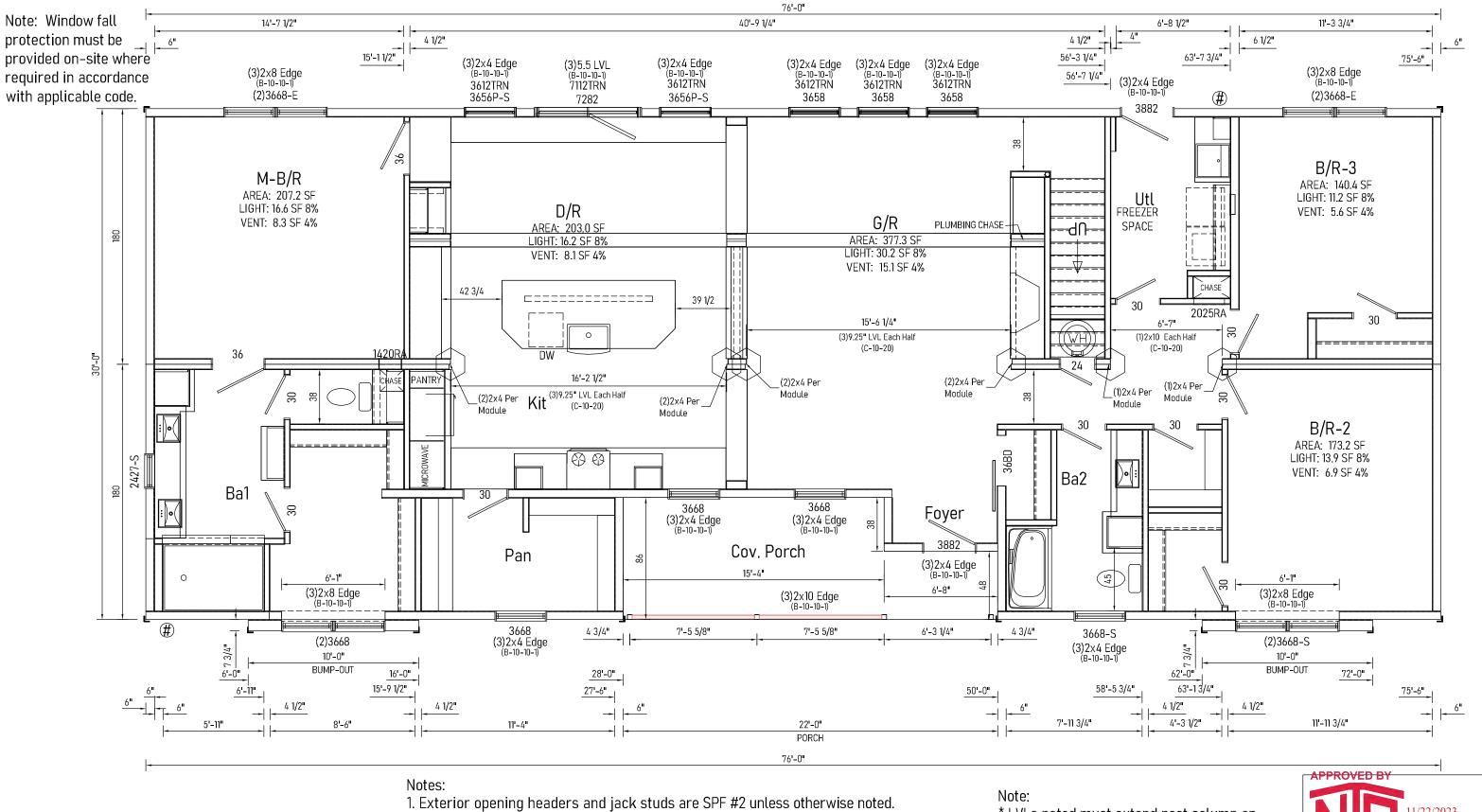
R-Anell Housing Group, LLC

Commodore Homes, LLC 235 Anthony Grove Rd. Crouse, NC 28033



Drawing Index						
Title	Page					
Cover	CV					
Floor Plan	FP					
Proposed Cape Floor Plan	PCFP					
Electrical Plan	EP					
Schedules and General Notes	NG					
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Cross Section	XS					
Hot Water Lines	WH					
Cold Water Lines	WC					
DWV System	DL					
DWV Notes	DN					
Gas Lines	GA					
Supply Air Ducts - Perimeter Registers	SP					
Ceiling Return Air System	HR					
Braced Walls-Prescriptive	BWP					
Foundation 2x10 Marriage Line without Stair	FD20#					
ResCheck	ATTACHED					
UFP Rigid Collar Tie Connection Details	UFP-EB05-02					
Truss Diagram	ATTACHED					





See Schedules and General Notes Page

= Column Support Location

AC = Attic Access

- 2. Sidewall headers may use alternate construction per section B-10 of Systems Manual.
- 3. LVL's where specified to be minimum of 11/2" wide, M.O.E. = 2.0 and fb = 2900 PSI.
- 4. See C-10-45 for stair opening framing.
- 5. See C-10-105 for dormer opening framing.

Address: 235 Anthony Grove Rd. Crouse, NC 28033 Crouse, NC 28033 Scale: 1'-0" 1/10/2023 Drawn By: Reference: NONE S/N: 44183 Page 1-0" S/N: 44188 Page 1-0" S/N: 44188 Page 1-0" S/N: 44188 Page 1-0"

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

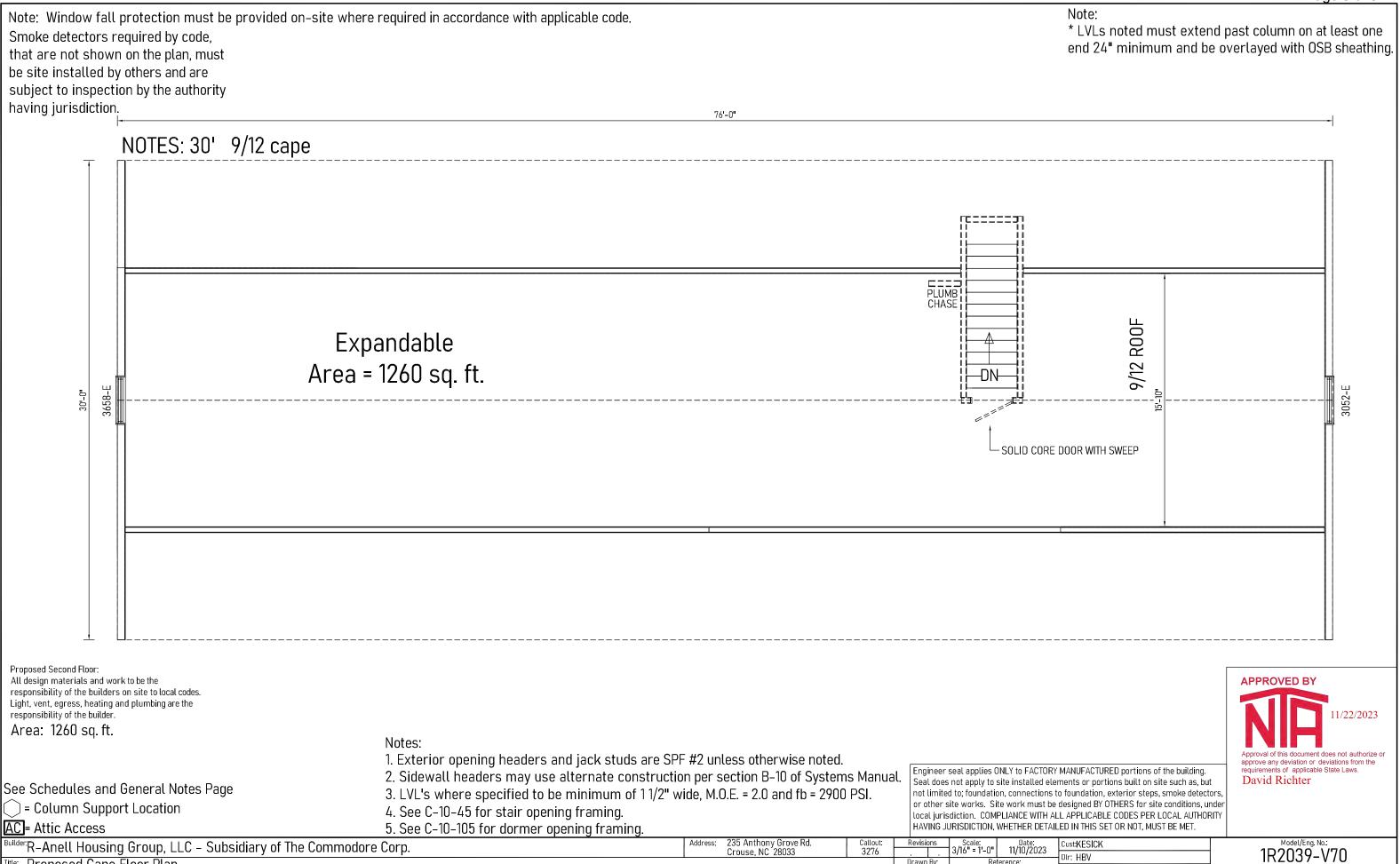


v<mark>id Richter</mark> Model/Eng. No.: 1R2039-V70

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

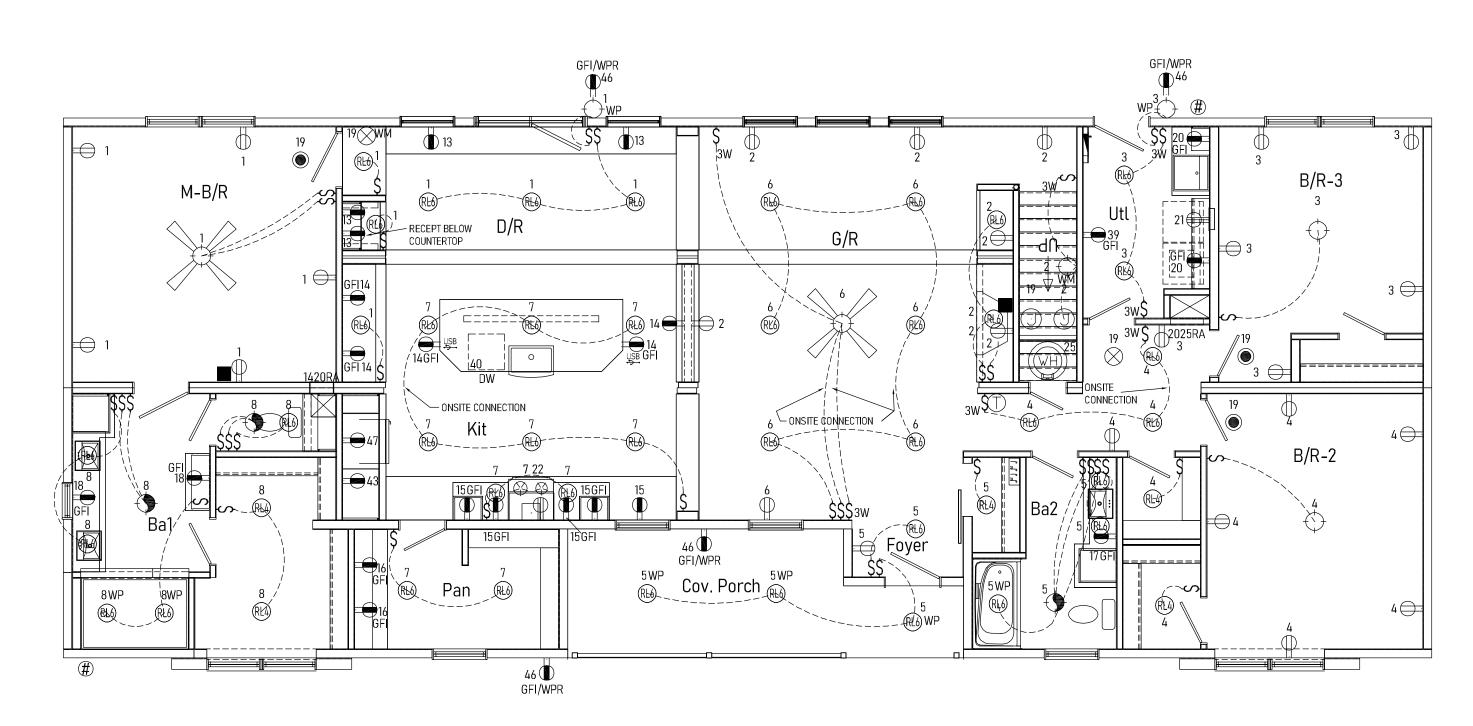
Title: Floor Plan

R-ANELL\1R\22-1R2039-V70



itle: Proposed Cape Floor Plan

S/N: 44183





See Schedules and General Notes Page

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Address: 235 Anthony Grove Rd. Callout: Crouse, NC 28033 3276	Revisions	Scale: Date: 3/16" = 1'-0" 11/10/2023	Cust:KESICK		
Title: Clastrical Disc		Drawn By:	Reference:	υп. пον		
litte: Electrical Plan		l ne '	l none	S/N: 44183	Pg.:	

Optional Method Load Calculation	for One-Famil	y Dwelli	ngs		del # 89-V70	
General Lighting and Receptacle Loads 220.82(B)(1) Do not include open porches, garages, or unused or unfinished spaces not adaptable for future use.	3 x (ft² using	3403 outside dime	= ensions)	1	10209	=15 AMP RECPT =SWITCH
2 Small-Appliance Branch Circuits 220.82(B)(2) At least two small-appliance branch circuits must be included. 210.11(C)(1)	1500 x (mi	4 nimum of tw	= o)	2	6000	RECPT
3 Laundry Branch Circuits(s) 220.82(B)(2) At least one laundry branch circuit must be included. 210.11(C)(2)	1500 x (mi	1 nimum of on	= e)	3	1500	=UNDER (
4 Appliances 220.82(B)(3) and (4) Do NOT include any hea Use the nameplate rating of all appliances (fastened in place,	•	Total vo all app. LIST	It-amps of ED BLEOW	4	34600	-STAND
permanently connected, or connected to a specific circuit), ranges, ovens, cooktops, motors, (1) Electric Dryer (2) Electric Range	4.5 KVA 5.4 KVA 14.2 KVA	(1)	Vent Fans Vicrowave Dishwashe	1.5	KVA KVA KVA	=PHONE JACK
and clothes dryers. Convert any (0) Electric Wal Oven (5) nameplate rating given in amperes (0) Electric Wal Oven (D) to volt-amperes by multiplying (2) Bath Circ's	0 KVA 0 KVA	(1) F	reezer Refrigerato	1.5	KVA KVA KVA	GFI =GROUND FA WP =WET LOCAT () =IONIZATION
	-	924 -	+ 10,000 =	269	924	SMOKE/CO
(total of lines 1-4) 6 Heating or Air-Conditioning System 220.82(C). Use the nameplate ratings in volt-amperes for all applicable systems in lines a through e. a) Air-conditioning and cooling systems, including heat	Supplemental electr Include the heat-pur compressor is prevented omit the compressor.	mp compress	or(s) at 100	%. If the hea	at-pump	
pumps without any supplemental electric heating:	0	x 65 % =	c)		0	
b) Electric thermal storage & other heating systems where the usual load is expected to be continuous at full	 Electric space-heating seperately controlled 20000 Electric space-heating space-heating	x 65 % =	d)	130	000	If an atta must be
shall not be figured under any other selection in 220.82(C). $0 \times 100\% = b$ 0	seperately controlle 0	ed units: x 40 % =	e)	(0	Clothes
7 Total Volt-Ampere 13000 + Demand Load: (Largest VArating, 6a - 6e)	26924 (Line 5)	. =	7	399	924	of applic of dryer
8 Minimum Amperes Divide the total volt- 39924 ÷ 240 amperes by voltage. (line 7) (voltage)	= 167 (min. amperes)	9	nimum Size Service or ler 240.6(A)	200 Amps	Installed	
10 Size the Service or Feeder Conductors. Use 310.15(B)(6) to up to 400 amperes. Ratings in excess of 400 amperes shall co.	o find the service conductomply w/ Table 310.16.		Minimum Size	Ċ	opper OR	
310.15(B)(6) also applies to feeder conductors serving as the n	main power feeder.		Conductors	4/0 Alu	ıminum	FOR PERM. HP.THE BR.

ID NO. REQ'D =SWITCHED RECPT WEATHERPROOF ENCLOSURE WITH WPR = WEATHE RESISTANT RECPT NM14-2/WG 1-12 General Lighting/Receptacles 15 =220 VOLT RECPT Small Appliance NM12-2/WG 13-16 20 RECESSED 4" RLO =RECESSED LED LIGHT (R)=RECESSED LIGHT)— =STD L**i**GHT 17-18 Bath (GFCI) 20 1 NM12-2/WG 19 Smoke Alarms (AFCI) 15 1 NM14-2/WG 48" FLOURESCENT 24" STRIPLIGHT - 今今今今 LOURESCENT PC =PULL CHAIN LIGHT NM12-2/WG 20 Laundry 20 1 21 Electric Dryer 30 NM10-3/WG _ =UNDER CABINET LIGHT / WALL LIGHT =UNDER CABINET STEREO Electric Range NM6-3/WG 22 50 2 SWITCH $S^{ ext{DM}}$ =DIMMER SWITCH $S^{ ext{3W}}$ =3-WAY SWITCH $S^{ ext{3DM}}$ =3-WAY DIMMER SWITCH Electric Cooktop NM8-3/WG 40 23 2 Electric Wall Oven 20 NM12-2/WG 24 2 - STANDARD VENT)=WIRE SE =DOORBELL 「プリアリ =CHIMES Electric Wall Oven 40 2 NM8-2/WG Electric W/H 25 NM10-2/WG =WHOLE HOUSE VENTILATION FAN =STANDARD FAN 20 NM12-2/WG w/LIGHT 25.1 Tankless W/H 1 NM14-2/WG Gas Furnace 15 =JUNCTION BOX 26 # HOSE 27 Electric Furnace 60/30 4 NM4-2/WG Electric Furnace 60/60 NM4-2/WG GROUND FAULT CIRCUIT INTERRUPTER >>> =BULLET =PANEL BOX 28-37 | Electric BB Heat 20 2 NM12-2/WG =AV JACK □♥ =MEDIA RECEPT -WET LOCATION ⊕ =SPEAKER NM6-2/WG A/C 38 50 2 IONIZATION SMOKE ALARM F = FIRE EXTINGUISHER T) =THERMOSTAT 39 Freezer 20 NM12-2/WG 1 40 Dishwasher 15 NM14-2/WG Disposal (GFCI) NM14-2/WG 15 Whirlpool Tub (GFCI) 20 NM12-2/WG NM12-2/WG 43 Microwave Oven 20 Garage (GFCI) 20 1 NM12-2/WG 44 46 Exterior Receptacles 15 (Opt. 20) NM14-2/WG (Opt. NM12-2/WG) 47 Refrigerator 20 NM12-2/WG

CIRCUIT

LOAD

an attached garage is to be added to this home, the entrance door to the home from the garage nust be a self-closing fire rated door per applicable code.

lothes dryer vents may need to be completed to the exterior of the home on site. Refer to sections f applicable local codes and to Section 8 of the home installation manual for required completion f dryer ventilation as necessary.

P.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.

LEGEND

=20 AMP RECPT

=20 AMP FLOOR RECPT

=15 AMP FLOOR RECPT

OR PERMANENTLY CONNECTED APPLIANCES RATED AT OVER 300 VOLT-AMPERES OR 1/8 MAIN DISCONNECT SHALL BE LOCATED ON THE EXTERIOR OF THE HOME.

Design R/O SF Light | Vent Description Label Load 3882 Half Lite Exterior Door 3882 21.70 2 18 20.76 +50/-50 7.57 3882 3/4 Lite Exterior Door | 3882 21.70 20.76 +50/-50 7282 Swing Patio Door 7282 43.12 19.44 19.13 +50/-50 24 Hinged Interior Door 24 14.99 0.00 0.00 NA

21.90

18.44

18.44

0.00

0.00

0.00 0.00

0.00 0.00

NΑ

NA

NA

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 MORE STRINGENT STAIR GEOMETRY IS REQUIRED OR DESIRED, PLEASE CONTACT THE PLANT OF MANUFACTURE FOR PLAN ADJUSTMENTS.

36

30

ELECTRICAL PLAN NOTES BASED ON NEC 2017

ALL KITCHEN AND BATHROOM COUNTER RECEPTS TO BE GFCI PROTECTED.

ALL CLOSET LIGHTS TO BE ENCLOSED SURFACE MOUNT FIXTURES, 12" MIN. FROM STORAGE SPACE.

DOOR SCHEDULE

36 Hinged Interior Door

30 Hinged Interior Door

30 Hinged Interior Door

- ALL RECEPTS TO BE GROUNDING TYPE, PER 210-7/NEC.
- SPECS, WIRING, INSTALLATIONS, ETC. TO COMPLY WITH NEC REGULATIONS.
- SERVICE PANEL MAY BE LOCATED IN GARAGE.
- ALL SMOKE ALARMS TO HAVE BATTERY BACK-UP AND TO BE INTERCONNECTED WITH A 14 GA, MIN. INTERCONNECTION WIRE, 14-3 CABLE, OR EQUIVALENT PER MFG.S RECOMMENDATIONS.
- EXTERIOR LIGHT AT GARAGE SIDE MAY BE REPLACED.
- 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.
- 200 AMP PANEL BOX INSTALLED

S/N: 44183

Dir: HBV

POLES

WIRE SIZE

AMPS

- ALL 120v GENERAL USE RECEPTS ARE TAMPER RESISTANT UNLESS MOUNTED AT LEAST 66* ABOVE FLOOR, OR ARE PART OF A LISTED LIGHT FIXTURE OR APPLIANCE, OR WHERE CORD & PLUG APPLIANCE IN DEDICATED SPACE IS NOT EASILY MOVED FOR USE.
- ALL EXTERIOR RECEPTACLES ARE GFI, TAMPER RESISTANT AND LISTED FOR WET LOCATIONS.
- COMBINATION TYPE AFCI BREAKERS ARE REQUIRED FOR ALL 120 V CIRCUITS EXCEPT THOSE SERVING BATHROOMS, GARAGE, LAUNDRY AREAS, KITCHENS, UNFINISHED BASEMENTS AND OUTDOORS.
- ALL ELECTRICAL BOXES SUPPORTING LIGHTING FIXTURES MUST BE RATED @ 50# AND IDENTIFIED ON THE BOX.
- WHIRLPOOL RECEPTACLES MUST BE GFCI. TAMPER RESISTANT AND READILY ACCESSIBLE PER NEC 680.71
- 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
- A RECEPTACLE OUTLET IS REQUIRED FOR PORCHES, BALCONIES OR DECKS WHICH ARE ACCESSIBLE FROM THE INSIDE OF THE DWELLING UNIT REGARDLESS OF THE SIZE OF THE PORCH, BALCONY OR DECK.
- NON-SWITCHED CIRCUIT NEUTRAL CONDUCTOR MUST BE PRESENT AT EACH WALL SWITCH. RE-IDENTIFIED CONDUCTORS WITH WHITE GREY OR THREE STRIPE INSULATION MAY ONLY BE USED AS SUPPLY TO SWITCH AND NOT FOR HOT RETURN TO FIXTURE.
- 120√ 15 OR 20 AMP RECEPTS LOCATED WITHIN 6' FROM ANY DWELLING UNIT SINK MUST BE GFCI PROTECTED.
- 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.

S SUFFIX	DENOTES	SAFETY (GLAZING / E	SUFFIX D	ENOTES	EGRESS				
Label	Width R/O	Height R/O	R/O SF	Light	Vent	Room SF	U Value	Egress	Design Load	SHGC w/o Grids
(2)3668	73	68.5	34.73	28.01	13.84	346.00	0.34	Yes	+50/-50	0.23
(2)3668-E	73	68.5	34.73	28.01	13.84	346.00	0.34	Yes	+50/-50	0.23
(2)3668-S	73	68.5	34.73	28.01	13.84	346.00	0.34	Yes	+50/-50	0.23
2427-S	24.5	27.5	4.68	3.01	1.32	33.00	0.34	No	+50/-50	0.23
3612TRN	36.5	12.5	3.17	2.15	0.00	0.00	0.31	No	+50/-50	0.26
3656P-S	36.5	56.5	14.32	12.33	0.00	0.00	0.31	No	+50/-50	0.26
3658	36.5	58.5	14.83	11.76	5.76	144.00	0.34	Yes	+50/-50	0.23
3668	36.5	68.5	17.36	14.00	6.92	173.00	0.34	Yes	+50/-50	0.23
3668-S	36.5	68.5	17.36	14.00	6.92	173.00	0.34	Yes	+50/-50	0.23
7112TRN	71.5	12.5	6 21	4 42	n nn	0.00	N 31	No	+50/-50	N 26

AT LEAST ONE EGRESS WINDOW IS REQUIRED FOR EACH SLEEPING AREA WHERE NO EXTERIOR EXIT DOOR EXISTS.

REFER TO RESCHECK FOR DOOR AND WINDOW U-VALUES

^{Builder}R–Anell Housing Group, LLC – Subsidiary of The Commodore Corp.

WINDO	WINDOW SCHEDULE - PROPOSED CAPE											
AT LEAS	AT LEAST ONE EGRESS WINDOW IS REQUIRED FOR EACH SLEEPING AREA WHERE NO EXTERIOR EXIT DOOR EXISTS.											
S SUFFIX DENOTES SAFETY GLAZING / E SUFFIX DENOTES EGRESS												
Label	Width R/O	Height R/O	R/O SF	Light	Vent	Room SF	U Value	Egress	Design Load	SHGC w/o Grids		
3052-E	36.25	62	15.61	10.26	5.88	128.25	0.31	Yes	+50.13/-50.13	0.21		
3658-E	36.5	58.5	14.83	11.76	5.76	144.00	0.34	Yes	+50/-50	0.23		
Address: 235 Anthony Grove Rd. Crouse, NC 28033				Call 32	lout Revis		cale: I.T.S. 11	Date: /10/2023				

APPROVED BY 11/22/2023 Approval of this document does not authorize or approve any deviation or deviations from the uirements of applicable State Laws **David Richter**

1R2039-V70

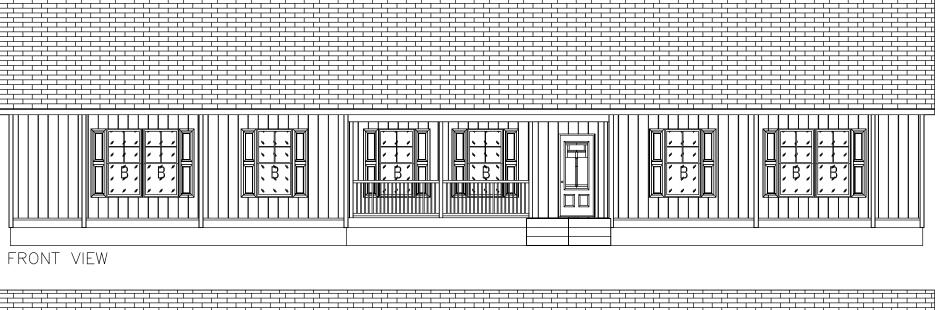
^{tle:} Schedules and General Notes

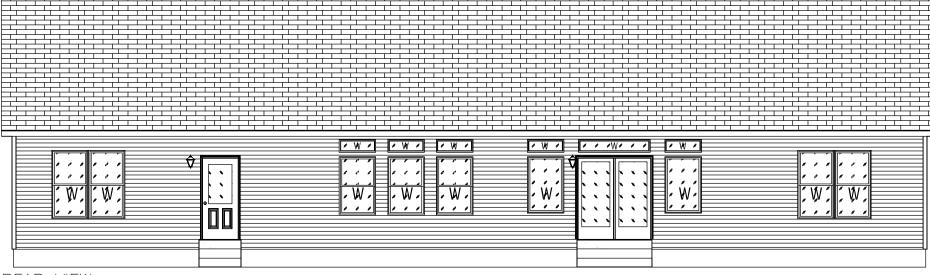
WINDOW SCHEDULE

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.

Note: Window fall protection must be provided on-site where required in accordance with applicable code.







REAR VIEW

-NOTES-

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

SIDEWALL HEIGHT ______ RIGHT VIEW 3658

3052 MI DH

Ŵ LEFT VIEW

HOMES WITH ATTIC SPACE QUALIFYING AS HABITABLE, MUST BE EQUIPPED WITH EMERGENCY ESCAPE AND RESCUE OPENINGS REGARDLESS OF WHETHER ATTIC AREA IS FINISHED OR UNFINISHED. OPENINGS MAY OCCUR AT END WALL OF ATTIC AND/OR AT ROOF DORMERS IN WHATEVER ARRANGEMENT NECESSARY TO INSURE THAT ANY SLEEPING ROOM HAS AT LEAST ONE EGRESS



Builde	R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.
Title:	Elevations

Address:	235 Anthony Grove Rd.	Callout: 3276	Revisions	Scale:	Date: 11/10/2023	Cust:KESICK
	Crouse, NC 28033	3Z/0		N.1.5.	11/10/2023	Dir: HBV
			Drawn By:	Ret	ference:	DII. HDV
			Diamin by.			C/N: / /100

SYSTEMS MANUAL REFERENCES

INTERIOR WALLS: B-30-10 & 11

BEAMS: C-10-10 THRU C-10-30

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

LEGEND

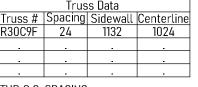
- JACK POST, PIER OR CONCRETE FILLED POST THAT MEETS OR EXCEEDS REQUIRED SUPPORT CAPACITY PER FOUNDATION DESIGN
- EXTERIOR WALL INSULATION (SEE INSULATION R-VALUES).
- 2X6 #3 SPF EXTERIOR WALL STUDS. (SEE STUD O.C. SPACING NOTE)
- 2X6 #3 SPF SIDEWALL BOTTOM PLATE.
- 7/16" RATED SHEATHING.
- VINYL OR 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.
- 2X6 TREATED SILL PLATE. FASTENING OF SILL AND HOME TO FOUNDATION ON SITE PER CODES OR BY LOCAL ENGINEER WHEN APPLICABLE.
- 2X4 #3 SPF INTERIOR WALL STUDS. (SEE STUD O.C. SPACING NOTE)
- 2X4 #3 SPF BOTTOM PLATE INTERIOR WALLS, TYP.
- ENGINEERED TRUSSES SPACED TO MEET DESIGNED GROUND LOAD SNOW LOAD.
- VAPOR BARRIER.
- CEILING BOARD 1/2" GYPSUM.
- 7/16" 24/16 RATED ROOF DECKING MIN. TYP.
- 16 2X4 #3 SPF MIN. VERT. RAIL CONT. ON BOTH SECTIONS OVER MATE WALL. USE APPLICABLE BEAM OVER OPEN SPANS (TYP.) PER PG'S C-10-10 OF SYSTEM DOCUMENT.
- 17 RIDGE VENT TYP. 50% VENTILATION OF ROOF CAVITY (UPPER PORTION), INSTALLED PER CODE REQUIREMENTS.
- TYPICAL SHINGLES, INSTALLED PER MFGR'S INSTRUCTIONS.
- SHINGLE UNDERLAYMENT TYP.
- JOIST HANGERS AT MATELINE(S).
- 1" MIN. SPACE FOR ATTIC VENTILATION.
- TYPICAL ICE BARRIER PER SECTION 905 OF APPLICABLE CODE.
- CEILING INSULATION TYP. (SEE INSULATION R-VALUES).
- 23/32" (0.S.B.) BOARD DECKING.
- 25 ALUM., VINYL OR HARDIE BOARD FACIA AND DRIP EDGE.
- FLOOR CAVITY OR PERIMETER WALL MUST BE INSULATED ON SITE OR AT THE FACTORY (SEE "INSULATION R-VALUES")
- PERIMETER RIM JOIST MUST BE INSULATED TO R-VALUE LISTED FOR EXTERIOR WALLS
- INSULATION INSTALLED ONSITE BY OTHERS PER THERMAL REQUIREMENTS AND/OR STATE AND LOCAL CODES
- VENTED SOFFIT 50% OF LOWER ROOF VENTILATION.
- BAFFLE REQUIRED
- DRIFT BLOCKER
- VAPOR RETARDER (AS REQUIRED PER CLIMATE ZONE)
- FLOOR DECKING RATED FOR 19.2" O.C. JOIST SPACING MAX.
- 34 MIN. 2X10 #2 SPF FLOOR JOIST 16" O.C.
- 2X6 #3 SPF DOUBLE TOP PLATE.
- 36 WALL COVERING (MIN. 1/2" GYPSUM).

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 2143/300 = 7.14 VENT REQUIRED

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. REFERENCE THE APPROVED SYSTEMS PACKAGE FOR ADDITIONAL AND SPECIFIC CROSS SECTION INFORMATION



STUD O.C. SPACING EXTERIOR WALL: 16"

INTERIOR WALL: 24"

INSULATION R-VALUES

CEILING: 38 CEILING (Between Knee Walls: 30 EXTERIOR WALLS (continuous): 0 EXTERIOR WALLS (cavity): 19

FL00R: 30

FOUNDATION WALLS (continuous): 0 FOUNDATION WALLS (cavity): 0

> WHEN FINISHING HABITABLE SPACE, INSULATED &, BOX-OUT AS NECESSARY TO ACCOMMODATE REQUIRED INSULATION THICKNESS FINISHED ON SITE BY OTHERS AT BUILDER'S
> DISCRETION. IT IS THE RESPONSIBILITY OF THE SITE BUILDER TO PROVIDE ALL STRUCTURAL

9

ELECTRICAL, THERMAL, VAPOR BARRIER, VENTILATION, HEATING AND COOLING MATERIALS AND INSTALLATION TO COMPLY WITH ALL STATE AND LOCAL CODE REQUIREMENTS. CONSULT YOUR LOCAL AUTHORITY HAVING JURISDICTION. THESE MEASURES ARE NOT ADDRESSED AT THE FACTORY.

R30C9F

R30C9F

20

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 & SPECIFICATIONS MAY VARY PER PLAN.

REFER TO INSTALLATION MANUAL FOR MODULE CONNECTIONS.

REFER TO INSTALLATION MANUAL AND TRUSS MFG. DIAGRAM FOR ROOF TRUSS BRACING.

APPROVED BY 1/22/2023 approve any deviation or deviations from the requirements of applicable State Laws. **David Richter**

^{Builder}R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.

^{tle:} Cross Section

Callout 3276 Cust:KESICK 11/10/2023 1/4" = 1'-0" Dir: HBV S/N: 44183

NULE:

- 1. 3/4" GALVANIZED, OR COPPER RELIEF DRAIN (NOT SHOWN) THRU FLOOR w/VISIBLE AIR GAP
- 2. INLET WITH 1" CAP & CHAIN.
- 3. DIMENSIONS EXPRESSED IN PARENTHESIS (A × B) INDICATE: (DIST. FROM REAR END OF HOME FLOOR × DIST. FROM HOME MATE LINE).
- 4. ANTI-SCALD DEVICE ON ALL SHOWER, AND TUB/SHOWER COMBINATIONS.
- 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
- BATHROOMS WITH DOUBLE LAVS ARE FED FROM THE SAME RISER.
- 8. ANY LINE NOT LABELED IS 1/2"
- 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.
- 12. SEE SYSTEMS PACKAGE PLUMBING SECTION PAGES FOR ADDITIOINAL PLUMBING NOTES AND DETAILS

SITE NOTES FOR DIAGRAM EXPLANATION:

- A. WHEN VERTICAL FIXTURE WATER SUPPY RISERS ONLY ARE SHOWN ON THIS PLAN, RISERS ONLY ARE FACTORY INSTALLED AS SHOWN AND TERMINATED BELOW THE FLOOR AT THE INDICATED LOCATIONS. MATERIAL PROVISIONS, SYSTEM CONNECTIONS, TESTING, AND INSPECTION FOR ALL BELOW-FLOOR CONNECTIONS ARE ON SITE BY OTHERS IN ACCORDANCE WITH ALL STATE AND LOCAL CODES.
- B. WHEN BELOW-FLOOR SYSTEM CONNECTIONS TO RISERS ARE SHOWN ON PLAN BY SOLID LINES, THESE ARE COMPLETED, TESTED, AND INSPECTED IN THE FACTORY TO THE TERMINATION POINT SHOWN ON ILLUSTRATED PLAN.
- C. DOTTED LINES ON PLAN,(IF PRESENT), ARE INTENDED ONLY TO ILLUSTRATE TYPICAL ON-SITE CONNECTIONS. THESE ARE FOR ILLUSTRATION ONLY AND ARE NOT PROVIDED, INSTALLED, TESTED, OR INSPECTED BY THE FACTORY.
- D. ALL BELOW FLOOR WATER LINES MUST BE SIZED, INSTALLED, AND TESTED ON SITE PER APPLICABLE LOCAL AND STATE CODES.

LAV (0"-10" x 47)

ELECTRIC WATER HEATER-RHEEM MODEL #82V40-2 ELECTRIC WATER HEATER-RHEEM MODEL #82V52-2 ELECTRIC WATER HEATER-RHEEM MODEL #83VR52-2 GAS WATER HEATER-RHEEM MODEL #22V40F1 GAS WATER HEATER-RHEEM MODEL #22V50F1

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

1"-6"

3'-8"

SHOWER
(7'-1" x 151)

SHOWER
(7'-1" x 153)



ALL DIMENSIONS FROM REAR AND MARRIAGE EDGE

S/N: 44183

UTIL SINK

(63'-5" x 146)

7'-8 7/8"

3/4x6'-6 7/8"

66 FROM MARRIAGE EDGE

13'-6 7/8"

WASHER

3/4 (55'-7" × 7)

FULL OPEN VALVE

6'-6"

3'-8 7/8"

 $(58'-3" \times 74)$

TUB ' (51'-8" x 112)

CAPE PREP

 $(51^{\circ}-3^{\circ}\times87)$

3/4

87 FROM

MARRIAGE EDGE

3/4x13'-1 3/4"

3/4x1/2"

3/4x7'-13/8"

13'-2 7/8"

SINK

 $(24^{\circ}-8^{\circ}\times31)$

3/4x30'-9 3/4"

X OVER

 $(38'-0" \times 1/8)$

3/4x5'-4 3/8"

3/4x4'-2 3/4"

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

tle: Hot Water Lines

LINE SIZED FOR DISHWASHER

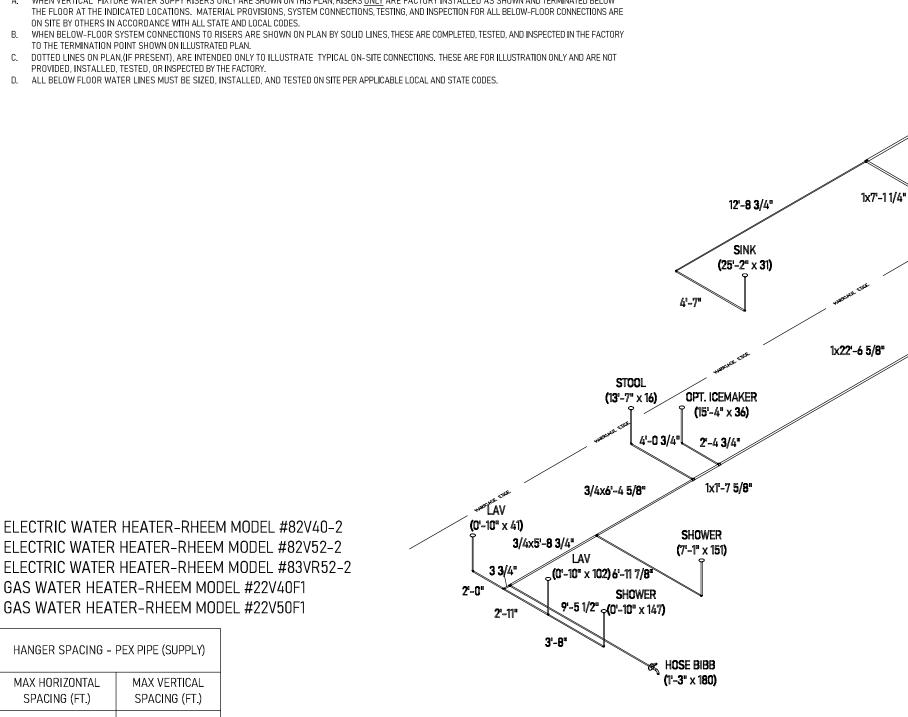
ess: 235 Anthony Grove Rd. Callout: Revisions Scale: Date: Cust:KESICK 28033 3276 CUSTOM 11/10/2023 DIr: HBV

Pq.:

- 3/4" GALVANIZED, OR COPPER RELIEF DRAIN (NOT SHOWN) THRU FLOOR w/VISIBLE AIR GAP
- DIMENSIONS EXPRESSED IN PARENTHESIS (A x B) INDICATE: (DIST, FROM REAR END OF HOME FLOOR x DIST, FROM HOME MATE LINE)
- ANTI-SCALD DEVICE ON ALL SHOWER, AND TUB/SHOWER COMBINATIONS.
- WATER-HAMMER ARRESTORS AT BATTERY OF FIXTURES INSTALLED WHEREVER THERE IS A QUICK-CLOSING VALVE CONFORMING TO ASSE 1010 & MANUFACTURER'S INSTRUCTIONS.
- SHUT-OFF VALVE IS REQUIRED AT EACH FIXTURE
- BATHROOMS WITH DOUBLE LAVS ARE FED FROM THE SAME RISER.
- ANY LINE NOT LABELED IS 1/2"
- WATER HEATER TEMPERATURE & PRESSURE RELIEF VALVE AND RELIEF DRAIN PIPE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- SHUT-OFF VALVE AT WATER HEATER IS FULL OPEN VALVE INSTALLED ON COLD WATER SUPPLY PIPE AT EACH WATER HEATER, PER CODE.
- FULLWAY SHUT-OFF VALVE WITH BLEED ORIFICE INSTALLED AT MAIN INLET SERVICE VALVE, INSTALLED ON-SITE, PER CODE.
- SEE SYSTEMS PACKAGE PLUMBING SECTION PAGES FOR ADDITIONAL PLUMBING NOTES AND DETAILS

SITE NOTES FOR DIAGRAM EXPLANATION:

- WHEN VERTICAL FIXTURE WATER SUPPY RISERS ONLY ARE SHOWN ON THIS PLAN, RISERS ONLY ARE FACTORY INSTALLED AS SHOWN AND TERMINATED BELOW THE FLOOR AT THE INDICATED LOCATIONS. MATERIAL PROVISIONS, SYSTEM CONNECTIONS, TESTING, AND INSPECTION FOR ALL BELOW-FLOOR CONNECTIONS ARE ON SITE BY OTHERS IN ACCORDANCE WITH ALL STATE AND LOCAL CODES.
- WHEN BELOW-FLOOR SYSTEM CONNECTIONS TO RISERS ARE SHOWN ON PLAN BY SOLID LINES, THESE ARE COMPLETED, TESTED, AND INSPECTED IN THE FACTORY TO THE TERMINATION POINT SHOWN ON ILLUSTRATED PLAN.
- DOTTED LINES ON PLAN, (IF PRESENT), ARE INTENDED ONLY TO ILLUSTRATE TYPICAL ON-SITE CONNECTIONS. THESE ARE FOR ILLUSTRATION ONLY AND ARE NOT PROVIDED, INSTALLED, TESTED, OR INSPECTED BY THE FACTORY.
- ALL BELOW FLOOR WATER LINES MUST BE SIZED, INSTALLED, AND TESTED ON SITE PER APPLICABLE LOCAL AND STATE CODES.



APPROVED BY 1/22/2023 Approval of this document does not authorize or approve any deviation or deviations from the requirements of applicable State Laws. **David Richter**

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

GAS WATER HEATER-RHEEM MODEL #22V40F1

GAS WATER HEATER-RHEEM MODEL #22V50F1

MAX VERTICAL

SPACING (FT.)

4'-0"

HANGER SPACING - PEX PIPE (SUPPLY)

MAX HORIZONTAL

SPACING (FT.)

2'-8"

^{tle:} Cold Water Lines

235 Anthony Grove Rd. Crouse, NC 28033

Callout: 3276

Scale: CUSTOM Date: 11/10/2023

ALL DIMENSIONS FROM REAR

AND MARRIAGE EDGE

UTIL SINK

 $(63^{\circ}-5^{\circ}\times140)$

7'-8 1/2"

3/4x7'-3 5/8" 3/4

1x6'-6 1/2"

66 FROM

MARRIAGE EDGE

3/4x14'-0 5/8"

WASHER

(63'-11" x 83)

 $(55'-7''\times7)$

3/4x5'-11 3/4"

3'-8 7/8"

 $(58'-3" \times 80)$

STOOL

 $(58'-7" \times 144)$

2 7/8"

1'-0 1/8"

TUB

(52'-2" x 112)

FULL OPEN VALVE

3/4

INLET

(55'-7" x 7)

1x1'-11 1/4"

HOSE BIBB

CAPE PREP

3/4

87 FROM

MARRIAGE EDGE

1x13'-4 1/8"

X OVER

 $(38'-0" \times 1/8)$

1x5"-4 1/4"

1x1/2"

(51°-5 1/2" × 87) (63°-0" × 180)

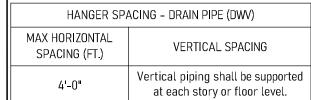
1x4'-0 1/8"

Cust:KESICK Dir: HBV S/N: 44183

NOTE:

- ALL LINES 1/4" SLOPE/FOOT MINIMUM UNLESS OTHERWISE NOTED.
- ← DENOTES 1/8" SLOPE/FOOT.
- 3. ALL 2" DIA. LINES SHOWN FILLED (BOLD)
- ALL LINES 1-1/2" DIA. MINIMUM OTHERWISE NOTED.
- LINES SERVING STOOL ARE 3" DIA.CONTINUOUS TO OUTLET.
- AIR ADMITTANCE VALVES SHOWN ARE IN ACCORDANCE w/ASSE 1051 & MANUFACTURER'S INSTRUCTIONS.
- CONTINUOUS WASTE APPL. ON SINKS AND LAVATORIES WHERE SPACING DOES NOT EXCEED 30".
- STACKS CLEANED THROUGH REMOVABLE FIXTURE P-TRAPS.
- 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.





DWV FITTING IDENTIFICATION LONG TURN 90° ELBOW 4X3CB 90° CLOSET ELBOW XLSL LONG TURN 90° STREET ELBOW DOUBLE 90° ELBOW 3-WAY-L 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 1/2° STREET ELBOW

SINK & DW (24'-11" x 29)

XLTL

(12°-2 1/2° x 44)

LTTY

(12'-2 1/2" x 44)

STOOL (12"-2 1/2" x 23)

(0°-10" x 150) LAV (T-0" x 105)

> 1.5 STY

1.5

XLTL

XLTL

STY Jet C.O.P. I

C.O.P. LTTY

(1'-0" x 44)

Q ➾ VTR 3€

> SHOWER (0'-10" x 150)

STY

©C.O.P.

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 ONLY.

3" MAIN VIR

(63'-11" x 89)

WASHER

(63'-11" x 89)

(5T-2" x 112) 3₩

LAV

(58'-1" x 77)

STY C.O.P.

C.O.P.

ĹTTY ,

ST00L (57'-4 3/4" x 151)

XLTL

STY

XLTL

TUB

[LTTY]

45L

45 WYE

XLTL

UTIL SINK

(63°-3" x 143)

XLTL 1.5 C.O.P.

45 WYE

CAPE PREP (51°-9" x 87)

XLTL

LTTY C.O.P.

LTTY

LTTY

45 WYE

Approval of this document does not authorize or approve any deviation or deviations from the requirements of applicable State Laws. David Richter

APPROVED BY

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

Title: DWV System

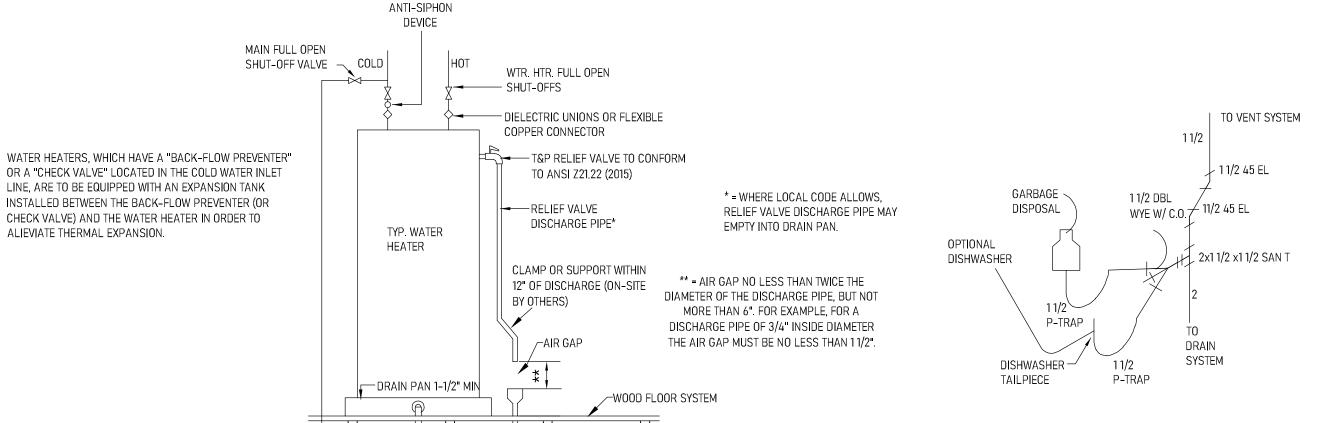
235 Anthony Grove Rd. Crouse, NC 28033 Address:

Callout: 3276 Scale: CUSTOM Cust KESICK Date: 11/10/2023 Dir: HBV S/N: 44183

1R2039-V70

1/22/2023

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'.



-RUN TO INDIRECT WASTE RECEPTOR

(NOT REQUIRED WHEN RELIEF VALVE

ON-SITE BY OTHERS PER

APPLICABLE CODE.

OR TO THE OUTDOORS

DISCHARGES TO PAN.

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

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 11/2" UNLESS NOTED.

ALIEVIATE THERMAL EXPANSION.

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.

DRAIN AND DISCHARGE PIPES SERVING WATER HEATERS TO BE CPVC OR OTHER CODE APPROVED MATERIAL

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

WATER INLET

IN CONCEALED SPACES WHERE PIPING IS INSTALLED THRU HOLES OR NOTCHES IN STUDS, JOISTS, TRUSSES, OR SIMILAR MEMBERS LESS THAN 11/2" 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.

-PAN DRAIN RUN TO OUTDOOR

OR TO INDIRECT WASTE

RECEPTOR

PROVIDE FUEL GAS SHUT-OFF VALVE (WHERE APPLICABLE) AND ELECTRICAL

SHUT-OFF MEANS FOR WATER HEATER.

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.

IN SEISMIC CATEGORIES DO, D1, D2 OR E STRAP UPPER THIRD AND LOWER THIRD OF WATER HEATER TO RESIST A HORIZONTAL FORCE OF 1/3 THE OPERATING WEIGHT OF THE WATER HEATER.



Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Address: 235 Anthony Grove Rd. Crouse, NC 28033	Callout: 3276	Revisions	Scale: N.T.S.	Date: 11/10/2023	Cust:KESICK	4
Title: DWV Notes			Drawn By:	Ref	erence:	S/N: 44183	- _{Da} .

NOTE:

- 1 TOTAL BTU's = 36,000
- 2. MAX. COLUMN LENGTH = 10'
- 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

FIREPLACE 36000 (51'-4" x 56)

WARRINGE TORK

FINISHED AND INSPECTED ON-SITE BY OTHERS PER APPLICABLE CODES



HANGER SPACING - STEEL PIPE (GAS)

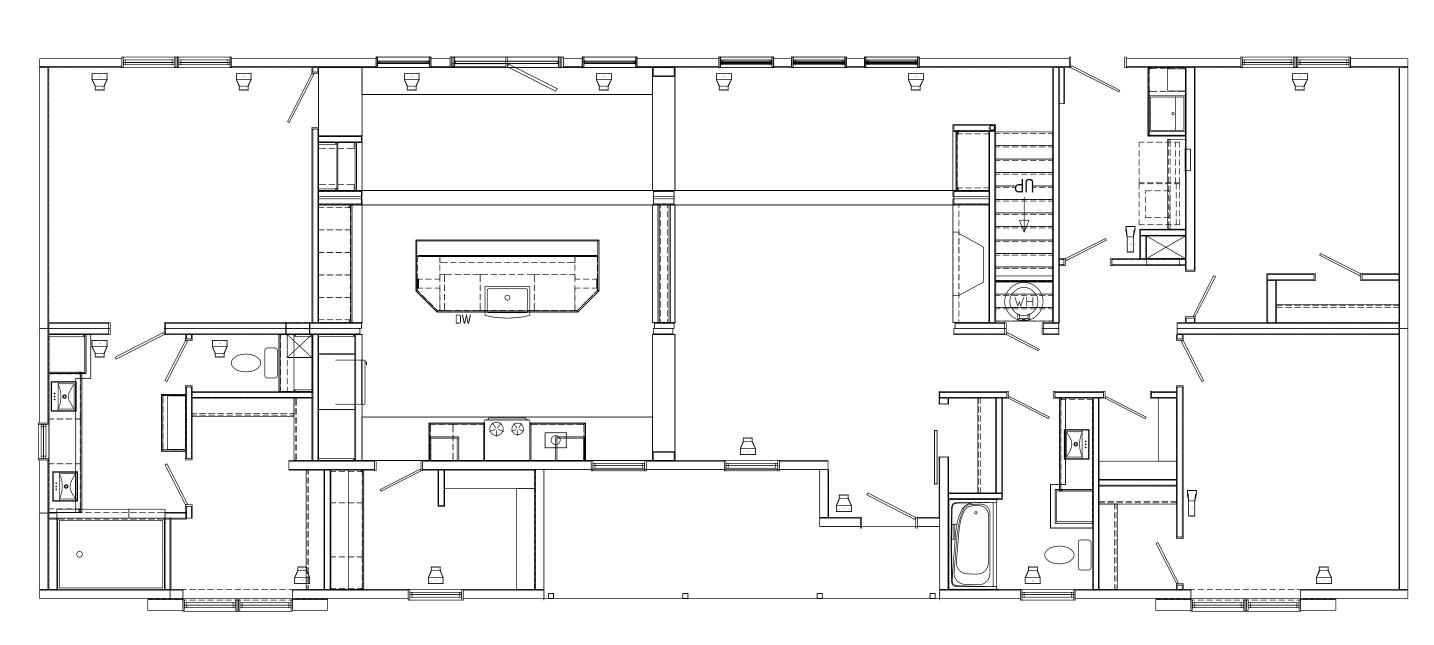
MAX HORIZONTAL MAX VERTICAL

 SPACING (FT.)
 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 Hous	ina Group. LLC	- Subsidiary of The Commodore Corp.	Address: 235 Anthony Grove Rd.	Callout: 3276	Revisions	Scale:	Date:	Cust:KESICK	
THE	,,,,g o, oup,o	Substitute y St. 1116 Soft introduct S SST pt.	Crouse, NC 28033	32/0	Drawn Dv	COSTOM	forence:	DIr: HBV	
Title: Gas Lines					Drawn By:	"	ference: JANE	S/N: 44183	Pa Pa

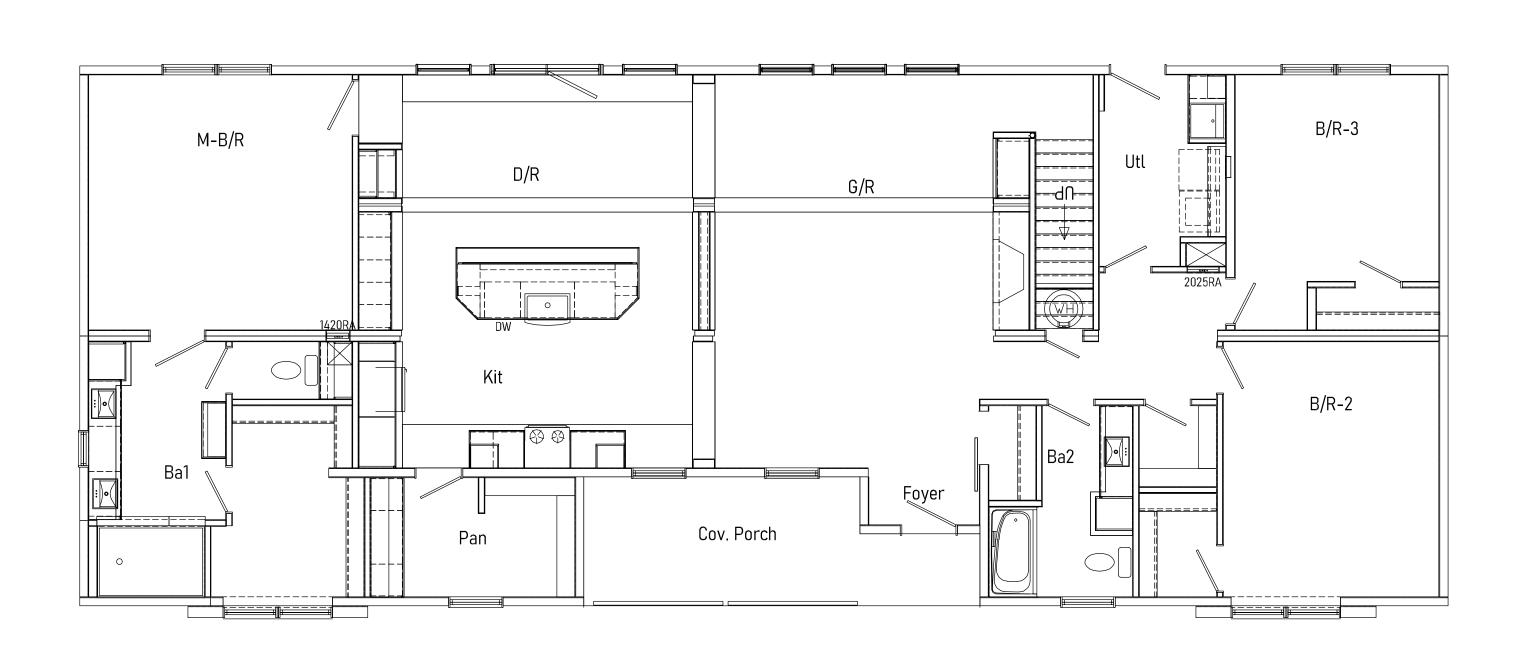


FURNACE AND HEAT DUCTS ARE
OMITTED AND WILL BE INSTALLED
ON-SITE BY OTHERS

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



Builder:R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Callout Re 3276	evisions	Scale: Date: 3/16" = 1'-0" 11/10/2023	Cust:KESICK	
Title: Supply Air Ducts - Perimeter Registers	Dr.	awn By:	Reference:	C/N: / / 100	
Supply 7 in 2 date 7 di iniciali 1 digitale		NE	NONE	S/N: 44183	Pg.:

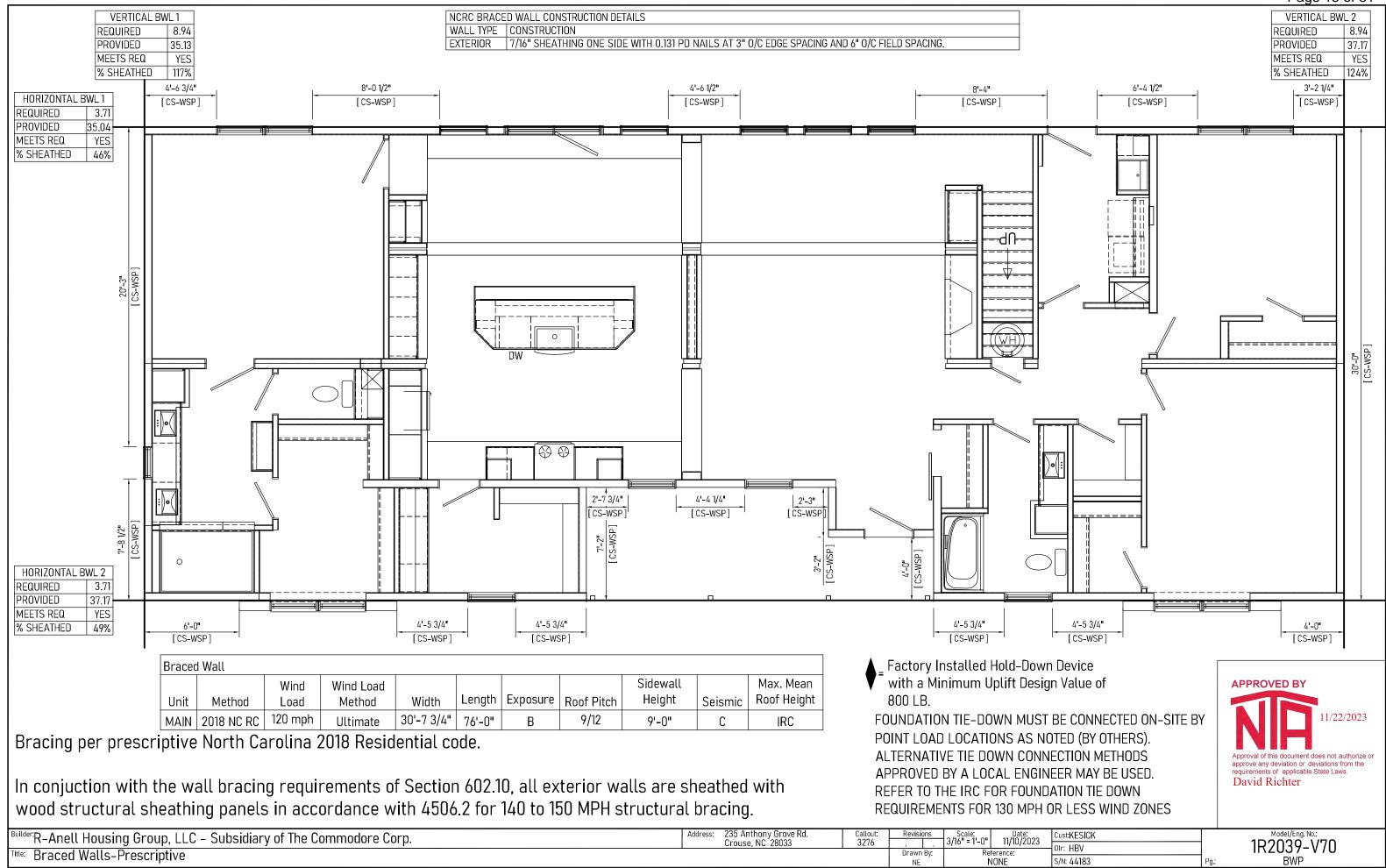




RETURNS IN CEILING IN ADDITION TO AIR THRU GRILLES/OPENINGS ONSITE BY OTHERS

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Address: 235 Anthony Grove Rd. Crouse, NC 28033	Callout: 3276	Revisions	Scale: Date: 11/10/2023	Cust:KESICK	
Title: Ceiling Return Air System			Drawn By: NF	Reference: NONE	S/N: 44183	Pa.:

Page 15 of 31



Г							
ı	Footing size	Footing	Footing max. load (lbs.) for 8" x16"				
ı	(in_)	1500 PSF	2000 PSF	2500 PSF			
ı	*16x16x6	2.5K	3.4K	4.3K			
ı	*20x20x6	4.0K	5.3K	6.7K			
ı	24x24x8	5.6K	7.6K	9.6K			
ı	30x30x10	8.5K	11.7K	14.8K			
ı	36x36x12	12.4K	16.7K	20.7K			
١	42x42x14	16.5K	22.4K	28.2K			
ı	48x48x14	21.2K	N/A	N/A			

* = A 4" thick pre-cast footer of equivalent width and

Footer size must be designed by others to site conditio

length may be used in place of a 6" thick cast in place footer.

COLUMNS & FOOTINGS **MUST BE RATED TO MEET THE CENTER** LINE LOADS LISTED

PSF

GROUND SNOW LOAD

Kip loads noted are based on allowable stress design (ASD). Capacity of supports (columns, footings, etc.) must exceed noted Kip loads. Any changes to this plan that effect the foundation in any way will be the sole responsibility of the builder/dealer.

SELF-WEIGHT ON FOOTERS NOT INCLUDED IN LOADS SHOWN.

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 APPLICABLE PRESCRIPTIVE CODES & GUIDELINES. WHEN REQUIRED, ONE VENT SHALL BE PROVIDED WITHIN 3 FEET OF EACH CORNER. FOUNDATION CONSTRUCTION AND TIE DOWN REQUIREMENTS FOR HOMES LOCATED IN 90 MPH OR LESS WIND ZONES MAY USE APPLICABLE PRESCRIPTIVE CODES & GUIDELINES UNLESS NOTED OTHERWISE.

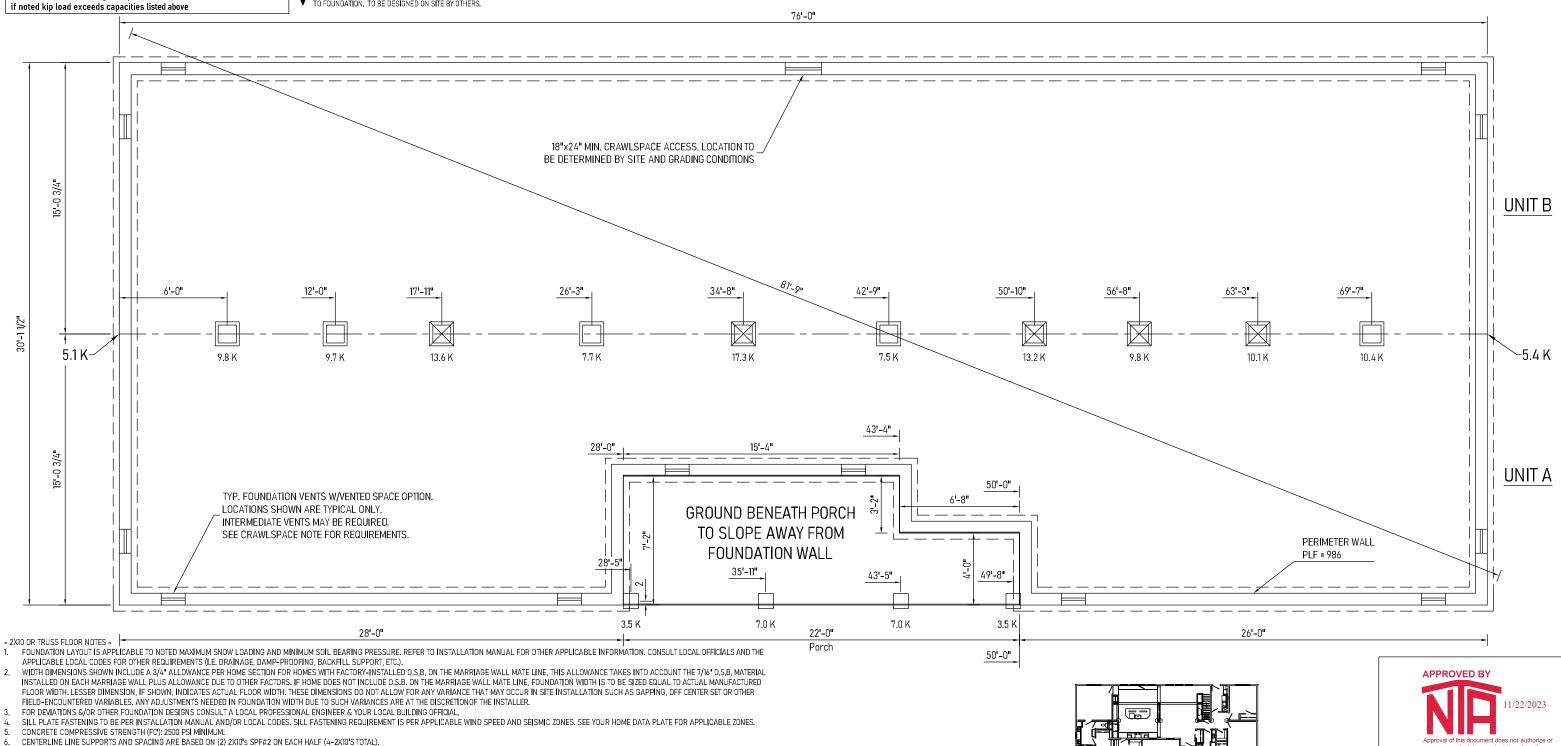
Builder:R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.

Title: Foundation 2x10 Marriage Line without Stair

♦ IF APPLICABLE, REPRESENTS TIE DOWN LOADS FROM BRACE WALLS TO FOUNDATION. TO BE DESIGNED ON SITE BY OTHERS.

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 3 (3.9 TIE DOWN TO FOUNDATION) OF THE "MODULAR HOME INSTALLATION MANUAL" FOR ADDITIONAL INFORMATION. REFER TO APPLICABLE CODES FOR CONNECTION OF HOME TO FOUNDATION WHEN "BRACED WALLS-PRESCRIPTIVE" PAGE IS APPLICABLE.

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



235 Anthony Grove Rd.

Crouse, NC 28033

Callout:

Cust KESICK

ır: HBV

S/N: 44183

11/10/2023

3/16" = 1'-0"

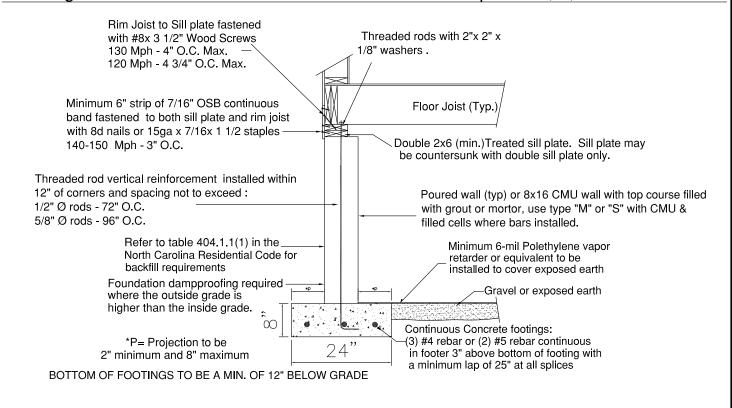
David Richter

N.C. Foundation Cross Section- 90 to 130 Mph 1-1/2, 2, OR 2-1/2 STORY 1/2" diameter anchor bolt embedded into wall top courses with a minimum of 7" deep anchor with washers, in 115-129 mph zones. **OPTIONAL** A minimum of 15" deep anchor with washers, (2"x 2" x 1/8" washers in 130 mph) Minimum 6" strip of 7/16" OSB continuous band Anchor bolts within 12" from corners and ends of sill plates. Anchor bolt spacing: fastened to both sill plate and rim joist with 8d nails 72" O.C. - 90-129 MPH or 15ga x 7/16x 1 1/2 staples 5" O.C. 48" O.C. - 130 Mph Rim Joist to Sill plate fastened Floor Joist (Typ.) 8d nails- 5" O.C. Max. 2x6 (min.) Treated sill plate. Sill plate bolt may be countersunk with double sill plate only. Refer to table 404.1.1(1) in the North Carolina Residential Code forbackfill requirements Poured wall (typ) or 8x16 CMU wall with top course filled with concrete or Mortor, use type "M" or "S" with CMU. Foundation dampproofing required where the outside grade is higher than the inside grade. Minimum 6-mil Polethylene vapor retarder or equivalent to be installed to cover exposed earth Gravel or exposed earth *P= Projection to be 2" minimum and 8" maximum Continuous rebar in footings when required per soil conditions and local code. BOTTOM OF FOOTINGS TO BE A MIN. OF 12" BELOW GRADE

Applicable to Seismic Zone C with minimum soil bearing capacity of 1500 PSF. Concrete 2500-PSI. min. Wind speed up to 130 Mph Exp. C. Refer to Chapter 4 in the North Carolina Residential Code for specific foundation application or CMU Construction.

Refer to the wind bracing pages for additional tie down and braced wall requirements.

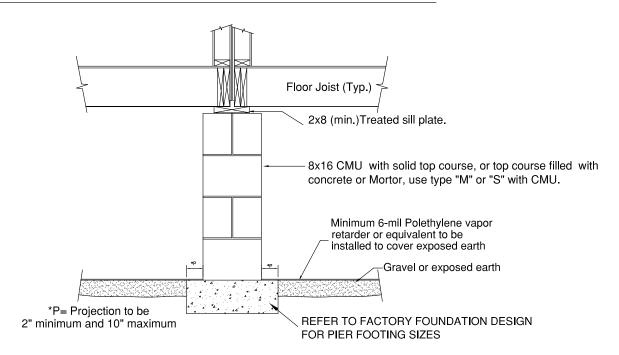
N.C. High Wind Foundation Cross Section- 140 to 150 Mph 1-1/2, 2, OR 2-1/2 STORY



Applicable to Seismic Zone C, D0, D1 with minimum soil bearing capacity of 2500 PSF. Concrete-2500 PSI.min. Wind speed up to 130 Mph maximum. Refer to wind bracing pages for additional tie down requirements at braced wall locations. Refer to Chapters 4 & 45 in the North Carolina Residential Code for specific foundation application or CMU Construction.

REFER TO FIGURE R4504.2(B) FOUNDATION WALL WITH UPLIFT ANCHOR BOLTS FROM FOOTING TO SILL PLATE

N.C. Pier Cross Section- All Zones- UP TO 3 STORIES

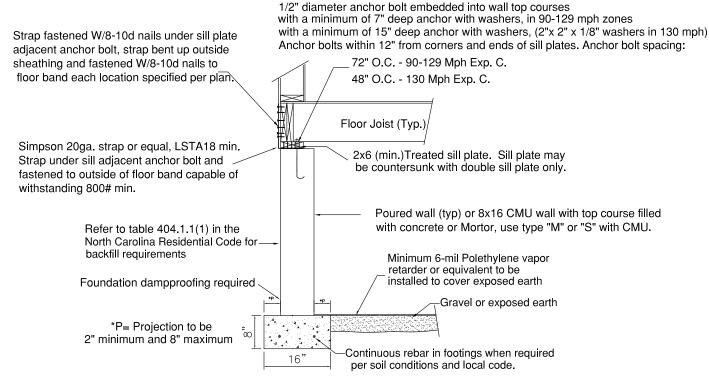


BOTTOM OF FOOTINGS TO BE A MIN, OF 12" BELOW GRADE

R404 1.5 4Piers.

The unsupported height of masonry piers shal Inot exceed 10 times their least dimension. When structural clay tile or hollow concrete masonry units are used for isolated piers to support beams and girders, the cellular spaces shall be filled solidly with concrete or Type M or S mortar, except that unfilled hollow piers may be used if their unsupported height is not more than four times their least dimension. When hollow masonry units are solidly filled with concrete or Type M or S mortar, the allowable compressive stress may be increased as provided in Table 606.9.

N.C. 800# HOLD DOWN STRAP DEVICE



Applicable to Seismic Zone C with minimum soil bearing capacity of 2500 PSF. Concrete 2500-PSI. min. Wind speed up to 110 Mph Exp. C. Refer to Chapter 4 in the North Carolina Residential Code for specific foundation application or CMU Construction.

Refer to the wind bracing pages for additional tie down and braced wall requirements.

 TYP FOUNDATION DETAILS

 DATE:
 REVISION:
 BY:
 NOTE:
 ALL HOMES

 1/18/18
 MIND SPEED
 MIND LOAD

 /30/19
 2018 CODE UPDATES
 MIND LOAD

 NNC WALL
 PIER DETAILS 2021.DWG

NC LOAD

HOMES BY
VANDERBUIL
300 JEFFERSON DAVIS HWY
ANFORD, NC 27332





Project 1R2039-V70

Energy Code: 2018 IECC

Location: Harnett County, North Carolina

Construction Type: Single-family
Project Type: New Construction
Orientation: Unspecified

Conditioned Floor Area: **2,143 ft2**Glazing Area **13%**

Climate Zone: **4 (3499 HDD)**

Permit Date: Permit Number:

Construction Site:

379 Suggs Rd
Erwin, North Carolina 28339

Comparison Owner/Agent:

KESICK
HBV

Approval of this document does not authorize or approve any deviation or deviations from the requirements of applicable State Laws.

David Richter

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

Compliance: Passes using UA trade-off

Compliance: **0.7% Better Than Code** Maximum UA: **408** Your UA: **405** Maximum SHGC: **0.40** Your SHGC: **0.23**

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.

Slab-on-grade tradeoffs are no longer considered in the UA or performance compliance path in REScheck. Each slab-on-grade assembly in the specified climate zone must meet the minimum energy code insulation R-value and depth requirements.

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Prop. U-Factor	Req. U-Factor	Prop. UA	Req. UA
Ceiling 1: Flat Ceiling or Scissor Truss	941	38.0	0.0	0.030	0.026	28	24
Ceiling 2 [Between knee walls]: Flat Ceiling or Scissor Truss	1,202	30.0	0.0	0.035	0.026	42	31
Wall [1walls]: Wood Frame, 16" o.c. Orientation: Right side	363	19.0	0.0	0.060	0.060	22	22
Wall [1walls]: Wood Frame, 16" o.c. Orientation: Left side	363	19.0	0.0	0.060	0.060	21	21
Window - Kinro SH 2427 {Qty 1}: Vinyl Frame:Double Pane with Low-E SHGC: 0.23 Orientation: Left side	5			0.340	0.320	2	2
Wall [1walls]: Wood Frame, 16" o.c. Orientation: Back	743	19.0	0.0	0.060	0.060	31	31
Door - Hinged - Exterior - Half Lite {Qty 1}: null Orientation: Back	22			0.250	0.320	6	7
Door - Swing Patio Door 7282 {Qty 1}: null Orientation: Back	43			0.370	0.320	16	14

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Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Prop. U-Factor	Req. U-Factor	Prop. UA	Req. UA
Window - (2) Kinro SH 3668 {Qty 2}: Vinyl Frame:Double Pane with Low-E SHGC: 0.23 Orientation: Back	69			0.340	0.320	23	22
Window - Kinro 7112 Transom {Qty 1}: Vinyl Frame:Double Pane with Low-E SHGC: 0.26 Orientation: Back	6			0.310	0.320	2	2
Window - Kinro 3656 Picture {Qty 2}: Vinyl Frame:Double Pane with Low-E SHGC: 0.26 Orientation: Back	29			0.310	0.320	9	9
Window - Kinro 3612 Transom {Qty 5}: Vinyl Frame:Double Pane with Low-E SHGC: 0.26 Orientation: Back	16			0.310	0.320	5	5
Window - Kinro SH 3658 {Qty 3}: Vinyl Frame:Double Pane with Low-E SHGC: 0.23 Orientation: Back	44			0.340	0.320	15	14
Wall [1walls]: Wood Frame, 16" o.c. Orientation: Front	743	19.0	0.0	0.060	0.060	35	35
Door - Hinged - Exterior - 0.75 Lite {Qty 1}: null Orientation: Front	22			0.320	0.320	7	7
Window - (2) Kinro 3668 {Qty 2}: Vinyl Frame:Double Pane with Low-E SHGC: 0.23 Orientation: Front	69			0.340	0.320	23	22
Window - Kinro SH 3668 {Qty 4}: Vinyl Frame:Double Pane with Low-E SHGC: 0.23 Orientation: Front	69			0.340	0.320	23	22
Wall [Cape Close Off Kit]: Wood Frame, 24" o.c. Orientation: Unspecified	200	11.0	0.0	0.087	0.060	16	11
Attic Door: Solid Orientation: Unspecified	18			0.460	0.320	8	6
Floor 1: All-Wood Joist/Truss:Over Outside Air	2,143	30.0	0.0	0.033	0.047	71	101

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 2018 IECC requirements in REScheck Version: REScheck Inspection Checklist.

N. Edwards - drafter	N. Edwards	11/10/2023
Name - Title	Signature	Date



Project Title: 1R2039-V70 Report date: 11/10/23 Data filename:

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REScheck Software Version: REScheck-Web

Inspection Checklist

Energy Code: 2018 IECC

Requirements: 0.0% were addressed directly in the REScheck software

Text in the "Comments/Assumptions" column is provided by the user in the REScheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Pre-Inspection/Plan Review	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
103.1, 103.2 [PR1] ¹	Construction drawings and documentation demonstrate energy code compliance for the building envelope. Thermal envelope represented on construction documents.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
103.1, 103.2, 403.7 [PR3] ¹	Construction drawings and documentation demonstrate energy code compliance for lighting and mechanical systems. Systems serving multiple dwelling units must demonstrate compliance with the IECC Commercial Provisions.			□Complies □Does Not □Not Observable □Not Applicable	
302.1, 403.7 [PR2] ²	Heating and cooling equipment is sized per ACCA Manual S based on loads calculated per ACCA Manual J or other methods approved by the code official.	Heating: Btu/hr Cooling: Btu/hr	Heating: Btu/hr Cooling: Btu/hr	□Complies □Does Not □Not Observable □Not Applicable	

Additional Comments/Assumptions:



1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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Section # & Req.ID	Foundation Inspection	Complies?	Comments/Assumptions
303.2.1 [FO11] ²	protect exposed exterior insulation	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.9 [FO12] ²	Snow- and ice-melting system controls installed.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:



1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: 1R2039-V70

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Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.3.4	Door U-factor.	U	U	□Complies □Does Not	See the Envelope Assemblies table for values.
[FR1] ¹				□Not Observable □Not Applicable	
402.1.1, 402.3.1,	Glazing U-factor (area-weighted average).	U	U	□Complies □Does Not	See the Envelope Assemblies table for values.
402.3.3, 402.5 [FR2] ¹				□Not Observable □Not Applicable	
303.1.3 [FR4] ¹	U-factors of fenestration products are determined in accordance			☐Complies ☐Does Not	
•	with the NFRC test procedure or taken from the default table.			□Not Observable □Not Applicable	
402.4.1.1 [FR23] ¹	Air barrier and thermal barrier installed per manufacturer's			☐Complies ☐Does Not	
	instructions.	APPROVED B	Υ	□Not Observable □Not Applicable	1 1 1 1 1 1
402.4.3 [FR20] ¹	Fenestration that is not site built is listed and labeled as meeting		11/22/2023	□Complies □Does Not	
0	AAMA /WDMA/CSA 101/I.S.2/A440 or has infiltration rates per NFRC 400 that do not exceed code limits.		pent does not authorize or	□Not Observable □Not Applicable	
402.4.5 [FR16] ²	IC-rated recessed lighting fixtures sealed at housing/interior finish	David Richter	cable State Laws.	□Complies □Does Not	
	and labeled to indicate ≤2.0 cfm leakage at 75 Pa.			□Not Observable □Not Applicable	1 1 1 1 1
403.3.1 [FR12] ¹	Supply and return ducts in attics insulated >= R-8 where duct is			□Complies □Does Not	
•	>= 3 inches in diameter and >= R-6 where < 3 inches. Supply and return ducts in other portions of the building insulated >= R-6 for diameter >= 3 inches and R-4.2 for < 3 inches in diameter.			□Not Observable □Not Applicable	
403.3.2 [FR13] ¹	Ducts, air handlers and filter boxes are sealed with			□Complies □Does Not	
•	Joints/seams compliant with International Mechanical Code or International Residential Code, as applicable.			□Not Observable □Not Applicable	
403.3.5 [FR15] ³	Building cavities are not used as ducts or plenums.			□Complies □Does Not	
•				□Not Observable □Not Applicable	
403.4 [FR17] ²	HVAC piping conveying fluids above 105 °F or chilled fluids	R	R	□Complies □Does Not	
•	below $55 ^{\circ}F$ are insulated to $\geq R$ -3.			□Not Observable □Not Applicable	
403.4.1 [FR24] ¹	Protection of insulation on HVAC piping.			□Complies □Does Not	
②				□Not Observable □Not Applicable	
403.5.3 [FR18] ²	Hot water pipes are insulated to ≥R-3.	R	R	☐Complies ☐Does Not	
()	-			□Not Observable □Not Applicable	
	1 High Impact (Tier	1) 2 Modium	Impact (Tier 2)	3 Low Impact (Ti	or 2)

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Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
403.6 [FR19] ²	Automatic or gravity dampers are installed on all outdoor air			□Complies □Does Not	
	intakes and exhausts.			□Not Observable □Not Applicable	

Additional Comments/Assumptions:



1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
303.1 [IN13] ²	All installed insulation is labeled or the installed R-values			□Complies □Does Not	
•	provided.			□Not Observable □Not Applicable	
402.1.1, 402.2.6 [IN1] ¹	Floor insulation R-value.	R Wood Steel	R	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
303.2, 402.2.8 [IN2] ¹	Floor insulation installed per manufacturer's instructions and in substantial contact with the underside of the subfloor, or floor framing cavity insulation is in contact with the top side of sheathing, or continuous insulation is installed on the underside of floor framing and extends from the bottom to the top of all perimeter floor framing members.			□Complies □Does Not □Not Observable □Not Applicable	
402.1.1, 402.2.5, 402.2.6 [IN3] ¹	Wall insulation R-value. If this is a mass wall with at least ½ of the wall insulation on the wall exterior, the exterior insulation requirement applies (FR10).	R	R	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
303.2 [IN4] ¹	Wall insulation is installed per manufacturer's instructions.			☐Complies ☐Does Not ☐Not Observable	
				□Not Applicable	1 1 1

Additional Comments/Assumptions:



1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.2.1, 402.2.2, 402.2.6 [FI1] ¹	Ceiling insulation R-value.	R Wood Steel	R Wood Steel	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
303.1.1.1, 303.2 [FI2] ¹	Ceiling insulation installed per manufacturer's instructions. Blown insulation marked every 300 ft ² .			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
402.2.3 [FI22] ²	Vented attics with air permeable insulation include baffle adjacent to soffit and eave vents that extends over insulation.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
402.2.4 [FI3] ¹	Attic access hatch and door insulation ≥R-value of the adjacent assembly.	R	R	□Complies □Does Not □Not Observable □Not Applicable	
402.4.1.2 [FI17] ¹	Blower door test @ 50 Pa. <=5 ach in Climate Zones 1-2, and <=3 ach in Climate Zones 3-8.	ACH 50 =	ACH 50 =	□Complies □Does Not □Not Observable □Not Applicable	
403.3.3 [FI27] ¹	Ducts are pressure tested to determine air leakage with either: Rough-in test: Total leakage measured with a pressure differential of 0.1 inch w.g. across the system including the manufacturer's air handler enclosure if installed at time of test. Postconstruction test: Total leakage measured with a pressure differential of 0.1 inch w.g. across the entire system including the manufacturer's air handler enclosure.	cfm/100 ft ²	cfm/100	□Complies □Does Not □Not Observable □Not Applicable	
403.3.4 [FI4] ¹	Duct tightness test result of <=4 cfm/100 ft2 across the system or <=3 cfm/100 ft2 without air handler @ 25 Pa. For rough-in tests, verification may need to occur during Framing Inspection.	cfm/100 ft ²	cfm/100 ft ²	□Complies □Does Not □Not Observable □Not Applicable	
403.3.2.1 [FI24] ¹	Air handler leakage designated by manufacturer at <=2% of design air flow.	APPROVED BY		☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.1.1 [FI9] ²	Programmable thermostats installed for control of primary heating and cooling systems and initially set by manufacturer to code specifications.	Approval of this documer approve any deviation or	deviations from the	□Complies □Does Not □Not Observable □Not Applicable	
403.1.2 [FI10] ²	Heat pump thermostat installed on heat pumps.	David Richter	olate Laws.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.5.1 [FI11] ²	Circulating service hot water systems have automatic or accessible manual controls.			□Complies □Does Not □Not Observable □Not Applicable	
	1 High Impact (Tier	1) 2 Medium	Impact (Tier 2)	3 Low Impact (Ti	er 3)

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# & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
403.6.1 [FI25] ²	All mechanical ventilation system fans not part of tested and listed HVAC equipment meet efficacy and air flow limits per Table R403.6.1.			□Complies □Does Not □Not Observable □Not Applicable	
403.2 [FI26] ²	Hot water boilers supplying heat through one- or two-pipe heating systems have outdoor setback control to lower boiler water temperature based on outdoor temperature.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.5.1.1 [FI28] ²	Heated water circulation systems have a circulation pump. The system return pipe is a dedicated return pipe or a cold water supply pipe. Gravity and thermossyphon circulation systems are not present. Controls for circulating hot water system pumps start the pump with signal for hot water demand within the occupancy. Controls automatically turn off the pump when water is in circulation loop is at set-point temperature and no demand for hot water exists.	approve any devia	11/22/2023 incurrent does not authorize or tion or deviations from the pplicable State Laws.	□Complies □Does Not □Not Observable □Not Applicable	
403.5.1.2 [FI29] ²	Electric heat trace systems comply with IEEE 515.1 or UL 515. Controls automatically adjust the energy input to the heat tracing to maintain the desired water temperature in the piping.			□Complies □Does Not □Not Observable □Not Applicable	
403.5.2 [FI30] ²	Demand recirculation water systems have controls that manage operation of the pump and limit the temperature of the water entering the cold water piping to $<=104^{\circ}F$.			□Complies □Does Not □Not Observable □Not Applicable	
403.5.4 [FI31] ²	Drain water heat recovery units tested in accordance with CSA B55.1. Potable water-side pressure loss of drain water heat recovery units < 3 psi for individual units connected to one or two showers. Potable water-side pressure loss of drain water heat recovery units < 2 psi for individual units connected to three or more showers.			□Complies □Does Not □Not Observable □Not Applicable	
404.1 [FI6] ¹	90% or more of permanent fixtures have high efficacy lamps.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
404.1.1 [FI23] ³	Fuel gas lighting systems have no continuous pilot light.			□Complies □Does Not □Not Observable □Not Applicable	
401.3 [FI7] ²	Compliance certificate posted.			□Complies □Does Not □Not Observable □Not Applicable	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
303.3 [FI18] ³	Manufacturer manuals for mechanical and water heating systems have been provided.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:



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Insulation Rating	R-Value	
Above-Grade Wall	19.00	
Below-Grade Wall	0.00	
Floor	30.00	
Ceiling / Roof	30.00	
Ductwork (unconditioned spaces):		
Glass & Door Rating	U-Factor	SHGC
Window	0.34	0.23
Door	0.37	
Heating & Cooling Equipment	Efficiency	
Heating System:		
Cooling System:		
Water Heater:		
Name:	Date <u>:</u>	

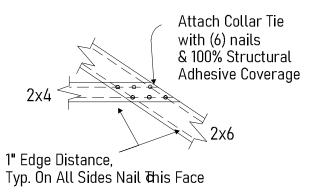
Comments



Job 32802 Truss A098601 Truss Ply UFP ENGINEERING 1 Bulletin 05-02 REF # 2001092

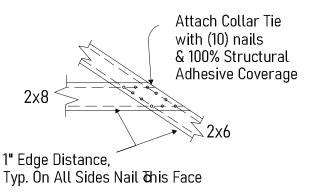
Universal Forest Products Inc., Grand Rapids, MI 49525,

2x4 Collar Tie Nailed to 2x6 Chord



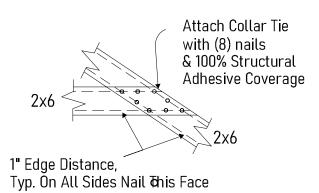
Detail (A)

2x8 Collar Tie Nailed to 2x6 Chord



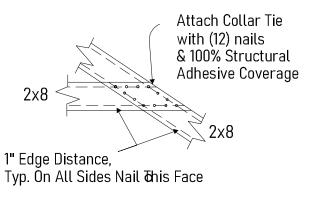
Detail (D)

2x6 Collar Tie Nailed to 2x6 Chord



Detail (B)

2x8 Collar Tie Nailed to 2x8 Chord



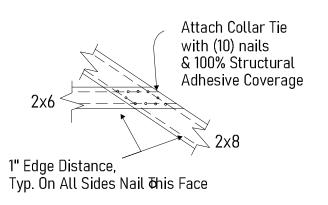
Detail (E)

Power Driven Nails Rigid Collar Tie Connection Details

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

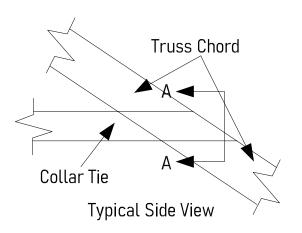
B) Bostitch .131" Dia. x 3" nails (or equal)

2x6 Collar Tie Nailed to 2x8 Chord



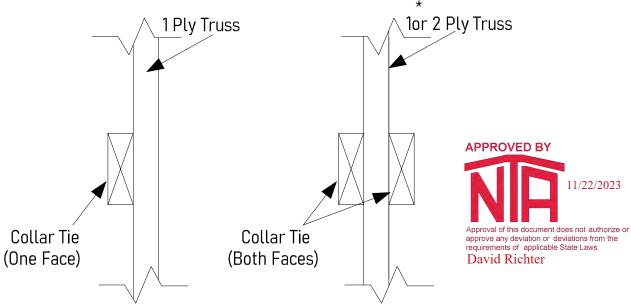
Detail (C)

This Bulletin to be used only in conjunction with UFPI truss designs which specifically refer to this Bulletin by number for collar tie field fastening.



Acceptable Alternate Applications

See truss print for which detail is actually used



Section A-A Section A-A
* FOR 1 PLY. OFFSET NAILS WITH RESPECT TO EACH FACE.

▲ WARNING - Verify design parameters and READ NOTES

Universal Forest Products, Inc.

2801 EAST BELTLINE RD, NE

This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult QST-88 Quality Standard, DSB-89 Bracing Specification, and HIB-91 Handling Installing and Bracing Recommendation available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719



HINGED ATTIC

Commodore 315 NC (R 30'0" wide 9/12 cape (IBC2018/2015)

Ref. #10005651

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

CCB34434

8.220 e Aug 13 2018 MiTek Industries, Inc. Tue Nov 5 07:43:30 2019 Page 1 of 2

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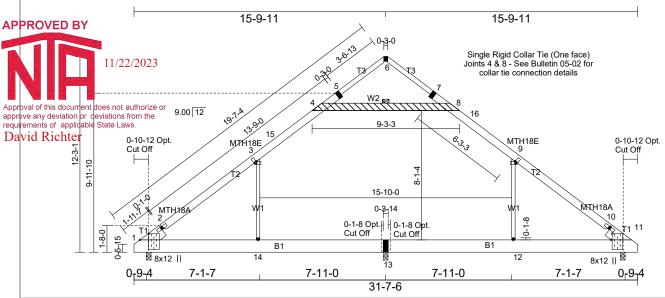


Plate Offsets (X,Y)-- [1:0-4-11,0-6-10], [2:0-0-5,0-0-8], [3:0-0-11,0-1-2], [9:0-0-11,0-1-2], [10:0-0-5,0-0-8], [11:0-4-11,0-0-13]

SPACING-: 2-0-0 LOADING (psf) TCLL TCLL 23.1 (Ground Snow=30.0) TCDL TCDL 7.0 BCLL 0.0 BCDL 10.0	SPACING-: 1-4-0 LOADING (psf) TCLL 34.7 (Ground Snow=45.0) TCDL 10.5 BCLL 0.0 BCDL 15.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IBC2018/TF		CSI. TC BC WB Matri	0.67 0.73 0.86 x-R	DEFL. Vert(LL) Vert(CT) Horz(CT) Attic	in (loc) 0.53 13-14 0.48 14 0.01 11 -0.31 13-14	l/defl L/d >337 240 >372 180 n/a n/a 620 360	PLATES MT20 MT18HS Weight: 22 FT = 0%	GRIP 137/130 137/130
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------	--	---------------------------------	-----------------------------	----------------------------------------------------	-------------------------------------------------------------	----------------------------------------------------------	---------------------------------------------------	-----------------------------

BRACING-

TOP CHORD

BOT CHORD

WEBS

purlins.

1 Row at midpt

LUMBER-

TOP CHORD 1-1/2X9-1/4 LP-LSL TC 1.75E *Except*

T2: 2x6 SP No.2 or 2x6 SPF No.2

T3: 2x4 SP No.2 or 2x4 SPF No.2

BOT CHORD 2x10 SP No.1 or 2x10 SPF No.2

2x3 SPF Stud *Except* **WEBS**

W2: 2x6 SP No.2 or 2x6 SPF No.2

REACTIONS. (lb/size) 13=397/0-3-8 (min. 0-1-8), 1=1076/0-3-8 (min. 0-1-12), 11=1076/0-3-8 (min. 0-1-12)

Max Horz 1=772(LC 8)

Max Uplift 13=-223(LC 9), 1=-725(LC 9), 11=-728(LC 10) Max Grav 13=1024(LC 13), 1=1131(LC 3), 11=1132(LC 4)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-1157/733, 2-3=-988/729, 3-15=-949/819, 4-15=-807/822, 4-5=-313/175, 5-6=-162/189,

6-7=-160/187, 7-8=-317/175, 8-16=-811/819, 9-16=-950/817, 9-10=-988/724, 10-11=-1157/727

BOT CHORD 1-14=-388/778, 13-14=-384/779, 12-13=-384/779, 11-12=-385/778

9-12=-250/545, 3-14=-254/547, 4-8=-686/818 WFBS

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Tension (lb)/ Shear (lb)/ Moment (lb-in 4=686/818/141/6651, 5=252/181/157/0, 6=137/191/157/0, 7=254/178/158/0, 8=686/818/141/6690,

12=250/545/0/0, 13=384/779/512/0, 14=254/547/0/0

1) Wind: ASCE 7-16; Vult=165mph (3-second gust) Vasd=130mph @24in o.c.; TCDL=2.8psf; BCDL=4.0psf; (Alt. 180mph @16in o.c.; TCDL=4.2psf; BCDL=6.0psf); h=30ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-0 to 3-11-1, Interior(1) 3-11-1 to 12-9-1, Exterior(2R) 12-9-1 to 18-9-4, Interior(1) 18-9-4 to 27-8-5, Exterior(2E) 27-8-5 to 30-8-6 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 engineer has designed the truss 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





2801 EAST BELTLINE RD, NE GRAND RAPIDS, MI 49525

Structural wood sheathing directly applied or 5-0-8 oc

4-8

Rigid ceiling directly applied or 5-7-7 oc bracing.





11/5/2019

Commodore 315 NC (F Job Truss Truss Type Qty 30'0" wide 9/12 cape (IBC2018/2015 99177 CCB34434 HINGED ATTIC Ref. #10005651

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

8.220 e Aug 13 2018 MiTek Industries, Inc. Tue Nov 5 07:43:30 2019 Page 2 of 2

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- 2) TCLL: ASCE 7-16; Pg=30.0 psf; Ps=23.1 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Roof design snow load has been reduced to account for slope.
- 4) Unbalanced snow loads have been considered for this design.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) See HINGE PLATE DETAILS for plate placement.
- 7) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
- 8) All additional member connections shall be provided by others for forces as indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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 223 lb uplift at joint 13, 725 lb uplift at joint 1 and 728 lb uplift at joint 11.
- 14) Fixity of member 4 8 has been changed.
- 15) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- 16) Attic room checked for L/360 deflection.
- 17) This truss is designed in accordance with the 2015 IBC Sec 2306.1 and referenced standard ANSI/TPI 1
- 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) The field-installed members are an integral part of the truss design. Retain a design professional to specify final field connections and temporary supports. All field-installed members must be properly fastened prior to applying any loading to the truss. This design anticipates the final set position.
- 20) Based on: CCB34432
- 21) Revision: IBC2018/2015 version



The professional engineering seal indicates that a licensed professional engineer has designed the truss 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 appointed

WARNING - Verify design parameters and READ NOTES Universal Forest Products, inc. PHONE (616)-364-6161 FAX (616)-365-0060 Truss shall not be cut or modified without approval of the truss design engineer.

2801 EAST BELTLINE RD, NE GRAND RAPIDS, MI 49525

This component has only been designed for the loads noted on this drawing. Construction and lifting forces have not been considered. The builder is responsible for lifting methods and system design. Builder responsibilities are defined under TPI1. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult BCSI 1-06 from the Wood Truss Council of America and Truss Plate Institute Recommendation available from WTCA, 6300 Enterprise LN, Madison, WI 53719 J:\support\MitekSupp\templates\ufp.tpe





Universal Forest Products°

Job	Truss	MFG	Customer
99177	CCB34434	315	COMMODORE

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 a design 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.







NORTH CAROLINA							
	MODULAR PLAN	S REVIEW CHECKLIST					
	<u></u>	PAGE 1 of 3 revised June 2018					
Manu	facturer						
Mode	number/name						
3rd Pa							
	w Date						
Revie	wer						
		Plan Sheet Page # and NOTES					
	QC MANUAL (current and complete)						
	APPENDIX B (required and attached)						
	PLAN SHEETS						
	Each plan sheet third-party stamped with						
	approver's name						
	Each plan sheets is numbered and/or indexed						
	GENERAL (cover sheet)						
	Code References						
	Statement regarding connection to public utilities						
	Statement regarding bathrooms if not included						
	Construction type Occupancy classification						
	Fire resistance ratings (if required)						
	Floor live load						
	Roof live load						
	Design wind velocity						
	Seismic information (commercial projects)						
	Thermal zones						
	Notice to inspections department regarding items						
	to be site inspected						
	FLOOR PLANS						
	Interior and exterior wall layouts						
	Door and window schedule						
	Light and Ventilation requirements						
	Attic access (size and location)						
	Non-prescriptive headers Safety glazing requirements						
	Fire rating of Exterior walls (if applicable)						
	The fating of Exterior waits (if applicable)						
	EXTERIOR ELEVATIONS						
	Exterior materials						
	Attic ventilation requirements						
=======================================	·						
	PLUMBING						
	Plan						
	All fixtures furnished by mfg. shown on plans						
	Materials (water supply & distribution, DWV, storm						
	drainage)						
	Supply and waste risers, including DWV system						
	(generic) beneath the building.						
	Water heater (type and capacity)						
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	H CAROLINA	CKLIST
MODULAR PLAN		
	PAGE 2 of 3	revised June 2018
	Plan S	Sheet Page # and NOTES
MECHANICAL		
Design calculations		
Installed unit capacity		
Supply and returns (locations and sizes)		
Duct sizes		
Specifications (units, ducts)		
All appliances furnished by mfg. shown on plans		
ELECTRICAL		
Plan		
Location of all electrical boxes		
Electrical panel location		
Note regarding main disconnect (if applicable)		
Exterior lighting and receptacles		
Ground level receptacles (if applicable)		
Smoke detector location(s)		
Electrical load calculations		
Electrical load calculations Electrical panel layout (breaker and wire sizes,		
circuit schedule)		
Panel and service entrance sizes		
All fixtures furnished by mfg. shown on plans		
ACCESSIBILITY		
(for other than 1 & 2 family dwellings)		
Entrances and means of egress		
Doors, doorways, and door hardware		
Stairs and handrails		
Toilet rooms, plumbing fixtures, grab bars, etc		
Bathrooms and shower rooms		
Occupancy specific requirements		
Multi-family dwellings: Type A and B units		
FLOOR X-SECTION		
Joists and beam sizes and spacing		
Materials species and grade		
Sheathing, decking, and concrete as applicable		
Fastening instructions		
Insulation		
Details as required for clarification		
WALL X-SECTION		
Stud and column sizes and spacing		
Materials species and grade		
Sheathing and bracing		
Headers and lintels		
Finishes		
Fastening instructions		
Insulation		
Details as required for clarification		
Dotails as required for clarification		

<u>NORTH</u>	<u> I CAROLINA</u>	
MODULAR PLAN	S REVIEW CHECKLIS	ST
	PAGE 3 of 3	revised June 2018
	Dian Chart D-	es # and NOTES
CEILING / ROOF X-SECTION	Plan Sneet Pa	ge # and NOTES
Truss, rafter, and beam spacing		
Lumber species and grade		
Sheathing and decking		
Finishes		
Fastening instructions		
Insulation		
Details including NC sealed truss designs or manual reference		
FOUNDATION PLAN		
Footings, pier, and curtain wall locations and		
specifications		
X-sections with dimensions		
Anchorage - sill plate to piers and curtain wall		
Anchorage - building to sill plate		
Anchorage - tie downs (lateral and longitudinal)		
Soil bearing capacity		
Minimum concrete compressive strength		
Mortar type		
Ventilation requirements (with and without vapor barrier)		
Crawl space access requirements		
ENERGY COMPLIANCE		
Demonstrated compliance		
SET-UP INSTRUCTIONS		
Floor and ceiling connections		
Marriage wall connections		
Roof set-up and connection		
Plumbing connections		
Mechanical connections		
Electrical connections		
Fire stopping		
Air infiltration elimination		
Notice to inspections department attachment if set-	•	
up instructions are by attachment		
ITEMS NOT INSPECTED IN PLANT		
List of items not inspected by 3rd. Party		
Notice to inspections department		





305 N. OAKLAND AVE. • P.O. BOX 490 • NAPPANEE, IN 46550 • P: 574.773.7975 • F: 574.773.2732 • ICC-NTA.ORG

November 22, 2023

Mr. Shane Phelps State of North Carolina Department of Insurance Manufactured Building Division 1202 Mail Service Center Raleigh, NC 27699-1202

RE: R-Anell Housing Group

Model 1R2039-V70-NC

Dear Mr. Phelps,

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,

David Richter

David Richter Account Manager



A MEMBER OF THE ICC FAMILY OF SOLUTIONS