INTERNATIONAL CODE COUNCIL®

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March 5, 2020

Mr. Mike Hamm, P.E.
NC Dept. of Insurance
Manufactured Building Division
322 Chapanoke Rd. / Suite 200
Raleigh, NC 27603

Re: R-Anell Housing Group

Model Submital
2R2007-R2 for NC

Dear Mr. Hamm:

Attached please find one (1) copy of each of the above-mentioned projects for your review. This project have been reviewed by NTA and found to be in compliance with the North Carolina State requirements.

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

Sincerely,

David J. Barts

David J. Barts
Account Manager
ICC-NTA LLC

Adopted Codes: State of North Carolina

2018 North Carolina Residential Code
2017 North Carolina Electrical Code
2018 North Carolina Energy Code
2018 North Carolina Mechanical Code
2018 North Carolina Plumbing Code
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Project Location:

3300 Jefferson Davis Hwy.
Sanford, NC 27330
Lee County

Occupancy:

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

Design Load:

Floor Area: .....2443 Sq.Ft.
Ground Snow Load: .....20 psf
Top Chord Dead Load: .....7 psf
Ultimate Wind Speed: ..... 115 mph
Seismic Design Category: ...C
Floor Live Load: .....40 psf
Floor Dead Load: .....10 psf
Bottom Chord Live Load:.....40 psf
Wind Exposure Category: .....B
IECC Geographical Code: 4

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).
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.

Model: 2R2007-R2
Customer: STOCK
Builder: HBV

Manufacturer:

R-Anell Housing Group, LLC

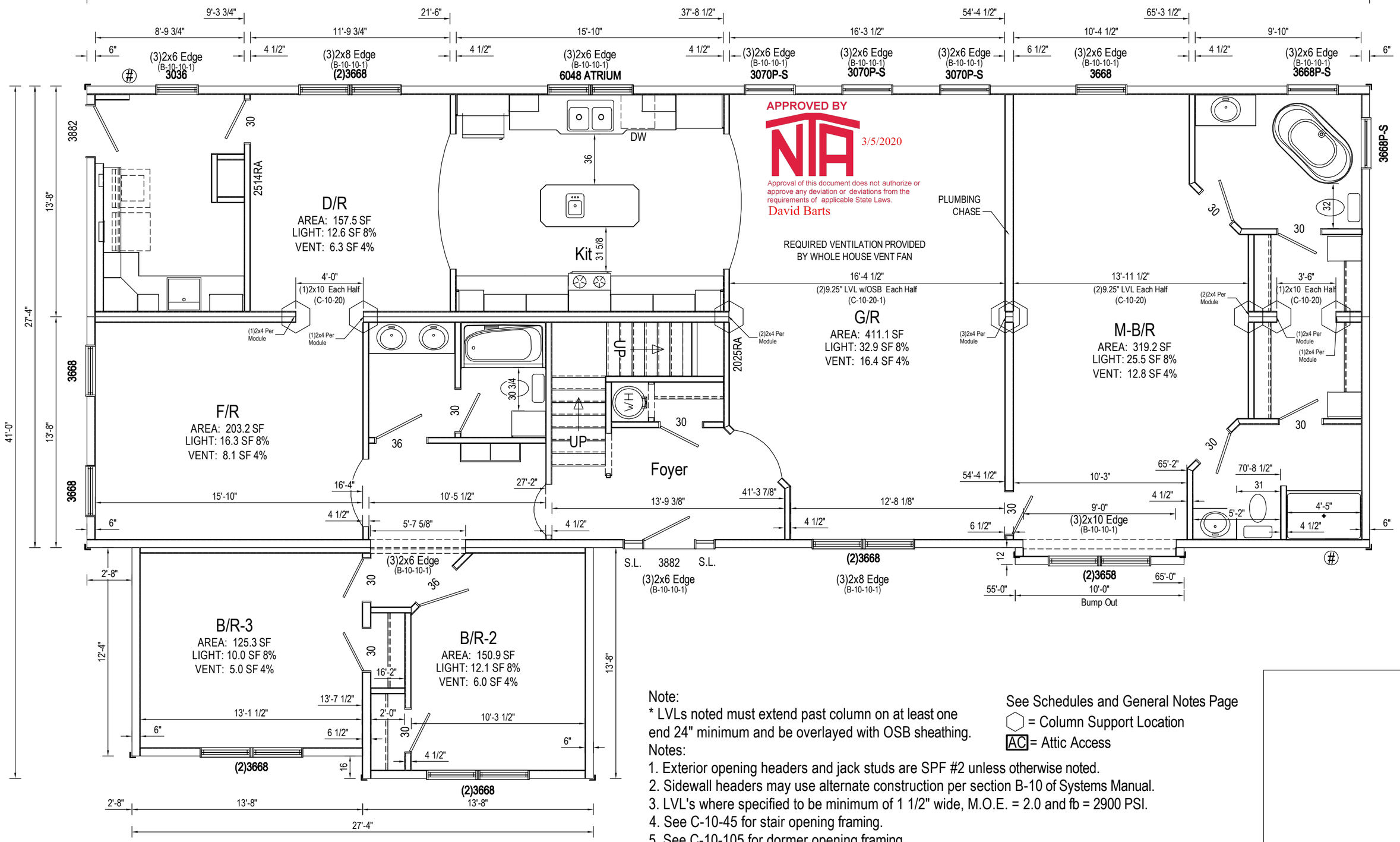
Subsidiary of The Commodore Corporation
235 Anthony Grove Rd.
Crouse, NC 28033

Drawing Index

APPROVED BY
NTA 3/5/2020
Approval of this document does not authorize or approve any deviation or deviations from the requirements of applicable State Laws.
David Barts

NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.
APPROVED
Limited building only review
Permit holder responsible for full compliance with the code
01/05/2022
Harnett COUNTY NORTH CAROLINA

Note: Window fall protection must be provided on-site where required in accordance with applicable section of the IRC.



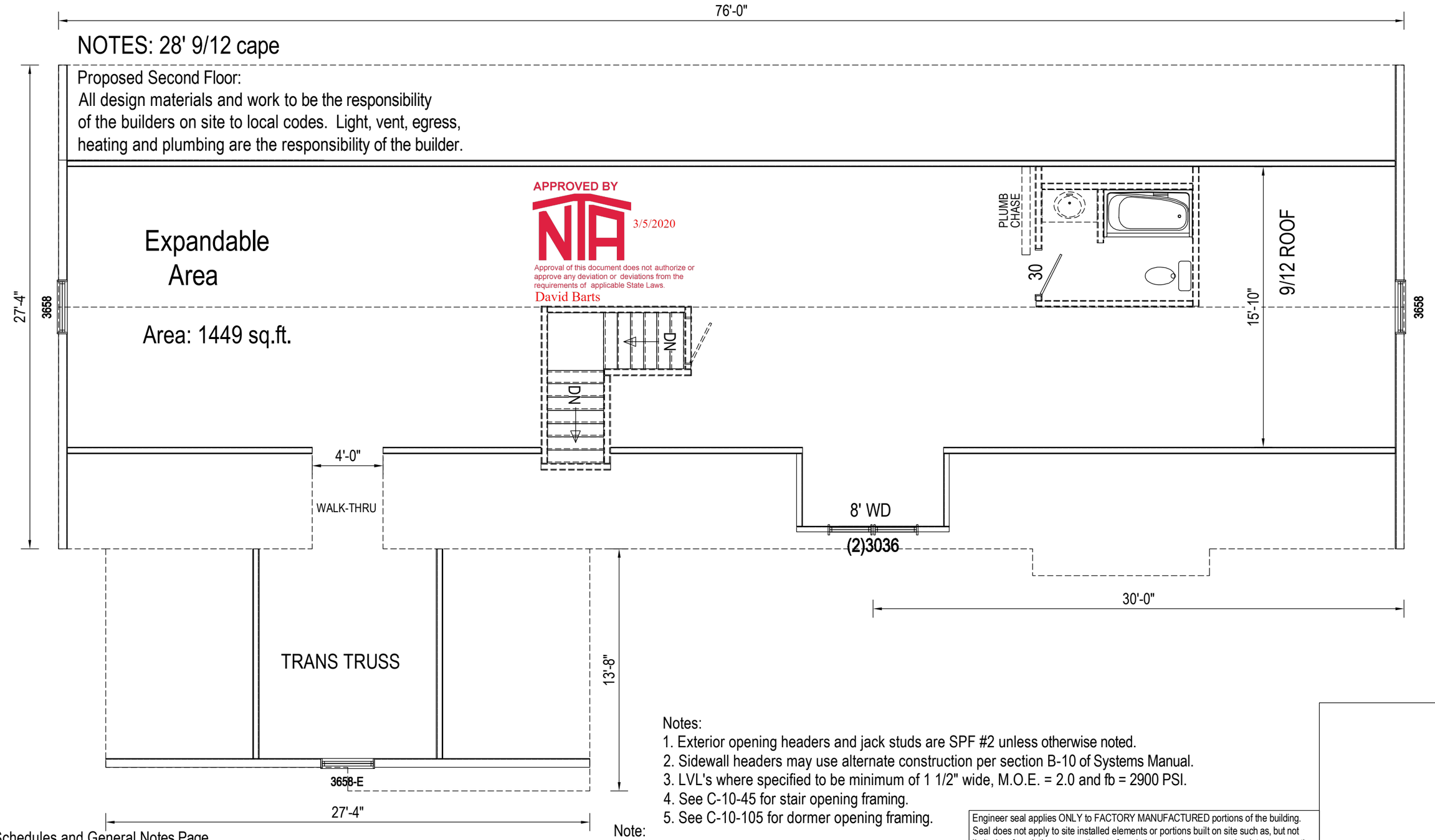
Note:
* LVLs noted must extend past column on at least one end 24" minimum and be overlayed with OSB sheathing.

See Schedules and General Notes Page
⬡ = Column Support Location
AC = Attic Access

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.
4. See C-10-45 for stair opening framing.
5. See C-10-105 for dormer opening framing.

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Callout: 4276	Revisions Date / No.	Scale: 3/16" = 1'-0"	Date: 03/02/2020	Cust: STOCK	Model/Eng. No.: 2R2007-R2
Title: Floor Plan			Drawn By: CL	Reference: VG508-A	Dlr: HBV S/N: 42396	Pg.: FP

Note: Window fall protection must be provided on-site where required in accordance with applicable section of the IRC.



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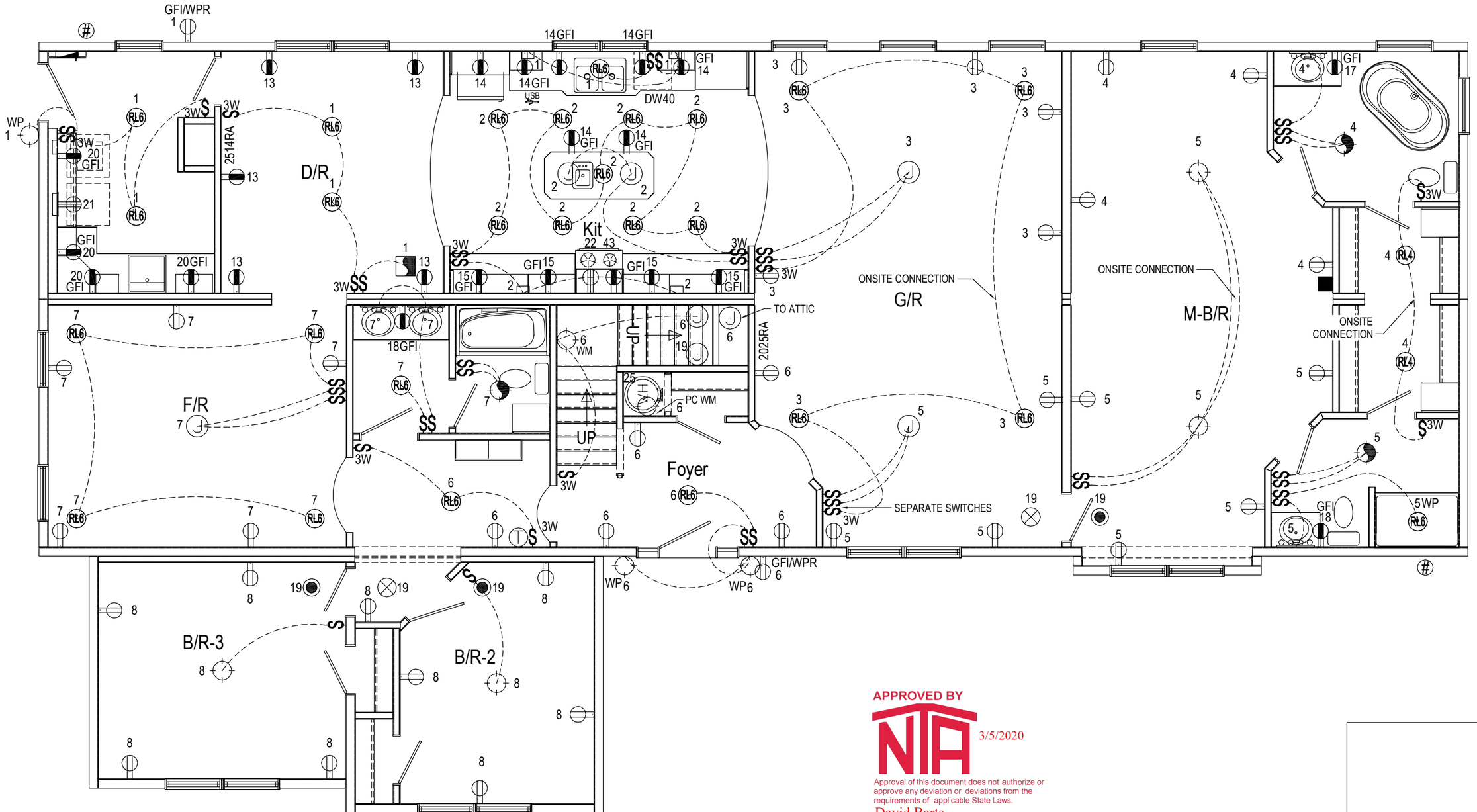
Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Callout: 4276	Revisions Date / No.	Scale: 3/16" = 1'-0"	Date: 03/02/2020	Cust: STOCK	Model/Eng. No.: 2R2007-R2
Title: Proposed Cape Floor Plan			Drawn By: CL	Reference: VG508-A	Dlr: HBV S/N: 42396	Pg.: PCFP



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NTA
3/5/2020

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David Barts

See Schedules and General Notes Page

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Callout: 4276	Revisions Date / No.	. / .	Scale: 3/16" = 1'-0"	Date: 03/02/2020	Cust: STOCK	Model/Eng. No.: 2R2007-R2
Title: Electrical Plan				Drawn By: CL	Reference: VG508-A	Dlr: HBV S/N: 42396	Pg.: EP

Optional Method Load Calculation for One-Family Dwellings

Model # 2R2007-R2

1 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 3892 = (ft² using outside dimensions)	**1**	**11676**
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 3 = (minimum of two)	**2**	**4500**
3 Laundry Branch Circuits(s) 220.82(B)(2) *At least one laundry branch circuit must be included. 210.11(C)(2)*	1500 x 1 = (minimum of one)	**3**	**1500**
4 Appliances 220.82(B)(3) and (4) *Use the nameplate rating of all appliances (fastened in place, permanently connected, or connected to a specific circuit), ranges, ovens, cooktops, motors, and clothes dryers. Convert any nameplate rating given in amperes to volt-amperes by multiplying the amperes by the rated voltage.* *Do NOT include any heating or A/C equipment in this section.* (1) Electric H_2O Heater 4.5 KVA (1) Electric Dryer 5.4 KVA (1) Electric Range 14.2 KVA (0) Electric Wal Oven (S) 0 KVA (0) Electric Wal Oven (D) 0 KVA (3) Bath Circ's 4.5 KVA (5) Vent Fans 1.5 KVA (1) Microwave 1.5 KVA (1) Dishwashe 1.5 KVA	Total volt-amps of all app. LISTED BLEOW	**4**	**33100**

5 Apply 220.82(B) demand factor to the total of lines 1 through 4.

50776 - 10,000 = 40776 x 40 % = 16310 + 10,000 = **26310**

(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 pumps without any supplemental electric heating:
6000 x 100 % = **a)** 6000

b) Electric thermal storage & other heating systems where the usual load is expected to be continuous at full nameplate value. *Systems qualifying under this selection shall not be figured under any other selection in 220.82(C).*
0 x 100 % = **b)** 0

c) Supplemental electric heating equipment for heat-pump systems. Include the heat-pump compressor(s) at 100%. *If the heat-pump compressor is prevented from operating with the supplemental heat, omit the compressor.*
0 x 65 % = **c)** 0

d) Electric space-heating equipment, if fewer than four seperately controlled units:
20000 x 65 % = **d)** 13000

e) Electric space-heating equipment, if four or more seperately controlled units:
0 x 40 % = **e)** 0

7 Total Volt-Ampere Demand Load:	13000 (Largest VA rating, 6a - 6e) + 26310 (Line 5) =	**7**	**39310**
8 Minimum Amperes *Divide the total volt-amperes by voltage.*	39310 (line 7) ÷ 240 (voltage) = **164** (min. amperes)	**9** Minimum Size Service or Feeder 240.6(A)	**200 Amps Installed**
10 Size the Service or Feeder Conductors. *Use 310.15(B)(6) to find the service conduct up to 400 amperes. Ratings in excess of 400 amperes shall comply w/ Table 310.16. 310.15(B)(6) also applies to feeder conductors serving as the main power feeder.*		**10** Minimum Size Conductors	**2/0 Copper OR 4/0 Aluminum**

REFER TO RESCHECK FOR DOOR AND WINDOW U-VALUES

LEGEND

=15 AMP RECPT | =15 AMP FLOOR RECPT | =20 AMP RECPT | =20 AMP FLOOR RECPT
=SWITCHED RECPT | =220 VOLT RECPT | WPR = WEATHERPROOF ENCLOSURE WITH WEATHE RESISTANT RECPT
=STD LIGHT | (R) =RECESSED LIGHT | (RL4) =RECESSED 4" LED LIGHT | (RL6) =RECESSED 6" LED LIGHT
18" FLOURESCENT | 48" FLOURESCENT | 24" STRIPLIGHT | (PC) =PULL CHAIN LIGHT
=UNDER CABINET LIGHT / WALL LIGHT | =UNDER CABINET STEREO
S =SWITCH | S^{DM} =DIMMER SWITCH | S^{3W} =3-WAY SWITCH | S^{3DM} =3-WAY DIMMER SWITCH
=STANDARD VENT | =WIRE | =DOORBELL | =CHIMES
=WHOLE HOUSE VENTILATION FAN | =STANDARD FAN | =STANDARD FAN w/LIGHT
=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
=IONIZATION SMOKE ALARM | =THERMOSTAT | F = FIRE EXTINGUISHER
=SMOKE/CO ALARM | PE = PHOTOELECTRIC SMOKE/CO ALARM

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

If an attached garage is to be added to this home, the entrance door to the home from the garage must be a self-closing fire rated door per applicable code.
Clothes dryer vents may need to be completed to the exterior of the home on site. Refer to sections of applicable local codes and to Section 8 of the home installation manual for required completion of dryer ventilation as necessary.

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.

WINDOW SCHEDULE - MOD SINGLE HUNG

S SUFFIX DENOTES SAFETY GLAZING / E SUFFIX DENOTES EGRESS

Mfg	Label	Width R/O	Height R/O	R/O SF	Light	Vent	Room SF	U Value	Egress No	Egress Yes	Design Load	SHGC w/o Grids	SHGC w/ Grids	Air Infil
KINRO	6048 ATRIUM	61	49	20.75	14.00	5.28	132.00	0.35	●		35	0.35	0.32	0.10
KINRO	3668P-S	36.5	68.5	17.36	15.08	0.00	0.00	0.33	●		50	0.32	0.30	0.10
KINRO	3036	30.5	36.5	7.62	5.55	2.64	66.00	0.35	●		66	0.33	0.30	0.10
KINRO	3658	36.5	58.5	14.66	11.76	5.76	144.00	0.35		●	50	0.33	0.30	0.10
KINRO	3658-E	36.5	58.5	14.66	11.76	5.76	144.00	0.35		●	50	0.33	0.30	0.10
KINRO	3668	36.5	68.5	17.18	14.00	6.92	173.00	0.35		●	50	0.33	0.30	0.10
KINRO	(2)3036	61	36.5	15.29	11.10	5.28	132.00	0.35	●		50	0.33	0.30	0.10
KINRO	(2)3658	73	58.5	29.43	23.52	11.52	288.00	0.35		●	50	0.33	0.30	0.10
KINRO	(2)3668	73	68.5	34.45	28.00	13.84	346.00	0.35		●	50	0.33	0.30	0.10
MI	3070P-S	36.25	84.25	21.21	17.00	0.00	0.00	0.32	●		50	0.24	0.00	0.06

Doors Exterior

Door Type	Size	Width	Height	RO SF	Light	Vent	Design Load	Air Infil
9 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	0.893	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'-8"	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
Side 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
1617 KD Patio	9868	9'-7 3/4"	6'-8"	64.31	46.83	22.74	35	0.90
6 Panel	3882	3'-2"	6'-10 1/2"	21.73	-	-	50	0.27

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.

Doors Interior

Door Type	Size	Width	Height
Int. Passage	24	2'-2 1/8"	6'-11"
Int. Passage	28	2'-6 1/8"	6'-11"
Int. Passage	30	2'-8 1/8"	6'-11"
Int. Passage	32	2'-10 1/8"	6'-11"
Int. Passage	36	3'-2 1/8"	6'-11"
Int. Passage	48	4'-1"	6'-11"

ELECTRICAL PLAN NOTES BASED ON NEC 2017:

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 GROUNDING TYPE, 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 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.
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 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.
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 BATHROOMS, GARAGE UNFINISHED BASEMENTS AND OUTDOORS.
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. 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.
18. 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.
19. 120v 15 OR 20 AMP RECEPTS LOCATED WITHIN 6' FROM ANY DWELLING UNIT SINK MUST BE GFCI PROTECTED.
20. 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.

APPROVED BY
NTA
3/5/2020
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David Barts

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.
Title: Schedules and General Notes

Callout: 4276
Revisions: Date / No.
Scale: N.T.S.
Date: 03/02/2020
Drawn By: CL
Reference: VG508-A
Cust: STOCK
Dlr: HBV
S/N: 42396
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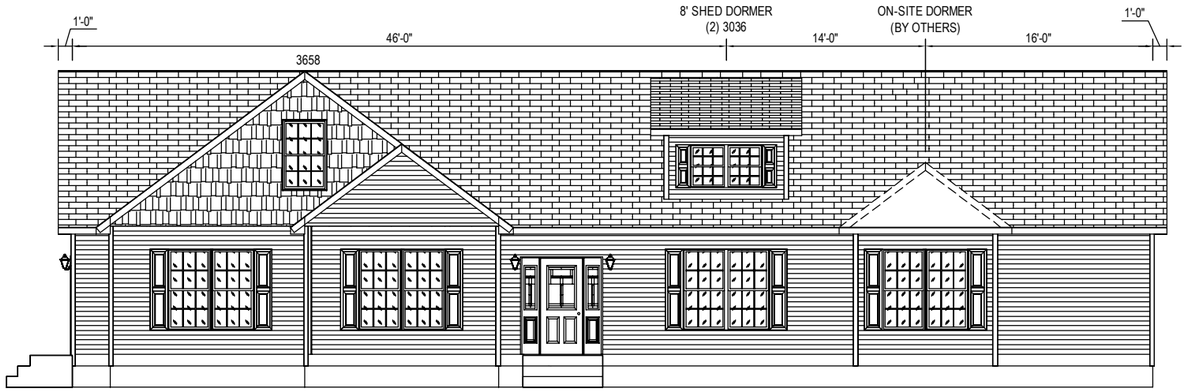
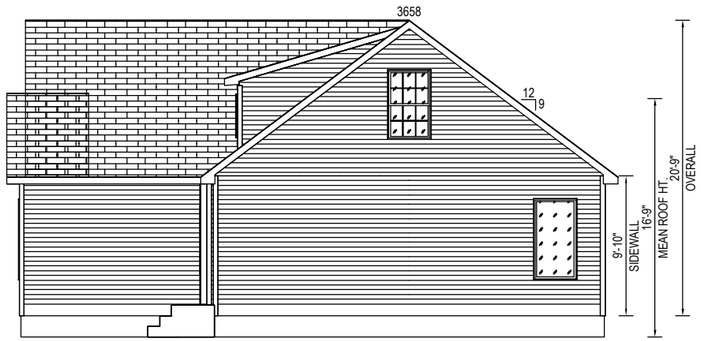
Pg.: NG

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 section of the IRC.



FRONT VIEW



RIGHT VIEW

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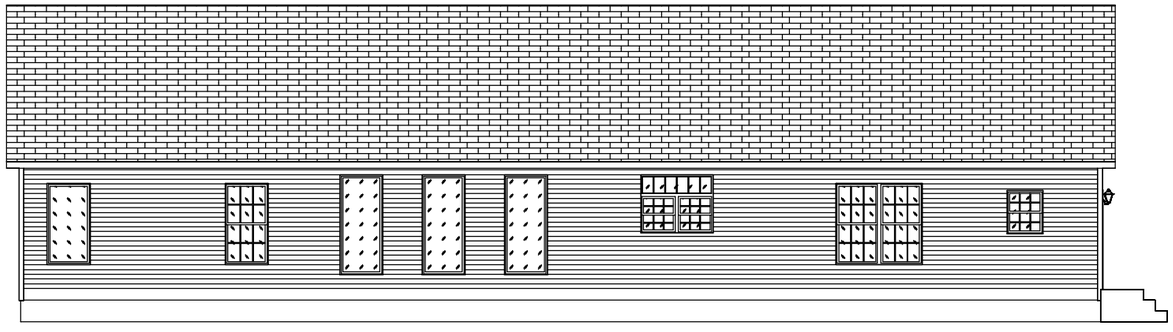
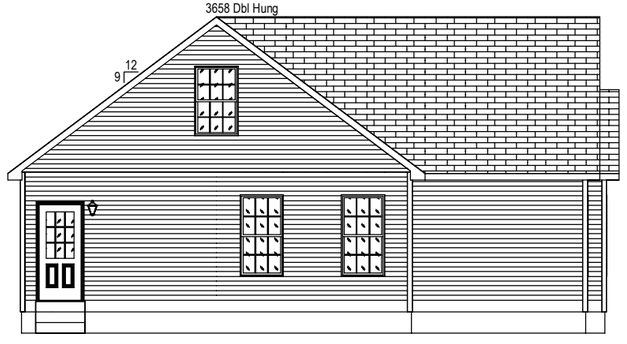


REAR VIEW



LEFT 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.

NOTE:

- HOMES SITED ON BASEMENTS MUST BE EQUIPPED WITH AT LEAST ONE BASEMENT EMERGENCY ESCAPE AND RESCUE OPENING TO THE OUTSIDE IN ACCORDANCE WITH IRC R310. EVERY SLEEPING ROOM MUST HAVE AN EMERGENCY ESCAPE AND RESCUE OPENING PROVIDED IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES .
- 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 OPENING.

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Callout: 4276	Revisions Date / No.	. / .	Scale: N.T.S.	Date: 03/02/2020	Cust: STOCK	Model/Eng. No.: 2R2007-R2
Title: Elevations		. / .	. / .	Drawn By: CL	Reference: VG508-A	Dlr: HBV	Pg.: EL
		. / .	. / .			S/N: 42396	

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David Barts

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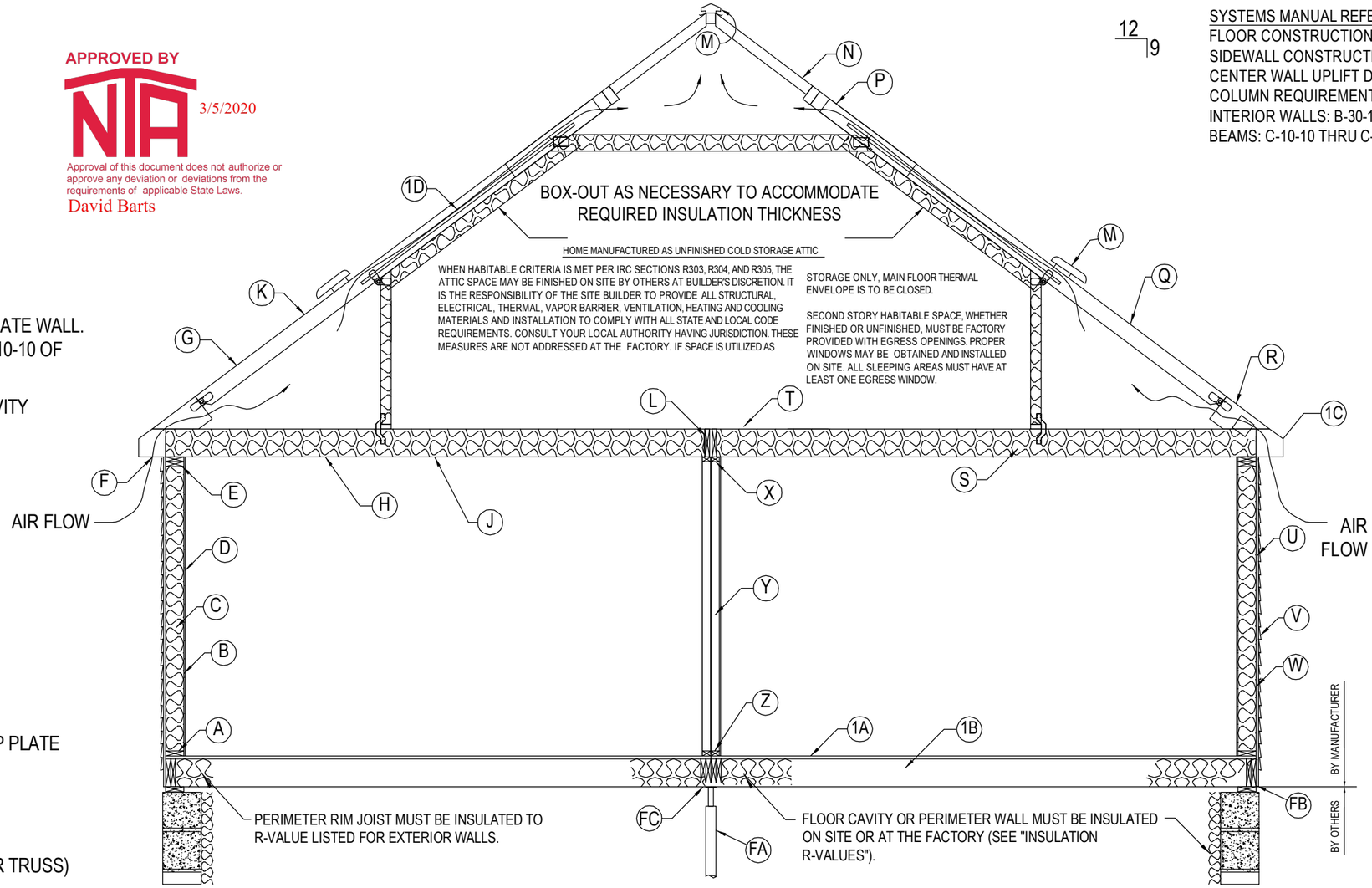
SYSTEMS MANUAL REFERENCES
FLOOR CONSTRUCTION: A-10-10 & 20
SIDEWALL CONSTRUCTION: B-10-10
CENTER WALL UPLIFT DETAIL: B-20-10
COLUMN REQUIREMENTS: B-20-20, 21 & 30
INTERIOR WALLS: B-30-10 & 11
BEAMS: C-10-10 THRU C-10-30

(A) 2x6 #3 SPF SIDEWALL BOTTOM PLATE
(B) 2x6 #3 SPF EXTERIOR WALL STUDS, 24" OR 16" O.C.
(C) EXTERIOR WALL INSULATION (SEE "INSULATION R-VALUES").
(D) WALL COVERING (MIN. 1/2" GYPSUM)
(E) 2x6 #3 SPF DOUBLE TOP PLATE
(F) VENTED SOFFIT 50% OF LOWER ROOF VENTILATION
(G) ENGINEERED TRUSSES SPACED TO MEET DESIGNED GROUND SNOW LOAD.
(H) VAPOR BARRIER
(J) CEILING BOARD 1/2" GYPSUM.
(K) 7/16" 24/16 RATING ROOF DECKING MIN. TYP.
(L) 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.
(M) ROOF VENT (OPT RIDGE VENT) 50% VENTILATION OF ROOF CAVITY (UPPER PORTION), INSTALLED PER CODE REQUIREMENTS
(N) TYPICAL SHINGLES, INSTALLED PER MFGR'S INSTRUCTIONS
(P) SHINGLE UNDERLAYMENT TYP.
(Q) 1" MIN SPACE FOR ATTIC VENTILATION
(R) TYPICAL ICE BARRIER PER SECTION 905 OF IRC
(S) CEILING INSULATION TYP. (SEE "INSULATION R-VALUES").
(T) DECKING BY OTHERS
(U) 7/16" RATED SHEATHING
(V) VINYL OR HARDBOARD SIDING (RAN VERT. OR HORZ.) INSTALLED PER MFGR.'S INSTRUCTIONS
(W) AIR INFILTRATION AND WATER RESISTANT BARRIER
(X) 2x4 #3 SPF SINGLE OR DOUBLE TOP PLATE INTERIOR WALL TOP PLATE
(Y) 2x4 #3 SPF INTERIOR WALL STUD, 24" OR 16" OC.
(Z) 2x4 #3 SPF BOTTOM PLATE INTERIOR WALLS, TYP
(1A) FLOOR DECKING RATED FOR 19.2" O.C JOIST SPACING, MAX
(1B) MIN 2x10 #2 SPF FLOOR JOIST 16" O.C. (OR ENGINEERED FLOOR TRUSS)
(1C) ALUM., VINYL, OR HARDIE BOARD FACIA & DRIP EDGE.
(1D) BAFFLE REQUIRED.
(FA) JACK POST, PIER OR CONCRETE FILLED POST THAT MEETS OR EXCEEDS REQUIRED SUPPORT CAPACITY PER FOUNDATION DESIGN.
(FB) 2x6 TREATED SILL PLATE. FASTENING OF SILL AND HOME TO FOUNDATION ON SITE PER CODES OR BY LOCAL ENGINEER WHEN APPLICABLE
(FC) JOIST HANGERS AT MATELINE(S)



INSULATION R-VALUES
CEILING: 38
CEILING (Between Knee Walls: 30
EXTERIOR WALLS (continuous): 0
EXTERIOR WALLS (cavity): 19
FLOOR: 30
FOUNDATION WALLS (continuous): 0
FOUNDATION WALLS (cavity): 0

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 2443/300 = 8.14 VENT REQUIRED

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 & SPECIFICATIONS MAY VARY PER PLAN.
REFER TO INSTALLATION MANUAL FOR MODULE CONNECTIONS.
REFER TO INSTALLATION MANUAL AND TRUSS MFG. DIAGRAM FOR ROOF TRUSS BRACING.

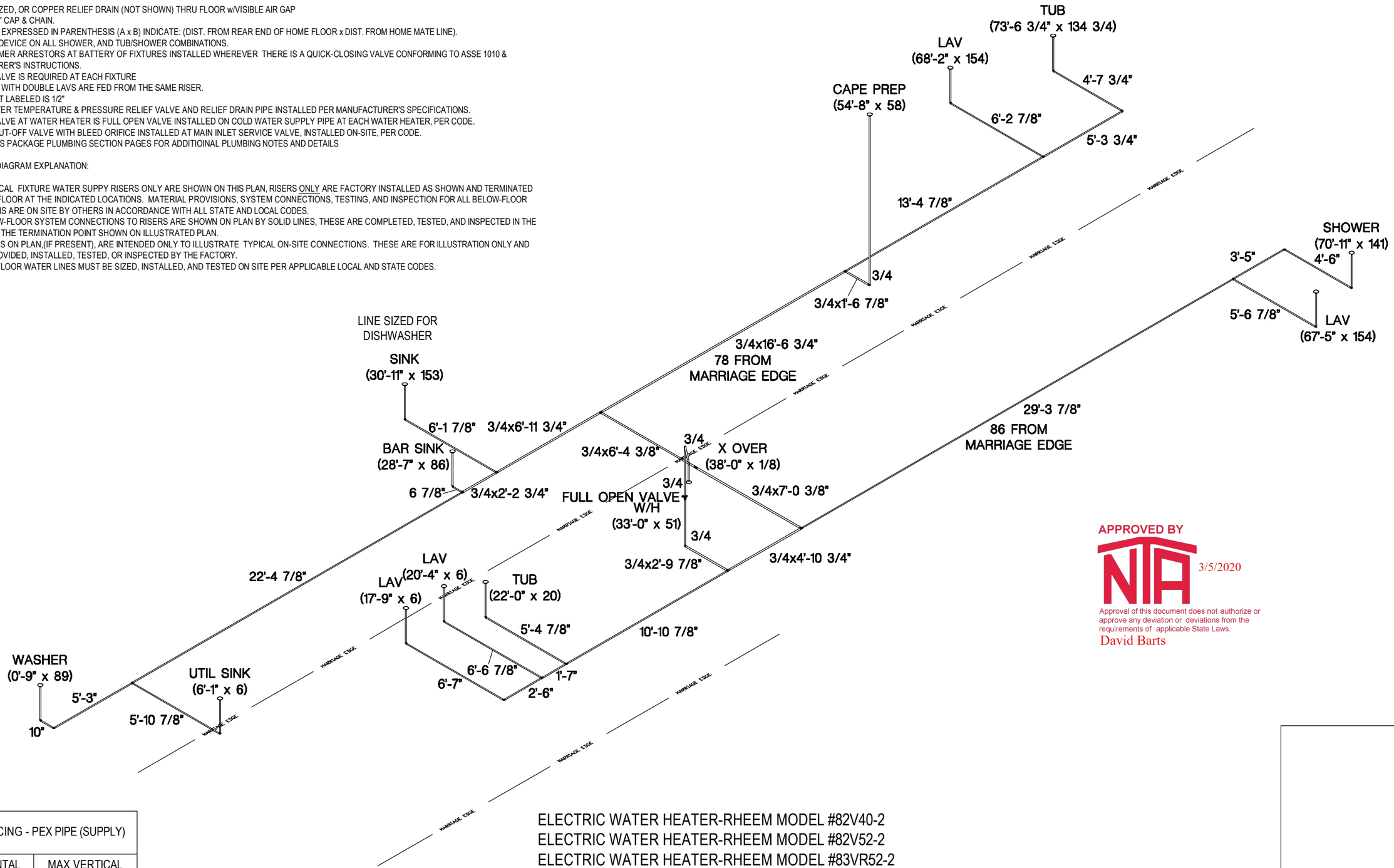
IMPORTANT!
MAIN LEVEL FLOORS, OVER ENCLOSED FOUNDATIONS, CONSTRUCTED WITH OPTIONAL ENGINEERED WEB FLOOR JOISTS (OPEN JOISTS) OR WITH JOISTS OF NOMINAL LUMBER LESS THAN 2X10, MAY BE SUBJECT TO SPECIAL FIRE PROTECTIVE REQUIREMENTS TO BE PERFORMED BY OTHERS ON SITE. CONSULT ADOPTED LOCAL CODES FOR COMPLIANCE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

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Callout: 4276	Revisions Date	No.	.	.	Scale: N.T.S.	Date: 03/02/2020	Cust: STOCK	Model/Eng. No.: 2R2007-R2
Title: Cross Section		.	.	.	.	Drawn By: CL	Reference: VG508-A	Dlr: HBV	Pg.: XS
		.	.	.	.			S/N: 42396	

NOTE:
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 x B) INDICATE: (DIST. FROM REAR END OF HOME FLOOR x DIST. FROM HOME MATE LINE).
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.
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.



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

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

ALL DIMENSIONS FROM REAR AND MARRIAGE EDGE

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.
Title: Hot Water Lines
Callout: 4276
Revisions: Date / No.
Scale: CUSTOM
Date: 03/02/2020
Drawn By: CL
Reference: VG508-A
Cust: STOCK
Dlr: HBV
S/N: 42396
Model/Eng. No.: 2R2007-R2
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. DIMENSIONS EXPRESSED IN PARENTHESIS (A x B) INDICATE: (DIST. FROM REAR END OF HOME FLOOR x DIST. FROM HOME MATE LINE).
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.
12. SEE SYSTEMS PACKAGE PLUMBING SECTION PAGES FOR ADDITIOINAL PLUMBING NOTES AND DETAILS

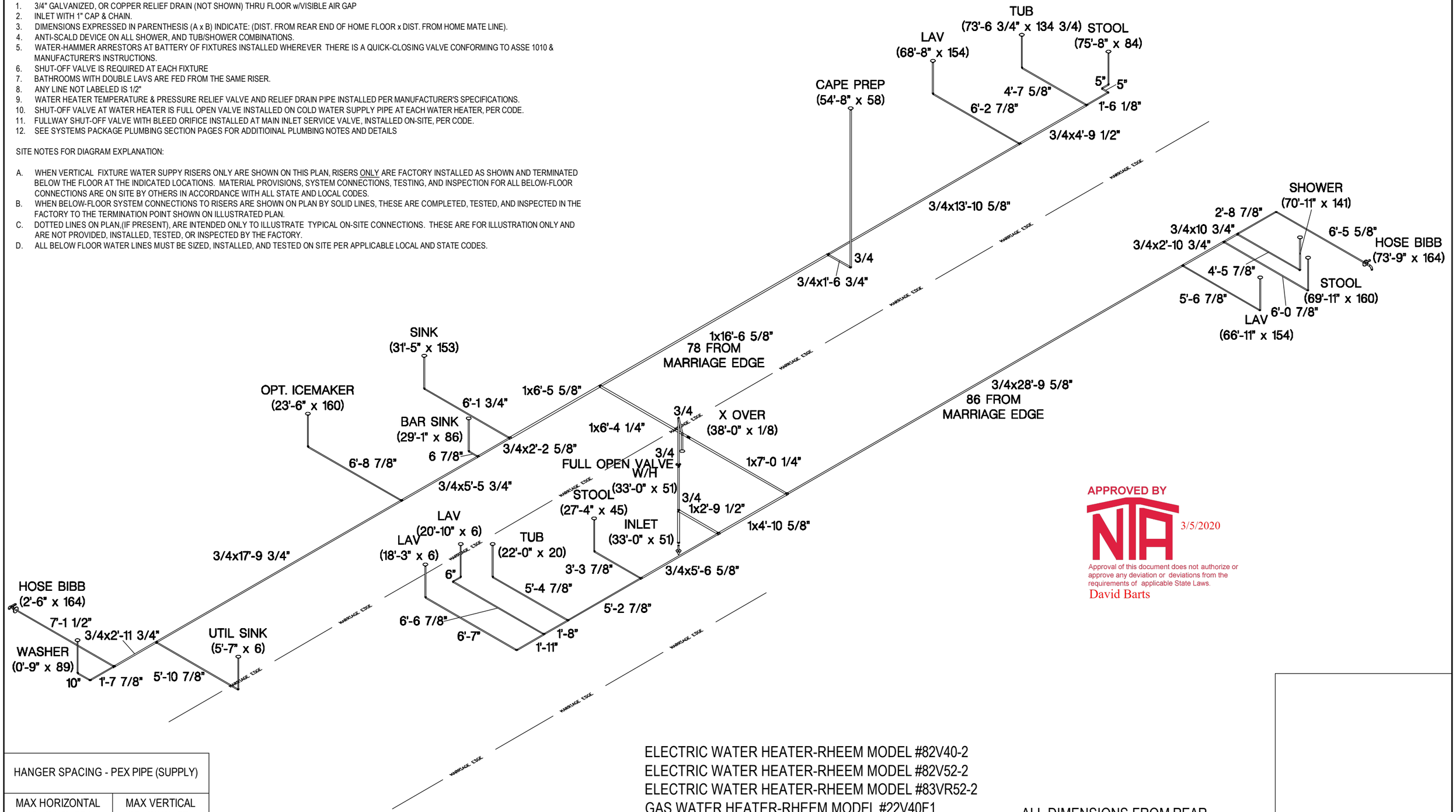
SITE NOTES FOR DIAGRAM EXPLANATION:

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.



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

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

ALL DIMENSIONS FROM REAR AND MARRIAGE EDGE

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.
Title: Cold Water Lines
Callout: 4276
Revisions: Date / No.
Scale: CUSTOM
Date: 03/02/2020
Drawn By: CL
Reference: VG508-A
Cust: STOCK
Dlr: HBV
S/N: 42396
Model/Eng. No.: 2R2007-R2
Pg.: WC

NOTE:

1. ALL LINES 1/4" SLOPE/FOOT MINIMUM UNLESS OTHERWISE NOTED.
2. ⟵⊖⟶ 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.

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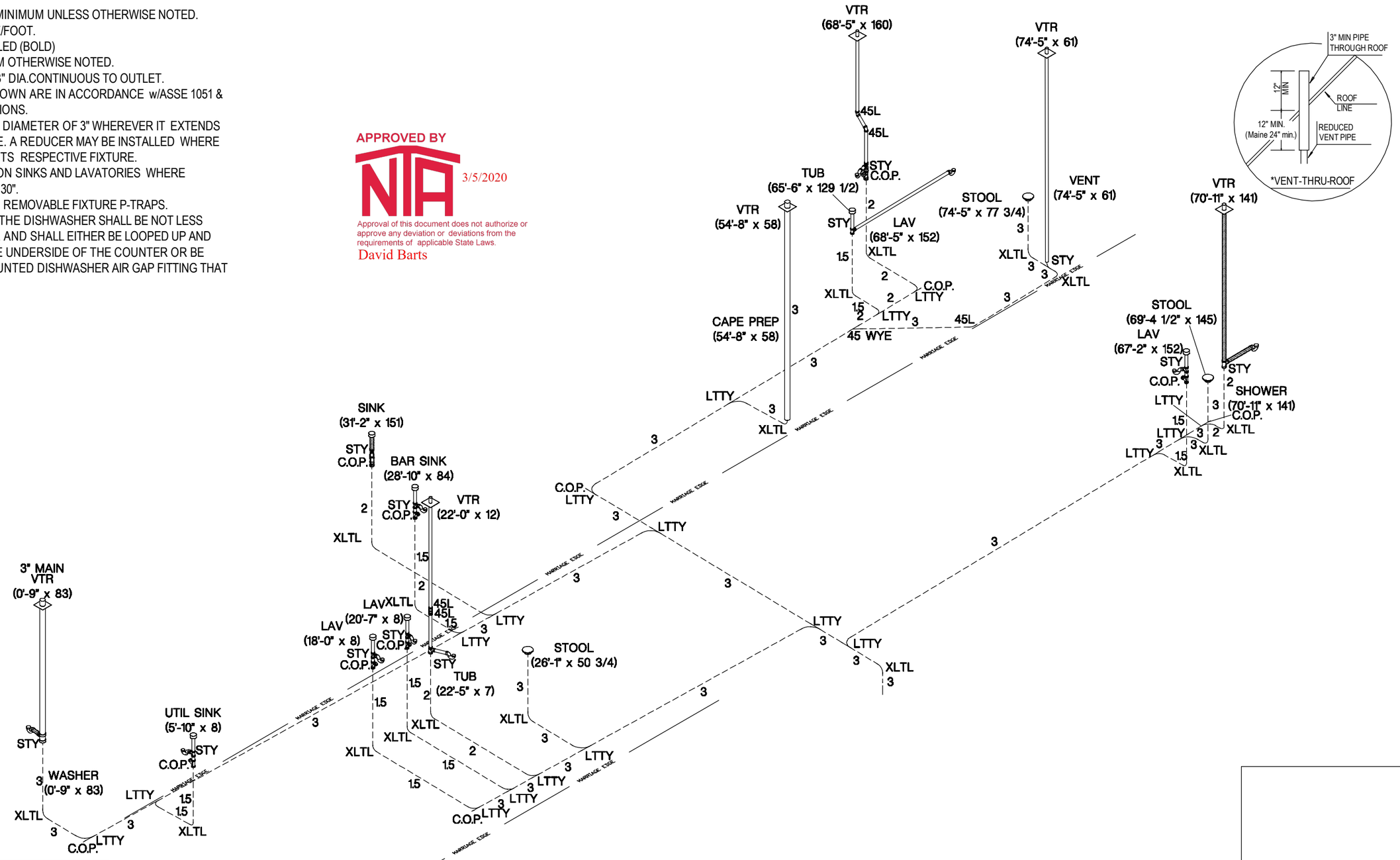


HANGER SPACING - DRAIN PIPE (DWV)	
MAX HORIZONTAL SPACING (FT.)	VERTICAL SPACING
4'-0"	Vertical piping shall be supported at each story or floor level.

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		

ALL DIMENSIONS FROM REAR AND MARRIAGE EDGE

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.

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

Callout:	Revisions				Scale:	Date:	Cust: STOCK	Model/Eng. No.:
4276	Date	No.	.	.	CUSTOM	03/02/2020	Dlr: HBV	2R2007-R2
	.	.	.	.	Drawn By: CL	Reference: VG508-A	S/N: 42396	Pg.: DL
	.	.	.	.				

PIPE SUPPORT:

VERTICAL PIPING:

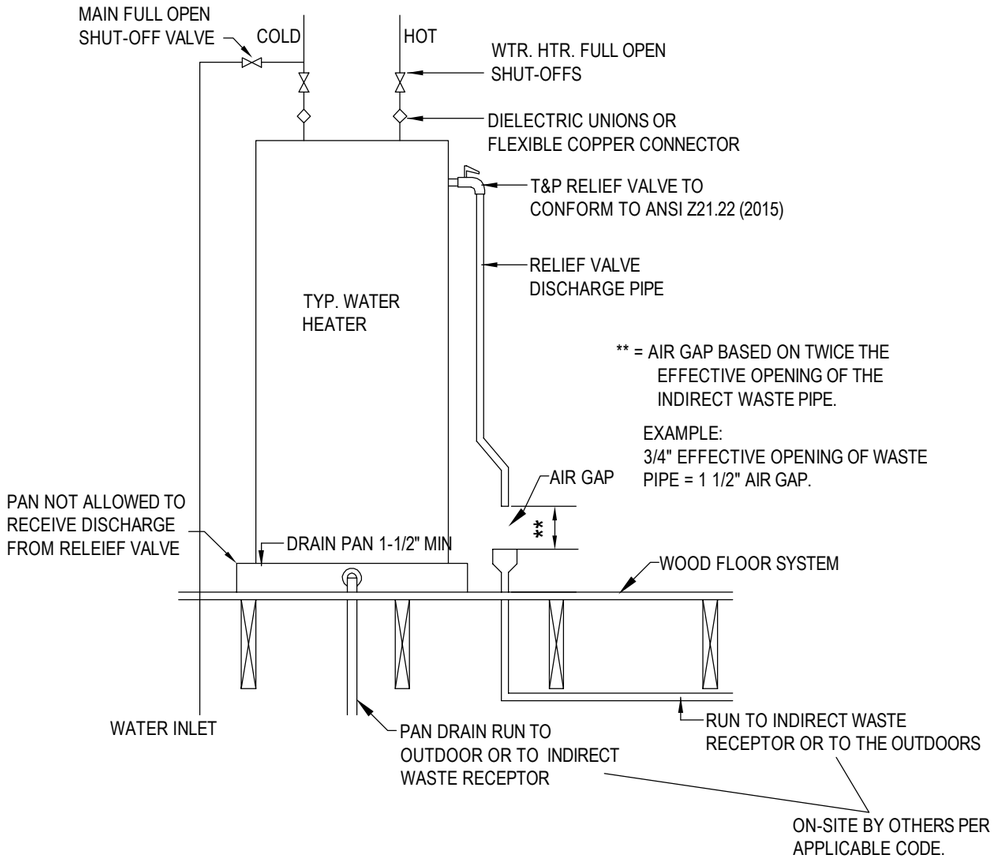
SUPPORTS AT 10' O.C. MAX. OR BETWEEN FLOOR LEVELS.

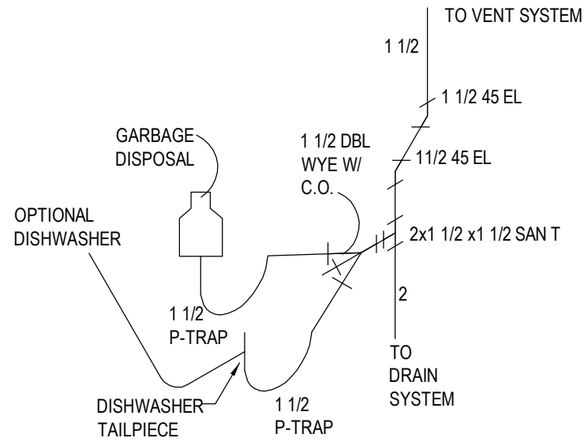
HORIZONTAL PIPING:

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.

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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.

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Callout: 4276	Revisions Date / No.		Scale: N.T.S.	Date: 03/02/2020	Cust: STOCK	Model/Eng. No.: 2R2007-R2
Title: DWV Notes				Drawn By: CL	Reference: VG508-A	Dlr: HBV	Pg.: DN
						S/N: 42396	

Bracing per prescriptive North Carolina 2018 Residential code.

In conjuction with the wall bracing requirements of Section 602.10, all exterior walls are sheathed with wood structural sheathing panels in accordance with 4506.2 for 140 to 150 MPH structural bracing.

VERTICAL BWL 1	
REQUIRED	8.23
PROVIDED	15.17
MEETS REQ	YES
% SHEATHED	66%

VERTICAL BWL 2	
REQUIRED	8.23
PROVIDED	22.43
MEETS REQ	YES
% SHEATHED	88%

HORIZONTAL BWL 1	
REQUIRED	3.34
PROVIDED	45.29
MEETS REQ	YES
% SHEATHED	62%

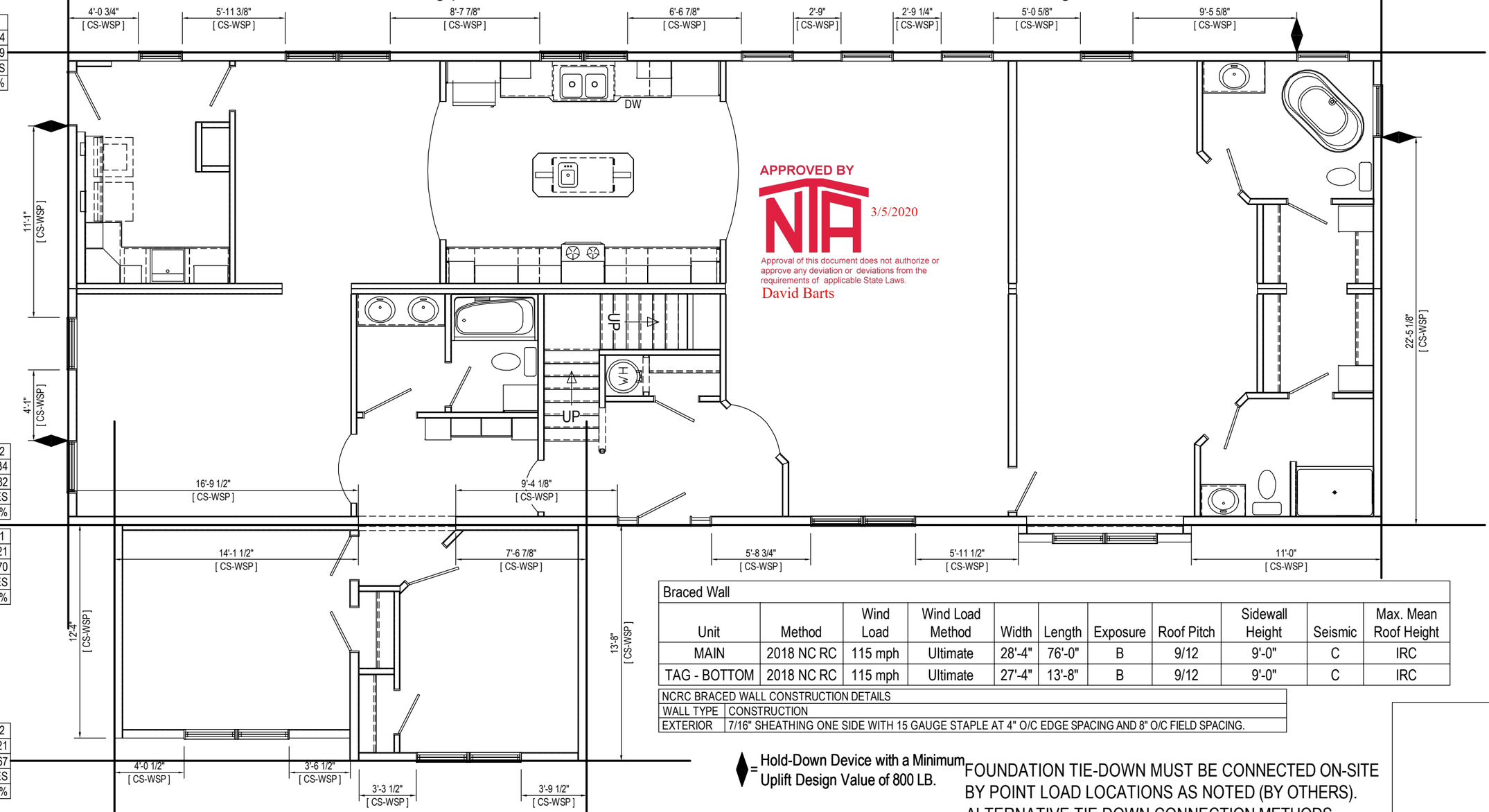
HORIZONTAL BWL 2	
REQUIRED	3.34
PROVIDED	48.82
MEETS REQ	YES
% SHEATHED	69%

HORIZONTAL BWL 1	
REQUIRED	3.21
PROVIDED	21.70
MEETS REQ	YES
% SHEATHED	79%

HORIZONTAL BWL 2	
REQUIRED	3.21
PROVIDED	14.67
MEETS REQ	YES
% SHEATHED	53%

VERTICAL BWL 1	
REQUIRED	1.90
PROVIDED	12.33
MEETS REQ	YES
% SHEATHED	100%

VERTICAL BWL 2	
REQUIRED	1.90
PROVIDED	13.67
MEETS REQ	YES
% SHEATHED	100%



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Braced Wall										
Unit	Method	Wind Load	Wind Load Method	Width	Length	Exposure	Roof Pitch	Sidewall Height	Seismic	Max. Mean Roof Height
MAIN	2018 NC RC	115 mph	Ultimate	28'-4"	76'-0"	B	9/12	9'-0"	C	IRC
TAG - BOTTOM	2018 NC RC	115 mph	Ultimate	27'-4"	13'-8"	B	9/12	9'-0"	C	IRC

NCRC BRACED WALL CONSTRUCTION DETAILS	
WALL TYPE	CONSTRUCTION
EXTERIOR	7/16" SHEATHING ONE SIDE WITH 15 GAUGE STAPLE AT 4" O/C EDGE SPACING AND 8" O/C FIELD SPACING.

◆ = Hold-Down Device with a Minimum Uplift Design Value of 800 LB.

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 130 MPH OR LESS WIND ZONES

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

Callout: 4276
Revisions: Date / No.
Scale: 0.013713
Date: 03/02/2020
Drawn By: CL
Reference: VG508-A
Cust: STOCK
Dlr: HBV
S/N: 42396
Model/Eng. No.: 2R2007-R2
Pg.: BWP

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

* = A 4" thick pre-cast footer of equivalent width and length may be used in place of a 6" thick cast in place footer.

Footer size must be designed by others to site conditions if noted kip load exceeds capacities listed above

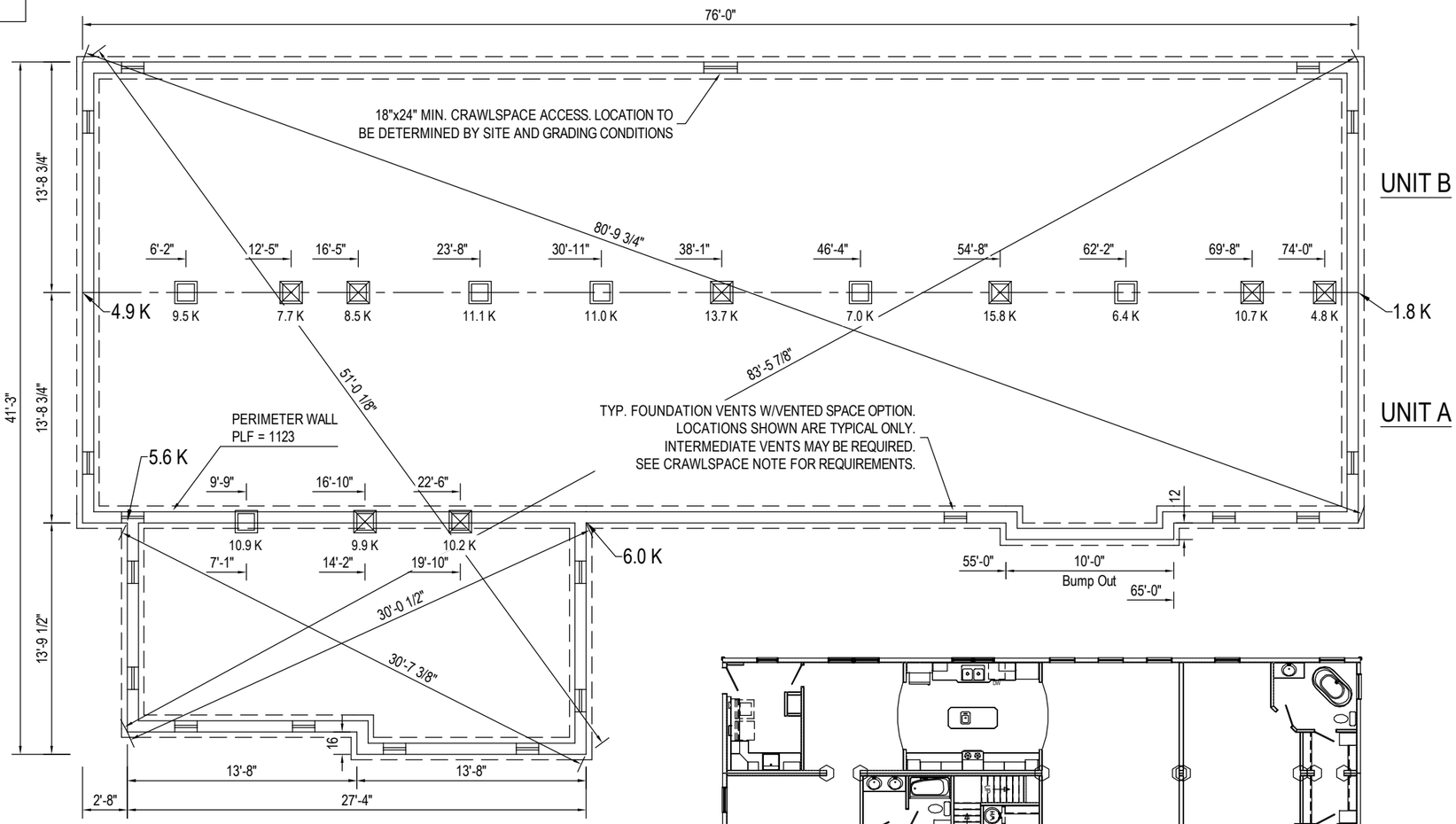
COLUMNS & FOOTINGS MUST BE RATED TO MEET THE CENTER LINE LOADS LISTED

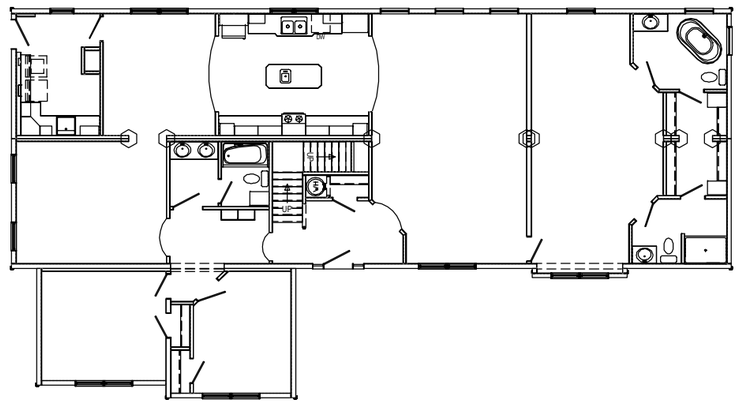
GROUND SNOW LOAD 20 PSF

Kip loads noted are based on allowable stress design (ASD).
Capacity of supports (columns, footings, etc.) must exceed noted Kip loads.

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 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.





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- 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.

Builder: R-Anell Housing Group, LLC - Subsidiary of The Commodore Corp.	Callout: 4276	Revisions Date	No.	.	.	Scale: 1/8" = 1'-0"	Date: 03/02/2020	Cust: STOCK	Model/Eng. No.: 2R2007-R2
Title: Foundation 2x10 Marriage Line without Stair		.	.	.	.	Drawn By: CL	Reference: VG508-A	Dlr: HBV	Pg.: FD20#
		.	.	.	.			S/N: 42396	

REScheck Software Version 4.7.0

Compliance Certificate

Project 2R2007-R2

Energy Code:	**2015 IECC**
Location:	**Lee County, North Carolina**
Construction Type:	**Single-family**
Project Type:	**New Construction**
Conditioned Floor Area:	**2,443 ft2**
Glazing Area	**15%**
Climate Zone:	**4 (3499 HDD)**
Permit Date:	
Permit Number:	

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David Barts

Construction Site:
3300 Jefferson Davis Hwy.
Sanford, North Carolina 27330

Owner/Agent:
STOCK
HBV

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: **4.8% Better Than Code** Maximum UA: **434** Your UA: **413** Maximum SHGC: **0.40** Your SHGC: **0.30**

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.

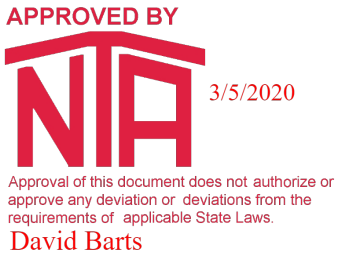
Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	U-Factor	UA
Wall 1 [1walls]: Wood Frame, 16" o.c.	2,306	19.0	0.0	0.060	114
Door - Hinged - Exterior - Half Lite - DSL - Brighton - RA {Qty 1}: Solid	37			0.380	14
Door - Hinged - Exterior - 9 Lite {Qty 1}: Solid	22			0.250	6
Window - (2) Kinro 3658 {Qty 1}: Vinyl Frame:Double Pane with Low-E SHGC: 0.30	29			0.350	10
Window - Kinro 3668 {Qty 3}: Vinyl Frame:Double Pane with Low-E SHGC: 0.30	52			0.350	18
Window - (2) Kinro 3668 {Qty 4}: Vinyl Frame:Double Pane with Low-E SHGC: 0.30	138			0.350	48
Window - MI 3070 Picture {Qty 3}: Vinyl Frame:Double Pane with Low-E SHGC: 0.30	64			0.320	20
Window - (2) Kinro 3036 wTrans - 6048 {Qty 1}: Vinyl Frame:Double Pane with Low-E SHGC: 0.32	21			0.350	7
Window - Kinro 3668 Picture Saftey {Qty 2}: Vinyl Frame:Double Pane with Low-E SHGC: 0.30	35			0.330	12
Window - Kinro 3036 {Qty 1}: Vinyl Frame:Double Pane with Low-E SHGC: 0.30	8			0.350	3
Floor 1: All-Wood Joist/Truss:Over Outside Air	2,443	30.0	0.0	0.033	81
Ceiling 1: Flat Ceiling or Scissor Truss	1,098	38.0	0.0	0.030	33

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	U-Factor	UA
Ceiling 2 [Between knee walls]: Flat Ceiling or Scissor Truss	1,345	30.0	0.0	0.035	47

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 2015 IECC requirements in RES*check* Version 4.7.0 and to comply with the mandatory requirements listed in the RES*check* Inspection Checklist.

Cameron LeCount		3/2/20
Name - Title	Signature	Date



RES*check* Software Version 4.7.0

Inspection Checklist

Energy Code: 2015 IECC

Requirements: 0.0% were addressed directly in the RES*check* 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:

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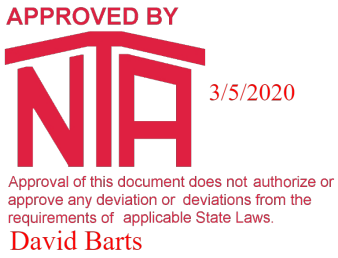
David Barts

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

Section # & Req.ID	Foundation Inspection	Complies?	Comments/Assumptions
303.2.1 [FO11]2	A protective covering is installed to protect exposed exterior insulation and extends a minimum of 6 in. below grade.	☐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:

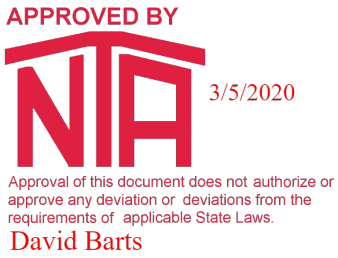


1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.3.4 [FR1][1]	Door U-factor.	U-____	U-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
402.1.1, 402.3.1, 402.3.3, 402.5 [FR2][1]	Glazing U-factor (area-weighted average).	U-____	U-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
303.1.3 [FR4][1]	U-factors of fenestration products are determined in accordance with the NFRC test procedure or taken from the default table.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
402.4.1.1 [FR23][1]	Air barrier and thermal barrier installed per manufacturer's instructions.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
402.4.3 [FR20][1]	Fenestration that is not site built is listed and labeled as meeting AAMA /WDMA/CSA 101/I.S.2/A440 or has infiltration rates per NFRC 400 that do not exceed code limits.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
402.4.5 [FR16][2]	IC-rated recessed lighting fixtures sealed at housing/interior finish and labeled to indicate ≤2.0 cfm leakage at 75 Pa.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.3.1 [FR12][1]	Supply and return ducts in attics insulated >= R-8 where duct is >= 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.			☐Complies ☐Does Not ☐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 ºF or chilled fluids below 55 ºF are insulated to ≥R-3.	R-____	R-____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.4.1 [FR24][1]	Protection of insulation on HVAC piping.			☐Complies ☐Does Not ☐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	
403.6 [FR19][2]	Automatic or gravity dampers are installed on all outdoor air intakes and exhausts.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

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

Additional Comments/Assumptions:



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

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 provided.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
402.1.1, 402.2.6 [IN1][1]	Floor insulation R-value.	R-____ ☐ Wood ☐ Steel	R-____ ☐ Wood ☐ Steel	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
303.2, 402.2.7 [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-____ ☐ Wood ☐ Mass ☐ Steel	R-____ ☐ Wood ☐ Mass ☐ Steel	☐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	

Additional Comments/Assumptions:

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

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 ft².			☐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	
403.3.4 [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 ft²	____ cfm/100 ft²	☐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 ft²	____ cfm/100 ft²	☐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.			☐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.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.1.2 [FI10][2]	Heat pump thermostat installed on heat pumps.			☐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 (Tier 3)

Section # & 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.			☐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 thermos-syphon 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.	APPROVED BY NTA 3/5/2020 Approval of this document does not authorize or approve any deviation or deviations from the requirements of applicable State Laws. David Barts		☐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]	Water distribution systems that have recirculation pumps that pump water from a heated water supply pipe back to the heated water source through a cold water supply pipe have a demand recirculation water system. Pumps have controls that manage operation of the pump and limit the temperature of the water entering the cold water piping to 104ºF.			☐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]	75% of lamps in permanent fixtures or 75% of permanent fixtures have high efficacy lamps. Does not apply to low-voltage lighting.			☐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	

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

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
401.3 [FI7][2]	Compliance certificate posted.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
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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1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

2015 IECC Energy Efficiency Certificate

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	0.35	0.30
Door	0.38	
Heating & Cooling Equipment	**Efficiency**	
Heating System:_____	_____	
Cooling System:_____	_____	
Water Heater:_____	_____	

Name: _____ **Date:** _____

Comments

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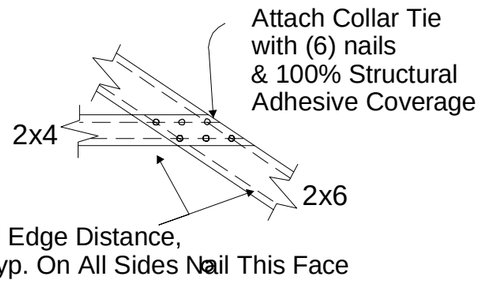
Job	Truss	Truss Type	Qty	Ply	
32802	A098601	RIGID COLLAR TIE CONNECTION DETAILS	1	1	UFP ENGINEERING Bulletin 05-02 REF # 2001092

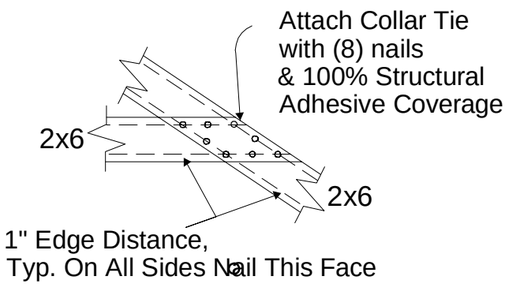
Universal Forest Products Inc., Grand Rapids, MI 49525,

2x4 Collar Tie Nailed to 2x6 Chord



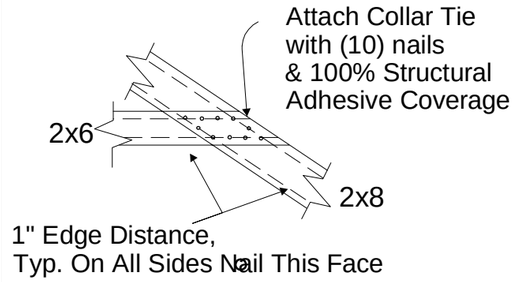
Detail (A)

2x6 Collar Tie Nailed to 2x6 Chord



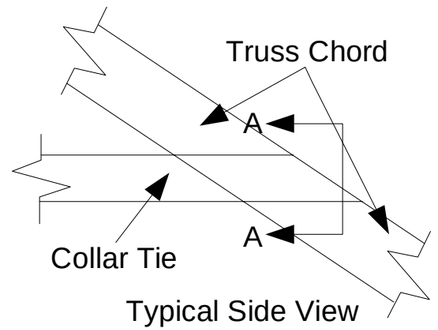
Detail (B)

2x6 Collar Tie Nailed to 2x8 Chord

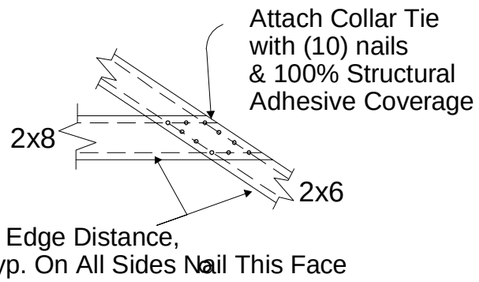


Detail (C)

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.

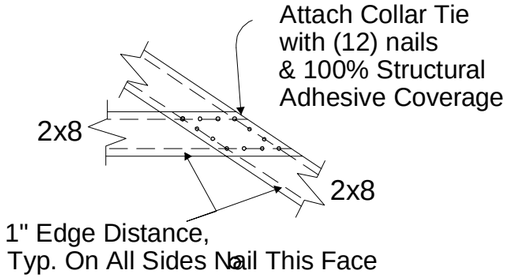


2x8 Collar Tie Nailed to 2x6 Chord



Detail (D)

2x8 Collar Tie Nailed to 2x8 Chord



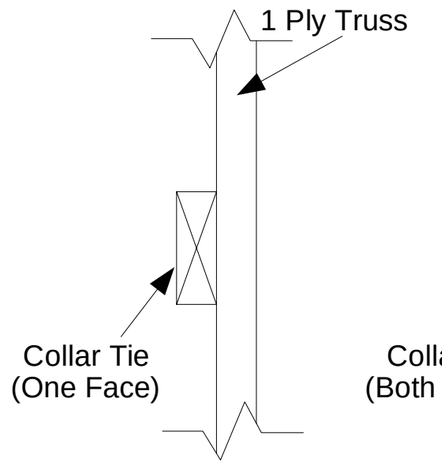
Detail (E)

Power Driven Nails Rigid Collar Tie Connection Details

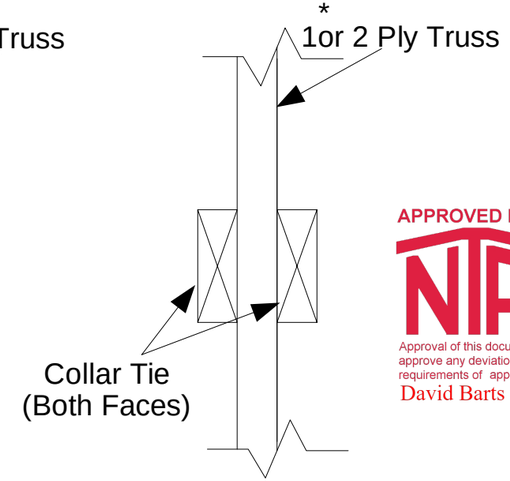
A) Side member shall be fastened with structural adhesive that meets the requirements of ASTM-2559. Maximum wood to wood gap = 1/16".
B) Bostitch .131" Dia. x 3" nails (or equal)

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.

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David Barts

WARNING - Verify design parameters and READ NOTES

Universal Forest Products, Inc. 2801 EAST BELTLINE RD, NE
PHONE (616)-364-6161 FAX (616)-365-0060 GRAND RAPIDS, MI 49505

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 avaliable from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719

J:\support\MitekSupp\templates\11x17addendum.tpl

Job	Truss	Truss Type	Qty	Ply	
98929	CCB34335	HINGED ATTIC	1	1	Commodore 315 NC R28C9F^ Ref. #10005457

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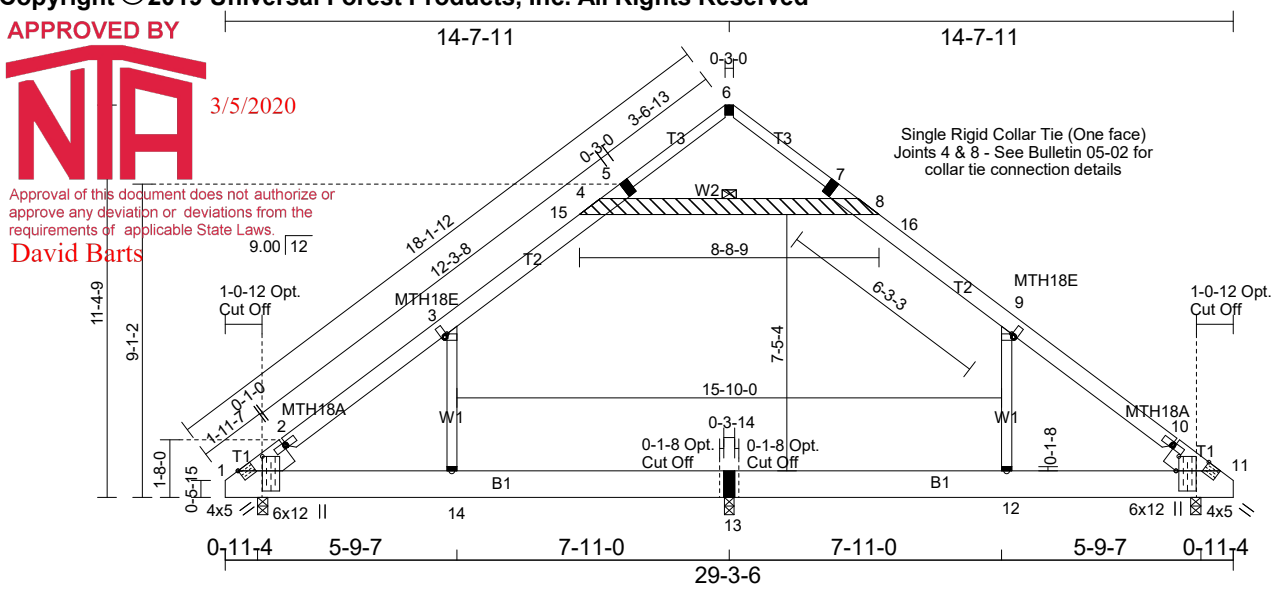

Plate Offsets (X,Y)-- [1:0-5-0,0-8-7], [2:0-0-5,0-0-8], [3:0-0-11,0-1-2], [9:0-0-11,0-1-2], [10:0-0-5,0-0-8], [11:0-7-5,Edge], [11:0-5-0,0-0-15]

SPACING-: 2-0-0		**SPACING-:** 1-4-0		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
LOADING (psf)		**LOADING** (psf)		Plate Grip DOL	1.15	TC	0.58	Vert(LL)	0.36	13-14	>450	240	MT20	137/130
TCLL	23.1	TCLL	34.7	Lumber DOL	1.15	BC	0.78	Vert(CT)	0.33	13-14	>499	180	MT18HS	137/130
(Ground Snow=30.0)		(Ground Snow=45.0)		Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.01	11	n/a	n/a		
TCDL	7.0	TCDL	10.5	Code	IBC2018/TPI2014	Matrix-R		Attic	-0.23	12-13	841	360	Weight: 212 lb	
BCLL	0.0 *	BCLL	0.0 *		IBC2015/TPI2014								FT = 0%	
BCDL	10.0	BCDL	15.0											

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.2 or 2x10 SPF No.2
WEBS 2x4 SP No.2 or 2x4 SPF No.2 *Except*
W2: 2x6 SP No.2 or 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-10-3 oc bracing.
WEBS 1 Row at midpt 4-8

REACTIONS. (lb/size) 1=992/0-3-8 (min. 0-1-11), 11=992/0-3-8 (min. 0-1-11), 13=352/0-3-8 (min. 0-1-8)
Max Horz 1=-715(LC 7)
Max Uplift 1=-669(LC 9), 11=-672(LC 10), 13=-173(LC 9)
Max Grav 1=1069(LC 3), 11=1070(LC 4), 13=999(LC 13)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1053/679, 2-3=-905/674, 3-15=-898/764, 4-15=-765/768, 4-5=-295/176, 5-6=-162/189, 6-7=-160/187, 7-8=-299/176, 8-16=-763/765, 9-16=-900/760, 9-10=-902/669, 10-11=-1053/674
BOT CHORD 1-14=-360/700, 13-14=-360/700, 12-13=-360/700, 11-12=-360/700
WEBS 9-12=-240/524, 3-14=-243/526, 4-8=-607/749

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Tension (lb)/ Shear (lb)/ Moment (lb-in
4=607/749/138/5858, 5=252/181/157/0, 6=137/191/157/0, 7=254/178/158/0, 8=607/749/138/5815, 12=240/524/0/0, 13=360/700/500/0, 14=243/526/0/0

NOTES-

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) 1-1-0 to 4-1-0, Interior(1) 4-1-0 to 11-7-2, Exterior(2R) 11-7-2 to 17-7-2, Interior(1) 17-7-2 to 25-2-6, Exterior(2E) 25-2-6 to 28-2-6 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
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.

10/17/2019

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.

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	
98929	CCB34335	HINGED ATTIC	1	1	Commodore 315 NC R28C9F^ Ref. #10005457

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.
9) 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 669 lb uplift at joint 1, 672 lb uplift at joint 11 and 173 lb uplift at joint 13.
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: CCB34331
21) Revision: Updated Code

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David Barts

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Universal Forest Products®

Job	Truss	MFG	Customer
98929	CCB34335	315	COMMODORE

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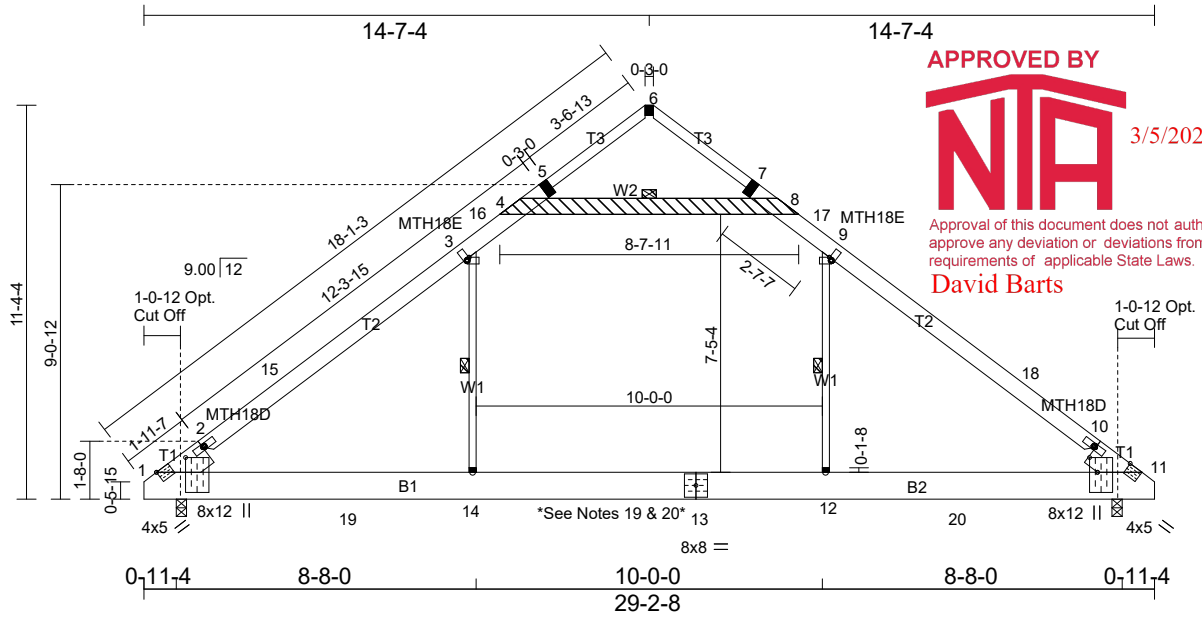
David Barts

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

Job	Truss	Truss Type	Qty	Ply	Commodore 315 NC (R274G9F^)
99333	CCB34513	HINGED ATTIC	1	1	27'4" w 9/12 transverse (IBC2018/2015)
					Ref. #10005792

Universal Forest Products Inc., Grand Rapids, MI 49525, Weston Gorby 8.220 e Aug 13 2018 MiTek Industries, Inc. Thu Nov 21 10:49:46 2019 Page 1 of 2



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David Barts

Plate Offsets (X,Y)-- [1:0-5-1,0-10-2], [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], [11:0-7-5,Edge], [11:0-5-1,0-2-11]

SPACING-: 2-0-0		**SPACING-:** 1-4-0		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
LOADING (psf)		**LOADING** (psf)		Plate Grip DOL	1.15	TC	0.87	Vert(LL)	0.45	12-14	>718	240	MT20	137/130
TCLL	23.1	TCLL	34.7	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.49	12-14	>666	180	MT18HS	137/130
(Ground Snow=30.0)		(Ground Snow=45.0)		Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.02	11	n/a	n/a		
TCDL	7.0	TCDL	10.5	Code	IBC2018/TPI2014	Matrix-R		Attic	-0.13	12-14	977	360	Weight: 212 lb	
BCLL	0.0 *	BCLL	0.0 *		IBC2015/TPI2014								FT = 0%	
BCDL	10.0	BCDL	15.0											

LUMBER-

TOP CHORD 1-1/2X9-1/4 LP-LSL TC 1.75E *Except* T2: 2x6 SP No.1, T3: 2x4 SP No.2 or 2x4 SPF No.2

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

WEBS 2x3 SP No.2 or 2x3 SPF Stud *Except* W2: 2x6 SP No.2 or 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.

BOT CHORD Rigid ceiling directly applied or 8-11-2 oc bracing.

WEBS 1 Row at midpt 9-12, 3-14, 4-8

REACTIONS. (lb/size) 1=1136/0-3-8 (min. 0-2-5), 11=1136/0-3-8 (min. 0-2-5)
Max Horz 1=-713(LC 7)
Max Uplift 1=-765(LC 9), 11=-767(LC 10)
Max Grav 1=1471(LC 3), 11=1472(LC 4)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-1612/961, 2-15=-1608/868, 3-15=-1497/882, 3-16=-1186/956, 4-16=-1163/964, 4-5=-293/176, 5-6=-162/189, 6-7=-160/187, 7-8=-297/176, 8-17=-1160/964, 9-17=-1187/956, 9-18=-1497/883, 10-18=-1608/868, 10-11=-1612/961

BOT CHORD 1-19=-460/1208, 14-19=-460/1208, 13-14=-459/1211, 12-13=-459/1211, 12-20=-458/1208, 11-20=-458/1208

WEBS 9-12=-338/681, 3-14=-338/681, 4-8=-1118/997

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Tension (lb)/ Shear (lb)/ Moment (lb-in
4=1118/997/36/0, 5=252/181/157/0, 6=137/191/157/0, 7=255/178/158/0, 8=1118/997/36/0, 12=338/681/0/0, 14=338/681/0/0

NOTES-

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 Corner(3E) 1-1-0 to 4-1-0, Exterior(2N) 4-1-0 to 11-6-11, Corner(3R) 11-6-11 to 17-6-11, Exterior(2N) 17-6-11 to 25-1-8, Corner(3E) 25-1-8 to 28-1-8 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

11/21/2019

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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.
9) 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, with BCDL = 10.0psf.
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. 12-14
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 765 lb uplift at joint 1 and 767 lb uplift at joint 11.
14) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
15) Attic room checked for L/360 deflection.
16) This truss is designed in accordance with the 2015 IBC Sec 2306.1 and referenced standard ANSI/TPI 1
17) 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.
18) 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.
19) Temporary supports are required to maintain the bottom chord in a level position during storage, transportation, and setup. Retain a design professional to specify all temporary bracing to support the truss until setup is complete. Temporary support(s) must not be removed until all field connections are completed.
20) The bottom chord must be laterally braced during shipment and setup to prevent damage to the splice plate.
21) Based on: CCB34502
22) Revision: IBC2018/2015 version

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3/5/2020

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David Barts

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Universal Forest Products®

Job	Truss	MFG	Customer
99333	CCB34513	315	COMMODORE

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David Barts

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

Job	Truss	Truss Type	Qty	Ply	Commodore 315 NC R14C9T^
98929	P1595207	KINGPOST	1	1	13'8" w 9/12 double hinge (165mph X-C)
					Ref. #10005457

Universal Forest Products Inc., Grand Rapids, MI 49525, Weston Gorby 8.220 e Aug 13 2018 MiTek Industries, Inc. Thu Oct 17 07:31:00 2019 Page 1 of 2

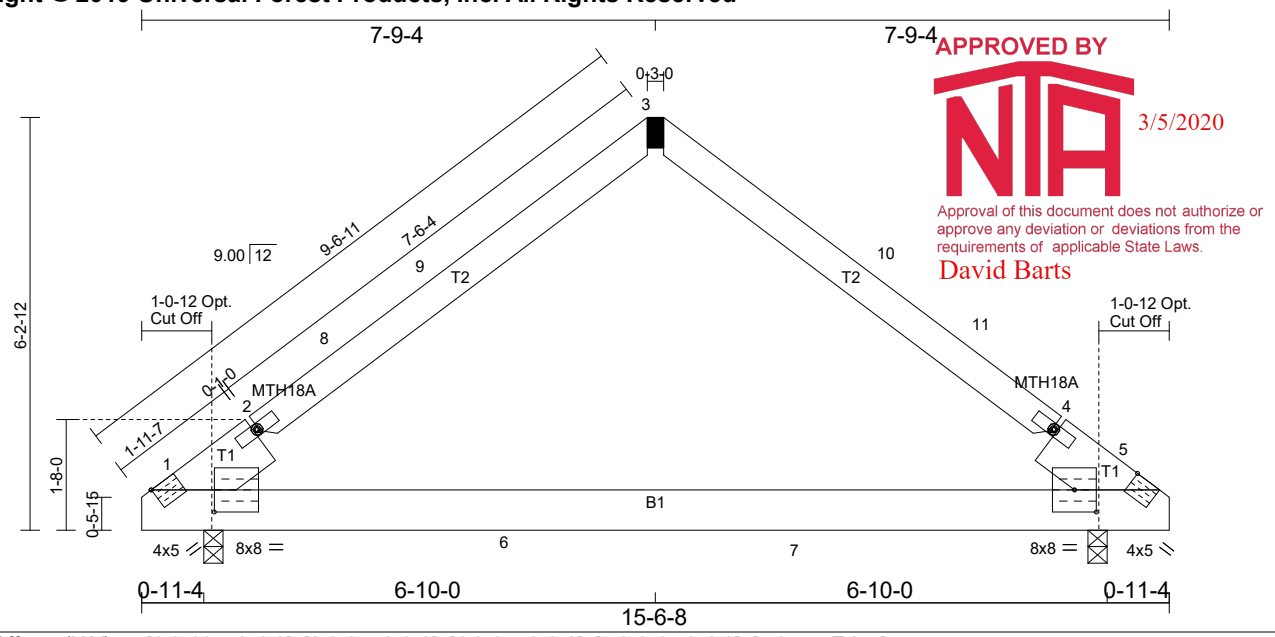

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Plate Offsets (X,Y)-- [1:0-11-7,0-4-0], [2:0-0-5,0-0-8], [4:0-0-5,0-0-8], [5:0-3-15,0-4-0], [5:0-7-5,Edge]

SPACING-: 2-0-0	**SPACING-:** 1-4-0	**SPACING-** 2-0-0	**CSI.**	**DEFL.** in (loc) l/defl L/d	**PLATES** **GRIP**
LOADING (psf)	**LOADING** (psf)	Plate Grip DOL 1.15	TC 0.57	Vert(LL) -0.33 1-5 >485 240	MT20 137/130
TCLL 23.1	TCLL 34.7	Lumber DOL 1.15	BC 0.86	Vert(CT) -0.57 1-5 >285 180	MT18HS 137/130
(Ground Snow=30.0)	(Ground Snow=45.0)	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 5 n/a n/a	
TCDL 10.0	TCDL 15.0	Code IBC2018/TPI2014	Matrix-R		Weight: 101 lb
BCLL 0.0 *	BCLL 0.0 *	IBC2015/TPI2014			FT = 0%
BCDL 10.0	BCDL 15.0				

LUMBER-

TOP CHORD 1-1/2X9-1/4 LP-LSL TC 1.75E *Except* T2: 2x6 SP No.2 or 2x6 SPF No.2

BOT CHORD 2x8 SP No.2 or 2x8 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

BOT CHORD Rigid ceiling directly applied or 4-8-6 oc bracing.

REACTIONS. (lb/size) 1=581/0-3-8 (min. 0-1-8), 5=581/0-3-8 (min. 0-1-8)
Max Horz 1=-375(LC 7)
Max Uplift 1=-371(LC 9), 5=-373(LC 10)
Max Grav 1=694(LC 3), 5=695(LC 4)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-589/416, 2-8=-448/365, 8-9=-351/372, 3-9=-345/383, 3-10=-343/382, 10-11=-349/370, 4-11=-445/363, 4-5=-590/416

BOT CHORD 1-6=-167/272, 6-7=-167/272, 5-7=-167/272

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Tension (lb)/ Shear (lb)/ Moment (lb-in)
3=283/387/311/0

NOTES-

1) Wind: ASCE 7-16; Vult=165mph (3-second gust) Vasd=130mph @24in o.c.; TCDL=4.0psf; BCDL=4.0psf; (Alt. 180mph @16in o.c.; TCDL=6.0psf; BCDL=6.0psf); h=30ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 1-0-5 to 4-0-5, Interior(1) 4-0-5 to 4-8-11, Exterior(2R) 4-8-11 to 10-8-11, Interior(1) 10-8-11 to 11-6-3, Exterior(2E) 11-6-3 to 14-6-3 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
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.

10/17/2019

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

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.
9) 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, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 371 lb uplift at joint 1 and 373 lb uplift at joint 5.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) This truss is designed in accordance with the 2015 IBC Sec 2306.1 and referenced standard ANSI/TPI 1
14) 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.
15) 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.
16) Based on: P1595202
17) Revision: Updated Code

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3/5/2020

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

David Barts

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.

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

Universal Forest Products®

Job	Truss	MFG	Customer
98929	P1595207	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.

APPROVED BY
NTA
3/5/2020

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David Barts

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/2019

NORTH CAROLINA			
MODULAR PLANS REVIEW CHECKLIST			
		PAGE 1 of 3	revised MAY 2011
Manufacturer		R-Anell Housing Group	
Model number/name		2R2007-R2	
3rd Party		NTA	
Review Date		3/4/10	
Reviewer		DAVID BAKER	
		Plan Sheet Page # and NOTES	
	QC MANUAL (current and complete)		
	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		
	Each plan sheet is numbered and/or indexed		
	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

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	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 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