

42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0

9'-5 1/4" 4'-11" 20'-11" 5'-4" 9'-10 1/2" 5'-6 1/4"

13'-2" 26'-4" 56'-0" 18'-6" 11'-6" 11'-7 3/4" 14'-4 1/4"

APPROVED BY
NH INC.
 FEDERAL MANUFACTURED HOME
 CONSTRUCTION AND SAFETY STANDARDS
 REVISED 6/21/2023

MODEL NAME: 5410
 PLANT: 957
 DRAWN BY: GDB
 DATE PRINTED: 06/20/2023
 SHEET NO.: 1-1

MASTER PLAN

INDICATOR	REVISIONS	DATE	BY	GENERAL NOTES	DRAWING TITLE	RETURN AIR REQUIREMENTS	INDICATES REQUIRED NUMBER OF STUDS IN COLUMN
1	WIND-1	DESIGN REV 210 P/LF	DESIGN REV 210 P/LF	DESIGN REV 210 P/LF	DESIGN REV 210 P/LF	DESIGN REV 210 P/LF	DESIGN REV 210 P/LF
2	WIND-2	DESIGN REV 420 P/LF	DESIGN REV 420 P/LF	DESIGN REV 420 P/LF	DESIGN REV 420 P/LF	DESIGN REV 420 P/LF	DESIGN REV 420 P/LF
3	WIND-3	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
4	WIND-4	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
5	WIND-5	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
6	WIND-6	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
7	WIND-7	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
8	WIND-8	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
9	WIND-9	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
10	WIND-10	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
11	WIND-11	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
12	WIND-12	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
13	WIND-13	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
14	WIND-14	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
15	WIND-15	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
16	WIND-16	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
17	WIND-17	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
18	WIND-18	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
19	WIND-19	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
20	WIND-20	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
21	WIND-21	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
22	WIND-22	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
23	WIND-23	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
24	WIND-24	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
25	WIND-25	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
26	WIND-26	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
27	WIND-27	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
28	WIND-28	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
29	WIND-29	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
30	WIND-30	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
31	WIND-31	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
32	WIND-32	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
33	WIND-33	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
34	WIND-34	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
35	WIND-35	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
36	WIND-36	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
37	WIND-37	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
38	WIND-38	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
39	WIND-39	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
40	WIND-40	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
41	WIND-41	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF
42	WIND-42	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF	DESIGN REV 430 P/LF

957-5410

BRAND: CLAYTON
 SERIES: HR28
 CEILING HEIGHT = 96'-00"
 REFER TO DRAFT PAGE MP-2.0 FOR AREA LIGHT & VENT
 REFER TO DRAFT PAGE EL-1.2 FOR ELEC. SYMBOL & BRANCH CIRCUIT NUMBER
 FLOOR FRAMING SPACING = 16"
 TOTAL WINDOW SQFT = 144

CMH Inc.
SHEARWALL DESIGN - HUD



Model # 5410
 Box Width = 158" Double wide
 Box Length = 56 ft. 99.5" 10" MIN. IBEAM
 No Skylights
 No Porches
 Joist Size = #2 spf 2x6 Lags 9Mx3"

Minimum Joist Spacing 16"
 No Offset Box
 No Clerestory
 No Origami Dormer
 No Sunken Floor
 No Parapet Roof

Version R13.20

Wind Zone 1 Standard Roof							96 inch sidewall
Diaphragm Construction:							(3/8" sheathing only with 16ga. @ 4/8 oc) [132 plf] Chords: 2x4 SPF #3 Top Plate & 2x4 Rail. Each spliced w/ 12" glue block.
Shearwall	Dist./ Hitch	Length	PLF	# of Joists	Lags	Notes	
A	0'	96"	210	2	2/1		
B	56'	96"	210	2	2/1		

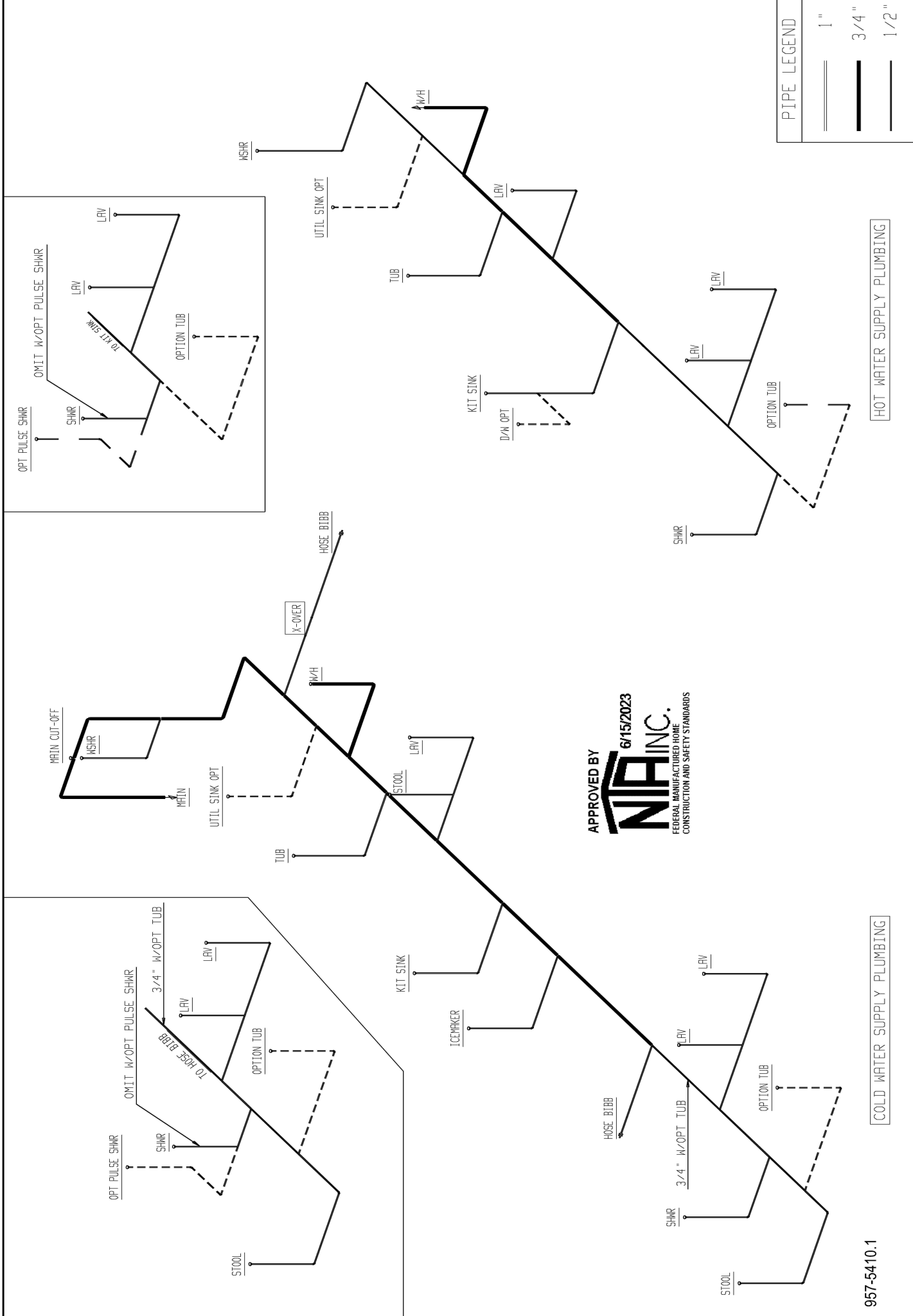
Wind Zone 2 Standard Roof							96 inch sidewall
Diaphragm Construction:							(3/8" sheathing w/ceiling with 16ga. @ 4/8 oc) [232 plf] Chords: 2x4 SPF #3 Top Plate & 2x4 Rail. Each spliced w/ 12" glue block.
Shearwall	Dist./ Hitch	Length	PLF	# of Joists	Lags	Notes	
A	0'	Full	420	2	4/4		
B	56'	Full	420	2	4/4		

Wind Zone 3 Standard Roof							96 inch sidewall
Diaphragm Construction:							(3/8" sheathing w/ceiling with 16ga. @ 4/8 oc) [232 plf] Chords: 2x4 SPF #3 Top Plate & 2x4 Rail. Each spliced w/ 12" glue block.
Shearwall	Dist./ Hitch	Length	PLF	# of Joists	Lags	Notes	
A	0'	Full	420	2	4/4		
B	56'	Full	420	2	4/4		

Diaphragm Construction:							(3/8" sheathing w/ceiling with 16ga. @ 4/8 oc) [232 plf] Chords: 2x4 SPF #3 Top Plate & 2x4 Rail. Each spliced w/ 12" glue block.
Shearwall	Dist./ Hitch	Length	PLF	# of Joists	Lags	Notes	

Designed by GDB

957-5410.0.2



APPROVED BY
NIA INC.
 6/15/2023
 FEDERAL MANUFACTURED HOME
 CONSTRUCTION AND SAFETY STANDARDS

PIPE LEGEND

1"
3/4"
1/2"

HOT WATER SUPPLY PLUMBING

COLD WATER SUPPLY PLUMBING

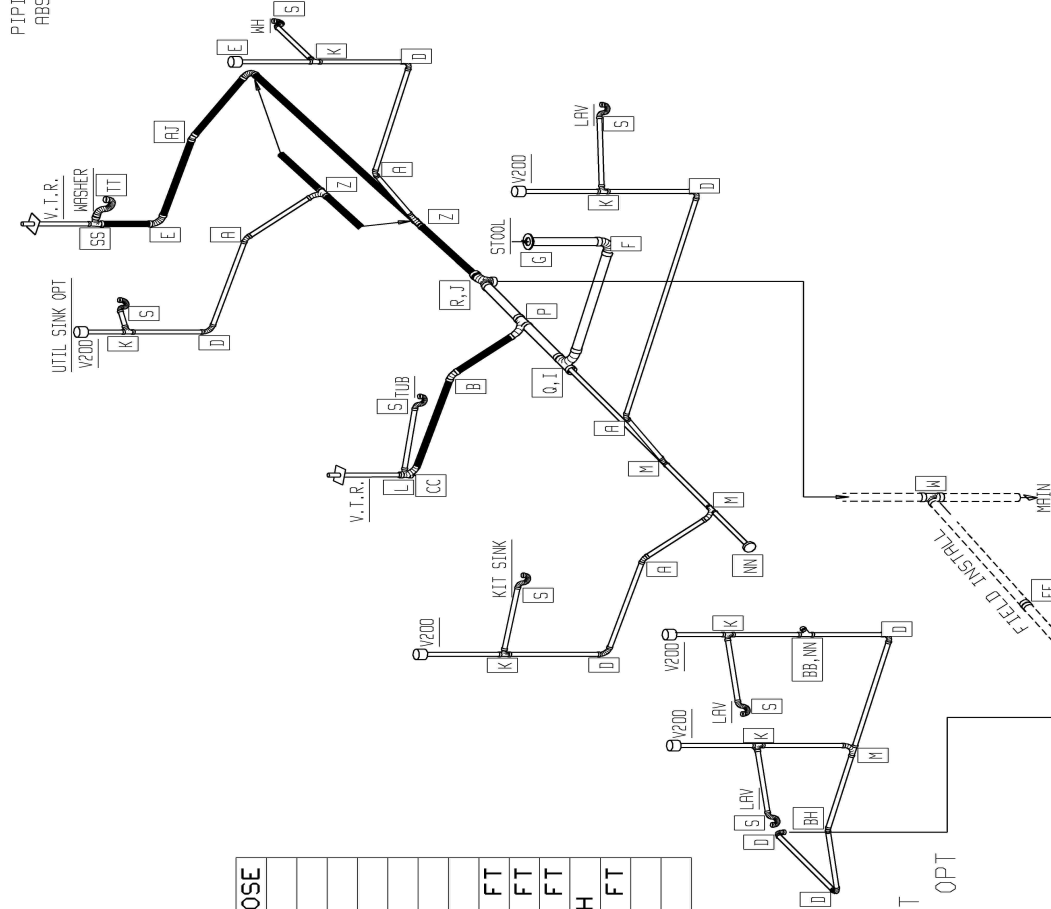
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BRAND CLAYTON	SERIES HR28	DRAWING TITLE SUPPLY PLUMBING		MODEL NAME 5410	SO. FT. 1474
		GENERAL NOTES HOSE BIBBS PER SPECS		PLANT 957	MODEL NO. 5410
CLAYTON HOME BUILDING GROUP		REVISIONS	DATE	DESCRIPTION	DATE PRINTED
				28X56 3BR-2BA	06/14/2023
				DRAWN BY GDB	SHEET NO. 9-1
				ORIG. DATE 05/09/2023	

PIPE LEGEND

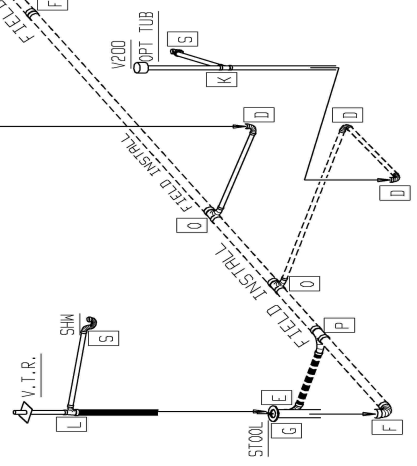
1 1/2"
2"
3"

PIPING AND FITTING MATERIAL TYPE TO BE:
 ABS (ACRYLONITRILE-BUTADIENE-STYRENE)
 OR PVC (POLYVINYL CHLORIDE)



STANDARD SHIP LOOSE	
D	1
E	1
F	1
FF	1
O	1
P	1
W	1
1.5" PIPE	4 FT
2" PIPE	5 FT
3" PIPE	40 FT
OPTIONAL TUB-PBH	
1.5" PIPE	11 FT
O	1
D	2

USE SAME LAYOUT
 WITH CERAMIC BATH OPT



LET	DESCRIPTION	LET	DESCRIPTION	LET	DESCRIPTION
C	3" x 45° 1/8" BEND	C	3" x 45° 1/8" BEND	D	1.5" x 1/2" LONG SWEEP 1/4" BEND
B	2" x 45° 1/8" BEND	B	2" x 45° 1/8" BEND	H	4" x 1/2" LONG SWEEP 1/4" BEND
F	3" x 30° ELBOW BUSHING	F	3" x 30° ELBOW BUSHING	L	2" x 1.5" x 1.5" COUPLING
J	3" x 30° ELBOW BUSHING	J	3" x 30° ELBOW BUSHING	P	2" x 1.5" x 1.5" COUPLING
N	2" x 1.5" x 1.5" LITTY	N	2" x 1.5" x 1.5" LITTY	T	3" x 3" x 1.5" DBL. SRN. TEE
O	3" x 1.5" x 1.5" LITTY	O	3" x 1.5" x 1.5" LITTY	X	3" x 3" x 1.5" DBL. SRN. TEE
S	3" x 1.5" x 1.5" LITTY	S	3" x 1.5" x 1.5" LITTY	Y	3" x 3" x 1.5" DBL. SRN. TEE
V	1.5" x 90° LONG SWEEP STREET	V	1.5" x 90° LONG SWEEP STREET	BB	1.5" x 45° W/PLUG
Z	2" x 45° W/PLUG	Z	2" x 45° W/PLUG	FF	3" COUPLING
AA	2" x 45° W/PLUG	AA	2" x 45° W/PLUG	JJ	2" x 1.5" x 1.5" LITTY
AB	2" x 45° W/PLUG	AB	2" x 45° W/PLUG	NN	1.5" C.O. W/PLUG
AC	2" x 45° W/PLUG	AC	2" x 45° W/PLUG	RR	1.5" x 1/4" BEND
AD	2" x 45° W/PLUG	AD	2" x 45° W/PLUG	VV	2" COUPLING
AE	2" x 45° W/PLUG	AE	2" x 45° W/PLUG	ZZ	4" COUPLING
AF	2" x 45° W/PLUG	AF	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AG	2" x 45° W/PLUG	AG	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AH	2" x 45° W/PLUG	AH	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AI	2" x 45° W/PLUG	AI	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AJ	2" x 45° W/PLUG	AJ	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AK	2" x 45° W/PLUG	AK	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AL	2" x 45° W/PLUG	AL	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AM	2" x 45° W/PLUG	AM	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AN	2" x 45° W/PLUG	AN	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AO	2" x 45° W/PLUG	AO	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AP	2" x 45° W/PLUG	AP	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AQ	2" x 45° W/PLUG	AQ	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AR	2" x 45° W/PLUG	AR	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AS	2" x 45° W/PLUG	AS	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AT	2" x 45° W/PLUG	AT	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AU	2" x 45° W/PLUG	AU	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AV	2" x 45° W/PLUG	AV	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AW	2" x 45° W/PLUG	AW	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AX	2" x 45° W/PLUG	AX	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AY	2" x 45° W/PLUG	AY	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
AZ	2" x 45° W/PLUG	AZ	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
BA	2" x 45° W/PLUG	BA	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
BB	2" x 45° W/PLUG	BB	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
BC	2" x 45° W/PLUG	BC	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
BD	2" x 45° W/PLUG	BD	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
BE	2" x 45° W/PLUG	BE	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
BF	2" x 45° W/PLUG	BF	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
BG	2" x 45° W/PLUG	BG	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
BH	2" x 45° W/PLUG	BH	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
BI	2" x 45° W/PLUG	BI	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
BJ	2" x 45° W/PLUG	BJ	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE
BK	2" x 45° W/PLUG	BK	2" x 45° W/PLUG	RR	3" x 3" x 1.5" DBL. SRN. TEE

BRAND	CLAYTON	SERIES	HR28	MODEL NAME	5410	SO. FT.	1474
DRAWING TITLE				DESCRIPTION	28X56 3BR-2BA	MODEL NO.	5410
GENERAL NOTES				PLANT	957	DATE PRINTED	06/20/2023
REVISIONS				DATE	05/09/2023	SHEET NO.	8-1
DWY SCHEMATIC				DATE	05/09/2023	SHEET NO.	8-1
CLAYTON HOME BUILDING GROUP				DATE	05/09/2023	SHEET NO.	8-1

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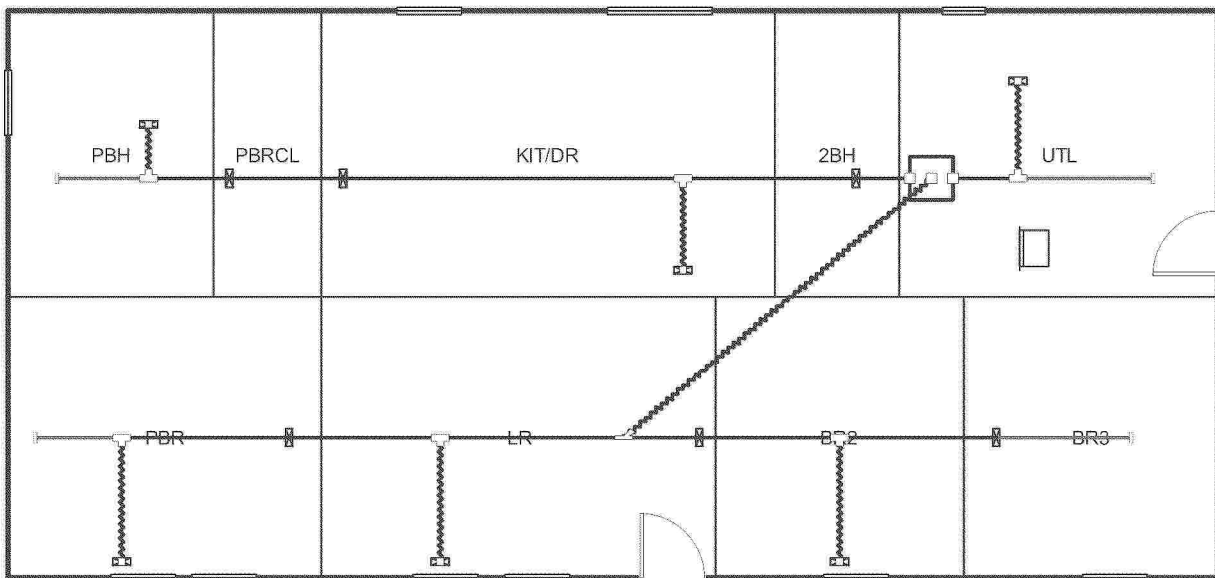
APPROVED BY

NIA INC.

6/15/2023

FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

Level 1



957-5410.4.1

Job #: 5410(I)
Performed by CLAYTON ROCKWELL for:
5410(I)
ROCKWELL, NC

Scale: 1 : 100
Page 1
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Project Summary
Entire House



Job: 5410(I)
Date: June 13, 2023
By: CLAYTON ROCKWELL

Project Information

For: 5410(I), CLAYTON 957
ROCKWELL, NC

Notes: DUCT COOLING CAPACITY = 26,000 BTU/HR

Design Information

Weather: Fort Bragg/Simmons, NC, US

Winter Design Conditions

Outside db 26 °F
Inside db 70 °F
Design TD 44 °F

Summer Design Conditions

Outside db 95 °F
Inside db 75 °F
Design TD 20 °F
Daily range M
Relative humidity 50 %
Moisture difference 41 gr/lb

Heating Summary

Structure 15294 Btuh
Ducts 0 Btuh
Central vent (90 cfm) **4338** Btuh
Outside air
Humidification 0 Btuh
Piping 0 Btuh
Equipment load 19632 Btuh

Sensible Cooling Equipment Load Sizing

Structure 12209 Btuh
Ducts 0 Btuh
Central vent (90 cfm) **1933** Btuh
Outside air
Blower 0 Btuh
Use manufacturer's data n
Rate/swing multiplier 1.00
Equipment sensible load 14100 Btuh

Infiltration

Method Simplified
Construction quality Average
Fireplaces 0

Latent Cooling Equipment Load Sizing

Structure 2035 Btuh
Ducts 0 Btuh
Central vent (90 cfm) **2465** Btuh
Outside air
Equipment latent load 4500 Btuh

	Heating	Cooling
Area (ft ²)	1470	1470
Volume (ft ³)	11760	11760
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	88	45

Equipment Total Load (Sen+Lat) 18600 Btuh
Req. total capacity at 0.70 SHR 1.7 ton

Heating Equipment Summary

Make Smart Comfort
Trade
Model
AHRI ref
Efficiency 100 EFF
Heating input 10.0 kW
Heating output 34121 Btuh
Temperature rise 40 °F
Actual air flow 780 cfm
Air flow factor 0.051 cfm/Btuh
Static pressure 0.30 in H2O
Space thermostat

Cooling Equipment Summary

Make Smart Comfort
Trade 15 SEER2 AC
Cond R4A5S24*K*WAA*
Coil FEVA0024**+NAVA43601CK
AHRI ref 0
Efficiency 13.0 EER2, 15.5 SEER2
Sensible cooling 16380 Btuh
Latent cooling 7020 Btuh
Total cooling 23400 Btuh
Actual air flow 780 cfm
Air flow factor 0.064 cfm/Btuh
Static pressure 0.30 in H2O
Load sensible heat ratio 0.76

Bold/italic values have been manually overridden

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



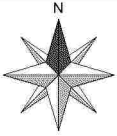
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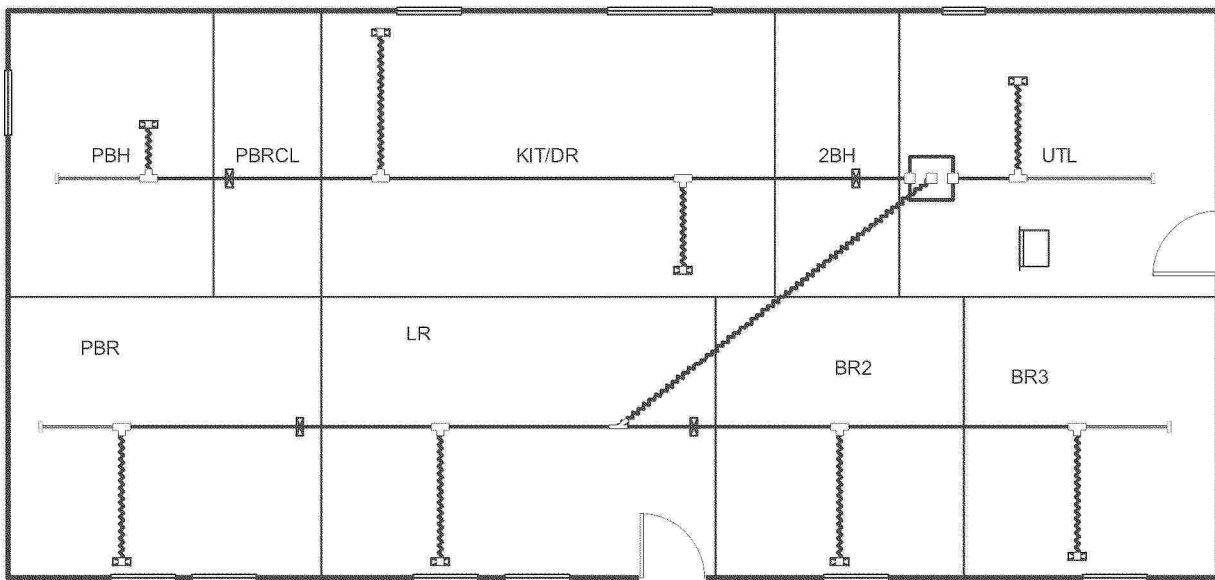
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Page 1



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NIA INC. 6/15/2023
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

Level 1



957-5410.4.3

Job #: 5410(P)
Performed by CLAYTON ROCKWELL for:
5410(P)
ROCKWELL, NC

Scale: 1 : 100
Page 1
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Project Summary
Entire House

Job: 5410(P)
Date: June 13, 2023
By: CLAYTON ROCKWELL

Project Information

For: 5410(P), CLAYTON 957
ROCKWELL, NC

Notes: DUCT COOLING CAPACITY = 26,000 BTU/HR

Design Information

Weather: Fort Bragg/Simmons, NC, US

Winter Design Conditions

Outside db 26 °F
Inside db 70 °F
Design TD 44 °F

Summer Design Conditions

Outside db 95 °F
Inside db 75 °F
Design TD 20 °F
Daily range M
Relative humidity 50 %
Moisture difference 41 gr/lb

Heating Summary

Structure 15294 Btuh
Ducts 0 Btuh
Central vent (90 cfm) **4338** Btuh
Outside air
Humidification 0 Btuh
Piping 0 Btuh
Equipment load 19632 Btuh

Sensible Cooling Equipment Load Sizing

Structure 12209 Btuh
Ducts 0 Btuh
Central vent (90 cfm) **1933** Btuh
Outside air
Blower 0 Btuh
Use manufacturer's data n
Rate/swing multiplier 1.00
Equipment sensible load 14100 Btuh

Infiltration

Method Simplified
Construction quality Average
Fireplaces 0

	Heating	Cooling
Area (ft ²)	1470	1470
Volume (ft ³)	11760	11760
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	88	45

Latent Cooling Equipment Load Sizing

Structure 2035 Btuh
Ducts 0 Btuh
Central vent (90 cfm) **2465** Btuh
Outside air
Equipment latent load 4500 Btuh
Equipment Total Load (Sen+Lat) 18600 Btuh
Req. total capacity at 0.70 SHR 1.7 ton

Heating Equipment Summary

Make Smart Comfort
Trade
Model
AHRI ref
Efficiency 100 EFF
Heating input 10.0 kW
Heating output 34121 Btuh
Temperature rise 40 °F
Actual air flow 780 cfm
Air flow factor 0.051 cfm/Btuh
Static pressure 0.30 in H2O
Space thermostat

Cooling Equipment Summary

Make Smart Comfort
Trade 15 SEER2 AC
Cond R4A5S24*K*WAA*
Coil FEVA0024**+NAVA43601CK
AHRI ref 0
Efficiency 13.0 EER2, 15.5 SEER2
Sensible cooling 16380 Btuh
Latent cooling 7020 Btuh
Total cooling 23400 Btuh
Actual air flow 780 cfm
Air flow factor 0.064 cfm/Btuh
Static pressure 0.30 in H2O
Load sensible heat ratio 0.76

Bold/italic values have been manually overridden

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

