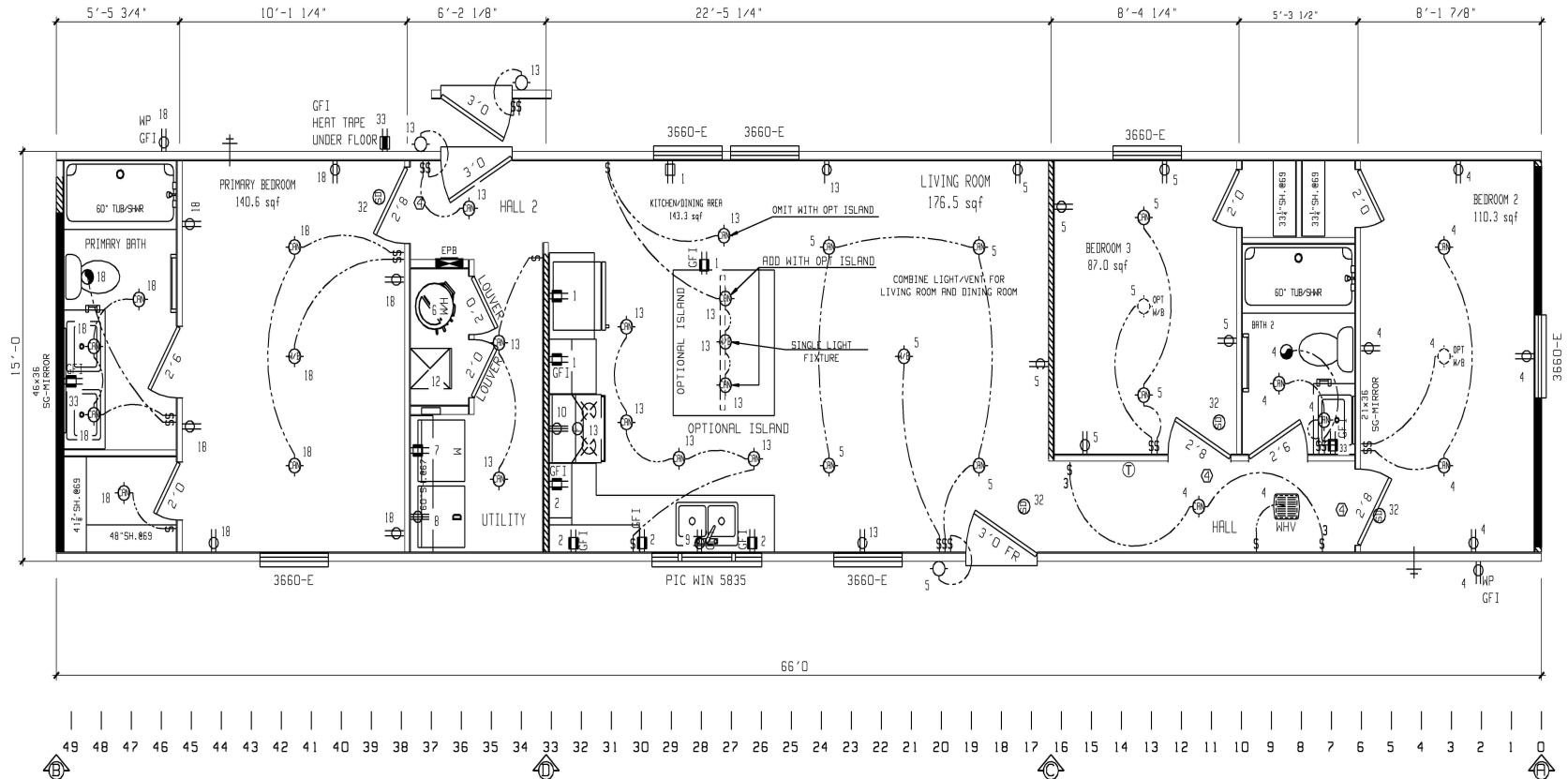
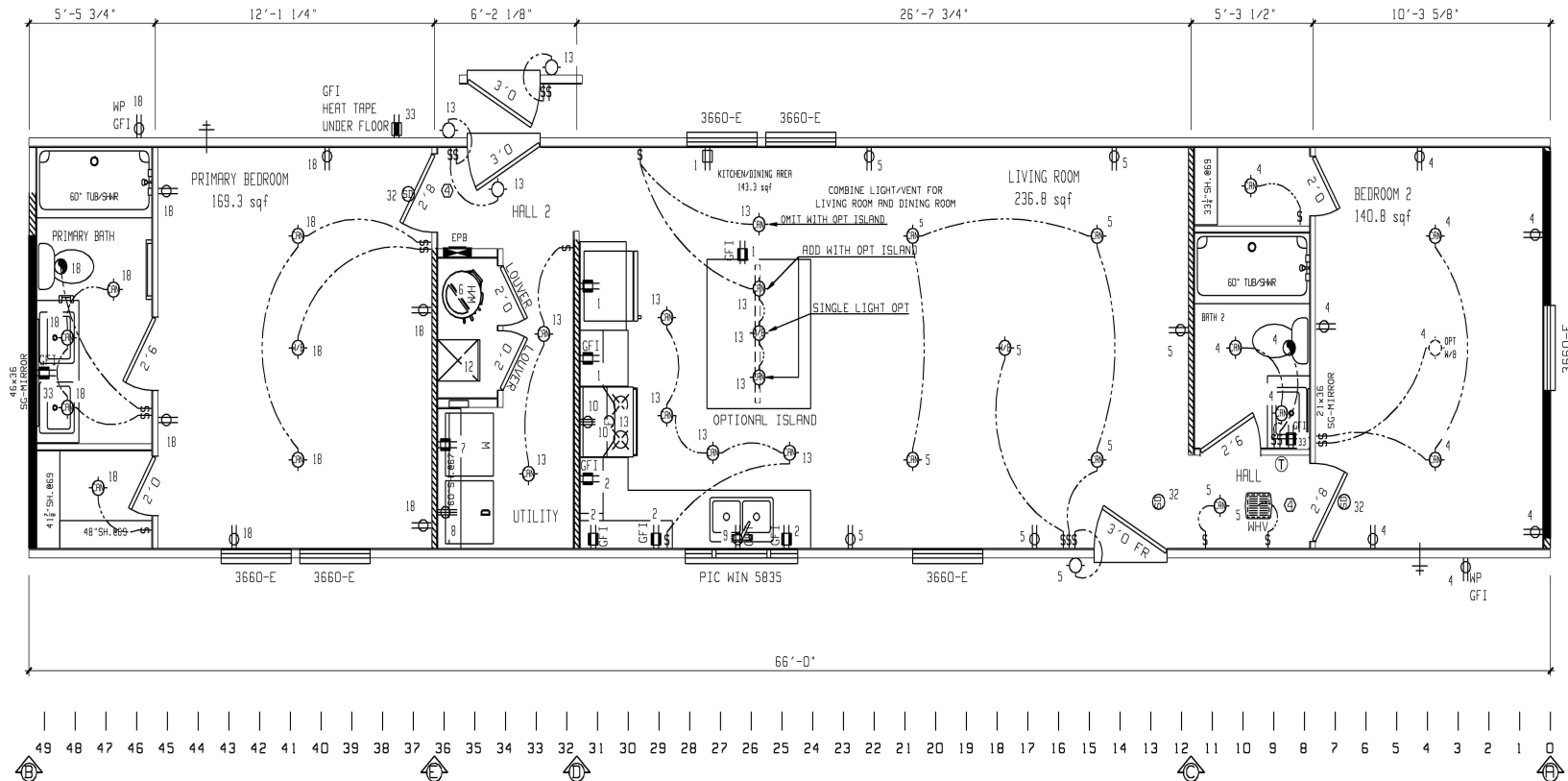




957-4202.0

WIND-1		DIAPHRAGM = 132 PLF		WIND-2		DIAPHRAGM = 232 PLF		WIND-3		DIAPHRAGM = 232 PLF		SHEARWALL		DIAPHRAGM = 132 PLF		WIND-3 (2BR OPT)		DIAPHRAGM = 232 PLF		SHEARWALL		DIAPHRAGM = 132 PLF		DESIGN LOADS			
SHEARWALL	DESIGN PLF	SHEAR AREA	JOISTS	SHEARWALL	DESIGN PLF	SHEAR AREA	JOISTS	SHEARWALL	DESIGN PLF	SHEAR AREA	JOISTS	SHEARWALL	DESIGN PLF	SHEAR AREA	JOISTS	SHEARWALL	DESIGN PLF	SHEAR AREA	JOISTS	SHEARWALL	DESIGN PLF	SHEAR AREA	JOISTS	WIND-ROOF PSF			
A	210 PLF	120"	2	A	210 PLF	120"	2	A	210 PLF	120"	2	A	210 PLF	120"	2	A	210 PLF	120"	2	A	210 PLF	120"	2	1-20			
B	210 PLF	116"	2	B	210 PLF	112"	2	B	210 PLF	112"	2	B	210 PLF	112"	2	B	210 PLF	112"	2	B	210 PLF	112"	2	2-20			
C				C	350 PLF	120"	3	C	420 PLF	120"	3	C	420 PLF	120"	3	C	420 PLF	120"	3	C	420 PLF	120"	3	3-20			
D				D	350 PLF	120"	3	D	420 PLF	120"	3	D	420 PLF	120"	3	D	350 PLF	120"	3	D	350 PLF	120"	3				
E				E				E				E				E	210 PLF	128"	2	E							
F				F				F				F				F				F							
G				G				G				G				G				G							
BRAND		SERIES				REVIS IONS				BY		DATE		GENERAL NOTES				DRAWING TITLE				MODEL NAME				SQ. FT.	
SCHULT		BM16												CEILING HEIGHT = 96.00				MASTER PLAN				4202				990	
														REFER TO DRPIA PAGE MMP-2.0 FOR AREA LIGHT & VENT													
														REFER TO DRPIA PAGE EL-1.2 FOR ELEC. SYMBOL & BRANCH CIRCUIT NUMBER													
														FLOOR FRAMING SPACING = 16													
														TOTAL WINDOW SQT = 107													
CLAYTON HOME BUILDING GROUP																											

OPTIONAL 2 BEDROOM LAYOUT



957-4202.0.1

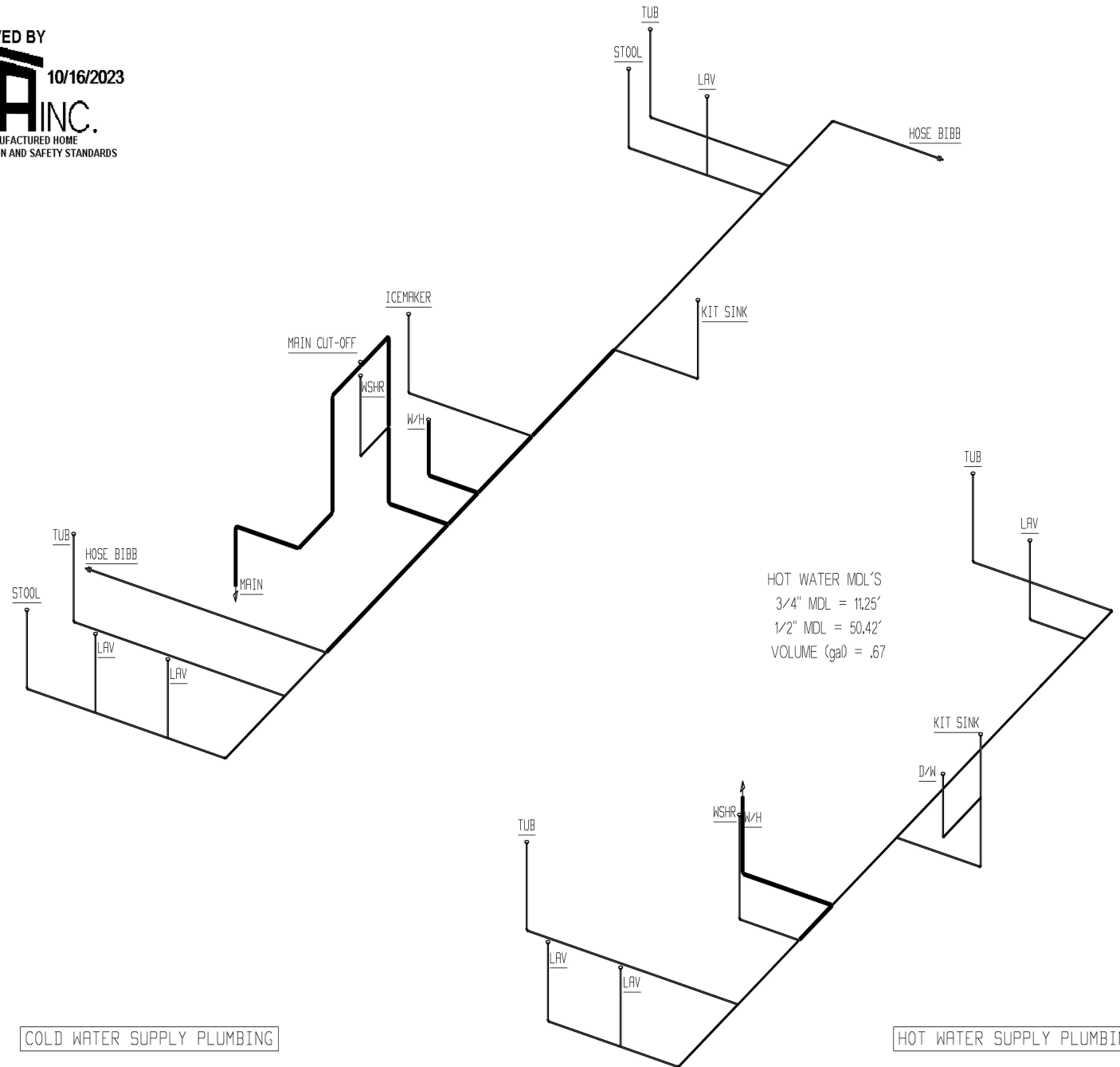
WIND-1		DIAPHRAGM = 132 PLF		WIND-2		DIAPHRAGM = 232 PLF		WIND-3		DIAPHRAGM = 232 PLF		WIND-4 (OPT 2BR)		DIAPHRAGM = 232 PLF		WIND-5 (2BR OPT)		DIAPHRAGM = 232 PLF		WIND-6		DIAPHRAGM = PLF		DESIGN LOADS					
SHEARWALL	DESIGN PLF	SHEAR AREA	JOISTS	SHEARWALL	DESIGN PLF	SHEAR AREA	JOISTS	SHEARWALL	DESIGN PLF	SHEAR AREA	JOISTS	SHEARWALL	DESIGN PLF	SHEAR AREA	JOISTS	SHEARWALL	DESIGN PLF	SHEAR AREA	JOISTS	SHEARWALL	DESIGN PLF	SHEAR AREA	JOISTS	WIND-ROOF PSF					
A	210 PLF	120"	2	A	210 PLF	120"	2	A	210 PLF	120"	2	A	210 PLF	120"	2	A	210 PLF	120"	2	A	210 PLF	120"	2	1-20					
B	210 PLF	116"	2	B	210 PLF	112"	2	B	210 PLF	120"	2	B	210 PLF	112"	2	B	210 PLF	112"	2	B	210 PLF	112"	2	2-20					
C				C	350 PLF	120"	3	C	420 PLF	120"	3	C	350 PLF	120"	3	C	420 PLF	120"	3	C	420 PLF	120"	3	3-20					
D				D	350 PLF	120"	3	D	420 PLF	120"	3	D	420 PLF	120"	3	D	350 PLF	120"	3	D	350 PLF	120"	3						
E				E				E				E				E	210 PLF	128"	2	E									
F				F				F				F				F				F									
G				G				G				G				G				G									
BRAND		SERIES				REVIS IONS				BY		DATE		GENERAL NOTES				DRAWING TITLE				MODEL NAME				SQ. FT.			
SCHULT		BM16												CEILING HEIGHT = 96.00 REFER TO DRPIA PAGE MMP-2.0 FOR AREA LIGHT & VENT REFER TO DRPIA PAGE EL-1.2 FOR ELEC. SYMBOL & BRANCH CIRCUIT NUMBER TOTAL WINDOW SOFT = 128.25				MASTER PLAN #2				4202				990			
CLAYTON HOME BUILDING GROUP																						PLANT		DESCRIPTION		MODEL NO.			
																						957		16X66 3BR-2BR		4202			
																						DRAWN BY		ORIG. DATE		DATE PRINTED		SHEET NO.	
																						GDB		06/06/2023		10/13/2023		1-2	

APPROVED BY
NTA 10/16/2023
INC.
 FEDERAL MANUFACTURED HOME
 CONSTRUCTION AND SAFETY STANDARDS

Box Width =	180 "	Single wide	No Offset Box
Box Length =	66 ft.	99.5" 10" MIN.IBEAM	No Clerestory
No Skylights			No Origami Dormer
No Porches			No Sunken Floor
Joist Size =	#2 spf 2x6	Lags 9Mx3"	No Parapet Roof

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4202.xlsm



PIPE LEGEND	
	1"
	3/4"
	1/2"

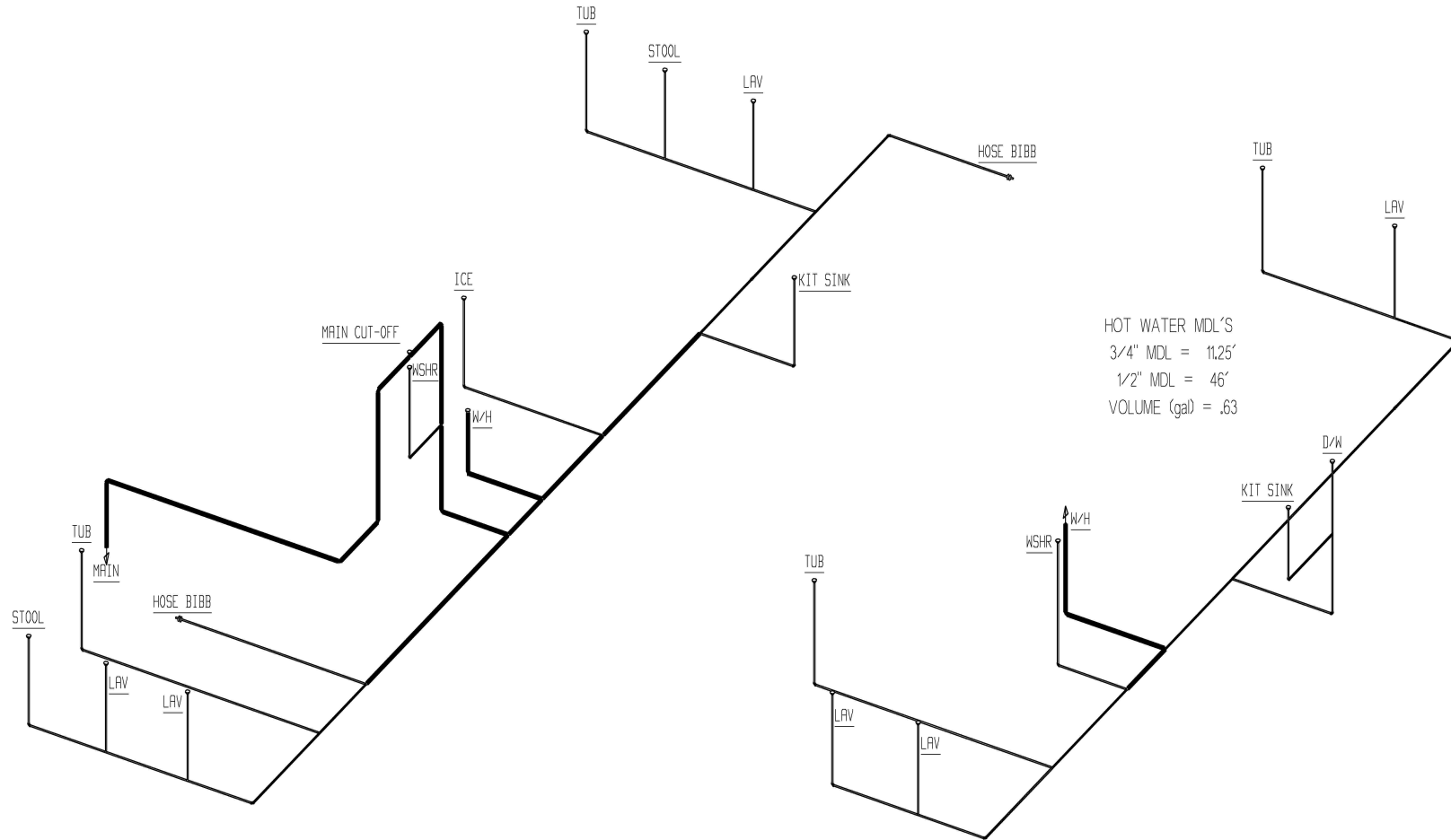
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COLD WATER SUPPLY PLUMBING

HOT WATER SUPPLY PLUMBING

BRAND SCHULT		SERIES BM16		REVISIONS		BY	DATE	GENERAL NOTES		DRAWING TITLE		MODEL NAME		SQ. FT.					
CLAYTON HOME BUILDING GROUP								HOSE BIBBS PER SPECS		SUPPLY PLUMBING		4202		990					
												PLANT 957		DESCRIPTION 16X66 3BR-2BA		MODEL NO. 4202			
												DRAWN BY GDB		ORIG. DATE 06/06/2023		DATE PRINTED 10/11/2023		SHEET NO. 9-1	

BUILD WITH 2BR OPTION



PIPE LEGEND	
	1"
	3/4"
	1/2"

957-4202.1.1

COLD WATER SUPPLY PLUMBING

HOT WATER SUPPLY PLUMBING

BRAND SCHULT	SERIES BM16	REVISIONS		BY	DATE	GENERAL NOTES HOSE BIBBS PER SPECS	DRAWING TITLE SUPPLY #2	MODEL NAME 4202		SO. FT. 990
								PLANT 957	DESCRIPTION 16X66 3BR-2BA	MODEL NO. 4202
								DRAWN BY GDB	ORIG. DATE 06/06/2023	DATE PRINTED 10/11/2023
										SHEET NO. 9-2

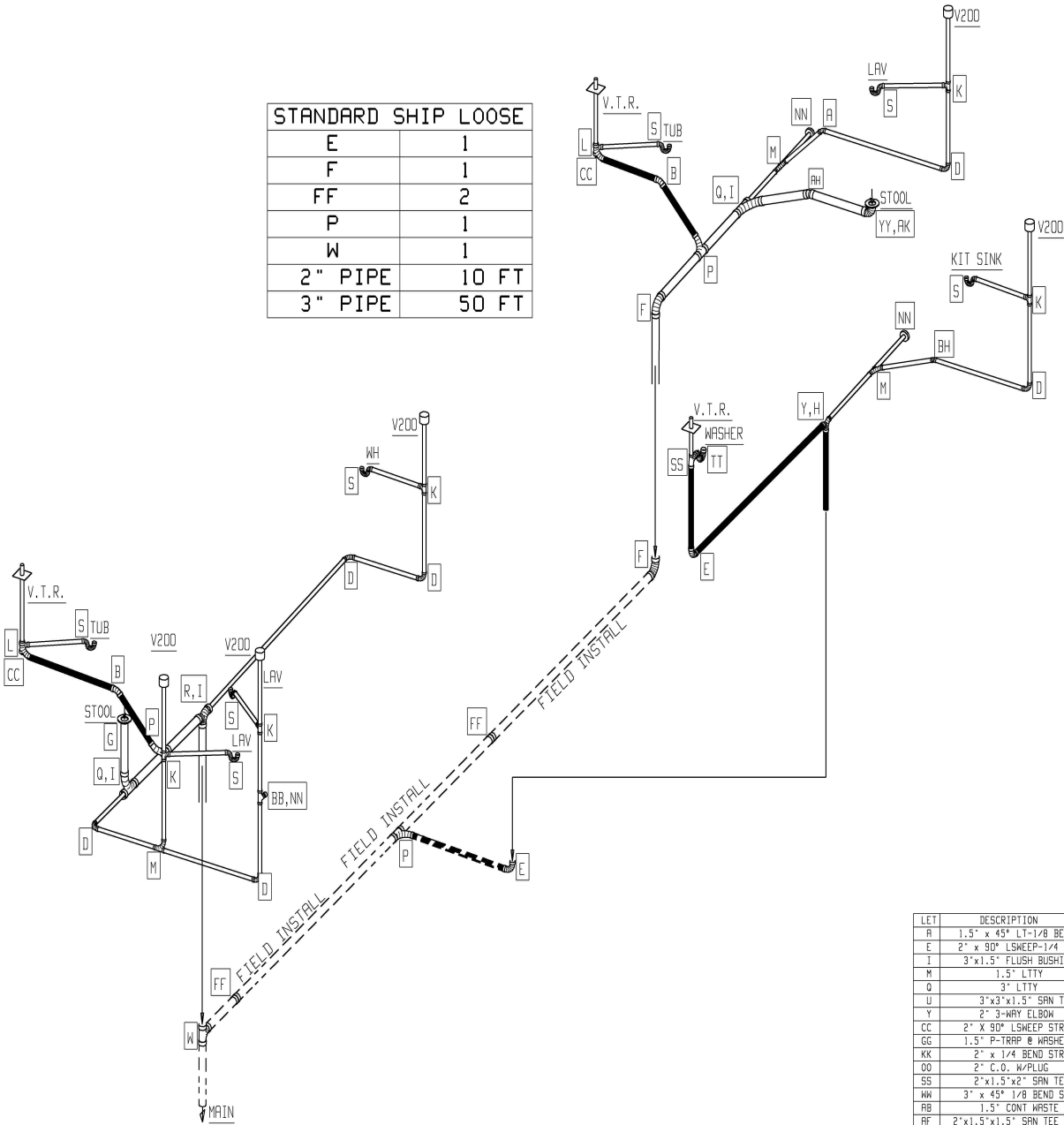
CLAYTON HOME BUILDING GROUP

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

PIPE LEGEND

===== 1 1/2"
===== 2"
===== 3"

STANDARD SHIP LOOSE	
E	1
F	1
FF	2
P	1
W	1
2" PIPE	10 FT
3" PIPE	50 FT



APPROVED BY
NIA INC.
10/16/2023
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

LET	DESCRIPTION	LET	DESCRIPTION	LET	DESCRIPTION	LET	DESCRIPTION
A	1.5" x 45° LT-1/8 BEND	B	2" x 45° LT-1/8 BEND	C	3" x 45° LT-1/8 BEND	D	1.5" x 90° LONG SWEEP-1/4 BEND
E	2" x 90° LSWEET-1/4 BEND	F	3" x 90° LSWEET-1/4 BEND	G	4"x3" CLOSET FLANGE	H	2"x1.5" FLUSH BUSHING
I	3"x1.5" FLUSH BUSHING	J	3"x2" FLUSH BUSHING	K	1.5" SANITARY TEE	L	2"x1.5"x1.5" SAN TEE
M	1.5" LT TY	N	2" LT TY	O	3"x3"x1.5" LT TY	P	3"x3"x2" LT TY
Q	3" LT TY	R	3" 3-WAY ELBOW	S	1.5"x1.5" P-TRAP	T	3"x3"x1.5"x1.5" DBL SAN TEE
U	3"x3"x1.5" SAN TEE	V	1.5" x 90° LONG SWEEP STREET	W	3" SANITARY TEE	X	3"x3"x1.5" WYE
Y	2" 3-WAY ELBOW	Z	2"x2"x1.5" LT TY	AA	3"x3"x2" SAN TEE	BB	1.5" x 45° WYE
CC	2" x 90° LSWEET STREET	DD	1.5" x 45° 1/8 BEND STREET	EE	1.5" COUPLING	FF	3" COUPLING
GG	1.5" P-TRAP @ WASHER	HH	1.5" SAN TEE STREET	II	2"x1.5"x1.5" LT TY	JJ	2"x1.5"x2" LT TY
KK	2" x 1/4 BEND STREET	LL	2" x 45° WYE	MM	3" DBL SAN TEE	NN	1.5" C.O. W/PLUG
OO	2" C.O. W/PLUG	PP	3" C.O. W/PLUG	QQ	2"x2"x1.5" WYE REDUCING	RR	1.5" 1/4 BEND
SS	2"x1.5"x2" SAN TEE	TT	2" P-TRAP	UU	2" x 45° 1/8 BEND STREET	VV	2" COUPLING
WH	3" x 45° 1/8 BEND STREET	XX	2" SANITARY TEE	YY	4" CLOSET FLANGE	ZZ	4" COUPLING
AB	1.5" CONT WASTE	AC	1.5" x 22 1/2° ELBOW STREET	AD	2" x 22 1/2° ELBOW STREET	AE	3"x3"x2"x2" DBL SAN TEE
AF	2"x1.5"x1.5" SAN TEE STREET	AG	2"x1.5"x1.5" 3-WAY ELBOW	AH	3" x 22 1/2° 1/16 BEND ELBOW	AI	1.5" 3-WAY ELBOW
AJ	2" x 22 1/2° 1/16 BEND ELBOW	AK	4"x3" CLOSET BEND STR (CUT DOWN 1.5")	AL	3"x3"x3" WYE	AM	3" 1/4 BEND
AN	2"x3" PIPE INCREASER	AO	3" X 3" X 2" WYE	AP	2" 1/4 BEND	AQ	2"x2"x2"x2" DBL SAN TEE
AR	1.5"x3" PIPE INCREASER	AS	1.5"x1.5"x1.5"x1.5" DBL SAN TEE	AT	3" DOUBLE FIXTURE TEE	AU	2"x2"x1.5"x1.5" DBL SAN TEE
AV	3"x3"x2"x2" SAN TEE (SI) LEFT	AW	3"x3"x3"x1.5" SAN TEE (SI) LEFT	AX	3"x3"x3"x2" SAN TEE (SI) LEFT	AY	3"x3"x2"x2" SAN TEE (SI) RIGHT
AZ	3"x3"x3"x1.5" SAN TEE (SI) RIGHT	BA	3"x3"x3"x2" SAN TEE (SI) RIGHT	BC	3"x3"x3"x2" SAN TEE DBL(SI)	BD	3"x3"x1.5"x1.5" SAN T DBL(SI)
BE	1.5"x2" PIPE INCREASER	BF	3"x3"x1.5" 90° LSWEET LOW HEEL INLET	BG	3"x3"x2" 90° LSWEET LOW HEEL INLET	BH	1.5" x 22 1/2° 1/16 BEND ELBOW
BI	4"x3" CLOSET BEND STREET	BJ		BK		BL	

957-4202.2

BRAND		SERIES		REVISIONS		BY	DATE	GENERAL NOTES		DRAWING TITLE		MODEL NAME		SO. FT.			
SCHULT		BM16								DWV SCHEMATIC		4202		990			
CLAYTON HOME BUILDING GROUP												PLANT		DESCRIPTION		MODEL NO.	
										957		16X66 3BR-2BA		4202			
										DRAWN BY		ORIG. DATE		DATE PRINTED		SHEET NO.	
										GDB		06/06/2023		10/11/2023		8-1	

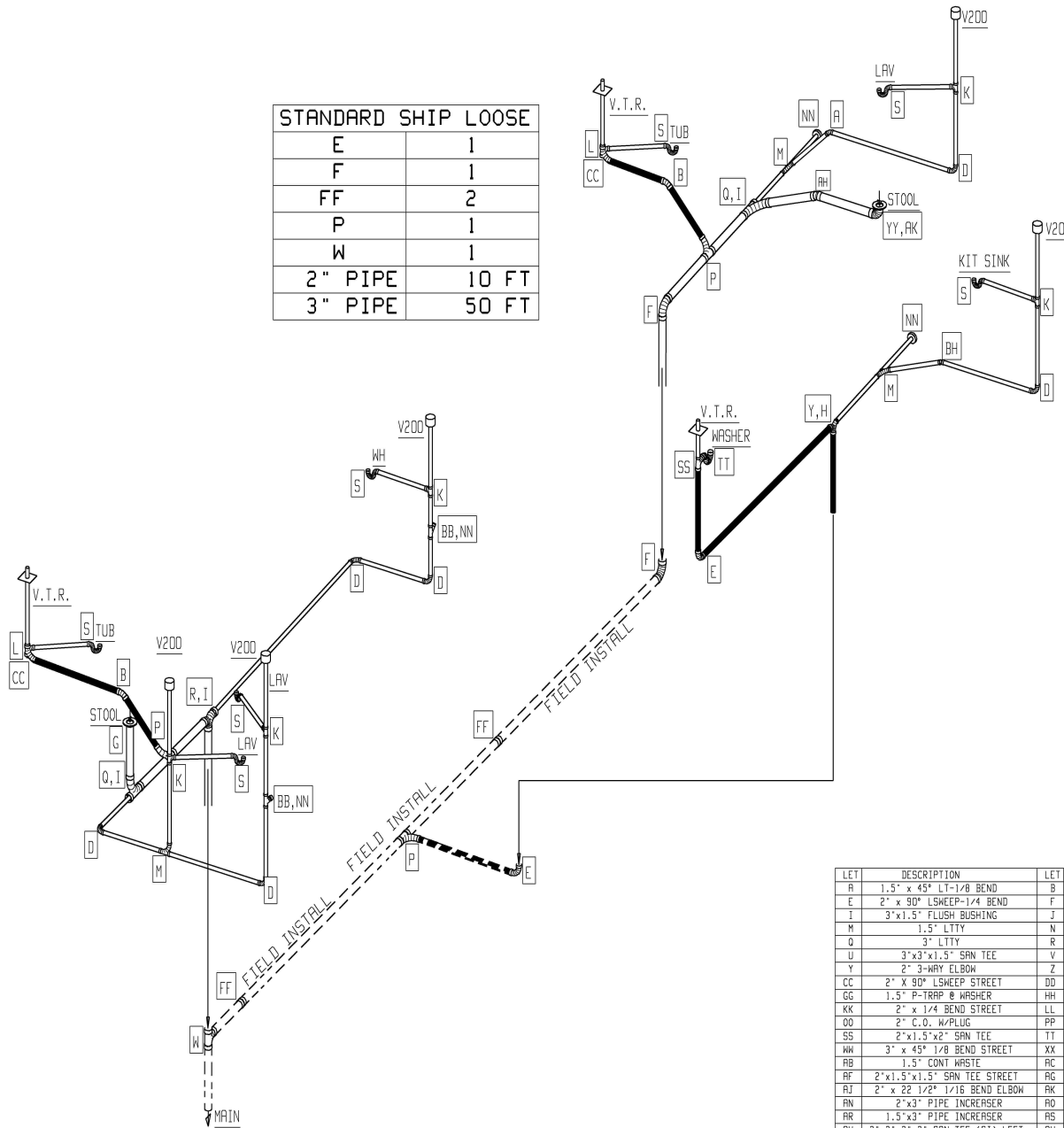
OPTIONAL 2 BEDROOM LAYOUT

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

PIPE LEGEND

=====	1 1/2"
=====	2"
=====	3"

STANDARD SHIP LOOSE	
E	1
F	1
FF	2
P	1
W	1
2" PIPE	10 FT
3" PIPE	50 FT



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CONSTRUCTION AND SAFETY STANDARDS

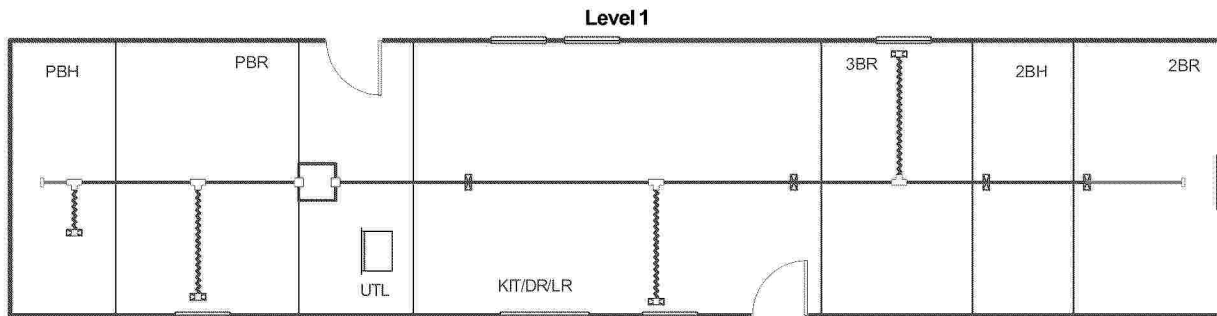
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LET	DESCRIPTION	LET	DESCRIPTION	LET	DESCRIPTION	LET	DESCRIPTION
A	1.5" x 45° LT-1/8 BEND	B	2" x 45° LT-1/8 BEND	C	3" x 45° LT-1/8 BEND	D	1.5" x 90° LONG SWEEP-1/4 BEND
E	2" x 90° LSWEET-1/4 BEND	F	3" x 90° LSWEET-1/4 BEND	G	4" x 3" CLOSET FLANGE	H	2" x 1.5" FLUSH BUSHING
I	3" x 1.5" FLUSH BUSHING	J	3" x 2" FLUSH BUSHING	K	1.5" SANITARY TEE	L	2" x 1.5" x 1.5" SAN TEE
M	1.5" LT-1/8	N	2" LT-1/8	O	3" x 3" x 1.5" LT-1/8	P	3" x 3" x 2" LT-1/8
Q	3" LT-1/8	R	3" 3-WAY ELBOW	S	1.5" x 1.5" P-TRAP	T	3" x 3" x 1.5" x 1.5" DBL SAN TEE
U	3" x 3" x 1.5" SAN TEE	V	1.5" x 90° LONG SWEEP STREET	W	3" SANITARY TEE	X	3" x 3" x 1.5" WYE
Y	2" 3-WAY ELBOW	Z	2" x 2" x 1.5" LT-1/8	AA	3" x 3" x 2" SAN TEE	BB	1.5" x 45° WYE
CC	2" x 90° LSWEET STREET	DD	1.5" x 45° 1/8 BEND STREET	EE	1.5" COUPLING	FF	3" COUPLING
GG	1.5" P-TRAP @ WASHER	HH	1.5" SAN TEE STREET	II	2" x 1.5" x 1.5" LT-1/8	JJ	2" x 1.5" x 2" LT-1/8
KK	2" x 1/4 BEND STREET	LL	2" x 45° WYE	MM	3" DBL SAN TEE	NN	1.5" C.O. W/PLUG
OO	2" C.O. W/PLUG	PP	3" C.O. W/PLUG	QQ	2" x 2" x 1.5" WYE REDUCING	RR	1.5" 1/4 BEND
SS	2" x 1.5" x 2" SAN TEE	TT	2" P-TRAP	UU	2" x 45° 1/8 BEND STREET	VV	2" COUPLING
WH	3" x 45° 1/8 BEND STREET	XX	2" SANITARY TEE	YY	4" CLOSET FLANGE	ZZ	4" COUPLING
AB	1.5" CONT WASTE	AC	1.5" x 22 1/2" ELBOW STREET	AD	2" x 22 1/2" ELBOW STREET	AE	3" x 3" x 2" DBL SAN TEE
AF	2" x 1.5" x 1.5" SAN TEE STREET	AG	2" x 1.5" x 1.5" 3-WAY ELBOW	AH	3" x 22 1/2" 1/16 BEND ELBOW	AI	1.5" 3-WAY ELBOW
AJ	2" x 22 1/2" 1/16 BEND ELBOW	AK	4" x 3" CLOSET BEND STR (CUT DOWN 1.5")	AL	3" x 3" x 3" WYE	AM	3" 1/4 BEND
AN	2" x 3" PIPE INCREASER	AO	3" x 3" x 2" WYE	AP	2" 1/4 BEND	AQ	2" x 2" x 2" DBL SAN TEE
AR	1.5" x 3" PIPE INCREASER	AS	1.5" x 1.5" x 1.5" x 1.5" DBL SAN TEE	AT	3" DOUBLE FIXTURE TEE	AU	2" x 2" x 1.5" x 1.5" DBL SAN TEE
AV	3" x 3" x 2" x 2" SAN TEE (SI) LEFT	AW	3" x 3" x 3" x 1.5" SAN TEE (SI) LEFT	AX	3" x 3" x 3" x 2" SAN TEE (SI) LEFT	AY	3" x 3" x 2" x 2" SAN TEE (SI) RIGHT
AZ	3" x 3" x 3" x 1.5" SAN TEE (SI) RIGHT	BA	3" x 3" x 3" x 2" SAN TEE (SI) RIGHT	BC	3" x 3" x 3" x 2" SAN TEE DBL (SI)	BD	3" x 3" x 3" x 1.5" x 1.5" SAN T DBL (SI)
BE	1.5" x 2" PIPE INCREASER	BF	3" x 3" x 1.5" 90° LSWEET LOW HEEL INLET	BG	3" x 3" x 2" 90° LSWEET LOW HEEL INLET	BH	1.5" x 22 1/2" 1/16 BEND ELBOW
BI	4" x 3" CLOSET BEND STREET	BJ	1.5" x 1.5" x .5" 45° APPLIANCE WYE	BK		BL	

BRAND		SERIES		REVISIONS		BY	DATE	GENERAL NOTES		DRAWING TITLE		MODEL NAME		SQ. FT.				
SCHULT		BM16								DWY SCHEMATIC #2		4202		990				
CLAYTON HOME BUILDING GROUP												PLANT	DESCRIPTION		MODEL NO.			
												957	16X66 3BR-2BA		4202			
												DRAWN BY	ORIG. DATE		DATE PRINTED		SHEET NO.	
												GDB	06/06/2023		10/11/2023		8-2	



APPROVED BY
NIA INC. 10/16/2023
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS



957-4202.4.1

Job #: 4202(I)
Performed by CLAYTON ROCKWELL for:
4202(I)
ROCKWELL, NC

Scale: 1 : 118
Page 1
Right-Suite® Universal 2023
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Project Summary Entire House

APPROVED BY



10/16/2023

Job: 4202(I)
Date: Oct 11, 2023
By: CLAYTON ROCKWELL

FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

Project Information

For: 4202(I), CLAYTON 957
ROCKWELL, NC

Notes: DUCT COOLING CAPACITY = 26,000 BTU/HR
REFER TO MODEL 4202 FOR THERMAL ZONE CALCULATIONS

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 12335 Btuh
Ducts 3131 Btuh
Central vent (60 cfm) **2892** Btuh
Outside air
Humidification 0 Btuh
Piping 0 Btuh
Equipment load 18358 Btuh

Sensible Cooling Equipment Load Sizing

Structure 11595 Btuh
Ducts 2899 Btuh
Central vent (60 cfm) **1289** Btuh
Outside air
Blower 0 Btuh
Use manufacturer's data n
Rate/swing multiplier 1.00
Equipment sensible load 15735 Btuh

Infiltration

Method Simplified
Construction quality Average
Fireplaces 0

Latent Cooling Equipment Load Sizing

Structure 1815 Btuh
Ducts 545 Btuh
Central vent (60 cfm) **1644** Btuh
Outside air
Equipment latent load 4004 Btuh

	Heating	Cooling
Area (ft ²)	990	990
Volume (ft ³)	7920	7920
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	65	37

Equipment Total Load (Sen+Lat) 19739 Btuh
Req. total capacity at 0.70 SHR 1.9 ton

Heating Equipment Summary

Make Smart Comfort
Trade 15 SEER2 R SERIES R410A HP
Model R4H5S24*K*AAA*
AHRI ref 0
Efficiency 7.5 HSPF2
Heating input 22800 Btuh @ 47°F
Heating output 27 °F
Temperature rise 780 cfm
Actual air flow 0.050 cfm/Btuh
Air flow factor 0.30 in H2O
Static pressure
Space thermostat
Capacity balance point = 23 °F

Cooling Equipment Summary

Make Smart Comfort
Trade 15 SEER2 R SERIES R410A HP
Cond R4H5S24*K*AAA*
Coil FEVA0024**+NAVA43601CK
AHRI ref 0
Efficiency 12.0 EER2, 15.2 SEER2
Sensible cooling 16380 Btuh
Latent cooling 7020 Btuh
Total cooling 23400 Btuh
Actual air flow 780 cfm
Air flow factor 0.054 cfm/Btuh
Static pressure 0.30 in H2O
Load sensible heat ratio 0.80

Backup: Smart Comfort
Input = 10 kW, Output = 34121 Btuh, 100 AFUE

957-4202.4.2

Bold/italic values have been manually overridden

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



Wrightsoft

Right-Suite® Universal 2023 23.0.04 RSU28036

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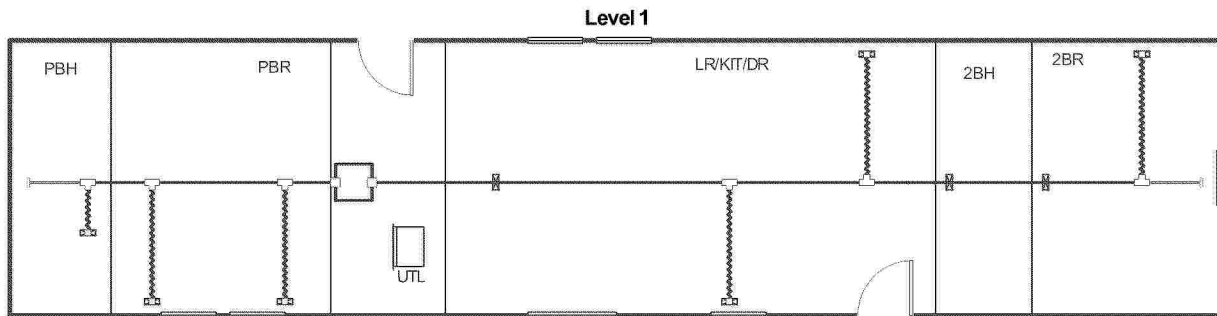
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Page 1



APPROVED BY

NIA INC. 10/16/2023
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS



957-4202.4.3

Job #: 4202_2BR(I)
Performed by CLAYTON ROCKWELL for:
4202_2BR(I)
ROCKWELL, NC

Scale: 1 : 118
Page 1
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Project Summary Entire House

APPROVED BY



10/16/2023

FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

Job: 4202_2BR(I)
Date: Oct 11, 2023
By: CLAYTON ROCKWELL

Project Information

For: 4202_2BR(I), CLAYTON 957
ROCKWELL, NC

Notes: DUCT COOLING CAPACITY = 26,000 BTU/HR
REFER TO MODEL PLAN 4202 FOR THERMAL ZONE CALCULATIONS

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 12750 Btuh
Ducts 3113 Btuh
Central vent (45 cfm) **2169** Btuh
Outside air
Humidification 0 Btuh
Piping 0 Btuh
Equipment load 18032 Btuh

Sensible Cooling Equipment Load Sizing

Structure 11841 Btuh
Ducts 2874 Btuh
Central vent (45 cfm) **967** Btuh
Outside air
Blower 0 Btuh
Use manufacturer's data n
Rate/swing multiplier 1.00
Equipment sensible load 15635 Btuh

Infiltration

Method Simplified
Construction quality Average
Fireplaces 0

Latent Cooling Equipment Load Sizing

Structure 1916 Btuh
Ducts 514 Btuh
Central vent (45 cfm) **1233** Btuh
Outside air
Equipment latent load 3662 Btuh

	Heating	Cooling
Area (ft²)	990	990
Volume (ft³)	7920	7920
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	74	48

Equipment Total Load (Sen+Lat) 19297 Btuh
Req. total capacity at 0.70 SHR 1.9 ton

Heating Equipment Summary

Make Smart Comfort
Trade 15 SEER2 R SERIES R410A HP
Model R4H5S24*K*AAA*
AHRI ref 0
Efficiency 7.5 HSPF2
Heating input 22800 Btuh @ 47°F
Heating output 27 °F
Temperature rise 780 cfm
Actual air flow 0.049 cfm/Btuh
Air flow factor 0.30 in H2O
Static pressure
Space thermostat
Capacity balance point = 22 °F

Cooling Equipment Summary

Make Smart Comfort
Trade 15 SEER2 R SERIES R410A HP
Cond R4H5S24*K*AAA*
Coil FEVA0024**+NAVA43601CK
AHRI ref 0
Efficiency 12.0 EER2, 15.2 SEER2
Sensible cooling 16380 Btuh
Latent cooling 7020 Btuh
Total cooling 23400 Btuh
Actual air flow 780 cfm
Air flow factor 0.053 cfm/Btuh
Static pressure 0.30 in H2O
Load sensible heat ratio 0.81

Backup: Smart Comfort
Input = 10 kW, Output = 34121 Btuh, 100 AFUE

957-4202.4.4

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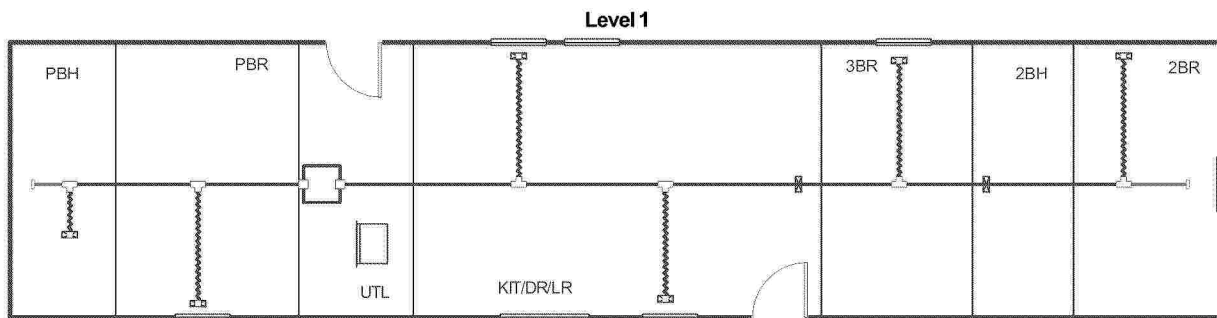
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FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS



957-4202.4.5

Job #: 4202(P)
Performed by CLAYTON ROCKWELL for:
4202(P)
ROCKWELL, NC

Scale: 1 : 118
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Project Summary Entire House

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10/16/2023

Job: 4202(P)
Date: Oct 11, 2023
By: CLAYTON ROCKWELL

FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

Project Information

For: 4202(P), CLAYTON 957
ROCKWELL, NC

Notes: DUCT COOLING CAPACITY = 26,000 BTU/HR
REFER TO MODEL 4202 FOR THERMAL ZONE CALCULATIONS

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	12335 Btuh
Ducts	3131 Btuh
Central vent (60 cfm)	2892 Btuh
Outside air	
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	18358 Btuh

Sensible Cooling Equipment Load Sizing

Structure	11595 Btuh
Ducts	2899 Btuh
Central vent (60 cfm)	1289 Btuh
Outside air	
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	1.00
Equipment sensible load	15735 Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

Latent Cooling Equipment Load Sizing

Structure	1815 Btuh
Ducts	545 Btuh
Central vent (60 cfm)	1644 Btuh
Outside air	
Equipment latent load	4004 Btuh

	Heating	Cooling
Area (ft²)	990	990
Volume (ft³)	7920	7920
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	65	37

Equipment Total Load (Sen+Lat)	19739 Btuh
Req. total capacity at 0.70 SHR	1.9 ton

Heating Equipment Summary

Make	Smart Comfort
Trade	15 SEER2 R SERIES R410A HP
Model	R4H5S24*K*AAA*
AHRI ref	0
Efficiency	7.5 HSPF2
Heating input	
Heating output	22800 Btuh @ 47°F
Temperature rise	27 °F
Actual air flow	780 cfm
Air flow factor	0.050 cfm/Btuh
Static pressure	0.30 in H2O
Space thermostat	
Capacity balance point = 23 °F	

Cooling Equipment Summary

Make	Smart Comfort
Trade	15 SEER2 R SERIES R410A HP
Cond	R4H5S24*K*AAA*
Coil	FEVA0024**+NAVA43601CK
AHRI ref	0
Efficiency	12.0 EER2, 15.2 SEER2
Sensible cooling	16380 Btuh
Latent cooling	7020 Btuh
Total cooling	23400 Btuh
Actual air flow	780 cfm
Air flow factor	0.054 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.80

Backup: Smart Comfort
Input = 10 kW, Output = 34121 Btuh, 100 AFUE

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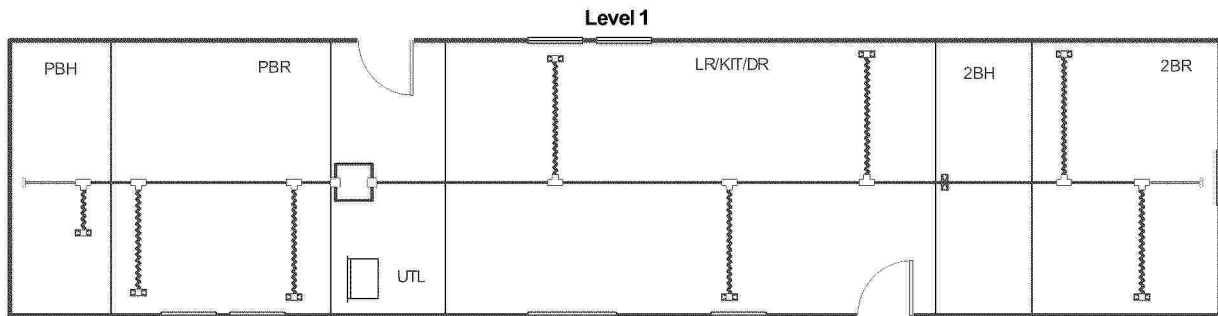
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FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS



957-4202.4.7

Job #: 4202_2BR(P)
Performed by CLAYTON ROCKWELL for:
4202_2BR(P)
ROCKWELL, NC

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Project Summary Entire House

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10/16/2023

FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

Job: 4202_2BR(P)
Date: Oct 11, 2023
By: CLAYTON ROCKWELL

Project Information

For: 4202_2BR(P), CLAYTON 957
ROCKWELL, NC

Notes: DUCT COOLING CAPACITY = 26,000 BTU/HR
REFER TO MODEL PLAN 4202 FOR THERMAL CALCULATIONS

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	12750 Btuh
Ducts	3113 Btuh
Central vent (45 cfm)	2169 Btuh
Outside air	
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	18032 Btuh

Sensible Cooling Equipment Load Sizing

Structure	11841 Btuh
Ducts	2874 Btuh
Central vent (45 cfm)	967 Btuh
Outside air	
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	1.00
Equipment sensible load	15635 Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

Latent Cooling Equipment Load Sizing

Structure	1916 Btuh
Ducts	514 Btuh
Central vent (45 cfm)	1233 Btuh
Outside air	
Equipment latent load	3662 Btuh

	Heating	Cooling
Area (ft²)	990	990
Volume (ft³)	7920	7920
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	74	48

Equipment Total Load (Sen+Lat)	19297 Btuh
Req. total capacity at 0.70 SHR	1.9 ton

Heating Equipment Summary

Make	Smart Comfort
Trade	15 SEER2 R SERIES R410A HP
Model	R4H5S24*K*AAA*
AHRI ref	0
Efficiency	7.5 HSPF2
Heating input	
Heating output	22800 Btuh @ 47°F
Temperature rise	27 °F
Actual air flow	780 cfm
Air flow factor	0.049 cfm/Btuh
Static pressure	0.30 in H2O
Space thermostat	
Capacity balance point = 22 °F	

Cooling Equipment Summary

Make	Smart Comfort
Trade	15 SEER2 R SERIES R410A HP
Cond	R4H5S24*K*AAA*
Coil	FEVA0024**+NAVA43601CK
AHRI ref	0
Efficiency	12.0 EER2, 15.2 SEER2
Sensible cooling	16380 Btuh
Latent cooling	7020 Btuh
Total cooling	23400 Btuh
Actual air flow	780 cfm
Air flow factor	0.053 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.81

Backup: Smart Comfort
Input = 10 kW, Output = 34121 Btuh, 100 AFUE

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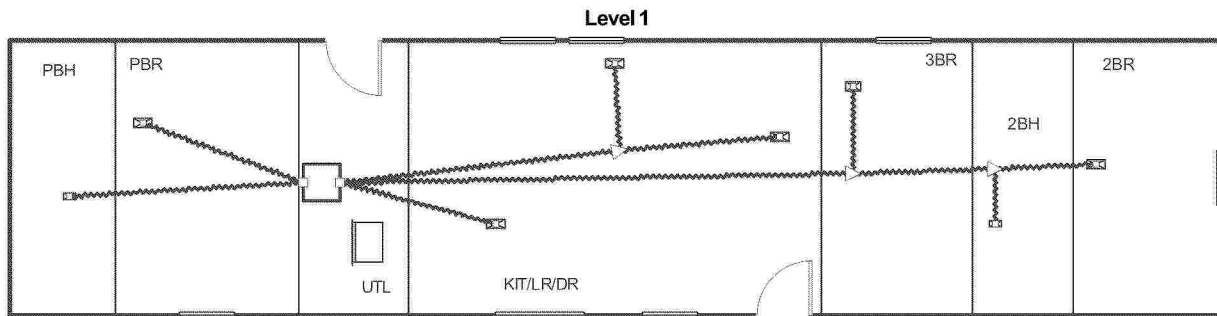
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FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS



957-4202.4.9

Job #: 4202(OHVD)
Performed by CLAYTON ROCKWELL for:
4202(OHVD)
ROCKWELL, NC

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Project Summary Entire House

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CONSTRUCTION AND SAFETY STANDARDS

10/16/2023

Job: 4202(OHVD)
Date: Oct 11, 2023
By: CLAYTON ROCKWELL

Project Information

For: 4202(OHVD), CLAYTON 957
ROCKWELL, NC

Notes: DUCT COOLING CAPACITY = 26,000 BTU/HR
REFER TO 4202 MODEL PLAN FOR THERMAL ZONE CALCULATIONS

Design Information

Weather: SC 55

Winter Design Conditions

Outside db	28 °F
Inside db	70 °F
Design TD	42 °F

Summer Design Conditions

Outside db	95 °F
Inside db	75 °F
Design TD	20 °F
Daily range	M
Relative humidity	50 %
Moisture difference	34 gr/lb

Heating Summary

Structure	11641 Btuh
Ducts	2663 Btuh
Central vent (60 cfm)	2731 Btuh
Outside air	
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	17035 Btuh

Sensible Cooling Equipment Load Sizing

Structure	11610 Btuh
Ducts	2457 Btuh
Central vent (60 cfm)	1303 Btuh
Outside air	
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	1.00
Equipment sensible load	15355 Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

Latent Cooling Equipment Load Sizing

Structure	1656 Btuh
Ducts	480 Btuh
Central vent (60 cfm)	1385 Btuh
Outside air	
Equipment latent load	3521 Btuh
Equipment Total Load (Sen+Lat)	18876 Btuh
Req. total capacity at 0.70 SHR	1.8 ton

	Heating	Cooling
Area (ft²)	990	990
Volume (ft³)	7920	7920
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	65	37

Heating Equipment Summary

Make	Smart Comfort
Trade	15 SEER2 R SERIES R410A HP
Model	R4H5S24*K*AAA*
AHRI ref	0
Efficiency	7.5 HSPF2
Heating input	
Heating output	22800 Btuh @ 47°F
Temperature rise	27 °F
Actual air flow	780 cfm
Air flow factor	0.055 cfm/Btuh
Static pressure	0.30 in H2O
Space thermostat	
Capacity balance point = 23 °F	
Backup: Smart Comfort	
Input = 10 kW, Output = 34121 Btuh, 100 AFUE	

Cooling Equipment Summary

Make	Smart Comfort
Trade	15 SEER2 R SERIES R410A HP
Cond	R4H5S24*K*AAA*
Coil	FEVA0024**+NAVA43601CK
AHRI ref	0
Efficiency	12.0 EER2, 15.2 SEER2
Sensible cooling	16380 Btuh
Latent cooling	7020 Btuh
Total cooling	23400 Btuh
Actual air flow	780 cfm
Air flow factor	0.055 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.81

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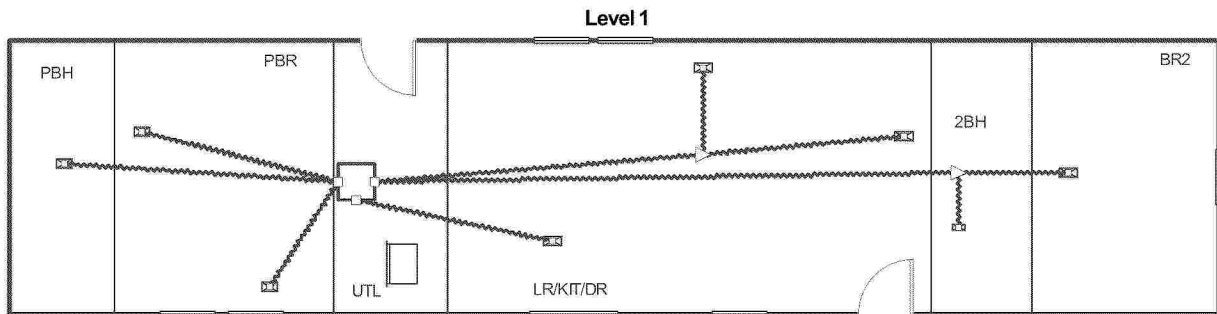
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FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS



957-4202.4.11

Job #: 4202(OHVD_2BR)
Performed by CLAYTON ROCKWELL for:
4202(OHVD_2BR)
ROCKWELL, NC

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Project Summary Entire House

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10/16/2023

Job: 4202(OHVD_2BR)
Date: Oct 11, 2023
By: CLAYTON ROCKWELL

FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

Project Information

For: 4202(OHVD_2BR_55SC), CLAYTON 957
ROCKWELL, NC

Notes: DUCT COOLING CAPACITY = 26,000 BTU/HR
REFER TO MODEL PLAN 4202 FOR THERMAL CALCULATIONS

Design Information

Weather: SC 55

Winter Design Conditions

Outside db 28 °F
Inside db 70 °F
Design TD 42 °F

Summer Design Conditions

Outside db 95 °F
Inside db 75 °F
Design TD 20 °F
Daily range M
Relative humidity 50 %
Moisture difference 34 gr/lb

Heating Summary

Structure 12068 Btuh
Ducts 2672 Btuh
Central vent (45 cfm) **2048** Btuh
Outside air
Humidification 0 Btuh
Piping 0 Btuh
Equipment load 16788 Btuh

Sensible Cooling Equipment Load Sizing

Structure 11885 Btuh
Ducts 2455 Btuh
Central vent (45 cfm) **978** Btuh
Outside air
Blower 0 Btuh
Use manufacturer's data n
Rate/swing multiplier 1.00
Equipment sensible load 15302 Btuh

Infiltration

Method Simplified
Construction quality Average
Fireplaces 0

Latent Cooling Equipment Load Sizing

Structure 1711 Btuh
Ducts 459 Btuh
Central vent (45 cfm) **1039** Btuh
Outside air
Equipment latent load 3209 Btuh

	Heating	Cooling
Area (ft²)	994	994
Volume (ft³)	7950	7950
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	74	48

Equipment Total Load (Sen+Lat) 18511 Btuh
Req. total capacity at 0.70 SHR 1.8 ton

Heating Equipment Summary

Make Smart Comfort
Trade 15 SEER2 R SERIES R410A HP
Model R4H5S24*K*AAA*
AHRI ref 0
Efficiency 7.5 HSPF2
Heating input 22800 Btuh @ 47°F
Heating output 27 °F
Temperature rise 780 cfm
Actual air flow 0.053 cfm/Btuh
Air flow factor 0.30 in H2O
Static pressure
Space thermostat
Capacity balance point = 22 °F

Cooling Equipment Summary

Make Smart Comfort
Trade 15 SEER2 R SERIES R410A HP
Cond R4H5S24*K*AAA*
Coil FEVA0024**+NAVA43601CK
AHRI ref 0
Efficiency 12.0 EER2, 15.2 SEER2
Sensible cooling 16380 Btuh
Latent cooling 7020 Btuh
Total cooling 23400 Btuh
Actual air flow 780 cfm
Air flow factor 0.054 cfm/Btuh
Static pressure 0.30 in H2O
Load sensible heat ratio 0.83

Backup: Smart Comfort
Input = 10 kW, Output = 34121 Btuh, 100 AFUE

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