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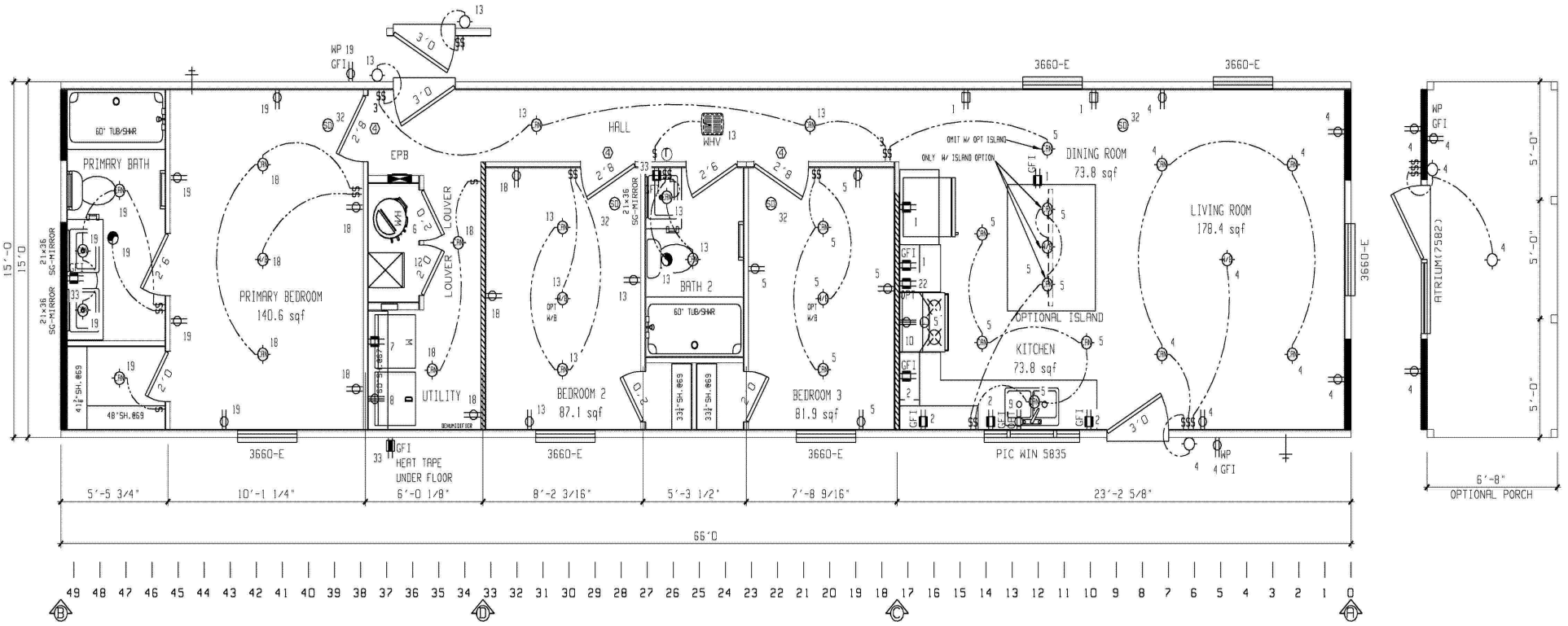
NTA INC. 10/18/2023
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS



957-5402.0

WIND-1		DIAPHRAGM = 132 PLF		WIND-2		DIAPHRAGM = 232 PLF		WIND-3		DIAPHRAGM = 232 PLF		WIND-1 (2BR OPTION)		DIAPHRAGM = 172 PLF		WIND-2 (2BR OPTION)		DIAPHRAGM = 232 PLF		WIND-3 (2BR OPTION)		DIAPHRAGM = 232 PLF				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	SHEARWALL	DESIGN PLF	SHEAR AREA	JOISTS	WIND-ROOF PSF
A	420 PLF	92"	5	A	420 PLF	92"	5	A	420 PLF	92"	5	A	420 PLF	92"	5	A	420 PLF	92"	5	A	420 PLF	92"	5	A				1-20
B	210 PLF	141"	2	B	210 PLF	141"	2	B	210 PLF	141"	2	B	210 PLF	141"	2	B	210 PLF	141"	2	B	210 PLF	141"	2	B				2-20
C				C	350 PLF	120"	3	C	420 PLF	120"	3	C					C	350 PLF	120"	3	C	420 PLF	120"	3	C				3-20
D				D	350 PLF	120"	3	D	420 PLF	120"	3	D					D				D	350 PLF	131"	3	D				
E				E				E				E					E				E				E				
F				F				F				F					F				F				F				
G				G				G				G					G				G				G				

RETURN AIR REQUIREMENTS

1. 20"x16" GRILL REQUIRED
2. 4"x10" GRILL W/ 2 1/2" DOOR UNDERCUT
3. DOOR(S) MUST BE UNDERCUT 2 1/2" MIN.
4. 4"x24" OR 6"x14" GRILL REQUIRED

◇ INDICATES REQUIRED NUMBER OF STUDS IN COLUMN

◇◇ THE # SPECIFIES THAT THERE CAN BE NO HOLES IN STUDS IN COLUMNS

BRAND	SERIES
CLAYTON	HR16

CLAYTON HOME BUILDING GROUP

REVISIONS	BY	DATE

GENERAL NOTES

- CEILING HEIGHT = 96.00
- REFER TO DAPIA PAGE MMP-2.0 FOR AREA LIGHT & VENT
- REFER TO DAPIA PAGE EL-1.2 FOR ELEC. SYMBOL & BRANCH CIRCUIT NUMBER
- FLOOR FRAMING SPACING = 16
- TOTAL WINDOW SQFT = 107 STD / 92 W/ PATIO/ATRIUM

DRAWING TITLE

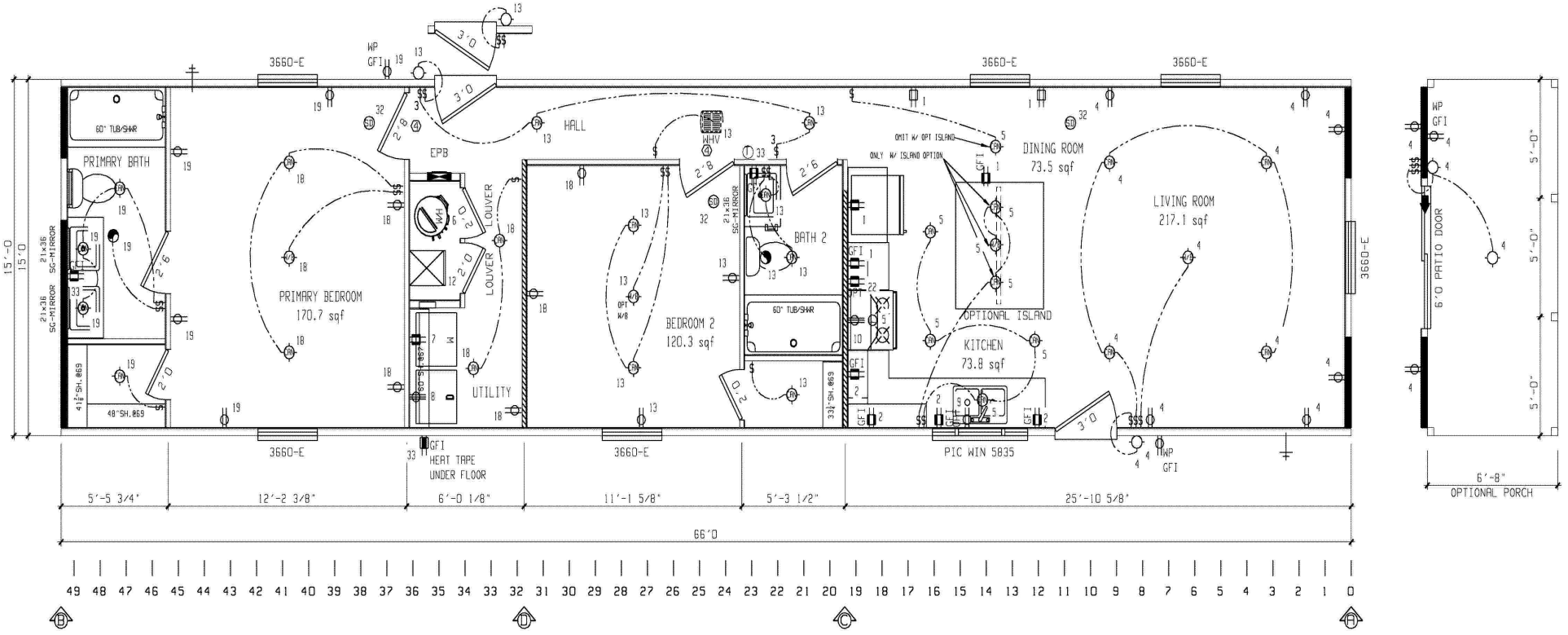
MASTER PLAN

MODEL NAME	SQ. FT.
5402	990

PLANT	DESCRIPTION	MODEL NO.
957	16X66 3BR-2BA	5402

DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
KLK	06/06/2023	10/17/2023	1-1

APPROVED BY
NTA INC. 10/18/2023
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS



957-5402.0.1

WIND-1		DIAPHRAGM = 132 PLF		WIND-2		DIAPHRAGM = 232 PLF		WIND-3		DIAPHRAGM = 232 PLF		WIND-1 (2BR OPTION)		DIAPHRAGM = 172 PLF		WIND-2 (2BR OPTION)		DIAPHRAGM = 232 PLF		WIND-3 (2BR OPTION)		DIAPHRAGM = 232 PLF				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	SHEARWALL	DESIGN PLF	SHEAR AREA	JOISTS	WIND-ROOF PSF	
A	420 PLF	92"	5	A	420 PLF	92"	5	A	420 PLF	92"	5	A	420 PLF	92"	5	A	420 PLF	92"	5	A	420 PLF	92"	5	A				1-20	
B	210 PLF	141"	2	B	210 PLF	141"	2	B	210 PLF	141"	2	B	210 PLF	141"	2	B	210 PLF	141"	2	B	210 PLF	141"	2	B				2-20	
C				C	350 PLF	120"	3	C	420 PLF	120"	3	C					C	350 PLF	120"	3	C	420 PLF	120"	3	C				3-20	
D				D	350 PLF	120"	3	D	420 PLF	120"	3	D					D	350 PLF	120"	3	D	350 PLF	131"	3	D					
E				E				E				E					E				E				E				
F				F				F				F					F				F				F				
G				G				G				G					G				G				G				

RETURN AIR REQUIREMENTS

1. 20"x16" GRILL REQUIRED
2. 4"x10" GRILL W/ 2 1/2" DOOR UNDERCUT
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4. 4"x24" OR 6"x14" GRILL REQUIRED

◊ INDICATES REQUIRED NUMBER OF STUDS IN COLUMN

◊◊ THE # SPECIFIES THAT THERE CAN BE NO HOLES IN STUDS IN COLUMNS

BRAND	SERIES
CLAYTON	HR16

CLAYTON HOME BUILDING GROUP

REVISIONS	BY	DATE

GENERAL NOTES

CEILING HEIGHT = 96.00

REFER TO DAPIA PAGE MMP-2.0 FOR AREA LIGHT & VENT

REFER TO DAPIA PAGE EL-1.2 FOR ELEC. SYMBOL & BRANCH CIRCUIT NUMBER

TOTAL WINDOW SQFT = 122 STD / 107 W/ PATIO/ATRIUM

DRAWING TITLE

MASTER PLAN #2
2 BEDROOM OPTION

MODEL NAME	SQ. FT.
5402	990

PLANT	DESCRIPTION	MODEL NO.
957	16X66 3BR-2BA	5402

DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
KLK	06/06/2023	10/17/2023	1-2

CMH Inc.
SHEARWALL DESIGN - HUD

APPROVED BY NTA INC. 10/18/2023
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Model # 5402

Box Width =	180 "	Single wide	Minimum Joist Spacing 16 "
Box Length =	66 ft.	99.5" 10" MIN.IBEAM	No Offset Box
No Skylights			No Clerestory
No Porches			No Origami Dormer
Joist Size =	#2 spf 2x6	Lags 9Mx3"	No Sunken Floor
			No Parapet Roof

Version R13.20

Wind Zone 1 Standard Roof — (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. — 96 inch sidewall

Diaphragm Construction:

Shearwall	Dist./ Hitch	Length	PLF	# of Joists	Lags	Notes	SW1/SW2
A	0 '	92 "	420	5	2/2	Split Shearwall	46/46
B	66 '	141 "	210	2	2/2	Split Shearwall	105/36

Wind Zone 2 Standard Roof — (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. — 96 inch sidewall

Diaphragm Construction:

Shearwall	Dist./ Hitch	Length	PLF	# of Joists	Lags	Notes	SW1/SW2
A	0 '	92 "	420	5	2/2	Split Shearwall	46/46
B	66 '	141 "	210	2	2/2	Split Shearwall	105/36
C	23.25 '	120 "	350	3	3/1		
D	44.42 '	120 "	350	3	3/1		

Wind Zone 3 Standard Roof — (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. — 96 inch sidewall

Diaphragm Construction:

Shearwall	Dist./ Hitch	Length	PLF	# of Joists	Lags	Notes	SW1/SW2
A	0 '	92 "	420	5	2/2	Split Shearwall	46/46
B	66 '	141 "	210	2	2/2	Split Shearwall	105/36
C	23.25 '	120 "	420	3	4/1		
D	44.42 '	120 "	420	3	4/1		

(3/8" sheathing only with 14ga. @ 6/6 oc) [172 plf] Chords: 2x4 SPF #3 Top Plate & 2x4 Rail. Each spliced w/ 12" glue block.

Diaphragm Construction:

Shearwall	Dist./ Hitch	Length	PLF	# of Joists	Lags	Notes

Designed by KLK

957-5402.0.2

CMH Inc.
SHEARWALL DESIGN - HUD

APPROVED BY
NTA INC.
10/18/2023
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Model # 5402 (2 BEDROOM OPT)

Box Width =	180 "	Single wide	Minimum Joist Spacing 16 "
Box Length =	66 ft.	99.5" 10" MIN.IBEAM	No Offset Box
No Skylights			No Clerestory
No Porches			No Origami Dormer
Joist Size =	#2 spf 2x6	Lags 9Mx3"	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	SW1/SW2
A	0 '	92 "	420	5	2/2	Split Shearwall	46/46
B	66 '	141 "	210	2	2/2	Split Shearwall	105/36

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	SW1/SW2
A	0 '	92 "	420	5	2/2	Split Shearwall	46/46
B	66 '	141 "	210	2	2/2	Split Shearwall	105/36
C	26 '	120 "	350	3	3/1		
D	42.5 '	120 "	350	3	3/1		

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	SW1/SW2	% over
A	0 '	92 "	420	5	2/2	Split Shearwall	46/46	
B	66 '	141 "	210	2	2/2	Split Shearwall	105/36	
C	26 '	120 "	420	3	4/1			
D	42.5 '	131 "	350	3	3/1			0.76

Diaphragm Construction: (3/8" sheathing only with 14ga. @ 6/6 oc) [172 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 KLK

957-5402.0.3

HOT WATER MDL'S
3/4" MDL = 9ft
1/2" MDL = 41ft
VOLUME (gal) = .54

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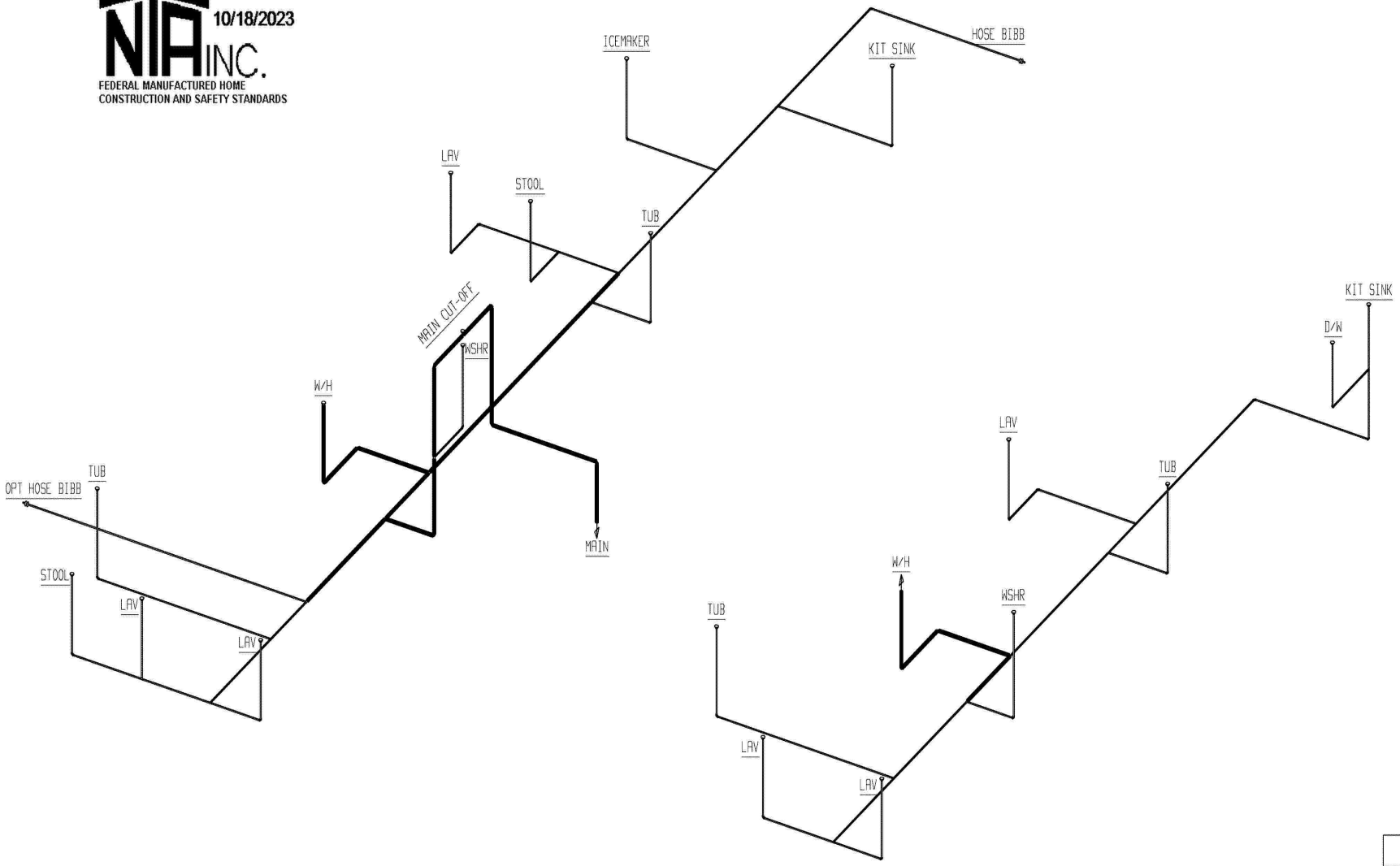
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS



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

957-5402.1

COLD WATER SUPPLY PLUMBING

HOT WATER SUPPLY PLUMBING

BRAND: CLAYTON	SERIES: HR16	REVISIONS	BY	DATE	GENERAL NOTES: HOSE BIBBS PER SPECS	DRAWING TITLE: SUPPLY PLUMBING	MODEL NAME: 5402 / SQ. FT.: 990
CLAYTON HOME BUILDING GROUP							PLANT: 957 / DESCRIPTION: 16X66 3BR-2BA / MODEL NO.: 5402
							DRAWN BY: KLK / ORIG. DATE: 06/06/2023 / DATE PRINTED: 10/13/2023 / SHEET NO.: 9-1

HOT WATER MDL'S
3/4" MDL = 12ft
1/2" MDL = 36ft
VOLUME (gal) = .55

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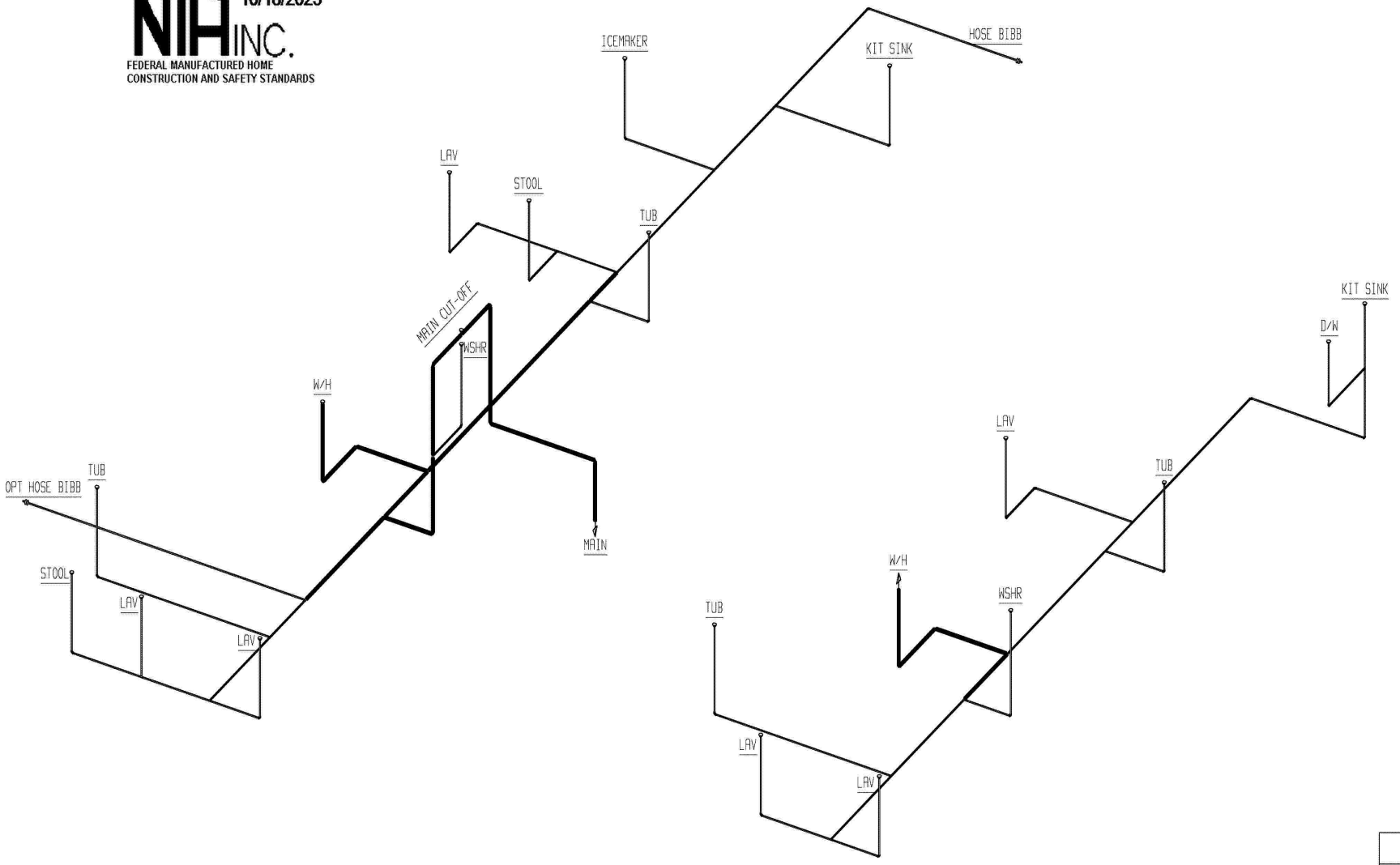
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS



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

957-5402.1.1

COLD WATER SUPPLY PLUMBING

HOT WATER SUPPLY PLUMBING

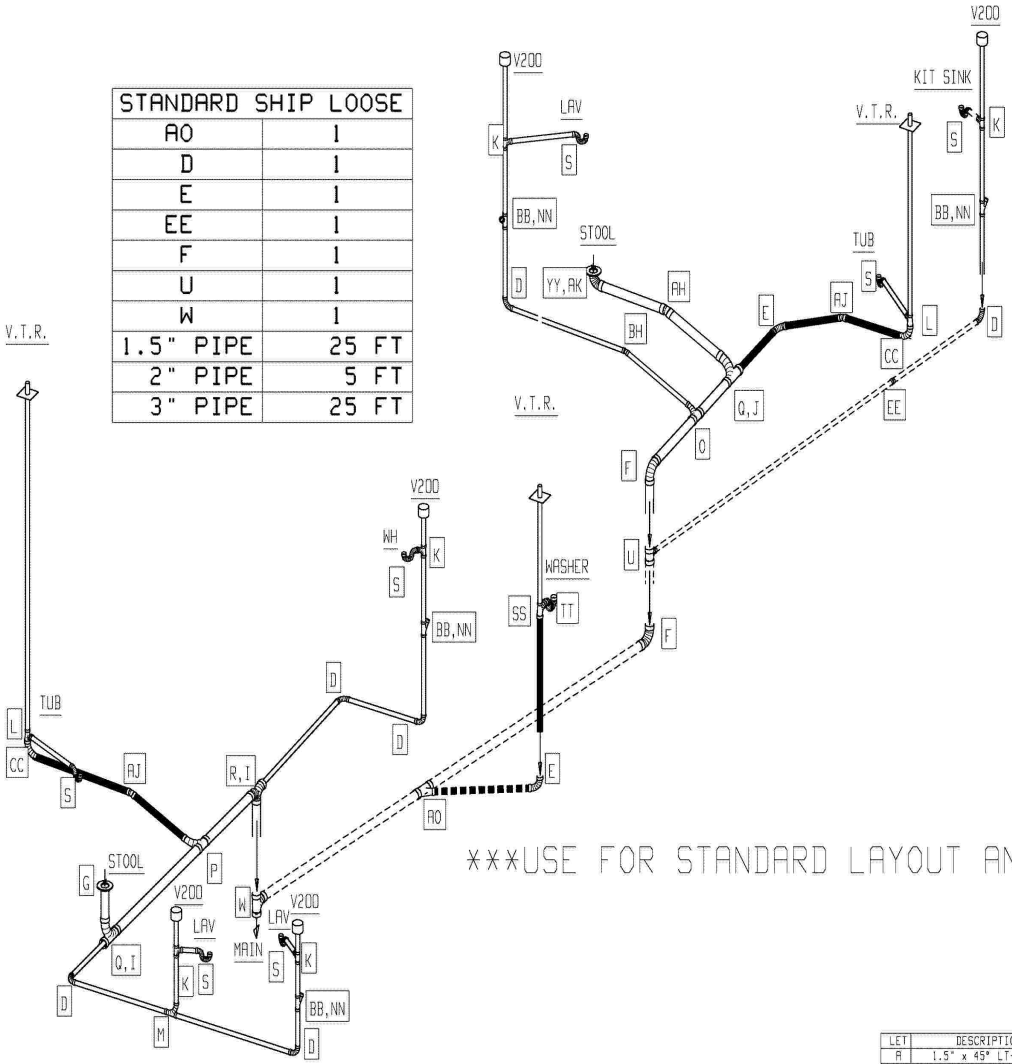
BRAND: CLAYTON	SERIES: HR16	REVISIONS	BY	DATE	GENERAL NOTES: HOSE BIBBS PER SPECS	DRAWING TITLE: SUPPLY #2 2 BEDROOM OPTION	MODEL NAME: 5402 / SQ. FT.: 990
CLAYTON HOME BUILDING GROUP							PLANT: 957 / DESCRIPTION: 16X66 3BR-2BA / MODEL NO.: 5402
							DRAWN BY: KLK / ORIG. DATE: 06/06/2023 / DATE PRINTED: 10/13/2023 / SHEET NO.: 9-2

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	
AO	1
D	1
E	1
EE	1
F	1
U	1
W	1
1.5" PIPE	25 FT
2" PIPE	5 FT
3" PIPE	25 FT



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10/18/2023
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

USE FOR STANDARD LAYOUT AND OPTIONAL 2 BEDROOM LAYOUT

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° LSWEEP-1/4 BEND	F	3" x 90° LSWEEP-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" LTTY	N	2" LTTY	O	3"x3"x1.5" LTTY	P	3"x3"x2" LTTY
Q	3" LTTY	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" LTTY	AA	3"x3"x2" SAN TEE	BB	1.5" x 45° WYE
CC	2" X 90° LSWEEP 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" LTTY	JJ	2"x1.5"x2" LTTY
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
WW	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"x2" SAN TEE DBL(SI)	BD	3"x3"x3"x1.5"x1.5" SAN T DBL(SI)
BE	1.5"x2" PIPE INCREASER	BF	3"x3"x1.5" 90° LSWEEP LOW HEEL INLET	BG	3"x3"x2" 90° LSWEEP LOW HEEL INLET	BH	1.5" x 22 1/2° 1/16 BEND ELBOW
BI	4"x3" CLOSET BEND STREET	BJ	1.5" x 1.5" x .5" 45° APPLIANCE WYE	BK		BL	

957-5402.2

BRAND	SERIES
CLAYTON	HR16

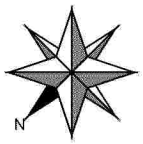
CLAYTON HOME BUILDING GROUP

REVISIONS	BY	DATE

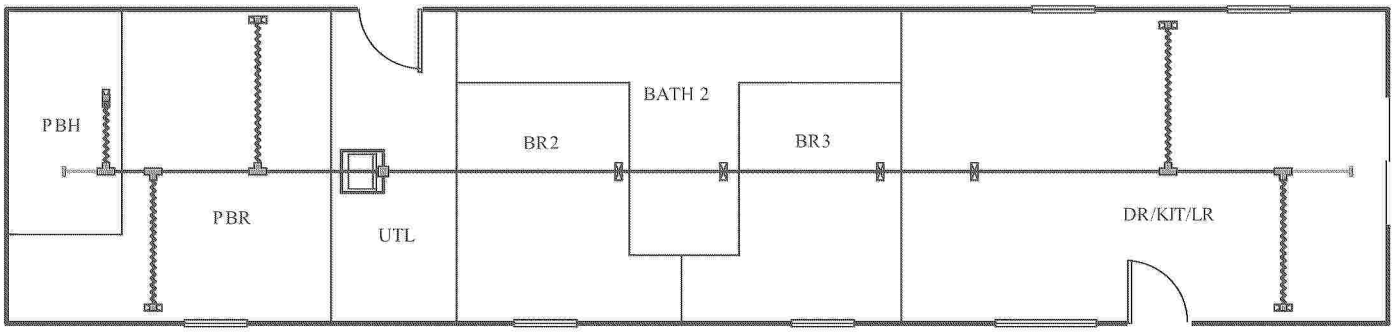
GENERAL NOTES

DRAWING TITLE
DWV SCHEMATIC

MODEL NAME			SQ. FT.
5402			990
PLANT	DESCRIPTION		MODEL NO.
957	16X66 3BR-2BA		5402
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
KLK	06/06/2023	10/13/2023	8-1



Level 1



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FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

957-5402.4.1

Job #: 5402(I)
Performed by CLAYTON ROCKWELL for:
5402(I)

ROCKWELL, NC

Scale: 1 : 110

Right-Suite® Universal 2023
23.0.04 RSU28035
2023-Oct-11 09:43:59
R:\WRITESOFT\MODELS\5402(I).rup

wrightsoft

Project Summary
Entire House

Job: 5402(I)
Date: Apr 04, 2023
By: CLAYTON ROCKWELL

Project Information

For: 5402(I), CLAYTON 957
ROCKWELL, NC

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

APPROVED BY NTA INC. 10/18/2023
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

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	12739	Btuh
Ducts	0	Btuh
Central vent (60 cfm)	***2892***	Btuh
Outside air		
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	15630	Btuh

Sensible Cooling Equipment Load Sizing

Structure	11105	Btuh
Ducts	0	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	12357	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	990	990
Volume (ft³)	8239	8239
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	68	38

Latent Cooling Equipment Load Sizing

Structure	1847	Btuh
Ducts	0	Btuh
Central vent (60 cfm)	***1644***	Btuh
Outside air		
Equipment latent load	3490	Btuh
Equipment Total Load (Sen+Lat)	15847	Btuh
Req. total capacity at 0.70 SHR	1.5	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	0.061 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	0.070 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.78

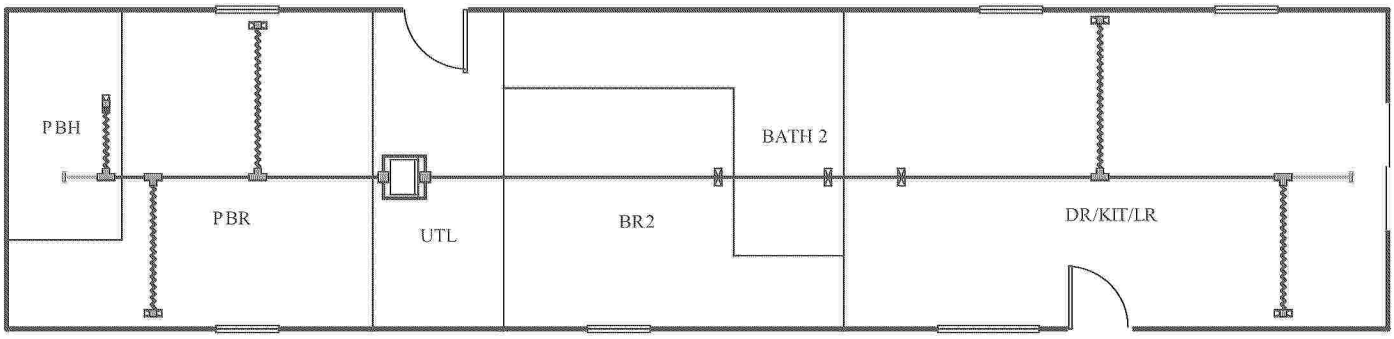
957-5402.4.2

Bold/italic values have been manually overridden

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

APPROVED BY
NTA INC. 10/18/2023
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

Level 1



957-5402.4.3

Job #: 5402_2BR_OPT(I)
Performed by CLAYTON ROCKWELL for:
5402_2BR_OPT(I)

ROCKWELL, NC

Scale: 1 : 110

Right-Suite® Universal 2023
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Project Summary
Entire House

Job: 5402_2BR_OPT(I)
Date: Apr 04, 2023
By: CLAYTON ROCKWELL

Project Information

For: 5402_2BR_OPT(I), CLAYTON 957 ROCKWELL, NC

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

APPROVED BY NTA INC. 10/18/2023
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Design Information

Weather: Fort Bragg/Simmons, NC, US

Winter Design Conditions

Outside db	26	°F
Inside db	72	°F
Design TD	46	°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	13589	Btuh
Ducts	0	Btuh
Central vent (45 cfm)	***2267***	Btuh
Outside air		
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	15856	Btuh

Sensible Cooling Equipment Load Sizing

Structure	11026	Btuh
Ducts	0	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	11956	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	1007	1007
Volume (ft³)	8052	8052
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	75	48

Latent Cooling Equipment Load Sizing

Structure	1927	Btuh
Ducts	0	Btuh
Central vent (45 cfm)	***1233***	Btuh
Outside air		
Equipment latent load	3160	Btuh
Equipment Total Load (Sen+Lat)	15116	Btuh
Req. total capacity at 0.70 SHR	1.4	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	0.057 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	0.071 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.79

Bold/italic values have been manually overridden

957-5402.4.4

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

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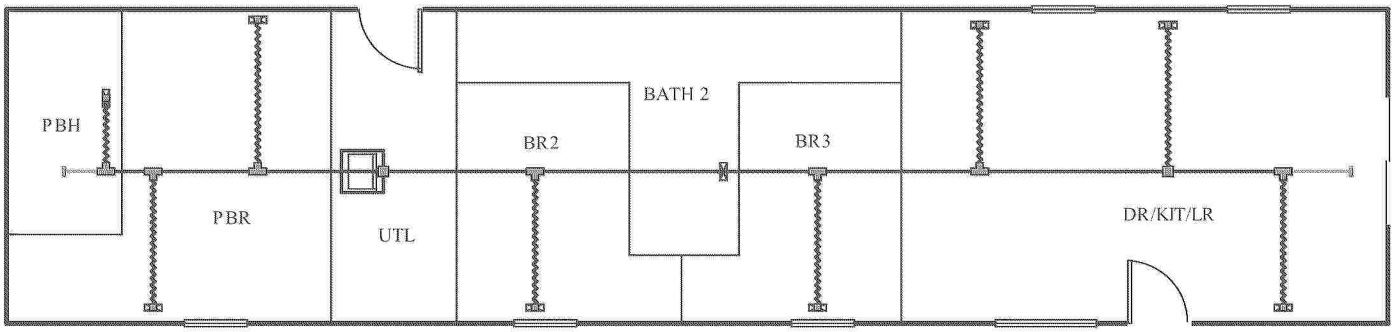
NTA INC. 10/18/2023
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

Level 1



957-5402.4.5

Job #: 5402(P)
Performed by CLAYTON ROCKWELL for:
5402(P)

ROCKWELL, NC

Scale: 1 : 110

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Project Summary
Entire House

Job: 5402(P)
Date: Apr 04, 2023
By: CLAYTON ROCKWELL

Project Information

For: 5402(P), CLAYTON 957
ROCKWELL, NC

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

APPROVED BY NTA INC. 10/18/2023
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

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	12739	Btuh
Ducts	0	Btuh
Central vent (60 cfm)	***2892***	Btuh
Outside air		
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	15630	Btuh

Sensible Cooling Equipment Load Sizing

Structure	11105	Btuh
Ducts	0	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	12357	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	990	990
Volume (ft³)	8239	8239
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	68	38

Latent Cooling Equipment Load Sizing

Structure	1847	Btuh
Ducts	0	Btuh
Central vent (60 cfm)	***1644***	Btuh
Outside air		
Equipment latent load	3490	Btuh
Equipment Total Load (Sen+Lat)	15847	Btuh
Req. total capacity at 0.70 SHR	1.5	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	0.061 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	0.070 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.78

957-5402.4.6

Bold/italic values have been manually overridden

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

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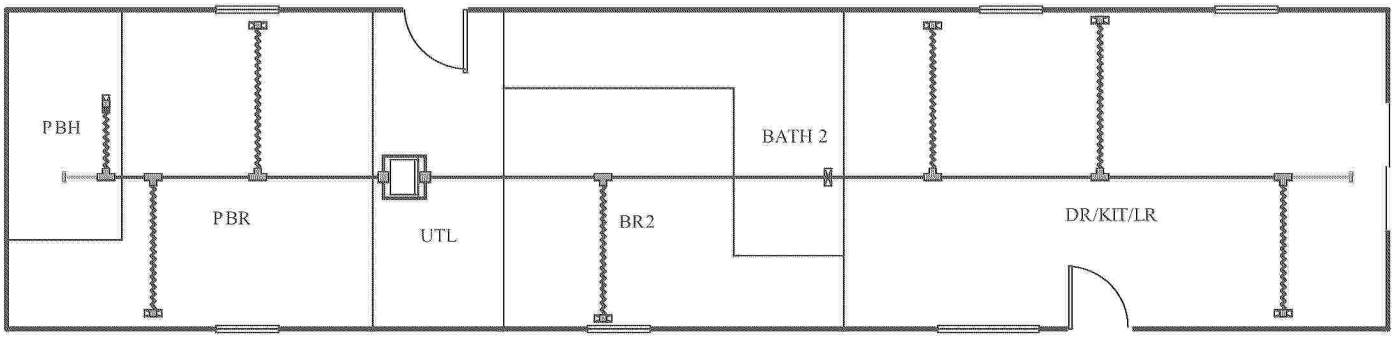
NTA INC. 10/18/2023
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

Level 1



957-5402.4.7

Job #: 5402_2BR_OPT(P)
Performed by CLAYTON ROCKWELL for:
5402_2BR_OPT(P)

ROCKWELL, NC

Scale: 1 : 110

Right-Suite® Universal 2023
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Project Summary
Entire House

Job: 5402_2BR_OPT(P)
Date: Apr 04, 2023
By: CLAYTON ROCKWELL

Project Information

For: 5402_2BR_OPT(P), CLAYTON 957 ROCKWELL, NC

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

APPROVED BY NTA INC. 10/18/2023
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

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	13001	Btuh
Ducts	0	Btuh
Central vent (45 cfm)	***2169***	Btuh
Outside air		
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	15170	Btuh

Sensible Cooling Equipment Load Sizing

Structure	11026	Btuh
Ducts	0	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	11956	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	1007	1007
Volume (ft³)	8052	8052
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	75	48

Latent Cooling Equipment Load Sizing

Structure	1927	Btuh
Ducts	0	Btuh
Central vent (45 cfm)	***1233***	Btuh
Outside air		
Equipment latent load	3160	Btuh
Equipment Total Load (Sen+Lat)	15116	Btuh
Req. total capacity at 0.70 SHR	1.4	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	0.060 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	0.071 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.79

957-5402.4.8

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

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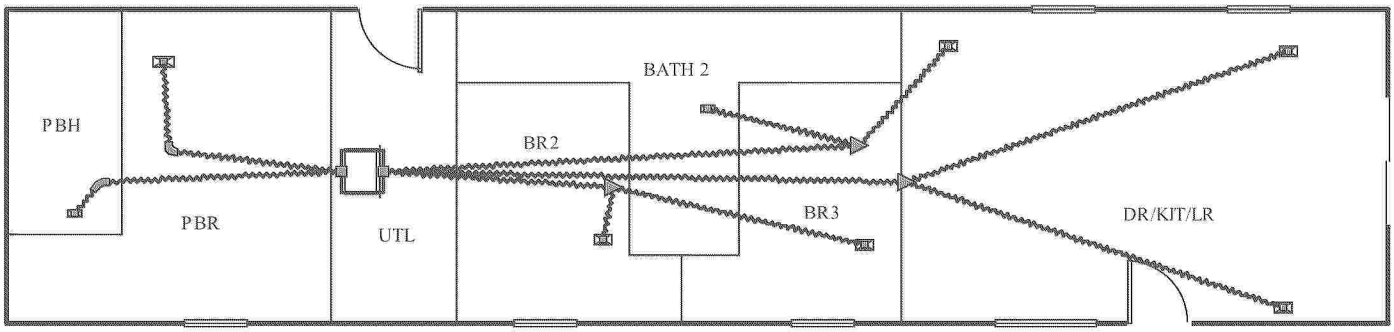
CONSTRUCTION AND SAFETY STANDARDS

Level 1



957-5402.4.9

Job #: 5402(OVERHEAD) **Performed by CLAYTON ROCKWELL for:** 5402(OVERHEAD) ROCKWELL, NC		Scale: 1 : 110 Page 1 Right-Suite® Universal 2023 23.0.04 RSU28035 2023-Oct-11 09:47:33 R:\WRITESOFT\MODELS\5402(OVHD

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Project Summary
Entire House

Job: 5402(OVERHEAD)
Date: Apr 04, 2023
By: CLAYTON ROCKWELL

Project Information

For: 5402(OVERHEAD), CLAYTON 957
ROCKWELL, NC

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

APPROVED BY
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FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

Design Information

Weather:

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	12022	Btuh
Ducts	0	Btuh
Central vent (60 cfm)	***2731***	Btuh
Outside air		
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	14753	Btuh

Sensible Cooling Equipment Load Sizing

Structure	11101	Btuh
Ducts	0	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	12392	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	990	990
Volume (ft³)	8239	8239
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	68	38

Latent Cooling Equipment Load Sizing

Structure	1682	Btuh
Ducts	0	Btuh
Central vent (60 cfm)	***1385***	Btuh
Outside air		
Equipment latent load	3067	Btuh
Equipment Total Load (Sen+Lat)	15460	Btuh
Req. total capacity at 0.70 SHR	1.5	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	0.065 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	0.070 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.80

957-5402.4.10

Bold/italic values have been manually overridden

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

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FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

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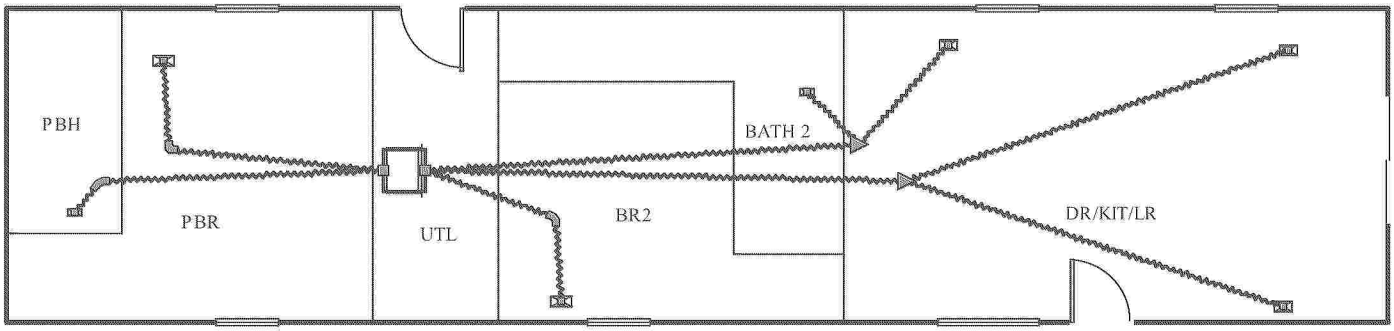

957-5402.4.11

Job #: 5402_2BR(OVERHEAD)
Performed by CLAYTON ROCKWELL for:
5402_2BR(OVERHEAD)

ROCKWELL, NC

Scale: 1 : 110

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Project Summary
Entire House

Job: 5402_2BR(OVERHEAD)
Date: Apr 04, 2023
By: CLAYTON ROCKWELL

Project Information

For: 5402_2BR(OVERHEAD), CLAYTON 957 ROCKWELL, NC

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

APPROVED BY NTA INC. 10/18/2023
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Design Information

Weather:

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	12162	Btuh
Ducts	642	Btuh
Central vent (45 cfm)	***2048***	Btuh
Outside air		
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	14853	Btuh

Sensible Cooling Equipment Load Sizing

Structure	10985	Btuh
Ducts	530	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	12480	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

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

Latent Cooling Equipment Load Sizing

Structure	1709	Btuh
Ducts	113	Btuh
Central vent (45 cfm)	***1039***	Btuh
Outside air		
Equipment latent load	2861	Btuh
Equipment Total Load (Sen+Lat)	15341	Btuh
Req. total capacity at 0.70 SHR	1.5	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	0.061 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	0.068 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.81

957-5402.4.12

Bold/italic values have been manually overridden

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