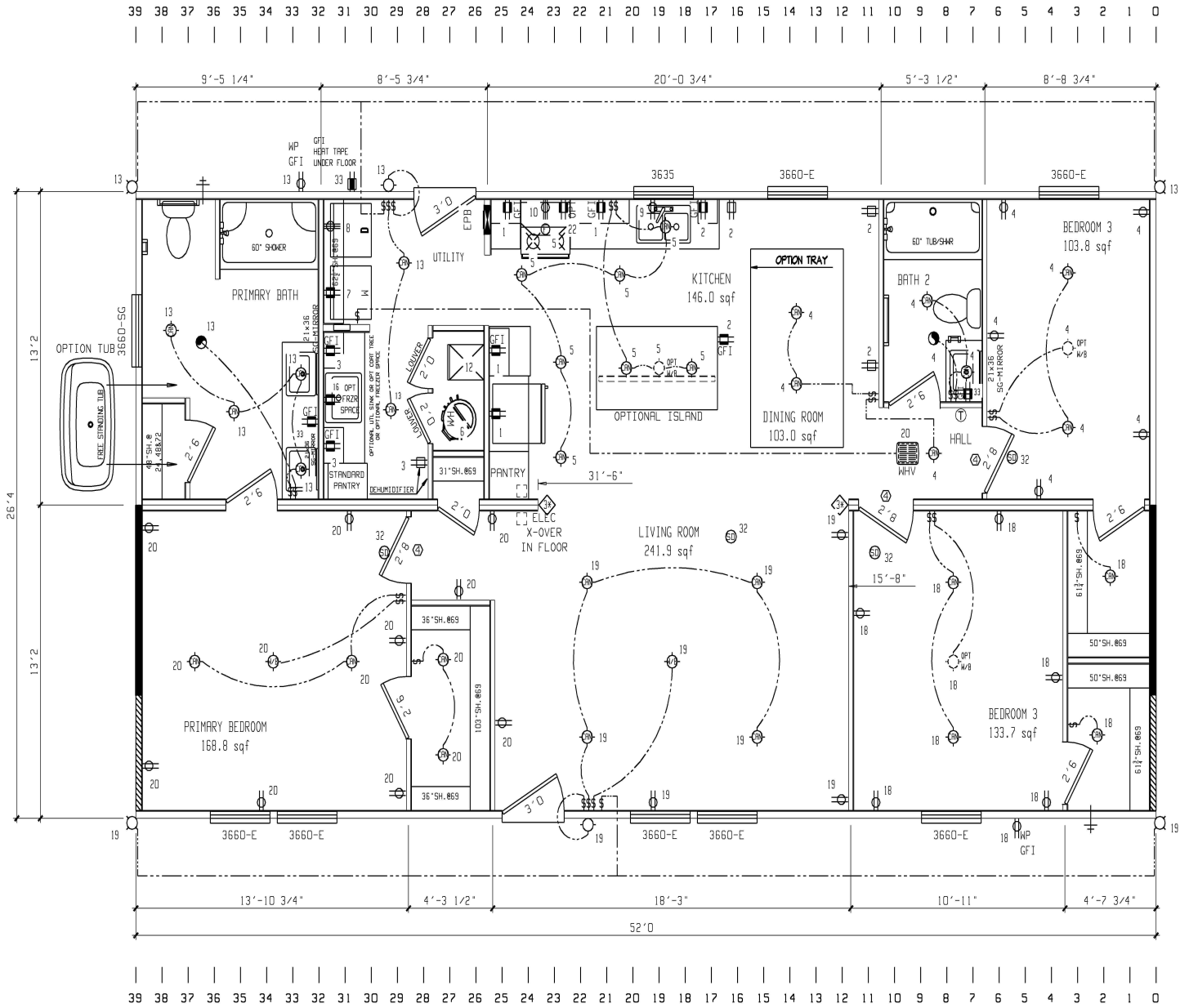


APPROVED BY NTA INC.
REVISED 12/6/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

957-3025.0

WIND-1		DIAPHRAGM = 132 PLF		WIND-2		DIAPHRAGM = 232 PLF		WIND-3		DIAPHRAGM = 232 PLF				DIAPHRAGM = PLF				DIAPHRAGM = 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	210 PLF	96"	2	A	420 PLF	FULL"	2	A	420 PLF	FULL"	2	A				A				A				A				1-20
B	210 PLF	96"	2	B	420 PLF	FULL"	2	B	420 PLF	FULL"	2	B				B				B				B				2-20
C				C				C				C				C				C				C				3-20
D				D				D				D				D				D				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 X SPECIFIES THAT THERE CAN BE NO HOLES IN STUDS IN COLUMNS

BRAND	SERIES
CLAYTON	FS28

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 = 132

DRAWING TITLE

MASTER PLAN

MODEL NAME	SQ. FT.
3025	1369

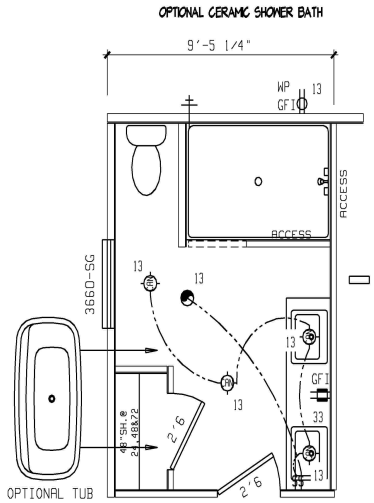
PLANT	DESCRIPTION	MODEL NO.
957	28X52 3BR-2BA	3025

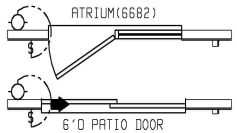
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	07/15/2024	12/05/2024	1-1

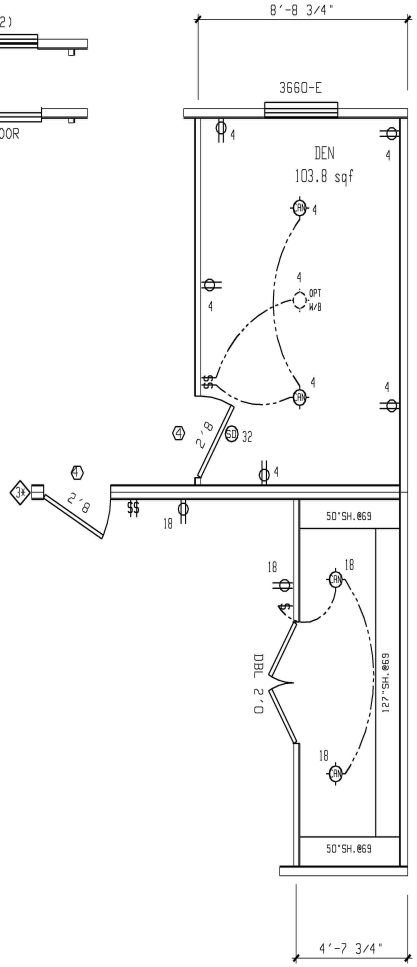
39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0

DEN OPTION

OPTIONAL CERAMIC SHOWER BATH







APPROVED BY NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

957-3025.0.1

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

WIND-1		DIAPHRAGM = 132 PLF		WIND-2		DIAPHRAGM = 232 PLF		WIND-3		DIAPHRAGM = 232 PLF				DIAPHRAGM = PLF				DIAPHRAGM = 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	210 PLF	96"	2	A	420 PLF	FULL"	2	A	420 PLF	FULL"	2	A				A				A				A				1-20
B	210 PLF	96"	2	B	420 PLF	FULL"	2	B	420 PLF	FULL"	2	B				B				B				B				2-20
C				C				C				C				C				C				C				3-20
D				D				D				D				D				D				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 X SPECIFIES THAT THERE CAN BE NO HOLES IN STUDS IN COLUMNS

BRAND: CLAYTON

SERIES: FS28

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

DRAWING TITLE

MASTER PLAN #2

MODEL NAME		SQ. FT.
3025		1369
PLANT	DESCRIPTION	MODEL NO.
957	28X52 3BR-2BA	3025
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	07/15/2024	07/29/2024	1-2

CMH Inc.
SHEARWALL DESIGN - HUD

APPROVED BY
NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Model # 3025

			Minimum Joist Spacing 16 "
Box Width =	158 "	Double wide	No Offset Box
Box Length =	52 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

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	52 '	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	52 '	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.

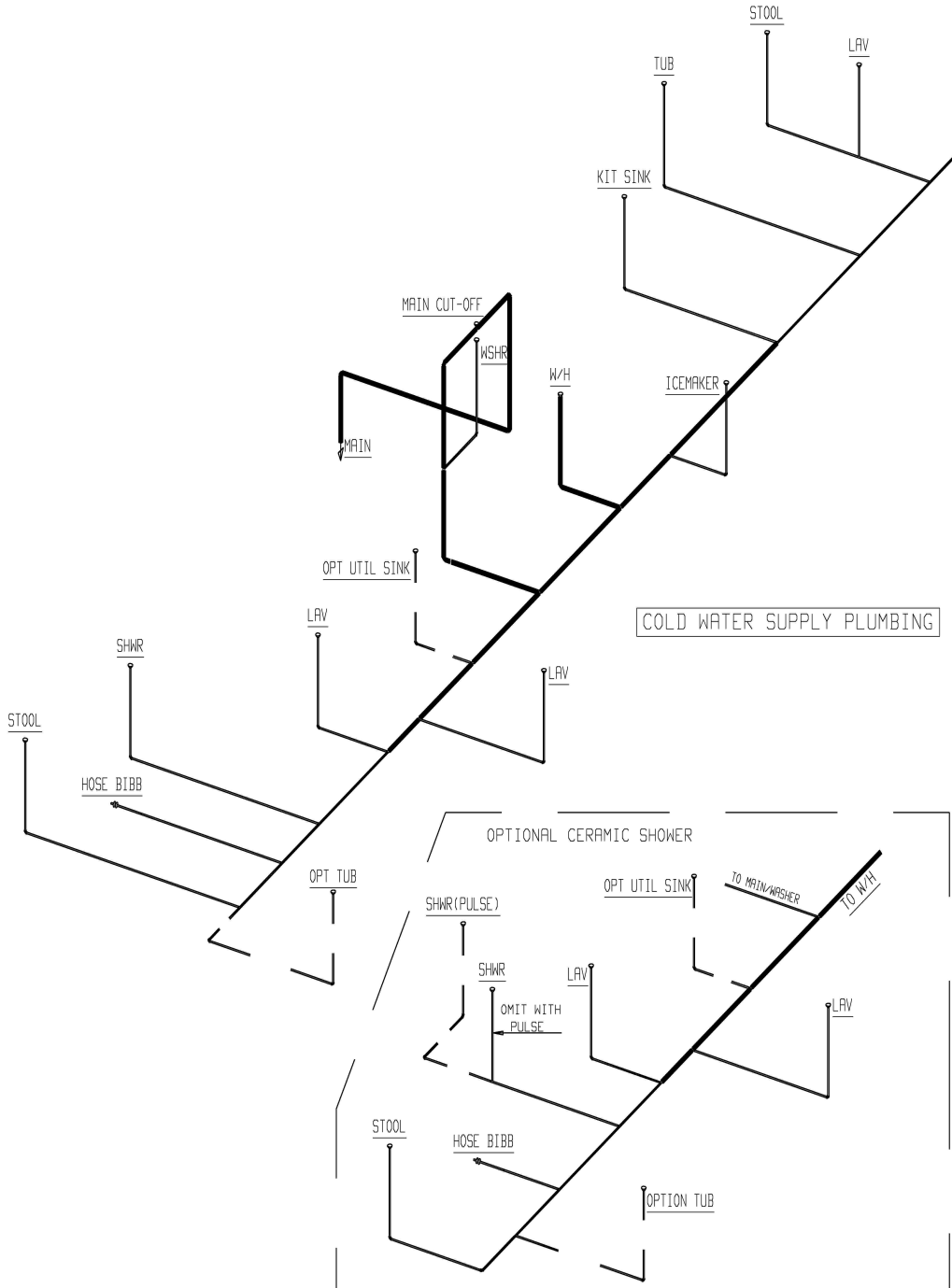
Shearwall	Dist./ Hitch	Length	PLF	# of Joists	Lags	Notes
A	0 '	Full	420	2	4/4	
B	52 '	Full	420	2	4/4	

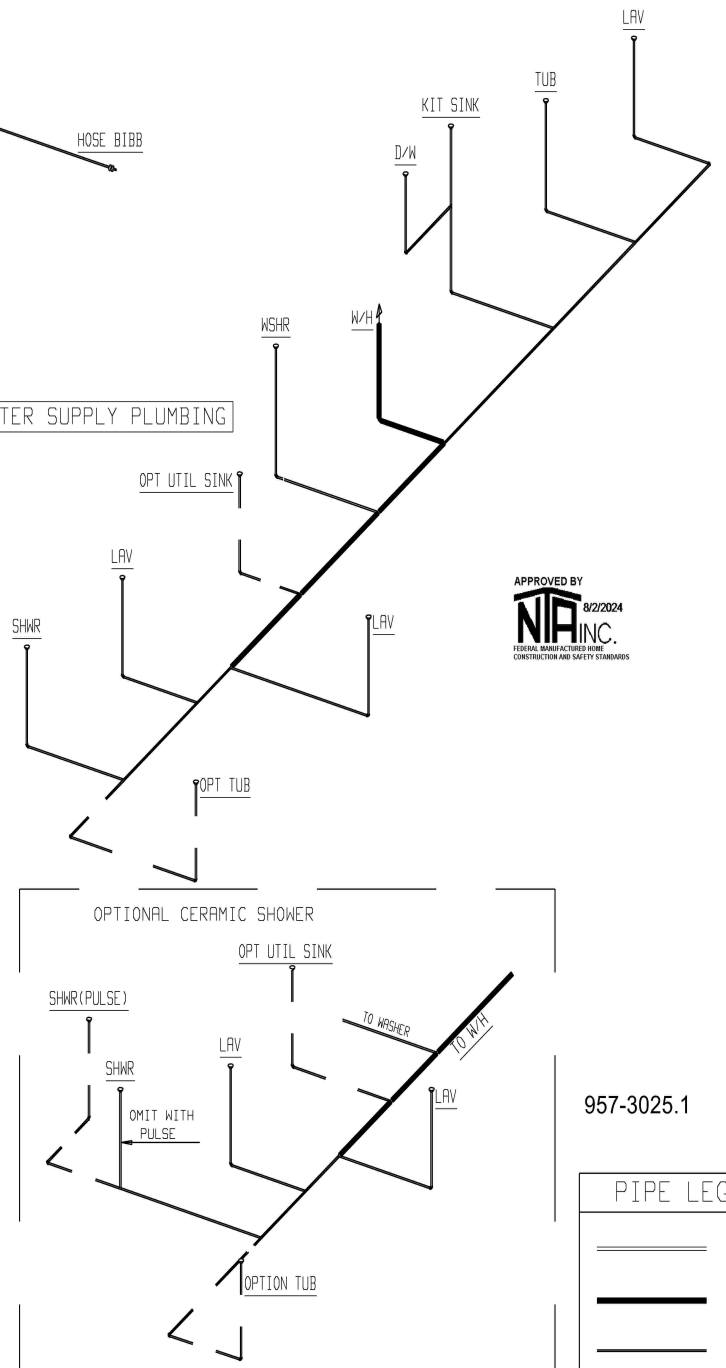
Diaphragm Construction: (3/8" sheathing w/ceiling with 16ga. @ 4/8 oc) [232 plf] Chords: 2x4 SPF #3 Top Plate & 2x4 Rail. Each spliced w/ 12" glue block.

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

Designed by GDB

957-3025.0.2





APPROVED BY NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

957-3025.1

PIPE LEGEND

1"

3/4"

1/2"

BRAND	SERIES
CLAYTON	FS28

CLAYTON HOME BUILDING GROUP

REVISIONS	BY	DATE

GENERAL NOTES

HOSE BIBBS PER SPECS

DRAWING TITLE

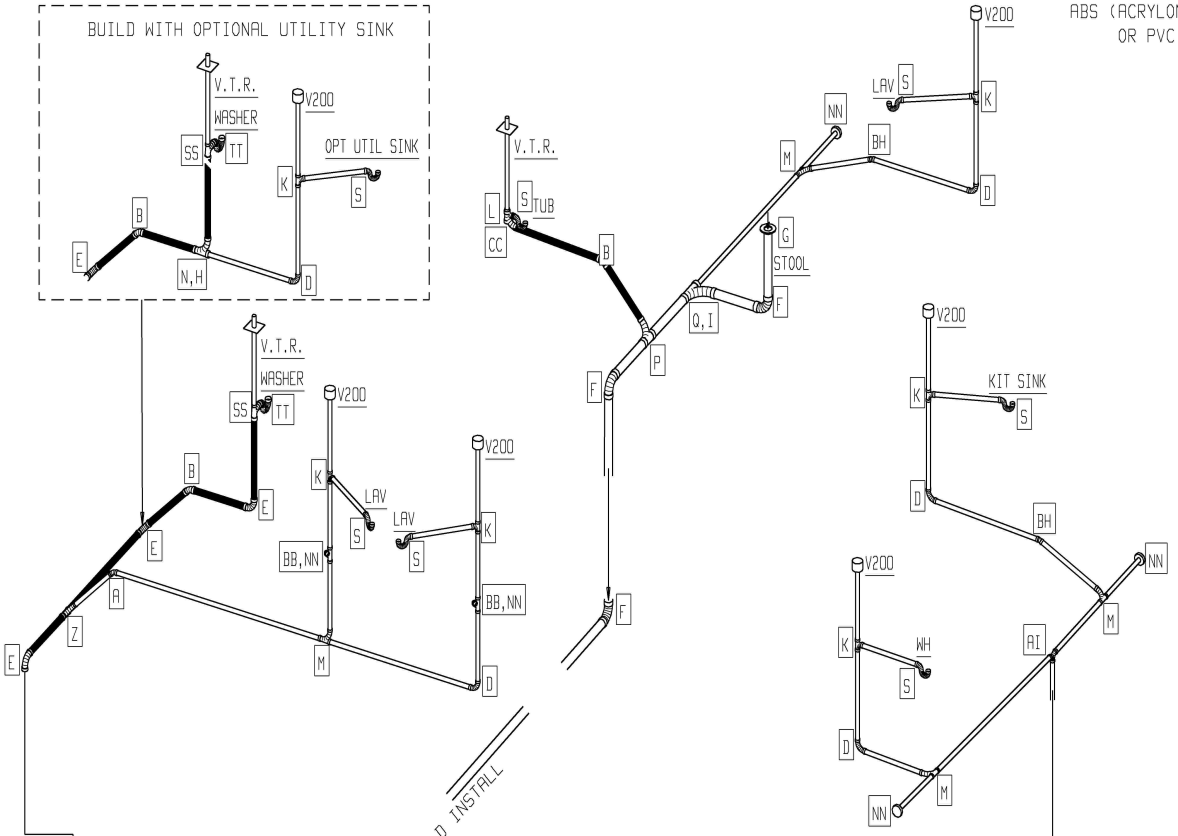
SUPPLY PLUMBING

MODEL NAME			SQ. FT.
3025			1369
PLANT	DESCRIPTION		MODEL NO.
957	28X52 3BR-2BA		3025
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	07/15/2024	07/29/2024	9-1

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	
D	1
E	1
F	1
O	1
P	1
W,J	1
1.5" PIPE	7 FT
2" PIPE	5 FT
3" PIPE	40 FT
OPTIONAL TUB IN PBH	
O	1
D	1
1.5" PIPE	8 FT

APPROVED BY
NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

957-3025.2

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	

BRAND	SERIES
CLAYTON	FS28

CLAYTON HOME BUILDING GROUP

REVISIONS	BY	DATE

GENERAL NOTES

DRAWING TITLE
DWV SCHEMATIC

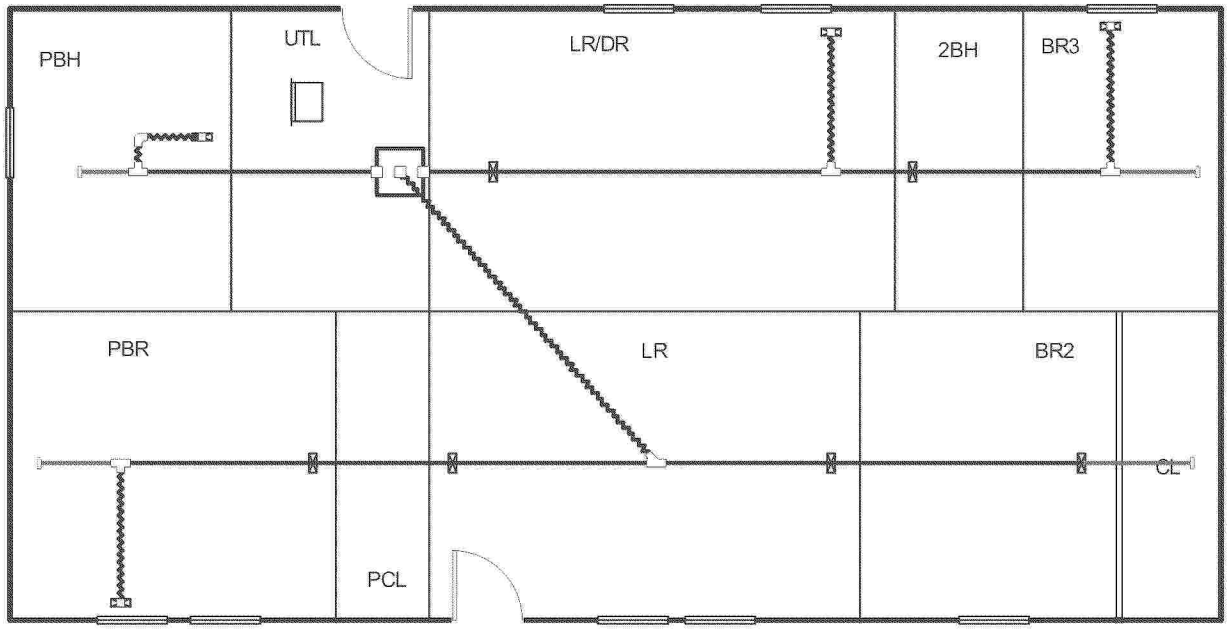
MODEL NAME	SQ. FT.
3025	1369

PLANT	DESCRIPTION	MODEL NO.
957	28X52 3BR-2BA	3025

DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	07/15/2024	07/29/2024	8-1

N

Level 1



APPROVED BY
NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

957-3025.4.1

Job #: 3025(I) **Performed by CLAYTON ROCKWELL for:** 3025(I) ROCKWELL, NC		Scale: 1 : 93 Page 1 Right-Suite® Universal 2023 23.0.04 RSU59516 2024-Jul-25 13:27:31 ...layton Homes\Desktop\3025(I).rup

wrightsoft

Manual S Compliance Report
Entire House

Job: 3025(I)
Date: July 25, 2024
By: CLAYTON ROCKWELL

Project Information

For: 3025(I), CLAYTON 957
ROCKWELL, NC

Cooling Equipment

Design Conditions

Outdoor design DB:	94.7°F	Sensible gain:	14642	Btuh	Entering coil DB:	76.6°F
Outdoor design WB:	75.9°F	Latent gain:	3761	Btuh	Entering coil WB:	63.7°F
Indoor design DB:	75.0°F	Total gain:	18404	Btuh		
Indoor RH:	50%	Estimated airflow:	780	cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type: Split ASHP
Manufacturer: Smart Comfort Model: R4H5S24*K*AAA*+FEVA0024**+NAVA43601CK

Actual airflow:	780	cfm		
Sensible capacity:	16380	Btuh	112% of load	
Latent capacity:	7020	Btuh	187% of load	
Total capacity:	23400	Btuh	127% of load	SHR: 70%

Heating Equipment

Design Conditions

Outdoor design DB:	25.8°F	Heat loss:	17480	Btuh	Entering coil DB:	66.5°F
Indoor design DB:	70.0°F					

Manufacturer's Performance Data at Actual Design Conditions

Equipment type: Split ASHP
Manufacturer: Smart Comfort Model: R4H5S24*K*AAA*+FEVA0024**+NAVA43601CK

Actual airflow:	780	cfm			
Output capacity:	22800	Btuh	130% of load	Capacity balance:	21 °F
Supplemental heat required:	0	Btuh		Economic balance:	-99 °F

Backup equipment type: Elec strip
Manufacturer: Smart Comfort Model:

Actual airflow:	780	cfm			
Output capacity:	10.0	kW	195% of load	Temp. rise:	40 °F

Meets all requirements of ACCA Manual S.

APPROVED BY NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

wrightsoft

Project Summary
Entire House

APPROVED BY
NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

Job: 3025(I)
Date: July 25, 2024
By: CLAYTON ROCKWELL

Project Information

For: 3025(I), CLAYTON 957
ROCKWELL, NC

Notes: DUCT COOLING CAPACITY = 26,000 BTU/HR
REFER TO MODEL PLAN 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	14588	Btuh
Ducts	0	Btuh
Central vent (60 cfm)	***2892***	Btuh
Outside air		
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	17480	Btuh

Sensible Cooling Equipment Load Sizing

Structure	13354	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	14599	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	1368	1368
Volume (ft³)	10947	10947
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	88	48

Latent Cooling Equipment Load Sizing

Structure	2118	Btuh
Ducts	0	Btuh
Central vent (60 cfm)	***1644***	Btuh
Outside air		
Equipment latent load	3761	Btuh
Equipment Total Load (Sen+Lat)	18360	Btuh
Req. total capacity at 0.70 SHR	1.7	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	0.053	cfm/Btuh
Static pressure	0.30	in H2O

Space thermostat
Capacity balance point = 21 °F

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

Cooling Equipment Summary

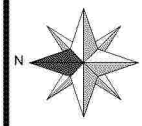
Make	Smart Comfort
Trade	15 SEER2 R SERIES R410A HP
Cond	R4H5S24*K*AAA*
Coil	FEVA0024**+NAVA43601CK
AHRI ref	0

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	0.058	cfm/Btuh
Static pressure	0.30	in H2O
Load sensible heat ratio	0.80	

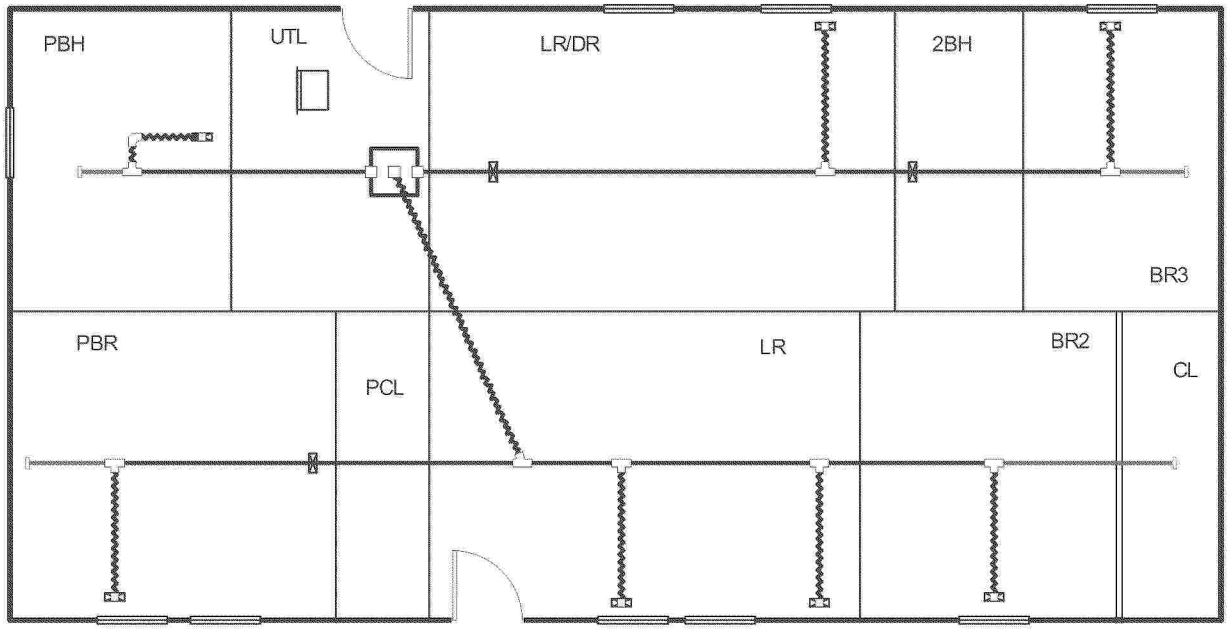
957-3025.4.3

Bold/italic values have been manually overridden

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



Level 1



APPROVED BY
NTA INC.
8/2/2024
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

957-3025.4.4

Job #: 3025(P) **Performed by CLAYTON ROCKWELL for:** 3025(P) ROCKWELL, NC		Scale: 1 : 93 Page 1 Right-Suite® Universal 2023 23.0.04 RSU59516 2024-Jul-25 13:55:12 ...layton Homes\Desktop\3025(P).rup

wrightsoft

Manual S Compliance Report
Entire House

Job: 3025(P)
Date: July 25, 2024
By: CLAYTON ROCKWELL

Project Information

For: 3025(P), CLAYTON 957
ROCKWELL, NC

Cooling Equipment

Design Conditions

Outdoor design DB:	94.7°F	Sensible gain:	14642	Btuh	Entering coil DB:	76.6°F
Outdoor design WB:	75.9°F	Latent gain:	3761	Btuh	Entering coil WB:	63.7°F
Indoor design DB:	75.0°F	Total gain:	18404	Btuh		
Indoor RH:	50%	Estimated airflow:	780	cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type: Split ASHP
Manufacturer: Smart Comfort Model: R4H5S24*K*AAA*+FEVA0024**+NAVA43601CK

Actual airflow:	780	cfm		
Sensible capacity:	16380	Btuh	112% of load	
Latent capacity:	7020	Btuh	187% of load	
Total capacity:	23400	Btuh	127% of load	SHR: 70%

Heating Equipment

Design Conditions

Outdoor design DB:	25.8°F	Heat loss:	17480	Btuh	Entering coil DB:	66.5°F
Indoor design DB:	70.0°F					

Manufacturer's Performance Data at Actual Design Conditions

Equipment type: Split ASHP
Manufacturer: Smart Comfort Model: R4H5S24*K*AAA*+FEVA0024**+NAVA43601CK

Actual airflow:	780	cfm			
Output capacity:	22800	Btuh	130% of load	Capacity balance:	21 °F
Supplemental heat required:	0	Btuh		Economic balance:	-99 °F

Backup equipment type: Elec strip
Manufacturer: Smart Comfort Model:

Actual airflow:	780	cfm			
Output capacity:	10.0	kW	195% of load	Temp. rise:	40 °F

APPROVED BY NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Meets all requirements of ACCA Manual S.

wrightsoft

Project Summary
Entire House

APPROVED BY
NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Job: 3025(P)
Date: July 25, 2024
By: CLAYTON ROCKWELL

Project Information

For: 3025(P), CLAYTON 957
ROCKWELL, NC

Notes: DUCT COOLING CAPACITY = 26,000 BTU/HR
REFER TO MODEL PLAN 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	14588	Btuh
Ducts	0	Btuh
Central vent (60 cfm)	***2892***	Btuh
Outside air		
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	17480	Btuh

Sensible Cooling Equipment Load Sizing

Structure	13354	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	14599	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	1368	1368
Volume (ft³)	10947	10947
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	88	48

Latent Cooling Equipment Load Sizing

Structure	2118	Btuh
Ducts	0	Btuh
Central vent (60 cfm)	***1644***	Btuh
Outside air		
Equipment latent load	3761	Btuh
Equipment Total Load (Sen+Lat)	18360	Btuh
Req. total capacity at 0.70 SHR	1.7	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	0.053	cfm/Btuh
Static pressure	0.30	in H2O

Space thermostat
Capacity balance point = 21 °F

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

Cooling Equipment Summary

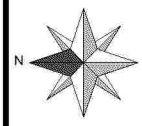
Make	Smart Comfort
Trade	15 SEER2 R SERIES R410A HP
Cond	R4H5S24*K*AAA*
Coil	FEVA0024**+NAVA43601CK
AHRI ref	0

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	0.058	cfm/Btuh
Static pressure	0.30	in H2O
Load sensible heat ratio	0.80	

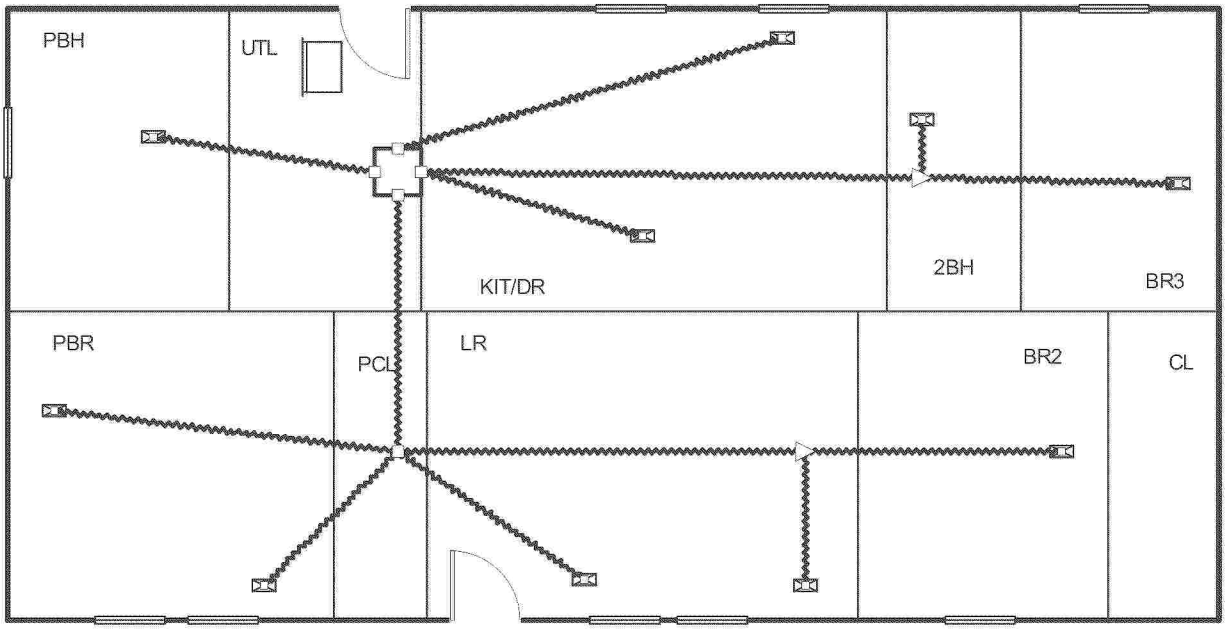
957-3025.4.6

Bold/italic values have been manually overridden

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



Level 1



APPROVED BY
NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

957-3025.4.7

Job #: 3025(OHVD) **Performed by CLAYTON ROCKWELL for:** 3025(OHVD) ROCKWELL, NC		Scale: 1 : 93 Page 1 Right-Suite® Universal 2023 23.0.04 RSU59516 2024-Jul-26 08:28:20 ...ton Homes\Desktop\3025(OHVD).rup

wrightsoft

Project Summary
Entire House

APPROVED BY
NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Job: 3025(OHVD)
Date: Jul 26, 2024
By: CLAYTON ROCKWELL

Project Information

For: 3025(OHVD), CLAYTON 957
ROCKWELL, NC

Notes: DUCT COOLING CAPACITY = 30,667 BTU/HR
REFER TO MODEL PLAN FOR THERMAL ZONE CALCULATIONS

Design Information

Weather: Jacksonville Intl, FL, US

Winter Design Conditions

Outside db	33	°F
Inside db	70	°F
Design TD	37	°F

Summer Design Conditions

Outside db	93	°F
Inside db	75	°F
Design TD	18	°F
Daily range	M	
Relative humidity	50	%
Moisture difference	49	gr/lb

Heating Summary

Structure	12282	Btuh
Ducts	4721	Btuh
Central vent (60 cfm)	***2452***	Btuh
Outside air		
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	19455	Btuh

Sensible Cooling Equipment Load Sizing

Structure	12835	Btuh
Ducts	4627	Btuh
Central vent (60 cfm)	***1160***	Btuh
Outside air		
Blower	0	Btuh
Use manufacturer's data	n	
Rate/swing multiplier	0.98	
Equipment sensible load	18175	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	1365	1365
Volume (ft³)	10920	10920
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	88	48

Latent Cooling Equipment Load Sizing

Structure	2409	Btuh
Ducts	1105	Btuh
Central vent (60 cfm)	***2011***	Btuh
Outside air		
Equipment latent load	5526	Btuh
Equipment Total Load (Sen+Lat)	23701	Btuh
Req. total capacity at 0.70 SHR	2.2	ton

Heating Equipment Summary

Make	Smart Comfort
Trade	15 SEER2 R SERIES R410A HP
Model	R4H5S30*K*AAA*
AHRI ref	0

Efficiency	7.5 HSPF2	
Heating input		
Heating output	28000	Btuh @ 47°F
Temperature rise	28	°F
Actual air flow	920	cfm
Air flow factor	0.054	cfm/Btuh
Static pressure	0.30	in H2O

Space thermostat
Capacity balance point = 25 °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	R4H5S30*K*AAA*
Coil	FEVA0036**+NAVA43601CK
AHRI ref	0

Efficiency	12.0 EER2,14.3 SEER2	
Sensible cooling	19320	Btuh
Latent cooling	8280	Btuh
Total cooling	27600	Btuh
Actual air flow	920	cfm
Air flow factor	0.053	cfm/Btuh
Static pressure	0.30	in H2O
Load sensible heat ratio	0.77	

957-3025.4.8

Bold/italic values have been manually overridden

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

wrightsoft

Manual S Compliance Report
Entire House

Job: 3025(OHVD)
Date: Jul 26, 2024
By: CLAYTON ROCKWELL

Project Information

For: 3025(OHVD), CLAYTON 957
ROCKWELL, NC

Cooling Equipment

Design Conditions

Outdoor design DB:	92.6°F	Sensible gain:	18622	Btuh	Entering coil DB:	76.2°F
Outdoor design WB:	76.8°F	Latent gain:	5526	Btuh	Entering coil WB:	63.6°F
Indoor design DB:	75.0°F	Total gain:	24148	Btuh		
Indoor RH:	50%	Estimated airflow:	920	cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type: Split ASHP
Manufacturer: Smart Comfort Model: R4H5S30*K*AAA*+FEVA0036**+NAVA43601CK

Actual airflow:	920	cfm		
Sensible capacity:	19320	Btuh	104% of load	
Latent capacity:	8280	Btuh	150% of load	
Total capacity:	27600	Btuh	114% of load	SHR: 70%

Heating Equipment

Design Conditions

Outdoor design DB:	32.8°F	Heat loss:	19455	Btuh	Entering coil DB:	67.5°F
Indoor design DB:	70.0°F					

Manufacturer's Performance Data at Actual Design Conditions

Equipment type: Split ASHP
Manufacturer: Smart Comfort Model: R4H5S30*K*AAA*+FEVA0036**+NAVA43601CK

Actual airflow:	920	cfm				
Output capacity:	28000	Btuh	144% of load		Capacity balance:	25 °F
Supplemental heat required:	0	Btuh			Economic balance:	-99 °F

Backup equipment type: Elec strip
Manufacturer: Smart Comfort Model:

Actual airflow:	920	cfm				
Output capacity:	10.0	kW	175% of load	Temp. rise:	34	°F

Meets all requirements of ACCA Manual S.

APPROVED BY NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

CLAYTON HOME BUILDING GROUP

3025 ZN 1 & 2

Model Number	3025	Drawing Number	3025	Version 17

BOX SIZE: 26.33 ft. x 52 ft.
AVG. SIDEWALL HEIGHT = 8 FEET
PERCENTAGE OF CEILING THAT IS VAULTED = 0%
12 INCH DIAMETER XOVER DUCT AREA = 78.5 SQ.FT. MAX. WITH R-8 INSULATION
IN-FLOOR DUCT SYSTEM

	UNHEATED FLOOR	WALL	FLAT ROOF
INSULATION VALUES	R-22 FW	R-13	R-38
DAPIA PAGE	THP-161	THP-552	THP-1484
U VALUE (BTUH/SQ.FT.-F)	0.0445	0.0808	0.0285

THIS INSULATION COMBINATION COMPLIES WITH ZONE 1 PRESCRIPTIVE ZERH REQUIREMENTS

APPROVED BY NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Overhead Duct	
Diameter	Length
4	0
5	0
6	0
7	0
8	0
9	0
12	0
11	0
14	0
Exterior Supply	Length
14	0
16	0
Exterior Return	Length
14	0
16	0

		Area	U Value	UA
Doors:	Front	22.00	0.210	4.62
	Rear	22.00	0.280	6.16
	Other Door	0.00	0.280	0.00
	Other Door	0.00	0.330	0.00
	OSB	0.00	0.000	0.00
	Skylights	0.00	0.330	0.00
Window Glass Area:	Standard	132.00	0.300	39.60
	Option	0.00	0.300	0.00
Net:	Floor	1369.33	0.045	60.94
	Wall	1077.33	0.081	87.05
	Ceiling	1369.33	0.0285	39.03
Th. Zone 1:	Ext. Duct	78.50	0.242	18.98
Th. Zone 2:	Ext. Duct	78.50	0.223	17.48
Th. Zone 3:	Ext. Duct	78.50	0.206	16.14
Overhead TZ 1:	Supply	0.00	0.000	0.00
Overhead TZ 2:	Supply	0.00	0.000	0.00
Overhead TZ 3:	Supply	0.00	0.00	0.00

Energy Star v3 & ZERH Max Glass (sq ft)	
Th. Zone 1	270.5
Th. Zone 2	147.3
Th. Zone 3	0.0

Thermal Zone	Outdoor Design Temp (F)	UA	Uo	EStar v3 & ZERH Compliant	Heatloss BTUH/F
1	11	256.37	0.063	OK	366.00
2	0	254.87	0.063	OK	364.50
3	-14	253.53	0.062	NG	363.20

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-23	5	10kW
-42	-8	12kW
-70	-28	15kW
-39	-7	40k Gas
-94	-45	60k Gas
-149	-83	80k Gas

Thermal Zone	U-Value	Thermal Zone	U-Value	Thermal Zone	U-Value
Energy Star Version 2					
1-EHP-S	0.080	2-EHP-S	0.080	3-EHP-S	0.079
1-GAS-S	0.080	2-GAS-S	0.080	3-GAS-S	0.071
1-ENV-S	0.076	2-ENV-S	0.067	3-ENV-S	0.059
1-EHP-M	0.074	2-EHP-M	0.074	3-EHP-M	0.074
1-GAS-M	0.074	2-GAS-M	0.074	3-GAS-M	0.065
1-ENV-M	0.071	2-ENV-M	0.064	3-ENV-M	0.056

Energy Star Version 3 & ZERH					
1 Single	0.076	2 Single	0.065	3 Single	0.057
1 Double	0.070	2 Double	0.063	3 Double	0.054

CLAYTON HOME BUILDING GROUP

3025 ZN 1 WITH OVERHEAD AND PATIO/ATRIUM DOOR

Model Number	3025	Drawing Number	3025	Version 17

BOX SIZE: 26.33 ft. x 52 ft.
AVG. SIDEWALL HEIGHT = 8 FEET
PERCENTAGE OF CEILING THAT IS VAULTED = 0%

OVERHEAD DUCT SYSTEM

	UNHEATED FLOOR	WALL	FLAT ROOF
INSULATION VALUES	R-22 FW	R-13	R-38
DAPIA PAGE	THP-161	THP-552	THP-1484
U VALUE (BTUH/SQ.FT.-F)	0.0445	0.0808	0.0285

THIS INSULATION COMBINATION COMPLIES WITH ZONE 1 PRESCRIPTIVE ZERH REQUIREMENTS

APPROVED BY NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Overhead Duct	
Diameter	Length
4	0
5	4
6	66
7	43
8	15
9	0
12	8
11	0
14	0
Exterior Supply	Length
14	0
16	0
Exterior Return	Length
14	0
16	0

		Area	U Value	UA
Doors:	Front	22.00	0.210	4.62
	Rear	22.00	0.280	6.16
	Other Door	0.00	0.280	0.00
	Other Door	0.00	0.330	0.00
	OSB	0.00	0.000	0.00
	Skylights	0.00	0.330	0.00
Window Glass Area:	Standard	132.00	0.300	39.60
	Option	0.00	0.300	0.00
Net:	Floor	1369.33	0.045	60.94
	Wall	1077.33	0.081	87.05
	Ceiling	1369.33	0.0285	39.03
Th. Zone 1:	Ext. Duct	0.00	0.000	0.00
Th. Zone 2:	Ext. Duct	0.00	0.000	0.00
Th. Zone 3:	Ext. Duct	0.00	0.000	0.00
Overhead TZ 1:	Supply	15.45	0.242	3.74
Overhead TZ 2:	Supply	15.45	0.223	3.44
Overhead TZ 3:	Supply	15.45	0.21	3.18

Energy Star v3 & ZERH Max Glass (sq ft)	
Th. Zone 1	314.8
Th. Zone 2	188.7
Th. Zone 3	26.0

Thermal Zone	Outdoor Design Temp (F)	UA	Uo	EStar v3 & ZERH Compliant	Heatloss BTUH/F
1	11	241.13	0.060	OK	350.80
2	0	240.83	0.060	OK	350.50
3	-14	240.57	0.060	NG	350.20

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-27	2	10kW
-47	-12	12kW
-76	-32	15kW
-44	-10	40k Gas
-101	-50	60k Gas
-158	-90	80k Gas

Thermal Zone	U-Value	Thermal Zone	U-Value	Thermal Zone	U-Value
Energy Star Version 2					
1-EHP-S	0.080	2-EHP-S	0.080	3-EHP-S	0.079
1-GAS-S	0.080	2-GAS-S	0.080	3-GAS-S	0.071
1-ENV-S	0.076	2-ENV-S	0.067	3-ENV-S	0.059
1-EHP-M	0.074	2-EHP-M	0.074	3-EHP-M	0.074
1-GAS-M	0.074	2-GAS-M	0.074	3-GAS-M	0.065
1-ENV-M	0.071	2-ENV-M	0.064	3-ENV-M	0.056

Energy Star Version 3 & ZERH					
1 Single	0.076	2 Single	0.065	3 Single	0.057
1 Double	0.070	2 Double	0.063	3 Double	0.054

CLAYTON HOME BUILDING GROUP

3025 ZN 1 WITH OVERHEAD AND PATIO/ATRIUM DOOR

Model Number	3025	Drawing Number	3025	Version 17

BOX SIZE: 26.33 ft. x 52 ft.
AVG. SIDEWALL HEIGHT = 8 FEET
PERCENTAGE OF CEILING THAT IS VAULTED = 0%

OVERHEAD DUCT SYSTEM

	UNHEATED FLOOR	WALL	FLAT ROOF
INSULATION VALUES	R-22 FW	R-13	R-38
DAPIA PAGE	THP-161	THP-552	THP-1484
U VALUE (BTUH/SQ.FT.-F)	0.0445	0.0808	0.0285

THIS INSULATION COMBINATION COMPLIES WITH ZONE 1 PRESCRIPTIVE ZERH REQUIREMENTS

Overhead Duct	
Diameter	Length
4	0
5	4
6	66
7	43
8	15
9	0
12	8
11	0
14	0
Exterior Supply	Length
14	0
16	0
Exterior Return	Length
14	0
16	0

APPROVED BY NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

			Area	U Value	UA
Doors:		Front	22.00	0.210	4.62
		Rear	43.00	0.280	12.04
		Other Door	0.00	0.280	0.00
		Other Door	0.00	0.330	0.00
		OSB	0.00	0.000	0.00
		Skylights	0.00	0.330	0.00
Window Glass Area:		Standard	117.00	0.300	35.10
		Option	0.00	0.300	0.00
Net:		Floor	1369.33	0.045	60.94
		Wall	1071.33	0.081	86.56
		Ceiling	1369.33	0.0285	39.03
Th. Zone 1:		Ext. Duct	0.00	0.000	0.00
Th. Zone 2:		Ext. Duct	0.00	0.000	0.00
Th. Zone 3:		Ext. Duct	0.00	0.000	0.00
Overhead TZ 1:		Supply	15.45	0.242	3.74
Overhead TZ 2:		Supply	15.45	0.223	3.44
Overhead TZ 3:		Supply	15.45	0.21	3.18

Energy Star v3 & ZERH Max Glass (sq ft)	
Th. Zone 1	295.7
Th. Zone 2	169.6
Th. Zone 3	6.9

Thermal Zone	Outdoor Design Temp (F)	UA	Uo	EStar v3 & ZERH Compliant	Heatloss BTUH/F
1	11	242.02	0.061	OK	351.70
2	0	241.73	0.061	OK	351.40
3	-14	241.46	0.060	NG	351.10

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-27	2	10kW
-46	-11	12kW
-76	-32	15kW
-44	-10	40k Gas
-101	-49	60k Gas
-157	-89	80k Gas

Thermal Zone	U-Value	Thermal Zone	U-Value	Thermal Zone	U-Value
Energy Star Version 2					
1-EHP-S	0.080	2-EHP-S	0.080	3-EHP-S	0.079
1-GAS-S	0.080	2-GAS-S	0.080	3-GAS-S	0.071
1-ENV-S	0.076	2-ENV-S	0.067	3-ENV-S	0.059
1-EHP-M	0.074	2-EHP-M	0.074	3-EHP-M	0.074
1-GAS-M	0.074	2-GAS-M	0.074	3-GAS-M	0.065
1-ENV-M	0.071	2-ENV-M	0.064	3-ENV-M	0.056

Energy Star Version 3 & ZERH					
1 Single	0.076	2 Single	0.065	3 Single	0.057
1 Double	0.070	2 Double	0.063	3 Double	0.054

CLAYTON HOME BUILDING GROUP

3025 ZN 1 & 2 WITH PATIO/ATRIUM DOOR

Model Number	3025	Drawing Number	3025	Version 17

BOX SIZE: 26.33 ft. x 52 ft.
AVG. SIDEWALL HEIGHT = 8 FEET
PERCENTAGE OF CEILING THAT IS VAULTED = 0%
12 INCH DIAMETER XOVER DUCT AREA = 78.5 SQ.FT. MAX. WITH R-8 INSULATION
IN-FLOOR DUCT SYSTEM

	UNHEATED FLOOR	WALL	FLAT ROOF
INSULATION VALUES	R-22 FW	R-13	R-38
DAPIA PAGE	THP-161	THP-552	THP-1484
U VALUE (BTUH/SQ.FT.-F)	0.0445	0.0808	0.0285

THIS INSULATION COMBINATION COMPLIES WITH ZONE 1 PRESCRIPTIVE ZERH REQUIREMENTS

APPROVED BY NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Overhead Duct	
Diameter	Length
4	0
5	0
6	0
7	0
8	0
9	0
12	0
11	0
14	0
Exterior Supply	**Length**
14	0
16	0
Exterior Return	**Length**
14	0
16	0

			Area	U Value	UA
	Doors:	Front	22.00	0.210	4.62
		Rear	43.00	0.280	12.04
		Other Door	0.00	0.280	0.00
		Other Door	0.00	0.330	0.00
		OSB	0.00	0.000	0.00
		Skylights	0.00	0.330	0.00
	Window Glass Area:	Standard	117.00	0.300	35.10
		Option	0.00	0.300	0.00
	Net:	Floor	1369.33	0.045	60.94
		Wall	1071.33	0.081	86.56
		Ceiling	1369.33	0.0285	39.03
	Th. Zone 1:	Ext. Duct	78.50	0.242	18.98
	Th. Zone 2:	Ext. Duct	78.50	0.223	17.48
	Th. Zone 3:	Ext. Duct	78.50	0.206	16.14
	Overhead TZ 1:	Supply	0.00	0.000	0.00
	Overhead TZ 2:	Supply	0.00	0.000	0.00
	Overhead TZ 3:	Supply	0.00	0.00	0.00

Energy Star v3 & ZERH Max Glass (sq ft)	
Th. Zone 1	251.4
Th. Zone 2	128.3
Th. Zone 3	0.0

Thermal Zone	Outdoor Design Temp (F)	UA	Uo	EStar v3 & ZERH Compliant	Heatloss BTUH/F
1	11	257.27	0.063	OK	366.90
2	0	255.77	0.063	OK	365.40
3	-14	254.42	0.063	NG	364.10

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-23	5	10kW
-42	-8	12kW
-69	-28	15kW
-39	-6	40k Gas
-94	-44	60k Gas
-148	-83	80k Gas

Thermal Zone	U-Value	Thermal Zone	U-Value	Thermal Zone	U-Value
Energy Star Version 2					
1-EHP-S	0.080	2-EHP-S	0.080	3-EHP-S	0.079
1-GAS-S	0.080	2-GAS-S	0.080	3-GAS-S	0.071
1-ENV-S	0.076	2-ENV-S	0.067	3-ENV-S	0.059
1-EHP-M	0.074	2-EHP-M	0.074	3-EHP-M	0.074
1-GAS-M	0.074	2-GAS-M	0.074	3-GAS-M	0.065
1-ENV-M	0.071	2-ENV-M	0.064	3-ENV-M	0.056

Energy Star Version 3 & ZERH					
1 Single	0.076	2 Single	0.065	3 Single	0.057
1 Double	0.070	2 Double	0.063	3 Double	0.054

CLAYTON HOME BUILDING GROUP

3025 ZN 3

Model Number	3025	Drawing Number	3025	Version 17

BOX SIZE: 26.33 ft. x 52 ft.
AVG. SIDEWALL HEIGHT = 8 FEET
PERCENTAGE OF CEILING THAT IS VAULTED = 0%
12 INCH DIAMETER XOVER DUCT AREA = 78.5 SQ.FT. MAX. WITH R-8 INSULATION
IN-FLOOR DUCT SYSTEM

	UNHEATED FLOOR	WALL	FLAT ROOF
INSULATION VALUES	(2) R-11 OR / R-33 BIB	R-21	R-38
DAPIA PAGE	THP-3001	THP-560	THP-1484
U VALUE (BTUH/SQ.FT.-F)	0.0371	0.0541	0.0285

THIS INSULATION COMBINATION COMPLIES WITH ZONE 2 PRESCRIPTIVE ZERH REQUIREMENTS

APPROVED BY NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Overhead Duct	
Diameter	Length
4	0
5	0
6	0
7	0
8	0
9	0
12	0
11	0
14	0
Exterior Supply	Length
14	0
16	0
Exterior Return	Length
14	0
16	0

		Area	U Value	UA
Doors:	Front	22.00	0.210	4.62
	Rear	22.00	0.280	6.16
	Other Door	0.00	0.280	0.00
	Other Door	0.00	0.330	0.00
	OSB	0.00	0.000	0.00
	Skylights	0.00	0.330	0.00
Window Glass Area:	Standard	132.00	0.300	39.60
	Option	0.00	0.300	0.00
Net:	Floor	1369.33	0.037	50.80
	Wall	1077.33	0.054	58.28
	Ceiling	1369.33	0.0285	39.03
Th. Zone 1:	Ext. Duct	78.50	0.242	18.98
Th. Zone 2:	Ext. Duct	78.50	0.223	17.48
Th. Zone 3:	Ext. Duct	78.50	0.206	16.14
Overhead TZ 1:	Supply	0.00	0.000	0.00
Overhead TZ 2:	Supply	0.00	0.000	0.00
Overhead TZ 3:	Supply	0.00	0.00	0.00

Energy Star v3 & ZERH Max Glass (sq ft)	
Th. Zone 1	413.6
Th. Zone 2	303.9
Th. Zone 3	160.3

Thermal Zone	Outdoor Design Temp (F)	UA	Uo	EStar v3 & ZERH Compliant	Heatloss BTUH/F
1	11	217.48	0.053	OK	327.10
2	0	215.97	0.053	OK	325.60
3	-14	214.63	0.053	OK	324.30

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-34	-3	10kW
-55	-18	12kW
-86	-40	15kW
-52	-16	40k Gas
-113	-58	60k Gas
-175	-101	80k Gas

Thermal Zone	U-Value	Thermal Zone	U-Value	Thermal Zone	U-Value
Energy Star Version 2					
1-EHP-S	0.080	2-EHP-S	0.080	3-EHP-S	0.079
1-GAS-S	0.080	2-GAS-S	0.080	3-GAS-S	0.071
1-ENV-S	0.076	2-ENV-S	0.067	3-ENV-S	0.059
1-EHP-M	0.074	2-EHP-M	0.074	3-EHP-M	0.074
1-GAS-M	0.074	2-GAS-M	0.074	3-GAS-M	0.065
1-ENV-M	0.071	2-ENV-M	0.064	3-ENV-M	0.056

Energy Star Version 3 & ZERH					
1 Single	0.076	2 Single	0.065	3 Single	0.057
1 Double	0.070	2 Double	0.063	3 Double	0.054

CLAYTON HOME BUILDING GROUP

3025 ZN 3 WITH PATIO/ATRIUM DOOR

Model Number	3025	Drawing Number	3025	Version 17

BOX SIZE: 26.33 ft. x 52 ft.
AVG. SIDEWALL HEIGHT = 8 FEET
PERCENTAGE OF CEILING THAT IS VAULTED = 0%
12 INCH DIAMETER XOVER DUCT AREA = 78.5 SQ.FT. MAX. WITH R-8 INSULATION
IN-FLOOR DUCT SYSTEM

	UNHEATED FLOOR	WALL	FLAT ROOF
INSULATION VALUES	(2) R-11 OR / R-33 BIB	R-21	R-38
DAPIA PAGE	THP-3001	THP-560	THP-1484
U VALUE (BTUH/SQ.FT.-F)	0.0371	0.0541	0.0285

THIS INSULATION COMBINATION COMPLIES WITH ZONE 2 PRESCRIPTIVE ZERH REQUIREMENTS

APPROVED BY NTA INC. 8/2/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Overhead Duct	
Diameter	Length
4	0
5	0
6	0
7	0
8	0
9	0
12	0
11	0
14	0
Exterior Supply	Length
14	0
16	0
Exterior Return	Length
14	0
16	0

		Area	U Value	UA
Doors:	Front	22.00	0.210	4.62
	Rear	43.00	0.280	12.04
	Other Door	0.00	0.280	0.00
	Other Door	0.00	0.330	0.00
	OSB	0.00	0.000	0.00
	Skylights	0.00	0.330	0.00
Window Glass Area:	Standard	117.00	0.300	35.10
	Option	0.00	0.300	0.00
Net:	Floor	1369.33	0.037	50.80
	Wall	1071.33	0.054	57.96
	Ceiling	1369.33	0.0285	39.03
Th. Zone 1:	Ext. Duct	78.50	0.242	18.98
Th. Zone 2:	Ext. Duct	78.50	0.223	17.48
Th. Zone 3:	Ext. Duct	78.50	0.206	16.14
Overhead TZ 1:	Supply	0.00	0.000	0.00
Overhead TZ 2:	Supply	0.00	0.000	0.00
Overhead TZ 3:	Supply	0.00	0.00	0.00

Energy Star v3 & ZERH Max Glass (sq ft)	
Th. Zone 1	394.3
Th. Zone 2	284.6
Th. Zone 3	141.1

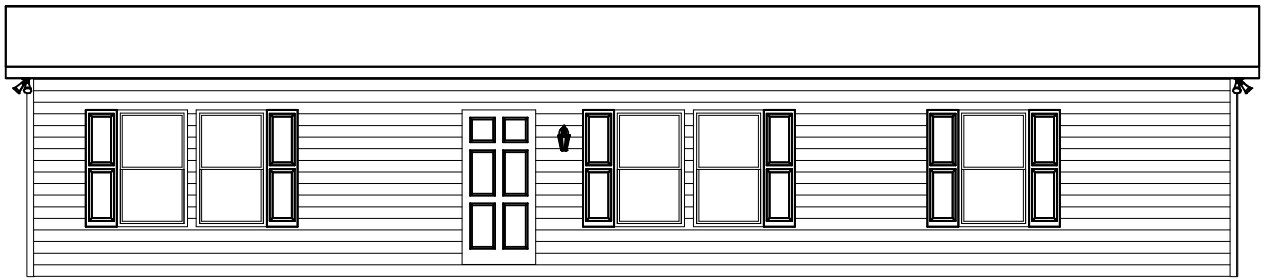
Thermal Zone	Outdoor Design Temp (F)	UA	Uo	EStar v3 & ZERH Compliant	Heatloss BTUH/F
1	11	218.53	0.054	OK	328.20
2	0	217.03	0.053	OK	326.70
3	-14	215.68	0.053	OK	325.30

Design Temperatures

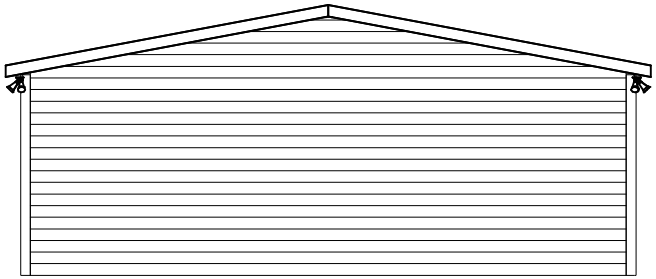
Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-34	-3	10kW
-55	-17	12kW
-86	-39	15kW
-52	-15	40k Gas
-113	-58	60k Gas
-174	-101	80k Gas

Thermal Zone	U-Value	Thermal Zone	U-Value	Thermal Zone	U-Value
Energy Star Version 2					
1-EHP-S	0.080	2-EHP-S	0.080	3-EHP-S	0.079
1-GAS-S	0.080	2-GAS-S	0.080	3-GAS-S	0.071
1-ENV-S	0.076	2-ENV-S	0.067	3-ENV-S	0.059
1-EHP-M	0.074	2-EHP-M	0.074	3-EHP-M	0.074
1-GAS-M	0.074	2-GAS-M	0.074	3-GAS-M	0.065
1-ENV-M	0.071	2-ENV-M	0.064	3-ENV-M	0.056

Energy Star Version 3 & ZERH					
1 Single	0.076	2 Single	0.065	3 Single	0.057
1 Double	0.070	2 Double	0.063	3 Double	0.054



FRONT ELEVATION



RIGHT SIDE ELEVATION

BRAND	SERIES
CLAYTON	FS28

CLAYTON
HOME BUILDING GROUP

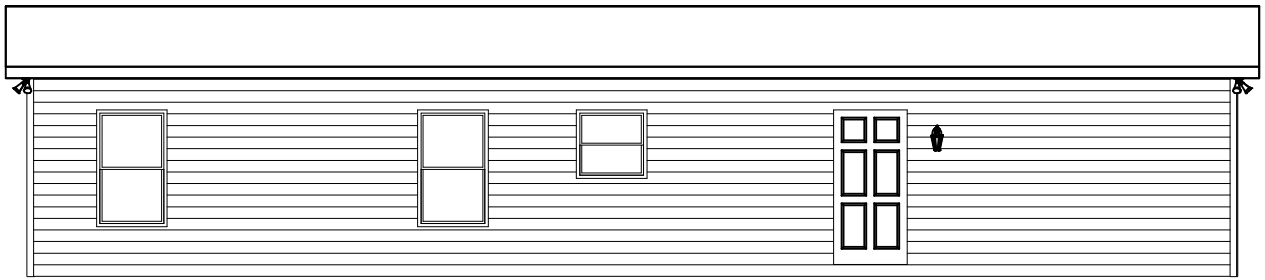
REVISIONS	BY	DATE

GENERAL NOTES

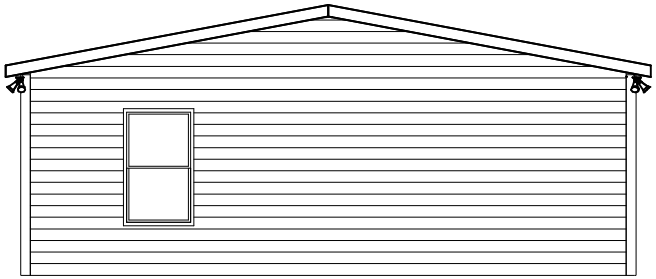
DRAWING TITLE

EXTERIOR ELEVATION
FRONT & RIGHT SIDE

MODEL NAME			SQ. FT.
3025			1369
PLANT	DESCRIPTION		MODEL NO.
957	28X52 3BR-2BA		3025
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	07/15/2024	12/11/2024	20-1



BACK ELEVATION



LEFT SIDE ELEVATION

BRAND: CLAYTON	SERIES: FS28		
CLAYTON HOME BUILDING GROUP			

REVISIONS	BY	DATE

GENERAL NOTES

DRAWING TITLE: EXTERIOR ELEVATION BACK & LEFT SIDE

MODEL NAME			SQ. FT.
3025			1369
PLANT	DESCRIPTION		MODEL NO.
957	28X52 3BR-2BA		3025
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	07/15/2024	12/11/2024	20-2

FRONT ELEVATION
16' DORMER OPTION

FRONT ELEVATION
10' DORMER OPTION

BRAND	SERIES
CLAYTON	FS28

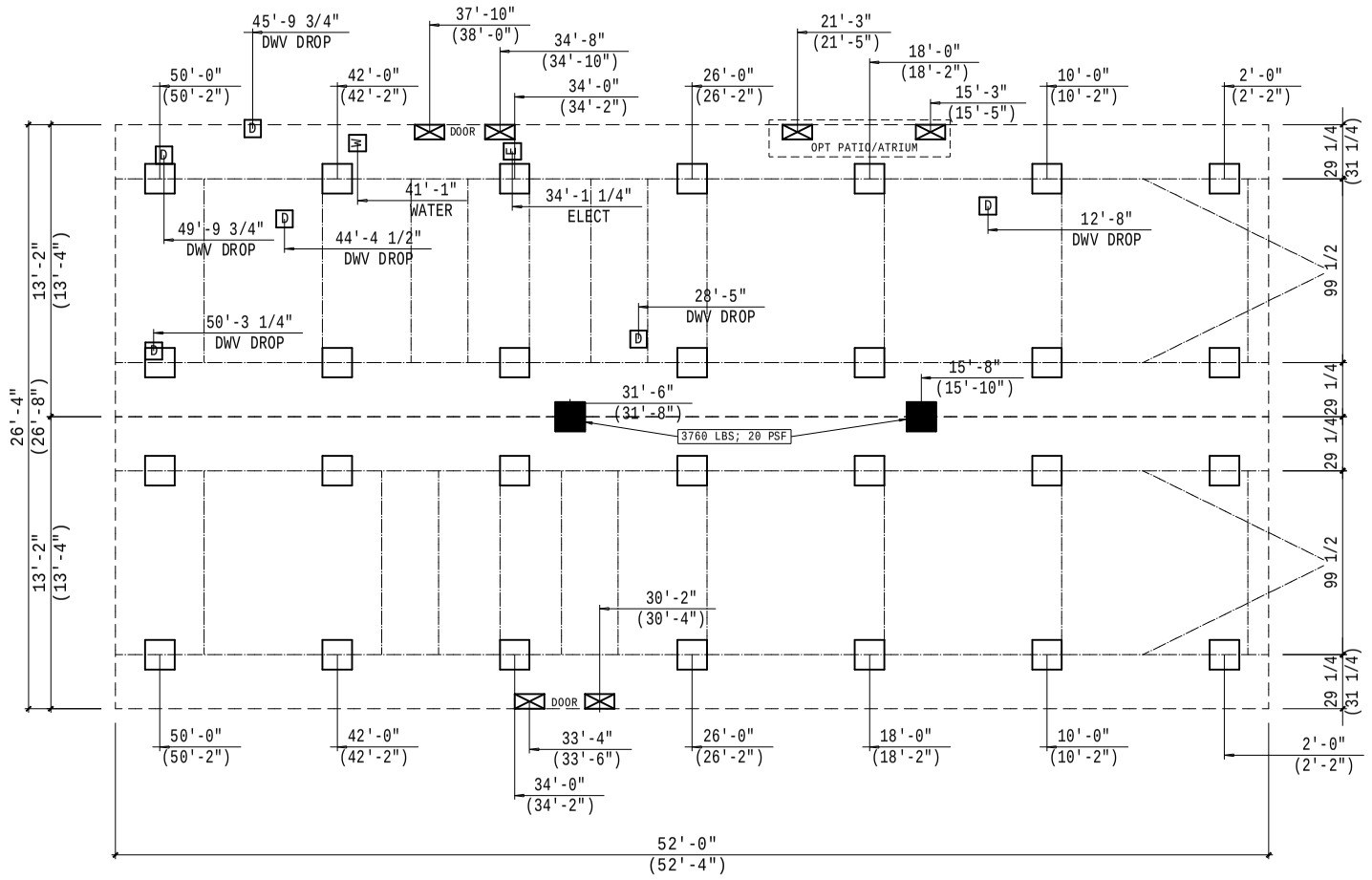
CLAYTON
HOME BUILDING GROUP

REVISIONS	BY	DATE

GENERAL NOTES

DRAWING TITLE
EXTERIOR ELEVATION
OPTION 3

MODEL NAME			SQ. FT.
3025			1369
PLANT	DESCRIPTION		MODEL NO.
957	28X52 3BR-2BA		3025
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	07/15/2024	12/11/2024	20-5



SERVICE ENTRANCE LEGEND
E = ELECTRICAL DROP
W = WATER INLET
D = DWV PLUMBING DROP
G = GAS INLET
NOTE: ALL LOCATIONS ARE APPROXIMATE

CRAWLSPACE VENTILATION
VENTILATION IS BASED ON 144 SQ. IN. OF VENT FOR EVERY 300 SQ. FT. OF CRAWLSPACE AREA WITH APPROVED VAPOR RETARDER MATERIAL. ONE SUCH VENT MUST BE WITHIN 3 FT. OF EACH CORNER

1369 SQ. FT. OF CRAWLSPACE AREA
658 SQ. IN. OF VENT REQUIRED
13 VENTS NEEDED @ 52 SQ. IN. EACH
676 SQ. IN. VENTILATION INSTALLED MINIMUM

NOTE: THE FOUNDATION WIDTH SHOWN 26'-4" IS IDENTICAL TO THE OVERALL FLOOR WIDTH OF THE HOME. THE FOUNDATION MAY BE CONSTRUCTED UP TO 1 1/2" WIDER TO COMPENSATE FOR PRODUCTION AND ASSEMBLY TOLERANCES.

PIER LEGEND
= SUPPORT AT MATING COLUMN
= SUPPORT UNDER MATING WALL
= SUPPORT UNDER MATING OPENING
= SUPPORT AT PORCH/RECESSED ENTRY
= SUPPORT UNDER MAIN I-BEAM
= SUPPORT UNDER PERIMETER WALL
= SUPPORT AT CROSS I-BEAM BASEMENT

BRAND	SERIES
CLAYTON	FS28

CLAYTON
HOME BUILDING GROUP

REVISIONS	BY	DATE

GENERAL NOTES
FOOTING SIZES VARY BASED ON SOIL BEARING CAPACITY AND PIER LOADS
REFER TO INSTALLATION MANUAL FOR PROPER FOOTING SIZING
( ) - DIMENSIONS DENOTES 2X6 WALLS OPTION

DRAWING TITLE
PIER SET
99 1/2 BEAM SPACING

MODEL NAME	SQ. FT.
3025	1369

PLANT	DESCRIPTION	MODEL NO.
957	28X52 3BR-2BA	3025

DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	07/15/2024	12/11/2024	21-PS-99