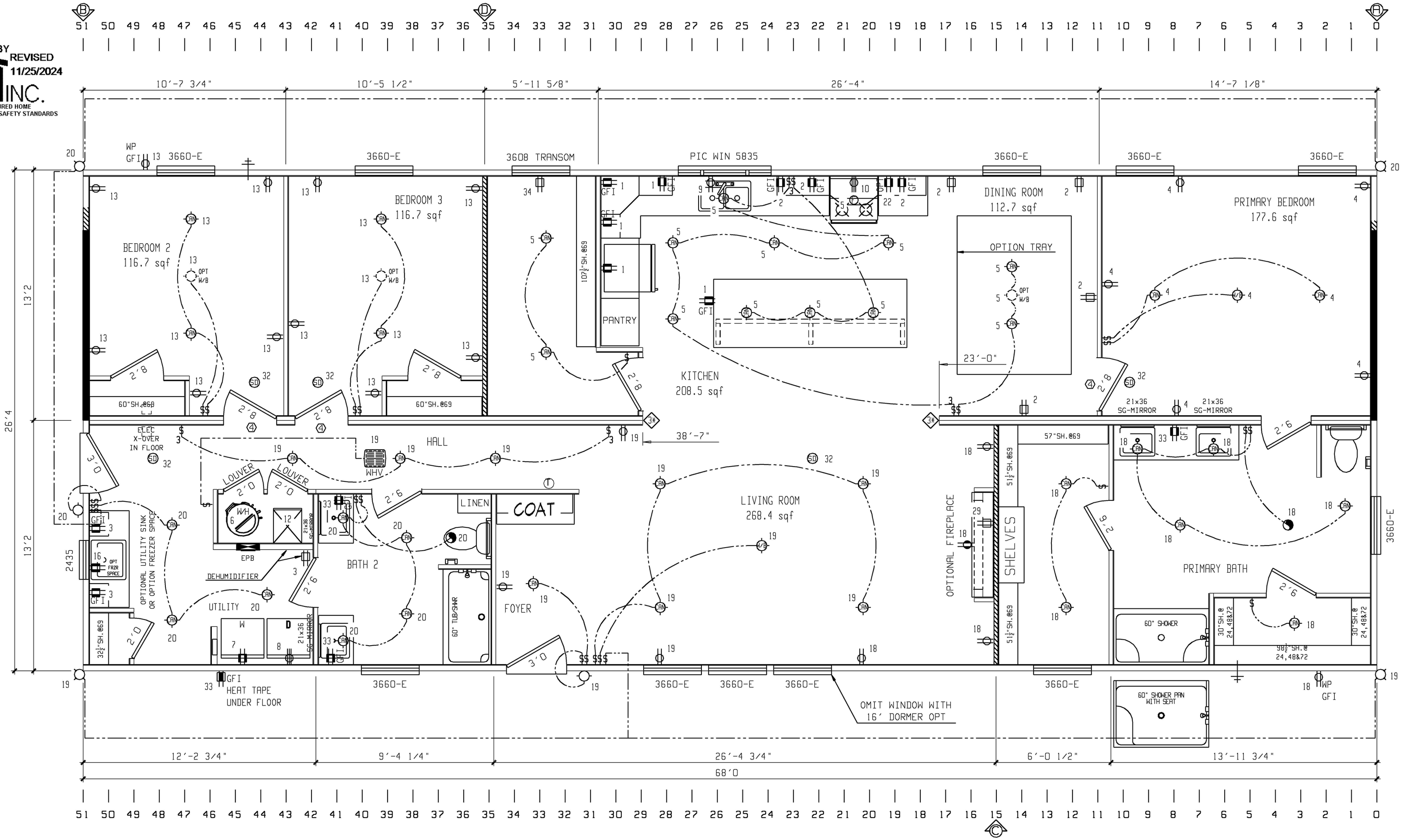
APPROVED BY
REVISED
11/25/2024
NTA INC.
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS



A-SECTION HITCH END

B-SECTION HITCH END

957-3033.0

WIND-1		DIAPHRAGM = 172 PLF		WIND-2		DIAPHRAGM = 281 PLF		WIND-3		DIAPHRAGM = 281 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	WIND-ROOF PSF
A	210 PLF	120"	2	A	210 PLF	96"	2	A	210 PLF	108"	2	A				A				A				A				1-20
B	210 PLF	120"	2	B	210 PLF	96"	2	B	210 PLF	116"	2	B				B				B				B				2-20
C				C	350 PLF	128"	2	C	350 PLF	FULL"	2	C				C				C				C				3-20
D				D	350 PLF	FULL"	2	D	420 PLF	FULL"	2	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 * 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 = 192/176 WITH PATIO/ATRIUM

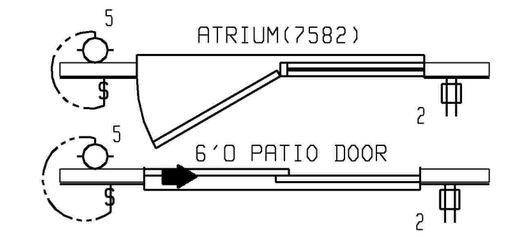
DRAWING TITLE

MASTER PLAN

MODEL NAME	SQ. FT.
3033	1790

PLANT	DESCRIPTION	MODEL NO.
957	28X68 3BR-2BA	3033

DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	10/10/2024	11/20/2024	1-1



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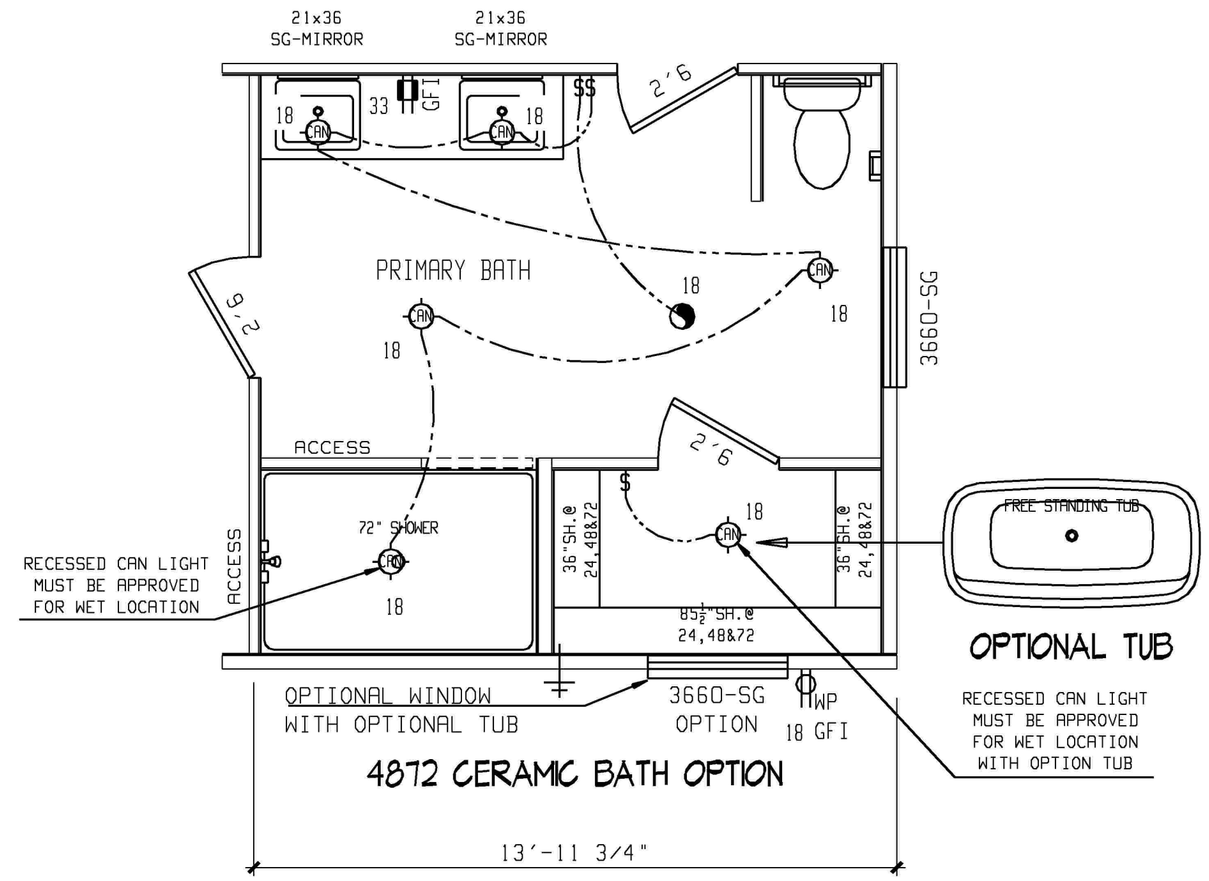
REVISED
1/10/2025
NTA INC.
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS



957-3033.0.1

WIND-1		DIAPHRAGM = 172 PLF		WIND-2		DIAPHRAGM = 281 PLF		WIND-3		DIAPHRAGM = 281 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	120"	2	A	210 PLF	96"	2	A	210 PLF	108"	2	A				A				A				A				1-20	
B	210 PLF	120"	2	B	210 PLF	96"	2	B	210 PLF	116"	2	B				B				B				B				2-20	
C				C	350 PLF	128"	2	C	350 PLF	FULL"	2	C				C				C				C				3-20	
D				D	350 PLF	FULL"	2	D	420 PLF	FULL"	2	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
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BRAND	SERIES
CLAYTON	FS28

CLAYTON
HOME BUILDING GROUP

REVISIONS	BY	DATE

GENERAL NOTES

CEILING HEIGHT = 96.00

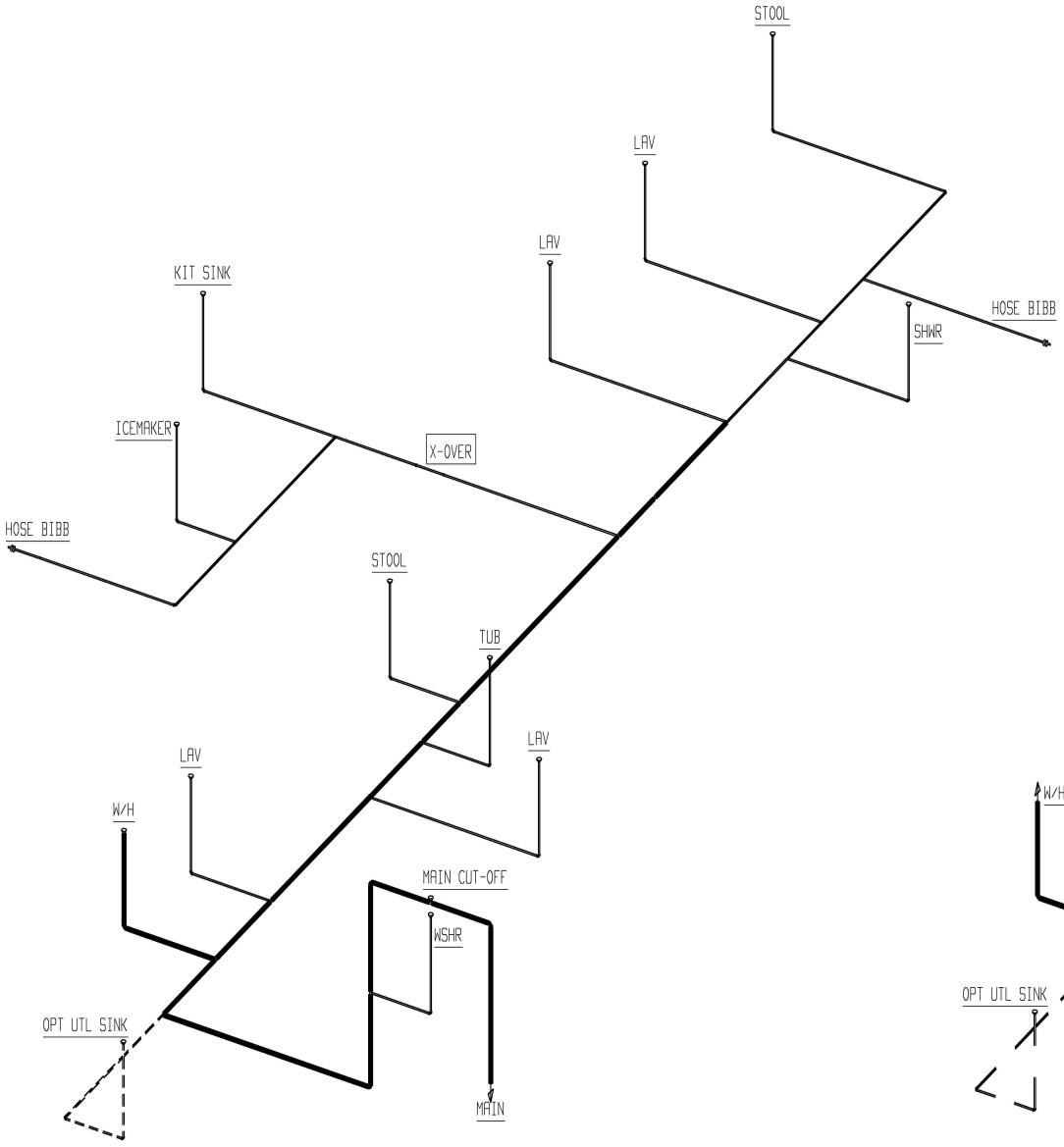
REFER TO DAPIA PAGE MMP-2.0 FOR AREA LIGHT & VENT

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

DRAWING TITLE

MASTER PLAN #2

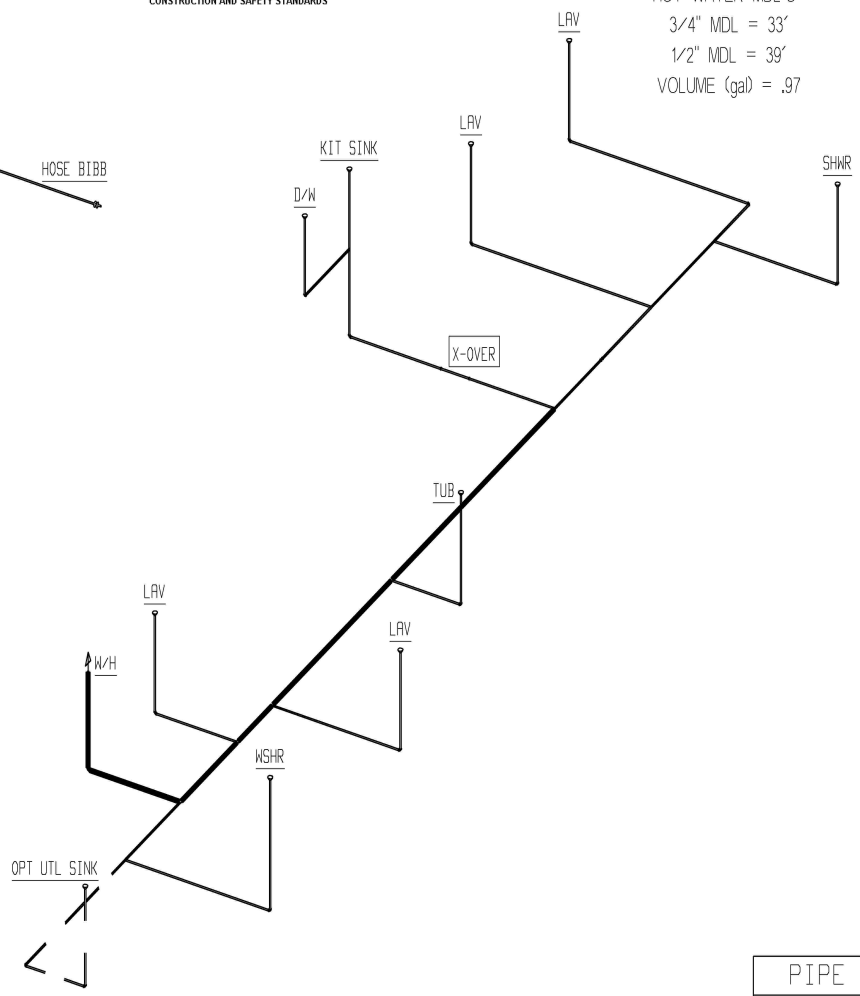
MODEL NAME			SQ. FT.
3033			1790
PLANT	DESCRIPTION		MODEL NO.
957	28X68 3BR-2BA		3033
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	10/10/2024	01/08/2025	1-2



COLD WATER SUPPLY PLUMBING

APPROVED BY
NTA INC. 10/31/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

HOT WATER MDL'S
3/4" MDL = 33'
1/2" MDL = 39'
VOLUME (gal) = .97



HOT WATER SUPPLY PLUMBING

957-3033.1

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

BRAND	SERIES
CLAYTON	FS28

CLAYTON
HOME BUILDING GROUP

REVISIONS	BY	DATE

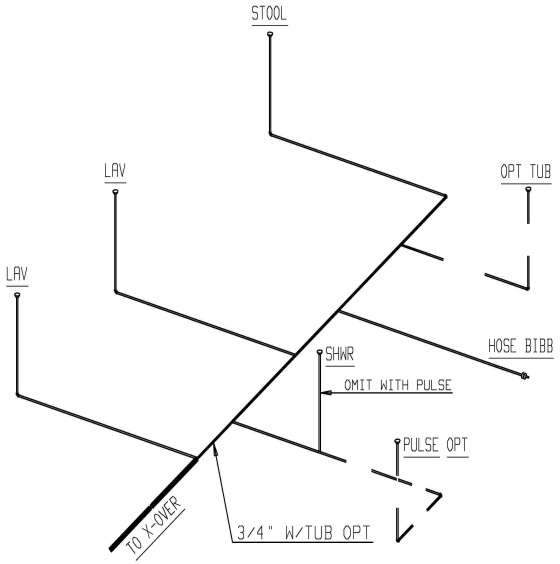
GENERAL NOTES
HOSE BIBBS PER SPECS

DRAWING TITLE
SUPPLY PLUMBING

MODEL NAME			SQ. FT.
3033			1790
PLANT	DESCRIPTION		MODEL NO.
957	28X68 3BR-2BA		3033
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	10/10/2024	10/24/2024	9-1

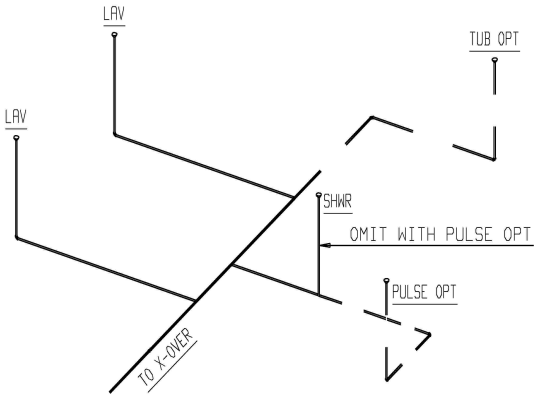
APPROVED BY
NTA INC. 10/31/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

WITH 4872 CERAMIC BATH OPTION



COLD WATER SUPPLY PLUMBING

WITH 4872 CERAMIC BATH OPTION



HOT WATER SUPPLY PLUMBING

PIPE LEGEND

1"

3/4"

1/2"

957-3033.1.1

BRAND	SERIES
CLAYTON	FS28

CLAYTON
HOME BUILDING GROUP

REVISIONS	BY	DATE

GENERAL NOTES

HOSE BIBBS PER SPECS

DRAWING TITLE

SUPPLY #2

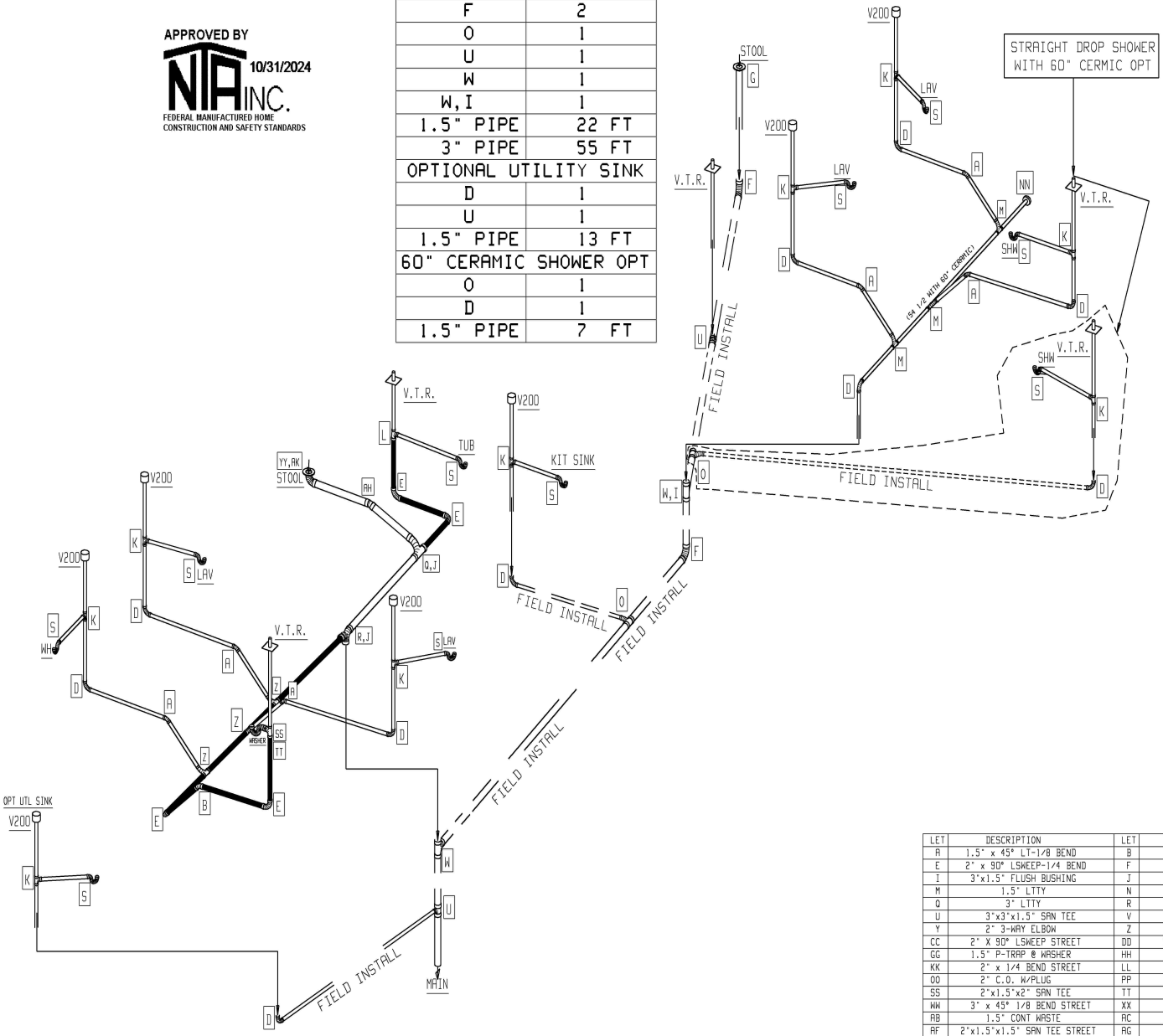
MODEL NAME			SQ. FT.
3033			1790
PLANT	DESCRIPTION		MODEL NO.
957	28X68 3BR-2BA		3033
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	10/10/2024	10/23/2024	9-2

APPROVED BY
NTA INC. 10/31/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

STANDARD SHIP LOOSE	
D	1
F	2
O	1
U	1
W	1
W,I	1
1.5" PIPE	22 FT
3" PIPE	55 FT
OPTIONAL UTILITY SINK	
D	1
U	1
1.5" PIPE	13 FT
60" CERAMIC SHOWER OPT	
O	1
D	1
1.5" PIPE	7 FT

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

PIPE LEGEND
1 1/2"
2"
3"



957-3033.2

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.
3033			1790
PLANT	DESCRIPTION		MODEL NO.
957	28X68 3BR-2BA		3033
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	10/10/2024	10/23/2024	8-1

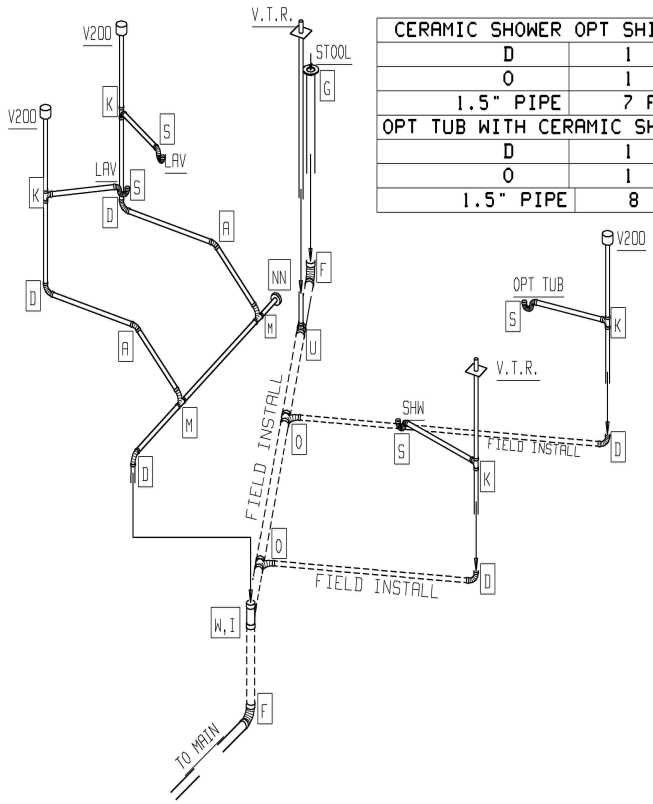
PIPING AND FITTING MATERIAL TYPE TO BE:
ABS (ACRYLONITRILE-BUTADIENE-STYRENE)
OR PVC (POLYVINYL CHLORIDE)

PIPE LEGEND

═══	1 1/2"
▬▬▬	2"
═══	3"

WITH OPTIONAL 4872 CERAMIC SHOWER OPTION

APPROVED BY
NTA INC. 10/31/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS



CERAMIC SHOWER OPT SHIP LOOSE	
D	1
O	1
1.5" PIPE	7 FT
OPT TUB WITH CERAMIC SHOWER OPT	
D	1
O	1
1.5" PIPE	8 FT

957-3033.2.1

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
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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 #2

MODEL NAME	SQ. FT.
3033	1790

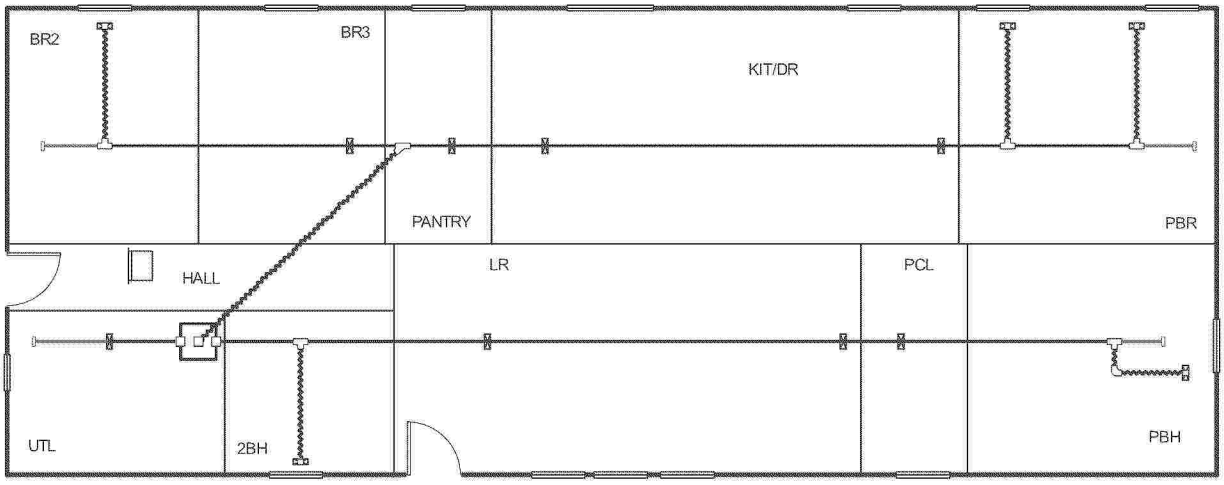
PLANT	DESCRIPTION	MODEL NO.
957	28X68 3BR-2BA	3033

DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	10/10/2024	10/23/2024	8-2

N

APPROVED BY
NTA INC. 10/31/2024
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

Level 1



957-3033.4.1

Job #: 3033(I) **Performed by CLAYTON ROCKWELL for:** 3033(I) ROCKWELL, NC		Scale: 1 : 122 Page 1 Right-Suite® Universal 2024 24.0.02 RSU59516 2024-Oct-22 12:41:09 ...layton Homes\Desktop\3033(I).rup

wrightsoft

Project Summary
Entire House

APPROVED BY
NTA INC. 10/31/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Job: 3033(I)
Date: Oct 22, 2024
By: CLAYTON ROCKWELL

Project Information

For: 3033(I), CLAYTON 957
ROCKWELL, NC

Notes: DUCT COOLING CAPACITY = 30,667 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
Ventilation Method	MJ8	

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	17512	Btuh
Ducts	1401	Btuh
Central vent (60 cfm)	***2892***	Btuh
Outside air		
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	21805	Btuh

Sensible Cooling Equipment Load Sizing

Structure	15687	Btuh
Ducts	1255	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	18176	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	1785	1785
Volume (ft³)	14280	14280
Air changes/hour	0.38	0.20
Equiv. AVF (cfm)	90	48

Latent Cooling Equipment Load Sizing

Structure	2104	Btuh
Ducts	0	Btuh
Central vent (60 cfm)	***1644***	Btuh
Outside air		
Equipment latent load	3747	Btuh
Equipment Total Load (Sen+Lat)	21924	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	210537970

Efficiency	7.5 HSPF2	
Heating input		
Heating output	28000	Btuh @ 47°F
Temperature rise	28	°F
Actual air flow	920	cfm
Air flow factor	0.049	cfm/Btuh
Static pressure	0.30	in H2O

Space thermostat
Capacity balance point = 22 °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	210537970

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	0.054	cfm/Btuh
Static pressure	0.30	in H2O
Load sensible heat ratio	0.83	

Bold/italic values have been manually overridden

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

957-3033.4.2

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Manual S Compliance Report
Entire House

APPROVED BY NTA INC. 10/31/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Job: 3033(P)
Date: Oct 22, 2024
By: CLAYTON ROCKWELL

Project Information

For: 3033(P), CLAYTON 957
ROCKWELL, NC

Cooling Equipment

Design Conditions

Outdoor design DB:	94.7°F	Sensible gain:	18545	Btuh	Entering coil DB:	76.9°F
Outdoor design WB:	75.9°F	Latent gain:	3747	Btuh	Entering coil WB:	63.7°F
Indoor design DB:	75.0°F	Total gain:	22292	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:	21523	Btuh	116% of load	
Latent capacity:	4702	Btuh	125% of load	
Total capacity:	26225	Btuh	118% of load	SHR: 82%

Heating Equipment

Design Conditions

Outdoor design DB:	25.8°F	Heat loss:	22155	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: R4H5S30*K*AAA*+FEVA0036**+NAVA43601CK

Actual airflow:	920	cfm				
Output capacity:	28000	Btuh	126% of load		Capacity balance:	23 °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	154% of load	Temp. rise:	34 °F

Meets all requirements of ACCA Manual S.

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Project Summary
Entire House

APPROVED BY NTA INC. 10/31/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Job: 3033(P)
Date: Oct 22, 2024
By: CLAYTON ROCKWELL

Project Information

For: 3033(P), CLAYTON 957
ROCKWELL, NC

Notes: DUCT COOLING CAPACITY = 30,667 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
Ventilation Method	MJ8	

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	17512	Btuh
Ducts	1751	Btuh
Central vent (60 cfm)	***2892***	Btuh
Outside air		
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	22155	Btuh

Sensible Cooling Equipment Load Sizing

Structure	15687	Btuh
Ducts	1569	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	18489	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	1785	1785
Volume (ft³)	14280	14280
Air changes/hour	0.38	0.20
Equiv. AVF (cfm)	90	48

Latent Cooling Equipment Load Sizing

Structure	2104	Btuh
Ducts	0	Btuh
Central vent (60 cfm)	***1644***	Btuh
Outside air		
Equipment latent load	3747	Btuh
Equipment Total Load (Sen+Lat)	22236	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	210537970

Efficiency	7.5 HSPF2	
Heating input		
Heating output	28000	Btuh @ 47°F
Temperature rise	28	°F
Actual air flow	920	cfm
Air flow factor	0.048	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	R4H5S30*K*AAA*
Coil	FEVA0036**+NAVA43601CK
AHRI ref	210537970

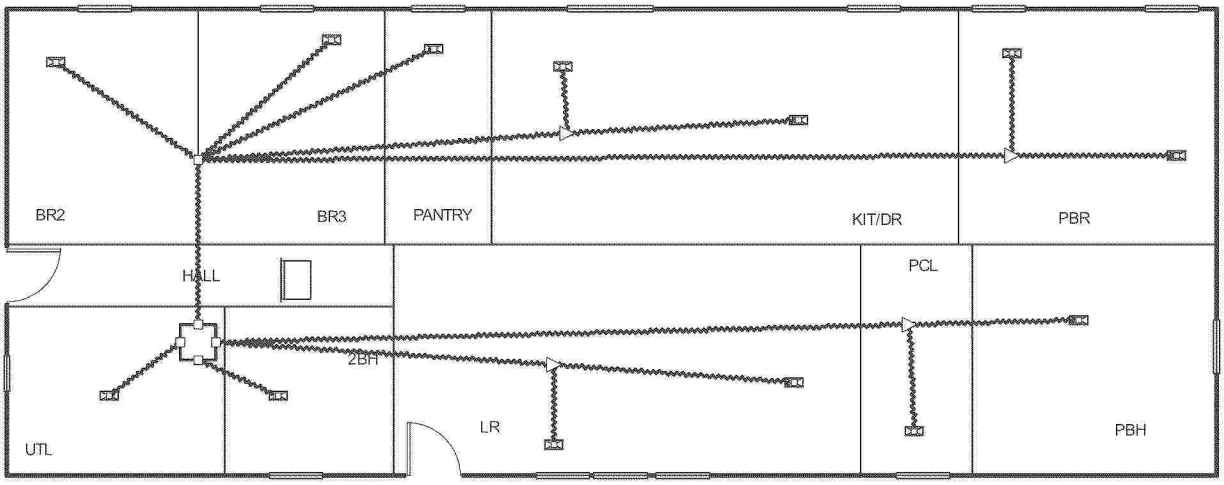
Efficiency	12.0 EER2,14.3 SEER2	
Sensible cooling	19320	Btuh
Latent cooling	8280	Btuh
Total cooling	27600	Btuh
Actual air flow	920	cfm
Air flow factor	0.053	cfm/Btuh
Static pressure	0.30	in H2O
Load sensible heat ratio	0.83	

Bold/italic values have been manually overridden

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

APPROVED BY
NTA INC. 10/31/2024
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

Level 1



957-3033.4.5

Job #: 3033(OHVD) **Performed by CLAYTON ROCKWELL for:** 3033(OHVD) ROCKWELL, NC		Scale: 1 : 122 Page 1 Right-Suite® Universal 2024 24.0.02 RSU59516 2024-Oct-22 13:49:21 ...ton Homes\Desktop\3033(OHVD).rup

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Manual S Compliance Report
Entire House

APPROVED BY NTA INC. 10/31/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Job: 3033(OHVD)
Date: Oct 22, 2024
By: CLAYTON ROCKWELL

Project Information

For: 3033(OHVD), CLAYTON 957
ROCKWELL, NC

Cooling Equipment

Design Conditions

Outdoor design DB:	92.6°F	Sensible gain:	21481	Btuh	Entering coil DB:	76.0°F
Outdoor design WB:	76.8°F	Latent gain:	5982	Btuh	Entering coil WB:	63.5°F
Indoor design DB:	75.0°F	Total gain:	27463	Btuh		
Indoor RH:	50%	Estimated airflow:	1113	cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type: Split ASHP
Manufacturer: Smart Comfort Model: R4H5S36*K*AAA*+FEVA0036**+NAVA43601CK

Actual airflow:	1113	cfm		
Sensible capacity:	25711	Btuh	120% of load	
Latent capacity:	6903	Btuh	115% of load	
Total capacity:	32614	Btuh	119% of load	SHR: 79%

Heating Equipment

Design Conditions

Outdoor design DB:	32.8°F	Heat loss:	22842	Btuh	Entering coil DB:	68.0°F
Indoor design DB:	70.0°F					

Manufacturer's Performance Data at Actual Design Conditions

Equipment type: Split ASHP
Manufacturer: Smart Comfort Model: R4H5S36*K*AAA*+FEVA0036**+NAVA43601CK

Actual airflow:	1113	cfm			
Output capacity:	27920	Btuh	122% 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:	1113	cfm			
Output capacity:	10.0	kW	149% of load	Temp. rise:	28 °F

Meets all requirements of ACCA Manual S.

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Project Summary
Entire House

APPROVED BY
NTA INC. 10/31/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Job: 3033(OHVD)
Date: Oct 22, 2024
By: CLAYTON ROCKWELL

Project Information

For: 3033(OHVD), CLAYTON 957
ROCKWELL, NC

Notes: DUCT COOLING CAPACITY = 37,100 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
Ventilation Method	MJ8	

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	14766	Btuh
Ducts (R-8.0)	5623	Btuh
Central vent (60 cfm)	***2452***	Btuh
Outside air		
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	22842	Btuh

Sensible Cooling Equipment Load Sizing

Structure	15073	Btuh
Ducts (R-8.0)	5248	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	20965	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	1785	1785
Volume (ft³)	14280	14280
Air changes/hour	0.38	0.20
Equiv. AVF (cfm)	90	48

Latent Cooling Equipment Load Sizing

Structure	2396	Btuh
Ducts	1575	Btuh
Central vent (60 cfm)	***2011***	Btuh
Outside air		
Equipment latent load	5982	Btuh
Equipment Total Load (Sen+Lat)	26948	Btuh
Req. total capacity at 0.70 SHR	2.5	ton

Heating Equipment Summary

Make	Smart Comfort
Trade	15 SEER2 R SERIES R410A HP
Model	R4H5S36*K*AAA*
AHRI ref	210538007

Efficiency	7.5 HSPF2	
Heating input		
Heating output	33000	Btuh @ 47°F
Temperature rise	27	°F
Actual air flow	1113	cfm
Air flow factor	0.055	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	R4H5S36*K*AAA*
Coil	FEVA0036**+NAVA43601CK
AHRI ref	210538007

Efficiency	12.0 EER2, 15 SEER2	
Sensible cooling	23380	Btuh
Latent cooling	10020	Btuh
Total cooling	33400	Btuh
Actual air flow	1113	cfm
Air flow factor	0.055	cfm/Btuh
Static pressure	0.30	in H2O
Load sensible heat ratio	0.78	

Bold/italic values have been manually overridden

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

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Manual S Compliance Report
Entire House

APPROVED BY NTA INC. 10/31/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Job: 3033(I)
Date: Oct 22, 2024
By: CLAYTON ROCKWELL

Project Information

For: 3033(I), CLAYTON 957
ROCKWELL, NC

Cooling Equipment

Design Conditions

Outdoor design DB:	94.7°F	Sensible gain:	18231	Btuh	Entering coil DB:	76.7°F
Outdoor design WB:	75.9°F	Latent gain:	3747	Btuh	Entering coil WB:	63.7°F
Indoor design DB:	75.0°F	Total gain:	21978	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:	21523	Btuh	118% of load	
Latent capacity:	4702	Btuh	125% of load	
Total capacity:	26225	Btuh	119% of load	SHR: 82%

Heating Equipment

Design Conditions

Outdoor design DB:	25.8°F	Heat loss:	21805	Btuh	Entering coil DB:	66.6°F
Indoor design DB:	70.0°F					

Manufacturer's Performance Data at Actual Design Conditions

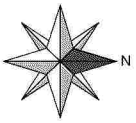
Equipment type: Split ASHP
Manufacturer: Smart Comfort Model: R4H5S30*K*AAA*+FEVA0036**+NAVA43601CK

Actual airflow:	920	cfm				
Output capacity:	28000	Btuh	128% of load		Capacity balance:	22 °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	156% of load	Temp. rise:	34 °F

Meets all requirements of ACCA Manual S.



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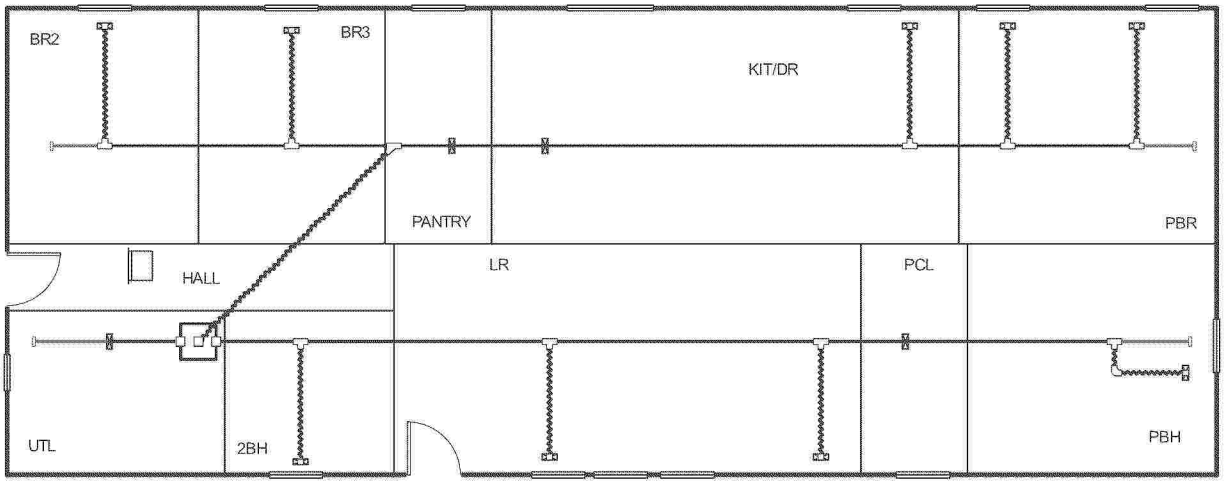
NTA INC. 10/31/2024
FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

Level 1



957-3033.4.9

Job #: 3033(P) **Performed by CLAYTON ROCKWELL for:** 3033(P) ROCKWELL, NC		Scale: 1 : 122 Page 1 Right-Suite® Universal 2024 24.0.02 RSU59516 2024-Oct-22 12:31:48 ...layton Homes\Desktop\3033(P).rup

CLAYTON HOME BUILDING GROUP

3033 ZONE 1&2

Model Number	57FWR286833BH24	Drawing Number	3033	Version 17

BOX SIZE: 26.33 ft. x 68 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. 10/31/2024
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	192.00	0.300	57.60
	Option	0.00	0.300	0.00
Net:	Floor	1790.67	0.045	79.68
	Wall	1273.33	0.081	102.89
	Ceiling	1790.67	0.0285	51.03
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	388.8
Th. Zone 2	230.6
Th. Zone 3	24.5

Thermal Zone	Outdoor Design Temp (F)	UA	Uo	EStar v3 & ZERH Compliant	Heatloss BTUH/F
1	11	320.97	0.062	OK	453.00
2	0	319.46	0.062	OK	451.50
3	-14	318.12	0.062	NG	450.20

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-5	17	10kW
-20	7	12kW
-43	-9	15kW
-18	8	40k Gas
-62	-23	60k Gas
-107	-54	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

3033 ZONE 3

Model Number	57FWR286833BH24	Drawing Number	3033	Version 17

BOX SIZE: 26.33 ft. x 68 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. 10/31/2024
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	192.00	0.300	57.60
	Option	0.00	0.300	0.00
Net:	Floor	1790.67	0.037	66.43
	Wall	1273.33	0.054	68.89
	Ceiling	1790.67	0.0285	51.03
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	559.6
Th. Zone 2	418.6
Th. Zone 3	234.9

Thermal Zone	Outdoor Design Temp (F)	UA	Uo	EStar v3 & ZERH Compliant	Heatloss BTUH/F
1	11	273.72	0.053	OK	405.80
2	0	272.22	0.053	OK	404.30
3	-14	270.87	0.052	OK	402.90

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-14	11	10kW
-31	-1	12kW
-56	-18	15kW
-29	1	40k Gas
-78	-33	60k Gas
-127	-68	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

3033 ZONE 3

Model Number	57FWR286833BH24	Drawing Number	3033	Version 17

BOX SIZE: 26.33 ft. x 68 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. 10/31/2024
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	43.00	0.280	12.04
	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	176.00	0.300	52.80
	Option	0.00	0.300	0.00
Net:	Floor	1790.67	0.037	66.43
	Wall	1246.33	0.054	67.43
	Ceiling	1790.67	0.0285	51.03
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	520.1
Th. Zone 2	379.1
Th. Zone 3	195.4

Thermal Zone	Outdoor Design Temp (F)	UA	Uo	EStar v3 & ZERH Compliant	Heatloss BTUH/F
1	11	279.50	0.054	OK	411.60
2	0	277.99	0.054	OK	410.10
3	-14	276.65	0.054	OK	408.70

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-13	12	10kW
-29	0	12kW
-54	-17	15kW
-27	2	40k Gas
-76	-32	60k Gas
-124	-66	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

3033 ZONE 1 WITH OVERHEAD AND ATRIUM/PATIO DOOR

Model Number	57FWR286833BH24	Drawing Number	3033	Version 17

BOX SIZE: 26.33 ft. x 68 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	24
6	36
7	7
8	161
9	0
12	7
11	0
14	0
Exterior Supply	Length
14	0
16	0
Exterior Return	Length
14	0
16	0

APPROVED BY NTA INC. 10/31/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

		Area	U Value	UA
Doors:	Front	22.00	0.210	4.62
	Rear	22.00	0.280	6.16
	Other Door	43.00	0.280	12.04
	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	176.00	0.300	52.80
	Option	0.00	0.300	0.00
Net:	Floor	1790.67	0.045	79.68
	Wall	1246.33	0.081	100.70
	Ceiling	1790.67	0.0285	51.03
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	51.35	0.242	12.42
Overhead TZ 2:	Supply	51.35	0.223	11.43
Overhead TZ 3:	Supply	51.35	0.21	10.55

Energy Star v3 & ZERH Max Glass (sq ft)	
Th. Zone 1	354.5
Th. Zone 2	196.4
Th. Zone 3	0.0

Thermal Zone	Outdoor Design Temp (F)	UA	Uo	EStar v3 & ZERH Compliant	Heatloss BTUH/F
1	11	319.46	0.063	OK	451.50
2	0	318.48	0.063	OK	450.50
3	-14	317.60	0.062	NG	449.70

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-6	17	10kW
-21	7	12kW
-43	-9	15kW
-19	8	40k Gas
-63	-23	60k Gas
-107	-54	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

3033 ZONE 3

Model Number	57FWR286833BH24	Drawing Number	3033	Version 17

BOX SIZE: 26.33 ft. x 68 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. 10/31/2024
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	43.00	0.280	12.04
	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	176.00	0.300	52.80
	Option	0.00	0.300	0.00
Net:	Floor	1790.67	0.045	79.68
	Wall	1246.33	0.081	100.70
	Ceiling	1790.67	0.0285	51.03
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	349.8
Th. Zone 2	191.6
Th. Zone 3	0.0

Thermal Zone	Outdoor Design Temp (F)	UA	Uo	EStar v3 & ZERH Compliant	Heatloss BTUH/F
1	11	326.03	0.063	OK	458.10
2	0	324.52	0.063	OK	456.60
3	-14	323.18	0.063	NG	455.20

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-4	18	10kW
-19	7	12kW
-42	-8	15kW
-17	9	40k Gas
-61	-22	60k Gas
-105	-52	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

3033 ZONE 1 WITH OVERHEAD

Model Number	57FWR286833BH24	Drawing Number	3033	Version 17

BOX SIZE: 26.33 ft. x 68 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	24
6	36
7	7
8	161
9	0
12	7
11	0
14	0
Exterior Supply	Length
14	0
16	0
Exterior Return	Length
14	0
16	0

APPROVED BY NTA INC. 10/31/2024
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

		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	192.00	0.300	57.60
	Option	0.00	0.300	0.00
Net:	Floor	1790.67	0.045	79.68
	Wall	1273.33	0.081	102.89
	Ceiling	1790.67	0.0285	51.03
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	51.35	0.242	12.42
Overhead TZ 2:	Supply	51.35	0.223	11.43
Overhead TZ 3:	Supply	51.35	0.21	10.55

Energy Star v3 & ZERH Max Glass (sq ft)	
Th. Zone 1	393.6
Th. Zone 2	235.5
Th. Zone 3	30.5

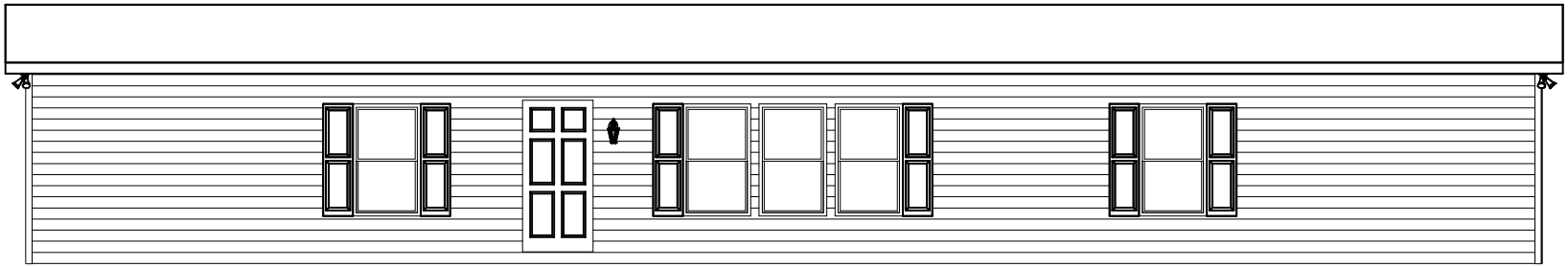
Thermal Zone	Outdoor Design Temp (F)	UA	Uo	EStar v3 & ZERH Compliant	Heatloss BTUH/F
1	11	314.40	0.062	OK	446.50
2	0	313.42	0.062	OK	445.50
3	-14	312.54	0.061	NG	444.60

Design Temperatures

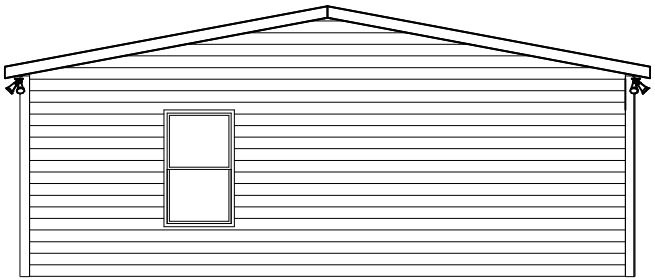
Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-6	17	10kW
-22	6	12kW
-45	-10	15kW
-20	7	40k Gas
-64	-24	60k Gas
-109	-55	80k Gas

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

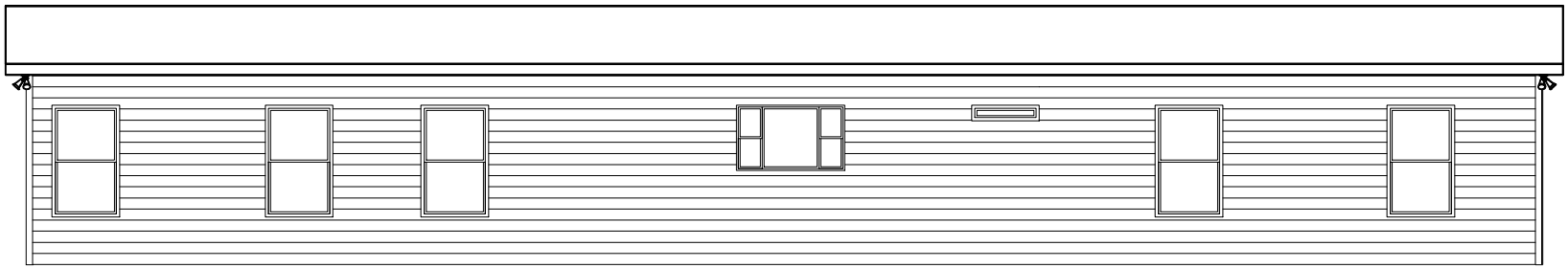
REVISIONS	BY	DATE

GENERAL NOTES

DRAWING TITLE

EXTERIOR ELEVATION
FRONT & RIGHT SIDE

MODEL NAME			SQ. FT.
3033			1790
PLANT	DESCRIPTION		MODEL NO.
957	28X68 3BR-2BA		3033
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	10/10/2024	11/01/2024	20-1



BACK ELEVATION

LEFT SIDE ELEVATION

BRAND	SERIES
CLAYTON	FS28

CLAYTON
HOME BUILDING GROUP

REVISIONS	BY	DATE

GENERAL NOTES

DRAWING TITLE

EXTERIOR ELEVATION
BACK & LEFT SIDE

MODEL NAME			SQ. FT.
3033			1790
PLANT	DESCRIPTION		MODEL NO.
957	28X68 3BR-2BA		3033
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	10/10/2024	11/01/2024	20-2

FRONT ELEVATION
16' DORMER OPTION
ONE WINDOW OMITTED W/DORMER OPT IN LR

RIGHT SIDE ELEVATION

BRAND	SERIES
CLAYTON	FS28

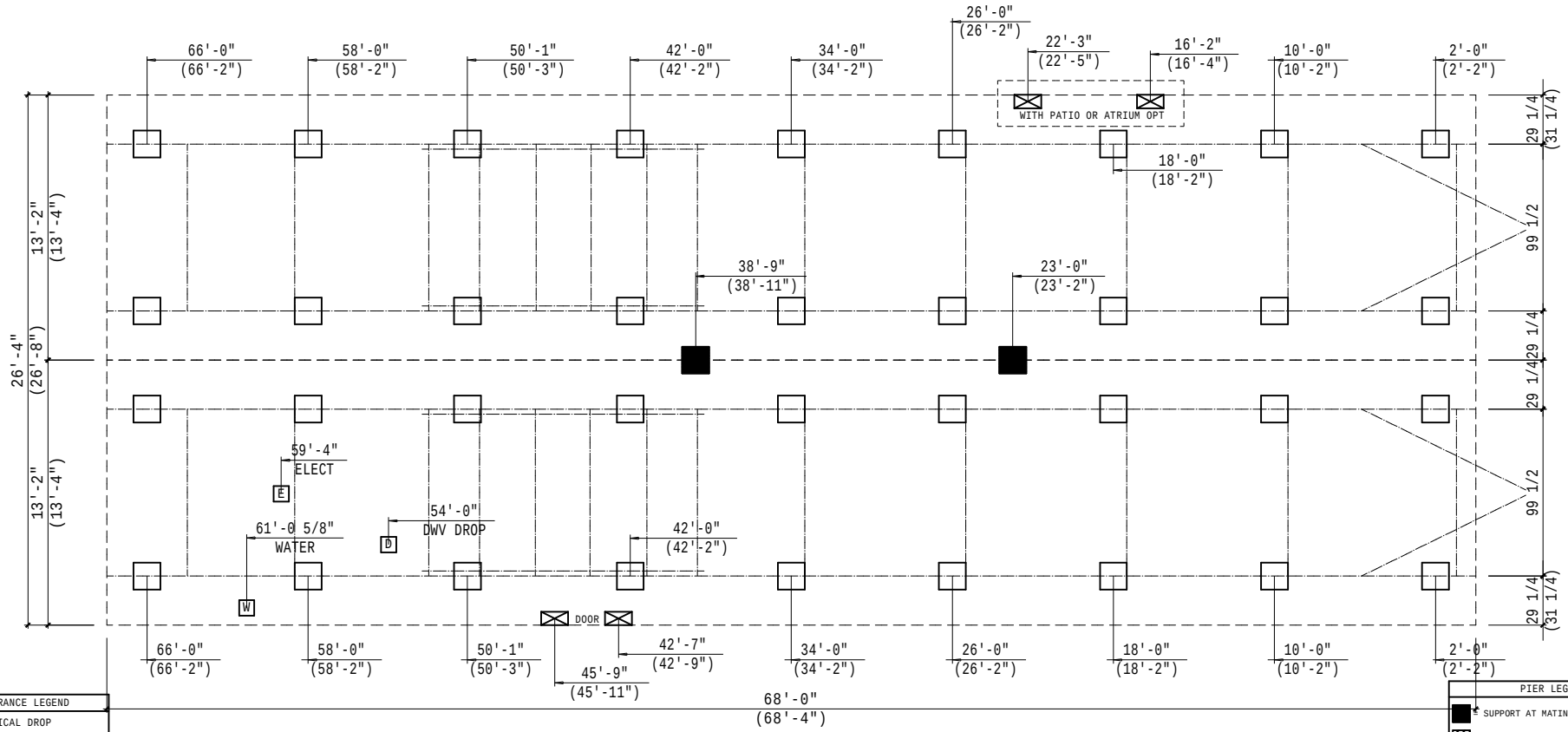
CLAYTON
HOME BUILDING GROUP

REVISIONS	BY	DATE

GENERAL NOTES

DRAWING TITLE
EXTERIOR ELEVATION
OPTION 3

MODEL NAME			SQ. FT.
3033			1790
PLANT	DESCRIPTION	MODEL NO.	
957	28X68 3BR-2BA	3033	
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	10/10/2024	11/01/2024	20-5



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

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

CRAWLSPACE VENTILATION
VENTILATION IS BASED ON 144 SQ. IN. OF VENT FOR EVERY 1500 SQ. FT. OF CRAWLSPACE AREA WITH APPROVED VAPOR RETARDER MATERIAL. ONE SUCH VENT MUST BE WITHIN 3 FT. OF EACH CORNER

1790 SQ. FT. OF CRAWLSPACE AREA
172 SQ. IN. OF VENT REQUIRED
4 VENTS NEEDED @ 52 SQ. IN. EACH
208 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.

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.
3033			1790
PLANT	DESCRIPTION		MODEL NO.
957	28X68 3BR-2BA		3033
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
GDB	10/10/2024	03/10/2025	21-PS-99