

CMH Inc.
SHEARWALL DESIGN - HUD



Model # 333
 Box Width = 180 " Single wide Minimum Joist Spacing 16 "
 Box Length = 76 ft. 99.5" 10" MIN.IBEAM No Offset Box
 No Skylights No Clerestory No Origami Dormer
 No Porches No Sunken Floor
 Joist Size = #2 spf 2x6 Lags 9Mx3" No Parapet Roof

Version R13.20

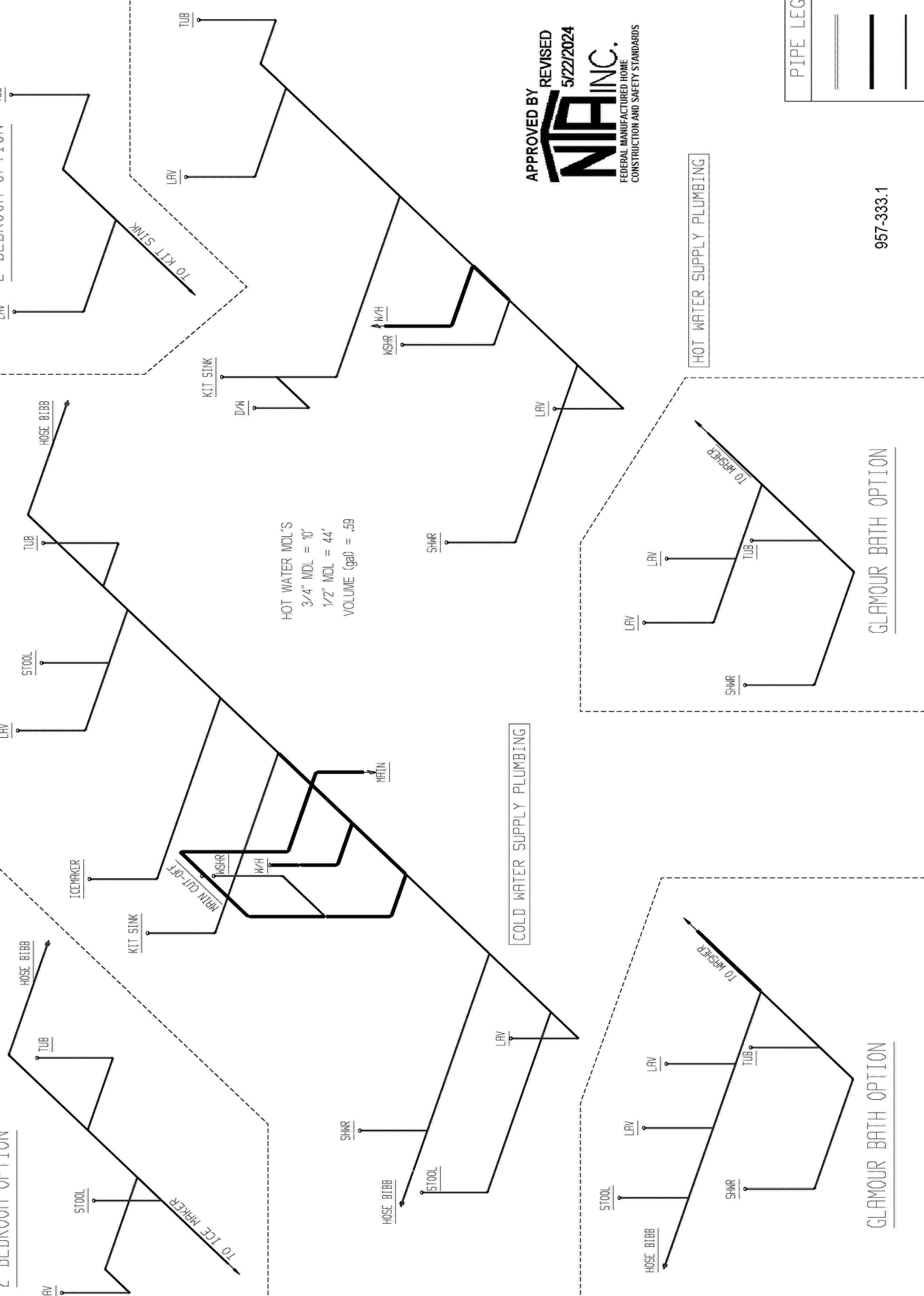
Wind Zone 1 Standard Roof							96 inch sidewall	
Diaphragm Construction:							(3/8" sheathing only with 16ga. @ 4/8 oc) [132 plf] Chords: 2x4 SPF #3 Top Plate & 2x4 Rail. Each spliced w/ 12" glue block.	
Shearwall	Dist./ Hitch	Length	PLF	# of Joists	Lags	Notes	SW1/SW2	
A	0'	130"	210	2	1/1	Split Shearwall *	65/65	
B	76'	108"	210	2	2/2	Split Shearwall	47/61	
C	23.92'	120"	350	3	3/1			
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	SW1/SW2	
A	0'	130"	210	2	1/1	Split Shearwall *	65/65	
B	76'	108"	210	2	2/2	Split Shearwall	47/61	
C	23.91'	128"	350	3	3/1			
D	55.83'	134"	420	6	4/4	Split Shearwall	103/31	
E	9.33'	108"	210	2	2/1			
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	
A	0'	130"	210	2	1/1	Split Shearwall *	65/65	
B	76'	108"	210	2	1/1	Split Shearwall	47/61	
C	23.91'	128"	420	3	4/1			
D	55.83'	134"	420	6	4/4	Split Shearwall	103/31	
E	9.33'	132"	210	2	2/1			
F	67'	136"	210	2	2/2	Split Shearwall	93/43	
Wind Zone 4 Standard Roof							96 inch sidewall	
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	SW1/SW2	

* Denotes that indicated shearwall is over full depth/width front steel chassis header. Designed by KLK

957-333.0.2

2 BEDROOM OPTION

2 BEDROOM OPTION



APPROVED BY **REVISED**
5/22/2024
NIA INC.
 FEDERAL MANUFACTURED HOME
 CONSTRUCTION AND SAFETY STANDARDS

PIPE LEGEND

---	1"
---	3/4"
---	1/2"

957-333.1

BRAND CLAYTON	SERIES FS16	DRAWING TITLE SUPPLY PLUMBING		MODEL NAME 333	SO. FT. 1140
		GENERAL NOTES HOSE BIBBS PER SPECS		PLANT 957	MODEL NO. 333
CLAYTON HOME BUILDING GROUP		REVISIONS	DESCRIPTION 16X76 3BR-2BR	DATE PRINTED 05/20/2024	SHEET NO. 9-1
		BY	DATE	DATE PRINTED 04/18/2024	SHEET NO. 9-1

Project Information

For: 333 (Inline), CLAYTON 957
 ROCKWELL, NC

Notes: DUCT COOLING CAPACITY = 19767 BTU/HR

APPROVED BY



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 12316 Btuh
 Ducts 0 Btuh
Central vent (90 cfm) **4338** Btuh
Outside air
 Humidification 0 Btuh
 Piping 0 Btuh
 Equipment load 16654 Btuh

Sensible Cooling Equipment Load Sizing

Structure 9666 Btuh
 Ducts 0 Btuh
Central vent (90 cfm) **1933** Btuh
Outside air
 Blower 0 Btuh
 Use manufacturer's data n
 Rate/swing multiplier 1.00
 Equipment sensible load 11565 Btuh

Infiltration

Method Simplified
 Construction quality Semi-tight
 Fireplaces 0

	Heating	Cooling
Area (ft ²)	1117	1117
Volume (ft ³)	8939	8939
Air changes/hour	0.31	0.16
Equiv. AVF (cfm)	46	24

Latent Cooling Equipment Load Sizing

Structure 1253 Btuh
 Ducts 0 Btuh
Central vent (90 cfm) **2465** Btuh
Outside air
 Equipment latent load 3718 Btuh
Equipment Total Load (Sen+Lat) 15283 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 53 °F
 Actual air flow 593 cfm
 Air flow factor 0.048 cfm/Btuh
 Static pressure 0.30 in H2O
 Space thermostat

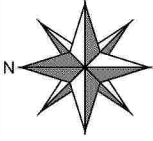
Cooling Equipment Summary

Make Smart Comfort
 Trade PERFORMANCE 14 SEER2 AC
 Cond R4A4S18*K*NAA*
 Coil FEVA0024***+NAVA43601CK
 AHRI ref 0
 Efficiency 12.5 EER2, 15.2 SEER2
 Sensible cooling 12460 Btuh
 Latent cooling 5340 Btuh
 Total cooling 17800 Btuh
 Actual air flow 593 cfm
 Air flow factor 0.061 cfm/Btuh
 Static pressure 0.30 in H2O
 Load sensible heat ratio 0.76

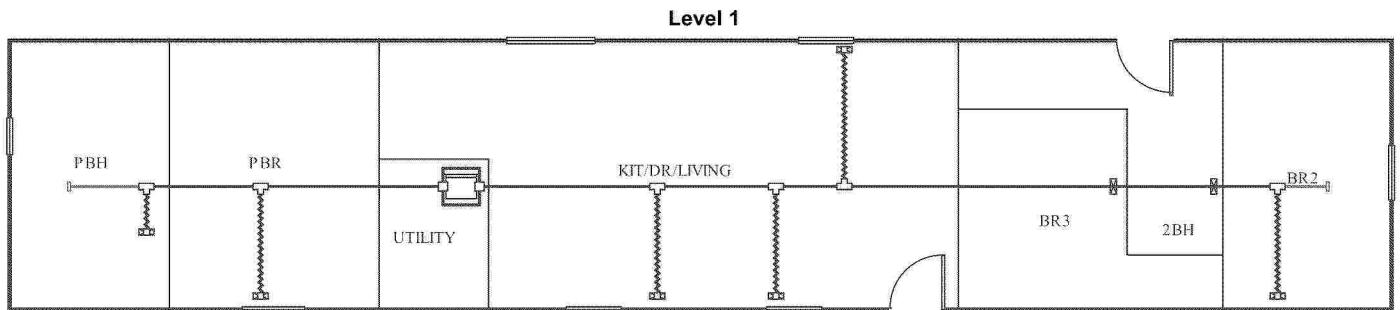
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CONSTRUCTION AND SAFETY STANDARDS



957-333.4.2

Job #: 333 (Inline)
Performed by **CLAYTON ROCKWELL** for
333 (Inline)
ROCKWELL, NC

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Project Information

For: 333 (perimeter), CLAYTON 957
 ROCKWELL, NC

Notes: DUCT COOLING CAPACITY = 19767 BTU/HR

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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 12316 Btuh
 Ducts 0 Btuh
Central vent (90 cfm) **4338** Btuh
Outside air
 Humidification 0 Btuh
 Piping 0 Btuh
 Equipment load 16654 Btuh

Sensible Cooling Equipment Load Sizing

Structure 9666 Btuh
 Ducts 0 Btuh
Central vent (90 cfm) **1933** Btuh
Outside air
 Blower 0 Btuh
 Use manufacturer's data n
 Rate/swing multiplier 1.00
 Equipment sensible load 11565 Btuh

Infiltration

Method Simplified
 Construction quality Semi-tight
 Fireplaces 0

	Heating	Cooling
Area (ft ²)	1117	1117
Volume (ft ³)	8939	8939
Air changes/hour	0.31	0.16
Equiv. AVF (cfm)	46	24

Latent Cooling Equipment Load Sizing

Structure 1253 Btuh
 Ducts 0 Btuh
Central vent (90 cfm) **2465** Btuh
Outside air
 Equipment latent load 3718 Btuh
Equipment Total Load (Sen+Lat) 15283 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 53 °F
 Actual air flow 593 cfm
 Air flow factor 0.048 cfm/Btuh
 Static pressure 0.30 in H2O
 Space thermostat

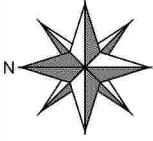
Cooling Equipment Summary

Make Smart Comfort
 Trade PERFORMANCE 14 SEER2 AC
 Cond R4A4S18*K*NAA*
 Coil FEVA0024***+NAVA43601CK
 AHRI ref 0
 Efficiency 12.5 EER2, 15.2 SEER2
 Sensible cooling 12460 Btuh
 Latent cooling 5340 Btuh
 Total cooling 17800 Btuh
 Actual air flow 593 cfm
 Air flow factor 0.061 cfm/Btuh
 Static pressure 0.30 in H2O
 Load sensible heat ratio 0.76

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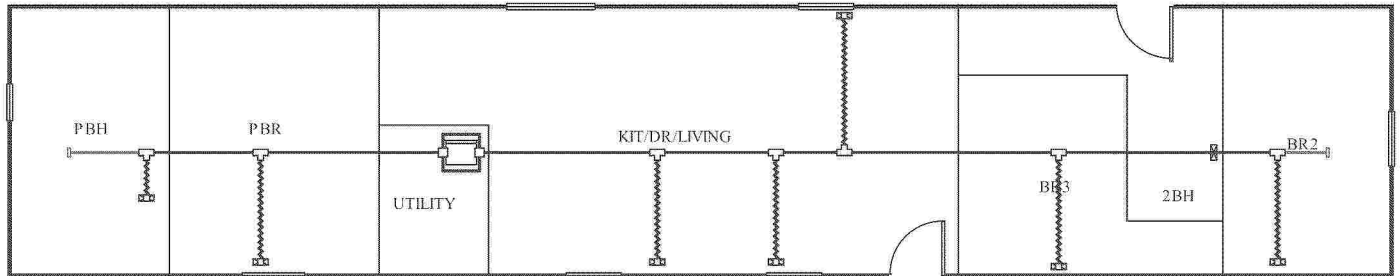


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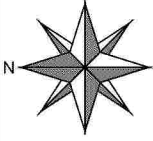
Level 1



957-333.4.4

Job #: 333 (perimeter)
Performed by CLAYTON ROCKWELL for
333 (perimeter)
ROCKWELL, NC

Scale: 1 : 126
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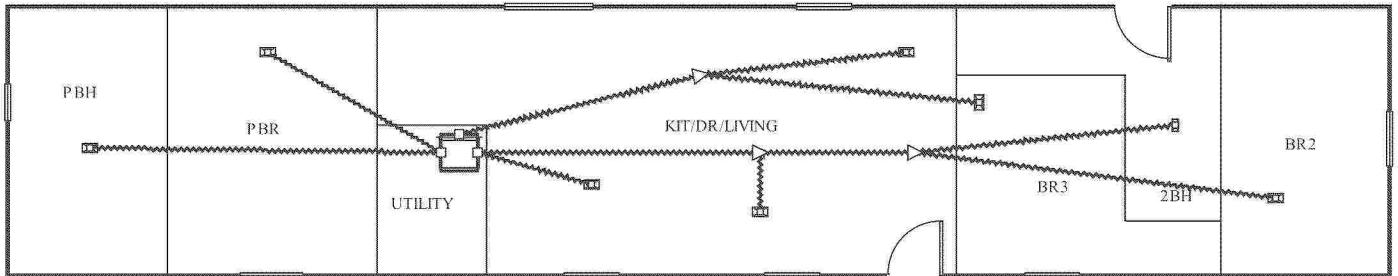
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9/15/2023

FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS

Level 1



957-333.4.5

Job #: 333 (OVERHEAD HVAC)
Performed by CLAYTON ROCKWELL for
333 (OVERHEAD HVAC)
ROCKWELL, NC

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Project Information

For: 333 (OVERHEAD HVAC), CLAYTON 957
 ROCKWELL, NC

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

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Design Information

Weather: SC 55

Winter Design Conditions

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

Summer Design Conditions

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

Heating Summary

Structure 12709 Btuh
 Ducts 0 Btuh
Central vent (90 cfm) **4097** Btuh
Outside air
 Humidification 0 Btuh
 Piping 0 Btuh
 Equipment load 16805 Btuh

Sensible Cooling Equipment Load Sizing

Structure 11615 Btuh
 Ducts 0 Btuh
Central vent (90 cfm) **1955** Btuh
Outside air
 Blower 0 Btuh
 Use manufacturer's data n
 Rate/swing multiplier 1.00
 Equipment sensible load 13556 Btuh

Infiltration

Method Simplified
 Construction quality Average
 Fireplaces 0

	Heating	Cooling
Area (ft ²)	1117	1117
Volume (ft ³)	8939	8939
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	67	34

Latent Cooling Equipment Load Sizing

Structure 1591 Btuh
 Ducts 0 Btuh
Central vent (90 cfm) **2078** Btuh
Outside air
 Equipment latent load 3669 Btuh
Equipment Total Load (Sen+Lat) 17225 Btuh
 Req. total capacity at 0.70 SHR 1.6 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 0.067 cfm/Btuh
 Static pressure 0.30 in H2O
 Load sensible heat ratio 0.79

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CLAYTON HOME BUILDING GROUP

OVERHEAD DUCT

Model Number	333	Drawing Number	333	Version 13
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BOX SIZE: 15 ft. x 76 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-164	THP-552	THP-2013
U VALUE (BTUH/SQ.FT.-F)	0.045	0.0808	0.0297

Overhead Duct	
Diameter	Length
4	0
5	0
6	56
7	31
8	14
9	24
10	0
11	0
14	0
Exterior Supply	Length
14	0
16	0
Exterior Return	Length
14	0
16	0



Window Glass Area:

Th. Zone 1:
 Th. Zone 2:
 Th. Zone 3:
 Overhead TZ 1:
 Overhead TZ 2:
 Overhead TZ 3:

	Area	U Value	UA
Doors:			
Front	21.00	0.170	3.57
Rear	21.00	0.260	5.46
Other Door	0.00	0.260	0.00
Other Door	0.00	0.330	0.00
OSB	0.00	0.000	0.00
Skylights	0.00	0.330	0.00
Standard	115.00	0.300	34.50
Option	0.00	0.300	0.00
Net:			
Floor	1140.00	0.045	51.76
Wall	1299.00	0.081	104.96
Ceiling	1140.00	0.0297	33.86
Ext. Duct	0.00	0.000	0.00
Ext. Duct	0.00	0.000	0.00
Ext. Duct	0.00	0.000	0.00
Supply	19.84	0.242	4.80
Supply	19.84	0.223	4.42
Supply	19.84	0.21	4.08

Energy Star v3 & ZERH Max Glass (sq ft)	
Th. Zone 1	327.3
Th. Zone 2	141.5
Th. Zone 3	6.7

	Outdoor Design Temp (F)	UA	Uo	Heatloss BTUH/F
Thermal Zone 1	11	238.90	0.064	366.30
Thermal Zone 2	0	238.52	0.064	365.90
Thermal Zone 3	-14	238.18	0.064	365.60

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-23	5	10kW
-42	-8	12kW
-70	-28	15kW
-39	-6	40k Gas
-94	-45	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

Project Information

For: 333(2 BEDROOM OPTION), CLAYTON 957
 ROCKWELL, NC

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

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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 14032 Btuh
 Ducts 702 Btuh
Central vent (45 cfm) **2169** Btuh
Outside air
 Humidification 0 Btuh
 Piping 0 Btuh
 Equipment load 16902 Btuh

Sensible Cooling Equipment Load Sizing

Structure 11652 Btuh
 Ducts 583 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 13162 Btuh

Infiltration

Method Simplified
 Construction quality Average
 Fireplaces 0

	Heating	Cooling
Area (ft ²)	1117	1117
Volume (ft ³)	8939	8939
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	81	51

Latent Cooling Equipment Load Sizing

Structure 2005 Btuh
 Ducts 0 Btuh
Central vent (45 cfm) **1233** Btuh
Outside air
 Equipment latent load 3238 Btuh
Equipment Total Load (Sen+Lat) 16399 Btuh
 Req. total capacity at 0.70 SHR 1.6 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 = 20 °F

Cooling Equipment Summary

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

Efficiency 12.0 EER2, 15.2 SEER2
 Sensible cooling 16380 Btuh
 Latent cooling 7020 Btuh
 Total cooling 23400 Btuh
 Actual air flow 780 cfm
 Air flow factor 0.064 cfm/Btuh
 Static pressure 0.30 in H2O
 Load sensible heat ratio 0.80

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

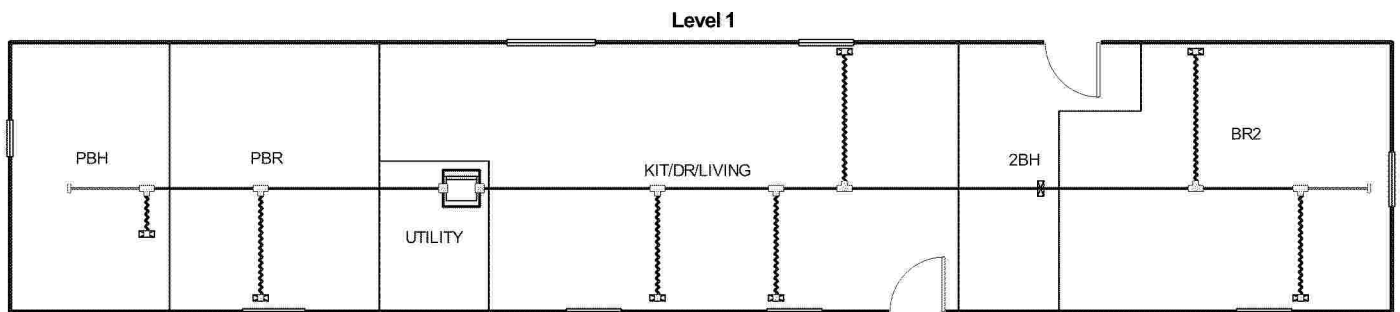
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CONSTRUCTION AND SAFETY STANDARDS



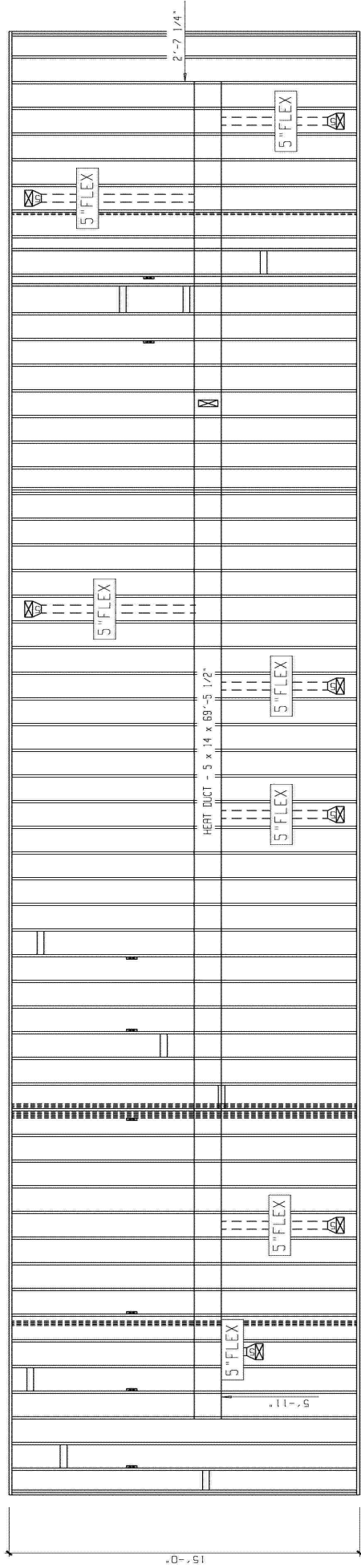
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Job #: 333(2 BEDROOM OPTION)
Performed by **CLAYTON ROCKWELL** for:
333(2 BEDROOM OPTION)
ROCKWELL, NC

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INLINE AND PERIMETER ARE THE SAME LAYOUT



76'-0"

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 FEDERAL MANUFACTURED HOME
 CONSTRUCTION AND SAFETY STANDARDS

957-333.4.10

BRAND CLAYTON	SERIES FS16	CLAYTON HOME BUILDING GROUP	DRAWING TITLE		MODEL NAME	SO. FT.
			INLINE HVAC-A 2 BEDROOM OPT		333	1140
GENERAL NOTES			PLANT	DESCRIPTION	MODEL NO.	
REVISIONS			957	16X76 3BR-2BR	333	
BY			DATE	ORIG. DATE	DATE PRINTED	SHEET NO.
				04/18/2024	05/20/2024	4-1A

Project Information

For: 333 (2BR OPTION) (OVERHEAD HVAC), CLAYTON 957 ROCKWELL, NC

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

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Design Information

Weather: SC 55

Winter Design Conditions

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

Summer Design Conditions

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

Heating Summary

Structure 12928 Btuh
 Ducts 2854 Btuh
Central vent (45 cfm) 2048 Btuh
Outside air
 Humidification 0 Btuh
 Piping 0 Btuh
 Equipment load 17831 Btuh

Sensible Cooling Equipment Load Sizing

Structure 10831 Btuh
 Ducts 2624 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 14418 Btuh

Infiltration

Method Simplified
 Construction quality Average
 Fireplaces 0

	Heating	Cooling
Area (ft ²)	1121	1121
Volume (ft ³)	8968	8968
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	81	51

Latent Cooling Equipment Load Sizing

Structure 1586 Btuh
 Ducts 492 Btuh
Central vent (45 cfm) 1039 Btuh
Outside air
 Equipment latent load 3117 Btuh
Equipment Total Load (Sen+Lat) 17535 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 0.049 cfm/Btuh
 Static pressure 0.30 in H2O
 Space thermostat
 Capacity balance point = 24 °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 0.82

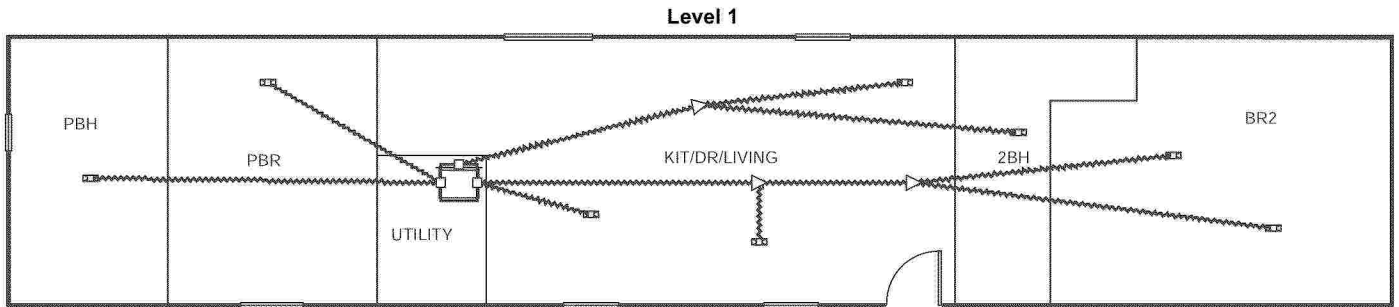
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FEDERAL MANUFACTURED HOME
CONSTRUCTION AND SAFETY STANDARDS



957-333.4.12

Job #: 333 (2BR OPTION) (OVERHEAD HV
Performed by CLAYTON ROCKWELL for
333 (2BR OPTION) (OVERHEAD HVAC)
ROCKWELL, NC

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CLAYTON HOME BUILDING GROUP

ZONES 1 & 2

Model Number	333	Drawing Number	333
			Version 13

BOX SIZE: 15 ft. x 76 ft.
 AVG. SIDEWALL HEIGHT = 8 FEET
 PERCENTAGE OF CEILING THAT IS VAULTED = 0%

IN-FLOOR DUCT SYSTEM

	UNHEATED FLOOR	WALL	FLAT ROOF
INSULATION VALUES	R-22 FW	R-13	R-38
DAPIA PAGE	THP-164	THP-552	THP-2013
U VALUE (BTUH/SQ.FT.-F)	0.045	0.0808	0.0297

APPROVED BY



Overhead Duct	
Diameter	Length
4	0
5	0
6	0
7	0
8	0
9	0
10	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	21.00	0.260	5.46
Rear	21.00	0.170	3.57
Other Door	0.00	0.260	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	115.00	0.300	34.50
Option	43.00	0.280	12.04
Net:			
Floor	1140.00	0.045	51.76
Wall	1256.00	0.081	101.48
Ceiling	1140.00	0.0297	33.86
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	0.00	0.000	0.00
Overhead TZ 2: Supply	0.00	0.000	0.00
Overhead TZ 3: Supply	0.00	0.000	0.00

Energy Star v3 & ZERH Max Glass (sq ft)	
Th. Zone 1	349.2
Th. Zone 2	161.7
Th. Zone 3	25.3

	Outdoor Design Temp (F)	UA	U _o	Heatloss BTUH/F
Thermal Zone 1	11	242.67	0.065	370.10
Thermal Zone 2	0	242.67	0.065	370.10
Thermal Zone 3	-14	242.67	0.065	370.10

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-22	5	10kW
-41	-7	12kW
-68	-27	15kW
-38	-6	40k Gas
-92	-43	60k Gas
-146	-81	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

ZONE 3

Model Number	333	Drawing Number	333	Version 13
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BOX SIZE: 15 ft. x 76 ft.
 AVG. SIDEWALL HEIGHT = 8 FEET
 PERCENTAGE OF CEILING THAT IS VAULTED = 0%

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-3004	THP-560	THP-2013
U VALUE (BTUH/SQ.FT.-F)	0.039	0.0541	0.0297

APPROVED BY



Overhead Duct	
Diameter	Length
4	0
5	0
6	0
7	0
8	0
9	0
10	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	21.00	0.260	5.46
Rear	21.00	0.170	3.57
Other Door	0.00	0.260	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	115.00	0.300	34.50
Option	43.00	0.280	12.04
Net:			
Floor	1140.00	0.039	44.35
Wall	1256.00	0.054	67.95
Ceiling	1140.00	0.0297	33.86
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	0.00	0.000	0.00
Overhead TZ 2: Supply	0.00	0.000	0.00
Overhead TZ 3: Supply	0.00	0.000	0.00

Energy Star v3 & ZERH Max Glass (sq ft)	
Th. Zone 1	494.9
Th. Zone 2	327.8
Th. Zone 3	206.2

	Outdoor Design Temp (F)	UA	U _o	Heatloss BTUH/F
Thermal Zone 1	11	201.72	0.054	329.10
Thermal Zone 2	0	201.72	0.054	329.10
Thermal Zone 3	-14	201.72	0.054	329.10

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-34	-3	10kW
-54	-17	12kW
-86	-39	15kW
-52	-15	40k Gas
-112	-58	60k Gas
-173	-100	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

GLAMOUR OPTION ZONES 1 & 2

Model Number	333	Drawing Number	333	Version 13
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BOX SIZE: 15 ft. x 76 ft.
 AVG. SIDEWALL HEIGHT = 8 FEET
 PERCENTAGE OF CEILING THAT IS VAULTED = 0%

IN-FLOOR DUCT SYSTEM

	UNHEATED FLOOR	WALL	FLAT ROOF
INSULATION VALUES	R-22 FW	R-13	R-38
DAPIA PAGE	THP-164	THP-552	THP-2013
U VALUE (BTUH/SQ.FT.-F)	0.045	0.0808	0.0297

Overhead Duct	
Diameter	Length
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
14	0
Exterior Supply	Length
14	0
16	0
Exterior Return	Length
14	0
16	0



Window Glass Area:

- Th. Zone 1:
- Th. Zone 2:
- Th. Zone 3:
- Overhead TZ 1:
- Overhead TZ 2:
- Overhead TZ 3:

	Area	U Value	UA
Doors:			
Front	21.00	0.150	3.15
Rear	21.00	0.260	5.46
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
Standard	122.00	0.300	36.60
Option	43.00	0.280	12.04
Net:			
Floor	1140.00	0.045	51.76
Wall	1249.00	0.081	100.92
Ceiling	1140.00	0.0297	33.86
Ext. Duct	0.00	0.000	0.00
Ext. Duct	0.00	0.000	0.00
Ext. Duct	0.00	0.000	0.00
Supply	0.00	0.000	0.00
Supply	0.00	0.000	0.00
Supply	0.00	0.00	0.00

Energy Star v3 & ZERH Max Glass (sq ft)	
Th. Zone 1	351.1
Th. Zone 2	163.6
Th. Zone 3	27.2

	Outdoor Design Temp (F)	UA	Uo	Heatloss BTUH/F
Thermal Zone 1	11	243.78	0.065	371.20
Thermal Zone 2	0	243.78	0.065	371.20
Thermal Zone 3	-14	243.78	0.065	371.20

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-22	6	10kW
-40	-7	12kW
-68	-27	15kW
-38	-5	40k Gas
-92	-43	60k Gas
-146	-81	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

GLAMOUR OPTION ZONE 3

Model Number	333	Drawing Number	333	Version 13
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BOX SIZE: 15 ft. x 76 ft.
 AVG. SIDEWALL HEIGHT = 8 FEET
 PERCENTAGE OF CEILING THAT IS VAULTED = 0%

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-3004	THP-560	THP-2013
U VALUE (BTUH/SQ.FT.-F)	0.039	0.0541	0.0297

Overhead Duct	
Diameter	Length
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
14	0
Exterior Supply	Length
14	0
16	0
Exterior Return	Length
14	0
16	0



Window Glass Area:

- Th. Zone 1:
 Th. Zone 2:
 Th. Zone 3:
 Overhead TZ 1:
 Overhead TZ 2:
 Overhead TZ 3:

	Area	U Value	UA		
Doors:	Front	21.00	0.150	3.15	
	Rear	21.00	0.260	5.46	
	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	
	Standard	Standard	122.00	0.300	36.60
		Option	43.00	0.280	12.04
	Net:	Floor	1140.00	0.039	44.35
		Wall	1249.00	0.054	67.57
Ceiling		1140.00	0.0297	33.86	
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	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	496.6
Th. Zone 2	329.5
Th. Zone 3	208.0

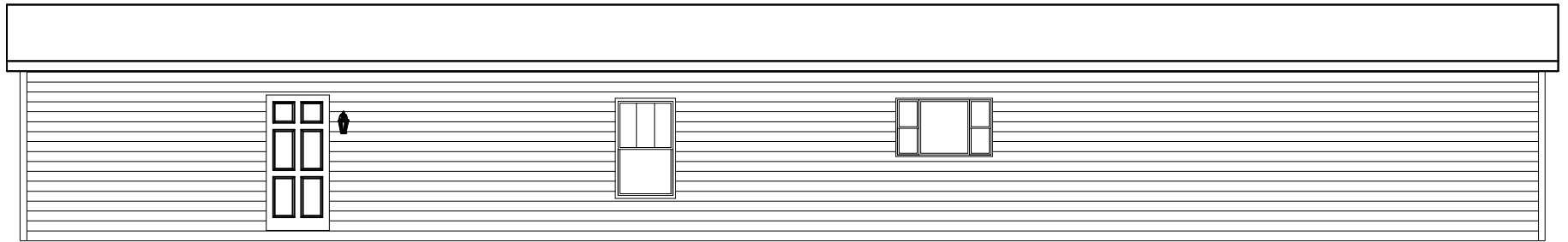
	Outdoor Design Temp (F)	UA	Uo	Heatloss BTUH/F
Thermal Zone 1	11	203.02	0.054	330.40
Thermal Zone 2	0	203.02	0.054	330.40
Thermal Zone 3	-14	203.02	0.054	330.40

Design Temperatures

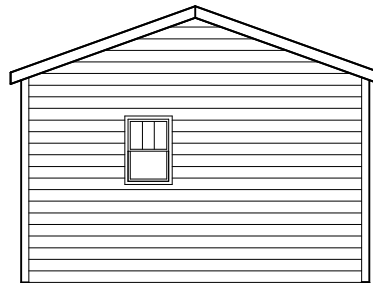
Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-33	-2	10kW
-54	-17	12kW
-85	-38	15kW
-51	-15	40k Gas
-112	-57	60k Gas
-172	-99	80k Gas

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

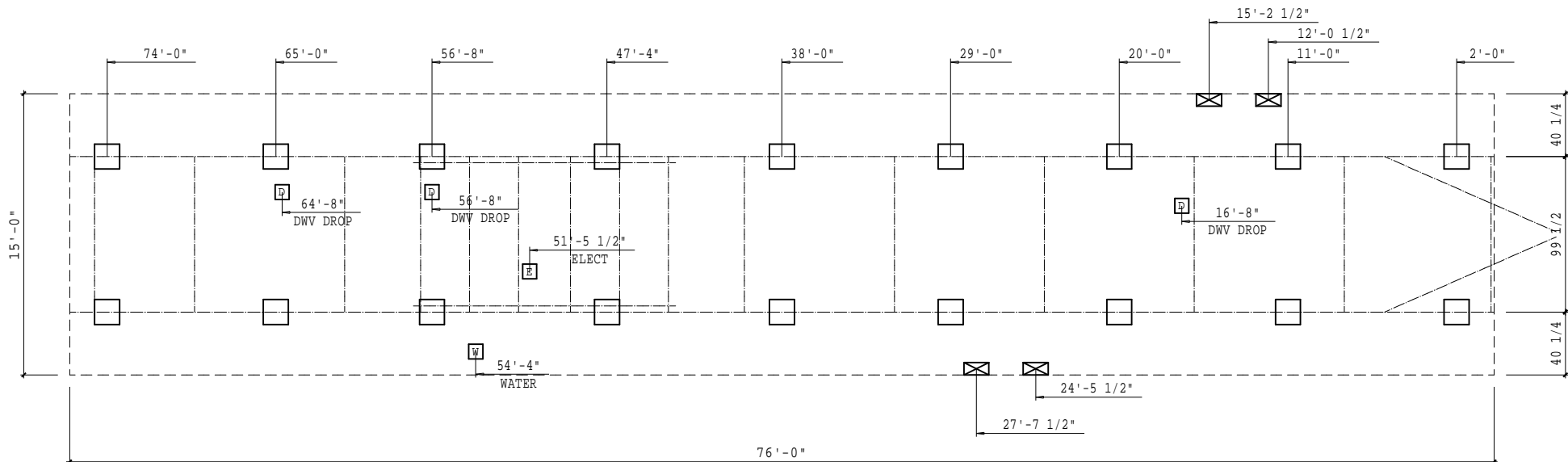


BACK ELEVATION



LEFT SIDE ELEVATION

BRAND CLAYTON	SERIES FS16	REVISIONS	BY	DATE	GENERAL NOTES	DRAWING TITLE EXTERIOR ELEVATION BACK & LEFT SIDE	MODEL NAME 333	SQ. FT. 1140
CLAYTON HOME BUILDING GROUP						PLANT 957	DESCRIPTION 16X76 3BR-2BA	MODEL NO. 333
						DRAWN BY KLK	ORIG. DATE 04/18/2024	DATE PRINTED 10/10/2024
							SHEET NO. 20-2	



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

CRAWSPACE VENTILATION	1140 SQ. FT. OF CRAWLSPACE AREA	**FOUNDATION SLOP NOTE**
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	548 SQ. IN. OF VENT REQUIRED 11 VENTS NEEDED @ 52 SQ. IN. EACH 572 SQ. IN. VENTILATION INSTALLED MINIMUM	

BRAND	SERIES
CLAYTON	FS16
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	333	SQ. FT.	1140
PLANT	DESCRIPTION	MODEL NO.	
957	16X76 3BR-2BA	333	
DRAWN BY	ORIG. DATE	DATE PRINTED	SHEET NO.
KLK	04/18/2024	10/10/2024	21-PS-99