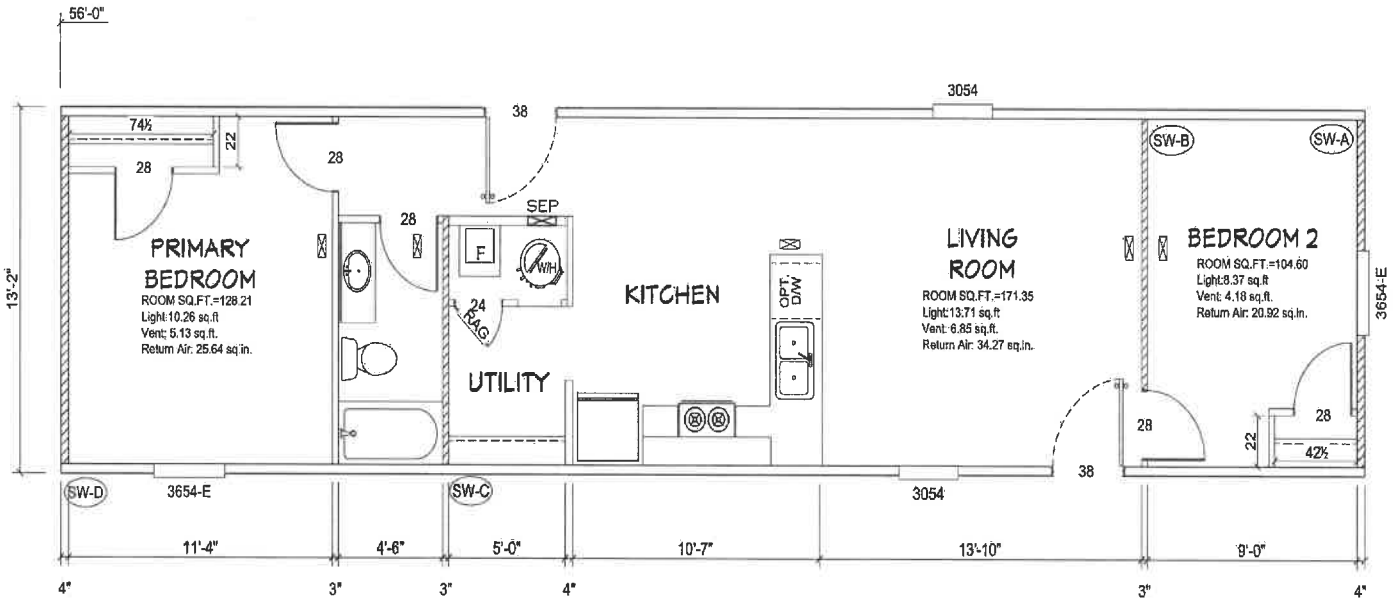


Model # TRU-1456-21-1 Minimum Joist Spacing 16 "

Box Width =	158 "	Single wide	No Offset Box
Box Length =	56 ft.	86 5" 12" MIN IBEAM	No Clerestory
No Skylights			No Origami Dormer
No Porches			No Sunken Floor
Joist Size =	#2 sp 2x6	Lags 9/Mcf"	No Parapet Roof

Version R14.00

Wind Zone 1 Standard Roof — 7/16" Rated Sheathing and Ceiling Board with 15 ga staple @ 6/12 (285,315) Chords: 2x4 SPF #3 Top Plate spliced w/2x4 MCP & 2x3 SPF Rail spliced w/ 2x4 MCP — 96 inch sidewall

Diaphragm Construction: Block Dist. X=0'

Shearwall	Dist./ Hitch	Length	PLF	# of Joists	Lags	Notes	SW1/SW2
A	0 "	109.5 "	250	2	2/2	Split Shearwall	54.75/54.75
D	56 '	129 "	162	2	2/1		

Wind Zone 2 Standard Roof — 7/16" Rated Sheathing and Ceiling Board with 15 ga staple @ 6/12 (285,315) Chords: 2x4 SPF #3 Top Plate spliced w/2x4 MCP & 2x3 SPF Rail spliced w/ 2x4 MCP — 96 inch sidewall

Diaphragm Construction: Block Dist. X=0.5'

Shearwall	Dist./ Hitch	Length	PLF	# of Joists	Lags	Notes	SW1/SW2
A	0 '	108.5 "	162	2	1/1	Split Shearwall	54.75/54.75
B	9.46 '	112 "	430	3	4/1		
C	39.46 '	104 "	420	5	3/3		
D	56 '	96 "	162	2	1/1		

Wind Zone 3 Standard Roof — 7/16" Rated Sheathing and Ceiling Board with 15 ga staple @ 6/12 (285,315) Chords: 2x4 SPF #3 Top Plate spliced w/2x4 MCP & 2x3 SPF Rail spliced w/ 2x4 MCP — 96 inch sidewall

Diaphragm Construction: Block Dist. X=2.1'

Shearwall	Dist./ Hitch	Length	PLF	# of Joists	Lags	Notes	
A	0 '	109.5 "	162	2	1/1	Split Shearwall	54.75/54.75
B	9.46 '	112 "	420	3	4/1		
C	39.46 '	104 "	520	7	4/3		

MP-14.TRU-1456-21-1.0.100

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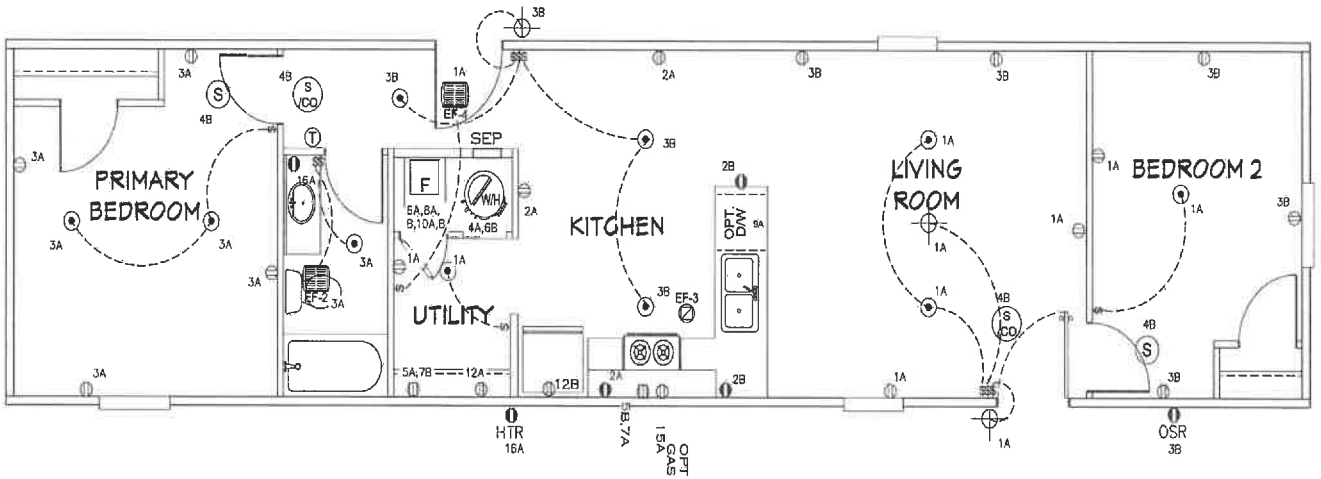
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Clayton Built

REVISION	DATE

MODEL NAME: ELM
MODEL NO.: TRT14562E
BOX SIZE: 14' x 56'
MODEL SQ. FT.: 737
DRAWN BY: Dustin Harville
DATE DRAWN: 2/27/2025
DATE PRINTED: 8/20/2025
SCALE: 3/16"=1'
* UNLESS OTHERWISE NOTED
PLAN NO.: TRU-1456-21-1
SHEET NAME: FLOOR PLAN
SHEET NO.: FP-0

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NOTES:

1. ALL CIRCUITS SHOWN ARE FOR REFERENCE AND MAY BE CHANGED BASED ON OPTIONAL COMPONENTS INSTALLED IN THE HOME.
2. REFER TO DAPIA MANUAL FOR SYMBOL CHART.
3. EITHER LIGHT OR RECEPTACLE MUST CONNECT TO SWITCH.
4. EF-1= 50 CFM EXHAUST FAN REQUIRED FOR THERMAL ZONE III THERMAL ZONES I & II MAY USE FAN OR WINDOW W/1.5 SQ. FT. OPENABLE GLASS.
5. EF-2= 50 CFM EXHAUST FAN REQUIRED THERMAL ZONE I, II, AND III.
6. EF-3= 100 CFM RANGE EXHAUST FAN, SWITCH AT HOOD.
7. EF-4= WHOLE HOUSE VENTILATION REQUIREMENTS PER DAPIA MANUAL.
8. REFER TO DAPIA MANUAL OR THE MFG. INSTALLATION INSTRUCTIONS FOR PROPER WIRE SIZE AND BREAKER SIZE FOR SPECIFIC APPLIANCE AND MODEL BEING INSTALLED.
9. ALL SMOKE ALARMS TO BE LOCATED ON THE CEILING.
10. CARBON MONOXIDE ALARMS ARE ONLY REQUIRED WHEN HOME HAS EITHER FUEL BURNING APPLIANCES, IS GARAGE READY OR IS BASEMENT READY. REFERENCE DAPIA MANUAL FOR ADDITIONAL INFORMATION.
11. DIMENSIONS SHOWN ON PRINT ARE APPROXIMATE AND TO BE USED ONLY AS A GUIDELINE.

CIRCUIT	CIRCUIT #	WIRE	BREAKER
LIGHT/RECEP	1A,3A,13B,14A	14-2	15-SP
LIGHT/RECEP	1B,3B,14B	14-2	15-SP
KITCHEN	2A,2B	12-2	20-SP
WASHER	12A	12-2	20-SP
RANG HOOD/ MICROWAVE	15B	SEE NOTE #8	
OPT. GAS RANG	15A	SEE NOTE #8	

CIRCUIT	CIRCUIT #	WIRE	BREAKER
DRYER	5A,7B	SEE NOTE #8	
WATER HEATER	4A,6B	SEE NOTE #8	
RANGE	5B,7A	SEE NOTE #8	
FURNACE	6A,8A,B,10A,B	SEE NOTE #8	
OPT D/WASH	9A	SEE NOTE #8	
SMOKE/CO DECT.	4B	SEE NOTE #8	
REFER	12B	SEE NOTE #8	

CIRCUIT	CIRCUIT #	WIRE	BREAKER
BATHROOM	16A	12-2	20-SP
OPT G/DISP	9B	SEE NOTE #8	
OPT SPA/ WP/JAC	11A,B	SEE NOTE #8	
FREEZER	13A	SEE NOTE #8	
OPT ELEC. FIREPLACE	16B	SEE NOTE #8	

MP-14.TRU-1456-21-1.2

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Clayton Built

REVISION | DATE

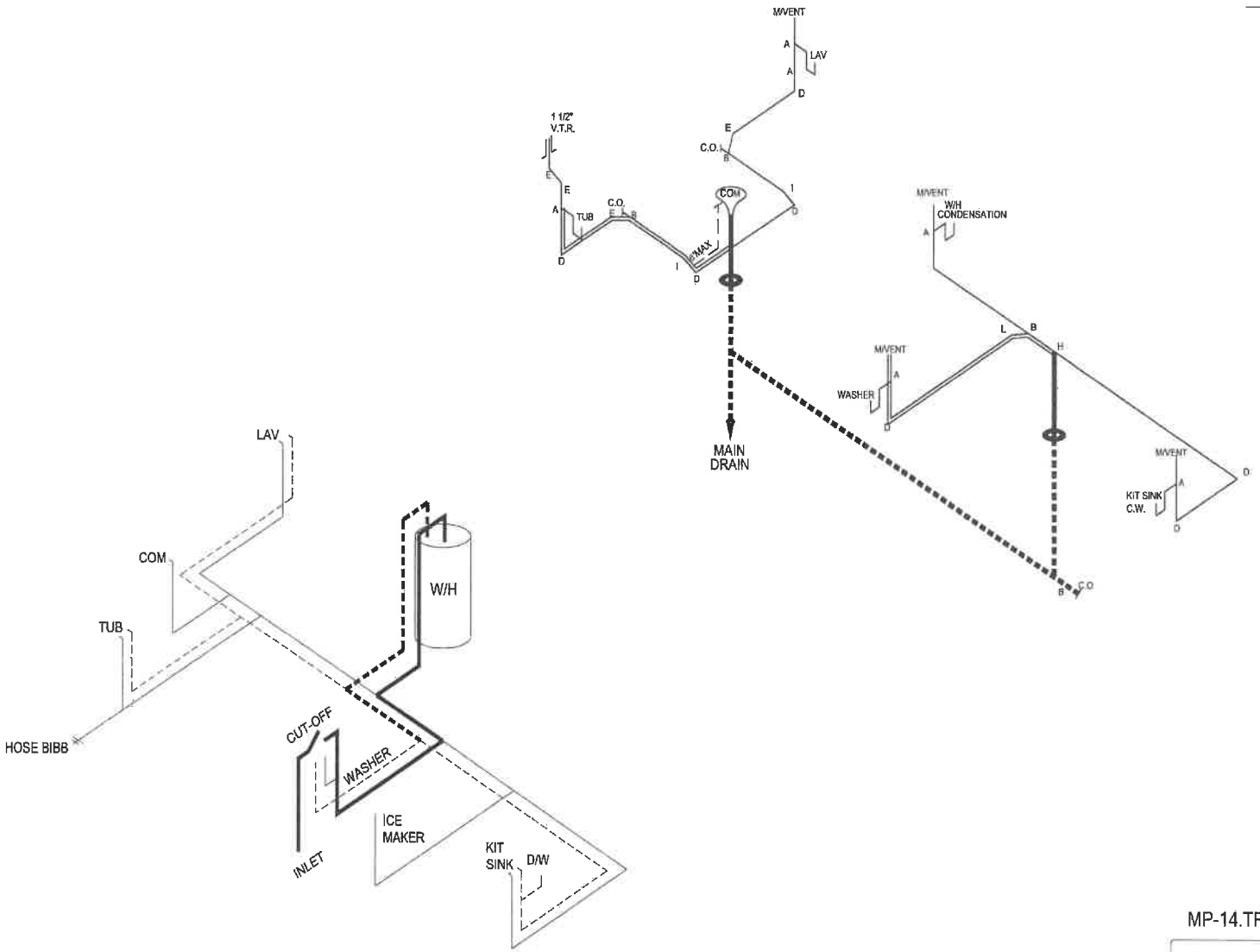
MODEL NAME: ELM
MODEL NO.: TRT14562E
BOX SIZE: 14' x 56'
MODEL SQ. FT: 737

DRAWN BY: Dustin Harville
DATE DRAWN: 2/27/2025
DATE PRINTED: 8/21/2025
SCALE: 3/16"=1' UNLESS OTHERWISE NOTED
PLAN NO.: TRU-1456-21-1
SHEET NAME: ELEC. PLAN
SHEET NO.: EL-1

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NOTE:
DASHED LINES INDICATE HOT WATER
SOLID LINES INDICATE COLD WATER

= 3/4"
= 1/2"



	LEGEND
A	SHORT TURN T-Y
B	LONG TURN T-Y
C	1/4 BEND
D	LONG SWEEP 1/4 BEND
E	45 ELL
F	DBL. SANITARY TEE
G	4x3 CLOSET ELL
H	DOUBLE ELL
I	22 1/2° ELL
J	45° Y
K	LONG TURN STREET ELBOW

DWV LINE SIZE CHART

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

MP-14.TRU-1456-21-1.3

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9/10/2025
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Clayton Built

DATE
REVISION

MODEL NAME: ELM
MODEL NO.: TRT14562E
BOX SIZE: 14' x 56'
MODEL SQ. FT: 737

DRAWN BY: Dustin Harville
DATE DRAWN: 2/27/2025
DATE PRINTED: 8/21/2025
SCALE: 3/16"=1'
* UNLESS OTHERWISE NOTED
PLAN NO.: TRU-1456-21-1
SHEET NAME: D.W.V. & SUPPLY
SHEET NO.: PL -1

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LEGEND	
SYM	FITTINGS
A	TEE
B	90 ELL
⧖	VALVE
C	CAP

APPLIANCE BTU's RATINGS MAX. INPUT

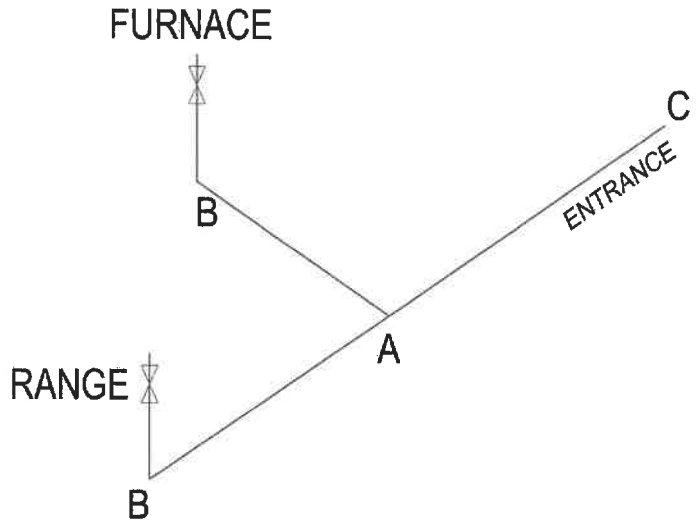
FURNACE	60,000	BTU'S
W/H	N/A	BTU'S
RANGE	52,000	BTU'S
DRYER	N/A	BTU'S

GAS LINE SIZE CHART

— = 1"

——— =3/4"

MDL= 17'



NOTES:

ALL PIPE IS 3/4" I.D.CAST
(EXCEPT WHERE NOTED OTHERWISE)
MDL=MAX. DETERMINED LENGTH OF PIPE
FITTING MAY BE ADDED OR SUBTRACTED
TO TRAVERSE VARIATIONS IN AXLE
QUANTITY, PLACEMENT, AND FRAME TYPE.
INLET LOCATION MAY VARY TO STAY WITHIN
MAX. DETERMINED LENGTH

MP-14.TRU-1456-21-1.4

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FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Clayton Built

DATE

REVISION

MODEL NAME: ELM
MODEL NO.: TRT14562E
BOX SIZE: 14' x 56'
MODEL SQ. FT: 737

DRAWN BY: Dustin Harville

DATE DRAWN: 2/27/2025

DATE PRINTED: 8/20/2025

SCALE: 3/16"=1'
*UNLESS OTHERWISE NOTED

PLAN NO.: TRU-1456-21-1

SHEET NAME: GAS LINES

SHEET NO.: PI -4

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wrightsoft

Manual S Compliance Report
Entire House
Clayton Homes

Job: TRU-1456-21-1-FDJ
Date: Aug 20, 2025
By:

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: TRU-1456-21-1-FDJ

Cooling Equipment

Design Conditions

Outdoor design DB:	90.4°F	Sensible gain:	16540	Btuh	Entering coil DB:	76.2°F
Outdoor design WB:	73.3°F	Latent gain:	4593	Btuh	Entering coil WB:	63.4°F
Indoor design DB:	75.0°F	Total gain:	21133	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:	18157	Btuh	110% of load	
Latent capacity:	4600	Btuh	100% of load	
Total capacity:	22757	Btuh	108% of load	SHR: 80%

Heating Equipment

Design Conditions

Outdoor design DB:	21.0°F	Heat loss:	32571	Btuh	Entering coil DB:	66.2°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:	15994	Btuh	49% of load	Capacity balance:	35 °F
Supplemental heat required:	16578	Btuh		Economic balance:	-99 °F

Backup equipment type: Elec strip
Manufacturer: Smart Comfort Model: FEVA002410

Actual airflow:	780	cfm			
Output capacity:	10.0	kW	105% of load	Temp. rise:	41 °F

Meets all requirements of ACCA Manual S.

APPROVED BY
NTA INC. 9/10/2025
FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

wrightsoft®

Project Summary
Entire House
Clayton Homes

Job: TRU-1456-21-1-FDJ
Date: Aug 20, 2025
By:

5000 Clayton Road, Maryville, TN 37804 Phone: 865-380-3000

Project Information

For: TRU-1456-21-1-FDJ

Notes: DUCT CAPACITY: 26,000 BTUH

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FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

Design Information

Weather: TN 25

Winter Design Conditions

Outside db	21	°F
Inside db	70	°F
Design TD	49	°F
Ventilation Method	MJ8	

Summer Design Conditions

Outside db	90	°F
Inside db	75	°F
Design TD	15	°F
Daily range	M	
Relative humidity	50	%
Moisture difference	34	gr/lb

Heating Summary

Structure	11119	Btuh
Ducts (R-0.0)	18329	Btuh
Central vent (60 cfm)	3123	Btuh
Outside air		
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	32571	Btuh

Sensible Cooling Equipment Load Sizing

Structure	7189	Btuh
Ducts (R-0.0)	8369	Btuh
Central vent (60 cfm)	982	Btuh
Outside air		
Blower	0	Btuh
Use manufacturer's data	n	
Rate/swing multiplier	0.95	
Equipment sensible load	15779	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	728	728
Volume (ft³)	5824	5824
Air changes/hour	0.61	0.32
Equiv. AVF (cfm)	59	31

Latent Cooling Equipment Load Sizing

Structure	2686	Btuh
Ducts	583	Btuh
Central vent (60 cfm)	1325	Btuh
Outside air		
Equipment latent load	4593	Btuh
Equipment Total Load (Sen+Lat)	20372	Btuh
Req. total capacity at 0.70 SHR	1.9	ton

Heating Equipment Summary

Make	Smart Comfort
Trade	15 SEER2 R SERIES R410A HP
Model	R4H5S24*K*AAA*
AHRI ref	210537896

Efficiency	7.5 HSPF2	
Heating input		
Heating output	22800	Btuh @ 47°F
Temperature rise	28	°F
Actual air flow	780	cfm
Air flow factor	0.026	cfm/Btuh
Static pressure	0.30	in H2O

Space thermostat
Capacity balance point = 35 °F

Backup: Smart Comfort FEVA002410
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	210537896
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	0.050	cfm/Btuh
Static pressure	0.30	in H2O
Load sensible heat ratio	0.78	

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

CLAYTON HOME BUILDING GROUP

ELM

Model Number	TRT14562E	Drawing Number	TRU-1456-21-1	Version 24

BOX SIZE: 13.17 ft. x 56 ft.
AVG. SIDEWALL HEIGHT = 8 FEET
PERCENTAGE OF CEILING THAT IS VAULTED = 42.9%

IN-FLOOR DUCT SYSTEM

	UNHEATED FLOOR	WALL	FLAT ROOF
INSULATION VALUES	R-11 OR / R-11 FW / R-11 BIB	R-13	R-33
DAPIA PAGE	THP-335	THP-515	THP-1972
U VALUE (BTUH/SQ.FT.-F)	0.0436	0.0853	0.0306

Overhead Duct	
Diameter	Length
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
15	0
Exterior Supply	Length
14	0
16	0
Exterior Return	Length
14	0
16	0

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FEDERAL MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS

		Area	U Value	UA
Doors:	Front	20.30	0.189	3.84
	Rear	20.30	0.360	7.31
	Other Door	0.00	0.300	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	51.00	0.300	15.30
	Option	0.00	0.300	0.00
Net:	Floor	737.33	0.044	32.15
	Wall	1015.07	0.085	86.59
	Ceiling	737.33	0.0306	22.56
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	188.8
Th. Zone 2	56.5
Th. Zone 3	0.0

Thermal Zone	Outdoor Design Temp (F)	UA	Uo	EStar v3 & ZERH Compliant	Heatloss BTUH/F
1	11	167.74	0.065	OK	264.60
2	0	167.74	0.065	OK	264.60
3	-14	167.74	0.065	NG	264.60

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-59	-20	10kW
-85	-38	12kW
-123	-65	15kW
-81	-36	40k Gas
-157	-89	60k Gas
-232	-142	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