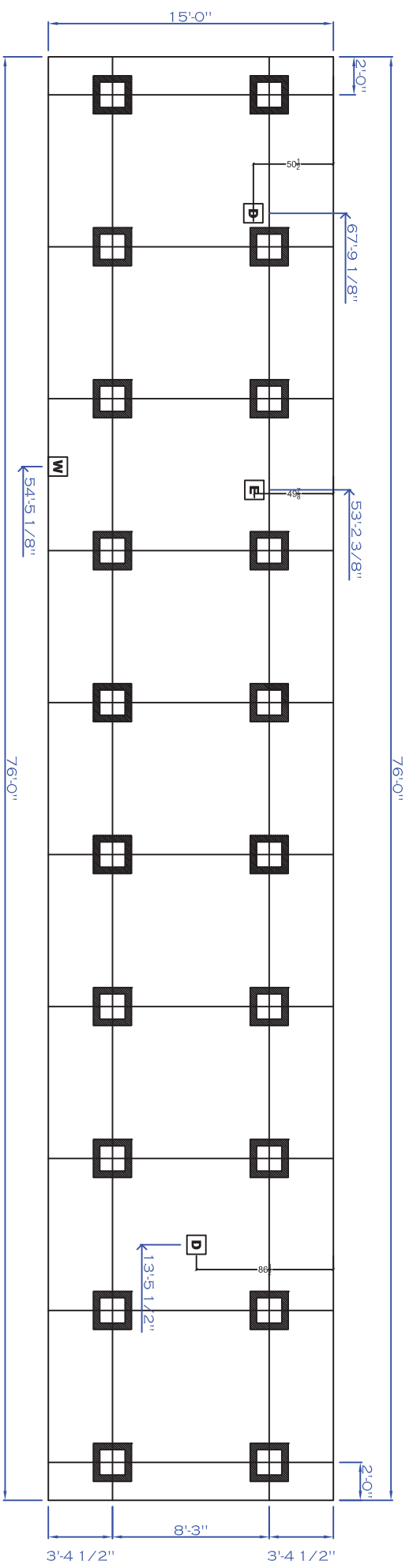








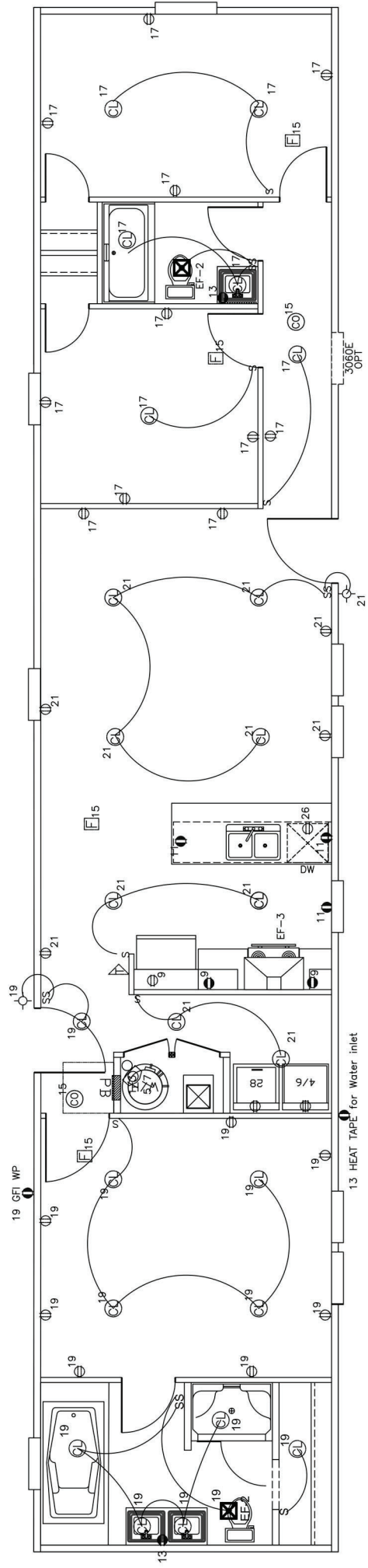
<b>GILES HOMES</b>	Model #	S46058	Printed #
465 S. Redoubt St. New Hazelville, OH 43924	Scale	1/8" = 1'-0"	S46058VB
Product Designer: PARKVILLE	Price Buster	16X76PRICEBUSTER_76B	
<b>ELEVATION</b>			
S46058VB.DOC - 8			



\*THIS FOOTER DIAGRAM IS FOR STANDARD PRODUCT ONLY  
 \*FOR PIER SPACING REFER TO SET UP MANUAL

-  **MARRIAGE WALL PIER**
-  **WATER INLET**
-  **DRAIN**
-  **ELECTRICAL DROP**
-  **DOOR PIER**
-  **REGULAR PIER**





NOTES:

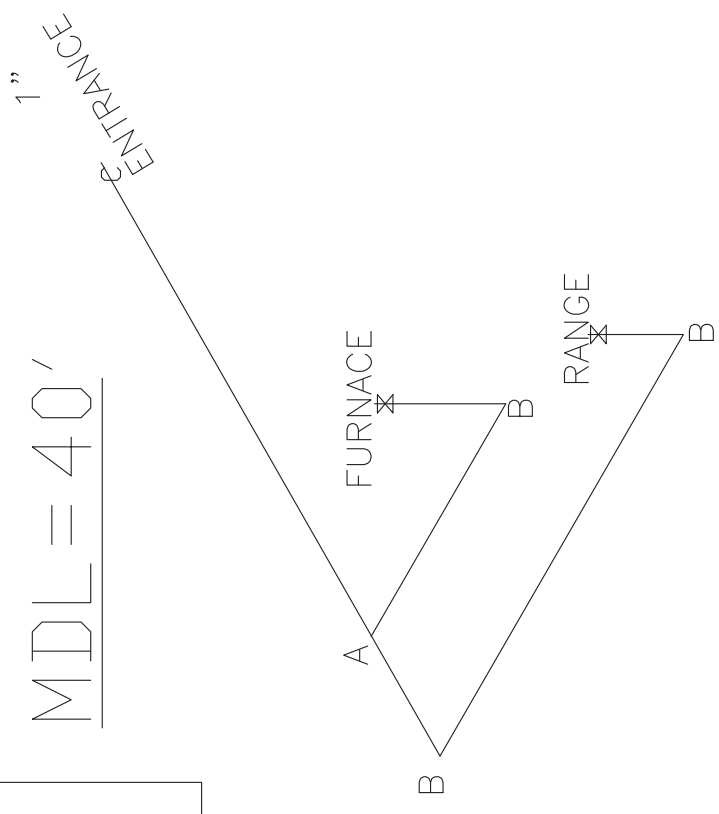
1. ALL CIRCUITS SHOWN ARE FOR REFERENCE AND MAY BE CHANGED BASED ON OPTIONAL COMPONENTS INSTALLED IN THE HOME.
2. REFER TO DAPIA MANUAL FOR SYMBOL CHART.
3. EITHER LIGHT OR RECEPTACLE MUST CONNECT TO SWITCH.
4. EF-1= 50 CFM EXHAUST FAN REQUIRED FOR THERMAL ZONE III THERMAL ZONES I & II MAY USE FAN OR WINDOW V/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.


  
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<b>GILES HOMES</b> 405 S. BROAD ST. NEW TAZEWELL TN 37825 Product Designer: HARVILLED	Model #: S46058 Drawing #: S46058VB Date: 11-15-23 Scale: N/A Product Designer: HARVILLED 1 GX76PRICEBUSTER_76B 546058VB-DOE.8
---	--

LEGEND		APPLIANCE BTU'S RATINGS MAX. INPUT	
SYM	FITTINGS	FURNACE	77,000 BTU'S
A	TEE	RANGE	56,000 BTU'S
B	90 ELL		
X	VALVE		
C	CAP		



NOTES:

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



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6

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LEGEND AND SET UP KIT.

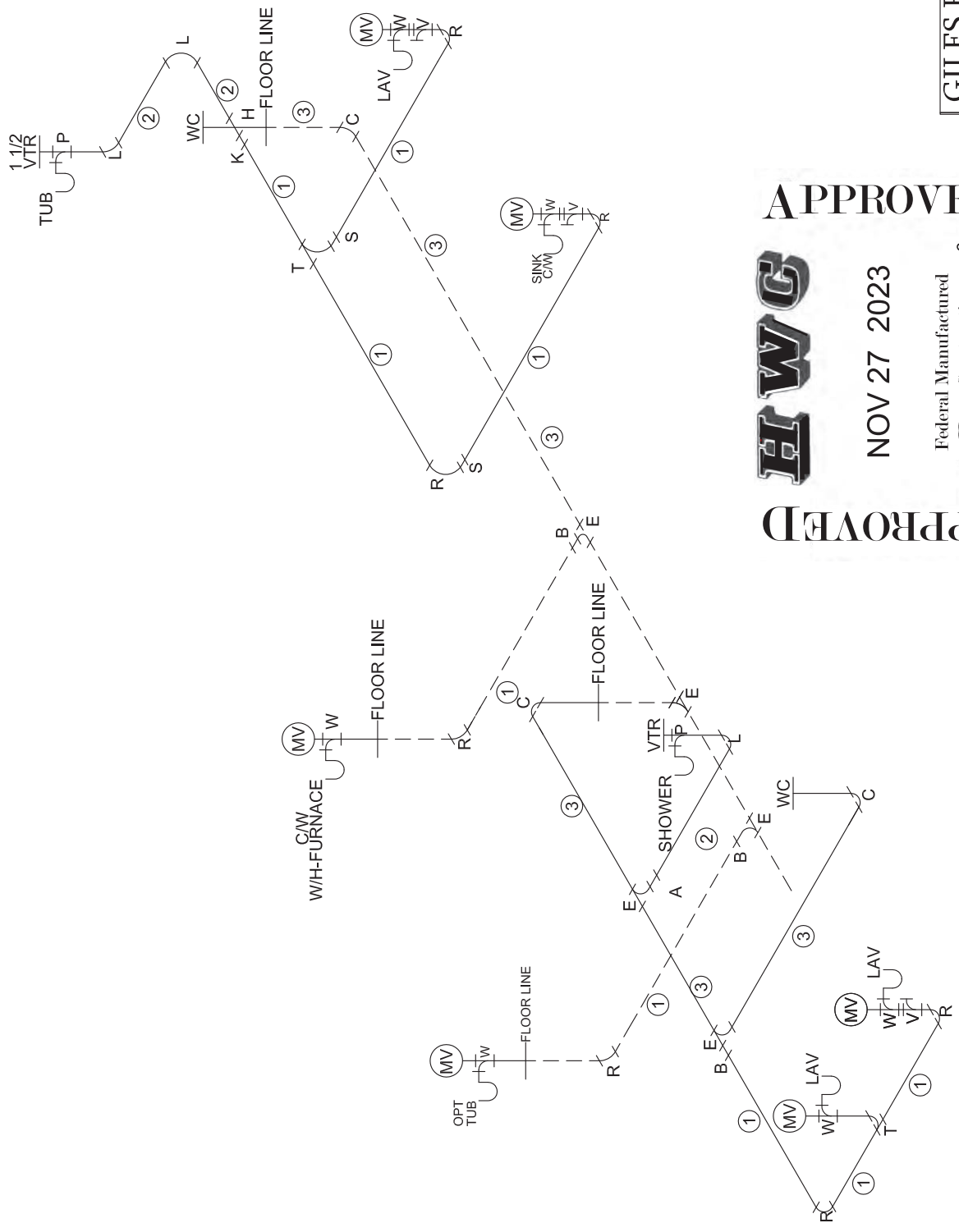
VTR - VENT THRU ROOF  
 (MV) - MECHANICAL VENT

- 70 (3) -3" PIPE
- 0 (2) -2" PIPE
- 20 (1) -1 1/2" PIPE

- 0 A -3"X2" REDUCER
- 0 B -3"X1 1/2" REDUCER
- 1 C -3" ELTL 90°
- 0 D -3" ELL 45°
- 1 E -3" LTTY
- 2 F -3" COUPLING
- 0 G -3" X 3" X 3" X 2" X 2" ST
- 0 H -3" X 3" X 2" X 2" ST
- 0 I -3" X 3" X 2" ST
- 0 J -3" 3 WAY ELL

- 0 K -2"X1 1/2" REDUCER
- 0 L -2" ELTL 90°
- 0 M -2" ELL 45°
- 0 N -2" LTTY
- 0 O -2" COUPLING
- 0 P -2" X 1 1/2" X 1 1/2" ST
- 0 Q -2" 3 WAY ELL

- 1 R -1 1/2" ELTL 90°
- 0 S -1 1/2" ELL 45°
- 0 T -1 1/2" LTTY
- 1 U -1 1/2" COUPLING
- 0 V -1 1/2" CLEAN OUT
- 0 W -1 1/2" SAN TEE



**APPROVED**

**H W G**

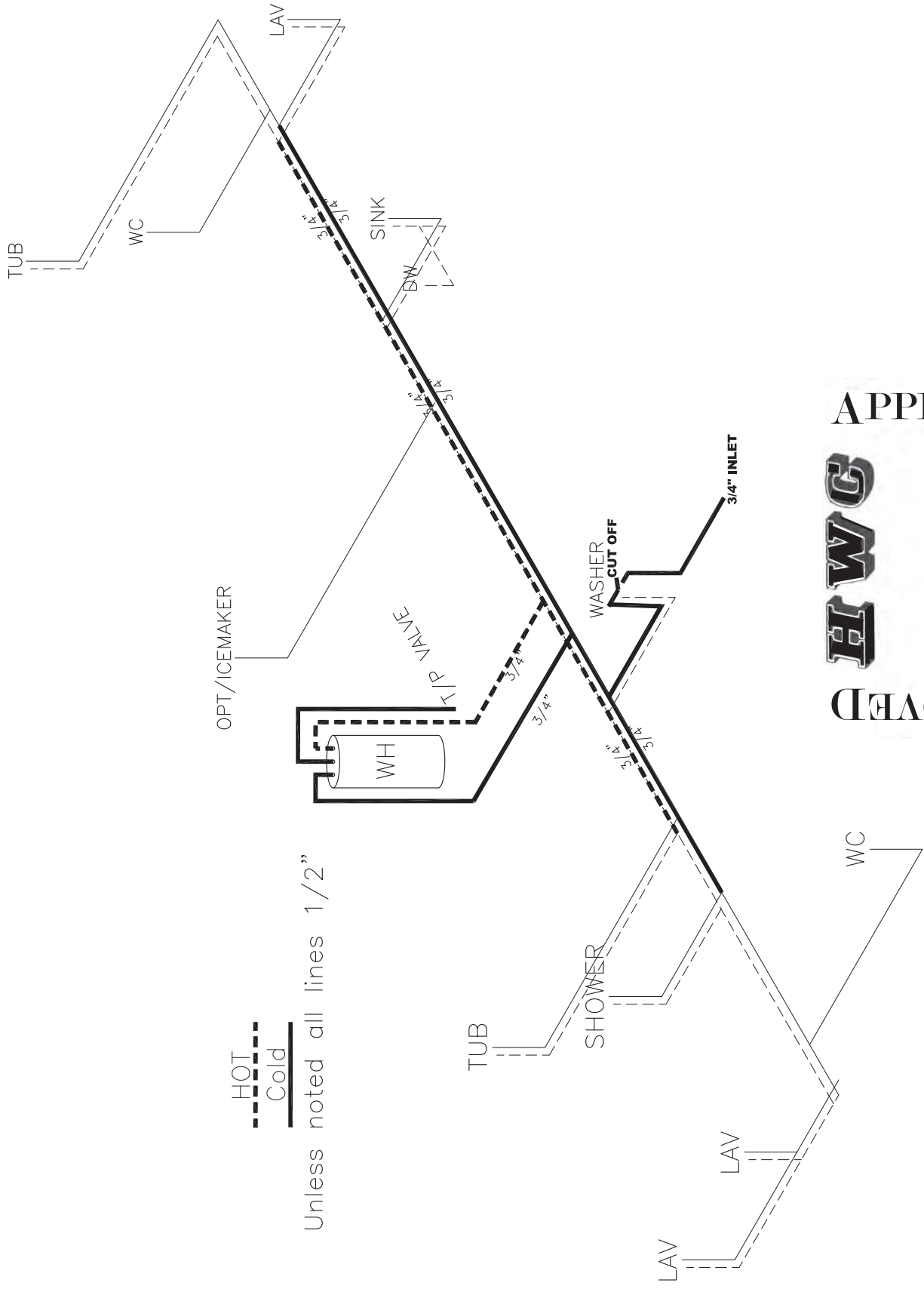
NOV 27 2023

Federal Manufactured  
Home Construction 6  
And Safety Standards

**APPROVED**

<b>GILES HOMES</b> 405 S. BROAD ST. NEW TAZEWELL TN 37825	Model #: 546058	Drawing #:
	Date: 11-15-23	Scale: N/A
Product Designer: HARVILLED	1GX76PRICEBUSTER_76B	
		546058VB-DOE-8

DWV



**---** HOT  
**—** Cold

Unless noted all lines 1/2"

**APPROVED**

**H W C**

**APPROVED**

NOV 27 2023

Federal Manufactured  
Home Construction  
And Safety Standards 6

<b>GILES HOMES</b> 406 S. BROAD ST. NEW TAZEWELL TN 37825	Model #: 546058	Drawing #:
	Date: 11-15-23	Scale: N/A
Product Designer: HARVILLE	1 6X76PRICEBUSTER_76B	
PRESSURE LINES	546058VB-DOE-8	





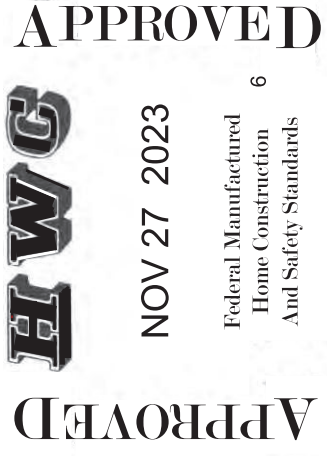
**Giles Homes Light and Vent Chart**

**Model # S46058VB-DOE**

Room	Floor Area SQFT	Window(s)	Glass Area	% of Floor	Artificial Light	Vent Area	% of Floor	Artificial Vent	Min. Door
Living Room	207	3060 X3	29.7	14.35%		15.6	7.54%		36
Kitchen / DR	131	3060	9.9	7.56%	X	5.2	3.97%	X	24
Primary Bedroom	182	3060 x2	19.8	10.88%	X	10.4	5.71%	X	36
Bedroom 2	129	3660	12.2	9.46%		6.2	4.81%		24
Bedroom 3	102	3060	9.9	9.71%		5.2	5.10%		24
Primary Bath	90	3640	7.7	8.56%	X	4	4.44%	X	24
Bath 2	37				X			X	24
Utility	44				X				24

\* (X) Artificial Light and Vent has been provided for this room

\*\* Note: All window sizes are minimum requirements for rooms. And windows may be added as long as heat loss allows and/or is documented on the floor plan



Data on this submitted  
By: Andy Cupp  
MFG. Giles Industries

**REVISION**

**E. S46058VB-DOE . 2**

# Description of Materials

U.S. Department of Housing  
and Urban Development  
Department of Veterans Affairs  
Farmers Home Administration

OMB Control No. 2502-0313  
(exp. 3/31/2024)

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This agency may not collect this information, and you are not required to complete this form, unless it displays a currently valid OMB control number.

The National Housing Act (12 USC 1703) authorizes insuring financial institutions against default losses on single family mortgages. HUD must evaluate the acceptability and value of properties to be insured. The information collected here will be used to determine if proposed construction meets regulatory requirements and if the property is suitable for mortgage insurance. Response to this information collection is mandatory. No assurance of confidentiality is provided.

Proposed Construction  Under Construction No. \_\_\_\_\_ (To be inserted by HUD, VA or FmHA)  
Property address (Include City and State)

Name and address of Mortgagor or Sponsor	Name and address of Contractor or Builder Giles Homes 405 South Broad Street New Tazewell TN 37825
--	---

### Instructions

- For additional information on how this form is to be submitted, number of copies, etc., see the instructions applicable to the HUD Application for Mortgage Insurance, VA Request for Determination of Reasonable Value, or FmHA Property Information and Appraisal Report, as the case may be.
- Describe all materials and equipment to be used, whether or not shown on the drawings, by marking an X in each appropriate check-box and entering the information called for each space. If space is inadequate, enter "See misc." and describe under item 27 or on an attached sheet. **The use of paint containing more than the percentage of lead by weight permitted by law is prohibited.**
- Work not specifically described or shown will not be considered unless required, then the minimum acceptable will be assumed. Work exceeding minimum requirements cannot be considered unless specifically described.
- Include no alternates, "or equal" phrases, or contradictory items. (Consideration of a request for acceptance of substitute materials or equipment is not thereby precluded.)
- Include signatures required at the end of this form.
- The construction shall be completed in compliance with the related drawings and specifications, as amended during processing. The specifications include this Description of Materials and the applicable Minimum Property Standards.

### 1. Excavation

Bearing soil, type \_\_\_\_\_

### 2. Foundations

Footings concrete mix \_\_\_\_\_ strength psi \_\_\_\_\_ Reinforcing \_\_\_\_\_

Foundation wall material \_\_\_\_\_ Reinforcing \_\_\_\_\_

Interior foundation wall material \_\_\_\_\_ Party foundation wall \_\_\_\_\_

Columns material and sizes \_\_\_\_\_ Piers material and reinforcing \_\_\_\_\_

Girders material and sizes \_\_\_\_\_ Sills material \_\_\_\_\_

Basement entrance areaway \_\_\_\_\_ Window areaways \_\_\_\_\_

Waterproofing \_\_\_\_\_ Footing drains \_\_\_\_\_

Termite protection \_\_\_\_\_

Basementless space ground cover \_\_\_\_\_ insulation \_\_\_\_\_ foundation vents \_\_\_\_\_

Special foundations \_\_\_\_\_

Additional information

### 3. Chimneys

Material \_\_\_\_\_ Prefabricated (make and size) \_\_\_\_\_

Flue lining material \_\_\_\_\_ Heater flue size \_\_\_\_\_ Fireplace flue size \_\_\_\_\_

Vents (material and size) gas or oil heater \_\_\_\_\_ water heater \_\_\_\_\_

Additional information

Chimney Kit 58621

### 4. Fireplaces

Type  solid fuel  gas-burning  circulator (make and size) \_\_\_\_\_ Ash dump and clean-out \_\_\_\_\_

Fireplace facing \_\_\_\_\_ lining \_\_\_\_\_ hearth 103217 \_\_\_\_\_ mantel 1032918 \_\_\_\_\_

Additional information

Fireplace front 1032921

**5. Exterior Walls**

Wood frame wood grade, and species #3 SPF  Corner bracing Building paper or felt \_\_\_\_\_  
 Sheathing OSB thickness 7/16" width 48"  solid  spaced \_\_\_\_\_ o.c.  diagonal \_\_\_\_\_  
 Siding Horizontal grade Blog type Vinyl size \_\_\_\_\_ exposure \_\_\_\_\_ fastening Stapled  
 Shingles Fiberglass grade #235 type GAP size 36 exposure 5 1/2" fastening Stapled  
 Stucco \_\_\_\_\_ thickness \_\_\_\_\_ Lath \_\_\_\_\_ weight \_\_\_\_\_ lb.  
 Masonry veneer \_\_\_\_\_ Sills \_\_\_\_\_ Lintels \_\_\_\_\_ Base flashing \_\_\_\_\_  
 Masonry  solid  faced  stuccoed total wall thickness \_\_\_\_\_ facing thickness \_\_\_\_\_ facing material \_\_\_\_\_  
 Backup material \_\_\_\_\_ thickness \_\_\_\_\_ bonding \_\_\_\_\_  
 Door sills \_\_\_\_\_ Window sills \_\_\_\_\_ Lintels \_\_\_\_\_ Base flashing \_\_\_\_\_  
 Interior surfaces dampproofing, \_\_\_\_\_ coats of \_\_\_\_\_ furring \_\_\_\_\_  
 Additional information \_\_\_\_\_  
 Exterior painting material \_\_\_\_\_ number of coats \_\_\_\_\_  
 Gable wall construction  same as main walls  other construction \_\_\_\_\_

**6. Floor Framing**

Joists wood, grade, and species #2 SPF other 16" bridging \_\_\_\_\_ anchors \_\_\_\_\_  
 Concrete slab  basement floor  first floor  ground supported  self-supporting mix \_\_\_\_\_ thickness \_\_\_\_\_  
 reinforcing \_\_\_\_\_ insulation \_\_\_\_\_ membrane \_\_\_\_\_  
 Fill under slab material \_\_\_\_\_ thickness \_\_\_\_\_  
 Additional information Double 2x6 @ @shearwalls nailed and glued

**7. Subflooring (Describe underflooring for special floors under item 21)**

Material grade and species 7/16" OSB size \_\_\_\_\_ type \_\_\_\_\_  
 Laid  first floor  second floor  attic \_\_\_\_\_ sq. ft.  diagonal  right angles  
 Additional information T&G OSB glued and nailed, sanded @ seams, water proofing in wet areas

**8. Finish Flooring (Wood only. Describe other finish flooring under item 21)**

Location	Rooms	Grade	Species	Thickness	Width	Bldg. Paper	Finish
First floor							
Second floor							
Attic floor	sq. ft.						

Additional information \_\_\_\_\_

**9. Partition Framing**

Studs wood, grade, and species SPF #2 and #3 size and spacing 2x3 and 2x4 Other \_\_\_\_\_  
 Additional information \_\_\_\_\_

**10. Ceiling Framing**

Joists wood, grade, and species purchased truss Other \_\_\_\_\_ Bridging \_\_\_\_\_  
 Additional information \_\_\_\_\_

**11. Roof Framing**

Rafters wood, grade, and species purchased truss Roof trusses (see detail) grade and species \_\_\_\_\_  
 Additional information \_\_\_\_\_

**12. Roofing**

Sheathing wood, grade, and species OSB 7/16"  solid  spaced \_\_\_\_\_ o.c.  
 Roofing \_\_\_\_\_ grade \_\_\_\_\_ size \_\_\_\_\_ type \_\_\_\_\_  
 Underlay \_\_\_\_\_ weight or thickness \_\_\_\_\_ size \_\_\_\_\_ fastening \_\_\_\_\_  
 Built-up roofing \_\_\_\_\_ number of plies \_\_\_\_\_ surfacing material \_\_\_\_\_  
 Flashing material \_\_\_\_\_ gage or weight \_\_\_\_\_  gravel stops  snow guards  
 Additional information \_\_\_\_\_

**13. Gutters and Downspouts**

Gutters material \_\_\_\_\_ gage or weight 1 1/2" size \_\_\_\_\_ shape \_\_\_\_\_  
Downspouts material \_\_\_\_\_ gage or weight \_\_\_\_\_ size \_\_\_\_\_ shape \_\_\_\_\_ number \_\_\_\_\_  
Downspouts connected to  Storm sewer  sanitary sewer  dry-well  Splash blocks material and size \_\_\_\_\_  
Additional information \_\_\_\_\_

**14. Lath and Plaster**

Lath  walls  ceilings material \_\_\_\_\_ weight or thickness \_\_\_\_\_ Plaster coats \_\_\_\_\_ finish \_\_\_\_\_  
Dry-wall  walls  ceilings material \_\_\_\_\_ thickness \_\_\_\_\_ finish \_\_\_\_\_  
Joint treatment \_\_\_\_\_

**15. Decorating (Paint, wallpaper, etc.)**

Rooms	Wall Finish Material and Application	Ceiling Finish Material and Application
Kitchen		
Bath		
Other		

Additional information \_\_\_\_\_

**16. Interior Doors and Trim**

Doors type Hollow core material Masonite board thickness 2"  
Door trim type \_\_\_\_\_ material \_\_\_\_\_ Base type \_\_\_\_\_ material \_\_\_\_\_ size \_\_\_\_\_  
Finish doors \_\_\_\_\_ trim \_\_\_\_\_  
Other trim (item, type and location) \_\_\_\_\_  
Additional information \_\_\_\_\_

**17. Windows**

Windows type Clayton Supply make \_\_\_\_\_ material \_\_\_\_\_ sash thickness \_\_\_\_\_  
Glass grade \_\_\_\_\_  sash weights  balances, type \_\_\_\_\_ head flashing \_\_\_\_\_  
Trim type \_\_\_\_\_ material \_\_\_\_\_ Paint \_\_\_\_\_ number coats \_\_\_\_\_  
Weatherstripping type \_\_\_\_\_ material \_\_\_\_\_ Storm sash, number \_\_\_\_\_  
Screens  full  half type \_\_\_\_\_ number \_\_\_\_\_ screen cloth material \_\_\_\_\_  
Basement windows type \_\_\_\_\_ material \_\_\_\_\_ screens, number \_\_\_\_\_ Storm sash, number \_\_\_\_\_  
Special windows \_\_\_\_\_  
Additional information \_\_\_\_\_

**18. Entrances and Exterior Detail**

Main entrance door material Elixir width \_\_\_\_\_ thickness \_\_\_\_\_ Frame material \_\_\_\_\_ thickness \_\_\_\_\_  
Other entrance doors material \_\_\_\_\_ width \_\_\_\_\_ thickness \_\_\_\_\_ Frame material \_\_\_\_\_ thickness \_\_\_\_\_  
Head flashing \_\_\_\_\_ Weatherstripping type \_\_\_\_\_ saddles \_\_\_\_\_  
Screen doors thickness \_\_\_\_\_ number \_\_\_\_\_ screen cloth material \_\_\_\_\_ Storm doors thickness \_\_\_\_\_ number \_\_\_\_\_  
Combination storm and screen doors thickness \_\_\_\_\_ number \_\_\_\_\_ screen cloth material \_\_\_\_\_  
Shutters  hinged  fixed Railings \_\_\_\_\_ Attic louvers \_\_\_\_\_  
Exterior millwork grade and species \_\_\_\_\_ Paint \_\_\_\_\_ number coats \_\_\_\_\_  
Additional information \_\_\_\_\_

**19. Cabinets and Interior Detail**

Kitchen cabinets, wall units material 1/2" duracraft lineal feet of shelves \_\_\_\_\_ shelf width \_\_\_\_\_  
Base units material \_\_\_\_\_ counter top \_\_\_\_\_ edging \_\_\_\_\_  
Back and end splash \_\_\_\_\_ Finish of cabinets \_\_\_\_\_ number coats \_\_\_\_\_  
Medicine cabinets make \_\_\_\_\_ model \_\_\_\_\_  
Other cabinets and built-in furniture \_\_\_\_\_  
Additional information \_\_\_\_\_

**20. Stairs**

Stair	Treads		Risers		Strings		Handrail		Balusters	
	Material	Thickness	Material	Thickness	Material	Size	Material	Size	Material	Size
Basement										
Main										
Attic										

Disappearing make and model number \_\_\_\_\_  
 Additional information \_\_\_\_\_

**21. Special Floors and Wainscot (Describe Carpet as listed in Certified Products Directory)**

Floors	Location	Material, Color, Border, Sizes, Gage, Etc.	Threshold Material	Wall Base Material	Underfloor Material
		Kitchen	Congo Liam		
	Bath	Congo Liam			

Wainscot	Location	Material, Color, Border, Cap. Sizes, Gage, Etc.	Height	Height Over Tub	Height in Showers (From Floor)
		Bath			

Additional information \_\_\_\_\_

**22. Plumbing**

Fixture	Number	Location	Make	MFR's Fixture Identification No.	Size	Color
Sink	1	Kitchen			33"x19"x6"	Steel
Lavatory	2	Bath			22"x14"	Plastic
Water closet	2	Bath			Single Bowl	
Bathtub	2	Bath			60"	Fiberglass
Shower over tub						
Stall shower						
Laundry trays						

Bathroom accessories  Recessed material \_\_\_\_\_ number \_\_\_\_\_  Attached material \_\_\_\_\_ number \_\_\_\_\_  
 Additional information \_\_\_\_\_

Curtain rod  Door  Shower pan material 1 pc fiberglass \* (Show and describe individual system in complete detail in separate drawings and specifications according to requirements.)  
 Water supply  public  community system  individual (private) system\*  
 Sewage disposal  public  community system  individual (private) system\*  
 House drain (inside)  cast iron  tile  other ABS House sewer (outside)  cast iron  tile  other \_\_\_\_\_  
 Water piping  galvanized steel  copper tubing  other PEX Sill cocks, number \_\_\_\_\_  
 Domestic water heater type Heat Pump make and model Rheem heating capacity \_\_\_\_\_ gph. 100° rise.  
 Storage tank material \_\_\_\_\_ capacity 40 or 50 gallons  
 Gas service  utility company  liq. pet. gas  other \_\_\_\_\_  Gas piping  cooking  house heating  
 Footing drains connected to  storm sewer  sanitary sewer  dry well  sump pump make and model \_\_\_\_\_  
 capacity \_\_\_\_\_ discharges into \_\_\_\_\_

Additional information \_\_\_\_\_

**23. Heating**

Hot water  Steam  Vapor  One-pipe system  Two-pipe system  
 Radiators  Convectors  Baseboard radiation Make and model Carrier Smart Comfort  
 Radiant panel  floor  wall  ceiling Panel coil material \_\_\_\_\_  
 Circulator  Return pump Make and model \_\_\_\_\_ capacity \_\_\_\_\_ gpm.  
Boiler make and model \_\_\_\_\_ Output \_\_\_\_\_ Btuh. net rating \_\_\_\_\_ Btuh.

Additional information  Down flow

Warm air  Gravity  Forced Type of system \_\_\_\_\_  
Duct material supply \_\_\_\_\_ return \_\_\_\_\_ Insulation \_\_\_\_\_ thickness \_\_\_\_\_  Outside air intake  
Furnace: make and model \_\_\_\_\_ Input \_\_\_\_\_ Btuh. output \_\_\_\_\_ Btuh.

Additional information

Space heater  floor furnace  wall heater Input \_\_\_\_\_ Btuh. output \_\_\_\_\_ Btuh. number units \_\_\_\_\_  
Make, model \_\_\_\_\_

Additional information

Controls make and types \_\_\_\_\_

Additional information

Fuel:  Coal  oil  gas  liq. pet. gas  electric  other \_\_\_\_\_ storage capacity \_\_\_\_\_

Additional information

Firing equipment furnished separately  Gas burner, conversion type  Stoker hopper feed  bin feed  
Oil burner  pressure atomizing  vaporizing \_\_\_\_\_  
Make and model \_\_\_\_\_

Control \_\_\_\_\_

Additional information

Electric heating system type \_\_\_\_\_ Input \_\_\_\_\_ watts @ \_\_\_\_\_ volts output \_\_\_\_\_ Btuh.

Additional information

Ventilating equipment  attic fan, make and model \_\_\_\_\_ capacity \_\_\_\_\_ cfm.  
 kitchen exhaust fan, make and model \_\_\_\_\_

Other heating, ventilating, or cooling equipment \_\_\_\_\_

Additional information

**24. Electric Wiring**

Service  overhead  underground Panel  fuse box  circuit-breaker make \_\_\_\_\_ AMP's \_\_\_\_\_ No. circuits \_\_\_\_\_  
Wiring  conduit  armored cable  nonmetallic cable  knob and tube  other \_\_\_\_\_  
Special outlets  range  water heater  other \_\_\_\_\_  
 Doorbell  Chimes  Push-button locations \_\_\_\_\_

Additional information

**25. Lighting Fixtures**

Total number of fixtures \_\_\_\_\_ Total allowance for fixtures, typical installation, \$ \_\_\_\_\_

Nontypical installation \_\_\_\_\_

Additional information

**26. Insulation**

Location	Thickness	Material, Type, and Method of Installation	Vapor Barrier
Roof	38	Blown	
Ceiling			
Wall	13 or 16	Batt	Kraft Back
Floor	22, 27 or 33	Rolled	

**27. Miscellaneous:** (Describe any main dwelling materials, equipment, or construction items not shown elsewhere; or use to provide additional information where the space provided was inadequate. Always reference by item number to correspond to numbering used on this form.)

**Hardware** (make, material, and finish.)

**Special Equipment** (State material or make, model and quantity. Include only equipment and appliances which are acceptable by local law, custom and applicable FHA standards. Do not include items which, by established custom, are supplied by occupant and removed when he vacates premises or chattles prohibited by law from becoming realty.)

**Porches**

**Terraces**

**Garages**

**Walks and Driveways**

Driveway width \_\_\_\_\_ base material \_\_\_\_\_ thickness \_\_\_\_\_ surfacing material \_\_\_\_\_ thickness \_\_\_\_\_  
 Front walk width \_\_\_\_\_ material \_\_\_\_\_ thickness \_\_\_\_\_ Service walk width \_\_\_\_\_ material \_\_\_\_\_ thickness \_\_\_\_\_  
 Steps material \_\_\_\_\_ treads \_\_\_\_\_ risers \_\_\_\_\_ Cheek walls \_\_\_\_\_

**Other Onsite Improvements**

(Specify all exterior onsite improvements not described elsewhere, including items such as unusual grading, drainage structures, retaining walls, fence, railings, and accessory structures.)

**Landscaping, Planting, and Finish Grading**

Topsoil \_\_\_\_\_ thick  front yard  side yards  rear yard to \_\_\_\_\_ feet behind main building  
 Lawns (seeded, sodded, or sprigged)  front yard \_\_\_\_\_  side yards \_\_\_\_\_  rear yard \_\_\_\_\_  
 Planting  as specified and shown on drawings  as follows:  
 \_\_\_\_\_ Shade trees deciduous \_\_\_\_\_ caliper \_\_\_\_\_ Evergreen trees \_\_\_\_\_ to \_\_\_\_\_ B & B  
 \_\_\_\_\_ Low flowering trees deciduous \_\_\_\_\_ to \_\_\_\_\_ Evergreen shrubs \_\_\_\_\_ to \_\_\_\_\_ B & B  
 \_\_\_\_\_ High-growing shrubs deciduous \_\_\_\_\_ to \_\_\_\_\_ Vines, 2-year \_\_\_\_\_  
 \_\_\_\_\_ Medium-growing shrubs deciduous \_\_\_\_\_ to \_\_\_\_\_ Other \_\_\_\_\_  
 \_\_\_\_\_ Low-growing shrubs deciduous \_\_\_\_\_ to \_\_\_\_\_

**Identification**—This exhibit shall be identified by the signature of the builder, or sponsor, and/or the proposed mortgagor if the latter is known at the time of application.

Date (mm/dd/yyyy) 10/13/2023 Signature \_\_\_\_\_

Signature \_\_\_\_\_



**Manual S Compliance Report**  
**Entire House**  
**Clayton Homes**

S46058VB-DOE-FDJ-TZII

Job: S46018-FDJ-TZII  
 Date: Jul 26, 2023  
 By:

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

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 Home Construction 6  
 And Safety Standards

**Project Information**

For: S46018-FDJ-TZII, GILES

**Cooling Equipment**

**Design Conditions**

Outdoor design DB:	90.6°F	Sensible gain:	12357	Btuh	Entering coil DB:	76.8°F
Outdoor design WB:	73.7°F	Latent gain:	3692	Btuh	Entering coil WB:	63.9°F
Indoor design DB:	75.0°F	Total gain:	16049	Btuh		
Indoor RH:	50%	Estimated airflow:	780	cfm		

**Manufacturer's Performance Data at Actual Design Conditions**

Equipment type:	Split ASHP			
Manufacturer:	Smart Comfort	Model:	N4H5S24*K*AAA*+FEVA0024**+NAVA43601CK	
Actual airflow:	780	cfm		
Sensible capacity:	16380	Btuh	133%	of load
Latent capacity:	7020	Btuh	190%	of load
Total capacity:	23400	Btuh	146%	of load
			SHR:	70%

**Heating Equipment**

**Design Conditions**

Outdoor design DB:	20.8°F	Heat loss:	19129	Btuh	Entering coil DB:	64.2°F
Indoor design DB:	70.0°F					

**Manufacturer's Performance Data at Actual Design Conditions**

Equipment type:	Split ASHP			
Manufacturer:	Smart Comfort	Model:	N4H5S24*K*AAA*+FEVA0024**+NAVA43601CK	
Actual airflow:	780	cfm		
Output capacity:	22800	Btuh	119%	of load
Supplemental heat required:	0	Btuh		
			Capacity balance:	21 °F
			Economic balance:	-99 °F

Backup equipment type:	Elec furnace			
Manufacturer:	Smart Comfort	Model:	N4H5S24*K*AAA*	
Actual airflow:	780	cfm		
Output capacity:	34121	Btuh	178%	of load
			Temp. rise:	41 °F

Meets all requirements of ACCA Manual S.





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**Project Information**

For: S46018-FDJ-TZII, GILES

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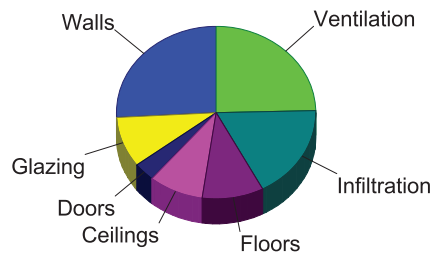
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 Home Construction 6  
 And Safety Standards

**Design Conditions**

<b>Location:</b> TN-SG25 Elevation: 981 ft Latitude: 36°N			<b>Indoor:</b> Indoor temperature (°F) Design TD (°F) Relative humidity (%) Moisture difference (gr/lb)	<b>Heating</b> 70 49 50 43.8	<b>Cooling</b> 75 16 50 35.8
<b>Outdoor:</b> Dry bulb (°F) Daily range (°F) Wet bulb (°F) Wind speed (mph)	<b>Heating</b> 21 - - 15.0	<b>Cooling</b> 91 19 ( M ) 74 7.5	<b>Infiltration:</b> Method Construction quality Fireplaces	Simplified Average 0	

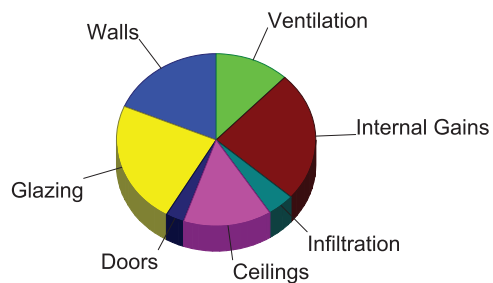
**Heating**

Component	Btuh/ft²	Btuh	% of load
Walls	4.0	4949	25.9
Glazing	14.8	1820	9.5
Doors	15.7	661	3.5
Ceilings	1.6	1700	8.9
Floors	1.8	1913	10.0
Infiltration	2.4	3384	17.7
Ducts		0	0
Piping		0	0
Humidification		0	0
Ventilation		4701	24.6
Adjustments		0	0
<b>Total</b>		<b>19129</b>	<b>100.0</b>



**Cooling**

Component	Btuh/ft²	Btuh	% of load
Walls	1.9	2298	18.6
Glazing	23.1	2851	23.1
Doors	8.9	374	3.0
Ceilings	1.6	1775	14.4
Floors	0	0	0
Infiltration	0.4	548	4.4
Ducts		0	0
Ventilation		1490	12.1
Internal gains		3020	24.4
Blower		0	0
Adjustments		0	0
<b>Total</b>		<b>12357</b>	<b>100.0</b>



Latent Cooling Load = 3692 Btuh  
 Overall U-value = 0.063 Btuh/ft²·°F, Window / Floor Area = 11.4 %

Data entries checked.



**Component Constructions**  
**Entire House**  
**Clayton Homes**

Job: S46018-FDJ-TZII  
Date: Jul 26, 2023  
By:

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

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**Project Information**

For: S46018-FDJ-TZII, GILES

NOV 27 2023

Federal Manufactured  
Home Construction 6  
And Safety Standards

**Design Conditions**

<b>Location:</b> TN-SG25 Elevation: 981 ft Latitude: 36°N			<b>Indoor:</b> Indoor temperature (°F) Design TD (°F) Relative humidity (%) Moisture difference (gr/lb)	<b>Heating</b> 70 49 50 43.8	<b>Cooling</b> 75 16 50 35.8
<b>Outdoor:</b> Dry bulb (°F) Daily range (°F) Wet bulb (°F) Wind speed (mph)	<b>Heating</b> 21 - - 15.0	<b>Cooling</b> 91 19 ( M ) 74 7.5	<b>Infiltration:</b> Method Construction quality Fireplaces	Simplified Average 0	

**Construction descriptions**

	Or	Area ft²	U-value Btuh/ft²-F	Insul R ft²-F/Btuh	Htg HTM Btuh/ft²	Loss Btuh	Clg HTM Btuh/ft²	Gain Btuh
<b>Walls</b> CMH - SW - R-13 Wall - THP502-DOE: Single Wide - R-13 Insulation	n	112	0.082	13.0	4.03	451	1.87	209
THP502 2x4 Wall-DOE	e	530	0.082	13.0	4.03	2138	1.87	993
	s	105	0.082	13.0	4.03	424	1.87	197
	w	480	0.082	13.0	4.03	1937	1.87	899
	all	1227	0.082	13.0	4.03	4949	1.87	2298

**Partitions**  
(none)

<b>Windows</b> Clayton - Thermopane Low-E DOE: Clayton-Thermopane Low-E DOE; 50% blinds 45°, medium; 50% outdoor insect screen; 6.67 ft head ht	n	8	0.300	0	14.8	123	7.37	61
	e	25	0.300	0	14.8	369	21.4	535
	s	15	0.300	0	14.8	221	10.3	155
	w	75	0.300	0	14.8	1107	21.4	1605
	all	123	0.300	0	14.8	1820	19.1	2357

<b>Doors</b> CMH - Standard Door: CMH - Standard Door - Solid no storm	e	21	0.320	0	15.7	331	8.91	187
	w	21	0.320	0	15.7	331	8.91	187
	all	42	0.320	0	15.7	661	8.91	374

<b>Ceilings</b> CMH-SW-180 BOX R38 - THP2002 - DOE: CMH-SW-180 BOX R38- THP2002 - DOE		1080	0.032	38.0	1.57	1700	1.64	1775
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<b>Floors</b> CMH-SW-180- R33-THP384-DOE: CMH-SW-180-R33-THP384-DOE		1080	0.036	33.0	1.77	1913	0	0
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**Project Summary**  
**Entire House**  
**Clayton Homes**

Job: S46018-FDJ-TZII  
Date: Jul 26, 2023  
By:

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

**Project Information**

For: S46018-FDJ-TZII, GILES

Notes: DUCT CAPACITY  
26000 BTUHS

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**Design Information**

Weather: TN-SG25

**Winter Design Conditions**

Outside db 21 °F  
Inside db 70 °F  
Design TD 49 °F

**Summer Design Conditions**

Outside db 91 °F  
Inside db 75 °F  
Design TD 16 °F  
Daily range M  
Relative humidity 50 %  
Moisture difference 36 gr/lb

**Heating Summary**

Structure 14428 Btuh  
Ducts 0 Btuh  
Central vent (90 cfm) 4701 Btuh  
Outside air  
Humidification 0 Btuh  
Piping 0 Btuh  
Equipment load 19129 Btuh

**Sensible Cooling Equipment Load Sizing**

Structure 10866 Btuh  
Ducts 0 Btuh  
Central vent (90 cfm) 1490 Btuh  
Outside air  
Blower 0 Btuh  
Use manufacturer's data n  
Rate/swing multiplier 0.96  
Equipment sensible load 11813 Btuh

**Infiltration**

Method Simplified  
Construction quality Average  
Fireplaces 0

**Latent Cooling Equipment Load Sizing**

Structure 1578 Btuh  
Ducts 0 Btuh  
Central vent (90 cfm) 2114 Btuh  
Outside air  
Equipment latent load 3692 Btuh

	Heating	Cooling
Area (ft <sup>2</sup> )	1080	1080
Volume (ft <sup>3</sup> )	8640	8640
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	65	33

**Equipment Total Load (Sen+Lat)** 15505 Btuh  
Req. total capacity at 0.70 SHR 1.4 ton

**Heating Equipment Summary**

Make Smart Comfort  
Trade PERFORMANCE 15 SEER2 HP  
Model N4H5S24\*K\*AAA\*  
AHRI ref 0  
Efficiency 7.5 HSPF2  
Heating input  
Heating output 22800 Btuh @ 47°F  
Temperature rise 28 °F  
Actual air flow 780 cfm  
Air flow factor 0.054 cfm/Btuh  
Static pressure 0.30 in H2O  
Space thermostat  
Capacity balance point = 21 °F

**Cooling Equipment Summary**

Make Smart Comfort  
Trade PERFORMANCE 15 SEER2 HP  
Cond N4H5S24\*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 0.072 cfm/Btuh  
Static pressure 0.30 in H2O  
Load sensible heat ratio 0.77

Backup: Smart Comfort N4H5S24\*K\*AAA\*  
Input = 10 kW, Output = 34121 Btuh, 100 AFUE

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

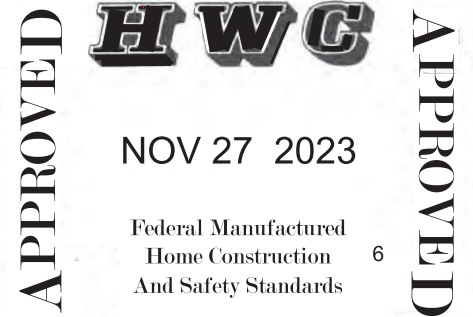




**Duct System Summary**  
**Entire House**  
**Clayton Homes**

Job: S46018-FDJ-TZII  
 Date: Jul 26, 2023  
 By:

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



**Project Information**

For: S46018-FDJ-TZII, GILES

	<b>Heating</b>	<b>Cooling</b>
External static pressure	0.30 in H2O	0.30 in H2O
Pressure losses	0 in H2O	0 in H2O
Available static pressure	0.30 in H2O	0.30 in H2O
Supply / return available pressure	0.150 / 0.150 in H2O	0.150 / 0.150 in H2O
Lowest friction rate	0.167 in/100ft	0.167 in/100ft
Actual air flow	780 cfm	780 cfm
Total effective length (TEL)	180 ft	

**Supply Branch Detail Table**

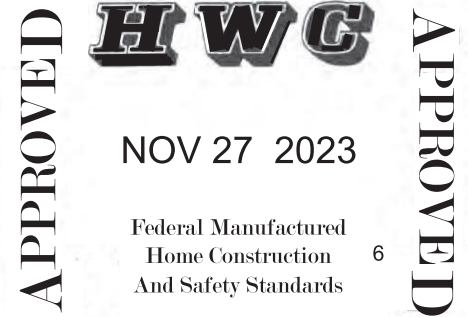
Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
BATGH	h 1710	92	46	0.382	5.0	0x0	VIFx	43.5	35.0	st2
BATH	h 845	46	24	0.168	5.0	0x0	VIFx	14.0	165.0	st5
BED 2	h 2243	121	85	0.167	7.0	0x0	VIFx	15.0	165.0	st6
BED 3	h 2377	129	111	0.276	6.0	0x0	VIFx	8.5	100.0	st3
KITCHEN	c 2228	93	160	0.496	5.0	5x6	ShMt	25.5	35.0	st2
LIVING ROOM	c 1502	94	108	0.741	4.0	5x5	ShMt	5.5	35.0	st2
LIVING ROOM-A	c 1502	94	108	0.541	5.0	0x0	VIFx	20.5	35.0	st2
P-BED	c 1935	110	139	0.444	6.0	0x0	VIFx	32.5	35.0	st2

**Supply Trunk Detail Table**

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st2	Peak AVF	485	561	0.382	1153	4.0	5 x 14	ShtMetl	
st3	Peak AVF	129	111	0.276	617	5.2	5 x 6	ShtMetl	st1
st5	Peak AVF	46	24	0.168	219	3.9	5 x 6	ShtMetl	st4
st1	Peak AVF	295	219	0.167	608	4.2	5 x 14	ShtMetl	
st4	Peak AVF	167	108	0.167	687	6.4	5 x 7	ShtMetl	st1
st6	Peak AVF	121	85	0.167	249	4.2	5 x 14	ShtMetl	st4

## Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x0	780	780	0	0	0	0	0x 0		VIFx	





**Manual S Compliance Report**  
**Entire House**  
**Clayton Homes**

S46058VB-DOE-FDJ-TZIII

Job: S46018-FDJ-TZIII  
 Date: Jul 26, 2023  
 By:

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

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**Project Information**

For: S46018-FDJ-TZIII, GILES

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Federal Manufactured  
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 And Safety Standards

**Cooling Equipment**

**Design Conditions**

Outdoor design DB:	87.6°F	Sensible gain:	10661 Btuh	Entering coil DB:	76.5°F
Outdoor design WB:	71.2°F	Latent gain:	2975 Btuh	Entering coil WB:	63.4°F
Indoor design DB:	75.0°F	Total gain:	13636 Btuh		
Indoor RH:	50%	Estimated airflow:	780 cfm		

**Manufacturer's Performance Data at Actual Design Conditions**

Equipment type:	Split ASHP				
Manufacturer:	Smart Comfort	Model:	N4H5S24*K*AAA*+FEVA0024**+NAVA43601CK		
Actual airflow:	780 cfm				
Sensible capacity:	16380 Btuh	154% of load			
Latent capacity:	7020 Btuh	236% of load			
Total capacity:	23400 Btuh	172% of load	SHR:	70%	

**Heating Equipment**

**Design Conditions**

Outdoor design DB:	15.8°F	Heat loss:	18911 Btuh	Entering coil DB:	63.6°F
Indoor design DB:	70.0°F				

**Manufacturer's Performance Data at Actual Design Conditions**

Equipment type:	Split ASHP				
Manufacturer:	Smart Comfort	Model:	N4H5S24*K*AAA*+FEVA0024**+NAVA43601CK		
Actual airflow:	780 cfm				
Output capacity:	22800 Btuh	121% of load		Capacity balance:	17 °F
Supplemental heat required:	0 Btuh			Economic balance:	-99 °F

Backup equipment type:	Elec furnace				
Manufacturer:	Smart Comfort	Model:	N4H5S24*K*AAA*		
Actual airflow:	780 cfm				
Output capacity:	34121 Btuh	180% of load	Temp. rise:	43 °F	

Meets all requirements of ACCA Manual S.



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

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**Project Information**

For: S46018-FDJ-TZIII, GILES

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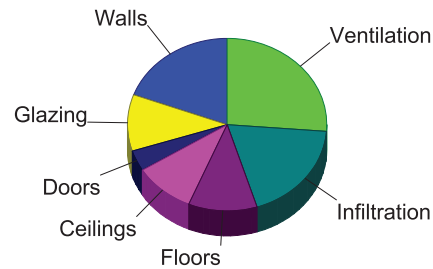
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 And Safety Standards

**Design Conditions**

<b>Location:</b>		<b>Indoor:</b>		<b>Heating</b>	<b>Cooling</b>
VA-SG22		Indoor temperature (°F)		70	75
Elevation: 2133 ft		Design TD (°F)		54	13
Latitude: 37°N		Relative humidity (%)		50	50
		Moisture difference (gr/lb)		48.7	28.1
<b>Outdoor:</b>		<b>Infiltration:</b>			
Dry bulb (°F)		Method		Simplified	
Daily range (°F)		Construction quality		Average	
Wet bulb (°F)		Fireplaces		0	
Wind speed (mph)					
	<b>Heating</b>	<b>Cooling</b>			
	16	88			
	-	20 ( M )			
	-	71			
	15.0	7.5			

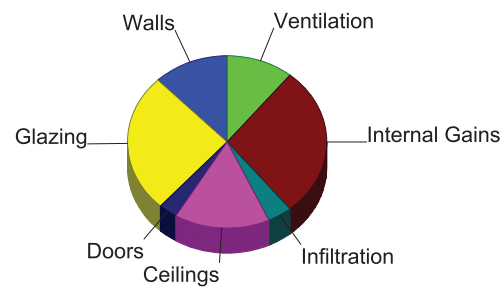
**Heating**

Component	Btuh/ft²	Btuh	% of load
Walls	3.0	3657	19.3
Glazing	16.3	2005	10.6
Doors	17.3	728	3.9
Ceilings	1.7	1873	9.9
Floors	2.0	2107	11.1
Infiltration	2.6	3575	18.9
Ducts		0	0
Piping		0	0
Humidification		0	0
Ventilation		4965	26.3
Adjustments		0	0
<b>Total</b>		<b>18911</b>	<b>100.0</b>



**Cooling**

Component	Btuh/ft²	Btuh	% of load
Walls	1.1	1302	12.2
Glazing	22.6	2782	26.1
Doors	7.8	327	3.1
Ceilings	1.5	1652	15.5
Floors	0	0	0
Infiltration	0.3	425	4.0
Ducts		0	0
Ventilation		1154	10.8
Internal gains		3020	28.3
Blower		0	0
Adjustments		0	0
<b>Total</b>		<b>10661</b>	<b>100.0</b>



Latent Cooling Load = 2975 Btuh  
 Overall U-value = 0.054 Btuh/ft²·°F, Window / Floor Area = 11.4 %

Data entries checked.





**Component Constructions**  
**Entire House**  
 Clayton Homes

Job: S46018-FDJ-TZIII  
 Date: Jul 26, 2023  
 By:

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

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**Project Information**

For: S46018-FDJ-TZIII, GILES

NOV 27 2023

Federal Manufactured  
 Home Construction 6  
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**Design Conditions**

<b>Location:</b>				<b>Indoor:</b>		<b>Heating</b>	<b>Cooling</b>
VA-SG22				Indoor temperature (°F)		70	75
Elevation: 2133 ft				Design TD (°F)		54	13
Latitude: 37°N				Relative humidity (%)		50	50
				Moisture difference (gr/lb)		48.7	28.1
<b>Outdoor:</b>		<b>Heating</b>	<b>Cooling</b>	<b>Infiltration:</b>			
Dry bulb (°F)		16	88	Method		Simplified	
Daily range (°F)		-	20 ( M )	Construction quality		Average	
Wet bulb (°F)		-	71	Fireplaces		0	
Wind speed (mph)		15.0	7.5				

**Construction descriptions**

	Or	Area ft²	U-value Btuh/ft²·°F	Insul R ft²·°F/Btuh	Htg HTM Btuh/ft²	Loss Btuh	Clg HTM Btuh/ft²	Gain Btuh
<b>Walls</b>								
CMH - SW - R-21 Wall - THP510-DOE: Single Wide - R-21Insulation	n	112	0.055	21.0	2.98	333	1.06	119
THP510 2x6 Wall-DOE	e	530	0.055	21.0	2.98	1580	1.06	563
	s	105	0.055	21.0	2.98	313	1.06	111
	w	480	0.055	21.0	2.98	1431	1.06	510
	all	1227	0.055	21.0	2.98	3657	1.06	1302
<b>Partitions</b>								
(none)								
<b>Windows</b>								
Clayton - Thermopane Low-E DOE: Clayton-Thermopane Low-E DOE;	n	8	0.300	0	16.3	136	6.52	54
50% blinds 45°, medium; 50% outdoor insect screen; 6.67 ft head ht	e	25	0.300	0	16.3	407	20.5	513
	s	15	0.300	0	16.3	244	9.83	147
	w	75	0.300	0	16.3	1220	20.5	1540
	all	123	0.300	0	16.3	2005	18.3	2256
<b>Doors</b>								
CMH - Standard Door: CMH - Standard Door - Solid no storm	e	21	0.320	0	17.3	364	7.78	163
	w	21	0.320	0	17.3	364	7.78	163
	all	42	0.320	0	17.3	728	7.78	327
<b>Ceilings</b>								
CMH-SW-180 BOX R38 - THP2002 - DOE: CMH-SW-180 BOX R38-THP2002 - DOE		1080	0.032	38.0	1.73	1873	1.53	1652
<b>Floors</b>								
CMH-SW-180- R33-THP384-DOE: CMH-SW-180-R33-THP384-DOE		1080	0.036	33.0	1.95	2107	0	0







**Project Summary**  
**Entire House**  
**Clayton Homes**

Job: S46018-FDJ-TZIII  
Date: Jul 26, 2023  
By:

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

**Project Information**

For: S46018-FDJ-TZIII, GILES

Notes: DUCT CAPACITY  
26000 BTUHS

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**Design Information**

Weather: VA-SG22

**Winter Design Conditions**

Outside db 16 °F  
Inside db 70 °F  
Design TD 54 °F

**Summer Design Conditions**

Outside db 88 °F  
Inside db 75 °F  
Design TD 13 °F  
Daily range M  
Relative humidity 50 %  
Moisture difference 28 gr/lb

**Heating Summary**

Structure 13946 Btuh  
Ducts 0 Btuh  
Central vent (90 cfm) 4965 Btuh  
Outside air  
Humidification 0 Btuh  
Piping 0 Btuh  
Equipment load 18911 Btuh

**Sensible Cooling Equipment Load Sizing**

Structure 9507 Btuh  
Ducts 0 Btuh  
Central vent (90 cfm) 1154 Btuh  
Outside air  
Blower 0 Btuh  
Use manufacturer's data n  
Rate/swing multiplier 0.93  
Equipment sensible load 9872 Btuh

**Infiltration**

Method Simplified  
Construction quality Average  
Fireplaces 0

**Latent Cooling Equipment Load Sizing**

Structure 1385 Btuh  
Ducts 0 Btuh  
Central vent (90 cfm) 1590 Btuh  
Outside air  
Equipment latent load 2975 Btuh

	Heating	Cooling
Area (ft <sup>2</sup> )	1080	1080
Volume (ft <sup>3</sup> )	8640	8640
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	65	33

**Equipment Total Load (Sen+Lat)** 12847 Btuh  
Req. total capacity at 0.70 SHR 1.2 ton

**Heating Equipment Summary**

Make Smart Comfort  
Trade PERFORMANCE 15 SEER2 HP  
Model N4H5S24\*K\*AAA\*  
AHRI ref 0  
Efficiency 7.5 HSPF2  
Heating input  
Heating output 22800 Btuh @ 47°F  
Temperature rise 29 °F  
Actual air flow 780 cfm  
Air flow factor 0.056 cfm/Btuh  
Static pressure 0.30 in H2O  
Space thermostat  
Capacity balance point = 17 °F

**Cooling Equipment Summary**

Make Smart Comfort  
Trade PERFORMANCE 15 SEER2 HP  
Cond N4H5S24\*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 0.082 cfm/Btuh  
Static pressure 0.30 in H2O  
Load sensible heat ratio 0.78

Backup: Smart Comfort N4H5S24\*K\*AAA\*  
Input = 10 kW, Output = 34121 Btuh, 100 AFUE

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





**Duct System Summary**  
**Entire House**  
**Clayton Homes**

Job: S46018-FDJ-TZIII  
 Date: Jul 26, 2023  
 By:

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

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**Project Information**

NOV 27 2023

For: S46018-FDJ-TZIII, GILES

Federal Manufactured  
 Home Construction 6  
 And Safety Standards

	<b>Heating</b>	<b>Cooling</b>
External static pressure	0.30 in H2O	0.30 in H2O
Pressure losses	0 in H2O	0 in H2O
Available static pressure	0.30 in H2O	0.30 in H2O
Supply / return available pressure	0.150 / 0.150 in H2O	0.150 / 0.150 in H2O
Lowest friction rate	0.167 in/100ft	0.167 in/100ft
Actual air flow	780 cfm	780 cfm
Total effective length (TEL)	180 ft	

**Supply Branch Detail Table**

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
BATGH	h 1569	88	37	0.382	5.0	0x0	VIFx	43.5	35.0	st2
BATH	h 792	44	20	0.168	5.0	0x0	VIFx	14.0	165.0	st5
BED 2	h 2090	117	78	0.167	7.0	0x0	VIFx	15.0	165.0	st6
BED 3	h 2341	131	109	0.276	7.0	0x0	VIFx	8.5	100.0	st3
KITCHEN	c 2074	95	170	0.496	5.1	5x6	ShMt	25.5	35.0	st2
LIVING ROOM	c 1353	97	111	0.741	4.0	5x5	ShMt	5.5	35.0	st2
LIVING ROOM-A	c 1353	97	111	0.541	5.0	0x0	VIFx	20.5	35.0	st2
P-BED	c 1754	111	144	0.444	6.0	0x0	VIFx	32.5	35.0	st2

**Supply Trunk Detail Table**

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st2	Peak AVF	488	573	0.382	1178	4.0	5 x 14	ShtMetl	
st3	Peak AVF	131	109	0.276	628	5.2	5 x 6	ShtMetl	st1
st5	Peak AVF	44	20	0.168	213	3.9	5 x 6	ShtMetl	st4
st1	Peak AVF	292	207	0.167	601	4.2	5 x 14	ShtMetl	
st4	Peak AVF	161	98	0.167	663	6.3	5 x 7	ShtMetl	st1
st6	Peak AVF	117	78	0.167	240	4.2	5 x 14	ShtMetl	st4

## Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x0	780	780	0	0	0	0	0x 0		VIFx	

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Federal Manufactured  
Home Construction  
And Safety Standards

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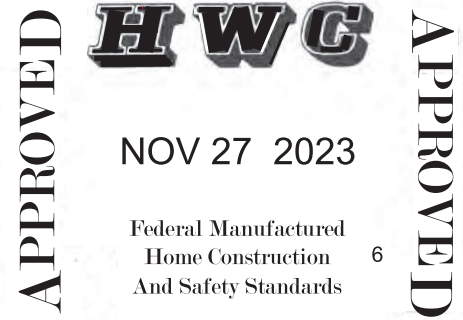


**Manual S Compliance Report**  
**Entire House**  
**Clayton Homes**

S46058VB-DOE-FDJ-TZI

Job: S46058VB-FDJ-TZ-TZ-I  
 Date: Nov 17, 2023  
 By:

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



**Project Information**

For: S46058VB-FDJ-TZ-TZ-I, GILES

**Cooling Equipment**

**Design Conditions**

Outdoor design DB:	91.7°F	Sensible gain:	12955	Btuh	Entering coil DB:	77.0°F
Outdoor design WB:	73.9°F	Latent gain:	3661	Btuh	Entering coil WB:	63.9°F
Indoor design DB:	75.0°F	Total gain:	16617	Btuh		
Indoor RH:	50%	Estimated airflow:	780	cfm		

**Manufacturer's Performance Data at Actual Design Conditions**

Equipment type:	Split ASHP				
Manufacturer:	Smart Comfort	Model:	N4H5S24*K*AAA*+FEVA0024**+NAVA43601CK		
Actual airflow:	780	cfm			
Sensible capacity:	16380	Btuh	126%	of load	
Latent capacity:	7020	Btuh	192%	of load	
Total capacity:	23400	Btuh	141%	SHR:	70%

**Heating Equipment**

**Design Conditions**

Outdoor design DB:	26.4°F	Heat loss:	16255	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:	N4H5S24*K*AAA*+FEVA0024**+NAVA43601CK		
Actual airflow:	780	cfm			
Output capacity:	22800	Btuh	140%	of load	
Supplemental heat required:	0	Btuh	Capacity balance:	20 °F	
			Economic balance:	-99 °F	

Backup equipment type:	Elec furnace				
Manufacturer:	Smart Comfort	Model:			
Actual airflow:	780	cfm			
Output capacity:	18008	Btuh	111%	Temp. rise:	50 °F

Meets all requirements of ACCA Manual S.



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**Project Information**

For: S46058VB-FDJ-TZ-TZ-I, GILES

NOV 27 2023

Federal Manufactured  
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And Safety Standards

**Design Conditions**

**Location:**

Atlanta Municipal, GA, US  
Elevation: 1027 ft  
Latitude: 34°N

**Outdoor:**

Dry bulb (°F)  
Daily range (°F)  
Wet bulb (°F)  
Wind speed (mph)

**Heating**

26  
-  
-  
15.0

**Cooling**

92  
17 ( M )  
74  
7.5

**Indoor:**

Indoor temperature (°F)  
Design TD (°F)  
Relative humidity (%)  
Moisture difference (gr/lb)

**Heating**

70  
44  
30  
17.0

**Cooling**

75  
17  
50  
35.3

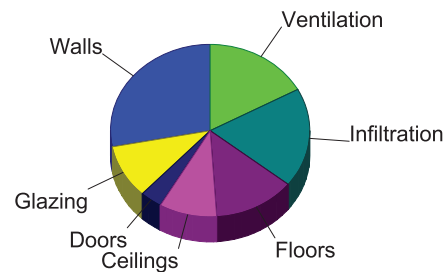
**Infiltration:**

Method  
Construction quality  
Fireplaces

Simplified  
Average  
0

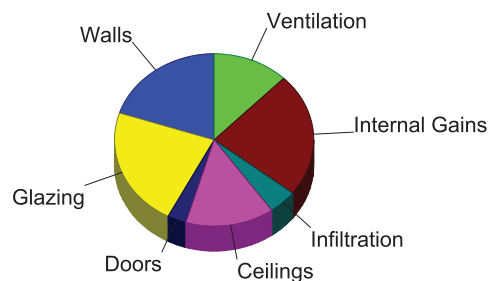
**Heating**

Component	Btuh/ft²	Btuh	% of load
Walls	3.6	4551	28.0
Glazing	13.1	1635	10.1
Doors	14.0	586	3.6
Ceilings	1.4	1527	9.4
Floors	2.0	2148	13.2
Infiltration	2.1	3035	18.7
Ducts		0	0
Piping		0	0
Humidification		0	0
Ventilation		2772	17.1
Adjustments		0	0
<b>Total</b>		<b>16255</b>	<b>100.0</b>



**Cooling**

Component	Btuh/ft²	Btuh	% of load
Walls	2.0	2578	19.9
Glazing	23.3	2907	22.4
Doors	9.5	399	3.1
Ceilings	1.7	1864	14.4
Floors	0	0	0
Infiltration	0.4	594	4.6
Ducts		0	0
Ventilation		1593	12.3
Internal gains		3020	23.3
Blower		0	0
Adjustments		0	0
<b>Total</b>		<b>12955</b>	<b>100.0</b>



Latent Cooling Load = 3661 Btuh  
Overall U-value = 0.066 Btuh/ft²·°F, Window / Floor Area = 11.4 %

Data entries checked.



**Component Constructions**  
**Entire House**  
**Clayton Homes**

Job: S46058VB-FDJ-TZ-TZ-I  
Date: Nov 17, 2023  
By:

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

**Project Information**

For: S46058VB-FDJ-TZ-TZ-I, GILES

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**Design Conditions**

**Location:**

Atlanta Municipal, GA, US  
Elevation: 1027 ft  
Latitude: 34°N

**Outdoor:**

Dry bulb (°F)  
Daily range (°F)  
Wet bulb (°F)  
Wind speed (mph)

**Heating**

26  
-  
-  
15.0

**Cooling**

92  
17 ( M )  
74  
7.5

**Indoor:**

Indoor temperature (°F)  
Design TD (°F)  
Relative humidity (%)  
Moisture difference (gr/lb)

**Heating**

70  
44  
30  
17.0

**Cooling**

75  
17  
50  
35.3

**Infiltration:**

Method  
Construction quality  
Fireplaces

Simplified  
Average  
0

**Construction descriptions**

Construction descriptions	Or	Area ft²	U-value Btuh/ft²-F	Insul R ft²-F/Btuh	Htg HTM Btuh/ft²	Loss Btuh	Clg HTM Btuh/ft²	Gain Btuh
<b>Walls</b>								
CMH - SW - R-13 Wall - THP502-DOE: Single Wide - R-13 Insulation	n	116	0.082	13.0	3.58	415	2.03	235
THP502 2x4 Wall-DOE	e	548	0.082	13.0	3.58	1959	2.03	1110
	s	101	0.082	13.0	3.58	361	2.03	205
	w	508	0.082	13.0	3.58	1816	2.03	1029
	all	1273	0.082	13.0	3.58	4551	2.03	2578

**Partitions**

(none)

**Windows**

Clayton - Thermopane Low-E DOE: Clayton-Thermopane Low-E DOE;	e	35	0.300	0	13.1	458	21.8	762
50% blinds 45°, medium; 50% outdoor insect screen; 6.67 ft head ht	s	15	0.300	0	13.1	196	10.1	152
	w	75	0.300	0	13.1	981	21.8	1633
	all	125	0.300	0	13.1	1635	20.4	2547

**Doors**

CMH - Standard Door: CMH - Standard Door - Solid no storm	e	21	0.320	0	14.0	293	9.50	200
	w	21	0.320	0	14.0	293	9.50	200
	all	42	0.320	0	14.0	586	9.50	399

**Ceilings**

CMH-SW-180 BOX R38 - THP2002 - DOE: CMH-SW-180 BOX R38-THP2002 - DOE		1095	0.032	38.0	1.40	1527	1.70	1864
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**Floors**

CMH-SW-180- R22-THP164-DOE: CMH-SW-180-R22-THP164-DOE		1095	0.045	22.0	1.96	2148	0	0
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**Project Summary**  
**Entire House**  
**Clayton Homes**

Job: S46058VB-FDJ-TZ-TZ-I  
 Date: Nov 17, 2023  
 By:

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

**Project Information**

For: S46058VB-FDJ-TZ-TZ-I, GILES

Notes: DUCT CAP--26000 BTUH

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**Design Information**

Weather: Atlanta Municipal, GA, US

**Winter Design Conditions**

Outside db 26 °F  
 Inside db 70 °F  
 Design TD 44 °F

**Summer Design Conditions**

Outside db 92 °F  
 Inside db 75 °F  
 Design TD 17 °F  
 Daily range M  
 Relative humidity 50 %  
 Moisture difference 35 gr/lb

**Heating Summary**

Structure 13483 Btuh  
 Ducts 0 Btuh  
 Central vent (60 cfm) 2772 Btuh  
 Outside air  
 Humidification 0 Btuh  
 Piping 0 Btuh  
 Equipment load 16255 Btuh

**Sensible Cooling Equipment Load Sizing**

Structure 11363 Btuh  
 Ducts 0 Btuh  
 Central vent (90 cfm) 1593 Btuh  
 Outside air  
 Blower 0 Btuh  
 Use manufacturer's data n  
 Rate/swing multiplier 0.97  
 Equipment sensible load 12528 Btuh

**Infiltration**

Method Simplified  
 Construction quality Average  
 Fireplaces 0

**Latent Cooling Equipment Load Sizing**

Structure 1577 Btuh  
 Ducts 0 Btuh  
 Central vent (90 cfm) 2084 Btuh  
 Outside air  
 Equipment latent load 3661 Btuh

	Heating	Cooling
Area (ft <sup>2</sup> )	1095	1095
Volume (ft <sup>3</sup> )	8758	8758
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	66	34

**Equipment Total Load (Sen+Lat)** 16189 Btuh  
 Req. total capacity at 0.70 SHR 1.5 ton

**Heating Equipment Summary**

Make Smart Comfort  
 Trade PERFORMANCE 15 SEER2 HP  
 Model N4H5S24\*K\*AAA\*  
 AHRI ref 0

Efficiency 7.5 HSPF2  
 Heating input  
 Heating output 22800 Btuh @ 47°F  
 Temperature rise 28 °F  
 Actual air flow 780 cfm  
 Air flow factor 0.058 cfm/Btuh  
 Static pressure 0 in H2O  
 Space thermostat  
 Capacity balance point = 20 °F

**Cooling Equipment Summary**

Make Smart Comfort  
 Trade PERFORMANCE 15 SEER2 HP  
 Cond N4H5S24\*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 0.069 cfm/Btuh  
 Static pressure 0 in H2O  
 Load sensible heat ratio 0.78

Backup: Smart Comfort  
 Input = 10 kW, Output = 18008 Btuh, 100 AFUE

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







**Duct System Summary**  
**Entire House**  
**Clayton Homes**

Job: S46058VB-FDJ-TZ-TZ-I  
 Date: Nov 17, 2023  
 By:

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

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**Project Information**

For: S46058VB-FDJ-TZ-TZ-I, GILES

NOV 27 2023

Federal Manufactured  
 Home Construction 6  
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	<b>Heating</b>	<b>Cooling</b>
External static pressure	0 in H2O	0 in H2O
Pressure losses	0 in H2O	0 in H2O
Available static pressure	0 in H2O	0 in H2O
Supply / return available pressure	0.000 / 0.000 in H2O	0.000 / 0.000 in H2O
Lowest friction rate	0 in/100ft	0 in/100ft
Actual air flow	780 cfm	780 cfm
Total effective length (TEL)		79 ft

**Supply Branch Detail Table**

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
BATH	h 339	44	23	0	0	0x0	VIFx	41.5	35.0	st1
BEDROOM 2	h 1214	119	83	0	0	0x0	VIFx	44.0	35.0	st1
BEDROOM 3	h 1316	95	90	0	0	0x0	VIFx	29.5	35.0	st1
KITCHEN	c 2628	141	180	0	0	5x0	ShMt	9.5	35.0	st1
LIVING ROOM	c 2770	150	190	0	0	0x0	VIFx	26.5	35.0	st1
P-BATH	h 1066	112	73	0	0	0x0	VIFx	17.0	35.0	st2
PRIMARY BEDROOM	c 2030	119	139	0	0	0x0	VIFx	12.0	35.0	st2

**Supply Trunk Detail Table**

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st2	Peak AVF	231	213	0	475	0	5 x 14	ShtMetl	
st1	Peak AVF	549	567	0	1167	0	5 x 14	ShtMetl	

**Return Branch Detail Table**

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x0	780	780	0	0	0	0	0x 0		VIFx	



# CLAYTON HOME BUILDING GROUP

PB76

Model Number	46ALL16763BH23S	Drawing Number	S46058 -HL-TZI	Version 12
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BOX SIZE: 15 ft. x 76 ft.

AVG. SIDEWALL HEIGHT = 8 FEET

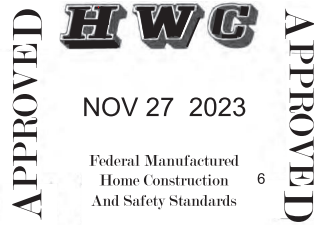
PERCENTAGE OF CEILING THAT IS VAULTED = 0%

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-164	THP-502	THP-2002
U VALUE (BTUH/SQ.FT.-F)	0.045	0.0817	0.0319

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	22.00	0.300	6.60
Rear	22.00	0.300	6.60
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	127.00	0.300	38.10
Option	0.00	0.300	0.00
Net:			
Floor	1140.00	0.045	51.76
Wall	1285.00	0.082	104.98
Ceiling	1140.00	0.0319	36.37
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	255.4
Th. Zone 2	70.1
Th. Zone 3	0.0

	Outdoor Design Temp (F)	UA	Uo	Heatloss BTUH/F
Thermal Zone 1	11	263.39	0.069	390.80
Thermal Zone 2	0	261.89	0.069	389.30
Thermal Zone 3	-14	260.54	0.068	387.90

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-17	9	10kW
-35	-3	12kW
-61	-22	15kW
-32	-2	40k Gas
-84	-37	60k Gas
-135	-73	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

PB76

Model Number	46ALL16763BH23S	Drawing Number	S46058 HL-TZ-II	Version 12
--------------	-----------------	----------------	-----------------	------------

BOX SIZE: 15 ft. x 76 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 OR / R-33 BIB	R-13	R-38
DAPIA PAGE	THP-384	THP-502	THP-2002
U VALUE (BTUH/SQ.FT.-F)	0.036	0.0817	0.0319

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

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Window Glass Area:

Doors:

	Area	U Value	UA
Front	22.00	0.300	6.60
Rear	22.00	0.300	6.60
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	127.00	0.300	38.10
Option	0.00	0.300	0.00
Net:			
Floor	1140.00	0.036	41.50
Wall	1285.00	0.082	104.98
Ceiling	1140.00	0.0319	36.37
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	302.4
Th. Zone 2	117.1
Th. Zone 3	0.0

Outdoor

Design Temp (F)

Thermal Zone 1  
Thermal Zone 2  
Thermal Zone 3

	UA	Uo	Heatloss BTUH/F
11	253.13	0.066	380.50
0	251.63	0.066	379.00
-14	250.28	0.066	377.70

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)
-20	7
-38	-5
-65	-24
-35	-4
-88	-40
-140	-77

10kW  
12kW  
15kW  
40k Gas  
60k Gas  
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

PB76

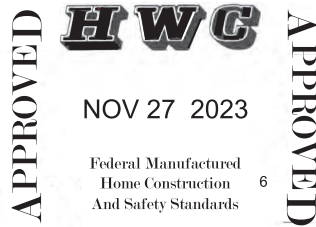
Model Number	46ALL16763BH23S	Drawing Number	S46058	HL-TZ-III	Version 11
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BOX SIZE: 15 ft. x 76 ft.  
 AVG. SIDEWALL HEIGHT = 8 FEET  
 PERCENTAGE OF CEILING THAT IS VAULTED = 0%

IN-FLOOR DUCT SYSTEM

	UNHEATED FLOOR	WALL	FLAT ROOF
INSULATION VALUES	R-22 OR / R-33 BIB	R-21	R-38
DAPIA PAGE	THP-384	THP-510	THP-2002
U VALUE (BTUH/SQ.FT.-F)	0.036	0.0546	0.0319

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



	Area	U Value	UA
Doors:			
Front	22.00	0.300	6.60
Rear	22.00	0.300	6.60
Other Door	0.00	0.330	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	127.00	0.300	38.10
Option	0.00	0.300	0.00
Net:			
Floor	1140.00	0.036	41.50
Wall	1285.00	0.055	70.16
Ceiling	1140.00	0.0319	36.37
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	477.9
Th. Zone 2	310.4
Th. Zone 3	188.6

	Outdoor Design Temp (F)	UA	Uo	Heatloss BTUH/F
Thermal Zone 1	11	199.32	0.053	326.70
Thermal Zone 2	0	199.32	0.053	326.70
Thermal Zone 3	-14	199.32	0.053	326.70

Design Temperatures

Furnace Heating Temp (F)	Economy Outdoor Temp (F)	
-34	-3	10kW
-55	-18	12kW
-87	-40	15kW
-52	-16	40k Gas
-114	-59	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