

# Load Short Form

## Entire House

### Superior Indoor Comfort

Job:  
Date: May 06, 2020  
By:

13955 Highway 9 North, Alpharetta, GA 30004 Phone: 770-664-9098 Fax: 770-6641581 Email: sic04@bellsouth.net

## Project Information

For: Wise, Southland Homes  
Ball Ground, GA

## Design Information

	Htg	Clg	Method	Infiltration
Outside db (°F)	25	94		Simplified
Inside db (°F)	70	75	Construction quality	Average
Design TD (°F)	45	19	Fireplaces	1 (Average)
Daily range	-	M		
Inside humidity (%)	30	50		
Moisture difference (gr/lb)	18	33		

### HEATING EQUIPMENT

Make	n/a
Trade	n/a
Model	n/a
AHRI ref.	n/a
Efficiency	n/a
Heating input	
Heating output	0 Btuh
Temperature rise	0 °F
Actual air flow	0 cfm
Air flow factor	0 cfm/Btuh
Static pressure	0 in H2O
Space thermostat	n/a

### COOLING EQUIPMENT

Make	n/a
Trade	n/a
Cond	n/a
Coil	n/a
AHRI ref.	n/a
Efficiency	n/a
Sensible cooling	0 Btuh
Latent cooling	0 Btuh
Total cooling	0 Btuh
Actual air flow	0 cfm
Air flow factor	0 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	0

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
2nd Floor	851	13942	16583	756	756
1st Floor	1887	28729	30759	1399	1399
Entire House	2738	42671	47342	2155	2155
Other equip loads		0	0		
Equip. @ 0.99 RSM			46632		
Latent cooling			4068		
<b>TOTALS</b>	<b>2738</b>	<b>42671</b>	<b>50700</b>	<b>2155</b>	<b>2155</b>

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

**Load Short Form**  
**1st Floor**  
**Superior Indoor Comfort**

Job:  
 Date: **May 06, 2020**  
 By:

13955 Highway 9 North, Alpharetta, GA 30004 Phone: 770-664-9098 Fax: 770-6641581 Email: sic04@bellsouth.net

**Project Information**

For: Wise, Southland Homes  
 Ball Ground, GA

**Design Information**

	Htg	Clg	Method	Infiltration
Outside db (°F)	25	94		Simplified
Inside db (°F)	70	75	Construction quality	Average
Design TD (°F)	45	19	Fireplaces	1 (Average)
Daily range	-	M		
Inside humidity (%)	30	50		
Moisture difference (gr/lb)	18	33		

**HEATING EQUIPMENT**

Make  
 Trade  
 Model  
 AHRI ref

Efficiency 0 HSPF

Heating input  
 Heating output 0 Btuh @ 47°F  
 Temperature rise 0 °F  
 Actual air flow 1399 cfm  
 Air flow factor 0.049 cfm/Btuh  
 Static pressure 0 in H2O  
 Space thermostat  
 Capacity balance point = -32 °F

Backup: n/a n/a  
 Input = 0 kW, Output = 0 Btuh, 100 AFUE

**COOLING EQUIPMENT**

Make  
 Trade  
 Cond  
 Coil  
 AHRI ref

Efficiency 0 SEER

Sensible cooling 0 Btuh  
 Latent cooling 0 Btuh  
 Total cooling 0 Btuh  
 Actual air flow 1399 cfm  
 Air flow factor 0.045 cfm/Btuh  
 Static pressure 0 in H2O  
 Load sensible heat ratio 0.93

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
mbath	137	2858	3501	139	159
mclos	63	534	247	26	11
master	199	3266	3668	159	167
mud	68	1131	649	55	30
laundry	73	2127	2053	104	93
breakfast	216	2528	2905	123	132
pantry	16	45	34	2	2
pwdr	33	93	70	5	3
dining	140	2578	4016	125	183
greatroom	456	7300	7490	355	341
foyer	170	2934	1388	143	63
kitchen	198	1488	2317	72	105
study	118	1848	2422	90	110

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

1st Floor	1887	28729	30759	1399	1399
Other equip loads		0	0		
Equip. @ 0.99 RSM			30298		
Latent cooling			2318		
TOTALS	1887	28729	32616	1399	1399

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



**Load Short Form**  
**2nd Floor**  
**Superior Indoor Comfort**

Job:  
 Date: **May 06, 2020**  
 By:

13955 Highway 9 North, Alpharetta, GA 30004 Phone: 770-664-9098 Fax: 770-6641581 Email: sic04@bellsouth.net

**Project Information**

For: Wise, Southland Homes  
 Ball Ground, GA

**Design Information**

	Htg	Clg	Method	Infiltration
Outside db (°F)	25	94		Simplified
Inside db (°F)	70	75	Construction quality	Average
Design TD (°F)	45	19	Fireplaces	1 (Average)
Daily range	-	M		
Inside humidity (%)	30	50		
Moisture difference (gr/lb)	18	33		

**HEATING EQUIPMENT**

Make	
Trade	
Model	
AHRI ref	
Efficiency	80 AFUE
Heating input	0 Btuh
Heating output	0 Btuh
Temperature rise	0 °F
Actual air flow	756 cfm
Air flow factor	0.054 cfm/Btuh
Static pressure	0 in H2O
Space thermostat	

**COOLING EQUIPMENT**

Make	
Trade	
Cond	
Coil	
AHRI ref	
Efficiency	0 SEER
Sensible cooling	0 Btuh
Latent cooling	0 Btuh
Total cooling	0 Btuh
Actual air flow	756 cfm
Air flow factor	0.046 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	0.90

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
foyer2	170	4257	6376	231	291
bedroom2	150	2182	2146	118	98
bath3	56	939	1315	51	60
bedroom4	162	2930	3122	159	142
bedroom3	166	2314	2368	126	108
bath2	99	1248	1175	68	54
landing	49	71	81	4	4

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

2nd Floor	851	13942	16583	756	756
Other equip loads		0	0		
Equip. @ 0.99 RSM			16334		
Latent cooling			1750		
TOTALS	851	13942	18084	756	756

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



**Project Information**

For: Wise, Southland Homes  
 Ball Ground, GA

Notes:

**Design Information**

Weather: Dobbins AFB/Mariett, GA, US

**Winter Design Conditions**

Outside db 25 °F  
 Inside db 70 °F  
 Design TD 45 °F

**Summer Design Conditions**

Outside db 94 °F  
 Inside db 75 °F  
 Design TD 19 °F  
 Daily range M  
 Relative humidity 50 %  
 Moisture difference 33 gr/lb

**Heating Summary**

Structure 32605 Btuh  
 Ducts 10066 Btuh  
 Central vent (0 cfm) 0 Btuh  
 Humidification 0 Btuh  
 Piping 0 Btuh  
 Equipment load 42671 Btuh

**Sensible Cooling Equipment Load Sizing**

Structure 37647 Btuh  
 Ducts 9695 Btuh  
 Central vent (0 cfm) 0 Btuh  
 Blower 0 Btuh  
 Use manufacturer's data n  
 Rate/swing multiplier 0.99  
 Equipment sensible load 46632 Btuh

**Infiltration**

Method Simplified  
 Construction quality Average  
 Fireplaces 1 (Average)

**Latent Cooling Equipment Load Sizing**

Structure 2025 Btuh  
 Ducts 2043 Btuh  
 Central vent (0 cfm) 0 Btuh  
 Equipment latent load 4068 Btuh  
**Equipment Total Load (Sen+Lat)** 50700 Btuh  
 Req. total capacity at 0.85 SHR 4.6 ton

	Heating	Cooling
Area (ft <sup>2</sup> )	2738	2738
Volume (ft <sup>3</sup> )	24642	24642
Air changes/hour	0.37	0.16
Equiv. AVF (cfm)	151	66

**Heating Equipment Summary**

Make n/a  
 Trade n/a  
 Model n/a  
 AHRI ref n/a  
 Efficiency n/a  
 Heating input  
 Heating output 0 Btuh  
 Temperature rise 0 °F  
 Actual air flow 0 cfm  
 Air flow factor 0 cfm/Btuh  
 Static pressure 0 in H2O  
 Space thermostat n/a

**Cooling Equipment Summary**

Make n/a  
 Trade n/a  
 Cond n/a  
 Coil n/a  
 AHRI ref n/a  
 Efficiency n/a  
 Sensible cooling 0 Btuh  
 Latent cooling 0 Btuh  
 Total cooling 0 Btuh  
 Actual air flow 0 cfm  
 Air flow factor 0 cfm/Btuh  
 Static pressure 0 in H2O  
 Load sensible heat ratio 0

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

**Project Information**

For: Wise, Southland Homes  
 Ball Ground, GA

Notes:

**Design Information**

Weather: Dobbins AFB/Mariett, GA, US

**Winter Design Conditions**

Outside db 25 °F  
 Inside db 70 °F  
 Design TD 45 °F

**Summer Design Conditions**

Outside db 94 °F  
 Inside db 75 °F  
 Design TD 19 °F  
 Daily range M  
 Relative humidity 50 %  
 Moisture difference 33 gr/lb

**Heating Summary**

Structure 21451 Btuh  
 Ducts 7278 Btuh  
 Central vent (0 cfm)  
 (none) 0 Btuh  
 Humidification 0 Btuh  
 Piping 0 Btuh  
 Equipment load 28729 Btuh

**Sensible Cooling Equipment Load Sizing**

Structure 23852 Btuh  
 Ducts 6907 Btuh  
 Central vent (0 cfm)  
 (none) 0 Btuh  
 Blower 0 Btuh  
 Use manufacturer's data n  
 Rate/swing multiplier 0.99  
 Equipment sensible load 30298 Btuh

**Infiltration**

Method Simplified  
 Construction quality Average  
 Fireplaces 1 (Average)

**Latent Cooling Equipment Load Sizing**

Structure 812 Btuh  
 Ducts 1506 Btuh  
 Central vent (0 cfm)  
 (none) 0 Btuh  
 Equipment latent load 2318 Btuh

	Heating	Cooling
Area (ft <sup>2</sup> )	1887	1887
Volume (ft <sup>3</sup> )	16983	16983
Air changes/hour	0.30	0.13
Equiv. AVF (cfm)	86	37

**Equipment Total Load (Sen+Lat)** 32616 Btuh  
 Req. total capacity at 0.85 SHR 3.0 ton

**Heating Equipment Summary**

Make  
 Trade  
 Model  
 AHRI ref  
 Efficiency 0 HSPF  
 Heating input  
 Heating output 0 Btuh @ 47°F  
 Temperature rise 0 °F  
 Actual air flow 1399 cfm  
 Air flow factor 0.049 cfm/Btuh  
 Static pressure 0 in H2O  
 Space thermostat  
 Capacity balance point = -32 °F  
 Backup: n/a n/a  
 Input = 0 kW, Output = 0 Btuh, 100 AFUE

**Cooling Equipment Summary**

Make  
 Trade  
 Cond  
 Coil  
 AHRI ref  
 Efficiency 0 SEER  
 Sensible cooling 0 Btuh  
 Latent cooling 0 Btuh  
 Total cooling 0 Btuh  
 Actual air flow 1399 cfm  
 Air flow factor 0.045 cfm/Btuh  
 Static pressure 0 in H2O  
 Load sensible heat ratio 0.93

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

**Project Information**

For: Wise, Southland Homes  
 Ball Ground, GA

Notes:

**Design Information**

Weather: Dobbins AFB/Mariett, GA, US

**Winter Design Conditions**

Outside db 25 °F  
 Inside db 70 °F  
 Design TD 45 °F

**Summer Design Conditions**

Outside db 94 °F  
 Inside db 75 °F  
 Design TD 19 °F  
 Daily range M  
 Relative humidity 50 %  
 Moisture difference 33 gr/lb

**Heating Summary**

Structure 11154 Btuh  
 Ducts 2788 Btuh  
 Central vent (0 cfm)  
 (none) 0 Btuh  
 Humidification 0 Btuh  
 Piping 0 Btuh  
 Equipment load 13942 Btuh

**Sensible Cooling Equipment Load Sizing**

Structure 13795 Btuh  
 Ducts 2788 Btuh  
 Central vent (0 cfm)  
 (none) 0 Btuh  
 Blower 0 Btuh  
 Use manufacturer's data n  
 Rate/swing multiplier 0.99  
 Equipment sensible load 16334 Btuh

**Infiltration**

Method Simplified  
 Construction quality Average  
 Fireplaces 1 (Average)

**Latent Cooling Equipment Load Sizing**

Structure 1213 Btuh  
 Ducts 537 Btuh  
 Central vent (0 cfm)  
 (none) 0 Btuh  
 Equipment latent load 1750 Btuh

	Heating	Cooling
Area (ft <sup>2</sup> )	851	851
Volume (ft <sup>3</sup> )	7659	7659
Air changes/hour	0.51	0.22
Equiv. AVF (cfm)	65	28

**Equipment Total Load (Sen+Lat)** 18084 Btuh  
 Req. total capacity at 0.85 SHR 1.6 ton

**Heating Equipment Summary**

Make  
 Trade  
 Model  
 AHRI ref

Efficiency 80 AFUE  
 Heating input 0 Btuh  
 Heating output 0 Btuh  
 Temperature rise 0 °F  
 Actual air flow 756 cfm  
 Air flow factor 0.054 cfm/Btuh  
 Static pressure 0 in H2O  
 Space thermostat

**Cooling Equipment Summary**

Make  
 Trade  
 Cond  
 Coil  
 AHRI ref

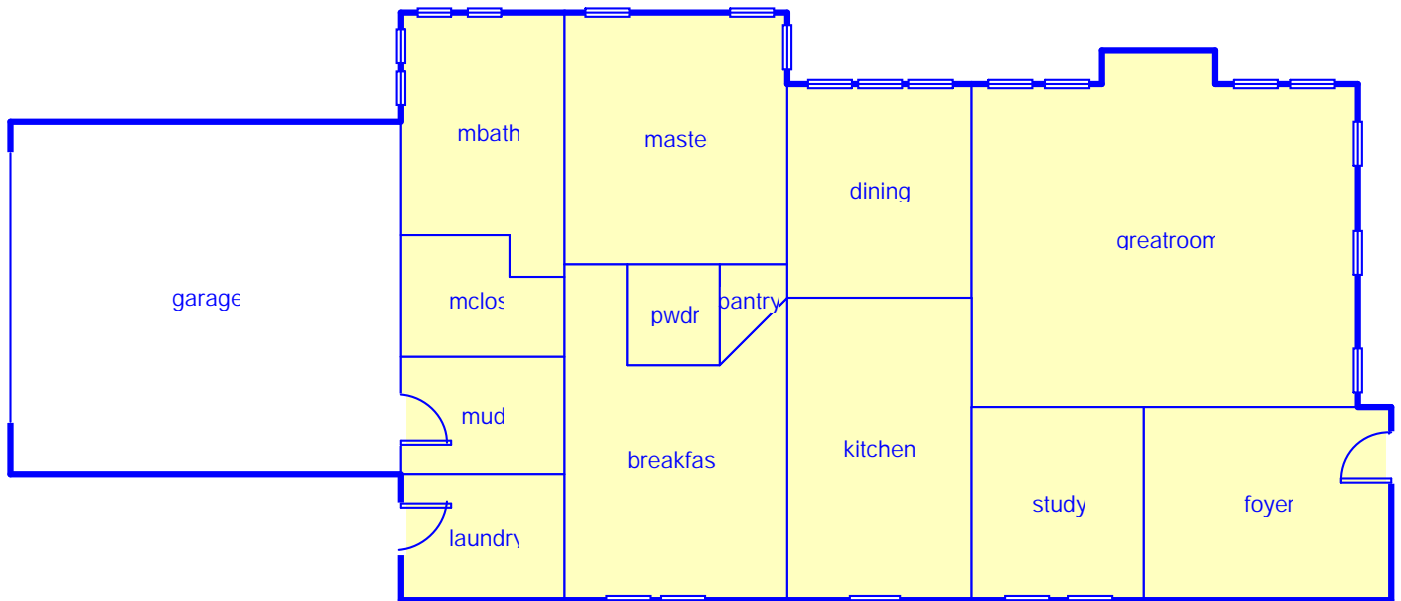
Efficiency 0 SEER  
 Sensible cooling 0 Btuh  
 Latent cooling 0 Btuh  
 Total cooling 0 Btuh  
 Actual air flow 756 cfm  
 Air flow factor 0.046 cfm/Btuh  
 Static pressure 0 in H2O  
 Load sensible heat ratio 0.90

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





**Level 1**



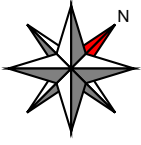
**Job #:**  
**Performed for:**  
Wise  
Ball Ground, GA

**Superior Indoor Comfort**

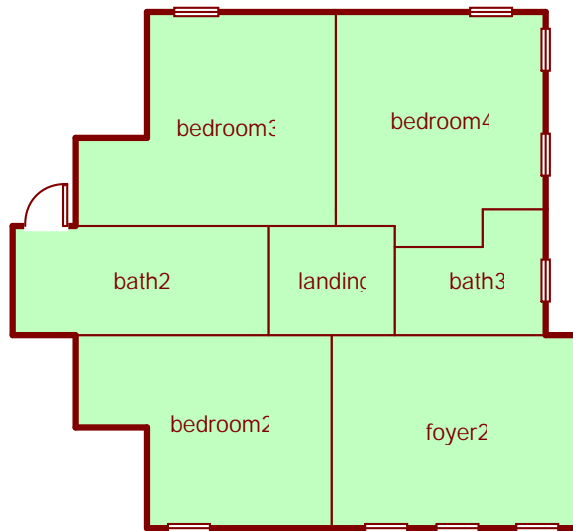
13955 Highway 9 North  
Alpharetta, GA 30004  
Phone: 770-664-9098 Fax: 770-6641581  
sic04@bellsouth.net

Scale: 1 : 137

Page 1  
Right-Suite@ Universal 2019  
19.0.17 RSU00434  
2020-May-07 22:08:06  
...hland Custom Homes\Wise\Wise.r



**Level 2**



**Job #:**  
**Performed for:**  
Wise  
Ball Ground, GA

**Superior Indoor Comfort**

13955 Highway 9 North  
Alpharetta, GA 30004  
Phone: 770-664-9098 Fax: 770-6641581  
sic04@bellsouth.net

Scale: 1 : 137  
Page 2  
Right-Suite® Universal 2019  
19.0.17 RSU00434  
2020-May-07 22:08:06  
...hland Custom Homes\Wise\Wise.i