

Residential System Sizing Calculation

Summary

Project Title:
Thomas Residence

, FL

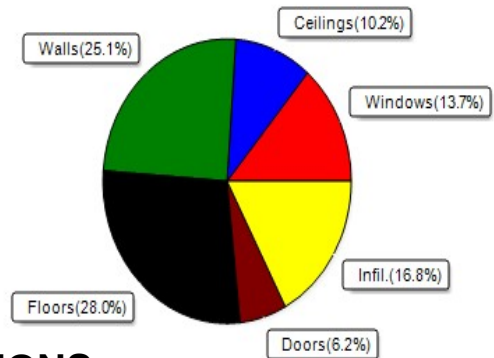
9/8/2025

| | | | | | |
|---|--------------|-------------|---------------------------------------|--------------|--------------|
| Location for weather data: Gainesville, FL - Defaults: Latitude(29.7) Altitude(100 ft.) Temp Range(M) | | | | | |
| Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(51gr.) | | | | | |
| Winter design temperature(TMY3 99%) | 30 | F | Summer design temperature(TMY3 99%) | 94 | F |
| Winter setpoint | 70 | F | Summer setpoint | 75 | F |
| Winter temperature difference | 40 | F | Summer temperature difference | 19 | F |
| Total heating load calculation | 40013 | Btuh | Total cooling load calculation | 36228 | Btuh |
| Submitted heating capacity | % of calc | Btuh | Submitted cooling capacity | % of calc | Btuh |
| Total (Electric Heat Pump) | 209.9 | 84000 | Sensible (SHR = 0.75) | 219.9 | 63000 |
| Heat Pump + Auxiliary(0.0kW) | 209.9 | 84000 | Latent | 277.1 | 21000 |
| | | | Total (Electric Heat Pump) | 231.9 | 84000 |

WINTER CALCULATIONS

Winter Heating Load (for 3371 sqft)

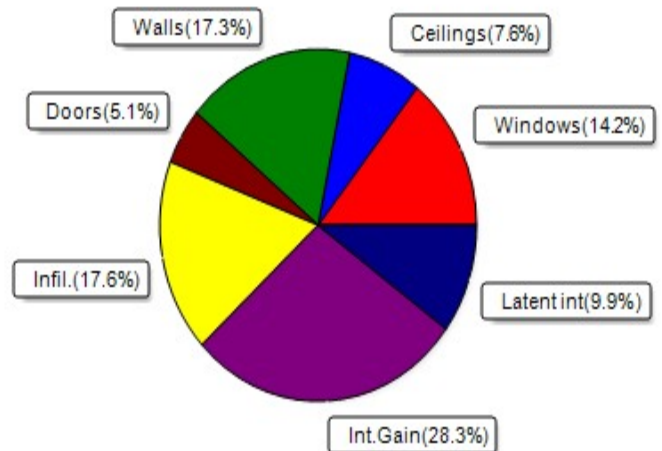
| Load component | Load | |
|------------------------|---------------------|-------------------|
| Window total | 529 sqft | 5502 Btuh |
| Wall total | 3138 sqft | 10029 Btuh |
| Door total | 135 sqft | 2478 Btuh |
| Ceiling total | 3371 sqft | 4086 Btuh |
| Floor total | See detail report | 11186 Btuh |
| Infiltration | 153 cfm | 6732 Btuh |
| Duct loss | | 0 Btuh |
| Subtotal | | 40013 Btuh |
| Ventilation | Ex:0 cfm; Sup:0 cfm | 0 Btuh |
| TOTAL HEAT LOSS | | 40013 Btuh |



SUMMER CALCULATIONS

Summer Cooling Load (for 3371 sqft)

| Load component | Load | |
|---------------------------------------|---------------------|-------------------|
| Window total | 529 sqft | 5140 Btuh |
| Wall total | 3138 sqft | 6265 Btuh |
| Door total | 135 sqft | 1858 Btuh |
| Ceiling total | 3371 sqft | 2746 Btuh |
| Floor total | | 0 Btuh |
| Infiltration | 115 cfm | 2398 Btuh |
| Internal gain | | 10240 Btuh |
| Duct gain | | 0 Btuh |
| Sens.Ventilation | Ex:0 cfm; Sup:0 cfm | 0 Btuh |
| Blower Load | | 0 Btuh |
| Total sensible gain | | 28648 Btuh |
| Latent gain(ducts) | | 0 Btuh |
| Latent gain(infiltration) | | 3980 Btuh |
| Latent gain(ventilation) | | 0 Btuh |
| Latent gain(internal/occupants/other) | | 3600 Btuh |
| Total latent gain | | 7580 Btuh |
| TOTAL HEAT GAIN | | 36228 Btuh |



8th Edition

EnergyGauge® System Sizing

PREPARED BY: _____

DATE: _____ 9-8-25

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Project Title:
Thomas Residence

, FL

9/8/2025

Reference City: Gainesville, FL (Defaults)
Humidity difference: 51gr.

Temperature Difference: 19.0F(TMY3 99%)
Summer Setpoint: 75 °F (Required Manual J default)

Component Loads for Whole House

| Window | Type* | | | | | Overhang | | Window Area(sqft) | | | HTM | | Load | |
|--------------|--------|------------|----|------|---------|----------|-------|-------------------|--------|----------|--------|----------|-----------|------|
| | Panes | SHGC | U | InSh | IS Ornt | Len | Hgt | Gross | Shaded | Unshaded | Shaded | Unshaded | | |
| 1 | 2 NFRC | 0.20, 0.26 | No | No | N | 9.5ft | 1.3ft | 54.0 | 0.0 | 54.0 | 9 | 9 | 494 | Btuh |
| 2 | 2 NFRC | 0.20, 0.26 | No | No | N | 14.5f | 1.3ft | 54.0 | 0.0 | 54.0 | 9 | 9 | 494 | Btuh |
| 3 | 2 NFRC | 0.20, 0.26 | No | No | N | 14.5f | 1.3ft | 90.0 | 0.0 | 90.0 | 9 | 9 | 823 | Btuh |
| 4 | 2 NFRC | 0.20, 0.26 | No | No | N | 1.5ft | 1.3ft | 54.0 | 0.0 | 54.0 | 9 | 9 | 494 | Btuh |
| 5 | 2 NFRC | 0.20, 0.26 | No | No | E | 1.5ft | 1.3ft | 20.0 | 0.0 | 20.0 | 9 | 24 | 484 | Btuh |
| 6 | 2 NFRC | 0.20, 0.26 | No | No | S | 1.5ft | 1.3ft | 20.0 | 20.0 | 0.0 | 9 | 11 | 183 | Btuh |
| 7 | 2 NFRC | 0.20, 0.26 | No | No | S | 9.5ft | 1.3ft | 30.0 | 30.0 | 0.0 | 9 | 11 | 274 | Btuh |
| 8 | 2 NFRC | 0.20, 0.26 | No | No | S | 9.5ft | 1.3ft | 30.0 | 30.0 | 0.0 | 9 | 11 | 274 | Btuh |
| 9 | 2 NFRC | 0.20, 0.26 | No | No | W | 9.5ft | 1.3ft | 30.0 | 30.0 | 0.0 | 9 | 24 | 274 | Btuh |
| 10 | 2 NFRC | 0.20, 0.26 | No | No | S | 1.5ft | 1.3ft | 12.0 | 12.0 | 0.0 | 9 | 11 | 110 | Btuh |
| 11 | 2 NFRC | 0.20, 0.26 | No | No | S | 1.5ft | 1.3ft | 30.0 | 30.0 | 0.0 | 9 | 11 | 274 | Btuh |
| 12 | 2 NFRC | 0.20, 0.26 | No | No | S | 1.5ft | 1.3ft | 15.0 | 15.0 | 0.0 | 9 | 11 | 137 | Btuh |
| 13 | 2 NFRC | 0.20, 0.26 | No | No | S | 1.5ft | 1.3ft | 30.0 | 30.0 | 0.0 | 9 | 11 | 274 | Btuh |
| 14 | 2 NFRC | 0.20, 0.26 | No | No | S | 1.5ft | 1.3ft | 15.0 | 15.0 | 0.0 | 9 | 11 | 137 | Btuh |
| 15 | 2 NFRC | 0.20, 0.26 | No | No | S | 1.5ft | 1.3ft | 30.0 | 30.0 | 0.0 | 9 | 11 | 274 | Btuh |
| 16 | 2 NFRC | 0.20, 0.26 | No | No | S | 1.5ft | 1.3ft | 15.0 | 15.0 | 0.0 | 9 | 11 | 137 | Btuh |
| Window Total | | | | | | | | 529 (sqft) | | | | | 5140 Btuh | |

Manual J Summer Calculations

Residential Load - Component Details (continued)

Project Title: Climate:FL_GAINESVILLE_REGIONAL_A
Thomas Residence

, FL

9/8/2025

| Walls | Type | U-Value | R-Value | Area(sqft) | HTM | Load |
|----------|-----------------------------|---------|------------|----------------------|------|------------------|
| | | | Cav/Sheath | | | |
| 1 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 160.0 | 2.3 | 362 Btuh |
| 2 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 27.0 | 2.3 | 61 Btuh |
| 3 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 191.5 | 2.3 | 433 Btuh |
| 4 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 79.0 | 2.3 | 179 Btuh |
| 5 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 132.0 | 2.3 | 299 Btuh |
| 6 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 295.0 | 2.3 | 668 Btuh |
| 7 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 52.0 | 2.3 | 118 Btuh |
| 8 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 114.0 | 2.3 | 258 Btuh |
| 9 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 84.0 | 2.3 | 190 Btuh |
| 10 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 18.0 | 2.3 | 41 Btuh |
| 11 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 69.3 | 2.3 | 157 Btuh |
| 12 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 18.0 | 2.3 | 41 Btuh |
| 13 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 84.0 | 2.3 | 190 Btuh |
| 14 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 84.0 | 2.3 | 190 Btuh |
| 15 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 156.0 | 2.3 | 353 Btuh |
| 16 | Frame - Wood - Adj | 0.09 | 13.0/0.0 | 223.0 | 1.7 | 376 Btuh |
| 17 | Frame - Wood - Int | 0.09 | 13.0/0.0 | 108.0 | 0.0 | 0 Btuh |
| 18 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 48.0 | 2.3 | 109 Btuh |
| 19 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 27.0 | 2.3 | 61 Btuh |
| 20 | Frame - Wood - Int | 0.09 | 13.0/0.0 | 204.8 | 0.0 | 0 Btuh |
| 21 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 168.0 | 2.3 | 380 Btuh |
| 22 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 57.0 | 2.3 | 129 Btuh |
| 23 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 114.0 | 2.3 | 258 Btuh |
| 24 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 84.0 | 2.3 | 190 Btuh |
| 25 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 18.0 | 2.3 | 41 Btuh |
| 26 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 81.0 | 2.3 | 183 Btuh |
| 27 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 18.0 | 2.3 | 41 Btuh |
| 28 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 84.0 | 2.3 | 190 Btuh |
| 29 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 114.0 | 2.3 | 258 Btuh |
| 30 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 57.0 | 2.3 | 129 Btuh |
| 31 | Frame - Wood - Ext | 0.09 | 13.0/0.0 | 168.0 | 2.3 | 380 Btuh |
| | Wall Total | | | 3138 (sqft) | | 6265 Btuh |
| Doors | Type | | | Area (sqft) | HTM | Load |
| 1 | Insulated - Exterior | | | 20.0 | 13.8 | 276 Btuh |
| 2 | Insulated - Exterior | | | 48.0 | 13.8 | 662 Btuh |
| 3 | Insulated - Exterior | | | 20.0 | 13.8 | 276 Btuh |
| 4 | Insulated - Exterior | | | 26.7 | 13.8 | 368 Btuh |
| 5 | Insulated - Garage | | | 20.0 | 13.8 | 276 Btuh |
| | Door Total | | | 135 (sqft) | | 1858 Btuh |
| Ceilings | Type/Color/Surface | U-Value | R-Value | Area(sqft) | HTM | Load |
| 1 | SnglAsmb no airsp/DarkMetal | 0.029 | 0.0/38.0 | 1436.0 | 0.75 | 1082 Btuh |
| 2 | SnglAsmb no airsp/DarkMetal | 0.029 | 0.0/38.0 | 1051.0 | 0.75 | 792 Btuh |
| 3 | SnglAsmb no airsp/DarkMetal | 0.034 | 30.0/0.0 | 884.0 | 0.99 | 872 Btuh |
| | Ceiling Total | | | 3371 (sqft) | | 2746 Btuh |
| Floors | Type | | R-Value | Size | HTM | Load |
| 1 | Slab On Grade | | 0.0 | 1436 (ft-perimeter) | 0.0 | 0 Btuh |
| 2 | Interior | | 0.0 | 1051 (sqft) | 0.0 | 0 Btuh |
| 3 | Slab On Grade | | 0.0 | 884 (ft-perimeter) | 0.0 | 0 Btuh |
| | Floor Total | | | 3371.0 (sqft) | | 0 Btuh |

Manual J Summer Calculations

Residential Load - Component Details (continued)

Project Title: Climate:FL_GAINESVILLE_REGIONAL_A
Thomas Residence

, FL

9/8/2025

| | | | | | | |
|----------------------|--|-------------|---------------|------------|----------------|-------------------|
| | Envelope Subtotal: | | | | | 16009 Btuh |
| Infiltration | Type | Average ACH | Volume(cuft) | Wall Ratio | CFM= | Load |
| | Natural | 0.23 | 30339 | 1 | 115.1 | 2398 Btuh |
| Internal gain | | Occupants | Btuh/occupant | Appliance | | Load |
| | | 18 | X 230 | + | 6100 | 10240 Btuh |
| | Sensible Envelope Load: | | | | | 28648 Btuh |
| Duct load | Extremely sealed, Supply(R6.0-Condi), Return(R6.0-Condi) | | | | (DGM of 0.000) | 0 Btuh |
| | Sensible Load All Zones | | | | | 28648 Btuh |

Manual J Summer Calculations

Residential Load - Component Details (continued)

Project Title: Climate:FL_GAINESVILLE_REGIONAL_A
 Thomas Residence

, FL

9/8/2025

WHOLE HOUSE TOTALS

| | | |
|---|---|-------------------|
| Whole House Totals for Cooling | Sensible Envelope Load All Zones | 28648 Btuh |
| | Sensible Duct Load | 0 Btuh |
| | Total Sensible Zone Loads | 28648 Btuh |
| | Sensible ventilation (Ex:0 cfm; Sup:0 cfm) | 0 Btuh |
| | Blower | 0 Btuh |
| | Total sensible gain | 28648 Btuh |
| | Latent infiltration gain (for 51 gr. humidity difference) | 3980 Btuh |
| | Latent ventilation gain | 0 Btuh |
| | Latent duct gain | 0 Btuh |
| | Latent occupant gain (18.0 people @ 200 Btuh per person) | 3600 Btuh |
| | Latent other gain | 0 Btuh |
| | Latent total gain | 7580 Btuh |
| | TOTAL GAIN | 36228 Btuh |

EQUIPMENT

| | | |
|-----------------|---|------------|
| 1. Central Unit | # | 36000 Btuh |
| 2. Central Unit | # | 18000 Btuh |
| 3. Central Unit | # | 30000 Btuh |

*Key: Window types (Panels - Number and type of panes of glass)
 (SHGC - Shading coefficient of glass as SHGC numerical value)
 (U - Window U-Factor)
 (InSh - Interior shading device: none(No), Blinds(B), Draperies(D) or Roller Shades(R))
 - For Blinds: Assume medium color, half closed
 For Draperies: Assume medium weave, half closed
 For Roller shades: Assume translucent, half closed
 (IS - Insect screen: none(N), Full(F) or Half(½))
 (Ornt - compass orientation)



Version 8

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Project Title:
Thomas Residence
Building Type: User

, FL

9/8/2025

Reference City: Gainesville, FL (Defaults) Winter Temperature Difference: 40.0 °F (TMY3 99%)
Winter Setpoint: 70 °F (Required Manual J default)

Component Loads for Whole House

| Window | Panes/Type | Frame | U | Orientation | Area(sqft) | X | HTM= | Load |
|--------|--------------|-------|---------|---------------------|-------------|---|------|-----------|
| 1 | 2, NFRC 0.20 | Vinyl | 0.26 | N | 54.0 | | 10.4 | 562 Btuh |
| 2 | 2, NFRC 0.20 | Vinyl | 0.26 | N | 54.0 | | 10.4 | 562 Btuh |
| 3 | 2, NFRC 0.20 | Vinyl | 0.26 | N | 90.0 | | 10.4 | 936 Btuh |
| 4 | 2, NFRC 0.20 | Vinyl | 0.26 | N | 54.0 | | 10.4 | 562 Btuh |
| 5 | 2, NFRC 0.20 | Vinyl | 0.26 | E | 20.0 | | 10.4 | 208 Btuh |
| 6 | 2, NFRC 0.20 | Vinyl | 0.26 | S | 20.0 | | 10.4 | 208 Btuh |
| 7 | 2, NFRC 0.20 | Vinyl | 0.26 | S | 30.0 | | 10.4 | 312 Btuh |
| 8 | 2, NFRC 0.20 | Vinyl | 0.26 | S | 30.0 | | 10.4 | 312 Btuh |
| 9 | 2, NFRC 0.20 | Vinyl | 0.26 | W | 30.0 | | 10.4 | 312 Btuh |
| 10 | 2, NFRC 0.20 | Vinyl | 0.26 | S | 12.0 | | 10.4 | 125 Btuh |
| 11 | 2, NFRC 0.20 | Vinyl | 0.26 | S | 30.0 | | 10.4 | 312 Btuh |
| 12 | 2, NFRC 0.20 | Vinyl | 0.26 | S | 15.0 | | 10.4 | 156 Btuh |
| 13 | 2, NFRC 0.20 | Vinyl | 0.26 | S | 30.0 | | 10.4 | 312 Btuh |
| 14 | 2, NFRC 0.20 | Vinyl | 0.26 | S | 15.0 | | 10.4 | 156 Btuh |
| 15 | 2, NFRC 0.20 | Vinyl | 0.26 | S | 30.0 | | 10.4 | 312 Btuh |
| 16 | 2, NFRC 0.20 | Vinyl | 0.26 | S | 15.0 | | 10.4 | 156 Btuh |
| | Window Total | | | | 529.0(sqft) | | | 5502 Btuh |
| Walls | Type | Ornt. | Ueff. | R-Value (Cav/Sh) | Area | X | HTM= | Load |
| 1 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 160 | | 3.55 | 568 Btuh |
| 2 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 27 | | 3.55 | 96 Btuh |
| 3 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 192 | | 3.55 | 680 Btuh |
| 4 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 79 | | 3.55 | 280 Btuh |
| 5 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 132 | | 3.55 | 469 Btuh |
| 6 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 295 | | 3.55 | 1047 Btuh |
| 7 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 52 | | 3.55 | 185 Btuh |
| 8 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 114 | | 3.55 | 405 Btuh |
| 9 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 84 | | 3.55 | 298 Btuh |
| 10 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 18 | | 3.55 | 64 Btuh |
| 11 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 69 | | 3.55 | 246 Btuh |
| 12 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 18 | | 3.55 | 64 Btuh |
| 13 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 84 | | 3.55 | 298 Btuh |
| 14 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 84 | | 3.55 | 298 Btuh |
| 15 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 156 | | 3.55 | 554 Btuh |
| 16 | Frame - Wood | - Adj | (0.089) | 13.0/0.0 | 223 | | 3.55 | 792 Btuh |
| 17 | Frame - Wood | - Int | (0.089) | 13.0/0.0 | 108 | | 0.00 | 0 Btuh |
| 18 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 48 | | 3.55 | 170 Btuh |
| 19 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 27 | | 3.55 | 96 Btuh |
| 20 | Frame - Wood | - Int | (0.089) | 13.0/0.0 | 205 | | 0.00 | 0 Btuh |
| 21 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 168 | | 3.55 | 596 Btuh |
| 22 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 57 | | 3.55 | 202 Btuh |
| 23 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 114 | | 3.55 | 405 Btuh |

Manual J Winter Calculations

Residential Load - Component Details (continued)

Project Title:
Thomas Residence
Building Type: User

, FL

9/8/2025

| Walls | Type | Ornt. | Ueff. | R-Value (Cav/Sh) | Area X | HTM= | Load |
|--------------------|------------------------------------|------------|---------|---------------------|------------------|-------|-------------------|
| 24 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 84 | 3.55 | 298 Btuh |
| 25 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 18 | 3.55 | 64 Btuh |
| 26 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 81 | 3.55 | 288 Btuh |
| 27 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 18 | 3.55 | 64 Btuh |
| 28 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 84 | 3.55 | 298 Btuh |
| 29 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 114 | 3.55 | 405 Btuh |
| 30 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 57 | 3.55 | 202 Btuh |
| 31 | Frame - Wood | - Ext | (0.089) | 13.0/0.0 | 168 | 3.55 | 596 Btuh |
| Wall Total | | | | | 3138(sqft) | | 10029 Btuh |
| Doors | Type | Storm | Ueff. | | Area X | HTM= | Load |
| 1 | Insulated - Exterior, | n | (0.460) | | 20 | 18.4 | 368 Btuh |
| 2 | Insulated - Exterior, | n | (0.460) | | 48 | 18.4 | 883 Btuh |
| 3 | Insulated - Exterior, | n | (0.460) | | 20 | 18.4 | 368 Btuh |
| 4 | Insulated - Exterior, | n | (0.460) | | 27 | 18.4 | 491 Btuh |
| 5 | Insulated - Garage, | n | (0.460) | | 20 | 18.4 | 368 Btuh |
| Door Total | | | | | 135(sqft) | | 2478Btuh |
| Ceilings | Type/Color/Surface | | Ueff. | R-Value | Area X | HTM= | Load |
| 1 | Single as/D/Metal | | (0.029) | 0.0/38.0 | 1436 | 1.2 | 1665 Btuh |
| 2 | Single as/D/Metal | | (0.029) | 0.0/38.0 | 1051 | 1.2 | 1219 Btuh |
| 3 | Single as/D/Metal | | (0.034) | 30.0/0.0 | 884 | 1.4 | 1202 Btuh |
| Ceiling Total | | | | | 3371(sqft) | | 4086Btuh |
| Floors | Type | | Ueff. | R-Value | Size X | HTM= | Load |
| 1 | Slab On Grade | | (1.180) | 0.0 | 101.0 ft(perim.) | 47.2 | 4767 Btuh |
| 2 | Interior | | (1.180) | 0.0 | 1051.0 sqft | 0.0 | 0 Btuh |
| 3 | Slab On Grade | | (1.180) | 0.0 | 136.0 ft(perim.) | 47.2 | 6419 Btuh |
| Floor Total | | | | | 3371 sqft | | 11186 Btuh |
| Envelope Subtotal: | | | | | | | 33281 Btuh |
| Infiltration | Type | Wholehouse | ACH | Volume(cuft) | Wall Ratio | CFM= | Load |
| | Natural | | 0.30 | 30339 | 1.00 | 153.5 | 6732 Btuh |
| Duct load | (DLM of 0.000) | | | | | | 0 Btuh |
| All Zones | Sensible Subtotal All Zones | | | | | | 40013 Btuh |

Manual J Winter Calculations

Residential Load - Component Details (continued)

, FL

Project Title:
Thomas Residence
Building Type: User

9/8/2025

WHOLE HOUSE TOTALS

| | | |
|---------------------------|--|------------------------------------|
| Totals for Heating | Subtotal Sensible Heat Loss Ventilation Sens. Heat Loss (Ex:0 cfm; Sup:0 cfm) Total Heat Loss | 40013 Btuh 0 Btuh 40013 Btuh |
|---------------------------|--|------------------------------------|

EQUIPMENT

| | | | |
|-----------------------|---|--|------------|
| 1. Electric Heat Pump | # | | 36000 Btuh |
| 2. Electric Heat Pump | # | | 18000 Btuh |
| 3. Electric Heat Pump | # | | 30000 Btuh |

Key: Window types - NFRC (Requires U-Factor and Shading coefficient(SHGC) of glass as numerical values)
 or - Glass as 'Clear' or 'Tint' (Uses U-Factor and SHGC defaults)
 U - (Window U-Factor)
 HTM - (ManualJ Heat Transfer Multiplier)



Version 8