



# Manual S Compliance Report

## Entire House

Strada Services

Job: Lot 38 1970 C-RHG-NW  
Date: 03/10/2022  
By: RS  
Plan: 1970

531 Codisco Way, Sanford, FL 32771 License: CAC043953

### Project Information

For: Lot 38 Preserve @ Laurel Lake, Adams Homes  
581 SW Bellflower Dr, Lake City, FL 32024

### Cooling Equipment

#### Design Conditions

|                    |        |                    |       |      |                   |        |
|--------------------|--------|--------------------|-------|------|-------------------|--------|
| Outdoor design DB: | 92.4°F | Sensible gain:     | 26209 | Btuh | Entering coil DB: | 78.1°F |
| Outdoor design WB: | 75.8°F | Latent gain:       | 4263  | Btuh | Entering coil WB: | 64.0°F |
| Indoor design DB:  | 75.0°F | Total gain:        | 30472 | Btuh |                   |        |
| Indoor RH:         | 50%    | Estimated airflow: | 1167  | cfm  |                   |        |

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

|                    |            |        |                             |                  |
|--------------------|------------|--------|-----------------------------|------------------|
| Equipment type:    | Split ASHP |        |                             |                  |
| Manufacturer:      | Carrier    | Model: | GH5SAN53600AA0+FJ5ANXB36L00 |                  |
| Actual airflow:    | 1167       | cfm    |                             |                  |
| Sensible capacity: | 29068      | Btuh   | 111%                        | of load          |
| Latent capacity:   | 5229       | Btuh   | 123%                        | of load          |
| Total capacity:    | 34297      | Btuh   | 113%                        | of load SHR: 85% |

### Heating Equipment

#### Design Conditions

|                    |        |            |       |      |                   |        |
|--------------------|--------|------------|-------|------|-------------------|--------|
| Outdoor design DB: | 33.3°F | Heat loss: | 29110 | Btuh | Entering coil DB: | 68.5°F |
| Indoor design DB:  | 70.0°F |            |       |      |                   |        |

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

|                             |            |        |                             |         |
|-----------------------------|------------|--------|-----------------------------|---------|
| Equipment type:             | Split ASHP |        |                             |         |
| Manufacturer:               | Carrier    | Model: | GH5SAN53600AA0+FJ5ANXB36L00 |         |
| Actual airflow:             | 1167       | cfm    |                             |         |
| Output capacity:            | 29287      | Btuh   | 101%                        | of load |
| Supplemental heat required: | 0          | Btuh   |                             |         |
|                             |            |        | Capacity balance:           | 29 °F   |
|                             |            |        | Economic balance:           | -99 °F  |

|                        |            |        |    |                          |
|------------------------|------------|--------|----|--------------------------|
| Backup equipment type: | Elec strip |        |    |                          |
| Manufacturer:          |            | Model: |    |                          |
| Actual airflow:        | 1167       | cfm    |    |                          |
| Output capacity:       | 0          | kW     | 0% | of load Temp. rise: 0 °F |

Meets all requirements of ACCA Manual S.



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...eLot 38 1970 C-RHG-NW Lot 38 1970 C-RHG-NW.rup Calc = MJ8 Front Door faces: NW



# Project Summary

## Entire House

### Strada Services

Job: Lot 38 1970 C-RHG-NW  
Date: 03/10/2022  
By: RS  
Plan: 1970

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## Project Information

For: Lot 38 Preserve @ Laurel Lake, Adams Homes  
581 SW Bellflower Dr, Lake City, FL 32024

Notes: LS 8-15-25 MAC

## Design Information

Weather: Gainesville, FL, US

### Winter Design Conditions

Outside db 33 °F  
Inside db 70 °F  
Design TD 37 °F

Ventilation Method MJ8

### Heating Summary

Structure 23309 Btuh  
Ducts (R-6.0) 5801 Btuh  
Central vent (0 cfm) 0 Btuh

Humidification 0 Btuh  
Piping 0 Btuh  
Equipment load 29110 Btuh

### Infiltration

Method Simplified  
Construction quality Average  
Fireplaces 0

|                  | Heating | Cooling |
|------------------|---------|---------|
| Area (ft²)       | 1955    | 1955    |
| Volume (ft³)     | 17415   | 17415   |
| Air changes/hour | 0.38    | 0.20    |
| Equiv. AVF (cfm) | 110     | 58      |

### Heating Equipment Summary

Make Carrier  
Trade 15 SEER2 HP  
Model GH5SAN53600AA0  
AHRI ref 214101828

Efficiency 7.5 HSPF2  
Heating input 35600 Btuh @ 47°F  
Heating output 28 °F  
Temperature rise 1167 cfm  
Actual air flow 0.040 cfm/Btuh  
Air flow factor 0.50 in H2O  
Static pressure  
Space thermostat  
Capacity balance point = 29 °F

Backup:  
Input = 0 kW, Output = 0 Btuh, 100 AFUE

### Summer Design Conditions

Outside db 92 °F  
Inside db 75 °F  
Design TD 17 °F  
Daily range M  
Relative humidity 50 %  
Moisture difference 43 gr/lb

### Sensible Cooling Equipment Load Sizing

Structure 18135 Btuh  
Ducts (R-6.0) 8074 Btuh  
Central vent (0 cfm) 0 Btuh

Blower 0 Btuh

Use manufacturer's data n  
Rate/swing multiplier 0.97  
Equipment sensible load 25527 Btuh

### Latent Cooling Equipment Load Sizing

Structure 2608 Btuh  
Ducts 1655 Btuh  
Central vent (0 cfm) 0 Btuh

Equipment latent load 4263 Btuh

**Equipment Total Load (Sen+Lat)** 29791 Btuh  
Req. total capacity at 0.75 SHR 2.8 ton

### Cooling Equipment Summary

Make Carrier  
Trade 15 SEER2 HP  
Cond GH5SAN53600AA0  
Coil FJ5ANXB36L00  
AHRI ref 214101828

Efficiency 12.0 EER2, 14.5 SEER2  
Sensible cooling 26250 Btuh  
Latent cooling 8750 Btuh  
Total cooling 35000 Btuh  
Actual air flow 1167 cfm  
Air flow factor 0.045 cfm/Btuh  
Static pressure 0.50 in H2O  
Load sensible heat ratio 0.86

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



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...e\Lot 38 1970 C-RHG-NW\Lot 38 1970 C-RHG-NW.rup Calc = MJ8 Front Door faces: NW

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|    |                                                  |                     |                       |    |                |              |                              |       |             |                |                              |       |             |      |
|----|--------------------------------------------------|---------------------|-----------------------|----|----------------|--------------|------------------------------|-------|-------------|----------------|------------------------------|-------|-------------|------|
| 1  | Room name                                        |                     |                       |    |                | Entire House |                              |       |             | Master         |                              |       |             |      |
| 2  | Exposed wall                                     |                     |                       |    |                | 208.0 ft     |                              |       |             | 58.5 ft        |                              |       |             |      |
| 3  | Room height                                      |                     |                       |    |                | 8.8 ft       |                              |       |             | 8.0 ft         |                              |       |             |      |
| 4  | Room dimensions                                  |                     |                       |    |                |              |                              |       |             | 1.0 x 359.8 ft |                              |       |             |      |
| 5  | Room area                                        |                     |                       |    |                | 1976.5 ft²   |                              |       |             | 359.8 ft²      |                              |       |             |      |
|    | Ty                                               | Construction number | U-value (Btuh/ft²·°F) | Or | HTM (Btuh/ft²) |              | Area (ft²) or perimeter (ft) |       | Load (Btuh) |                | Area (ft²) or perimeter (ft) |       | Load (Btuh) |      |
|    |                                                  |                     |                       |    | Heat           | Cool         | Gross                        | N/P/S | Heat        | Cool           | Gross                        | N/P/S | Heat        | Cool |
| 6  | W                                                | 12C-0sw             | 0.091                 | ne | 3.34           | 2.76         | 568                          | 552   | 1843        | 1526           | 116                          | 116   | 387         | 321  |
| 11 | G                                                | 2A-2ov              | 0.330                 | ne | 12.11          | 19.88        | 16                           | 0     | 196         | 322            | 0                            | 0     | 0           | 0    |
|    | W                                                | 16B-19ad            | 0.049                 | ne | 1.80           | 2.62         | 64                           | 64    | 115         | 168            | 0                            | 0     | 0           | 0    |
|    | W                                                | 12C-0sw             | 0.091                 | se | 3.34           | 2.76         | 364                          | 282   | 942         | 780            | 180                          | 148   | 493         | 408  |
|    | G                                                | 2A-2ov              | 0.330                 | se | 12.11          | 19.98        | 32                           | 2     | 392         | 647            | 32                           | 2     | 392         | 647  |
|    | G                                                | 2A-2ov              | 0.330                 | se | 12.11          | 10.11        | 32                           | 32    | 392         | 327            | 0                            | 0     | 0           | 0    |
|    | D                                                | 11J0                | 0.600                 | se | 22.02          | 17.97        | 18                           | 18    | 391         | 319            | 0                            | 0     | 0           | 0    |
|    | W                                                | 16B-19ad            | 0.049                 | se | 1.80           | 2.62         | 32                           | 32    | 58          | 84             | 0                            | 0     | 0           | 0    |
|    | W                                                | 12C-0sw             | 0.091                 | sw | 3.34           | 2.76         | 510                          | 444   | 1482        | 1227           | 172                          | 138   | 461         | 382  |
|    | G                                                | 2A-2ov              | 0.330                 | sw | 12.11          | 19.98        | 49                           | 3     | 588         | 970            | 16                           | 1     | 196         | 323  |
|    | D                                                | 11J0                | 0.600                 | sw | 22.02          | 17.97        | 18                           | 18    | 391         | 319            | 18                           | 18    | 391         | 319  |
|    | W                                                | 12C-0sw             | 0.091                 | nw | 3.34           | 2.76         | 186                          | 113   | 377         | 312            | 0                            | 0     | 0           | 0    |
|    | G                                                | 2A-2ov              | 0.330                 | nw | 12.11          | 19.88        | 49                           | 0     | 588         | 966            | 0                            | 0     | 0           | 0    |
|    | D                                                | 11D0                | 0.390                 | nw | 14.31          | 11.68        | 24                           | 24    | 344         | 280            | 0                            | 0     | 0           | 0    |
|    | P                                                | 12C-0sw             | 0.091                 | -  | 3.34           | 1.37         | 211                          | 193   | 645         | 265            | 0                            | 0     | 0           | 0    |
|    | D                                                | 11D0                | 0.390                 | n  | 14.31          | 11.68        | 18                           | 18    | 255         | 208            | 0                            | 0     | 0           | 0    |
|    | C                                                | 16B-30ad            | 0.032                 | -  | 1.17           | 1.71         | 1982                         | 1982  | 2328        | 3390           | 360                          | 360   | 422         | 615  |
|    | F                                                | 22A-tpl             | 0.989                 | -  | 36.30          | 0.00         | 1976                         | 208   | 7550        | 0              | 360                          | 58    | 2123        | 0    |
| 6  | c)AED excursion                                  |                     |                       |    |                |              |                              |       | 199         |                |                              |       | -79         |      |
|    | Envelope loss/gain                               |                     |                       |    |                |              |                              | 18876 | 12309       |                |                              | 4867  | 2937        |      |
| 12 | a) Infiltration                                  |                     |                       |    |                |              |                              | 4433  | 1106        |                |                              | 1203  | 300         |      |
|    | b) Room ventilation                              |                     |                       |    |                |              |                              | 0     | 0           |                |                              | 0     | 0           |      |
| 13 | Internal gains: Occupants @ 230 Appliances/other |                     |                       |    |                | 4            |                              |       | 920 3800    | 2              |                              |       | 460 600     |      |
|    | Subtotal (lines 6 to 13)                         |                     |                       |    |                |              |                              | 23309 | 18135       |                |                              | 6070  | 4297        |      |
| 14 | Less external load                               |                     |                       |    |                |              |                              | 0     | 0           |                |                              | 0     | 0           |      |
|    | Less transfer                                    |                     |                       |    |                |              |                              | 0     | 0           |                |                              | 0     | 0           |      |
|    | Redistribution                                   |                     |                       |    |                |              |                              | 0     | 0           |                |                              | 0     | 0           |      |
|    | Subtotal                                         |                     |                       |    |                |              |                              | 23309 | 18135       |                |                              | 6070  | 4297        |      |
| 15 | Duct loads                                       |                     |                       |    |                | 25%          | 45%                          | 5801  | 8074        | 25%            | 45%                          | 1511  | 1913        |      |
|    | Total room load                                  |                     |                       |    |                |              |                              | 29110 | 26209       |                |                              | 7581  | 6210        |      |
|    | Air required (cfm)                               |                     |                       |    |                |              |                              | 1167  | 1167        |                |                              | 304   | 276         |      |

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

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|    |                                 |                     |                       |       |                |                |                              |       |             |      |                              |       |             |      |   |
|----|---------------------------------|---------------------|-----------------------|-------|----------------|----------------|------------------------------|-------|-------------|------|------------------------------|-------|-------------|------|---|
| 1  | Room name                       |                     |                       |       |                | Fam/Din        |                              |       |             |      | 0 ft                         |       |             |      |   |
| 2  | Exposed wall                    |                     |                       |       |                | 50.5 ft        |                              |       |             |      | 0 ft                         |       |             |      |   |
| 3  | Room height                     |                     |                       |       |                | 10.2 ft        |                              |       |             |      | 8.0 ft                       |       |             |      |   |
| 4  | Room dimensions                 |                     |                       |       |                | 1.0 x 670.8 ft |                              |       |             |      | 5.0 x 3.5 ft                 |       |             |      |   |
| 5  | Room area                       |                     |                       |       |                | 670.8 ft²      |                              |       |             |      | 17.5 ft²                     |       |             |      |   |
|    | Ty                              | Construction number | U-value (Btuh/ft²·°F) | Or    | HTM (Btuh/ft²) |                | Area (ft²) or perimeter (ft) |       | Load (Btuh) |      | Area (ft²) or perimeter (ft) |       | Load (Btuh) |      |   |
|    |                                 |                     |                       |       | Heat           | Cool           | Gross                        | N/P/S | Heat        | Cool | Gross                        | N/P/S | Heat        | Cool |   |
| 6  | W                               | 12C-0sw             | 0.091                 | ne    | 3.34           | 2.76           | 60                           | 60    | 200         | 166  | 0                            | 0     | 0           | 0    |   |
| 11 | G                               | 2A-2ov              | 0.330                 | ne    | 12.11          | 19.88          | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |   |
|    | W                               | 16B-19ad            | 0.049                 | ne    | 1.80           | 2.62           | 64                           | 64    | 115         | 168  | 0                            | 0     | 0           | 0    |   |
|    | W                               | 12C-0sw             | 0.091                 | se    | 3.34           | 2.76           | 184                          | 134   | 449         | 371  | 0                            | 0     | 0           | 0    |   |
|    | G                               | 2A-2ov              | 0.330                 | se    | 12.11          | 19.98          | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |   |
|    | G                               | 2A-2ov              | 0.330                 | se    | 12.11          | 10.11          | 32                           | 32    | 392         | 327  | 0                            | 0     | 0           | 0    |   |
|    | D                               | 11J0                | 0.600                 | se    | 22.02          | 17.97          | 18                           | 18    | 391         | 319  | 0                            | 0     | 0           | 0    |   |
|    | W                               | 16B-19ad            | 0.049                 | se    | 1.80           | 2.62           | 32                           | 32    | 58          | 84   | 0                            | 0     | 0           | 0    |   |
|    | W                               | 12C-0sw             | 0.091                 | sw    | 3.34           | 2.76           | 130                          | 98    | 326         | 270  | 0                            | 0     | 0           | 0    |   |
|    | G                               | 2A-2ov              | 0.330                 | sw    | 12.11          | 19.98          | 32                           | 2     | 392         | 647  | 0                            | 0     | 0           | 0    |   |
|    | D                               | 11J0                | 0.600                 | sw    | 22.02          | 17.97          | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |   |
|    | W                               | 12C-0sw             | 0.091                 | nw    | 3.34           | 2.76           | 60                           | 36    | 122         | 101  | 0                            | 0     | 0           | 0    |   |
|    | G                               | 2A-2ov              | 0.330                 | nw    | 12.11          | 19.88          | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |   |
|    | D                               | 11D0                | 0.390                 | nw    | 14.31          | 11.68          | 24                           | 24    | 344         | 280  | 0                            | 0     | 0           | 0    |   |
|    | P                               | 12C-0sw             | 0.091                 | -     | 3.34           | 1.37           | 135                          | 135   | 451         | 185  | 0                            | 0     | 0           | 0    |   |
|    | D                               | 11D0                | 0.390                 | n     | 14.31          | 11.68          | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |   |
|    | C                               | 16B-30ad            | 0.032                 | -     | 1.17           | 1.71           | 674                          | 674   | 791         | 1152 | 18                           | 18    | 21          | 30   |   |
| F  | 22A-tpl                         | 0.989               | -                     | 36.30 | 0.00           | 671            | 50                           | 1833  | 0           | 18   | 0                            | 0     | 0           |      |   |
| 6  | c)AED excursion                 |                     |                       |       |                |                |                              |       | 91          |      |                              |       | -1          |      |   |
|    | Envelope loss/gain              |                     |                       |       |                |                |                              |       | 5864        | 4162 |                              |       | 21          | 29   |   |
| 12 | a) Infiltration                 |                     |                       |       |                |                |                              |       | 1365        | 341  |                              |       | 0           | 0    |   |
|    | b) Room ventilation             |                     |                       |       |                |                |                              |       | 0           | 0    |                              |       | 0           | 0    |   |
| 13 | Internal gains: Occupants @ 230 |                     |                       |       |                |                | 0                            |       | 0           | 1200 | 0                            |       |             | 0    | 0 |
|    | Appliances/other                |                     |                       |       |                |                |                              |       |             |      |                              |       |             |      |   |
|    | Subtotal (lines 6 to 13)        |                     |                       |       |                |                |                              |       | 7229        | 5703 |                              |       | 21          | 29   |   |
| 14 | Less external load              |                     |                       |       |                |                |                              |       | 0           | 0    |                              |       | 0           | 0    |   |
|    | Less transfer                   |                     |                       |       |                |                |                              |       | 0           | 0    |                              |       | 0           | 0    |   |
|    | Redistribution                  |                     |                       |       |                |                |                              |       | 21          | 30   |                              |       | -21         | -29  |   |
|    | Subtotal                        |                     |                       |       |                |                |                              |       | 7250        | 5732 |                              |       | 0           | 0    |   |
| 15 | Duct loads                      |                     |                       |       |                | 25%            | 45%                          |       | 1804        | 2552 | 25%                          | 45%   | 0           | 0    |   |
|    | Total room load                 |                     |                       |       |                |                |                              |       | 9054        | 8284 |                              |       | 0           | 0    |   |
|    | Air required (cfm)              |                     |                       |       |                |                |                              |       | 363         | 369  |                              |       | 0           | 0    |   |

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

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| 1  | Room name                       |                     |                                    |    |                             |       | Bath 2                                    |       |             |      | Bed 3                                     |       |             |      |
|----|---------------------------------|---------------------|------------------------------------|----|-----------------------------|-------|-------------------------------------------|-------|-------------|------|-------------------------------------------|-------|-------------|------|
| 2  | Exposed wall                    |                     |                                    |    |                             |       | 8.0 ft                                    |       |             |      | 8.0 ft                                    |       |             |      |
| 3  | Room height                     |                     |                                    |    |                             |       | 6.0 ft                                    |       |             |      | 34.0 ft                                   |       |             |      |
| 4  | Room dimensions                 |                     |                                    |    |                             |       | heat/cool                                 |       |             |      | heat/cool                                 |       |             |      |
| 5  | Room area                       |                     |                                    |    |                             |       | 66.0 ft <sup>2</sup>                      |       |             |      | 194.0 ft <sup>2</sup>                     |       |             |      |
|    | Ty                              | Construction number | U-value (Btuh/ft <sup>2</sup> ·°F) | Or | HTM (Btuh/ft <sup>2</sup> ) |       | Area (ft <sup>2</sup> ) or perimeter (ft) |       | Load (Btuh) |      | Area (ft <sup>2</sup> ) or perimeter (ft) |       | Load (Btuh) |      |
|    |                                 |                     |                                    |    | Heat                        | Cool  | Gross                                     | N/P/S | Heat        | Cool | Gross                                     | N/P/S | Heat        | Cool |
| 6  | W                               | 12C-0sw             | 0.091                              | ne | 3.34                        | 2.76  | 48                                        | 48    | 160         | 133  | 116                                       | 116   | 387         | 321  |
|    | G                               | 2A-2ov              | 0.330                              | ne | 12.11                       | 19.88 | 0                                         | 0     | 0           | 0    | 0                                         | 0     | 0           | 0    |
|    | W                               | 16B-19ad            | 0.049                              | ne | 1.80                        | 2.62  | 0                                         | 0     | 0           | 0    | 0                                         | 0     | 0           | 0    |
| 11 | W                               | 12C-0sw             | 0.091                              | se | 3.34                        | 2.76  | 0                                         | 0     | 0           | 0    | 0                                         | 0     | 0           | 0    |
|    | G                               | 2A-2ov              | 0.330                              | se | 12.11                       | 19.88 | 0                                         | 0     | 0           | 0    | 0                                         | 0     | 0           | 0    |
|    | D                               | 11J0                | 0.600                              | se | 12.11                       | 10.11 | 0                                         | 0     | 0           | 0    | 0                                         | 0     | 0           | 0    |
|    | W                               | 16B-19ad            | 0.049                              | se | 1.80                        | 2.62  | 0                                         | 0     | 0           | 0    | 0                                         | 0     | 0           | 0    |
|    | W                               | 12C-0sw             | 0.091                              | sw | 3.34                        | 2.76  | 0                                         | 0     | 0           | 0    | 40                                        | 40    | 134         | 111  |
|    | G                               | 2A-2ov              | 0.330                              | sw | 12.11                       | 19.88 | 0                                         | 0     | 0           | 0    | 0                                         | 0     | 0           | 0    |
|    | D                               | 11J0                | 0.600                              | sw | 22.02                       | 17.97 | 0                                         | 0     | 0           | 0    | 0                                         | 0     | 0           | 0    |
|    | W                               | 12C-0sw             | 0.091                              | nw | 3.34                        | 2.76  | 0                                         | 0     | 0           | 0    | 116                                       | 67    | 225         | 186  |
|    | G                               | 2A-2ov              | 0.330                              | nw | 12.11                       | 19.88 | 0                                         | 0     | 0           | 0    | 49                                        | 0     | 588         | 966  |
|    | D                               | 11D0                | 0.390                              | nw | 14.31                       | 11.68 | 0                                         | 0     | 0           | 0    | 0                                         | 0     | 0           | 0    |
|    | P                               | 12C-0sw             | 0.091                              | -  | 3.34                        | 1.37  | 0                                         | 0     | 0           | 0    | 0                                         | 0     | 0           | 0    |
|    | D                               | 11D0                | 0.390                              | n  | 14.31                       | 11.68 | 0                                         | 0     | 0           | 0    | 0                                         | 0     | 0           | 0    |
|    | C                               | 16B-30ad            | 0.032                              | -  | 1.17                        | 1.71  | 66                                        | 66    | 78          | 113  | 194                                       | 194   | 228         | 332  |
|    | F                               | 22A-lpl             | 0.989                              | -  | 36.30                       | 0.00  | 66                                        | 6     | 218         | 0    | 194                                       | 34    | 1234        | 0    |
| 6  | c) AED excursion                |                     |                                    |    |                             |       |                                           |       |             | -5   |                                           |       |             | 287  |
|    | Envelope loss/gain              |                     |                                    |    |                             |       |                                           |       | 456         | 241  |                                           |       | 2796        | 2202 |
| 12 | a) Infiltration                 |                     |                                    |    |                             |       |                                           |       | 123         | 31   |                                           |       | 699         | 175  |
|    | b) Room ventilation             |                     |                                    |    |                             |       |                                           |       | 0           | 0    |                                           |       | 0           | 0    |
| 13 | Internal gains: Occupants @ 230 |                     |                                    |    |                             |       | 0                                         |       |             | 0    | 1                                         |       |             | 230  |
|    | Appliances/other                |                     |                                    |    |                             |       |                                           |       |             | 0    |                                           |       |             | 150  |
|    | Subtotal (lines 6 to 13)        |                     |                                    |    |                             |       |                                           |       | 579         | 271  |                                           |       | 3496        | 2756 |
|    | Less external load              |                     |                                    |    |                             |       |                                           |       | 0           | 0    |                                           |       | 0           | 0    |
|    | Less transfer                   |                     |                                    |    |                             |       |                                           |       | 0           | 0    |                                           |       | 0           | 0    |
|    | Redistribution                  |                     |                                    |    |                             |       |                                           |       | 23          | 33   |                                           |       | 16          | 22   |
| 14 | Subtotal                        |                     |                                    |    |                             |       |                                           |       | 602         | 305  |                                           |       | 3511        | 2779 |
| 15 | Duct loads                      |                     |                                    |    |                             |       | 25%                                       | 45%   | 150         | 136  | 25%                                       | 45%   | 874         | 1237 |
|    | Total room load                 |                     |                                    |    |                             |       |                                           |       | 752         | 440  |                                           |       | 4385        | 4016 |
|    | Air required (cfm)              |                     |                                    |    |                             |       |                                           |       | 30          | 20   |                                           |       | 176         | 179  |

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

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| 1  | Room name                       |                     |                       |    |                |       | Bed 2                        |       |             |      | Lau                          |       |             |      |
|----|---------------------------------|---------------------|-----------------------|----|----------------|-------|------------------------------|-------|-------------|------|------------------------------|-------|-------------|------|
| 2  | Exposed wall                    |                     |                       |    |                |       | 15.0 ft                      |       |             |      | 16.0 ft                      |       |             |      |
| 3  | Room height                     |                     |                       |    |                |       | 8.0 ft                       |       |             |      | 8.0 ft                       |       |             |      |
| 4  | Room dimensions                 |                     |                       |    |                |       | 1.0 x 187.8 ft               |       |             |      | 9.5 x 6.5 ft                 |       |             |      |
| 5  | Room area                       |                     |                       |    |                |       | 187.8 ft²                    |       |             |      | 61.8 ft²                     |       |             |      |
|    | Ty                              | Construction number | U-value (Btuh/ft²·°F) | Or | HTM (Btuh/ft²) |       | Area (ft²) or perimeter (ft) |       | Load (Btuh) |      | Area (ft²) or perimeter (ft) |       | Load (Btuh) |      |
|    |                                 |                     |                       |    | Heat           | Cool  | Gross                        | N/P/S | Heat        | Cool | Gross                        | N/P/S | Heat        | Cool |
| 6  | W                               | 12C-0sw             | 0.091                 | ne | 3.34           | 2.76  | 120                          | 104   | 347         | 287  | 0                            | 0     | 0           | 0    |
|    | G                               | 2A-2ov              | 0.330                 | ne | 12.11          | 19.88 | 16                           | 0     | 196         | 322  | 0                            | 0     | 0           | 0    |
|    | W                               | 16B-19ad            | 0.049                 | ne | 1.80           | 2.62  | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | W                               | 12C-0sw             | 0.091                 | se | 3.34           | 2.76  | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
| 11 | G                               | 2A-2ov              | 0.330                 | se | 12.11          | 19.88 | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | G                               | 2A-2ov              | 0.330                 | se | 12.11          | 10.11 | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | D                               | 11J0                | 0.600                 | se | 22.02          | 17.97 | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | W                               | 16B-19ad            | 0.049                 | se | 1.80           | 2.62  | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | W                               | 12C-0sw             | 0.091                 | sw | 3.34           | 2.76  | 0                            | 0     | 0           | 0    | 52                           | 52    | 174         | 144  |
|    | G                               | 2A-2ov              | 0.330                 | sw | 12.11          | 19.88 | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | D                               | 11J0                | 0.600                 | sw | 22.02          | 17.97 | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | W                               | 12C-0sw             | 0.091                 | nw | 3.34           | 2.76  | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | G                               | 2A-2ov              | 0.330                 | nw | 12.11          | 19.88 | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | D                               | 11D0                | 0.390                 | nw | 14.31          | 11.68 | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | P                               | 12C-0sw             | 0.091                 | -  | 3.34           | 1.37  | 0                            | 0     | 0           | 0    | 76                           | 58    | 194         | 80   |
|    | D                               | 11D0                | 0.390                 | n  | 14.31          | 11.68 | 0                            | 0     | 0           | 0    | 18                           | 18    | 255         | 208  |
|    | C                               | 16B-30ad            | 0.032                 | -  | 1.17           | 1.71  | 188                          | 188   | 220         | 321  | 62                           | 62    | 73          | 106  |
|    | F                               | 22A-lpl             | 0.989                 | -  | 36.30          | 0.00  | 188                          | 15    | 544         | 0    | 62                           | 16    | 581         | 0    |
| 6  | c) AED excursion                |                     |                       |    |                |       |                              |       |             | -25  |                              |       |             | -19  |
|    | Envelope loss/gain              |                     |                       |    |                |       |                              |       | 1308        | 905  |                              |       | 1276        | 517  |
| 12 | a) Infiltration                 |                     |                       |    |                |       |                              |       | 309         | 77   |                              |       | 134         | 33   |
|    | b) Room ventilation             |                     |                       |    |                |       |                              |       | 0           | 0    |                              |       | 0           | 0    |
| 13 | Internal gains: Occupants @ 230 |                     |                       |    |                |       | 1                            |       |             | 230  | 0                            |       |             | 0    |
|    | Appliances/other                |                     |                       |    |                |       |                              |       |             | 150  |                              |       |             | 500  |
|    | Subtotal (lines 6 to 13)        |                     |                       |    |                |       |                              |       | 1616        | 1362 |                              |       | 1410        | 1051 |
|    | Less external load              |                     |                       |    |                |       |                              |       | 0           | 0    |                              |       | 0           | 0    |
|    | Less transfer                   |                     |                       |    |                |       |                              |       | 0           | 0    |                              |       | 0           | 0    |
|    | Redistribution                  |                     |                       |    |                |       |                              |       | 19          | 27   |                              |       | 0           | 0    |
| 14 | Subtotal                        |                     |                       |    |                |       |                              |       | 1635        | 1389 |                              |       | 1410        | 1051 |
| 15 | Duct loads                      |                     |                       |    |                |       | 25%                          | 45%   | 407         | 618  | 25%                          | 45%   | 351         | 468  |
|    | Total room load                 |                     |                       |    |                |       |                              |       | 2042        | 2007 |                              |       | 1760        | 1519 |
|    | Air required (cfm)              |                     |                       |    |                |       |                              |       | 82          | 89   |                              |       | 71          | 68   |

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| 1  | Room name                       |                     |                       |    |                |       | Kitchen                      |       |             |      | Bath 1                       |       |             |      |
|----|---------------------------------|---------------------|-----------------------|----|----------------|-------|------------------------------|-------|-------------|------|------------------------------|-------|-------------|------|
| 2  | Exposed wall                    |                     |                       |    |                |       | 14.5 ft                      |       |             |      | 13.5 ft                      |       |             |      |
| 3  | Room height                     |                     |                       |    |                |       | 8.9 ft                       |       |             |      | 8.0 ft                       |       |             |      |
| 4  | Room dimensions                 |                     |                       |    |                |       | 9.5 x 14.5 ft                |       |             |      | 1.0 x 14.2 ft                |       |             |      |
| 5  | Room area                       |                     |                       |    |                |       | 137.8 ft²                    |       |             |      | 141.2 ft²                    |       |             |      |
|    | Ty                              | Construction number | U-value (Btuh/ft²·°F) | Or | HTM (Btuh/ft²) |       | Area (ft²) or perimeter (ft) |       | Load (Btuh) |      | Area (ft²) or perimeter (ft) |       | Load (Btuh) |      |
|    |                                 |                     |                       |    | Heat           | Cool  | Gross                        | N/P/S | Heat        | Cool | Gross                        | N/P/S | Heat        | Cool |
| 6  | W                               | 12C-0sw             | 0.091                 | ne | 3.34           | 2.76  | 0                            | 0     | 0           | 0    | 108                          | 108   | 361         | 299  |
|    | G                               | 2A-2ov              | 0.330                 | ne | 12.11          | 19.88 | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | W                               | 16B-19ad            | 0.049                 | ne | 1.80           | 2.62  | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | W                               | 12C-0sw             | 0.091                 | se | 3.34           | 2.76  | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
| 11 | G                               | 2A-2ov              | 0.330                 | se | 12.11          | 19.88 | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | G                               | 2A-2ov              | 0.330                 | se | 12.11          | 10.11 | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | D                               | 11J0                | 0.600                 | se | 22.02          | 17.97 | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | W                               | 16B-19ad            | 0.049                 | se | 1.80           | 2.62  | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | W                               | 12C-0sw             | 0.091                 | sw | 3.34           | 2.76  | 116                          | 116   | 387         | 321  | 0                            | 0     | 0           | 0    |
|    | G                               | 2A-2ov              | 0.330                 | sw | 12.11          | 19.88 | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | D                               | 11J0                | 0.600                 | sw | 22.02          | 17.97 | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | W                               | 12C-0sw             | 0.091                 | nw | 3.34           | 2.76  | 9                            | 9     | 30          | 25   | 0                            | 0     | 0           | 0    |
|    | G                               | 2A-2ov              | 0.330                 | nw | 12.11          | 19.88 | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | D                               | 11D0                | 0.390                 | nw | 14.31          | 11.68 | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | P                               | 12C-0sw             | 0.091                 | -  | 3.34           | 1.37  | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | D                               | 11D0                | 0.390                 | n  | 14.31          | 11.68 | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |
|    | C                               | 16B-30ad            | 0.032                 | -  | 1.17           | 1.71  | 141                          | 141   | 165         | 241  | 141                          | 141   | 166         | 242  |
|    | F                               | 22A-lpl             | 0.989                 | -  | 36.30          | 0.00  | 138                          | 14    | 526         | 0    | 141                          | 14    | 490         | 0    |
| 6  | c) AED excursion                |                     |                       |    |                |       |                              |       |             | -34  |                              |       |             | -11  |
|    | Envelope loss/gain              |                     |                       |    |                |       |                              |       | 1109        | 552  |                              |       | 1017        | 529  |
| 12 | a) Infiltration                 |                     |                       |    |                |       |                              |       | 321         | 80   |                              |       | 278         | 69   |
|    | b) Room ventilation             |                     |                       |    |                |       |                              |       | 0           | 0    |                              |       | 0           | 0    |
| 13 | Internal gains: Occupants @ 230 |                     |                       |    |                |       | 0                            |       |             | 0    | 0                            |       |             | 0    |
|    | Appliances/other                |                     |                       |    |                |       |                              |       |             | 1200 |                              |       |             | 0    |
|    | Subtotal (lines 6 to 13)        |                     |                       |    |                |       |                              |       | 1430        | 1833 |                              |       | 1294        | 598  |
|    | Less external load              |                     |                       |    |                |       |                              |       | 0           | 0    |                              |       | 0           | 0    |
|    | Less transfer                   |                     |                       |    |                |       |                              |       | 0           | 0    |                              |       | 0           | 0    |
|    | Redistribution                  |                     |                       |    |                |       |                              |       | 0           | 0    |                              |       | 0           | 0    |
| 14 | Subtotal                        |                     |                       |    |                |       |                              |       | 1430        | 1833 |                              |       | 1294        | 598  |
| 15 | Duct loads                      |                     |                       |    |                |       | 25%                          | 45%   | 356         | 816  | 25%                          | 45%   | 322         | 266  |
|    | Total room load                 |                     |                       |    |                |       |                              |       | 1786        | 2648 |                              |       | 1616        | 865  |
|    | Air required (cfm)              |                     |                       |    |                |       |                              |       | 72          | 118  |                              |       | 65          | 38   |

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



# Right-J® Worksheet

## Entire House

### Strada Services

Job: Lot 38 1970 C-RHG-NW  
Date: 03/10/2022  
By: RS  
Plan: 1970

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|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|----|-----------------|---------------------|-----------------------|----|----------------|-------------|------------------------------|-------|-------------|------|------------------------------|-------|-------------|------|--|
| 1  | Room name       |                     |                       |    |                | Wic<br>0 ft |                              |       |             |      | TO<br>0 ft                   |       |             |      |  |
| 2  | Exposed wall    |                     |                       |    |                | 8.0 ft      |                              |       |             |      | 8.0 ft                       |       |             |      |  |
| 3  | Room height     |                     |                       |    |                | 1.0         |                              |       |             |      | 6.0                          |       |             |      |  |
| 4  | Room dimensions |                     |                       |    |                | 72.5 ft     |                              |       |             |      | 18.0 ft                      |       |             |      |  |
| 5  | Room area       |                     |                       |    |                | 72.5 ft²    |                              |       |             |      | 18.0 ft²                     |       |             |      |  |
|    | Ty              | Construction number | U-value (Btuh/ft²·°F) | Or | HTM (Btuh/ft²) |             | Area (ft²) or perimeter (ft) |       | Load (Btuh) |      | Area (ft²) or perimeter (ft) |       | Load (Btuh) |      |  |
|    |                 |                     |                       |    | Heat           | Cool        | Gross                        | N/P/S | Heat        | Cool | Gross                        | N/P/S | Heat        | Cool |  |
| 6  | W               | 12C-0sw             | 0.091                 | ne | 3.34           | 2.76        | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |  |
| 11 | G               | 2A-2ov              | 0.330                 | ne | 12.11          | 19.88       | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |  |
|    | W               | 16B-19ad            | 0.049                 | ne | 1.80           | 2.62        | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |  |
|    | W               | 12C-0sw             | 0.091                 | se | 3.34           | 2.76        | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |  |
|    | G               | 2A-2ov              | 0.330                 | se | 12.11          | 19.98       | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |  |
|    | G               | 2A-2ov              | 0.330                 | se | 12.11          | 10.11       | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |  |
|    | D               | 11J0                | 0.600                 | se | 22.02          | 17.97       | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |  |
|    | W               | 16B-19ad            | 0.049                 | se | 1.80           | 2.62        | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |  |
|    | W               | 12C-0sw             | 0.091                 | sw | 3.34           | 2.76        | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |  |
|    | G               | 2A-2ov              | 0.330                 | sw | 12.11          | 19.98       | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |  |
|    | D               | 11J0                | 0.600                 | sw | 22.02          | 17.97       | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |  |
|    | W               | 12C-0sw             | 0.091                 | nw | 3.34           | 2.76        | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |  |
|    | G               | 2A-2ov              | 0.330                 | nw | 12.11          | 19.88       | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |  |
|    | D               | 11D0                | 0.390                 | nw | 14.31          | 11.68       | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |  |
|    | P               | 12C-0sw             | 0.091                 | -  | 3.34           | 1.37        | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |  |
|    | D               | 11D0                | 0.390                 | n  | 14.31          | 11.68       | 0                            | 0     | 0           | 0    | 0                            | 0     | 0           | 0    |  |
|    | C               | 16B-30ad            | 0.032                 | -  | 1.17           | 1.71        | 72                           | 72    | 85          | 124  | 18                           | 18    | 21          | 31   |  |
|    | F               | 22A-tpl             | 0.989                 | -  | 36.30          | 0.00        | 72                           | 0     | 0           | 0    | 18                           | 0     | 0           | 0    |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |
|    |                 |                     |                       |    |                |             |                              |       |             |      |                              |       |             |      |  |

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



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|    |                                 |                     |                       |       |                |                       |                              |       |             |      |                   |       |      |      |
|----|---------------------------------|---------------------|-----------------------|-------|----------------|-----------------------|------------------------------|-------|-------------|------|-------------------|-------|------|------|
| 1  | Room name                       |                     |                       |       |                | 8.0 ft 0 ft heat/cool |                              |       |             |      |                   |       |      |      |
| 2  | Exposed wall                    |                     |                       |       |                | 1.0 x 49.5 ft         |                              |       |             |      |                   |       |      |      |
| 3  | Room height                     |                     |                       |       |                | 49.5 ft²              |                              |       |             |      |                   |       |      |      |
| 4  | Room dimensions                 |                     |                       |       |                |                       |                              |       |             |      |                   |       |      |      |
| 5  | Room area                       |                     |                       |       |                |                       |                              |       |             |      |                   |       |      |      |
|    | Ty                              | Construction number | U-value (Btuh/ft²·°F) | Or    | HTM (Btuh/ft²) |                       | Area (ft²) or perimeter (ft) |       | Load (Btuh) |      | Area or perimeter |       | Load |      |
|    |                                 |                     |                       |       | Heat           | Cool                  | Gross                        | N/P/S | Heat        | Cool | Gross             | N/P/S | Heat | Cool |
| 6  | W                               | 12C-0sw             | 0.091                 | ne    | 3.34           | 2.76                  | 0                            | 0     | 0           | 0    |                   |       |      |      |
| .  | G                               | 2A-2ov              | 0.330                 | ne    | 12.11          | 19.88                 | 0                            | 0     | 0           | 0    |                   |       |      |      |
| .  | W                               | 16B-19ad            | 0.049                 | ne    | 1.80           | 2.62                  | 0                            | 0     | 0           | 0    |                   |       |      |      |
| .  | W                               | 12C-0sw             | 0.091                 | se    | 3.34           | 2.76                  | 0                            | 0     | 0           | 0    |                   |       |      |      |
| 11 | G                               | 2A-2ov              | 0.330                 | se    | 12.11          | 19.98                 | 0                            | 0     | 0           | 0    |                   |       |      |      |
|    | G                               | 2A-2ov              | 0.330                 | se    | 12.11          | 10.11                 | 0                            | 0     | 0           | 0    |                   |       |      |      |
|    | D                               | 11J0                | 0.600                 | se    | 22.02          | 17.97                 | 0                            | 0     | 0           | 0    |                   |       |      |      |
|    | W                               | 16B-19ad            | 0.049                 | se    | 1.80           | 2.62                  | 0                            | 0     | 0           | 0    |                   |       |      |      |
|    | W                               | 12C-0sw             | 0.091                 | sw    | 3.34           | 2.76                  | 0                            | 0     | 0           | 0    |                   |       |      |      |
|    | G                               | 2A-2ov              | 0.330                 | sw    | 12.11          | 19.98                 | 0                            | 0     | 0           | 0    |                   |       |      |      |
|    | D                               | 11J0                | 0.600                 | sw    | 22.02          | 17.97                 | 0                            | 0     | 0           | 0    |                   |       |      |      |
|    | W                               | 12C-0sw             | 0.091                 | nw    | 3.34           | 2.76                  | 0                            | 0     | 0           | 0    |                   |       |      |      |
|    | G                               | 2A-2ov              | 0.330                 | nw    | 12.11          | 19.88                 | 0                            | 0     | 0           | 0    |                   |       |      |      |
|    | D                               | 11D0                | 0.390                 | nw    | 14.31          | 11.68                 | 0                            | 0     | 0           | 0    |                   |       |      |      |
|    | P                               | 12C-0sw             | 0.091                 | -     | 3.34           | 1.37                  | 0                            | 0     | 0           | 0    |                   |       |      |      |
| D  | 11D0                            | 0.390               | n                     | 14.31 | 11.68          | 0                     | 0                            | 0     | 0           |      |                   |       |      |      |
| C  | 16B-30ad                        | 0.032               | -                     | 1.17  | 1.71           | 50                    | 50                           | 58    | 85          |      |                   |       |      |      |
| F  | 22A-tpl                         | 0.989               | -                     | 36.30 | 0.00           | 50                    | 0                            | 0     | 0           |      |                   |       |      |      |
| 6  | c)AED excursion                 |                     |                       |       |                |                       |                              |       |             | -2   |                   |       |      |      |
|    | Envelope loss/gain              |                     |                       |       |                |                       |                              |       | 58          | 83   |                   |       |      |      |
| 12 | a) Infiltration                 |                     |                       |       |                |                       |                              |       | 0           | 0    |                   |       |      |      |
|    | b) Room ventilation             |                     |                       |       |                |                       |                              |       | 0           | 0    |                   |       |      |      |
| 13 | Internal gains: Occupants @ 230 |                     |                       |       |                |                       | 0                            |       |             | 0    |                   |       |      |      |
|    | Appliances/other                |                     |                       |       |                |                       |                              |       |             | 0    |                   |       |      |      |
|    | Subtotal (lines 6 to 13)        |                     |                       |       |                |                       |                              |       | 58          | 83   |                   |       |      |      |
|    | Less external load              |                     |                       |       |                |                       |                              |       | 0           | 0    |                   |       |      |      |
|    | Less transfer                   |                     |                       |       |                |                       |                              |       | 0           | 0    |                   |       |      |      |
|    | Redistribution                  |                     |                       |       |                |                       |                              |       | -58         | -83  |                   |       |      |      |
| 14 | Subtotal                        |                     |                       |       |                |                       |                              |       | 0           | 0    |                   |       |      |      |
| 15 | Duct loads                      |                     |                       |       |                |                       | 25%                          | 45%   | 0           | 0    |                   |       |      |      |
|    | Total room load                 |                     |                       |       |                |                       |                              |       | 0           | 0    |                   |       |      |      |
|    | Air required (cfm)              |                     |                       |       |                |                       |                              |       | 0           | 0    |                   |       |      |      |

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



# Duct System Summary

## Entire House

### Strada Services

Job: Lot 38 1970 C-RHG-NW  
Date: 03/10/2022  
By: RS  
Plan: 1970

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## Project Information

For: Lot 38 Preserve @ Laurel Lake, Adams Homes  
581 SW Bellflower Dr, Lake City, FL 32024

|                                    | Heating                           | Cooling                           |
|------------------------------------|-----------------------------------|-----------------------------------|
| External static pressure           | 0.50 in H <sub>2</sub> O          | 0.50 in H <sub>2</sub> O          |
| Pressure losses                    | 0.16 in H <sub>2</sub> O          | 0.16 in H <sub>2</sub> O          |
| Available static pressure          | 0.34 in H <sub>2</sub> O          | 0.34 in H <sub>2</sub> O          |
| Supply / return available pressure | 0.170 / 0.170 in H <sub>2</sub> O | 0.170 / 0.170 in H <sub>2</sub> O |
| Lowest friction rate               | 0.258 in/100ft                    | 0.258 in/100ft                    |
| Actual air flow                    | 1167 cfm                          | 1167 cfm                          |
| Total effective length (TEL)       | 132 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 1    | h 1616        | 65        | 38        | 0.269     | 5.0       | 0x0        | VIFx      | 26.2           | 100.0           | st2   |
| Bath 2    | h 752         | 30        | 20        | 0.288     | 4.0       | 0x0        | VIFx      | 18.0           | 100.0           | st1   |
| Bed 2     | c 2007        | 82        | 89        | 0.281     | 6.0       | 0x0        | VIFx      | 20.9           | 100.0           | st2   |
| Bed 3     | c 2008        | 88        | 89        | 0.270     | 7.0       | 0x0        | VIFx      | 26.1           | 100.0           | st1   |
| Bed 3-A   | c 2008        | 88        | 89        | 0         | 0         | 0x0        | VIFx      | 0              | 0               |       |
| Fam/Din-E | c 2761        | 121       | 123       | 0.297     | 6.0       | 0x0        | VIFx      | 14.3           | 100.0           | st1   |
| Fam/Din-F | c 2761        | 121       | 123       | 0.262     | 6.0       | 0x0        | VIFx      | 29.6           | 100.0           | st1   |
| Fam/Din-G | c 2761        | 121       | 123       | 0.287     | 6.0       | 0x0        | VIFx      | 18.7           | 100.0           | st1   |
| Kitchen-A | c 2648        | 72        | 118       | 0.258     | 6.0       | 0x0        | VIFx      | 31.9           | 100.0           | st1   |
| Lau-A     | h 1760        | 71        | 68        | 0.263     | 5.0       | 0x0        | VIFx      | 29.3           | 100.0           | st1   |
| Master    | h 3790        | 152       | 138       | 0.263     | 7.0       | 0x0        | VIFx      | 29.4           | 100.0           | st2   |
| Master-B  | h 3790        | 152       | 138       | 0.259     | 7.0       | 0x0        | VIFx      | 31.1           | 100.0           | st2   |
| TO-A      | c 44          | 1         | 2         | 0.278     | 4.0       | 0x0        | VIFx      | 22.4           | 100.0           | st2   |
| Wic-A     | c 176         | 4         | 8         | 0.275     | 4.0       | 0x0        | VIFx      | 23.5           | 100.0           | st2   |

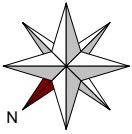
## Supply Trunk Detail Table

| Name | Trunk Type | Htg (cfm) | Clg (cfm) | Design FR | Veloc (fpm) | Diam (in) | H x W (in) | Duct Material | Trunk |
|------|------------|-----------|-----------|-----------|-------------|-----------|------------|---------------|-------|
| st1  | Peak AVF   | 623       | 663       | 0.258     | 620         | 14.0      | 0 x 0      | VinIFlx       |       |
| st2  | Peak AVF   | 456       | 414       | 0.259     | 580         | 12.0      | 0 x 0      | VinIFlx       |       |

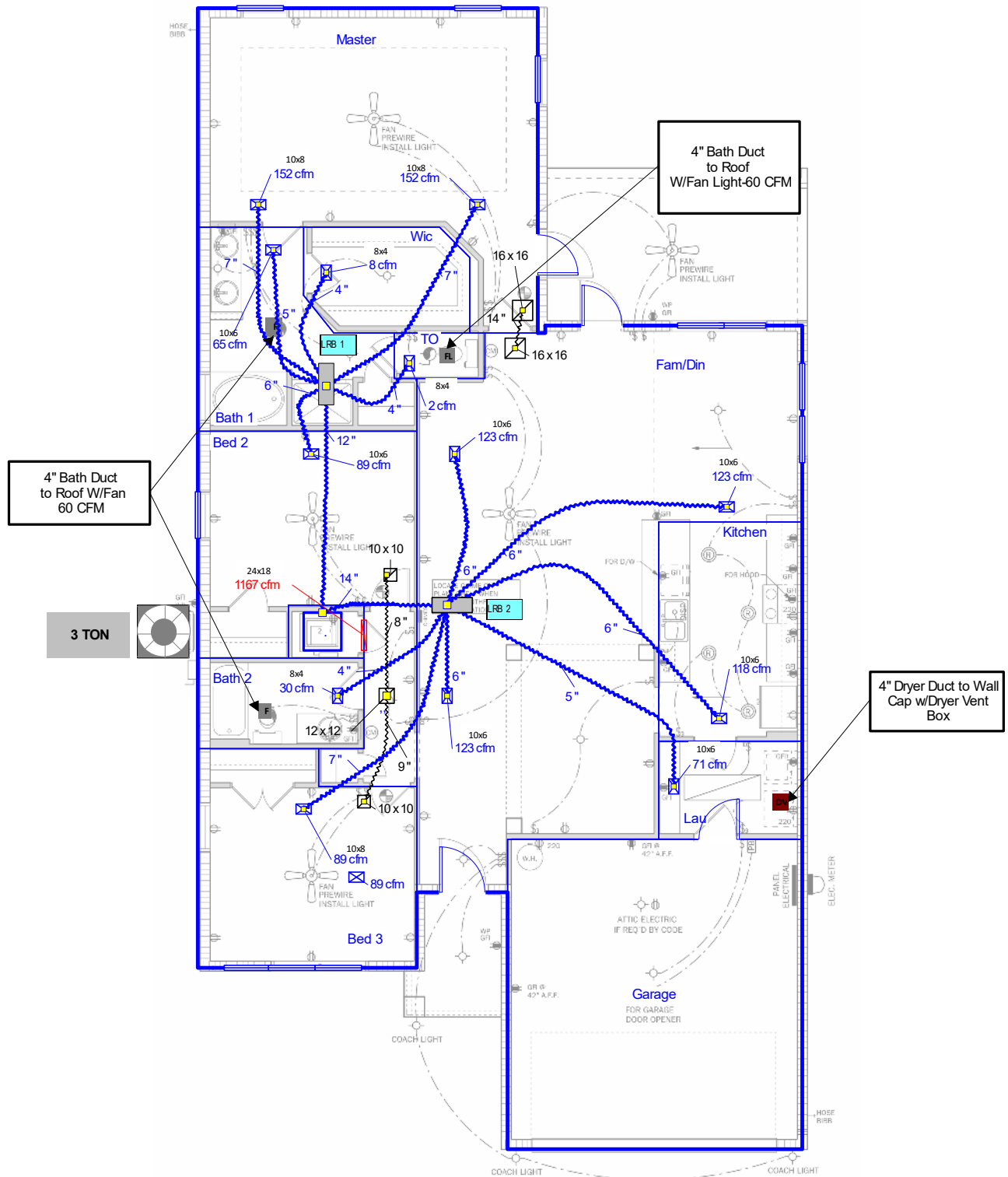


## Return Branch Detail Table

| Name | Grille<br>Size (in) | Htg<br>(cfm) | Clg<br>(cfm) | TEL<br>(ft) | Design<br>FR | Veloc<br>(fpm) | Diam<br>(in) | H x W<br>(in) | Stud/Joist<br>Opening (in) | Duct<br>Matl | Trunk |
|------|---------------------|--------------|--------------|-------------|--------------|----------------|--------------|---------------|----------------------------|--------------|-------|
| rb1  | 0x0                 | 1167         | 1167         | 0           | 0            | 0              | 0            | 0x 0          |                            | VIFx         |       |



# Sheet 1



Job #: Lot 38 1970 C-RHG-NW  
Performed by RS for:  
Lot 38 Preserve @ Laurel Lake  
581 SW Bellflower Dr  
Lake City, FL 32024

## Strada Services

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Scale: 1 : 119

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