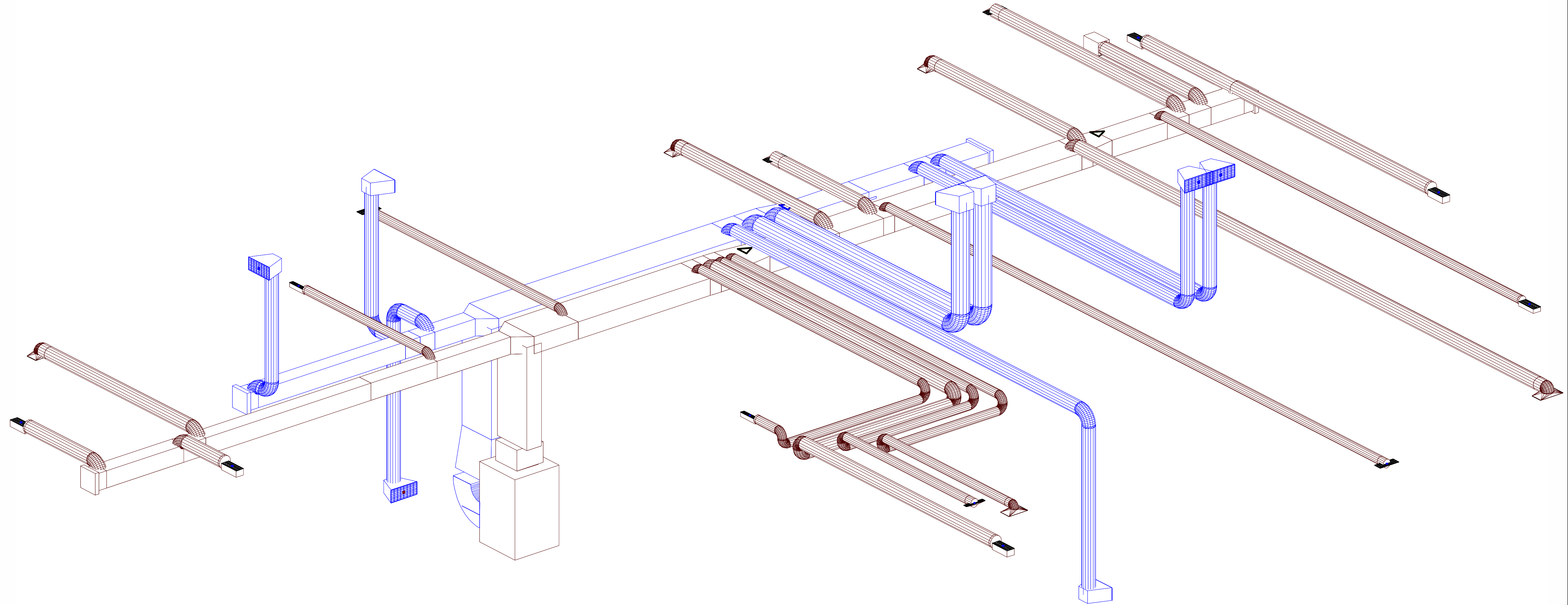


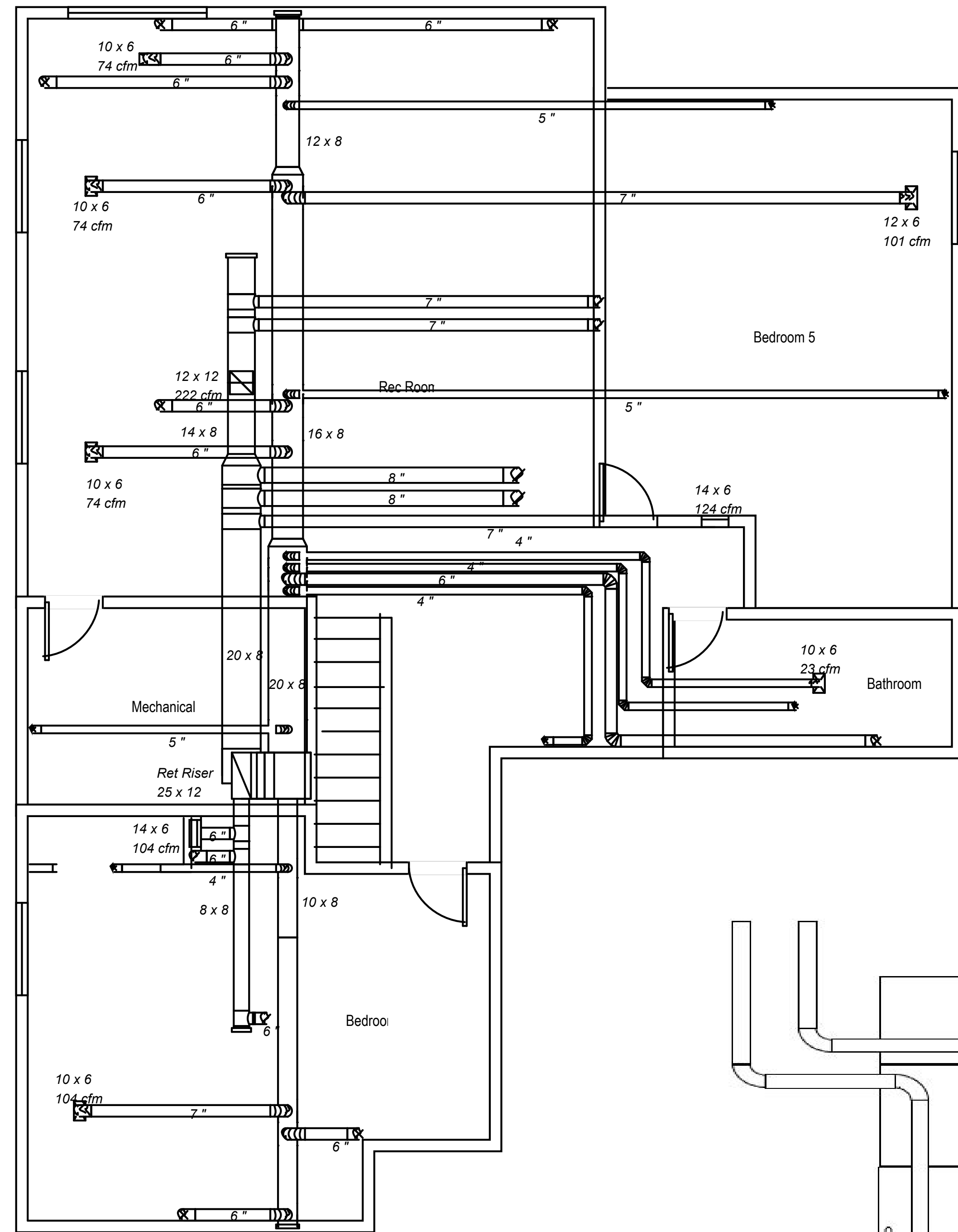
Jackson Contracting Inc.
4341 W. Schilling Street
Severance, Colorado



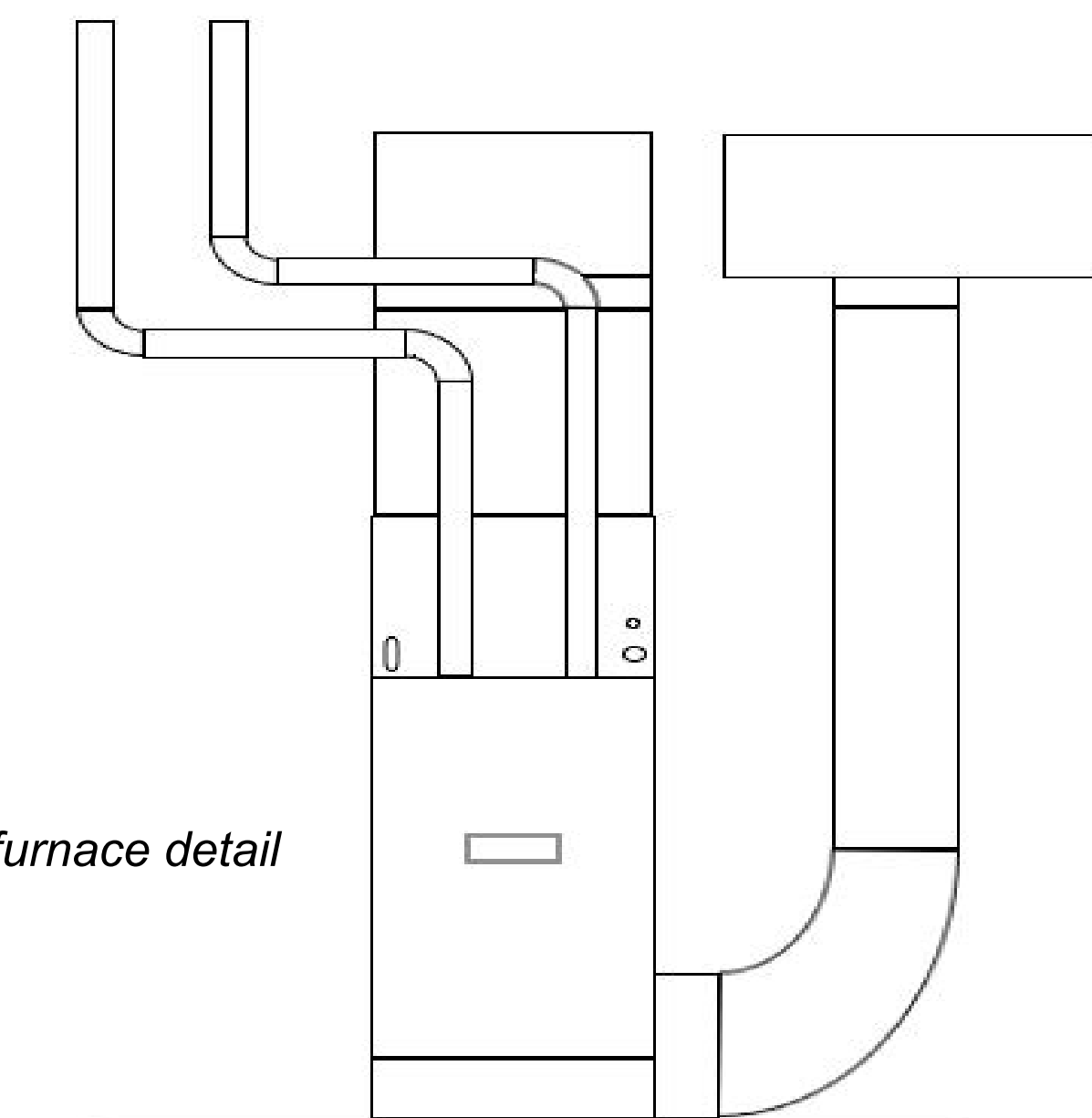
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Basement

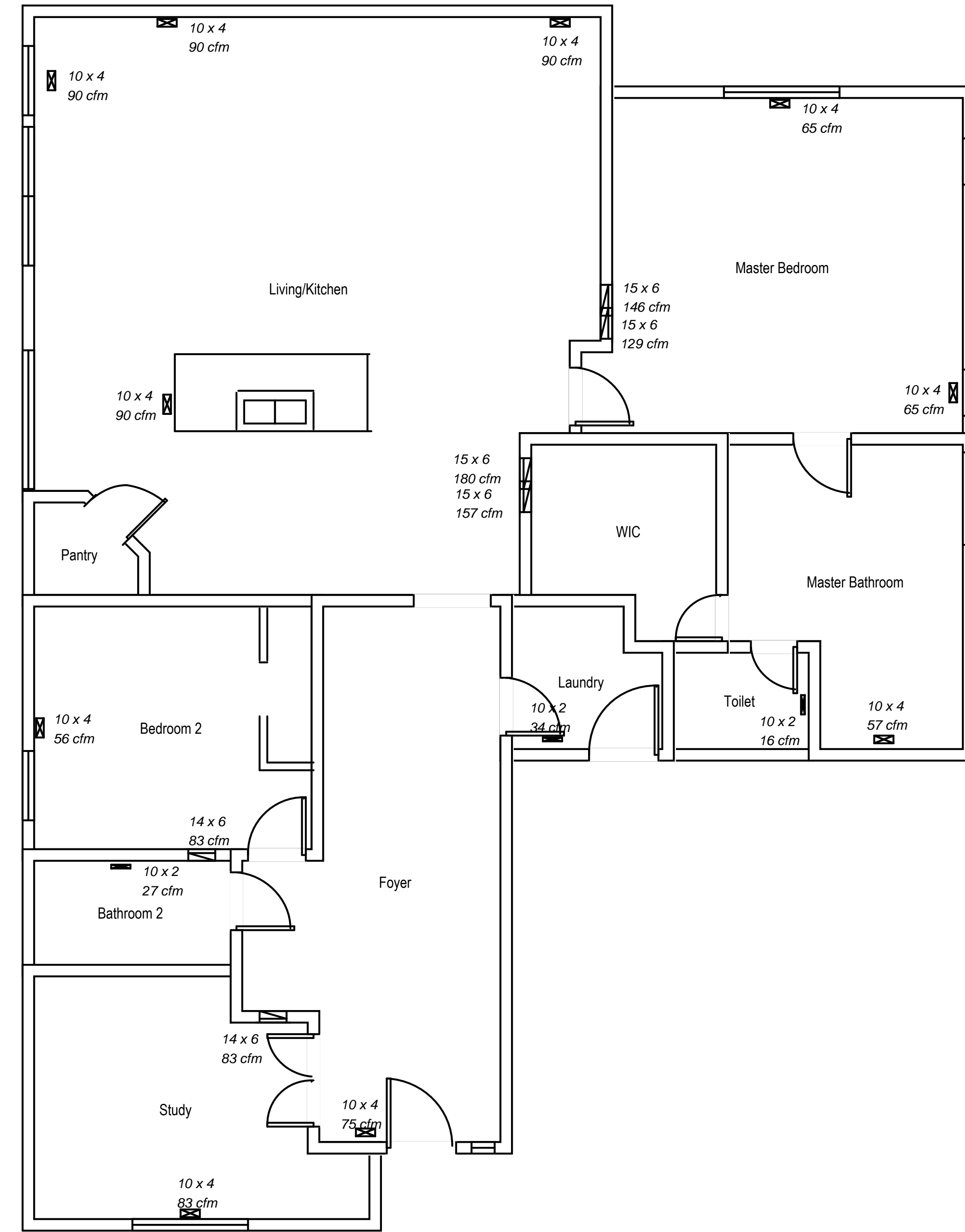


Gas furnace detail



Furnace enn x 193 070 36
 il enn x 35 30 36
 ndenser enn x 13 030

Main Level

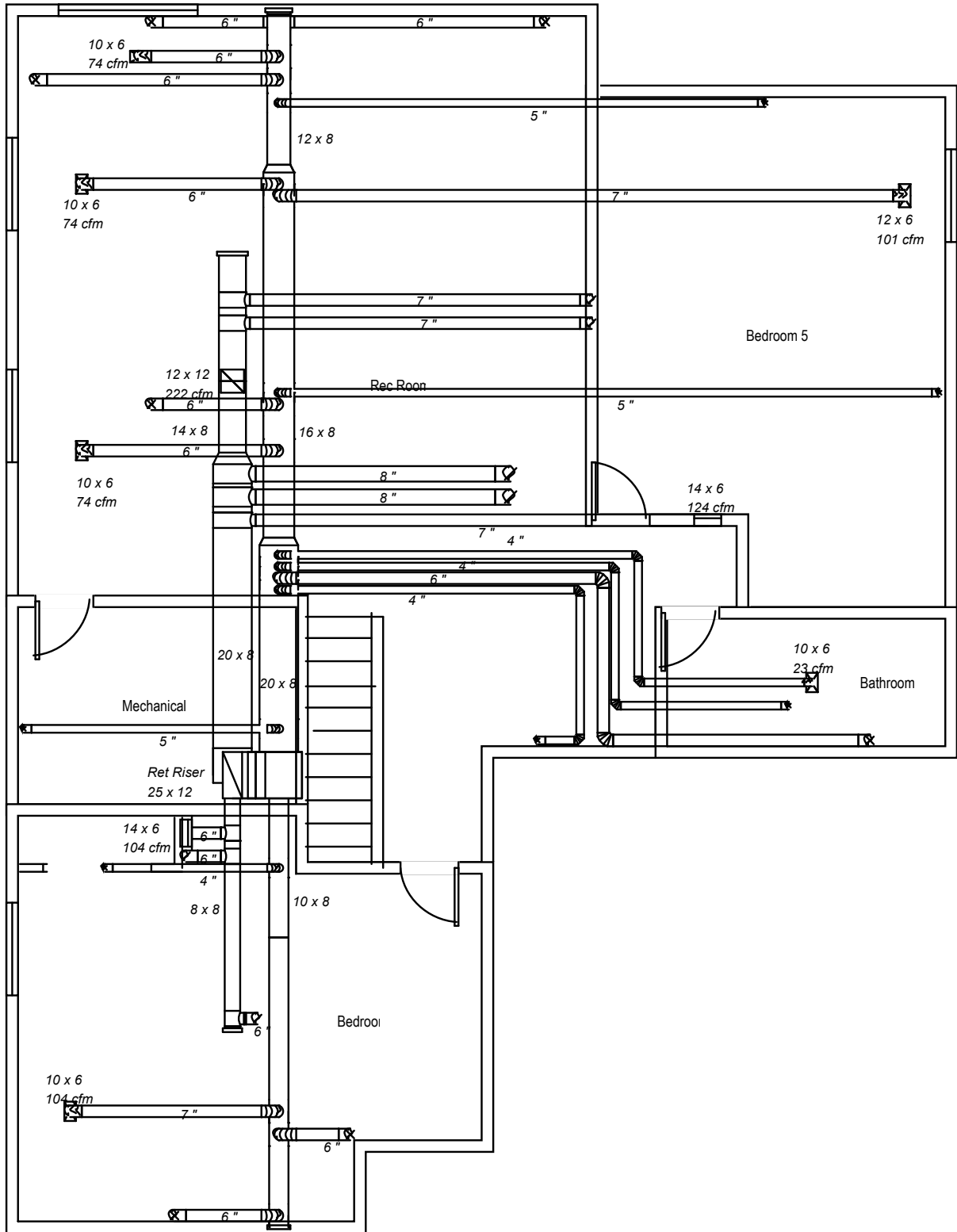


| REVISIONS |
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Basement



Job #: 4341 W. Schilling St.
Performed by Rockview Designs (MM) fo

Jackson Contracting
4341 W. Schilling St.
Severance, Co

Rockview Designs

Scale: 1 : 79

Page 1

Comfort Builder by Wrightsoft

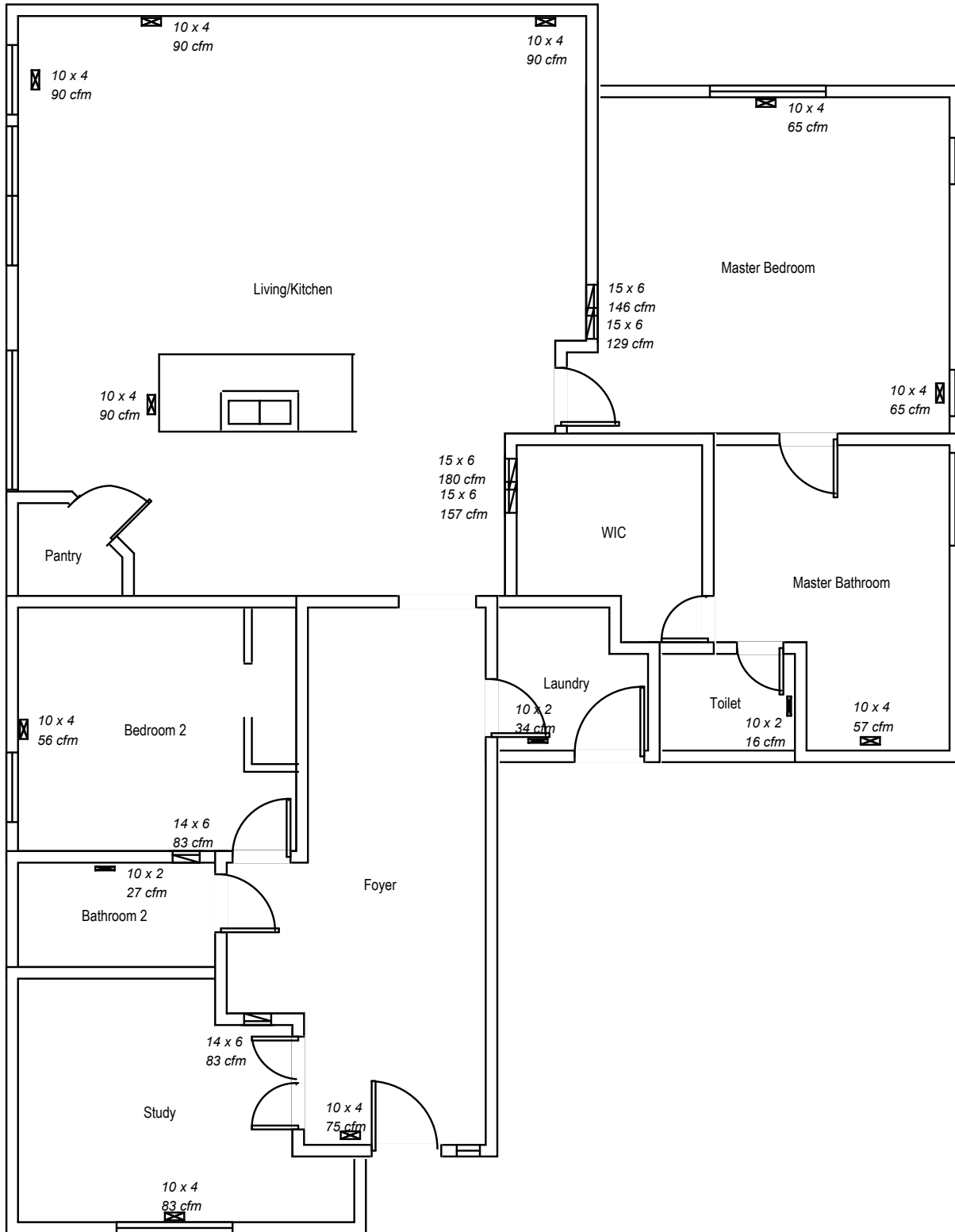
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Main Level



Job #: 4341 W. Schilling St.
Performed by Rockview Designs (MM) fo
Jackson Contracting
4341 W. Schilling St.
Severance, Co

Rockview Designs

Scale: 1 : 79
Page 2
Comfort Builder by Wrightsoft
19.0.15 RSU30090
2020-Apr-12 09:10:05
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GAS FURNACES

ML193UH

MERIT® SERIES

Upflow / Horizontal

PRODUCT SPECIFICATIONS

Bulletin No. 210588

March 2019

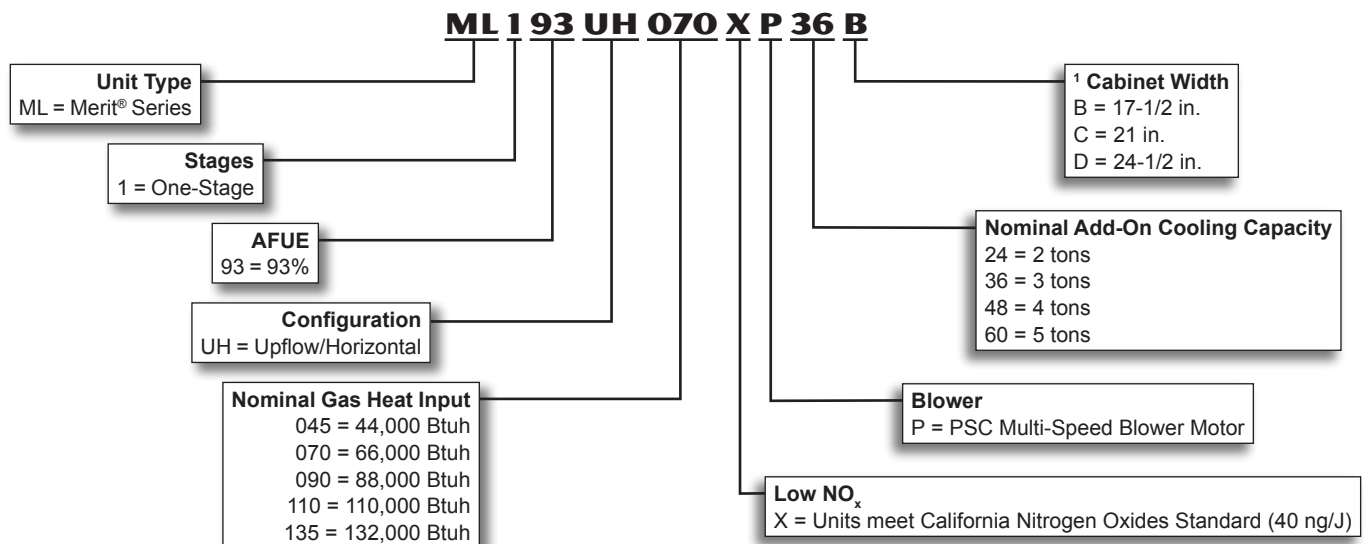
Supersedes September 2018



**MERIT®
SERIES**

AFUE - 93%
Input - 44,000 to 132,000 Btuh
Nominal Add-on Cooling - 2 to 5 Tons

MODEL NUMBER IDENTIFICATION



¹ Indoor coils with the same letter designation will physically match the furnace.

BLOWER DATA

ML193UH045XP24B PERFORMANCE (Less Filter)

| External Static Pressure in. w.g. | Air Volume / Watts at Various Blower Speeds | | | | | | | |
|--------------------------------------|---|-------|-------------|-------|------------|-------|-----|-------|
| | High | | Medium-High | | Medium-Low | | Low | |
| | cfm | Watts | cfm | Watts | cfm | Watts | cfm | Watts |
| 0.00 | 1140 | 455 | 920 | 365 | 765 | 295 | 710 | 265 |
| 0.10 | 1135 | 445 | 900 | 360 | 765 | 290 | 690 | 255 |
| 0.20 | 1125 | 430 | 895 | 350 | 755 | 285 | 680 | 255 |
| 0.30 | 1090 | 415 | 870 | 340 | 725 | 280 | 660 | 250 |
| 0.40 | 1065 | 405 | 870 | 325 | 715 | 270 | 635 | 245 |
| 0.50 | 1020 | 390 | 825 | 315 | 675 | 260 | 605 | 235 |
| 0.60 | 945 | 365 | 780 | 300 | 640 | 250 | 555 | 225 |
| 0.70 | 910 | 350 | 740 | 295 | 585 | 240 | 505 | 220 |
| 0.80 | 790 | 325 | 670 | 275 | 510 | 225 | 455 | 205 |
| 0.90 | 735 | 310 | 575 | 255 | 460 | 220 | 390 | 195 |

ML193UH090XP36C PERFORMANCE (Less Filter)

| External Static Pressure in. w.g. | Air Volume / Watts at Various Blower Speeds | | | | | | | |
|--------------------------------------|---|-------|-------------|-------|------------|-------|-----|-------|
| | High | | Medium-High | | Medium-Low | | Low | |
| | cfm | Watts | cfm | Watts | cfm | Watts | cfm | Watts |
| 0.00 | 1620 | 745 | 1340 | 620 | 1130 | 500 | 965 | 405 |
| 0.10 | 1610 | 720 | 1335 | 595 | 1135 | 490 | 975 | 395 |
| 0.20 | 1565 | 695 | 1335 | 565 | 1145 | 465 | 970 | 385 |
| 0.30 | 1525 | 665 | 1300 | 555 | 1135 | 455 | 970 | 370 |
| 0.40 | 1485 | 635 | 1295 | 520 | 1110 | 435 | 960 | 355 |
| 0.50 | 1431 | 600 | 1260 | 495 | 1090 | 405 | 940 | 345 |
| 0.60 | 1365 | 570 | 1210 | 475 | 1035 | 390 | 900 | 330 |
| 0.70 | 1295 | 535 | 1155 | 445 | 995 | 365 | 860 | 305 |
| 0.80 | 1200 | 505 | 1065 | 415 | 930 | 340 | 745 | 270 |
| 0.90 | 1060 | 460 | 955 | 375 | 820 | 305 | 695 | 260 |

ML193UH045XP36B PERFORMANCE (Less Filter)

| External Static Pressure in. w.g. | Air Volume / Watts at Various Blower Speeds | | | | | | | |
|--------------------------------------|---|-------|-------------|-------|------------|-------|------|-------|
| | High | | Medium-High | | Medium-Low | | Low | |
| | cfm | Watts | cfm | Watts | cfm | Watts | cfm | Watts |
| 0.00 | 1600 | 700 | 1370 | 590 | 1160 | 475 | 1005 | 400 |
| 0.10 | 1600 | 685 | 1355 | 565 | 1155 | 465 | 1015 | 390 |
| 0.20 | 1550 | 650 | 1330 | 540 | 1150 | 445 | 1000 | 380 |
| 0.30 | 1480 | 625 | 1295 | 515 | 1140 | 430 | 975 | 365 |
| 0.40 | 1425 | 590 | 1280 | 490 | 1105 | 415 | 975 | 350 |
| 0.50 | 1355 | 565 | 1190 | 460 | 1085 | 395 | 940 | 335 |
| 0.60 | 1320 | 545 | 1165 | 435 | 1030 | 375 | 900 | 315 |
| 0.70 | 1225 | 500 | 1110 | 425 | 975 | 355 | 855 | 310 |
| 0.80 | 1135 | 480 | 1050 | 395 | 920 | 330 | 780 | 280 |
| 0.90 | 1025 | 445 | 950 | 360 | 800 | 295 | 700 | 255 |

ML193UH090XP48C PERFORMANCE (Less Filter)

| External Static Pressure in. w.g. | Air Volume / Watts at Various Blower Speeds | | | | | | | |
|--------------------------------------|---|-------|-------------|-------|------------|-------|------|-------|
| | High | | Medium-High | | Medium-Low | | Low | |
| | cfm | Watts | cfm | Watts | cfm | Watts | cfm | Watts |
| 0.00 | 2025 | 900 | 1690 | 780 | 1395 | 645 | 1200 | 540 |
| 0.10 | 1995 | 880 | 1705 | 760 | 1390 | 635 | 1205 | 525 |
| 0.20 | 1925 | 835 | 1675 | 715 | 1405 | 605 | 1205 | 505 |
| 0.30 | 1850 | 795 | 1640 | 680 | 1400 | 580 | 1170 | 490 |
| 0.40 | 1790 | 760 | 1575 | 645 | 1395 | 560 | 1170 | 475 |
| 0.50 | 1700 | 725 | 1540 | 625 | 1350 | 535 | 1140 | 450 |
| 0.60 | 1610 | 690 | 1455 | 580 | 1295 | 505 | 1100 | 430 |
| 0.70 | 1540 | 645 | 1365 | 550 | 1225 | 480 | 1030 | 405 |
| 0.80 | 1415 | 615 | 1265 | 510 | 1125 | 445 | 980 | 385 |
| 0.90 | 1270 | 565 | 1165 | 470 | 1060 | 420 | 900 | 350 |

ML193UH070XP24B PERFORMANCE (Less Filter)

| External Static Pressure in. w.g. | Air Volume / Watts at Various Blower Speeds | | | | | | | |
|--------------------------------------|---|-------|-------------|-------|------------|-------|-----|-------|
| | High | | Medium-High | | Medium-Low | | Low | |
| | cfm | Watts | cfm | Watts | cfm | Watts | cfm | Watts |
| 0.00 | 1140 | 455 | 920 | 365 | 765 | 295 | 710 | 265 |
| 0.10 | 1135 | 445 | 900 | 360 | 765 | 290 | 690 | 255 |
| 0.20 | 1125 | 430 | 895 | 350 | 755 | 285 | 680 | 255 |
| 0.30 | 1090 | 415 | 870 | 340 | 725 | 280 | 660 | 250 |
| 0.40 | 1065 | 405 | 870 | 325 | 715 | 270 | 635 | 245 |
| 0.50 | 1020 | 390 | 825 | 315 | 675 | 260 | 605 | 235 |
| 0.60 | 945 | 365 | 780 | 300 | 640 | 250 | 555 | 225 |
| 0.70 | 910 | 350 | 740 | 295 | 585 | 240 | 505 | 220 |
| 0.80 | 790 | 325 | 670 | 275 | 510 | 225 | 455 | 205 |
| 0.90 | 735 | 310 | 575 | 255 | 460 | 220 | 390 | 195 |

ML193UH110XP48C PERFORMANCE (Less Filter)

| External Static Pressure in. w.g. | Air Volume / Watts at Various Blower Speeds | | | | | | | |
|--------------------------------------|---|-------|-------------|-------|------------|-------|------|-------|
| | High | | Medium-High | | Medium-Low | | Low | |
| | cfm | Watts | cfm | Watts | cfm | Watts | cfm | Watts |
| 0.00 | 2030 | 905 | 1750 | 805 | 1425 | 665 | 1225 | 530 |
| 0.10 | 1950 | 865 | 1755 | 770 | 1430 | 630 | 1215 | 515 |
| 0.20 | 1935 | 840 | 1675 | 735 | 1455 | 610 | 1230 | 505 |
| 0.30 | 1885 | 810 | 1660 | 685 | 1410 | 585 | 1200 | 485 |
| 0.40 | 1830 | 780 | 1585 | 645 | 1385 | 570 | 1190 | 470 |
| 0.50 | 1750 | 740 | 1565 | 630 | 1320 | 535 | 1165 | 455 |
| 0.60 | 1660 | 695 | 1485 | 585 | 1280 | 505 | 1105 | 425 |
| 0.70 | 1540 | 665 | 1380 | 555 | 1230 | 485 | 1060 | 405 |
| 0.80 | 1420 | 615 | 1290 | 520 | 1140 | 445 | 945 | 375 |
| 0.90 | 1290 | 575 | 1175 | 470 | 1045 | 410 | 850 | 350 |

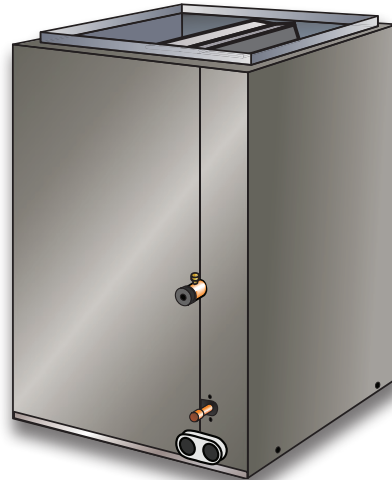
ML193UH070XP36B PERFORMANCE (Less Filter)

| External Static Pressure in. w.g. | Air Volume / Watts at Various Blower Speeds | | | | | | | |
|--------------------------------------|---|-------|-------------|-------|------------|-------|------|-------|
| | High | | Medium-High | | Medium-Low | | Low | |
| | cfm | Watts | cfm | Watts | cfm | Watts | cfm | Watts |
| 0.00 | 1615 | 680 | 1355 | 570 | 1140 | 480 | 1030 | 400 |
| 0.10 | 1565 | 660 | 1365 | 545 | 1150 | 465 | 1020 | 385 |
| 0.20 | 1535 | 630 | 1340 | 525 | 1150 | 440 | 1025 | 375 |
| 0.30 | 1440 | 600 | 1300 | 500 | 1110 | 420 | 1000 | 350 |
| 0.40 | 1405 | 570 | 1255 | 470 | 1075 | 400 | 975 | 345 |
| 0.50 | 1340 | 535 | 1200 | 445 | 1045 | 380 | 945 | 330 |
| 0.60 | 1255 | 500 | 1125 | 420 | 995 | 355 | 875 | 310 |
| 0.70 | 1165 | 475 | 1080 | 395 | 935 | 335 | 820 | 290 |
| 0.80 | 1060 | 455 | 990 | 365 | 870 | 315 | 750 | 265 |
| 0.90 | 955 | 425 | 895 | 345 | 750 | 285 | 660 | 245 |



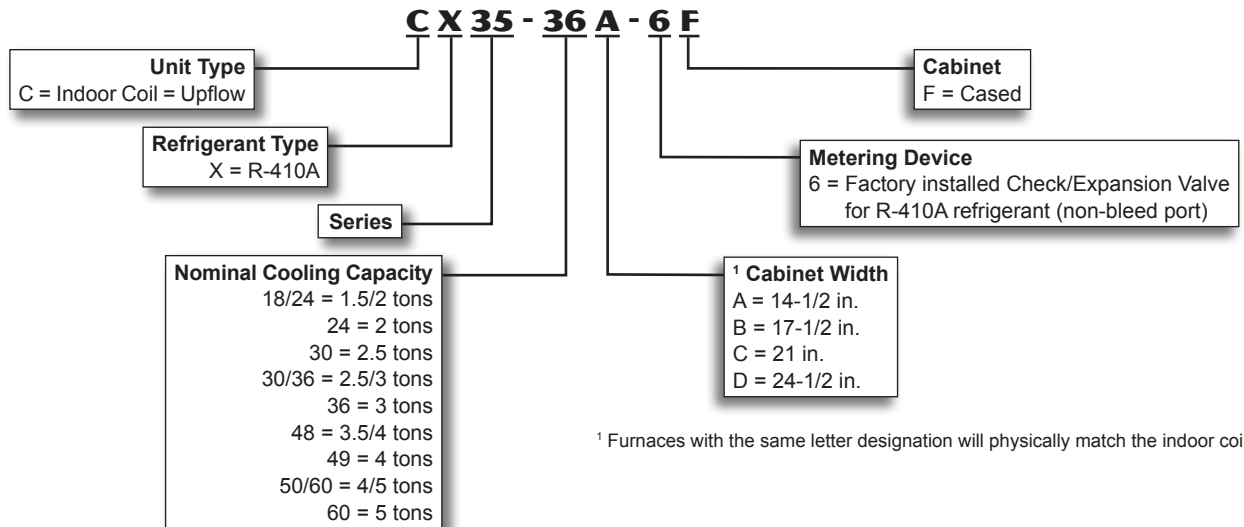
PRODUCT SPECIFICATIONS

Bulletin No. 210668
November 2016
Supersedes September 2015



1.5 to 5 Tons

MODEL NUMBER IDENTIFICATION



¹ Furnaces with the same letter designation will physically match the indoor coil.

FEATURES

CONTENTS

Air Resistance..... 4

CX34 To CX35 Cross-Reference..... 8

Dimensions..... 5

Features..... 1

Model Number Identification..... 1

Specifications..... 2

WARRANTY

All Covered Components - Limited warranty for five years in residential applications, one year warranty in non-residential applications.
Refer to Lennox Equipment Limited Warranty certificate included with equipment for details.

APPLICATIONS

Lennox designed upflow cased indoor coils can easily be installed with most Lennox upflow furnaces.
Factory installed R-410A, check/expansion valve.
See Product Specifications in section Air Conditioners or Heat Pump Outdoor Units for indoor coil applications and cooling capacities.

TESTING

Tested with matching air conditioners and heat pump units.
Rated in accordance with AHRI Standard 210/240-2008 conditions and DOE test procedures.
Air resistance tests from Lennox Laboratory air test chamber.

AIR RESISTANCE

| Model No. | Air Volume cfm | Total Resistance | |
|---|-------------------|------------------|----------|
| | | Dry Coil | Wet Coil |
| | | in. w.g. | in. w.g. |
| CX35-18/24A-6F CX35-18/24B-6F | 400 | 0.06 | 0.08 |
| | 600 | 0.11 | 0.17 |
| | 800 | 0.18 | 0.25 |
| | 1000 | 0.27 | 0.39 |
| | 1200 | 0.37 | 0.52 |
| CX35-24A-6F | 400 | 0.05 | 0.05 |
| | 600 | 0.09 | 0.10 |
| | 800 | 0.16 | 0.18 |
| | 1000 | 0.23 | 0.26 |
| | 1200 | 0.32 | 0.36 |
| CX35-24B-6F | 400 | 0.03 | 0.04 |
| | 600 | 0.07 | 0.09 |
| | 800 | 0.11 | 0.15 |
| | 1000 | 0.17 | 0.22 |
| | 1200 | 0.23 | 0.31 |
| CX35-30A-6F | 600 | 0.07 | 0.08 |
| | 800 | 0.12 | 0.13 |
| | 1000 | 0.18 | 0.20 |
| | 1200 | 0.26 | 0.28 |
| | 1400 | 0.34 | 0.37 |
| CX35-30B-6F | 600 | 0.06 | 0.06 |
| | 800 | 0.09 | 0.11 |
| | 1000 | 0.13 | 0.16 |
| | 1200 | 0.19 | 0.23 |
| | 1400 | 0.25 | 0.31 |
| CX35-30/36A-6F | 800 | 0.13 | 0.14 |
| | 1000 | 0.19 | 0.21 |
| | 1200 | 0.27 | 0.30 |
| | 1400 | 0.34 | 0.39 |
| | 1600 | 0.45 | 0.51 |
| CX35-30/36B-6F CX35-30/36C-6F CX35-36B-6F | 800 | 0.08 | 0.11 |
| | 1000 | 0.13 | 0.16 |
| | 1200 | 0.17 | 0.21 |
| | 1400 | 0.22 | 0.28 |
| | 1600 | 0.29 | 0.34 |

| Model No. | Air Volume cfm | Total Resistance | |
|----------------|-------------------|------------------|----------|
| | | Dry Coil | Wet Coil |
| | | in. w.g. | in. w.g. |
| CX35-36A-6F | 800 | 0.13 | 0.14 |
| | 1000 | 0.19 | 0.21 |
| | 1200 | 0.27 | 0.30 |
| | 1400 | 0.34 | 0.39 |
| | 1600 | 0.45 | 0.51 |
| CX35-48B-6F | 1000 | 0.13 | 0.13 |
| | 1200 | 0.18 | 0.18 |
| | 1400 | 0.23 | 0.24 |
| | 1600 | 0.30 | 0.31 |
| | 1800 | 0.37 | 0.40 |
| CX35-48C-6F | 1000 | 0.07 | 0.09 |
| | 1200 | 0.10 | 0.12 |
| | 1400 | 0.13 | 0.16 |
| | 1600 | 0.16 | 0.20 |
| | 1800 | 0.20 | 0.24 |
| CX35-49C-6F | 1200 | 0.08 | 0.12 |
| | 1400 | 0.13 | 0.17 |
| | 1600 | 0.17 | 0.22 |
| | 1800 | 0.22 | 0.28 |
| | 2000 | 0.28 | 0.35 |
| CX35-50/60C-6F | 1200 | 0.13 | 0.17 |
| | 1400 | 0.18 | 0.23 |
| | 1600 | 0.23 | 0.29 |
| | 1800 | 0.28 | 0.37 |
| | 2000 | 0.34 | 0.43 |
| CX35-60D-6F | 1400 | 0.11 | 0.15 |
| | 1600 | 0.14 | 0.18 |
| | 1800 | 0.17 | 0.21 |
| | 2000 | 0.21 | 0.27 |
| | 2200 | 0.25 | 0.32 |
| | 2400 | 0.30 | 0.37 |
| CX35-60C-6F | 1400 | 0.15 | 0.19 |
| | 1600 | 0.19 | 0.23 |
| | 1800 | 0.24 | 0.28 |
| | 2000 | 0.29 | 0.34 |
| | 2200 | 0.33 | 0.40 |
| | 2400 | 0.39 | 0.46 |



PRODUCT SPECIFICATIONS

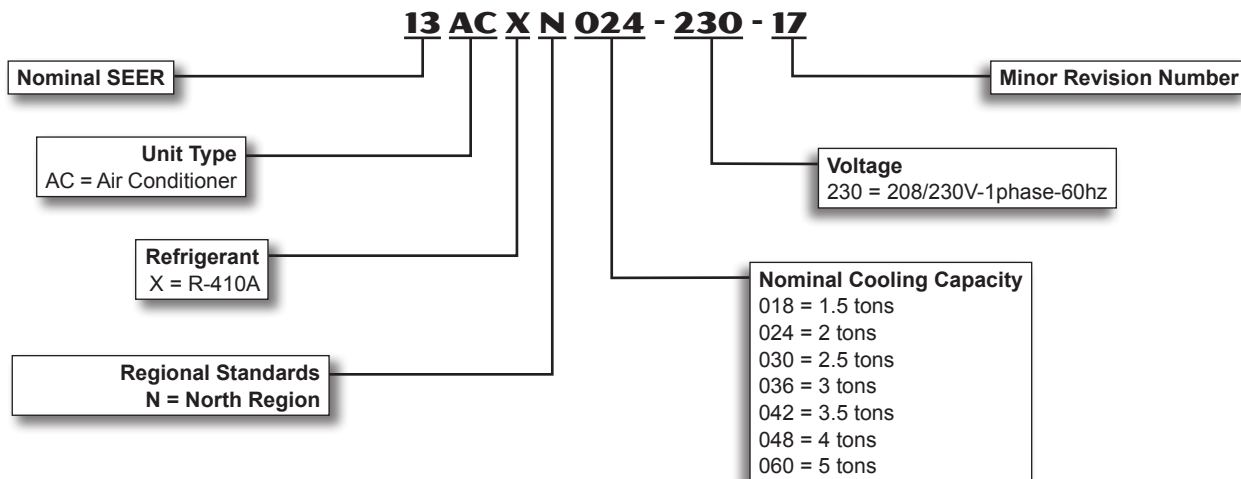
Bulletin No. 210739
 November 2017
 Supersedes August 2017



MERIT®
 SERIES

SEER up to 15.50
1.5 to 5 Tons
Cooling Capacity - 17,500 to 59,000 Btuh

MODEL NUMBER IDENTIFICATION





Project Summary
Entire House
Rockview Designs

Job: 4341 W. Schilling St.
 Date: Mar 15, 2020
 By: Rockview Designs (MM)

Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Notes:

Design Information

Weather: Severance, Co

Winter Design Conditions

Outside db 1 °F
 Inside db 72 °F
 Design TD 71 °F

Summer Design Conditions

Outside db 91 °F
 Inside db 75 °F
 Design TD 16 °F
 Daily range H
 Relative humidity 50 %
 Moisture difference -19 gr/lb

Heating Summary

Structure 30197 Btuh
 Ducts 0 Btuh
 Central vent (78 cfm) 5064 Btuh
 Outside air
 Humidification 3969 Btuh
 Piping 0 Btuh
 Equipment load 39230 Btuh

Sensible Cooling Equipment Load Sizing

Structure 20360 Btuh
 Ducts 0 Btuh
 Central vent (78 cfm) 1141 Btuh
 Outside air
 Blower 0 Btuh
 Use manufacturer's data y
 Rate/swing multiplier 1.00
 Equipment sensible load 21501 Btuh

Infiltration

Method Simplified
 Construction quality Semi-tight
 Fireplaces 0

Latent Cooling Equipment Load Sizing

Structure 825 Btuh
 Ducts 0 Btuh
 Central vent (78 cfm) -839 Btuh
 Outside air
 Equipment latent load 0 Btuh

| | Heating | Cooling |
|---------------------------|---------|---------|
| Area (ft ²) | 3297 | 3297 |
| Volume (ft ³) | 20902 | 20902 |
| Air changes/hour | 0.19 | 0.10 |
| Equip. AVF (cfm) | 66 | 35 |

Equipment Total Load (Sen+Lat) 21501 Btuh
 Req. total capacity at 1.00 SHR 1.8 ton

Heating Equipment Summary

Make Lennox
 Trade LENNOX
 Model ML193UH070XP36B-
 AHRI ref

Efficiency 93 AFUE
 Heating input 66000 Btuh
 Heating output 54628 Btuh
 Temperature rise 55 °F
 Actual air flow 1080 cfm
 Air flow factor 0.036 cfm/Btuh
 Static pressure 0.70 in H2O
 Space thermostat

Cooling Equipment Summary

Make Lennox
 Trade LENNOX
 Cond 13ACXN030-230-
 Coil CX35-30/36B
 AHRI ref

Efficiency 12.0 EER, 14.5 SEER
 Sensible cooling 27520 Btuh
 Latent cooling 0 Btuh
 Total cooling 27520 Btuh
 Actual air flow 1060 cfm
 Air flow factor 0.052 cfm/Btuh
 Static pressure 0.80 in H2O
 Load sensible heat ratio 1.00

Bold/italic values have been manually overridden

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



Project Information

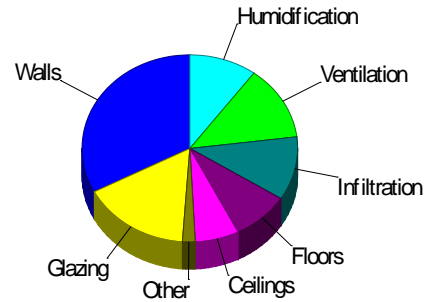
For: Jackson Contracting
4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | |
|--|---------------------------------------|---|-------------------------------|-------------------------|
| Location: Severance, Co Elevation: 5016 ft Latitude: 40°N | | Indoor: Indoor temperature (°F) Design TD (°F) Relative humidity (%) Moisture difference (gr/lb) | Heating | Cooling |
| Outdoor: Drybulb (°F) Daily range (°F) Wet bulb (°F) Wind speed (mph) | Heating 1 - - 15.0 | Cooling 91 28 (H) 63 7.5 | 72 71 30 36.5 | 75 16 50 -19.0 |
| | | Infiltration: Method Construction quality Fireplaces | Simplified Semi-tight 0 | |

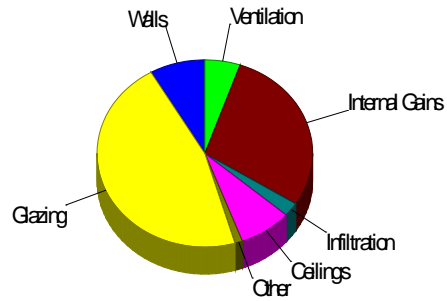
Heating

| Component | Btuh/ft² | Btuh | % of load |
|----------------|----------|--------------|--------------|
| Walls | 4.3 | 12814 | 32.7 |
| Glazing | 21.3 | 6369 | 16.2 |
| Doors | 17.8 | 746 | 1.9 |
| Ceilings | 1.6 | 2585 | 6.6 |
| Floors | 2.0 | 3385 | 8.6 |
| Infiltration | 1.9 | 4299 | 11.0 |
| Ducts | | 0 | 0 |
| Piping | | 0 | 0 |
| Humidification | | 3969 | 10.1 |
| Ventilation | | 5064 | 12.9 |
| Adjustments | | 0 | 0 |
| Total | | 39230 | 100.0 |



Cooling

| Component | Btuh/ft² | Btuh | % of load |
|----------------|----------|--------------|--------------|
| Walls | 0.6 | 1790 | 8.3 |
| Glazing | 33.2 | 9932 | 46.2 |
| Doors | 5.8 | 245 | 1.1 |
| Ceilings | 1.0 | 1704 | 7.9 |
| Floors | 0 | 0 | 0 |
| Infiltration | 0.2 | 510 | 2.4 |
| Ducts | | 0 | 0 |
| Ventilation | | 1141 | 5.3 |
| Internal gains | | 6180 | 28.7 |
| Blower | | 0 | 0 |
| Adjustments | | 0 | 0 |
| Total | | 21501 | 100.0 |



Latent Cooling Load = 0 Btuh
Overall U-value = 0.054 Btuh/ft²-°F

ERROR: negative wall area in Bedroom 5 - check windows.

Bold/italic values have been manually overridden



Right-J® Worksheet
Entire House
Rockview Designs

Job: 4341 W. Schilling St.
Date: Mar 15, 2020
By: Rockview Designs (MM)

| 1 | | Room name | | Entire House | | | | Master Bedroom | | | | | | |
|----|--------------------------|---------------------|-----------------------|--------------|----------------|-------|------------------------------|----------------|-------------|-------|------------------------------|-------|-------------|------|
| 2 | | Exposed wall | | 372.3 ft | | | | 30.7 ft | | | | | | |
| 3 | | Room height | | 9.0 ft | | | | 9.0 ft | | | | | | |
| 4 | | Room dimensions | | p | | | | 1.0 x 240.3 ft | | | | | | |
| 5 | | Room area | | 3297.4 ft² | | | | 240.3 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 | 15B15-0wc-8 | 0.088 | ne | 3.66 | 0.07 | 185 | 185 | 675 | 13 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | ne | 3.07 | 0.06 | 180 | 180 | 552 | 10 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | ne | 4.83 | 0.97 | 366 | 297 | 1434 | 287 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | ne | 21.30 | 24.61 | 27 | 0 | 575 | 664 | 0 | 0 | 0 | 0 |
| 11 | D | DftDoor | 0.250 | ne | 17.75 | 5.82 | 42 | 42 | 746 | 245 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | se | 4.83 | 0.97 | 0 | -32 | -154 | -31 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 32 | 0 | 682 | 964 | 0 | 0 | 0 | 0 |
| | W | 15B15-0wc-8 | 0.088 | se | 3.38 | 0.01 | 162 | 146 | 493 | 1 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 16 | 0 | 341 | 482 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | se | 3.07 | 0.06 | 230 | 230 | 704 | 13 | 0 | 0 | 0 | 0 |
| | W | Basement Wall R-11 | 0.099 | se | 7.03 | 0.81 | 81 | 81 | 569 | 66 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | se | 4.83 | 0.97 | 473 | 356 | 1716 | 343 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 117 | 0 | 2492 | 3524 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | sw | 4.83 | 0.97 | 365 | 323 | 1557 | 311 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 42 | 0 | 895 | 1265 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | sw | 4.83 | 0.97 | 366 | 341 | 1646 | 329 | 141 | 116 | 560 | 112 |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 25 | 0 | 533 | 753 | 25 | 0 | 533 | 753 |
| | W | 12E-0sw | 0.068 | nw | 4.83 | 0.97 | 0 | -16 | -77 | -15 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 16 | 0 | 341 | 394 | 0 | 0 | 0 | 0 |
| | W | 15B15-0wc-8 | 0.088 | nw | 3.66 | 0.07 | 140 | 140 | 511 | 10 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | nw | 3.07 | 0.06 | 333 | 333 | 1022 | 19 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | nw | 4.83 | 0.97 | 473 | 449 | 2165 | 433 | 135 | 119 | 575 | 115 |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 24 | 0 | 511 | 591 | 16 | 0 | 341 | 394 |
| | C | R49 Attic | 0.022 | - | 1.56 | 1.03 | 1655 | 1655 | 2585 | 1704 | 240 | 240 | 375 | 247 |
| | F | 21A-32c | 0.020 | - | 1.42 | 0.00 | 517 | 517 | 734 | 0 | 0 | 0 | 0 | 0 |
| | F | 21A-32t | 0.020 | - | 1.42 | 0.00 | 12 | 12 | 17 | 0 | 3 | 3 | 4 | 0 |
| | F | 22B-10cpm | 0.355 | - | 25.20 | 0.00 | 1126 | 105 | 2634 | 0 | 0 | 0 | 0 | 0 |
| 6 | c) AED excursion | | | | | | | | | 1296 | | | | 327 |
| | Envelope loss/gain | | | | | | | | 25898 | 13670 | | | 2387 | 1948 |
| 12 | a) Infiltration | | | | | | | | 4299 | 510 | | | 525 | 62 |
| | b) Room ventilation | | | | | | | | 0 | 0 | | | 0 | 0 |
| 13 | Internal gains: | | Occupants @ | 230 | | 6 | | | | 1380 | 2 | | | 460 |
| | | | Appliances/other | | | | | | | 4800 | | | | 0 |
| | Subtotal (lines 6 to 13) | | | | | | | | 30197 | 20360 | | | 2912 | 2471 |
| | Less external load | | | | | | | | 0 | 0 | | | 0 | 0 |
| | Less transfer | | | | | | | | 0 | 0 | | | 0 | 0 |
| | Redistribution | | | | | | | | 0 | 0 | | | 19 | 11 |
| 14 | Subtotal | | | | | | | | 30197 | 20360 | | | 2931 | 2481 |
| 15 | Duct loads | | | | | | | | 0 | 0 | -0% | 0% | 0 | 0 |
| | Total room load | | | | | | | | 30197 | 20360 | | | 2931 | 2481 |
| | Air required (cfm) | | | | | | | | 1080 | 1060 | | | 105 | 129 |

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



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Page 1



Right-J® Worksheet
Entire House
Rockview Designs

Job: 4341 W. Schilling St.
Date: Mar 15, 2020
By: Rockview Designs (MM)

| 1 | | Room name | | Living/Kitchen 49.4 ft | | | | Pantry 4.5 ft | | | | | | |
|----|--------------------------|---------------------|-----------------------|---------------------------|----------------|-------|------------------------------|------------------|-------------|------|------------------------------|-------|-------------|------|
| 2 | | Exposed wall | | 9.0 ft heat/cool | | | | 9.0 ft heat/cool | | | | | | |
| 3 | | Room height | | 1.0 x 588.3 ft | | | | 1.0 x 19.4 ft | | | | | | |
| 4 | | Room dimensions | | 588.3 ft² | | | | 19.4 ft² | | | | | | |
| 5 | | Room area | | | | | | | | | | | | |
| | 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 | 15B15-0wc-8 | 0.088 | ne | 3.66 | 0.07 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | ne | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | ne | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | ne | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | D | DftDoor | 0.250 | ne | 17.75 | 5.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | se | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B15-0wc-8 | 0.088 | se | 3.38 | 0.01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | se | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | Basement Wall R-11 | 0.099 | se | 7.03 | 0.81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | se | 4.83 | 0.97 | 189 | 87 | 420 | 84 | 41 | 41 | 196 | 39 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 102 | 0 | 2173 | 3072 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | sw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | sw | 4.83 | 0.97 | 225 | 225 | 1086 | 217 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | nw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B15-0wc-8 | 0.088 | nw | 3.66 | 0.07 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | nw | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | nw | 4.83 | 0.97 | 32 | 32 | 152 | 30 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | C | R49 Attic | 0.022 | - | 1.56 | 1.03 | 588 | 588 | 919 | 606 | 19 | 19 | 30 | 20 |
| | F | 21A-32c | 0.020 | - | 1.42 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | F | 21A-32t | 0.020 | - | 1.42 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | F | 22B-10cpm | 0.355 | - | 25.20 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | c) AED excursion | | | | | | | | | 847 | | | | -9 |
| | Envelope loss/gain | | | | | | | | 4750 | 4857 | | | 226 | 50 |
| 12 | a) Infiltration | | | | | | | | 848 | 101 | | | 77 | 9 |
| | b) Room ventilation | | | | | | | | 0 | 0 | | | 0 | 0 |
| 13 | Internal gains: | | Occupants @ | 230 | | | 0 | | | 0 | 0 | | | 0 |
| | | | Appliances/other | | | | | | | 1900 | | | | 0 |
| | Subtotal (lines 6 to 13) | | | | | | | | 5598 | 6857 | | | 303 | 60 |
| | Less external load | | | | | | | | 0 | 0 | | | 0 | 0 |
| | Less transfer | | | | | | | | 0 | 0 | | | 0 | 0 |
| | Redistribution | | | | | | | | 214 | 53 | | | -303 | -60 |
| 14 | Subtotal | | | | | | | | 5812 | 6910 | | | 0 | 0 |
| 15 | Duct loads | | | | | | | | -0% | 0% | | | 0 | 0 |
| | Total room load | | | | | | | | 5812 | 6910 | | | 0 | 0 |
| | Air required (cfm) | | | | | | | | 208 | 360 | | | 0 | 0 |

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



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Right-J® Worksheet
Entire House
Rockview Designs

Job: 4341 W. Schilling St.
Date: Mar 15, 2020
By: Rockview Designs (MM)

| 1 Room name | | | | Toilet | | Master Bathroom | | | | | | | | |
|-------------------|--------------------------|---------------------|-----------------------|--------------|----------------|-----------------|------------------------------|-------|-------------|------|------------------------------|-------|-------------|------|
| 2 Exposed wall | | | | 6.3 ft | | 20.3 ft | | | | | | | | |
| 3 Room height | | | | 9.0 ft | | 9.0 ft | | | | | | | | |
| 4 Room dimensions | | | | 6.3 x 4.7 ft | | 1.0 x 127.1 ft | | | | | | | | |
| 5 Room area | | | | 29.6 ft² | | 127.1 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 | 15B15-0wc-8 | 0.088 | ne | 3.66 | 0.07 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | ne | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | ne | 4.83 | 0.97 | 57 | 57 | 275 | 55 | 60 | 60 | 290 | 58 |
| | G | Low E 2012 | 0.300 | ne | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | D | DftDoor | 0.250 | ne | 17.75 | 5.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | se | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B15-0wc-8 | 0.088 | se | 3.38 | 0.01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | se | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | Basement Wall R-11 | 0.099 | se | 7.03 | 0.81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | se | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | sw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | sw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | nw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B15-0wc-8 | 0.088 | nw | 3.66 | 0.07 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | nw | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | nw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 123 | 115 | 555 | 111 |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 8 | 0 | 170 | 197 |
| | C | R49 Attic | 0.022 | - | 1.56 | 1.03 | 30 | 30 | 46 | 30 | 127 | 127 | 199 | 131 |
| | F | 21A-32c | 0.020 | - | 1.42 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | F | 21A-32t | 0.020 | - | 1.42 | 0.00 | 1 | 1 | 1 | 0 | 3 | 3 | 5 | 0 |
| | F | 22B-10cpm | 0.355 | - | 25.20 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | c) AED excursion | | | | | | | | | | | | | -59 |
| | Envelope loss/gain | | | | | | | | 323 | 73 | | | 1219 | 438 |
| 12 | a) Infiltration | | | | | | | | 108 | 13 | | | 348 | 41 |
| | b) Room ventilation | | | | | | | | 0 | 0 | | | 0 | 0 |
| 13 | Internal gains: | | Occupants @ | 230 | | | 0 | | 0 | 0 | | | 0 | 0 |
| | | | Appliances/other | | | | | | 0 | 0 | | | 500 | |
| | Subtotal (lines 6 to 13) | | | | | | | | 431 | 86 | | | 1567 | 979 |
| | Less external load | | | | | | | | 0 | 0 | | | 0 | 0 |
| | Less transfer | | | | | | | | 0 | 0 | | | 0 | 0 |
| | Redistribution | | | | | | | | 7 | 4 | | | 27 | 16 |
| 14 | Subtotal | | | | | | | | 438 | 90 | | | 1594 | 995 |
| 15 | Duct loads | | | | | | | | 0 | 0 | | | 0 | 0 |
| | Total room load | | | | | | | | 438 | 90 | | | 1594 | 995 |
| | Air required (cfm) | | | | | | | | 16 | 5 | | | 57 | 52 |

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



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Right-J® Worksheet
Entire House
Rockview Designs

Job: 4341 W. Schilling St.
Date: Mar 15, 2020
By: Rockview Designs (MM)

| 1 Room name | | | | WIC 0 ft | | | | Laundry 7.0 ft | | | | | | |
|-------------------|--------------------------|---------------------|------------------------------------|--------------------------------|-----------------------------|-------|---|--------------------------------|-------------|------|---|-------|-------------|------|
| 2 Exposed wall | | | | 9.0 ft 1.0 x 67.5 ft heat/cool | | | | 9.0 ft 1.0 x 43.3 ft heat/cool | | | | | | |
| 3 Room height | | | | 67.5 ft ² | | | | 43.3 ft ² | | | | | | |
| 4 Room dimensions | | | | | | | | | | | | | | |
| 5 Room area | | | | | | | | | | | | | | |
| | Ty | Construction number | U-value (Btuh/ft ² -°F) | Or | HTM (Btuh/ft ²) | | Area (ft ²) or perimeter (ft) | | Load (Btuh) | | Area (ft ²) or perimeter (ft) | | Load (Btuh) | |
| | | | | | Heat | Cool | Gross | N/P/S | Heat | Cool | Gross | N/P/S | Heat | Cool |
| 6 | W | 15B15-0wc-8 | 0.088 | ne | 3.66 | 0.07 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | ne | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | ne | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 63 | 42 | 203 | 41 |
| | G | Low E 2012 | 0.300 | ne | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | D | DftDoor | 0.250 | ne | 17.75 | 5.82 | 0 | 0 | 0 | 0 | 21 | 21 | 373 | 122 |
| | W | 12E-0sw | 0.068 | se | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B15-0wc-8 | 0.088 | se | 3.38 | 0.01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | se | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | Basement Wall R-11 | 0.099 | se | 7.03 | 0.81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | se | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | sw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | sw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | nw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B15-0wc-8 | 0.088 | nw | 3.66 | 0.07 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | nw | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | nw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | C | R49 Attic | 0.022 | - | 1.56 | 1.03 | 68 | 68 | 105 | 69 | 43 | 43 | 68 | 45 |
| | F | 21A-32c | 0.020 | - | 1.42 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | F | 21A-32t | 0.020 | - | 1.42 | 0.00 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 |
| | F | 22B-10cpm | 0.355 | - | 25.20 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | c) AED excursion | | | | | | | | | | | | | -92 |
| | Envelope loss/gain | | | | | | | | 105 | 61 | | | 645 | 116 |
| 12 | a) Infiltration | | | | | | | | 0 | 0 | | | 120 | 14 |
| | b) Room ventilation | | | | | | | | 0 | 0 | | | 0 | 0 |
| 13 | Internal gains: | | Occupants @ | 230 | | | 0 | | 0 | 0 | | | 0 | 0 |
| | | | Appliances/other | | | | | | 0 | | | | 500 | |
| | Subtotal (lines 6 to 13) | | | | | | | | 105 | 61 | | | 765 | 630 |
| | Less external load | | | | | | | | 0 | 0 | | | 0 | 0 |
| | Less transfer | | | | | | | | 0 | 0 | | | 0 | 0 |
| | Redistribution | | | | | | | | -105 | -61 | | | 25 | 14 |
| 14 | Subtotal | | | | | | | | 0 | 0 | | | 789 | 644 |
| 15 | Duct loads | | | | | | | | 0 | 0 | | | 0 | 0 |
| | Total room load | | | | | | | | 0 | 0 | | | 789 | 644 |
| | Air required (cfm) | | | | | | | | 0 | 0 | | | 28 | 34 |

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



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Right-J® Worksheet
Entire House
Rockview Designs

Job: 4341 W. Schilling St.
Date: Mar 15, 2020
By: Rockview Designs (MM)

| 1 | | Room name | | | | Bedroom 2 | | | | Bathroom 2 | | | | |
|----|--------------------------|---------------------|-----------------------|-----|----------------|----------------|------------------------------|-------|-------------|--------------|------------------------------|-------|-------------|------|
| 2 | | Exposed wall | | | | 11.0 ft | | | | 5.0 ft | | | | |
| 3 | | Room height | | | | 9.0 ft | | | | 9.0 ft | | | | |
| 4 | | Room dimensions | | | | 12.5 x 11.0 ft | | | | 9.0 x 5.0 ft | | | | |
| 5 | | Room area | | | | 137.5 ft² | | | | 45.0 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 | 15B15-0wc-8 | 0.088 | ne | 3.66 | 0.07 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | ne | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | ne | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | ne | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | D | DftDoor | 0.250 | ne | 17.75 | 5.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | se | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B15-0wc-8 | 0.088 | se | 3.38 | 0.01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | se | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | Basement Wall R-11 | 0.099 | se | 7.03 | 0.81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | se | 4.83 | 0.97 | 99 | 84 | 406 | 81 | 45 | 45 | 217 | 43 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 15 | 0 | 320 | 452 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | sw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | sw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | nw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B15-0wc-8 | 0.088 | nw | 3.66 | 0.07 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | nw | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | nw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | C | R49 Attic | 0.022 | - | 1.56 | 1.03 | 138 | 138 | 215 | 142 | 45 | 45 | 70 | 46 |
| | F | 21A-32c | 0.020 | - | 1.42 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | F | 21A-32t | 0.020 | - | 1.42 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | F | 22B-10cpm | 0.355 | - | 25.20 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | c) AED excursion | | | | | | | | | 119 | | | | -76 |
| | Envelope loss/gain | | | | | | | | | 940 | 794 | | | 288 |
| 12 | a) Infiltration | | | | | | | | | 188 | 22 | | | 86 |
| | b) Room ventilation | | | | | | | | | 0 | 0 | | | 0 |
| 13 | Internal gains: | | Occupants @ | 230 | | 1 | | | | 230 | 0 | | | 0 |
| | | | Appliances/other | | | | | | | 0 | | | | 500 |
| | Subtotal (lines 6 to 13) | | | | | | | | | 1128 | 1046 | | | 373 |
| | Less external load | | | | | | | | | 0 | 0 | | | 0 |
| | Less transfer | | | | | | | | | 0 | 0 | | | 0 |
| | Redistribution | | | | | | | | | 116 | 23 | | | 0 |
| 14 | Subtotal | | | | | | | | | 1244 | 1069 | | | 373 |
| 15 | Duct loads | | | | | | | | | 0 | 0 | | | 0 |
| | Total room load | | | | | | | | | 1244 | 1069 | | | 373 |
| | Air required (cfm) | | | | | | | | | 45 | 56 | | | 13 |

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



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Right-J® Worksheet
Entire House
Rockview Designs

Job: 4341 W. Schilling St.
Date: Mar 15, 2020
By: Rockview Designs (MM)

| | | Study 29.3 ft | | Foyer 22.7 ft | | | | | | | | | | |
|----|--------------------------|-----------------------|------------------------------------|-----------------------|-----------------------------|-------|---|-------|-------------|------|---|-------|-------------|------|
| | | 9.0 ft x 137.9 ft | | 9.0 ft x 218.7 ft | | | | | | | | | | |
| | | 137.9 ft ² | | 218.7 ft ² | | | | | | | | | | |
| 1 | Room name | | | | | | | | | | | | | |
| | Exposed wall | | | | | | | | | | | | | |
| 2 | Room height | | | | | | | | | | | | | |
| 3 | Room dimensions | | | | | | | | | | | | | |
| 4 | Room area | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | |
| | Ty | Construction number | U-value (Btuh/ft ² -°F) | Or | HTM (Btuh/ft ²) | | Area (ft ²) or perimeter (ft) | | Load (Btuh) | | Area (ft ²) or perimeter (ft) | | Load (Btuh) | |
| | | | | | Heat | Cool | Gross | N/P/S | Heat | Cool | Gross | N/P/S | Heat | Cool |
| 6 | W | 15B15-0wc-8 | 0.088 | ne | 3.66 | 0.07 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | ne | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | ne | 4.83 | 0.97 | 135 | 115 | 555 | 111 | 51 | 23 | 111 | 22 |
| | G | Low E 2012 | 0.300 | ne | 21.30 | 24.61 | 20 | 0 | 426 | 492 | 7 | 0 | 149 | 172 |
| 11 | D | DftDoor | 0.250 | ne | 17.75 | 5.82 | 0 | 0 | 0 | 0 | 21 | 21 | 373 | 122 |
| | W | 12E-0sw | 0.068 | se | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B15-0wc-8 | 0.088 | se | 3.38 | 0.01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | se | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | Basement Wall R-11 | 0.099 | se | 7.03 | 0.81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | se | 4.83 | 0.97 | 99 | 99 | 478 | 96 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | sw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | sw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | nw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B15-0wc-8 | 0.088 | nw | 3.66 | 0.07 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | nw | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | nw | 4.83 | 0.97 | 30 | 30 | 145 | 29 | 153 | 153 | 739 | 148 |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | C | R49 Attic | 0.022 | - | 1.56 | 1.03 | 138 | 138 | 215 | 142 | 219 | 219 | 342 | 225 |
| | F | 21A-32c | 0.020 | - | 1.42 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | F | 21A-32t | 0.020 | - | 1.42 | 0.00 | 0 | 0 | 0 | 0 | 4 | 4 | 5 | 0 |
| | F | 22B-10cpm | 0.355 | - | 25.20 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | c) AED excursion | | | | | | | | | | | | | -87 |
| | Envelope loss/gain | | | | | | | | 1819 | 743 | | | 1719 | 603 |
| 12 | a) Infiltration | | | | | | | | 502 | 60 | | | 388 | 46 |
| | b) Room ventilation | | | | | | | | 0 | 0 | | | 0 | 0 |
| 13 | Internal gains: | | Occupants @ | 230 | | | 1 | | | 230 | 0 | | | 0 |
| | | | Appliances/other | | | | | | | 0 | | | | 0 |
| | Subtotal (lines 6 to 13) | | | | | | | | 2322 | 1032 | | | 2107 | 649 |
| | Less external load | | | | | | | | 0 | 0 | | | 0 | 0 |
| | Less transfer | | | | | | | | 0 | 0 | | | 0 | 0 |
| | Redistribution | | | | | | | | 0 | 0 | | | 0 | 0 |
| 14 | Subtotal | | | | | | | | 2322 | 1032 | | | 2107 | 649 |
| 15 | Duct loads | | | | | | | | -0% | 0% | | | 0 | 0 |
| | Total room load | | | | | | | | 2322 | 1032 | | | 2107 | 649 |
| | Air required (cfm) | | | | | | | | 83 | 54 | | | 75 | 34 |

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



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Right-J® Worksheet
Entire House
Rockview Designs

Job: 4341 W. Schilling St.
Date: Mar 15, 2020
By: Rockview Designs (MM)

| 1 | | Room name | | | | Bedroom 5 | | | | Rec Room | | | | |
|----|--------------------------|---------------------|-----------------------|-----|----------------|----------------|------------------------------|-------|-------------|----------------|------------------------------|-------|-------------|------|
| 2 | | Exposed wall | | | | 38.0 ft | | | | 66.5 ft | | | | |
| 3 | | Room height | | | | 9.0 ft | | | | 9.0 ft | | | | |
| 4 | | Room dimensions | | | | 1.0 x 322.8 ft | | | | 1.0 x 802.8 ft | | | | |
| 5 | | Room area | | | | 322.8 ft² | | | | 802.8 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 | 15B15-0wc-8 | 0.088 | ne | 3.66 | 0.07 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | ne | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 68 | 68 | 207 | 4 |
| | W | R-19 Frame Wall | 0.068 | ne | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | ne | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | D | DftDoor | 0.250 | ne | 17.75 | 5.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | se | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | -32 | -154 | -31 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 32 | 0 | 682 | 964 |
| | W | 15B15-0wc-8 | 0.088 | se | 3.38 | 0.01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | se | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 230 | 230 | 704 | 13 |
| | W | Basement Wall R-11 | 0.099 | se | 7.03 | 0.81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | se | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | sw | 4.83 | 0.97 | 140 | 140 | 674 | 135 | 225 | 183 | 884 | 177 |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 42 | 0 | 895 | 1265 |
| | W | R-19 Frame Wall | 0.068 | sw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | nw | 4.83 | 0.97 | 0 | -16 | -77 | -15 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 16 | 0 | 341 | 394 | 0 | 0 | 0 | 0 |
| | W | 15B15-0wc-8 | 0.088 | nw | 3.66 | 0.07 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | nw | 3.07 | 0.06 | 203 | 203 | 621 | 11 | 77 | 77 | 235 | 4 |
| | W | R-19 Frame Wall | 0.068 | nw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | C | R49 Attic | 0.022 | - | 1.56 | 1.03 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | F | 21A-32c | 0.020 | - | 1.42 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | F | 21A-32t | 0.020 | - | 1.42 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | F | 22B-10cpm | 0.355 | - | 25.20 | 0.00 | 323 | 38 | 958 | 0 | 803 | 67 | 1676 | 0 |
| 6 | c) AED excursion | | | | | | | | | 46 | | | 345 | |
| | Envelope loss/gain | | | | | | | | 2516 | 571 | | | 5128 | 2741 |
| 12 | a) Infiltration | | | | | | | | 308 | 37 | | | 507 | 60 |
| | b) Room ventilation | | | | | | | | 0 | 0 | | | 0 | 0 |
| 13 | Internal gains: | | Occupants @ | 230 | | 1 | | | | 230 | 0 | | | 0 |
| | | | Appliances/other | | | | | | | 0 | | | | 900 |
| | Subtotal (lines 6 to 13) | | | | | | | | 2825 | 837 | | | 5635 | 3701 |
| | Less external load | | | | | | | | 0 | 0 | | | 0 | 0 |
| | Less transfer | | | | | | | | 0 | 0 | | | 0 | 0 |
| | Redistribution | | | | | | | | 0 | 0 | | | 559 | 46 |
| 14 | Subtotal | | | | | | | | 2825 | 837 | | | 6193 | 3747 |
| 15 | Duct loads | | | | | | | | -0% | 0% | | | 0 | 0 |
| | Total room load | | | | | | | | 2825 | 837 | | | 6193 | 3747 |
| | Air required (cfm) | | | | | | | | 101 | 44 | | | 222 | 195 |

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



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Right-J® Worksheet
Entire House
Rockview Designs

Job: 4341 W. Schilling St.
Date: Mar 15, 2020
By: Rockview Designs (MM)

| 1 Room name | | Bathroom 3 | | | | | | Mechanical | | | | | | |
|-------------------|--------------------------|---------------------|-----------------------|-----|----------------|-------|------------------------------|---------------|-------------|------|------------------------------|-------|-------------|------|
| 2 Exposed wall | | 18.5 ft | | | | | | 9.0 ft | | | | | | |
| 3 Room height | | 9.0 ft | | | | | | 9.0 ft | | | | | | |
| 4 Room dimensions | | 12.5 x 6.0 ft | | | | | | 12.5 x 9.0 ft | | | | | | |
| 5 Room area | | 75.0 ft² | | | | | | 112.5 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 | 15B15-0wc-8 | 0.088 | ne | 3.66 | 0.07 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | ne | 3.07 | 0.06 | 113 | 113 | 345 | 6 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | ne | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | ne | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | D | DftDoor | 0.250 | ne | 17.75 | 5.82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | se | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B15-0wc-8 | 0.088 | se | 3.38 | 0.01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | se | 3.07 | 0.06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | Basement Wall R-11 | 0.099 | se | 7.03 | 0.81 | 0 | 0 | 0 | 0 | 81 | 81 | 569 | 66 |
| | W | R-19 Frame Wall | 0.068 | se | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | sw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | sw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 12E-0sw | 0.068 | nw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B15-0wc-8 | 0.088 | nw | 3.66 | 0.07 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | W | 15B19-0wc-8 | 0.069 | nw | 3.07 | 0.06 | 54 | 54 | 166 | 3 | 0 | 0 | 0 | 0 |
| | W | R-19 Frame Wall | 0.068 | nw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | C | R49 Attic | 0.022 | - | 1.56 | 1.03 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | F | 21A-32c | 0.020 | - | 1.42 | 0.00 | 75 | 75 | 106 | 0 | 113 | 113 | 160 | 0 |
| | F | 21A-32t | 0.020 | - | 1.42 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | F | 22B-10cpm | 0.355 | - | 25.20 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | c) AED excursion | | | | | | | | | | | | | -11 |
| | Envelope loss/gain | | | | | | | | 617 | -56 | | | 729 | 55 |
| 12 | a) Infiltration | | | | | | | | 35 | 4 | | | 154 | 18 |
| | b) Room ventilation | | | | | | | | 0 | 0 | | | 0 | 0 |
| 13 | Internal gains: | | Occupants @ | 230 | | | 0 | | | 0 | 0 | | | 0 |
| | | | Appliances/other | | | | | | | 500 | | | | 0 |
| | Subtotal (lines 6 to 13) | | | | | | | | 653 | 448 | | | 883 | 73 |
| | Less external load | | | | | | | | 0 | 0 | | | 0 | 0 |
| | Less transfer | | | | | | | | 0 | 0 | | | 0 | 0 |
| | Redistribution | | | | | | | | 0 | 0 | | | -883 | -73 |
| 14 | Subtotal | | | | | | | | 653 | 448 | | | 0 | 0 |
| 15 | Duct loads | | | | | | | | -0% | 0% | | | 0 | 0 |
| | Total room load | | | | | | | | 653 | 448 | | | 0 | 0 |
| | Air required (cfm) | | | | | | | | 23 | 23 | | | 0 | 0 |

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



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Right-J® Worksheet
Entire House
Rockview Designs

Job: 4341 W. Schilling St.
Date: Mar 15, 2020
By: Rockview Designs (MM)

| 1 | | Room name | | | | Bedroom 4 | | | | | | | | | |
|----|--------------------------|---------------------|-----------------------|-----|----------------|----------------|------------------------------|-------|-------------|-----------|-------------------|-------|------|------|-----|
| 2 | | Exposed wall | | | | 54.0 ft | | | | | | | | | |
| 3 | | Room height | | | | 9.0 ft | | | | heat/cool | | | | | |
| 4 | | Room dimensions | | | | 1.0 x 329.8 ft | | | | | | | | | |
| 5 | | Room area | | | | 329.8 ft² | | | | | | | | | |
| | 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 | 15B15-0wc-8 | 0.088 | ne | 3.66 | 0.07 | 185 | 185 | 675 | 13 | | | | | |
| | W | 15B19-0wc-8 | 0.069 | ne | 3.07 | 0.06 | 0 | 0 | 0 | 0 | | | | | |
| | W | R-19 Frame Wall | 0.068 | ne | 4.83 | 0.97 | 0 | 0 | 0 | 0 | | | | | |
| | G | Low E 2012 | 0.300 | ne | 21.30 | 24.61 | 0 | 0 | 0 | 0 | | | | | |
| 11 | D | DftDoor | 0.250 | ne | 17.75 | 5.82 | 0 | 0 | 0 | 0 | | | | | |
| | W | 12E-0sw | 0.068 | se | 4.83 | 0.97 | 0 | 0 | 0 | 0 | | | | | |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | | | | | |
| | W | 15B15-0wc-8 | 0.088 | se | 3.38 | 0.01 | 162 | 146 | 493 | 1 | | | | | |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 16 | 0 | 341 | 482 | | | | | |
| | W | 15B19-0wc-8 | 0.069 | se | 3.07 | 0.06 | 0 | 0 | 0 | 0 | | | | | |
| | W | Basement Wall R-11 | 0.099 | se | 7.03 | 0.81 | 0 | 0 | 0 | 0 | | | | | |
| | W | R-19 Frame Wall | 0.068 | se | 4.83 | 0.97 | 0 | 0 | 0 | 0 | | | | | |
| | G | Low E 2012 | 0.300 | se | 21.30 | 30.12 | 0 | 0 | 0 | 0 | | | | | |
| | W | 12E-0sw | 0.068 | sw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | | | | | |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 0 | 0 | 0 | 0 | | | | | |
| | W | R-19 Frame Wall | 0.068 | sw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | | | | | |
| | G | Low E 2012 | 0.300 | sw | 21.30 | 30.12 | 0 | 0 | 0 | 0 | | | | | |
| | W | 12E-0sw | 0.068 | nw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | | | | | |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 0 | 0 | 0 | 0 | | | | | |
| | W | 15B15-0wc-8 | 0.088 | nw | 3.66 | 0.07 | 140 | 140 | 511 | 10 | | | | | |
| | W | 15B19-0wc-8 | 0.069 | nw | 3.07 | 0.06 | 0 | 0 | 0 | 0 | | | | | |
| | W | R-19 Frame Wall | 0.068 | nw | 4.83 | 0.97 | 0 | 0 | 0 | 0 | | | | | |
| | G | Low E 2012 | 0.300 | nw | 21.30 | 24.61 | 0 | 0 | 0 | 0 | | | | | |
| | C | R49 Attic | 0.022 | - | 1.56 | 1.03 | 0 | 0 | 0 | 0 | | | | | |
| | F | 21A-32c | 0.020 | - | 1.42 | 0.00 | 330 | 330 | 468 | 0 | | | | | |
| | F | 21A-32t | 0.020 | - | 1.42 | 0.00 | 0 | 0 | 0 | 0 | | | | | |
| | F | 22B-10cpm | 0.355 | - | 25.20 | 0.00 | 0 | 0 | 0 | 0 | | | | | |
| 6 | c) AED excursion | | | | | | | | | | | | | 158 | |
| | Envelope loss/gain | | | | | | | | | | | | | 2488 | 664 |
| 12 | a) Infiltration | | | | | | | | | | | | | 103 | 12 |
| | b) Room ventilation | | | | | | | | | | | | | 0 | 0 |
| 13 | Internal gains: | | Occupants @ | 230 | | | 1 | | | 230 | | | 0 | | |
| | | | Appliances/other | | | | | | | 0 | | | | | |
| | Subtotal (lines 6 to 13) | | | | | | | | | | | | | 2591 | 906 |
| | Less external load | | | | | | | | | | | | | 0 | 0 |
| | Less transfer | | | | | | | | | | | | | 0 | 0 |
| | Redistribution | | | | | | | | | | | | | 325 | 27 |
| 14 | Subtotal | | | | | | | | | | | | | 2916 | 933 |
| 15 | Duct loads | | | | | | | | | | | | | -0% | 0% |
| | Total room load | | | | | | | | | | | | | 2916 | 933 |
| | Air required (cfm) | | | | | | | | | | | | | 104 | 49 |

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



Comfort Builder by Wrightsoft 19.0.15 RSU30090

2020-Apr-12 09:09:34

...LLC\PDF Templates\Sample Ranch\Sample Ranch.rup Calc = MJ8 Front Door faces: NE

Page 9



Project Information

For: Jackson Contracting
4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | | |
|--------------------|----------------|----------------|-----------------------------|----------------|----------------|
| Location: | | | Indoor: | Heating | Cooling |
| Severance, Co | | | Indoor temperature (°F) | 72 | 75 |
| Elevation: 5016 ft | | | Design TD (°F) | 71 | 16 |
| Latitude: 40°N | | | Relative humidity (%) | 30 | 50 |
| Outdoor: | Heating | Cooling | Moisture difference (gr/lb) | 36.5 | -19.0 |
| Drybulb (°F) | 1 | 91 | Infiltration: | | |
| Daily range (°F) | - | 28 (H) | Method | Simplified | |
| Wet bulb (°F) | - | 63 | Construction quality | Semi-tight | |
| Wind speed (mph) | 15.0 | 7.5 | Fireplaces | 0 | |

Construction descriptions

| Construction descriptions | Or | Area ft ² | U-value Btuh/ft ² -°F | Insul R ft ² -°F/Btuh | Htg HTM Btuh/ft ² | Loss Btuh | Clg HTM Btuh/ft ² | Gain Btuh |
|--|-----|-------------------------|-------------------------------------|-------------------------------------|---------------------------------|--------------|---------------------------------|--------------|
| Walls | | | | | | | | |
| 15B15-0wc-8: Bg wall, heavy dry or light damp soil, 2"x4" wood int frm, concrete wall, r-15 cav ins, 8" thk, 1/2" gypsum board int fnsh | ne | 185 | 0.047 | 15.0 | 3.66 | 675 | 0.07 | 13 |
| | se | 146 | 0.047 | 15.0 | 3.38 | 493 | 0.01 | 1 |
| | nw | 140 | 0.047 | 15.0 | 3.66 | 511 | 0.07 | 10 |
| | all | 470 | 0.047 | 15.0 | 3.57 | 1679 | 0.05 | 25 |
| 15B19-0wc-8: Bg wall, heavy dry or light damp soil, 2"x6" wood int frm, concrete wall, r-19 cav ins, 8" thk, 1/2" gypsum board int fnsh | ne | 180 | 0.040 | 19.0 | 3.07 | 552 | 0.06 | 10 |
| | se | 230 | 0.040 | 19.0 | 3.07 | 704 | 0.06 | 13 |
| | nw | 333 | 0.040 | 19.0 | 3.07 | 1022 | 0.06 | 19 |
| | all | 743 | 0.040 | 19.0 | 3.07 | 2279 | 0.06 | 42 |
| R-19 Frame Wall: Frm wall, wd ext, 3/8" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud | ne | 297 | 0.068 | 19.0 | 4.83 | 1434 | 0.97 | 287 |
| | se | 356 | 0.068 | 19.0 | 4.83 | 1716 | 0.97 | 343 |
| | sw | 323 | 0.068 | 19.0 | 4.83 | 1557 | 0.97 | 311 |
| | sw | 341 | 0.068 | 19.0 | 4.83 | 1646 | 0.97 | 329 |
| | nw | 449 | 0.068 | 19.0 | 4.83 | 2165 | 0.97 | 433 |
| | all | 1717 | 0.068 | 19.0 | 4.83 | 8287 | 0.97 | 1657 |
| Basement Wall R-11: Bg wall, heavy dry or light damp soil, 2"x4" wood int frm, concrete wall, r-11 cav ins, 8" thk, 1/2" gypsum board int fnsh | se | 81 | 0.099 | 11.0 | 7.03 | 569 | 0.81 | 66 |

Partitions

(none)

Windows

| | | | | | | | | |
|---|-----|-----|-------|---|------|------|------|------|
| Low E 2012: 2 glazing, clr outr, air gas, mtl no brk frm mat, clr innr, 1/4" gap, 1/8" thk; 6.67 ft head ht | ne | 27 | 0.300 | 0 | 21.3 | 575 | 24.6 | 664 |
| | se | 32 | 0.300 | 0 | 21.3 | 682 | 30.1 | 964 |
| | se | 16 | 0.300 | 0 | 21.3 | 341 | 30.1 | 482 |
| | se | 117 | 0.300 | 0 | 21.3 | 2492 | 30.1 | 3524 |
| | sw | 42 | 0.300 | 0 | 21.3 | 895 | 30.1 | 1265 |
| | sw | 25 | 0.300 | 0 | 21.3 | 533 | 30.1 | 753 |
| | nw | 16 | 0.300 | 0 | 21.3 | 341 | 24.6 | 394 |
| | nw | 24 | 0.300 | 0 | 21.3 | 511 | 24.6 | 591 |
| | all | 299 | 0.300 | 0 | 21.3 | 6369 | 28.9 | 8636 |

Doors

| | | | | | | | | |
|---------------------------|----|----|-------|---|------|-----|------|-----|
| DftDoor: Door, wd sc type | ne | 42 | 0.250 | 0 | 17.8 | 746 | 5.82 | 245 |
|---------------------------|----|----|-------|---|------|-----|------|-----|

Bold/italic values have been manually overridden

Ceilings

| | | | | | | | |
|--|------|-------|------|------|------|------|------|
| R49 Attic: Attic ceiling, asphalt shingles roof mat, r-49 ceil ins, 1/2" gypsum board int fnsh | 1655 | 0.022 | 49.0 | 1.56 | 2585 | 1.03 | 1704 |
|--|------|-------|------|------|------|------|------|

Floors

| | | | | | | | |
|--|-----|-------|---|------|-----|---|---|
| 21A-32c: Bg floor, heavy dry or light damp soil, 8' depth, carpet flr fnsh | 517 | 0.020 | 0 | 1.42 | 734 | 0 | 0 |
|--|-----|-------|---|------|-----|---|---|

| | | | | | | | |
|---|----|-------|---|------|----|---|---|
| 21A-32t: Bg floor, heavy dry or light damp soil, 8' depth | 12 | 0.020 | 0 | 1.42 | 17 | 0 | 0 |
|---|----|-------|---|------|----|---|---|

| | | | | | | | |
|---|-----|-------|------|------|------|---|---|
| 22B-10cpm: Bg floor, heavy dry or light damp soil, on grade depth, r-10 edge ins, carpet flr fnsh | 105 | 0.355 | 10.0 | 25.2 | 2634 | 0 | 0 |
|---|-----|-------|------|------|------|---|---|

Bold/italic values have been manually overridden



Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | |
|--|---------------------------------------|---|--|---|
| Location: Severance, Co Elevation: 5016 ft Latitude: 40°N | | Indoor: Indoor temperature (°F) 72 Design TD (°F) 71 Relative humidity (%) 30 Moisture difference (gr/lb) 36.5 | Heating 72 71 30 36.5 | Cooling 75 16 50 -19.0 |
| Outdoor: Drybulb (°F) Daily range (°F) Wet bulb (°F) Wind speed (mph) | Heating 1 - - 15.0 | Cooling 91 28 (H) 63 7.5 | Infiltration: Method Simplified Construction quality Semi-tight Fireplaces 0 | |

Construction descriptions

Walls

R-19 Frame Wall: Frm wall, wd ext, 3/8" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud

| | Or | Area ft ² | U-value Btuh/ft ² -°F | Insul R ft ² -°F/Btuh | Htg HTM Btuh/ft ² | Loss Btuh | Clg HTM Btuh/ft ² | Gain Btuh |
|-----|----|-------------------------|-------------------------------------|-------------------------------------|---------------------------------|--------------|---------------------------------|--------------|
| sw | | 116 | 0.068 | 19.0 | 4.83 | 560 | 0.97 | 112 |
| nw | | 119 | 0.068 | 19.0 | 4.83 | 575 | 0.97 | 115 |
| all | | 235 | 0.068 | 19.0 | 4.83 | 1135 | 0.97 | 227 |

Partitions (none)

Windows

Low E 2012: 2 glazing, clr outr, air gas, mtl no brk frm mat, clr innr, 1/4" gap, 1/8" thk; 6.67 ft head ht

| | | | | | | | |
|-----|----|-------|---|------|-----|------|------|
| sw | 25 | 0.300 | 0 | 21.3 | 533 | 30.1 | 753 |
| nw | 16 | 0.300 | 0 | 21.3 | 341 | 24.6 | 394 |
| all | 41 | 0.300 | 0 | 21.3 | 873 | 28.0 | 1147 |

Doors (none)

Ceilings

R49 Attic: Attic ceiling, asphalt shingles roof mat, r-49 ceil ins, 1/2" gypsum board int fnsh

| | | | | | | | |
|--|-----|-------|------|------|-----|------|-----|
| | 240 | 0.022 | 49.0 | 1.56 | 375 | 1.03 | 247 |
|--|-----|-------|------|------|-----|------|-----|

Floors

21A-32t: Bg floor, heavy dry or light damp soil, 8' depth

| | | | | | | | |
|--|---|-------|---|------|---|---|---|
| | 3 | 0.020 | 0 | 1.42 | 4 | 0 | 0 |
|--|---|-------|---|------|---|---|---|

Bold/italic values have been manually overridden



Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|----------------|----------------|----------------|--------------|---|----|------------------|---|----------|---------------|---|----|------------------|------|-----|--|--|----------------|----------------|-------------------------|----|----|----------------|----|----|-----------------------|----|----|-----------------------------|------|-------|--|----------------|----------------|--------|------------|------------|----------------------|------------|------------|------------|---|---|
| <p>Location: Severance, Co Elevation: 5016 ft Latitude: 40°N</p> <p>Outdoor:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;"></td> <td style="text-align: center;">Heating</td> <td style="text-align: center;">Cooling</td> </tr> <tr> <td>Drybulb (°F)</td> <td style="text-align: center;">1</td> <td style="text-align: center;">91</td> </tr> <tr> <td>Daily range (°F)</td> <td style="text-align: center;">-</td> <td style="text-align: center;">28 (H)</td> </tr> <tr> <td>Wet bulb (°F)</td> <td style="text-align: center;">-</td> <td style="text-align: center;">63</td> </tr> <tr> <td>Wind speed (mph)</td> <td style="text-align: center;">15.0</td> <td style="text-align: center;">7.5</td> </tr> </table> | | Heating | Cooling | Drybulb (°F) | 1 | 91 | Daily range (°F) | - | 28 (H) | Wet bulb (°F) | - | 63 | Wind speed (mph) | 15.0 | 7.5 | <p>Indoor:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;"></td> <td style="text-align: center;">Heating</td> <td style="text-align: center;">Cooling</td> </tr> <tr> <td>Indoor temperature (°F)</td> <td style="text-align: center;">72</td> <td style="text-align: center;">75</td> </tr> <tr> <td>Design TD (°F)</td> <td style="text-align: center;">71</td> <td style="text-align: center;">16</td> </tr> <tr> <td>Relative humidity (%)</td> <td style="text-align: center;">30</td> <td style="text-align: center;">50</td> </tr> <tr> <td>Moisture difference (gr/lb)</td> <td style="text-align: center;">36.5</td> <td style="text-align: center;">-19.0</td> </tr> </table> <p>Infiltration:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;"></td> <td style="text-align: center;">Heating</td> <td style="text-align: center;">Cooling</td> </tr> <tr> <td>Method</td> <td style="text-align: center;">Simplified</td> <td style="text-align: center;">Simplified</td> </tr> <tr> <td>Construction quality</td> <td style="text-align: center;">Semi-tight</td> <td style="text-align: center;">Semi-tight</td> </tr> <tr> <td>Fireplaces</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> </tr> </table> | | Heating | Cooling | Indoor temperature (°F) | 72 | 75 | Design TD (°F) | 71 | 16 | Relative humidity (%) | 30 | 50 | Moisture difference (gr/lb) | 36.5 | -19.0 | | Heating | Cooling | Method | Simplified | Simplified | Construction quality | Semi-tight | Semi-tight | Fireplaces | 0 | 0 |
| | Heating | Cooling | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Drybulb (°F) | 1 | 91 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Daily range (°F) | - | 28 (H) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wet bulb (°F) | - | 63 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wind speed (mph) | 15.0 | 7.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Heating | Cooling | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Indoor temperature (°F) | 72 | 75 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Design TD (°F) | 71 | 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Relative humidity (%) | 30 | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Moisture difference (gr/lb) | 36.5 | -19.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Heating | Cooling | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Method | Simplified | Simplified | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Construction quality | Semi-tight | Semi-tight | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fireplaces | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Construction descriptions

| Construction descriptions | Or | Area ft ² | U-value Btuh/ft ² -°F | Insul R ft ² -°F/Btuh | Htg HTM Btuh/ft ² | Loss Btuh | Clg HTM Btuh/ft ² | Gain Btuh |
|--|-----|-------------------------|-------------------------------------|-------------------------------------|---------------------------------|--------------|---------------------------------|--------------|
| Walls | | | | | | | | |
| R-19 Frame Wall: Frm wall, wd ext, 3/8" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud | se | 87 | 0.068 | 19.0 | 4.83 | 420 | 0.97 | 84 |
| | sw | 225 | 0.068 | 19.0 | 4.83 | 1086 | 0.97 | 217 |
| | nw | 32 | 0.068 | 19.0 | 4.83 | 152 | 0.97 | 30 |
| | all | 344 | 0.068 | 19.0 | 4.83 | 1658 | 0.97 | 332 |
| Partitions | | | | | | | | |
| (none) | | | | | | | | |
| Windows | | | | | | | | |
| Low E 2012: 2 glazing, clr outr, air gas, mtl no brk frm mat, clr innr, 1/4" gap, 1/8" thk; 6.67 ft head ht | se | 102 | 0.300 | 0 | 21.3 | 2173 | 30.1 | 3072 |
| Doors | | | | | | | | |
| (none) | | | | | | | | |
| Ceilings | | | | | | | | |
| R49 Attic: Attic ceiling, asphalt shingles roof mat, r-49 ceil ins, 1/2" gypsum board int fnsh | | 588 | 0.022 | 49.0 | 1.56 | 919 | 1.03 | 606 |
| Floors | | | | | | | | |
| (none) | | | | | | | | |

Bold/italic values have been manually overridden



Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | | |
|--------------------|----------------|----------------|-----------------------------|----------------|----------------|
| Location: | | | Indoor: | Heating | Cooling |
| Severance, Co | | | Indoor temperature (°F) | 72 | 75 |
| Elevation: 5016 ft | | | Design TD (°F) | 71 | 16 |
| Latitude: 40°N | | | Relative humidity (%) | 30 | 50 |
| Outdoor: | Heating | Cooling | Moisture difference (gr/lb) | 36.5 | -19.0 |
| Drybulb (°F) | 1 | 91 | Infiltration: | | |
| Daily range (°F) | - | 28 (H) | Method | Simplified | |
| Wet bulb (°F) | - | 63 | Construction quality | Semi-tight | |
| Wind speed (mph) | 15.0 | 7.5 | Fireplaces | 0 | |

Construction descriptions

| | Or | Area | U-value | Insul R | Htg HTM | Loss | Clg HTM | Gain |
|--|----|------|-------------|-------------|----------|------|----------|------|
| | | ft² | Btuh/ft²-°F | ft²-°F/Btuh | Btuh/ft² | Btuh | Btuh/ft² | Btuh |
| Walls | | | | | | | | |
| R-19 Frame Wall: Frm wall, wd ext, 3/8" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud | se | 41 | 0.068 | 19.0 | 4.83 | 196 | 0.97 | 39 |
| Partitions | | | | | | | | |
| (none) | | | | | | | | |
| Windows | | | | | | | | |
| (none) | | | | | | | | |
| Doors | | | | | | | | |
| (none) | | | | | | | | |
| Ceilings | | | | | | | | |
| R49 Attic: Attic ceiling, asphalt shingles roof mat, r-49 ceil ins, 1/2" gypsum board int fnsh | | 19 | 0.022 | 49.0 | 1.56 | 30 | 1.03 | 20 |
| Floors | | | | | | | | |
| (none) | | | | | | | | |

Bold/italic values have been manually overridden



Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | | |
|--------------------|----------------|----------------|-----------------------------|----------------|----------------|
| Location: | | | Indoor: | Heating | Cooling |
| Severance, Co | | | Indoor temperature (°F) | 72 | 75 |
| Elevation: 5016 ft | | | Design TD (°F) | 71 | 16 |
| Latitude: 40°N | | | Relative humidity (%) | 30 | 50 |
| Outdoor: | Heating | Cooling | Moisture difference (gr/lb) | 36.5 | -19.0 |
| Drybulb (°F) | 1 | 91 | Infiltration: | | |
| Daily range (°F) | - | 28 (H) | Method | Simplified | |
| Wet bulb (°F) | - | 63 | Construction quality | Semi-tight | |
| Wind speed (mph) | 15.0 | 7.5 | Fireplaces | 0 | |

Construction descriptions

| | Or | Area | U-value | Insul R | Htg HTM | Loss | Clg HTM | Gain |
|--|----|------|-------------|-------------|----------|------|----------|------|
| | | ft² | Btuh/ft²-°F | ft²-°F/Btuh | Btuh/ft² | Btuh | Btuh/ft² | Btuh |
| Walls | | | | | | | | |
| R-19 Frame Wall: Frm wall, wd ext, 3/8" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud | ne | 57 | 0.068 | 19.0 | 4.83 | 275 | 0.97 | 55 |
| Partitions | | | | | | | | |
| (none) | | | | | | | | |
| Windows | | | | | | | | |
| (none) | | | | | | | | |
| Doors | | | | | | | | |
| (none) | | | | | | | | |
| Ceilings | | | | | | | | |
| R49 Attic: Attic ceiling, asphalt shingles roof mat, r-49 ceil ins, 1/2" gypsum board int fnsh | | 30 | 0.022 | 49.0 | 1.56 | 46 | 1.03 | 30 |
| Floors | | | | | | | | |
| 21A-32t: Bg floor, heavy dry or light damp soil, 8' depth | | 1 | 0.020 | 0 | 1.42 | 1 | 0 | 0 |

Bold/italic values have been manually overridden



Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | | |
|--|---------------------------------------|---|---|--|---|
| Location: Severance, Co Elevation: 5016 ft Latitude: 40°N | | | Indoor: Indoor temperature (°F) 72 Design TD (°F) 71 Relative humidity (%) 30 Moisture difference (gr/lb) 36.5 | Heating 72 71 30 36.5 | Cooling 75 16 50 -19.0 |
| Outdoor: Drybulb (°F) Daily range (°F) Wet bulb (°F) Wind speed (mph) | Heating 1 - - 15.0 | Cooling 91 28 (H) 63 7.5 | Infiltration: Method Construction quality Fireplaces | Simplified Semi-tight 0 | |

Construction descriptions

| | Or | Area ft² | U-value Btuh/ft²-°F | Insul R ft²-°F/Btuh | Htg HTM Btuh/ft² | Loss Btuh | Clg HTM Btuh/ft² | Gain Btuh | |
|--|-----|-------------|------------------------|------------------------|---------------------|--------------|---------------------|--------------|--|
| Walls | | | | | | | | | |
| R-19 Frame Wall: Frm wall, wd ext, 3/8" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud | ne | 60 | 0.068 | 19.0 | 4.83 | 290 | 0.97 | 58 | |
| | nw | 115 | 0.068 | 19.0 | 4.83 | 555 | 0.97 | 111 | |
| | all | 175 | 0.068 | 19.0 | 4.83 | 845 | 0.97 | 169 | |
| Partitions (none) | | | | | | | | | |
| Windows | | | | | | | | | |
| Low E 2012: 2 glazing, clr outr, air gas, mtl no brk frm mat, clr innr, 1/4" gap, 1/8" thk; 6.67 ft head ht | nw | 8 | 0.300 | 0 | 21.3 | 170 | 24.6 | 197 | |
| Doors (none) | | | | | | | | | |
| Ceilings | | | | | | | | | |
| R49 Attic: Attic ceiling, asphalt shingles roof mat, r-49 ceil ins, 1/2" gypsum board int fnsh | | 127 | 0.022 | 49.0 | 1.56 | 199 | 1.03 | 131 | |
| Floors | | | | | | | | | |
| 21A-32t: Bg floor, heavy dry or light damp soil, 8' depth | | 3 | 0.020 | 0 | 1.42 | 5 | 0 | 0 | |

Bold/italic values have been manually overridden



Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | | |
|--------------------|----------------|-----------------------------|----------------------|----------------|----------------|
| Location: | | Indoor: | | Heating | Cooling |
| Severance, Co | | Indoor temperature (°F) | | 72 | 75 |
| Elevation: 5016 ft | | Design TD (°F) | | 71 | 16 |
| Latitude: 40°N | | Relative humidity (%) | | 30 | 50 |
| Outdoor: | | Moisture difference (gr/lb) | | 36.5 | -19.0 |
| | Heating | Cooling | Infiltration: | | |
| Drybulb (°F) | 1 | 91 | Method | | |
| Daily range (°F) | - | 28 (H) | Construction quality | | |
| Wet bulb (°F) | - | 63 | Fireplaces | | |
| Wind speed (mph) | 15.0 | 7.5 | Simplified | | |
| | | | Semi-tight | | |
| | | | 0 | | |

Construction descriptions

| | Or | Area | U-value | Insul R | Htg HTM | Loss | Clg HTM | Gain |
|--|----|------|-------------|-------------|----------|------|----------|------|
| | | ft² | Btuh/ft²-°F | ft²-°F/Btuh | Btuh/ft² | Btuh | Btuh/ft² | Btuh |

| | | | | | | | | |
|---|--|----|-------|------|------|-----|------|----|
| Walls (none) | | | | | | | | |
| Partitions (none) | | | | | | | | |
| Windows (none) | | | | | | | | |
| Doors (none) | | | | | | | | |
| Ceilings R49 Attic: Attic ceiling, asphalt shingles roof mat, r-49 ceil ins, 1/2" gypsum board int fnsh | | 68 | 0.022 | 49.0 | 1.56 | 105 | 1.03 | 69 |
| Floors (none) | | | | | | | | |

Bold/italic values have been manually overridden



Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | | |
|--------------------|----------------|----------------|-----------------------------|----------------|----------------|
| Location: | | | Indoor: | Heating | Cooling |
| Severance, Co | | | Indoor temperature (°F) | 72 | 75 |
| Elevation: 5016 ft | | | Design TD (°F) | 71 | 16 |
| Latitude: 40°N | | | Relative humidity (%) | 30 | 50 |
| Outdoor: | Heating | Cooling | Moisture difference (gr/lb) | 36.5 | -19.0 |
| Drybulb (°F) | 1 | 91 | Infiltration: | | |
| Daily range (°F) | - | 28 (H) | Method | Simplified | |
| Wet bulb (°F) | - | 63 | Construction quality | Semi-tight | |
| Wind speed (mph) | 15.0 | 7.5 | Fireplaces | 0 | |

Construction descriptions

| | Or | Area | U-value | Insul R | Htg HTM | Loss | Clg HTM | Gain |
|--|----|-----------------|--------------------------|--------------------------|----------------------|------|----------------------|------|
| | | ft ² | Btuh/ft ² -°F | ft ² -°F/Btuh | Btuh/ft ² | Btuh | Btuh/ft ² | Btuh |
| Walls | | | | | | | | |
| R-19 Frame Wall: Frm wall, wd ext, 3/8" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud | ne | 42 | 0.068 | 19.0 | 4.83 | 203 | 0.97 | 41 |
| Partitions | | | | | | | | |
| (none) | | | | | | | | |
| Windows | | | | | | | | |
| (none) | | | | | | | | |
| Doors | | | | | | | | |
| DftDoor: Door, wd sc type | ne | 21 | 0.250 | 0 | 17.8 | 373 | 5.82 | 122 |
| Ceilings | | | | | | | | |
| R49 Attic: Attic ceiling, asphalt shingles roof mat, r-49 ceil ins, 1/2" gypsum board int fnsh | | 43 | 0.022 | 49.0 | 1.56 | 68 | 1.03 | 45 |
| Floors | | | | | | | | |
| 21A-32t: Bg floor, heavy dry or light damp soil, 8' depth | | 1 | 0.020 | 0 | 1.42 | 2 | 0 | 0 |

Bold/italic values have been manually overridden



Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | | |
|--|---------------------------------------|---|---|--|---|
| Location: Severance, Co Elevation: 5016 ft Latitude: 40°N | | | Indoor: Indoor temperature (°F) Design TD (°F) Relative humidity (%) Moisture difference (gr/lb) | Heating 72 71 30 36.5 | Cooling 75 16 50 -19.0 |
| Outdoor: Drybulb (°F) Daily range (°F) Wet bulb (°F) Wind speed (mph) | Heating 1 - - 15.0 | Cooling 91 28 (H) 63 7.5 | Infiltration: Method Construction quality Fireplaces | Simplified Semi-tight 0 | |

Construction descriptions

| | Or | Area ft² | U-value Btuh/ft²-°F | Insul R ft²-°F/Btuh | Htg HTM Btuh/ft² | Loss Btuh | Clg HTM Btuh/ft² | Gain Btuh |
|--|----|-------------|------------------------|------------------------|---------------------|--------------|---------------------|--------------|
| Walls R-19 Frame Wall: Frm wall, wd ext, 3/8" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud | se | 84 | 0.068 | 19.0 | 4.83 | 406 | 0.97 | 81 |
| Partitions (none) | | | | | | | | |
| Windows Low E 2012: 2 glazing, clr outr, air gas, mtl no brk frm mat, clr innr, 1/4" gap, 1/8" thk; 6.67 ft head ht | se | 15 | 0.300 | 0 | 21.3 | 320 | 30.1 | 452 |
| Doors (none) | | | | | | | | |
| Ceilings R49 Attic: Attic ceiling, asphalt shingles roof mat, r-49 ceil ins, 1/2" gypsum board int fnsh | | 138 | 0.022 | 49.0 | 1.56 | 215 | 1.03 | 142 |
| Floors (none) | | | | | | | | |

Bold/italic values have been manually overridden



Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | | |
|--------------------|----------------|----------------|-----------------------------|----------------|----------------|
| Location: | | | Indoor: | Heating | Cooling |
| Severance, Co | | | Indoor temperature (°F) | 72 | 75 |
| Elevation: 5016 ft | | | Design TD (°F) | 71 | 16 |
| Latitude: 40°N | | | Relative humidity (%) | 30 | 50 |
| Outdoor: | Heating | Cooling | Moisture difference (gr/lb) | 36.5 | -19.0 |
| Drybulb (°F) | 1 | 91 | Infiltration: | | |
| Daily range (°F) | - | 28 (H) | Method | Simplified | |
| Wet bulb (°F) | - | 63 | Construction quality | Semi-tight | |
| Wind speed (mph) | 15.0 | 7.5 | Fireplaces | 0 | |

Construction descriptions

| | Or | Area | U-value | Insul R | Htg HTM | Loss | Clg HTM | Gain |
|--|----|------|-------------|-------------|----------|------|----------|------|
| | | ft² | Btuh/ft²-°F | ft²-°F/Btuh | Btuh/ft² | Btuh | Btuh/ft² | Btuh |
| Walls | | | | | | | | |
| R-19 Frame Wall: Frm wall, wd ext, 3/8" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud | se | 45 | 0.068 | 19.0 | 4.83 | 217 | 0.97 | 43 |
| Partitions | | | | | | | | |
| (none) | | | | | | | | |
| Windows | | | | | | | | |
| (none) | | | | | | | | |
| Doors | | | | | | | | |
| (none) | | | | | | | | |
| Ceilings | | | | | | | | |
| R49 Attic: Attic ceiling, asphalt shingles roof mat, r-49 ceil ins, 1/2" gypsum board int fnsh | | 45 | 0.022 | 49.0 | 1.56 | 70 | 1.03 | 46 |
| Floors | | | | | | | | |
| (none) | | | | | | | | |

Bold/italic values have been manually overridden



Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | | |
|--------------------|----------------|----------------|-----------------------------|----------------|----------------|
| Location: | | | Indoor: | Heating | Cooling |
| Severance, Co | | | Indoor temperature (°F) | 72 | 75 |
| Elevation: 5016 ft | | | Design TD (°F) | 71 | 16 |
| Latitude: 40°N | | | Relative humidity (%) | 30 | 50 |
| Outdoor: | Heating | Cooling | Moisture difference (gr/lb) | 36.5 | -19.0 |
| Drybulb (°F) | 1 | 91 | Infiltration: | | |
| Daily range (°F) | - | 28 (H) | Method | Simplified | |
| Wet bulb (°F) | - | 63 | Construction quality | Semi-tight | |
| Wind speed (mph) | 15.0 | 7.5 | Fireplaces | 0 | |

Construction descriptions

| | Or | Area ft² | U-value Btuh/ft²-°F | Insul R ft²-°F/Btuh | Htg HTM Btuh/ft² | Loss Btuh | Clg HTM Btuh/ft² | Gain Btuh |
|--|-----|-------------|------------------------|------------------------|---------------------|--------------|---------------------|--------------|
| Walls | | | | | | | | |
| R-19 Frame Wall: Frm wall, wd ext, 3/8" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud | ne | 115 | 0.068 | 19.0 | 4.83 | 555 | 0.97 | 111 |
| | se | 99 | 0.068 | 19.0 | 4.83 | 478 | 0.97 | 96 |
| | nw | 30 | 0.068 | 19.0 | 4.83 | 145 | 0.97 | 29 |
| | all | 244 | 0.068 | 19.0 | 4.83 | 1178 | 0.97 | 236 |
| Partitions (none) | | | | | | | | |
| Windows | | | | | | | | |
| Low E 2012: 2 glazing, clr outr, air gas, mtl no brk frm mat, clr innr, 1/4" gap, 1/8" thk; 6.67 ft head ht | ne | 20 | 0.300 | 0 | 21.3 | 426 | 24.6 | 492 |
| Doors (none) | | | | | | | | |
| Ceilings | | | | | | | | |
| R49 Attic: Attic ceiling, asphalt shingles roof mat, r-49 ceil ins, 1/2" gypsum board int fnsh | | 138 | 0.022 | 49.0 | 1.56 | 215 | 1.03 | 142 |
| Floors (none) | | | | | | | | |

Bold/italic values have been manually overridden



Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | | |
|--|---------------------------------------|---|---|--|---|
| Location: Severance, Co Elevation: 5016 ft Latitude: 40°N | | | Indoor: Indoor temperature (°F) Design TD (°F) Relative humidity (%) Moisture difference (gr/lb) | Heating 72 71 30 36.5 | Cooling 75 16 50 -19.0 |
| Outdoor: Drybulb (°F) Daily range (°F) Wet bulb (°F) Wind speed (mph) | Heating 1 - - 15.0 | Cooling 91 28 (H) 63 7.5 | Infiltration: Method Construction quality Fireplaces | Simplified Semi-tight 0 | |

Construction descriptions

| | Or | Area ft² | U-value Btuh/ft²-°F | Insul R ft²-°F/Btuh | Htg HTM Btuh/ft² | Loss Btuh | Clg HTM Btuh/ft² | Gain Btuh |
|--|-----|-------------|------------------------|------------------------|---------------------|--------------|---------------------|--------------|
| Walls | | | | | | | | |
| R-19 Frame Wall: Frm wall, wd ext, 3/8" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud | ne | 23 | 0.068 | 19.0 | 4.83 | 111 | 0.97 | 22 |
| | nw | 153 | 0.068 | 19.0 | 4.83 | 739 | 0.97 | 148 |
| | all | 176 | 0.068 | 19.0 | 4.83 | 850 | 0.97 | 170 |
| Partitions (none) | | | | | | | | |
| Windows | | | | | | | | |
| Low E 2012: 2 glazing, clr outr, air gas, mtl no brk frm mat, clr innr, 1/4" gap, 1/8" thk; 6.67 ft head ht | ne | 7 | 0.300 | 0 | 21.3 | 149 | 24.6 | 172 |
| Doors | | | | | | | | |
| DftDoor: Door, wd sc type | ne | 21 | 0.250 | 0 | 17.8 | 373 | 5.82 | 122 |
| Ceilings | | | | | | | | |
| R49 Attic: Attic ceiling, asphalt shingles roof mat, r-49 ceil ins, 1/2" gypsum board int fnsh | | 219 | 0.022 | 49.0 | 1.56 | 342 | 1.03 | 225 |
| Floors | | | | | | | | |
| 21A-32t: Bg floor, heavy dry or light damp soil, 8' depth | | 4 | 0.020 | 0 | 1.42 | 5 | 0 | 0 |

Bold/italic values have been manually overridden



Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | | |
|--------------------|----------------|----------------|-----------------------------|----------------|----------------|
| Location: | | | Indoor: | Heating | Cooling |
| Severance, Co | | | Indoor temperature (°F) | 72 | 75 |
| Elevation: 5016 ft | | | Design TD (°F) | 71 | 16 |
| Latitude: 40°N | | | Relative humidity (%) | 30 | 50 |
| Outdoor: | Heating | Cooling | Moisture difference (gr/lb) | 36.5 | -19.0 |
| Drybulb (°F) | 1 | 91 | Infiltration: | | |
| Daily range (°F) | - | 28 (H) | Method | Simplified | |
| Wet bulb (°F) | - | 63 | Construction quality | Semi-tight | |
| Wind speed (mph) | 15.0 | 7.5 | Fireplaces | 0 | |

Construction descriptions

| | Or | Area | U-value | Insul R | Htg HTM | Loss | Clg HTM | Gain |
|---|----|-----------------|--------------------------|--------------------------|----------------------|------|----------------------|------|
| | | ft ² | Btuh/ft ² -°F | ft ² -°F/Btuh | Btuh/ft ² | Btuh | Btuh/ft ² | Btuh |
| Walls | | | | | | | | |
| 15B19-0wc-8: Bg wall, heavy dry or light damp soil, 2"x6" wood int frm, concrete wall, r-19 cav ins, 8" thk, 1/2" gypsum board int fnsh | nw | 203 | 0.040 | 19.0 | 3.07 | 621 | 0.06 | 11 |
| 12E-0sw: Frm wall, wd ext, 3/8" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud | sw | 140 | 0.068 | 19.0 | 4.83 | 674 | 0.97 | 135 |
| Partitions | | | | | | | | |
| (none) | | | | | | | | |
| Windows | | | | | | | | |
| Low E 2012: 2 glazing, clr outr, air gas, mtl no brk frm mat, clr innr, 1/4" gap, 1/8" thk; 6.67 ft head ht | nw | 16 | 0.300 | 0 | 21.3 | 341 | 24.6 | 394 |
| Doors | | | | | | | | |
| (none) | | | | | | | | |
| Ceilings | | | | | | | | |
| (none) | | | | | | | | |
| Floors | | | | | | | | |
| 22B-10cpm: Bg floor, heavy dry or light damp soil, on grade depth, r-10 edge ins, carpet flr fnsh | | 38 | 0.355 | 10.0 | 25.2 | 958 | 0 | 0 |

Bold/italic values have been manually overridden



Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | |
|--|---------------------------------------|---|--|---|
| Location: Severance, Co Elevation: 5016 ft Latitude: 40°N | | Indoor: Indoor temperature (°F) 72 Design TD (°F) 71 Relative humidity (%) 30 Moisture difference (gr/lb) 36.5 | Heating 72 71 30 36.5 | Cooling 75 16 50 -19.0 |
| Outdoor: Drybulb (°F) Daily range (°F) Wet bulb (°F) Wind speed (mph) | Heating 1 - - 15.0 | Cooling 91 28 (H) 63 7.5 | Infiltration: Method Simplified Construction quality Semi-tight Fireplaces 0 | |

Construction descriptions

| Construction descriptions | Or | Area ft ² | U-value Btuh/ft ² -°F | Insul R ft ² -°F/Btuh | Htg HTM Btuh/ft ² | Loss Btuh | Clg HTM Btuh/ft ² | Gain Btuh |
|---|-----|-------------------------|-------------------------------------|-------------------------------------|---------------------------------|--------------|---------------------------------|--------------|
| Walls 15B19-0wc-8: Bg wall, heavy dry or light damp soil, 2"x6" wood int frm, concrete wall, r-19 cav ins, 8" thk, 1/2" gypsum board int fnsh | ne | 68 | 0.040 | 19.0 | 3.07 | 207 | 0.06 | 4 |
| | se | 230 | 0.040 | 19.0 | 3.07 | 704 | 0.06 | 13 |
| | nw | 77 | 0.040 | 19.0 | 3.07 | 235 | 0.06 | 4 |
| | all | 374 | 0.040 | 19.0 | 3.07 | 1146 | 0.06 | 21 |
| 12E-0sw: Frm wall, wd ext, 3/8" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud | sw | 183 | 0.068 | 19.0 | 4.83 | 884 | 0.97 | 177 |

Partitions (none)

Windows

| | | | | | | | | |
|---|-----|----|-------|---|------|------|------|------|
| Low E 2012: 2 glazing, clr outr, air gas, mtl no brk frm mat, clr innr, 1/4" gap, 1/8" thk; 6.67 ft head ht | se | 32 | 0.300 | 0 | 21.3 | 682 | 30.1 | 964 |
| | sw | 42 | 0.300 | 0 | 21.3 | 895 | 30.1 | 1265 |
| | all | 74 | 0.300 | 0 | 21.3 | 1576 | 30.1 | 2229 |

Doors (none)

Ceilings (none)

Floors

| | | | | | | | |
|---|----|-------|------|------|------|---|---|
| 22B-10cpm: Bg floor, heavy dry or light damp soil, on grade depth, r-10 edge ins, carpet flr fnsh | 67 | 0.355 | 10.0 | 25.2 | 1676 | 0 | 0 |
|---|----|-------|------|------|------|---|---|

Bold/italic values have been manually overridden



Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | | |
|--------------------|----------------|----------------|-----------------------------|----------------|----------------|
| Location: | | | Indoor: | Heating | Cooling |
| Severance, Co | | | Indoor temperature (°F) | 72 | 75 |
| Elevation: 5016 ft | | | Design TD (°F) | 71 | 16 |
| Latitude: 40°N | | | Relative humidity (%) | 30 | 50 |
| Outdoor: | Heating | Cooling | Moisture difference (gr/lb) | 36.5 | -19.0 |
| Drybulb (°F) | 1 | 91 | Infiltration: | | |
| Daily range (°F) | - | 28 (H) | Method | Simplified | |
| Wet bulb (°F) | - | 63 | Construction quality | Semi-tight | |
| Wind speed (mph) | 15.0 | 7.5 | Fireplaces | 0 | |

Construction descriptions

| | Or | Area | U-value | Insul R | Htg HTM | Loss | Clg HTM | Gain |
|--|-----|------|-------------|-------------|----------|------|----------|------|
| | | ft² | Btuh/ft²-°F | ft²-°F/Btuh | Btuh/ft² | Btuh | Btuh/ft² | Btuh |
| Walls | | | | | | | | |
| 15B19-0wc-8: Bg wall, heavy dry or light damp soil, 2"x6" wood int frm, | ne | 113 | 0.040 | 19.0 | 3.07 | 345 | 0.06 | 6 |
| concrete wall, r-19 cav ins, 8" thk, 1/2" gypsum board int fnsh | nw | 54 | 0.040 | 19.0 | 3.07 | 166 | 0.06 | 3 |
| | all | 167 | 0.040 | 19.0 | 3.07 | 511 | 0.06 | 9 |
| Partitions | | | | | | | | |
| (none) | | | | | | | | |
| Windows | | | | | | | | |
| (none) | | | | | | | | |
| Doors | | | | | | | | |
| (none) | | | | | | | | |
| Ceilings | | | | | | | | |
| (none) | | | | | | | | |
| Floors | | | | | | | | |
| 21A-32c: Bg floor, heavy dry or light damp soil, 8' depth, carpet flr fnsh | | 75 | 0.020 | 0 | 1.42 | 107 | 0 | 0 |

Bold/italic values have been manually overridden



Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | | |
|--------------------|----------------|----------------|-----------------------------|----------------|----------------|
| Location: | | | Indoor: | Heating | Cooling |
| Severance, Co | | | Indoor temperature (°F) | 72 | 75 |
| Elevation: 5016 ft | | | Design TD (°F) | 71 | 16 |
| Latitude: 40°N | | | Relative humidity (%) | 30 | 50 |
| Outdoor: | Heating | Cooling | Moisture difference (gr/lb) | 36.5 | -19.0 |
| Drybulb (°F) | 1 | 91 | Infiltration: | | |
| Daily range (°F) | - | 28 (H) | Method | Simplified | |
| Wet bulb (°F) | - | 63 | Construction quality | Semi-tight | |
| Wind speed (mph) | 15.0 | 7.5 | Fireplaces | 0 | |

Construction descriptions

| | Or | Area | U-value | Insul R | Htg HTM | Loss | Clg HTM | Gain |
|--|----|------|-------------|-------------|----------|------|----------|------|
| | | ft² | Btuh/ft²-°F | ft²-°F/Btuh | Btuh/ft² | Btuh | Btuh/ft² | Btuh |
| Walls | | | | | | | | |
| Basement Wall R-11: Bg wall, heavy dry or light damp soil, 2"x4" wood int frm, concrete wall, r-11 cav ins, 8" thk, 1/2" gypsum board int fnsh | se | 81 | 0.099 | 11.0 | 7.03 | 569 | 0.81 | 66 |
| Partitions | | | | | | | | |
| (none) | | | | | | | | |
| Windows | | | | | | | | |
| (none) | | | | | | | | |
| Doors | | | | | | | | |
| (none) | | | | | | | | |
| Ceilings | | | | | | | | |
| (none) | | | | | | | | |
| Floors | | | | | | | | |
| 21A-32c: Bg floor, heavy dry or light damp soil, 8' depth, carpet flr fnsh | | 113 | 0.020 | 0 | 1.42 | 160 | 0 | 0 |

Bold/italic values have been manually overridden



Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | | |
|--------------------|----------------|-----------------------------|----------------------|----------------|----------------|
| Location: | | Indoor: | | Heating | Cooling |
| Severance, Co | | Indoor temperature (°F) | | 72 | 75 |
| Elevation: 5016 ft | | Design TD (°F) | | 71 | 16 |
| Latitude: 40°N | | Relative humidity (%) | | 30 | 50 |
| Outdoor: | | Moisture difference (gr/lb) | | 36.5 | -19.0 |
| | Heating | Cooling | Infiltration: | | |
| Drybulb (°F) | 1 | 91 | Method | Simplified | |
| Daily range (°F) | - | 28 (H) | Construction quality | Semi-tight | |
| Wet bulb (°F) | - | 63 | Fireplaces | 0 | |
| Wind speed (mph) | 15.0 | 7.5 | | | |

Construction descriptions

| | Or | Area | U-value | Insul R | Htg HTM | Loss | Clg HTM | Gain |
|---|-----|-----------------|--------------------------|--------------------------|----------------------|------|----------------------|------|
| | | ft ² | Btuh/ft ² -°F | ft ² -°F/Btuh | Btuh/ft ² | Btuh | Btuh/ft ² | Btuh |
| Walls | | | | | | | | |
| 15B15-0wc-8: Bg wall, heavy dry or light damp soil, 2"x4" wood int frm, | ne | 185 | 0.047 | 15.0 | 3.66 | 675 | 0.07 | 13 |
| concrete wall, r-15 cav ins, 8" thk, 1/2" gypsum board int fnsh | se | 146 | 0.047 | 15.0 | 3.38 | 493 | 0.01 | 1 |
| | nw | 140 | 0.047 | 15.0 | 3.66 | 511 | 0.07 | 10 |
| | all | 470 | 0.047 | 15.0 | 3.57 | 1679 | 0.05 | 25 |
| Partitions | | | | | | | | |
| (none) | | | | | | | | |
| Windows | | | | | | | | |
| Low E 2012: 2 glazing, clr outr, air gas, mtl no brk frm mat, clr innr, 1/4" gap, 1/8" thk; 6.67 ft head ht | se | 16 | 0.300 | 0 | 21.3 | 341 | 30.1 | 482 |
| Doors | | | | | | | | |
| (none) | | | | | | | | |
| Ceilings | | | | | | | | |
| (none) | | | | | | | | |
| Floors | | | | | | | | |
| 21A-32c: Bg floor, heavy dry or light damp soil, 8' depth, carpet flr fnsh | | 330 | 0.020 | 0 | 1.42 | 468 | 0 | 0 |

Bold/italic values have been manually overridden



Loads for Multiple Orientations

Entire House

Rockview Designs

Job: 4341 W. Schilling St.
 Date: Mar 15, 2020
 By: Rockview Designs (MM)

Project Information

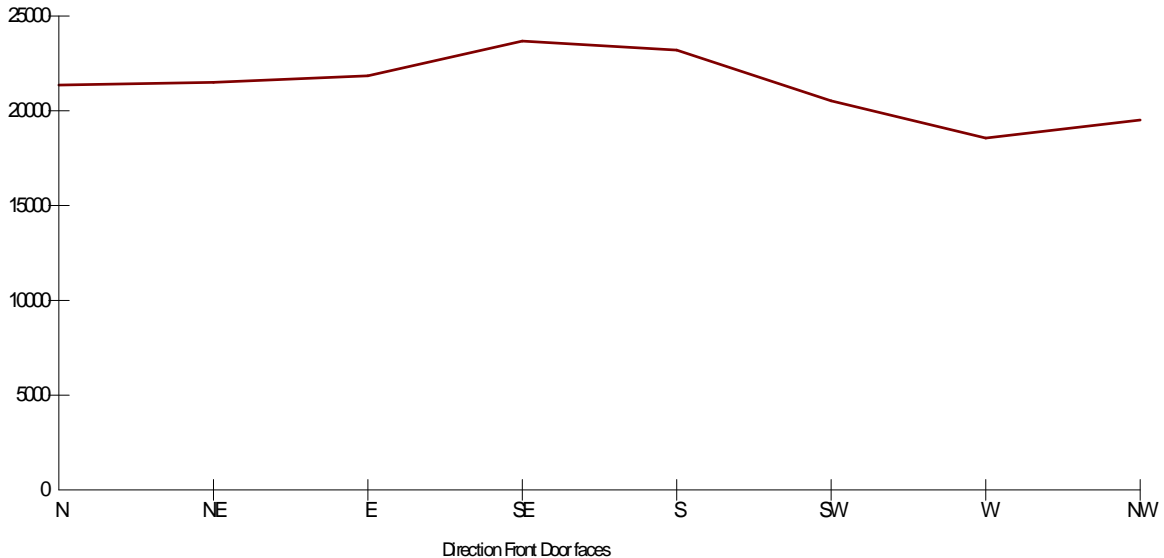
For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | |
|--------------------|----------------|-----------------------------|----------------------|----------------|
| Location: | | Indoor: | Heating | Cooling |
| Severance, Co | | Indoor temperature (°F) | 72 | 75 |
| Elevation: 5016 ft | | Design TD (°F) | 71 | 16 |
| Latitude: 40°N | | Relative humidity (%) | 30 | 50 |
| | | Moisture difference (gr/lb) | 36.5 | -19.0 |
| Outdoor: | Heating | Cooling | Infiltration: | |
| Drybulb (°F) | 1 | 91 | | |
| Daily range (°F) | - | 28 (H) | | |
| Wet bulb (°F) | - | 63 | | |
| Wind speed (mph) | 15.0 | 7.5 | | |

| Front Door | North | Northeast | East | Southeast | South | Southwest | West | Northwest |
|----------------------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|
| Sensible Load (Btuh) | 21358 | 21501 | 21840 | 23673 | 23204 | 20518 | 18558 | 19517 |
| Latent Load (Btuh) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Load (Btuh) | 21358 | 21501 | 21840 | 23673 | 23204 | 20518 | 18558 | 19517 |
| Heating AVF (cfm) | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 |
| Cooling AVF (cfm) | 1060 | 1060 | 1060 | 1060 | 1060 | 1060 | 1060 | 1060 |

Building Orientation Cooling Load



Current Orientation: Front Door faces Northeast
 Highest Cooling Load: Front Door faces Southeast

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



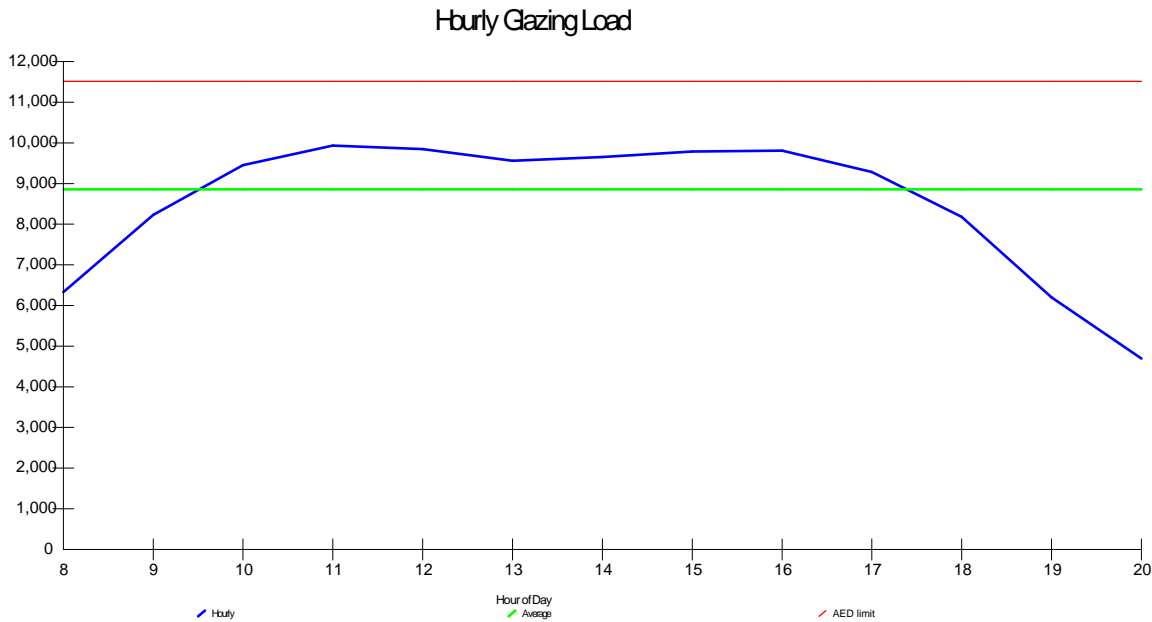
Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Design Conditions

| | | | | |
|--------------------|----------------|-----------------------------|----------------------|----------------|
| Location: | | Indoor: | Heating | Cooling |
| Severance, Co | | Indoor temperature (°F) | 72 | 75 |
| Elevation: 5016 ft | | Design TD (°F) | 71 | 16 |
| Latitude: 40°N | | Relative humidity (%) | 30 | 50 |
| | | Moisture difference (gr/lb) | 36.5 | -19.0 |
| Outdoor: | Heating | Cooling | Infiltration: | |
| Drybulb (°F) | 1 | 91 | | |
| Daily range (°F) | - | 28 (H) | | |
| Wet bulb (°F) | - | 63 | | |
| Wind speed (mph) | 15.0 | 7.5 | | |

Test for Adequate Exposure Diversity



Maximum hourly glazing load exceeds average by 12.2%.

House has adequate exposure diversity (AED), based on AED limit of 30%.

AED excursion: 1296 Btuh (PFG - ALP)

Bold/italic values have been manually overridden



Duct system multi orientation report

Entire House

Rockview Designs

Job: 4341 W. Schilling St.
 Date: Mar 15, 2020
 By: Rockview Designs (MM)

Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Group 1: (N, NE, S) Group 2: (E, SE) Group 3: (SW) Group 4: (W) Group 5: (NW)

| Duct Name | (N) | | | (NE) | | | (E) | | | (SE) | | |
|------------------|---------|----------|-----------|---------|----------|-----------|---------|----------|-----------|---------|----------|-----------|
| | Reg CFM | Reg Size | Duct Size | Reg CFM | Reg Size | Duct Size | Reg CFM | Reg Size | Duct Size | Reg CFM | Reg Size | Duct Size |
| Supply Branches | | | | | | | | | | | | |
| Bathroom 2 | 27 c | 10x2 | 4 | 27 c | 10x2 | 4 | 29 c | 10x2 | 4 | 27 c | 10x2 | 4 |
| Bathroom 3 | 23 c | 10x6 | 4 | 23 h | 10x6 | 4 | 24 c | 10x6 | 4 | 23 c | 10x6 | 4 |
| Bedroom 2 | 60 c | 10x4 | 5 | 58 c | 10x4 | 5 | 53 c | 10x4 | 5 | 56 c | 10x4 | 5 |
| Bedroom 4 | 104 h | 10x6 | 7 | 104 h | 10x6 | 7 | 104 h | 10x6 | 7 | 104 h | 10x6 | 7 |
| Bedroom 5 | 101 h | 12x6 | 7 | 101 h | 12x6 | 7 | 101 h | 12x6 | 7 | 101 h | 12x6 | 7 |
| Foyer | 75 h | 10x4 | 6 | 75 h | 10x4 | 6 | 75 h | 10x4 | 6 | 75 h | 10x4 | 6 |
| Laundry | 34 c | 10x2 | 4 | 33 c | 10x2 | 4 | 35 c | 10x2 | 4 | 34 c | 10x2 | 4 |
| Living/Kitchen | 98 c | 10x4 | 6 | 94 c | 10x4 | 6 | 85 c | 10x4 | 6 | 90 c | 10x4 | 6 |
| Living/Kitchen-A | 98 c | 10x4 | 6 | 94 c | 10x4 | 6 | 85 c | 10x4 | 6 | 90 c | 10x4 | 6 |
| Living/Kitchen-B | 98 c | 10x4 | 6 | 94 c | 10x4 | 6 | 85 c | 10x4 | 6 | 90 c | 10x4 | 6 |
| Living/Kitchen-C | 98 c | 10x4 | 6 | 94 c | 10x4 | 6 | 85 c | 10x4 | 6 | 90 c | 10x4 | 6 |
| Master Bathroom | 57 h | 10x4 | 6 | 57 h | 10x4 | 6 | 57 h | 10x4 | 6 | 57 h | 10x4 | 6 |
| Master Bedroom | 52 h | 10x4 | 5 | 52 h | 10x4 | 5 | 62 c | 10x4 | 5 | 65 c | 10x4 | 5 |
| Master Bedroom-A | 52 h | 10x4 | 5 | 52 h | 10x4 | 5 | 62 c | 10x4 | 5 | 65 c | 10x4 | 5 |
| Rec Room | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 |
| Rec Room-A | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 |
| Rec Room-B | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 |
| Study | 83 h | 10x4 | 6 | 83 h | 10x4 | 6 | 83 h | 10x4 | 6 | 83 h | 10x4 | 6 |
| Toilet | 16 h | 10x2 | 4 | 16 h | 10x2 | 4 | 16 h | 10x2 | 4 | 16 h | 10x2 | 4 |
| Supply Trunks | | | | | | | | | | | | |
| st1 | 276 h | | 8x8 | 276 h | | 8x8 | 276 h | | 10x8 | 276 h | | 10x8 |
| st2A | 695 c | | 16x8 | 700 c | | 16x8 | 704 c | | 16x8 | 728 c | | 16x8 |
| st2 | 873 c | | 20x8 | 867 c | | 20x8 | 868 c | | 20x8 | 897 c | | 20x8 |
| st2B | 393 c | | 12x8 | 394 c | | 12x8 | 387 c | | 12x8 | 399 c | | 12x8 |
| Return Branches | | | | | | | | | | | | |
| rb3 | 88 c | 14x6 | 6 | 85 c | 14x6 | 6 | 81 c | 14x6 | 6 | 83 c | 14x6 | 6 |
| rb7 | 83 h | 14x6 | 6 | 83 h | 14x6 | 6 | 83 h | 14x6 | 6 | 83 h | 14x6 | 6 |
| rb9 | 104 h | 14x6 | 6 | 104 h | 14x6 | 6 | 104 h | 14x6 | 6 | 104 h | 14x6 | 6 |
| rb8 | 124 h | 14x6 | 7 | 124 h | 14x6 | 7 | 124 h | 14x6 | 7 | 124 h | 14x6 | 7 |
| rb6 | 170 c | 15x6 | 8 | 168 c | 15x6 | 8 | 163 c | 15x6 | 8 | 157 c | 15x6 | 8 |
| rb5 | 196 c | 15x6 | 8 | 188 c | 15x6 | 8 | 170 c | 15x6 | 8 | 180 c | 15x6 | 8 |
| rb1 | 105 h | 15x6 | 7 | 105 h | 15x6 | 7 | 124 c | 15x6 | 7 | 129 c | 15x6 | 7 |
| rb4 | 159 c | 15x6 | 7 | 147 c | 15x6 | 7 | 137 c | 15x6 | 7 | 146 c | 15x6 | 7 |
| rb2 | 222 h | 12x12 | 9 | 222 h | 12x12 | 9 | 222 h | 12x12 | 9 | 222 h | 12x12 | 9 |
| Return Trunks | | | | | | | | | | | | |
| rt3A | 451 h | | 14x8 | 451 h | | 14x8 | 469 c | | 14x8 | 471 c | | 14x8 |
| rt2 | 245 h | | 8x8 | 245 h | | 8x8 | 245 h | | 8x8 | 245 h | | 8x8 |
| rrs1 | 1080 h | | 25x12 | 1080 h | | 25x12 | 1080 h | | 25x12 | 1080 h | | 25x12 |
| rt3 | 851 c | | 20x8 | 850 c | | 20x8 | 857 c | | 20x8 | 875 c | | 20x8 |
| rt1 | 1080 h | | 24x10 | 1080 h | | 24x10 | 1080 h | | 24x10 | 1080 h | | 24x10 |

| Friction Rates | | | | | | | | | | | | |
|----------------|-------|--|--|-------|--|--|-------|--|--|-------|--|--|
| Heating FR | 0.063 | | | 0.063 | | | 0.061 | | | 0.061 | | |
| Cooling FR | 0.077 | | | 0.077 | | | 0.075 | | | 0.075 | | |

Project Information

For: Jackson Contracting
4341 W. Schilling St., Severance, Co

| Duct Name | (S) | | | (SW) | | | (W) | | | (NW) | | |
|------------------------|---------|----------|-----------|---------|----------|-----------|---------|----------|-----------|---------|----------|-----------|
| | Reg CFM | Reg Size | Duct Size | Reg CFM | Reg Size | Duct Size | Reg CFM | Reg Size | Duct Size | Reg CFM | Reg Size | Duct Size |
| Supply Branches | | | | | | | | | | | | |
| Bathroom 2 | 28 c | 10x2 | 4 | 31 c | 10x2 | 4 | 34 c | 10x2 | 4 | 31 c | 10x2 | 4 |
| Bathroom 3 | 24 c | 10x6 | 4 | 27 c | 10x6 | 4 | 29 c | 10x6 | 4 | 26 c | 10x6 | 4 |
| Bedroom 2 | 56 c | 10x4 | 5 | 46 c | 10x4 | 4 | 45 h | 10x4 | 4 | 52 c | 10x4 | 5 |
| Bedroom 4 | 104 h | 10x6 | 7 | 104 h | 10x6 | 7 | 104 h | 10x6 | 7 | 104 h | 10x6 | 7 |
| Bedroom 5 | 101 h | 12x6 | 7 | 101 h | 12x6 | 7 | 101 h | 12x6 | 7 | 101 h | 12x6 | 7 |
| Foyer | 75 h | 10x4 | 6 | 75 h | 10x4 | 6 | 75 h | 10x4 | 6 | 75 h | 10x4 | 6 |
| Laundry | 34 c | 10x2 | 4 | 38 c | 10x2 | 4 | 42 c | 10x2 | 4 | 38 c | 10x2 | 4 |
| Living/Kitchen | 91 c | 10x4 | 6 | 73 c | 10x4 | 6 | 65 c | 10x4 | 5 | 84 c | 10x4 | 6 |
| Living/Kitchen-A | 91 c | 10x4 | 6 | 73 c | 10x4 | 6 | 65 c | 10x4 | 5 | 84 c | 10x4 | 6 |
| Living/Kitchen-B | 91 c | 10x4 | 6 | 73 c | 10x4 | 6 | 65 c | 10x4 | 5 | 84 c | 10x4 | 6 |
| Living/Kitchen-C | 91 c | 10x4 | 6 | 73 c | 10x4 | 6 | 65 c | 10x4 | 5 | 84 c | 10x4 | 6 |
| Master Bathroom | 60 c | 10x4 | 6 | 67 c | 10x4 | 6 | 67 c | 10x4 | 6 | 63 c | 10x4 | 6 |
| Master Bedroom | 61 c | 10x4 | 5 | 67 c | 10x4 | 5 | 72 c | 10x4 | 6 | 60 c | 10x4 | 5 |
| Master Bedroom-A | 61 c | 10x4 | 5 | 67 c | 10x4 | 5 | 72 c | 10x4 | 6 | 60 c | 10x4 | 5 |
| Rec Room | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 |
| Rec Room-A | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 |
| Rec Room-B | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 |
| Study | 83 h | 10x4 | 6 | 83 h | 10x4 | 6 | 100 c | 10x4 | 6 | 87 c | 10x4 | 6 |
| Toilet | 16 h | 10x2 | 4 | 16 h | 10x2 | 4 | 16 h | 10x2 | 4 | 16 h | 10x2 | 4 |
| Supply Trunks | | | | | | | | | | | | |
| st1 | 276 h | | 8x8 | 276 h | | 10x8 | 276 h | | 10x8 | 276 h | | 8x8 |
| st2A | 727 c | | 16x8 | 695 c | | 16x8 | 657 c | | 16x8 | 667 c | | 16x8 |
| st2 | 907 c | | 20x8 | 878 c | | 20x8 | 842 c | | 20x8 | 851 c | | 20x8 |
| st2B | 394 c | | 12x8 | 355 c | | 10x8 | 331 c | | 10x8 | 362 c | | 10x8 |
| Return Branches | | | | | | | | | | | | |
| rb3 | 84 c | 14x6 | 6 | 77 c | 14x6 | 6 | 75 c | 14x6 | 5 | 83 c | 14x6 | 6 |
| rb7 | 83 h | 14x6 | 6 | 83 h | 14x6 | 6 | 100 c | 14x6 | 6 | 87 c | 14x6 | 6 |
| rb9 | 104 h | 14x6 | 6 | 104 h | 14x6 | 6 | 104 h | 14x6 | 6 | 104 h | 14x6 | 6 |
| rb8 | 124 h | 14x6 | 7 | 124 h | 14x6 | 7 | 124 h | 14x6 | 7 | 124 h | 14x6 | 7 |
| rb6 | 156 c | 15x6 | 8 | 156 h | 15x6 | 8 | 160 c | 15x6 | 8 | 169 c | 15x6 | 8 |
| rb5 | 181 c | 15x6 | 8 | 147 c | 15x6 | 7 | 129 c | 15x6 | 7 | 167 c | 15x6 | 8 |
| rb1 | 122 c | 15x6 | 7 | 134 c | 15x6 | 7 | 143 c | 15x6 | 7 | 120 c | 15x6 | 7 |
| rb4 | 156 c | 15x6 | 7 | 145 c | 15x6 | 7 | 137 c | 15x6 | 7 | 152 c | 15x6 | 7 |
| rb2 | 222 h | 12x12 | 9 | 222 h | 12x12 | 9 | 222 h | 12x12 | 9 | 222 h | 12x12 | 9 |
| Return Trunks | | | | | | | | | | | | |
| rt3A | 461 c | | 14x8 | 483 c | | 14x8 | 477 c | | 14x8 | 451 h | | 14x8 |
| rt2 | 245 h | | 8x8 | 245 h | | 8x8 | 245 h | | 8x8 | 245 h | | 8x8 |
| rrs1 | 1080 h | | 25x12 | 1080 h | | 25x12 | 1080 h | | 25x12 | 1080 h | | 25x12 |
| rt3 | 882 c | | 20x8 | 874 c | | 20x8 | 854 c | | 20x8 | 846 c | | 20x8 |
| rt1 | 1080 h | | 24x10 | 1080 h | | 24x10 | 1080 h | | 24x10 | 1080 h | | 24x10 |
| Friction Rates | | | | | | | | | | | | |
| Heating FR | 0.063 | | | 0.061 | | | 0.061 | | | 0.063 | | |
| Cooling FR | 0.077 | | | 0.075 | | | 0.075 | | | 0.077 | | |

Project Information

For: Jackson Contracting
4341 W. Schilling St., Severance, Co

| Duct Name | Largest | | | Smallest | | |
|------------------------|---------|----------|-----------|----------|----------|-----------|
| | Reg CFM | Reg Size | Duct Size | Reg CFM | Reg Size | Duct Size |
| Supply Branches | | | | | | |
| Bathroom 2 | 34 c | 10x2 | 4 | 27 c | 10x2 | 4 |
| Bathroom 3 | 29 c | 10x6 | 4 | 23 h | 10x6 | 4 |
| Bedroom 2 | 60 c | 10x4 | 5 | 45 h | 10x4 | 4 |
| Bedroom 4 | 104 h | 10x6 | 7 | 104 h | 10x6 | 7 |
| Bedroom 5 | 101 h | 12x6 | 7 | 101 h | 12x6 | 7 |
| Foyer | 75 h | 10x4 | 6 | 75 h | 10x4 | 6 |
| Laundry | 42 c | 10x2 | 4 | 33 c | 10x2 | 4 |
| Living/Kitchen | 98 c | 10x4 | 6 | 65 c | 10x4 | 5 |
| Living/Kitchen-A | 98 c | 10x4 | 6 | 65 c | 10x4 | 5 |
| Living/Kitchen-B | 98 c | 10x4 | 6 | 65 c | 10x4 | 5 |
| Living/Kitchen-C | 98 c | 10x4 | 6 | 65 c | 10x4 | 5 |
| Master Bathroom | 67 c | 10x4 | 6 | 57 h | 10x4 | 6 |
| Master Bedroom | 72 c | 10x4 | 6 | 52 h | 10x4 | 5 |
| Master Bedroom-A | 72 c | 10x4 | 6 | 52 h | 10x4 | 5 |
| Rec Room | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 |
| Rec Room-A | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 |
| Rec Room-B | 74 h | 10x6 | 6 | 74 h | 10x6 | 6 |
| Study | 100 c | 10x4 | 6 | 83 h | 10x4 | 6 |
| Toilet | 16 h | 10x2 | 4 | 16 h | 10x2 | 4 |
| Supply Trunks | | | | | | |
| st1 | 276 h | | 10x8 | 276 h | | 8x8 |
| st2A | 728 c | | 16x8 | 657 c | | 16x8 |
| st2 | 907 c | | 20x8 | 842 c | | 20x8 |
| st2B | 399 c | | 12x8 | 331 c | | 10x8 |
| Return Branches | | | | | | |
| rb3 | 88 c | 14x6 | 6 | 75 c | 14x6 | 5 |
| rb7 | 100 c | 14x6 | 6 | 83 h | 14x6 | 6 |
| rb9 | 104 h | 14x6 | 6 | 104 h | 14x6 | 6 |
| rb8 | 124 h | 14x6 | 7 | 124 h | 14x6 | 7 |
| rb6 | 170 c | 15x6 | 8 | 156 h | 15x6 | 8 |
| rb5 | 196 c | 15x6 | 8 | 129 c | 15x6 | 7 |
| rb1 | 143 c | 15x6 | 7 | 105 h | 15x6 | 7 |
| rb4 | 159 c | 15x6 | 7 | 137 c | 15x6 | 7 |
| rb2 | 222 h | 12x12 | 9 | 222 h | 12x12 | 9 |
| Return Trunks | | | | | | |
| rt3A | 483 c | | 14x8 | 451 h | | 14x8 |
| rt2 | 245 h | | 8x8 | 245 h | | 8x8 |
| rrs1 | 1080 h | | 25x12 | 1080 h | | 25x12 |
| rt3 | 882 c | | 20x8 | 846 c | | 20x8 |
| rt1 | 1080 h | | 24x10 | 1080 h | | 24x10 |
| Friction Rates | | | | | | |
| Heating FR | 0.063 | | | 0.061 | | |
| Cooling FR | 0.077 | | | 0.075 | | |



Static Pressure and Friction Rate
Entire House
Rockview Designs

Job: 4341 W. Schilling St.
 Date: Mar 15, 2020
 By: Rockview Designs (MM)

Project Information

For: Jackson Contracting
 4341 W. Schilling St., Severance, Co

Available Static Pressure

| | Heating (in H2O) | Cooling (in H2O) |
|---------------------------|---------------------|---------------------|
| External static pressure | 0.70 | 0.80 |
| Pressure losses | | |
| Coil | 0.15 | 0.16 |
| Heat exchanger | 0 | 0 |
| Supply diffusers | 0.03 | 0.03 |
| Return grilles | 0.03 | 0.03 |
| Filter | 0.10 | 0.10 |
| Humidifier | 0 | 0 |
| Balancing damper | 0 | 0 |
| Other device | 0 | 0 |
| Available static pressure | 0.39 | 0.48 |

Total Effective Length

| | Supply (ft) | Return (ft) |
|-------------------------------|----------------|----------------|
| Measured length of run-out | 33 | 16 |
| Measured length of trunk | 9 | 22 |
| Equivalent length of fittings | 215 | 345 |
| Total length | 256 | 382 |
| Total effective length | | 638 |

Friction Rate

| | Heating (in/100ft) | | Cooling (in/100ft) | |
|--------------|-----------------------|----|-----------------------|----|
| Supply Ducts | 0.061 | OK | 0.075 | OK |
| Return Ducts | 0.061 | OK | 0.075 | OK |

Fitting Equivalent Length Details

Supply 4AD=60, 8A7=30, 8A7=30, 2I2=85, 1B=10: TotalEL=215
 Return 6M=20, 6C6=115, 6CB=25, 12F1=20, 6CA=10, 6CA=10, 6CA=10, 10A=75, 8B3=20, 5A=40: TotalEL=345



Duct System Summary

Entire House
Rockview Designs

Job: 4341 W. Schilling St.
Date: Mar 15, 2020
By: Rockview Designs (MM)

Project Information

For: Jackson Contracting
4341 W. Schilling St., Severance, Co

| | Heating | Cooling |
|------------------------------------|----------------------|----------------------|
| External static pressure | 0.70 in H2O | 0.80 in H2O |
| Pressure losses | 0.31 in H2O | 0.32 in H2O |
| Available static pressure | 0.39 in H2O | 0.48 in H2O |
| Supply / return available pressure | 0.156 / 0.234 in H2O | 0.193 / 0.287 in H2O |
| Lowest friction rate | 0.061 in/100ft | 0.075 in/100ft |
| Actual air flow | 1080 cfm | 1060 cfm |
| Total effective length (TEL) | 638 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 | |
|------------------|---------------|-----------|-----------|-----------|-----------|------------|-----------|----------------|-----------------|-------|------|
| Bathroom 2 | c | 523 | 13 | 27 | 0.109 | 4.0 | 0x0 | ShMt | 11.5 | 165.0 | st1 |
| Bathroom 3 | c | 653 | 23 | 23 | 0.067 | 4.0 | 0x0 | ShMt | 38.0 | 195.0 | st2 |
| Bedroom 2 | c | 1069 | 45 | 56 | 0.105 | 5.0 | 0x0 | ShMt | 13.0 | 170.0 | st2 |
| Bedroom 4 | h | 2916 | 104 | 49 | 0.088 | 7.0 | 0x0 | ShMt | 23.5 | 155.0 | st1 |
| Bedroom 5 | h | 2825 | 101 | 44 | 0.076 | 7.0 | 0x0 | ShMt | 52.0 | 155.0 | st2A |
| Foyer | h | 2107 | 75 | 34 | 0.096 | 6.0 | 0x0 | ShMt | 18.6 | 145.0 | st1 |
| Laundry | c | 644 | 28 | 34 | 0.076 | 4.0 | 0x0 | ShMt | 29.3 | 225.0 | st2 |
| Living/Kitchen | c | 1728 | 52 | 90 | 0.100 | 6.0 | 0x0 | ShMt | 38.0 | 155.0 | st2B |
| Living/Kitchen-A | c | 1728 | 52 | 90 | 0.098 | 6.0 | 0x0 | ShMt | 21.5 | 175.0 | st2A |
| Living/Kitchen-B | c | 1728 | 52 | 90 | 0.097 | 6.0 | 0x0 | ShMt | 44.0 | 155.0 | st2B |
| Living/Kitchen-C | c | 1728 | 52 | 90 | 0.089 | 6.0 | 0x0 | ShMt | 40.5 | 175.0 | st2B |
| Master Bathroom | h | 1594 | 57 | 52 | 0.061 | 6.0 | 0x0 | ShMt | 41.0 | 215.0 | st2 |
| Master Bedroom | c | 1241 | 52 | 65 | 0.082 | 5.0 | 0x0 | ShMt | 50.0 | 185.0 | st2B |
| Master Bedroom-A | c | 1241 | 52 | 65 | 0.092 | 5.0 | 0x0 | ShMt | 45.0 | 165.0 | st2A |
| Rec Room | h | 2064 | 74 | 65 | 0.087 | 6.0 | 0x0 | ShMt | 34.0 | 145.0 | st2A |
| Rec Room-A | h | 2064 | 74 | 65 | 0.077 | 6.0 | 0x0 | ShMt | 37.0 | 165.0 | st2B |
| Rec Room-B | h | 2064 | 74 | 65 | 0.077 | 6.0 | 0x0 | ShMt | 22.5 | 180.0 | st2A |
| Study | h | 2322 | 83 | 54 | 0.099 | 6.0 | 0x0 | ShMt | 23.5 | 135.0 | st1 |
| Toilet | h | 438 | 16 | 5 | 0.065 | 4.0 | 0x0 | ShMt | 37.0 | 205.0 | st2 |

Bold/italic values have been manually overridden

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 | 276 | 163 | 0.088 | 497 | 8.7 | 8 x 10 | ShtMetl | |
| st2A | Peak AVF | 635 | 728 | 0.082 | 819 | 12.8 | 8 x 16 | ShtMetl | st2 |
| st2 | Peak AVF | 804 | 897 | 0.061 | 807 | 14.1 | 8 x 20 | ShtMetl | |
| st2B | Peak AVF | 282 | 399 | 0.082 | 599 | 10.2 | 8 x 12 | ShtMetl | st2A |

Return Branch Detail Table

| Name | Grille Size (in) | Htg (cfm) | Clg (cfm) | TEL (ft) | Design FR | Veloc (fpm) | Diam (in) | H x W (in) | Stud/Joist Opening (in) | Duct Matl | Trunk |
|------|------------------|-----------|-----------|----------|-----------|-------------|-----------|------------|-------------------------|-----------|-------|
| rb3 | 0x0 | 58 | 83 | 246.5 | 0.117 | 422 | 6.0 | 0x 0 | | ShMt | rt2 |
| rb7 | 0x0 | 83 | 54 | 317.6 | 0.074 | 423 | 6.0 | 0x 0 | | ShMt | rt2 |
| rb9 | 0x0 | 104 | 49 | 180.5 | 0.129 | 531 | 6.0 | 0x 0 | | ShMt | rt2 |
| rb8 | 0x0 | 124 | 67 | 207.5 | 0.113 | 465 | 7.0 | 0x 0 | | ShMt | rt3 |
| rb6 | 0x0 | 156 | 157 | 210.0 | 0.111 | 451 | 8.0 | 0x 0 | | ShMt | rt3 |
| rb5 | 0x0 | 104 | 180 | 221.0 | 0.130 | 515 | 8.0 | 0x 0 | | ShMt | rt3 |
| rb1 | 0x0 | 105 | 129 | 296.0 | 0.097 | 483 | 7.0 | 0x 0 | | ShMt | rt3A |
| rb4 | 0x0 | 125 | 146 | 382.0 | 0.075 | 548 | 7.0 | 0x 0 | | ShMt | rt3A |
| rb2 | 0x0 | 222 | 195 | 203.0 | 0.115 | 501 | 9.0 | 0x 0 | | ShMt | rt3A |

Return Trunk Detail Table

| Name | Trunk Type | Htg (cfm) | Clg (cfm) | Design FR | Veloc (fpm) | Diam (in) | H x W (in) | Duct Material | Trunk |
|------|------------|-----------|-----------|-----------|-------------|-----------|------------|---------------|-------|
| rt3A | Peak AVF | 451 | 471 | 0.061 | 605 | 11.3 | 8 x 14 | ShtMetl | rt3 |
| rt2 | Peak AVF | 245 | 185 | 0.074 | 552 | 8.7 | 8 x 8 | ShtMetl | rrs1 |
| rrs1 | Peak AVF | 1080 | 1060 | 0.061 | 518 | 14.3 | 12 x 25 | ShtMetl | rt1 |
| rt3 | Peak AVF | 835 | 875 | 0.061 | 787 | 14.3 | 8 x 20 | ShtMetl | rrs1 |
| rt1 | Peak AVF | 1080 | 1060 | 0.061 | 648 | 15.6 | 10 x 24 | ShtMetl | |

Bold/italic values have been manually overridden

