

Report By:

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Report: TAB Report
Function: Test, Adjust, & Balance
Date: 05/12/2025
Completed By: National TAB

PROJECT

03-31-25 WAWA #6300 WAYCROSS, GA

S GEORGIA PARKWAY & GEORGIA STREET

WAYCROSS, GA 31503

Client

Wawa
260 West Baltimore Pike
Wawa, PA 19063

National TAB

Project: 03-31-25 WAWA #6300 WAYCROSS, GA

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Project Summary

The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report is further detail about your building performance including recommendations, asset data, and pictures. Our focus is to work with the trades to remedy any issues or deficiencies during the actual field balancing and not after the balancing has occurred to achieve a positive environment and outcome. The level of success is determined by the availability of the trades, possible parts needed, or time constraints.

RTU's (Roof Top Units) w/ Diffusers

Each of the RTU's were measured at their terminal devices or via traverse to establish a total flow for that unit. Each RTU was adjusted to within tolerance of the engineer's design flow. Each outlet was then adjusted to within tolerance of the design flow. Outside air was measured by reading the intake air opening with a velocity grid and multiplying by the free area. The outside air damper was adjusted until the airflow was within the design requirements. Any equipment that fell outside of that tolerance is noted throughout the report.

General Exhaust Fans w/ Grilles

The general exhaust fans were measured by reading each air device with a flow hood. The total airflow for each fan is equivalent to the sum of these readings. Fan speed was then adjusted so that the airflow was within tolerance of design. Each terminal device was balanced to within tolerance of the design volume using the installed volume dampers. Any equipment that fell outside of this tolerance is noted throughout the report.

Ceiling Exhaust Fans

The ceiling exhaust fans were measured using a flow hood. If speed adjustment was provided, the fan speed was adjusted to within design tolerance. Any equipment that fell outside of this tolerance is noted throughout the report.

Final Building Tests

After completing the test and balance the final building pressure was measured. It was confirmed that the building pressure fell within acceptable tolerances and that the pressure measurement coincides with the actual and design net airflow. Any deviations from these standards are noted throughout the report.

Issue List

- EF-1 - No Dampers



03-31-25 WAWA #6300 WAYCROSS, GA

Project Issue Information

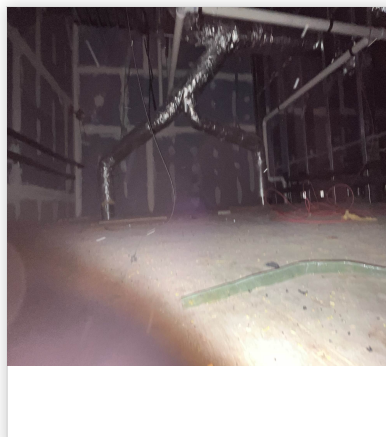
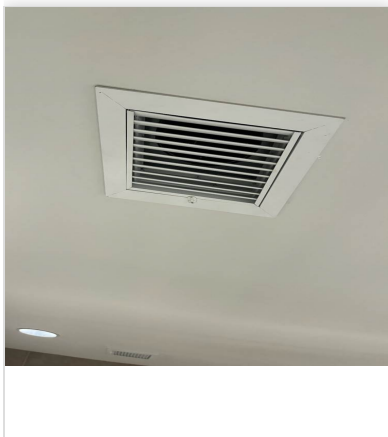
Issue Name : EF-1 - No Dampers
Description : Restroom exhaust grilles do not have dampers installed. Recommend installing face-accessible dampers to allow for balancing.
Created By : National TAB **Assigned To :** National TAB - Will Turnbough
Status : Open
Priority : Urgent **Asset Tag :**
Originated Date : 04/03/2025 - Mark Johnson - National TAB

Project Issue File Details



Project Issue Response Details

- **07/01/2025 National TAB - Ian Fuller**
 - Issue not resolved as of 7/1. Unable to balance individual diffusers.



07/01/2025

07/01/2025

AIR BALANCE SCHEDULE

| UNIT | AREA SERVED | HVAC SUPPLY | | HVAC RETURN | | HVAC OUTDOOR | | OA % | | HOOD MAKE-UP | | HOOD EXHAUST | | GENERAL EXH. | |
|---------------|-------------|-------------|--------|-------------|--------|--------------|--------|--------|--------|--------------|--------|--------------|--------|--------------|--------|
| | | DESIGN | ACTUAL | DESIGN | ACTUAL | DESIGN | ACTUAL | DESIGN | ACTUAL | DESIGN | ACTUAL | DESIGN | ACTUAL | DESIGN | ACTUAL |
| RTU-1 | RETAIL | 3400 | 3308 | 2900 | 2805 | 500 | 503 | 14.7% | 15.2% | | | | | | |
| RTU-2 | DELI | 4000 | 3989 | 3525 | 3483 | 475 | 506 | 11.9% | 12.7% | | | | | | |
| RTU-3 | COFFEE/SPEC | 3000 | 2955 | 2750 | 2700 | 250 | 255 | 8.3% | 8.6% | | | | | | |
| EF-1 | RESTROOMS | | | | | | | | | | | | | 325 | 322 |
| EF-2 | | | | | | | | | | | | | | 400 | 404 |
| TOTALS | | 10400 | 10252 | 9175 | 8988 | 1225 | 1264 | | | 0 | 0 | 0 | 0 | 725 | 726 |

NET BUILDING AIRFLOW CALCULATION

| TOTALS | DESIGN | ACTUAL |
|--------------------|------------|------------|
| TOTAL OA | 1225 | 1264 |
| TOTAL EXHAUST | 725 | 726 |
| NET AIRFLOW | 500 | 538 |

| DOOR TESTED | BUILDING PRESSURE MEASUREMENTS (IN. H2O) |
|----------------|--|
| FRONT | 0.0053 |
| SIDE | 0.0078 |
| REAR | 0.0112 |
| AVERAGE | 0.0081 |

FINAL CHECKS

- ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✓

- MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW: ✓

- PRESSURE FALLS WITHIN IMC TOLERANCE OF +/-0.02" W.C. ✓

NOTES:

National TAB

Project: 03-31-25 WAWA #6300 WAYCROSS, GA

System/Unit: AHU/RTU



Asset: RTU1

AREA: CORE

| Unit Data | | |
|---------------------|-------------------|-------------------|
| | Design | Actual |
| MFG | LENNOX ENLIGHT | LENNOX ENLIGHT |
| Serial Num | - | 5624H02036 |
| Model Num | LCT102H4E | LCT102H4EG1Y |
| Type | RTU | RTU |
| Configuration | VERTICAL | VERTICAL |
| Num OA Filters 1 | - | 1 |
| OA Filter Size 1 | - | 23x14 |
| Num Final Filter 1 | - | 4 |
| Final Filter Size 1 | - | 20x25x2 |

| Test Data | | |
|--------------------|--------|--------------|
| | Design | Actual |
| SF CFM | 3400 | 3308 |
| SF RPM | - | 1496 |
| MOTOR RPM | - | 1496 |
| RA CFM | 2900 | 2805 |
| OA CFM | 500 | 503 |
| RL Voltage | - | 207/207/207 |
| RL Amperage | - | 3.4/3.4/3.4 |
| SF System SetPt | - | 68% |
| OA Damper Position | - | 50% |
| OA Damper Type | - | SINGLE BLADE |

| Motor Data | | |
|----------------|--------|----------|
| | Design | Actual |
| Motor MFG | - | EBMPAPST |
| Frame | - | NL |
| Horsepower | 3.75 | 3.8 |
| Motor Rpm | - | 2200 |
| Phase | 3 | 3 |
| Rated Voltage | 208 | 200-240 |
| Rated Amperage | - | 8.7 |
| Service Factor | - | NL |

| Performance Data | | |
|------------------|--------|--------|
| | Design | Actual |
| MA Plenum SP | - | -0.26" |
| Fan Suction SP | - | -0.76" |
| Fan Discharge SP | - | 0.61" |
| Total ESP | 0.50" | 0.87" |
| Fan Total SP | - | 1.37" |

| Drive Data | |
|--------------------|--------|
| | Actual |
| Motor Sheave Size | DD |
| Motor Bore Size | DD |
| Motor Sheave SetPt | DD |
| Fan Sheave Size | DD |
| Fan Sheave Bore | DD |
| Belt CL Distance | DD |
| Num of Belts | DD |
| Belt Size | DD |

Completed By: Mark Johnson on 04/03/2025

Unit Data - PHOTO LOG



04/01/2025

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Project:03-31-25 WAWA #6300 WAYCROSS, GA

AHU/RTU



Diffuser Supply (GRD)

RTU1/CORE

| Asset | | | | | | | | | |
|------------|----------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| SGRD1 | RETAIL | CD1 | 6" | 100 | 1 | 77 | 96 | 96 | 96.0 |
| SGRD2 | RETAIL | LD1 | 8" | 200 | 1 | 149 | 193 | 193 | 96.5 |
| SGRD3 | RETAIL | LD1 | 10" | 300 | 1 | 207 | 326 | 304 | 101.3 |
| SGRD4 | RETAIL | LD1 | 10" | 300 | 1 | 165 | 253 | 270 | 90.0 |
| SGRD5 | RETAIL | LD1 | 8" | 250 | 1 | 105 | 125 | 225 | 90.0 |
| SGRD6 | RETAIL | LD1 | 8" | 250 | 1 | 109 | 154 | 248 | 99.2 |
| SGRD7 | RETAIL | LD1 | 8" | 250 | 1 | 175 | 296 | 239 | 95.6 |
| SGRD8 | RETAIL | LD1 | 10" | 275 | 1 | 217 | 343 | 269 | 97.8 |
| SGRD9 | RETAIL | LD1 | 10" | 300 | 1 | 177 | 318 | 312 | 104.0 |
| SGRD10 | RETAIL | LD1 | 10" | 300 | 1 | 55 | 121 | 301 | 100.3 |
| SGRD11 | RETAIL | LD1 | 10" | 250 | 1 | 219 | 408 | 241 | 96.4 |
| SGRD12 | RETAIL | CD1 | 10" | 275 | 1 | 150 | 285 | 269 | 97.8 |
| SGRD13 | RETAIL | CD1 | 6" | 150 | 1 | 62 | 105 | 139 | 92.7 |
| SGRD14 | RETAIL | CD4 | 6" | 75 | 1 | 71 | 66 | 80 | 106.7 |
| SGRD15 | RETAIL | CD4 | 6" | 75 | 1 | 94 | 186 | 71 | 94.7 |
| SGRD16 | RETAIL | LD1 | 10" | 50 | 1 | 279 | 506 | 51 | 102.0 |
| Total | | | | 3400 | | 2311 | 3781 | 3308 | 97.29% |

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Project: 03-31-25 WAWA #6300 WAYCROSS, GA

System/Unit: AHU/RTU



Asset: RTU2

AREA:DELI

| Unit Data | | |
|---------------------|-------------------|-------------------|
| | Design | Actual |
| MFG | LENNOX ENLIGHT | LENNOX ENLIGHT |
| Serial Num | - | 5624H03687 |
| Model Num | LCT120H4E | LCT120H4EN1Y |
| Type | RTU | RTU |
| Configuration | VERTICAL | VERTICAL |
| Num OA Filters 1 | - | 1 |
| OA Filter Size 1 | - | 23x14 |
| Num Final Filter 1 | - | 4 |
| Final Filter Size 1 | - | 20x25x2 |

| Test Data | | |
|--------------------|--------|--------------|
| | Design | Actual |
| SF CFM | 4000 | 3989 |
| SF RPM | - | 1628 |
| MOTOR RPM | - | 74% |
| RA CFM | 3525 | 3483 |
| OA CFM | 475 | 506 |
| RL Voltage | - | 208/208/208 |
| RL Amperage | - | 5.8/5.6/5.7 |
| SF System SetPt | - | 74% |
| OA Damper Position | - | 33% |
| OA Damper Type | - | SINGLE BLADE |

| Motor Data | | |
|----------------|--------|----------|
| | Design | Actual |
| Motor MFG | - | EBMPAPST |
| Frame | - | NL |
| Horsepower | 3.75 | 3.8 |
| Motor Rpm | - | 2200 |
| Phase | 3 | 3 |
| Rated Voltage | 208 | 200-240 |
| Rated Amperage | - | 8.7 |
| Service Factor | - | NL |

| Performance Data | | |
|------------------|--------|--------|
| | Design | Actual |
| MA Plenum SP | - | -0.45" |
| Fan Suction SP | - | -0.83" |
| Fan Discharge SP | - | 1.35" |
| Total ESP | 0.50" | 1.80" |
| Fan Total SP | - | 2.18" |

| Drive Data | |
|--------------------|--------|
| | Actual |
| Motor Sheave Size | DD |
| Motor Bore Size | DD |
| Motor Sheave SetPt | DD |
| Fan Sheave Size | DD |
| Fan Sheave Bore | DD |
| Belt CL Distance | DD |
| Num of Belts | DD |
| Belt Size | DD |

Completed By: Mark Johnson on 04/03/2025

Unit Data - PHOTO LOG



04/01/2025

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Project:03-31-25 WAWA #6300 WAYCROSS, GA

AHU/RTU



Diffuser Supply (GRD)

RTU2/DELI

| Asset | | | | | | | | | |
|------------|----------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| SGRD1 | DELI | CD3 | 8" | 150 | 1 | 81 | 139 | 135 | 90.0 |
| SGRD2 | DELI | CD1 | 12" | 550 | 1 | 132 | 540 | 567 | 103.1 |
| SGRD3 | DELI | LD1 | 10" | 410 | 1 | 114 | 389 | 404 | 98.5 |
| SGRD4 | DELI | LD1 | 10" | 410 | 1 | 225 | 306 | 406 | 99.0 |
| SGRD5 | DELI | LD1 | 10" | 410 | 1 | 993 | 974 | 391 | 95.4 |
| SGRD6 | DELI | LD1 | 10" | 400 | 1 | 137 | 149 | 396 | 99.0 |
| SGRD7 | DELI | LD1 | 10" | 410 | 1 | 140 | 150 | 375 | 91.5 |
| SGRD8 | DELI | LD1 | 12" | 410 | 1 | 781 | 404 | 420 | 102.4 |
| SGRD9 | DELI | LD1 | 10" | 400 | 1 | 773 | 426 | 438 | 109.5 |
| SGRD10 | DELI | CD1 | 10" | 450 | 1 | 751 | 449 | 457 | 101.6 |
| Total | | | | 4000 | | 4127 | 3926 | 3989 | 99.72% |

Diffuser Ret/Exh (GRD)

RTU2/DELI

| Asset | | | | | | | | | |
|------------|----------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| EGRD1 | DELI | G1 | 12" | 705 | 1 | 748 | 650 | 661 | 93.8 |
| EGRD2 | DELI | G1 | 12" | 705 | 1 | 830 | 674 | 683 | 96.9 |
| EGRD3 | DELI | G1 | 12" | 705 | 1 | 753 | 632 | 666 | 94.5 |
| EGRD4 | DELI | G1 | 12" | 705 | 1 | 781 | 687 | 709 | 100.6 |
| EGRD5 | DELI | G1 | 12" | 705 | 1 | 1015 | 812 | 701 | 99.4 |
| Total | | | | 3525 | | 4127 | 3455 | 3420 | 97.02% |

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Project: 03-31-25 WAWA #6300 WAYCROSS, GA

System/Unit: AHU/RTU



Asset: RTU3

AREA:COFFEE /SPECIAL

| Unit Data | | |
|---------------------|-------------------|-------------------|
| | Design | Actual |
| MFG | LENNOX ENLIGHT | LENNOX ENLIGHT |
| Serial Num | - | 5624H02039 |
| Model Num | LCT092H4E | LCT092H4EG1Y |
| Type | RTU | RTU |
| Configuration | VERTICAL | VERTICAL |
| Num OA Filters 1 | - | 1 |
| OA Filter Size 1 | - | 23x14 |
| Num Final Filter 1 | - | 4 |
| Final Filter Size 1 | - | 20x25x2 |

| Test Data | | |
|--------------------|--------|--------------|
| | Design | Actual |
| SF CFM | 3000 | 2955 |
| SF RPM | - | 1430 |
| MOTOR RPM | - | 1430 |
| RA CFM | 2750 | 2700 |
| OA CFM | 250 | 255 |
| RL Voltage | - | 209/208/209 |
| RL Amperage | - | 2.9/2.9/3.0 |
| SF System SetPt | - | 65% |
| OA Damper Position | - | 39% |
| OA Damper Type | - | SINGLE BLADE |

| Motor Data | | |
|----------------|--------|----------|
| | Design | Actual |
| Motor MFG | - | EBMPAPST |
| Frame | - | NL |
| Horsepower | 3.75 | 3.8 |
| Motor Rpm | - | 2200 |
| Phase | 3 | 3 |
| Rated Voltage | 208 | 200-240 |
| Rated Amperage | - | 8.7 |
| Service Factor | - | NL |

| Performance Data | | |
|------------------|--------|--------|
| | Design | Actual |
| MA Plenum SP | - | -0.25" |
| Fan Suction SP | - | -0.52" |
| Fan Discharge SP | - | 0.66" |
| Total ESP | 0.50" | 0.91" |
| Fan Total SP | - | 1.18" |

| Drive Data | |
|--------------------|--------|
| | Actual |
| Motor Sheave Size | DD |
| Motor Bore Size | DD |
| Motor Sheave SetPt | DD |
| Fan Sheave Size | DD |
| Fan Sheave Bore | DD |
| Belt CL Distance | DD |
| Num of Belts | DD |
| Belt Size | DD |

Completed By: Mark Johnson on 04/03/2025

Unit Data - PHOTO LOG



04/02/2025

National TAB

Project:03-31-25 WAWA #6300 WAYCROSS, GA

AHU/RTU



Diffuser Supply (GRD)

RTU3/COFFEE /SPECIAL

| Asset | | | | | | | | | |
|------------|-------------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| SGRD1 | COFFEE/SPEC | CD2 | 12" | 500 | 1 | 770 | 569 | 489 | 97.8 |
| SGRD2 | COFFEE/SPEC | LD1 | 10" | 450 | 1 | 59 | 380 | 411 | 91.3 |
| SGRD3 | COFFEE/SPEC | LD1 | 10" | 475 | 1 | 580 | 514 | 519 | 109.3 |
| SGRD4 | COFFEE/SPEC | LD1 | 10" | 475 | 1 | 548 | 479 | 470 | 98.9 |
| SGRD5 | COFFEE/SPEC | LD1 | 10" | 475 | 1 | 530 | 479 | 471 | 99.2 |
| SGRD6 | COFFEE/SPEC | LD1 | 10" | 475 | 1 | 444 | 402 | 436 | 91.8 |
| SGRD7 | COFFEE/SPEC | CD1 | 8" | 150 | 1 | 273 | 257 | 159 | 106.0 |
| Total | | | | 3000 | | 3204 | 3080 | 2955 | 98.5% |

National TAB

Project: 03-31-25 WAWA #6300 WAYCROSS, GA

System/Unit: FAN - Exhaust



Asset: EF1

AREA:RESTROOMS

| Unit Data | | |
|---------------|-----------|-----------------|
| | Design | Actual |
| MFG | GREENHECK | GREENHECK |
| Model Num | G-080 | G-080-VG-1-17-X |
| Serial Num | - | 25794863 |
| Type | DOWNBLAST | DOWNBLAST |
| Configuration | VERTICAL | VERTICAL |

| Motor Data | | |
|------------------|--------|-----------------|
| | Design | Actual |
| Motor MFG | - | VARI-GREEN |
| Frame | - | NL |
| Horsepower | 1.10 | 1/10 |
| Motor Rpm | - | 300-1750 |
| Phase | 1 | 1 |
| Voltage (rated) | 120 | 115/208-230/277 |
| Amperage (rated) | - | 1.38/0.84/0.73 |
| Service Factor | - | NL |

| Test Data | | |
|------------------|--------|--------|
| | Design | Actual |
| CFM | 325 | 322 |
| Fan RPM | - | DD |
| Fan Rotation | - | CCW |
| Motor RPM | - | DD |
| System SetPt | - | 5.5 V |
| RL Voltage | - | 120 |
| RL Amperage | - | 0.6 |
| Total ESP | .250" | 0.10" |
| Fan Inlet SP | - | -0.10" |
| Fan Discharge SP | - | ATM |

Completed By: Mark Johnson on 04/03/2025

Unit Data - PHOTO LOG



04/02/2025

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Project:03-31-25 WAWA #6300 WAYCROSS, GA

FAN - Exhaust



Diffuser Ret/Exh (GRD)

EF1/RESTROOMS

| Asset | | | | | | | | | |
|------------|-----------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| EGRD1 | WOMENS RR | G-3 | 6" | 100 | 1 | 94 | 94 | 94 | 94.0 |
| EGRD2 | WOMENS RR | G-3 | 8" | 100 | 1 | 69 | 69 | 69 | 69.0 |
| EGRD3 | MENS RR | G-3 | 6" | 50 | 1 | 79 | 79 | 79 | 158.0 |
| EGRD4 | MENS RR | G-4 | 6" | 75 | 1 | 80 | 80 | 80 | 106.7 |
| Total | | | | 325 | | 322 | 322 | 322 | 99.08% |

| Asset | Notes | Date | Written By |
|-------|--|------------|------------|
| EGRD1 | No face dampers. Unable to balance individual diffusers. | 06/12/2025 | Ian Fuller |

National TAB

Project: 03-31-25 WAWA #6300 WAYCROSS, GA

System/Unit: FAN - Exhaust



Asset: EF2

AREA:DELI

| Unit Data | | |
|---------------|-----------|-------------------|
| | Design | Actual |
| MFG | GREENHECK | GREENHECK |
| Model Num | G-120 | G-120-4-VG-1-19-X |
| Serial Num | - | 25794864 |
| Type | DOWNBLAST | DOWNBLAST |
| Configuration | VERTICAL | VERTICAL |

| Test Data | | |
|------------------|--------|--------|
| | Design | Actual |
| CFM | 400 | 404 |
| Fan RPM | - | DD |
| Fan Rotation | - | CW |
| Motor RPM | - | DD |
| System SetPt | - | 4.0 |
| RL Voltage | - | 120 |
| RL Amperage | - | 0.3 |
| Total ESP | .250" | 0.08" |
| Fan Inlet SP | - | -0.08" |
| Fan Discharge SP | - | ATM |

| Motor Data | | |
|------------------|--------|-----------------|
| | Design | Actual |
| Motor MFG | - | VARI-GREEN |
| Frame | - | NL |
| Horsepower | .50 | 1/4 |
| Motor Rpm | - | 300-1750 |
| Phase | 1 | 1 |
| Voltage (rated) | 120 | 115/208-230/277 |
| Amperage (rated) | - | 2.85/1.7/1.5 |
| Service Factor | - | NL |

Completed By: Mark Johnson on 04/03/2025

Unit Data - PHOTO LOG



04/02/2025

National TAB

Project:03-31-25 WAWA #6300 WAYCROSS, GA

FAN - Exhaust



Diffuser Ret/Exh (GRD)

EF2/DELI

| Asset | | | | | | | | | |
|------------|----------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| EGRD1 | WASHROOM | G1 | 10" | 200 | 1 | 397 | 184 | 184 | 92.0 |
| EGRD2 | BACKROOM | G1 | 10" | 200 | 1 | 496 | 220 | 220 | 110.0 |
| Total | | | | 400 | | 893 | 404 | 404 | 101% |

