

Report By:

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Report: TAB

Function: Test, Adjust, & Balance

Date: 03/31/2025

Completed By: National TAB

PROJECT

03-31-25 WAWA #7409 CHESTERFIELD, IN

6364 UNIVERSITY DR NW

HUNSTVILLE, AL 35806

Client

Wawa

260 West Baltimore Pike

Wawa, PA 19063

National TAB

Project: 03-31-25 WAWA #7409 CHESTERFIELD, IN

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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

- BACNET Not Wired
- EF-3 Above Design
- RTU-1 Dehumidification Mode
- RTU-1 In Unoccupied State
- RTU-2 & 3 Diffusers
- RTU-2 Diffusers Inaccessible
- RTU-2 Sensors



03-31-25 WAWA #7409 CHESTERFIELD, IN

Project Issue Information

Issue Name : BACNET Not Wired
Description : BACNET for units is not yet installed, to be installed 04/15 per GC.
Created By : National TAB **Assigned To :** National TAB - Jordan Best
Status : Open
Priority : Urgent **Asset Tag :**
Originated Date : 04/01/2025 - Jordan Best - National TAB



03-31-25 WAWA #7409 CHESTERFIELD, IN

Project Issue Information

Issue Name : EF-3 Above Design
Description : EF-3 is above design flow and is not equipped with a speed controller.
Created By : National TAB **Assigned To :** National TAB - Jordan Best
Status : Open
Priority : [Medium](#) **Asset Tag :**
Originated Date : 03/31/2025 - Jordan Best - National TAB



03-31-25 WAWA #7409 CHESTERFIELD, IN

Project Issue Information

Issue Name : RTU-1 Dehumidification Mode
Description : RTU-1 dehum mode did not active when called for, unit stayed in cooling.
Created By : National TAB **Assigned To :** National TAB - Jordan Best
Status : Open
Priority : Urgent **Asset Tag :**
Originated Date : 04/01/2025 - Jordan Best - National TAB



03-31-25 WAWA #7409 CHESTERFIELD, IN

Project Issue Information

Issue Name : RTU-1 In Unoccupied State
Description : RTU-1 showing unoccupied status via Lenox core app. Installed a jumper connecting, G, R, and OCP to get unit to run. Unsure if this issue will be solved when BACNET is fully installed.
Created By : National TAB **Assigned To :** National TAB - Jordan Best
Status : Open
Priority : Urgent **Asset Tag :**
Originated Date : 04/01/2025 - Jordan Best - National TAB



03-31-25 WAWA #7409 CHESTERFIELD, IN

Project Issue Information

Issue Name : RTU-2 & 3 Diffusers
Description : In the future I would recommend engineers try to take into account positioning of supply grilles/registers/diffusers and orient them in a way that access to them is not restricted by hanging light fixtures. On this site almost every diffuser for RTU-2 is obstructed by hanging light fixtures.
Created By : National TAB **Assigned To :** National TAB - Jordan Best
Status : Open
Priority : InfoOnly **Asset Tag :**
Originated Date : 04/01/2025 - Jordan Best - National TAB



03-31-25 WAWA #7409 CHESTERFIELD, IN

Project Issue Information

Issue Name : RTU-2 Diffusers Inaccessible
Description : Diffusers 1,2,3 4, and 8, for RTU-2 are inaccessible due to multiple pieces of hanging lighting.
Created By : National TAB **Assigned To :** National TAB - Jordan Best
Status : Open
Priority : [Medium](#) **Asset Tag :**
Originated Date : 04/01/2025 - Jordan Best - National TAB



03-31-25 WAWA #7409 CHESTERFIELD, IN

Project Issue Information

Issue Name : RTU-2 Sensors
Description : RTU-2 temp and humidity sensors were installed but unplugged at unit. MC was aware of this but could not inform me on why or who did it. I plugged back in for testing and left them plugged in.
Created By : National TAB **Assigned To :** National TAB - Jordan Best
Status : Open
Priority : Urgent **Asset Tag :**
Originated Date : 04/01/2025 - Jordan Best - National TAB

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 | BOH | 4500 | 4506 | 3800 | 3844 | 700 | 662 | 15.6% | 14.7% | | | | | | |
| RTU-2 | SALES | 3400 | 3534 | 3020 | 3167 | 380 | 367 | 11.2% | 10.4% | | | | | | |
| RTU-3 | FOH | 2400 | 2289 | 2200 | 2092 | 200 | 197 | 8.3% | 8.6% | | | | | | |
| EF-1 | RESTROOM | | | | | | | | | | | | | 375 | 356 |
| EF-2 | BOH | | | | | | | | | | | | | 400 | 433 |
| EF-3 | TRASH ROOM | | | | | | | | | | | | | 200 | 238 |
| TOTALS | | 10300 | 10329 | 9020 | 9103 | 1280 | 1226 | | | 0 | 0 | 0 | 0 | 975 | 1027 |

NET BUILDING AIRFLOW CALCULATION

| TOTALS | DESIGN | ACTUAL |
|--------------------|------------|------------|
| TOTAL OA | 1280 | 1226 |
| TOTAL EXHAUST | 975 | 1027 |
| NET AIRFLOW | 305 | 199 |

| DOOR TESTED | BUILDING PRESSURE MEASUREMENTS (IN. H2O) |
|----------------|--|
| FRONT | 0.0187 |
| SIDE | |
| REAR | 0.0128 |
| AVERAGE | 0.0158 |

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:

CheckList List

- 01: RTU's/AHU's
- 02: LENNOX SETUP PARAMETERS
- 03: SENSOR WIRING (LENNOX)
- 04: EF'S
- 05: CLOSEOUT CHECKS



03-31-25 WAWA #7409 CHESTERFIELD, IN

CheckList Information

Name : 01: RTU's/AHU's **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 03/21/2025 - Nicole Seever - National TAB

CheckList Item Details

RTU's/AHU's

All diffusers and grilles are installed and match design? Pass

Comment:

Clean filters installed? Pass

Comment:

Economizers are assembled and functional? Pass

Comment:

Motors are all operating below the FLA rating? Pass

Comment:

Are belts tight? N/A

Comment:

If direct drive unit is the speed controller working? Pass

Comment:

Is gas piping installed and valves turned on? Pass

Comment:

Condensate drains are installed?

Pass

Comment:

Unit free of noticeable noise and vibration

Pass

Comment:

Final outside air damper position is marked with permanent marker?

Pass

Comment:

No alarms present?

Pass

Comment:

Any noticeable duct leakage?

Pass

Comment:

Total supply and OA flows are balanced within +/-5% and supply & return diffusers within +/-10%?

Pass

Comment:

IN TEST MODE, TEST THE FOLLOWING:

Cooling mode is operational? Record EAT/LAT for each unit:

Pass

Comment:

RTU-1 EAT- 62.4 LAT- 47.3 RTU-2 EAT- 71 LAT- 49 RTU-3 64 LAT- 48

Heating mode is operational? Record EAT/LAT for each unit:

Pass

Comment:

RTU-1 NA RTU-2 EAT- 70 LAT- 114 RTU-3 EAT-64 LAT- 134.4

Dehumidification mode is operational? (Feel dehumidification coil with your hand. Is it hot?) Record EAT/LAT for each unit:

Pass

Comment:

RTU-1 EAT- 61.3 LAT- 45.5 RTU-2 EAT- 68 LAT- 61 RTU-3 EAT- 67 LAT-59



03-31-25 WAWA #7409 CHESTERFIELD, IN

CheckList Information

Name : 02: LENNOX SETUP PARAMETERS **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 03/21/2025 - Nicole Seever - National TAB

CheckList Item Details

UNIT ID CONFIGURATIONS

BACNET CONFIGURATION: GO TO SETTINGS>GENERAL>CONFIGURATION ID1 POSITION 5 SET TO "N". Pass

Comment:

NETWORK CONFIGURATION: GO TO SETUP>NETWORK INTEGRATION, SET TO BACNET IP Pass

Comment:

NA, BACNET not set up.

CONTROL MODE: SET CONTROL MODE TO ROOM SENSOR: CO2, TEMP & HUMIDITY (PER UNIT, AS NEEDED). Pass

Comment:

INDIVIDUAL PARAMETER CONFIGURATIONS (MECHANICAL CONTRACTOR TO DEFINE / AS APPLICABLE):

PARAMETER 105 DEHUMID MODE: 7 NO CONDITIONS Pass

Comment:

PARAMETER 106 DEHUMID SETPOINT: 50, THIS IS A CENTERED SET POINT (+/-) Yes

Comment:

PARAMETER 107 DEHUMID DEADBAND: 3 (DEFAULT) THIS IS THE ACTUAL +/- VALUE Pass

Comment:

PARAMETER 117 CO2 DAMPER MAX OPEN: 50%

Pass

Comment:

PARAMETER 118 CO2 START OPEN PPM: 1500

Pass

Comment:

PARAMETER 119 CO2 MAX OPEN PPM: 1500

Pass

Comment:

PARAMETER 137 OCCHET SET POINT: 68 (BACK UP)

Pass

Comment:

PARAMETER 131 SET TO THE SAME % AS THE MINMIUM OA DAMPER SETPOINT

Pass

Comment:

PARAMETER 139 OCC COOLING SET POINT: 72 (BACK UP)

Pass

Comment:

PARAMETER 154 OCC BLOWER MODE: ON-CONTINUOUS 1

Pass

Comment:

CFM VALUES / MSAV FAN SPEEDS (AIR BALANCER TO DEFINE / IF APPLICABLE):

OA DAMPER SET TO SAME POSITION IN ALL FAN SPEEDS?

Pass

Comment:

ALL FAN SPEEDS SET TO THE SAME CFM VALUE (ENTER SETPOINTS BELOW)

Pass

Comment:

RTU-1 78% RTU-2 74% RTU-3 62%

HEAT CFM VALUE: PER THE HVAC SCHEDULE

Pass

Comment:

68

HIGH COOL CFM VALUE: THE HIGH COOL CFM VALUE

Pass

Comment:

72

LOW COOL CFM VALUE: MATCH THE HIGH COOL CFM VALUE

Pass

Comment:

72

VENTILATION CFM VALUE: MATCH THE HIGH COOL CFM VALUE

Pass

Comment:

72



03-31-25 WAWA #7409 CHESTERFIELD, IN

CheckList Information

Name : 03: SENSOR WIRING (LENNOX) **Status :** Not Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 03/21/2025 - Nicole Seever - National TAB

CheckList Item Details

COMBINATION TEMPERATURE/HUMIDITY SENSOR

| | |
|--|------|
| Sensors are installed where shown on the drawing? | Pass |
|--|------|

Comment:

| | |
|---|------|
| 2 conductor shielded cable has one wire landed to Vin, one to GND, and the shield wire is not connected. | Pass |
|---|------|

Comment:

RTU-2 sensors installed originally and then disconnected @ unit, per MC, unsure why

| | |
|--|------|
| For second shielded cable, one wire is landed to Vout and the shield wire is not connected. | Pass |
|--|------|

Comment:

RTU-2 sensors installed originally and then disconnected @ unit, per MC, unsure why

| | |
|---|------|
| Verify that the CORE or Prodigy controller is sensing a relative humidity (record the reading) | Pass |
|---|------|

Comment:

50%



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CheckList Information

Name : 04: EF'S **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 03/21/2025 - Nicole Seever - National TAB

CheckList Item Details

EF's

| | |
|-----------------------------|------|
| Rotation is correct? | Pass |
|-----------------------------|------|

Comment:

| | |
|---|------|
| Belts are tight (if applicable)? | Pass |
|---|------|

Comment:

| | |
|---|-----|
| Speed controller installed and functional (if applicable)? | N/A |
|---|-----|

Comment:

| | |
|--|------|
| There is no major leakage around base of fan? | Pass |
|--|------|

Comment:

| | |
|---|-----|
| Is the motor operating below the motor FLA rating? | N/A |
|---|-----|

Comment:

| | |
|---|------|
| Back draft damper installed and can it fully open? | Pass |
|---|------|

Comment:

| | |
|---|------|
| Unit free of noticeable noise and vibration? | Pass |
|---|------|

Comment:

Total exhaust flow balanced within +/-5% and grilles are within +/-10%?

Pass

Comment:

EF-3 above design flow and not equipped with a speed controller.



03-31-25 WAWA #7409 CHESTERFIELD, IN

CheckList Information

Name : 05: CLOSEOUT CHECKS **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 03/21/2025 - Nicole Seever - National TAB

CheckList Item Details

SPACE COMFORT

Is space free of drafting? Pass

Comment:

Is space comfortable in all areas? Pass

Comment:

Is the space free of ventilation noise? Pass

Comment:

BUILDING PRESSURE

Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative) Pass

Comment:

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Project: 03-31-25 WAWA #7409 CHESTERFIELD, IN

System/Unit: AHU/RTU



Asset: RTU1

AREA:BOH

| Unit Data | | |
|---------------------|-----------|------------|
| | Design | Actual |
| MFG | LENNOX | LENNOX |
| Serial Num | - | 5624L02332 |
| Model Num | LCT150H4E | LCT150H4E |
| Type | RTU | RTU |
| Configuration | VERTICAL | VERTICAL |
| Num OA Filters 1 | - | 2 |
| OA Filter Size 1 | - | 26"X16" |
| Num Final Filter 1 | - | 4 |
| Final Filter Size 1 | - | 20"X25"X2" |

| Motor Data | | |
|----------------|--------|--------|
| | Design | Actual |
| Horsepower | 3.75 | 3.8 |
| Phase | 3 | 3 |
| Rated Voltage | 208 | 208 |
| Rated Amperage | - | 8.7 |

| Test Data | | |
|--------------------|--------|-------------------|
| | Design | Actual |
| SF CFM | 4500 | 4506 |
| RA CFM | 3800 | 3844 |
| OA CFM | 700 | 662 |
| RL Voltage | - | 214.6/213.8/213.3 |
| RL Amperage | - | 4.34/4.47/4.38 |
| SF System SetPt | - | 78% |
| RA Damper Position | - | 73% |
| RA Damper Type | - | MOTORIZED |
| OA Damper Position | - | 27% |
| OA Damper Type | - | MOTORIZED |

| Performance Data | | |
|------------------|--------|--------|
| | Design | Actual |
| MA Plenum SP | - | -0.33" |
| Fan Suction SP | - | -0.90" |
| Fan Discharge SP | - | 0.50" |
| Total ESP | 0.70" | 0.83" |
| Fan Total SP | - | 1.4" |

Completed By: Jordan Best on 04/01/2025

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Project:03-31-25 WAWA #7409 CHESTERFIELD, IN

AHU/RTU



Diffuser Supply (GRD)

RTU1/BOH

| Asset | | | | | | | | | |
|------------|-----------------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| SGRD1 | FOOD SERVICE | SD-6 | 10" | 425 | 1 | 434 | 366 | 382 | 89.9 |
| SGRD2 | FOOD SERVICE | SD-6 | 10" | 425 | 1 | 522 | 417 | 441 | 103.8 |
| SGRD3 | FOOD SERVICE | SD-6 | 10" | 425 | 1 | 567 | 448 | 431 | 101.4 |
| SGRD4 | FOOD SERVICE | SD-6 | 10" | 425 | 1 | 548 | 447 | 438 | 103.1 |
| SGRD5 | FOOD SERVICE | SD-6 | 10" | 425 | 1 | 709 | 562 | 422 | 99.3 |
| SGRD6 | COFFEE | SD-6 | 12" | 500 | 1 | 762 | 623 | 522 | 104.4 |
| SGRD7 | TRASH | SD-1 | 10" | 300 | 1 | 434 | 349 | 320 | 106.7 |
| SGRD8 | BOH | SD-6 | 10" | 400 | 1 | 403 | 316 | 367 | 91.8 |
| SGRD9 | BOH | SD-6 | 10" | 400 | 1 | 481 | 381 | 395 | 98.8 |
| SGRD10 | BOH | SD-6 | 10" | 400 | 1 | 526 | 419 | 416 | 104.0 |
| SGRD11 | ELECTRICAL ROOM | SD-1 | 10" | 375 | 1 | 419 | 346 | 372 | 99.2 |
| Total | | | | 4500 | | 5805 | 4674 | 4506 | 100.13% |

Diffuser Ret/Exh (GRD)

RTU1/BOH

| Asset | | | | | | | | | |
|------------|----------|------|--------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| EGRD1 | FOH | RG-1 | 14" | 870 | 1 | 948 | 792 | 803 | 92.3 |
| EGRD2 | FOH | RG-1 | 14" | 865 | 1 | 503 | 802 | 811 | 93.8 |
| EGRD3 | FOH | RG-1 | 14" | 865 | 1 | 788 | 811 | 788 | 91.1 |
| EGRD4 | WASHROOM | RG-1 | 16X14" | 1200 | 1 | 903 | 1109 | 1097 | 91.4 |
| Total | | | | 3800 | | 3142 | 3514 | 3499 | 92.08% |

Completed By: Jordan Best on 04/01/2025

National TAB

Project: 03-31-25 WAWA #7409 CHESTERFIELD, IN

System/Unit: AHU/RTU



Asset: RTU2

AREA:SALES

| Unit Data | | |
|---------------------|-----------|------------|
| | Design | Actual |
| MFG | LENNOX | LENNOX |
| Serial Num | - | 5624L01950 |
| Model Num | LCT102H4E | LCT102H4E |
| Type | RTU | RTU |
| Configuration | VERTICAL | VERTICAL |
| Num OA Filters 1 | - | 2 |
| OA Filter Size 1 | - | 26"X16" |
| Num Final Filter 1 | - | 4 |
| Final Filter Size 1 | - | 20"X25"X2" |

| Motor Data | | |
|----------------|--------|--------|
| | Design | Actual |
| Horsepower | 3.75 | 3.8 |
| Phase | 3 | 3 |
| Rated Voltage | 208 | 208 |
| Rated Amperage | - | 8.7 |

| Test Data | | |
|--------------------|--------|-------------------|
| | Design | Actual |
| SF CFM | 3400 | 3534 |
| RA CFM | 3020 | 3167 |
| OA CFM | 380 | 367 |
| RL Voltage | - | 213.3/212.4/214.3 |
| RL Amperage | - | 3.61/3.75/3.72 |
| SF System SetPt | - | 74% |
| RA Damper Position | - | 82% |
| RA Damper Type | - | MOTORIZED |
| OA Damper Position | - | 18% |
| OA Damper Type | - | MOTORIZED |

| Performance Data | | |
|------------------|--------|--------|
| | Design | Actual |
| MA Plenum SP | - | -0.29" |
| Fan Suction SP | - | -0.64" |
| Fan Discharge SP | - | 0.62" |
| Total ESP | 1" | 0.93" |
| Fan Total SP | - | 1.26" |

Completed By: Jordan Best on 04/01/2025

Notes:
Dirty filters, unit balanced with filters removed.

Written By: Jordan Best on 03/31/2025

National TAB

Project:03-31-25 WAWA #7409 CHESTERFIELD, IN

AHU/RTU



Diffuser Supply (GRD)

RTU2/SALES

| Asset | | | | | | | | | |
|------------|-----------------|------|------|------------|------|--------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| SGRD1 | RETAIL | SD-2 | 12" | 275 | 0.92 | 0 | 0 | 0 | 0.0 |
| SGRD2 | RETAIL | SD-2 | 12" | 275 | 0.92 | 0 | 0 | 0 | 0.0 |
| SGRD3 | RETAIL | SD-2 | 12" | 275 | 0.92 | 0 | 0 | 0 | 0.0 |
| SGRD4 | RETAIL | SD-2 | 12" | 275 | 0.92 | 0 | 0 | 0 | 0.0 |
| SGRD5 | RETAIL | SD-2 | 12" | 275 | 0.92 | 376 | 292 | 292 | 106.2 |
| SGRD6 | RETAIL | SD-2 | 12" | 300 | 0.92 | 343 | 287 | 287 | 95.7 |
| SGRD7 | RETAIL | SD-2 | 16" | 275 | 0.92 | 339 | 283 | 283 | 102.9 |
| SGRD8 | RETAIL | SD-2 | 16" | 275 | 0.92 | 0 | 0 | 0 | 0.0 |
| SGRD9 | RETAIL | SD-2 | 16" | 275 | 0.92 | 484 | 271 | 271 | 98.5 |
| SGRD10 | HALLWAY | SD-1 | 16" | 200 | 1 | 204 | 187 | 187 | 93.5 |
| SGRD11 | DELIVERY ROOM | SD-1 | 8" | 250 | 1 | 375 | 233 | 233 | 93.2 |
| SGRD12 | MENS RESTROOM | SD-5 | 8" | 150 | 1 | 267 | 162 | 162 | 108.0 |
| SGRD13 | VESTIBULE | SD-5 | 8" | 200 | 1 | 268 | 193 | 193 | 96.5 |
| SGRD14 | WOMENS RESTROOM | SD-5 | 8" | 100 | 1 | 293 | 98 | 98 | 98.0 |
| Total | | | | 3400 | | 2949 | 2006 | 2006 | 59% |

Completed By: Jordan Best on 04/01/2025

National TAB

Project: 03-31-25 WAWA #7409 CHESTERFIELD, IN

System/Unit: AHU/RTU



Asset: RTU3

AREA:FOH

| Unit Data | | |
|---------------------|-----------|------------|
| | Design | Actual |
| MFG | LENNOX | LENNOX |
| Serial Num | - | 5624L05215 |
| Model Num | LGT072H4E | LGT072H4E |
| Type | RTU | RTU |
| Configuration | VERTICAL | VERTICAL |
| Num OA Filters 1 | - | 1 |
| OA Filter Size 1 | - | 30"X16" |
| Num Final Filter 1 | - | 4 |
| Final Filter Size 1 | - | 20"X20"X2" |

| Motor Data | | |
|----------------|--------|--------|
| | Design | Actual |
| Horsepower | 1 | 1.5 |
| Phase | 3 | 3 |
| Rated Voltage | 208 | 208 |
| Rated Amperage | - | 4.4 |

| Test Data | | |
|--------------------|--------|-------------------|
| | Design | Actual |
| SF CFM | 2400 | 2289 |
| RA CFM | 2200 | 2092 |
| OA CFM | 200 | 197 |
| RL Voltage | - | 213.1/211.8/214.5 |
| RL Amperage | - | 1.67/1.56/1.64 |
| SF System SetPt | - | 62% |
| RA Damper Position | - | 70% |
| RA Damper Type | - | MOTORIZED |
| OA Damper Position | - | 30% |
| OA Damper Type | - | MOTORIZED |

| Performance Data | | |
|------------------|--------|--------|
| | Design | Actual |
| MA Plenum SP | - | -0.17" |
| Fan Suction SP | - | -0.29" |
| Fan Discharge SP | - | 0.32" |
| Total ESP | - | 0.49" |
| Fan Total SP | - | 0.61" |

Completed By: Jordan Best on 04/01/2025

Notes:
Dirty filters, unit balanced with filters removed.

Written By: Jordan Best on 03/31/2025

National TAB

Project:03-31-25 WAWA #7409 CHESTERFIELD, IN

AHU/RTU



Diffuser Supply (GRD)

RTU3/FOH

| Asset | | | | | | | | | |
|------------|-----------------|------|------|------------|------|--------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| SGRD1 | ASSOCIATES AREA | SD-1 | 8" | 200 | 1 | 444 | 191 | 191 | 95.5 |
| SGRD2 | OFFICE | SD-1 | 8" | 150 | 1 | 216 | 136 | 136 | 90.7 |
| SGRD3 | VESTIBULE | SD-5 | 8" | 250 | 0.92 | 235 | 229 | 229 | 91.6 |
| SGRD4 | RETAIL | SD-2 | 18" | 450 | 0.92 | 856 | 432 | 432 | 96.0 |
| SGRD5 | RETAIL | SD-2 | 18" | 450 | 0.92 | 935 | 428 | 428 | 95.1 |
| SGRD6 | RETAIL | SD-2 | 14" | 450 | 0.92 | 970 | 442 | 442 | 98.2 |
| SGRD7 | RETAIL | SD-2 | 14" | 450 | 0.92 | 928 | 431 | 431 | 95.8 |
| Total | | | | 2400 | | 4584 | 2289 | 2289 | 95.38% |

Completed By: Jordan Best on 04/01/2025

National TAB

Project: 03-31-25 WAWA #7409 CHESTERFIELD, IN

System/Unit: FAN - Exhaust



Asset: EF1

AREA:RESTROOMS

| Unit Data | | |
|----------------------|-----------|-----------|
| | Design | Actual |
| MFG | GREENHECK | GREENHECK |
| Model Num | GB-098-6 | GB-098-6 |
| Serial Num | - | 26298976 |
| Type | DOWNBLAST | DOWNBLAST |
| Configuration | VERTICAL | VERTICAL |

| Test Data | | |
|-------------------------|--------|-------------|
| | Design | Actual |
| CFM | 375 | 356 |
| Fan Rotation | - | CCW |
| System SetPt | - | 5 TURNS OUT |
| Total ESP | 0.38" | 0.15" |
| Fan Inlet SP | - | -0.15" |
| Fan Discharge SP | - | ATM |

| Motor Data | | |
|-------------------------|--------|-----------|
| | Design | Actual |
| Motor MFG | - | US MOTORS |
| Horsepower | 0.167 | 0.167 |
| Motor Rpm | - | 1725 |
| Phase | 1 | 1 |
| Voltage (rated) | 120 | 115 |
| Amperage (rated) | - | 3.8 |
| Service Factor | - | 1.35 |

Completed By: Jordan Best on 04/01/2025

- Notes:
- Fan Sheave- 3.5"
 - Fan Bore- 0.625"
 - Motor Sheave/Bore- VP25
 - CL Distance- 5"
 - Belt- 3L180
 - 1 Belt

Written By: Jordan Best on 03/31/2025

Unit Data - PHOTO LOG



03/31/2025

National TAB

Project:03-31-25 WAWA #7409 CHESTERFIELD, IN

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 RESTROOM | EG-1 | 8X8" | 150 | 1 | 174 | 143 | 143 | 95.3 |
| EGRD2 | MENS RESTROOM | EG-1 | 8X8" | 225 | 1 | 190 | 213 | 213 | 94.7 |
| Total | | | | 375 | | 364 | 356 | 356 | 94.93% |

Completed By: Jordan Best on 03/31/2025

National TAB

Project: 03-31-25 WAWA #7409 CHESTERFIELD, IN

System/Unit: FAN - Exhaust



Asset: EF2

AREA:BOH

| Unit Data | | |
|---------------|-----------|-----------|
| | Design | Actual |
| MFG | GREENHECK | GREENHECK |
| Model Num | GB-098-6 | GB-098-6 |
| Serial Num | - | 26298978 |
| Type | DOWNBLAST | DOWNBLAST |
| Configuration | VERTICAL | VERTICAL |

| Test Data | | |
|------------------|--------|-------------|
| | Design | Actual |
| CFM | 400 | 433 |
| Fan Rotation | - | CCW |
| System SetPt | - | 5 TURNS OUT |
| Total ESP | 0.38" | 0.14" |
| Fan Inlet SP | - | -0.14" |
| Fan Discharge SP | - | ATM |

| Motor Data | | |
|------------------|--------|-----------|
| | Design | Actual |
| Motor MFG | - | US MOTORS |
| Horsepower | 0.167 | 0.167 |
| Motor Rpm | - | 1725 |
| Phase | 1 | 1 |
| Voltage (rated) | 120 | 115 |
| Amperage (rated) | - | 3.8 |
| Service Factor | - | 1.35 |

Completed By: Jordan Best on 04/01/2025

Notes:

- Fan Sheave- 3.5"
- Fan Bore- 0.625"
- Motor Sheave/Bore- VP25
- CL Distance- 5"
- Belt- 3L180
- 1 Belt

Written By: Jordan Best on 03/31/2025

National TAB

Project:03-31-25 WAWA #7409 CHESTERFIELD, IN

FAN - Exhaust



Diffuser Ret/Exh (GRD)

EF2/BOH

| Asset | | | | | | | | | |
|------------|--------------|------|------|------------|----|--------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK | CFM(1) | CFM(2) | FINAL CFM | % to design |
| EGRD1 | FOOD SERVICE | RG-2 | 8X8" | 200 | 1 | 238 | 214 | 214 | 107.0 |
| EGRD2 | BOH | RG-2 | 8X8" | 200 | 1 | 236 | 219 | 219 | 109.5 |
| Total | | | | 400 | | 474 | 433 | 433 | 108.25% |

Completed By: Jordan Best on 03/31/2025

National TAB

Project: 03-31-25 WAWA #7409 CHESTERFIELD, IN

System/Unit: FAN - Exhaust



Asset: EF3

AREA:TRASH ROOM

| Unit Data | | |
|---------------|-----------|----------------|
| | Design | Actual |
| MFG | GREENHECK | GREENHECK |
| Model Num | SP-B200 | SP-B200 |
| Serial Num | - | 191307299-0060 |
| Type | CEILING | CEILING |
| Configuration | VERTICAL | VERTICAL |

| Test Data | | |
|------------------|--------|-------------|
| | Design | Actual |
| CFM | 200 | 238 |
| Fan Rotation | - | CCW |
| System SetPt | - | Fixed Speed |
| Fan Discharge SP | - | ATM |

| Motor Data | | |
|------------------|--------|-----------|
| | Design | Actual |
| Motor MFG | - | GREENHECK |
| Horsepower | 0.167 | 0.033 |
| Motor Rpm | - | 1000 |
| Phase | 1 | 1 |
| Voltage (rated) | 120 | 115 |
| Amperage (rated) | - | 2.7 |

Completed By: Jordan Best on 03/31/2025

Notes:

Fan above design, not equipped with speed controller.

Written By: Jordan Best on 03/31/2025

