**Report By:**

**National TAB**
**1329 E. KEMPER ROAD**
**SUITE 4210**
**CINCINNATI, OH 45246**

**Report: TAB REPORT**

**Function: Test, Adjust, & Balance**

**Date: 11/18/2024**

**Completed By: National TAB**

# PROJECT

## 11-18-24 DOLLAR TREE - COLUMBUS, WI

11490 W JAMES ST.

COLUMBUS, WI 53925

Client

Oliphant Heating

208 WOLLARD BLVD

RICHMOND, MO

# National TAB

**Project: 11-18-24 DOLLAR TREE - COLUMBUS, WI**

## Table Of Contents

## 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.

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.

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 |
| AC-1 | STORAGE | 1750 | 1737 | 1600 | 1573 | 150 | 164 | 8.6% | 9.4% | | | | | | |
| AC-2 | WEST SALES | 2800 | 2876 | 2450 | 2514 | 350 | 362 | 12.5% | 12.6% | | | | | | |
| AC-3 | EAST SALES | 2800 | 2820 | 2450 | 2440 | 350 | 380 | 12.5% | 13.5% | | | | | | |
| AC-4 | SOUTH SALES | 3500 | 3517 | 3100 | 3133 | 400 | 384 | 11.4% | 10.9% | | | | | | |
| EF-1 | RESTROOM | | | | | | | | | | | | | 75 | 75 |
| EF-2 | RESTROOM | | | | | | | | | | | | | 75 | 72 |
| **TOTALS** | | 10850 | 10950 | 9600 | 9660 | 1250 | 1290 | | | 0 | 0 | 0 | 0 | 150 | 147 |

**NET BUILDING AIRFLOW CALCULATION**

| TOTALS | DESIGN | ACTUAL |
|---|---|---|
| TOTAL OA | 1250 | 1290 |
| TOTAL EXHAUST | 150 | 147 |
| **NET AIRFLOW** | 1100 | 1143 |

| DOOR TESTED | BUILDING PRESSURE MEASUREMENTS (IN. H20) |
|---|---|
| FRONT | 0.021 |
| SIDE | |
| REAR | 0.021 |
| **AVERAGE** | **0.021** |

**FINAL CHECKS**

ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✔

MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW: ✔

PRESSURE FALLS WITHIN TOLERANCE OF +/-0.03" W.C. ✔

NOTES:

# CheckList List

- TECH 01: INITIAL WALKTHROUGH
- TECH 02: UNIT DATA AND EVALUATION
- TECH 03: TEST, ADJUST, AND BALANCE
- TECH 04: FINAL TESTS

# 11-18-24 DOLLAR TREE - COLUMBUS, WI

## CheckList Information

| | | | |
|---|---|---|---|
| **Name :** | TECH 01: INITIAL WALKTHROUGH | **Status :** | Completed |
| **Assigned Organization :** | National TAB | **Asset :** | |
| **Requesting Organization :** | National TAB | | |
| **Created Date :** | 11/19/2024 - Michael McDonnell - National TAB | | |
| **Completed Date :** | 11/20/2024 - Michael McDonnell - National TAB | | |

## CheckList Item Details

**INITIAL SITE WALKTHROUGH**

**Store Front**

| | |
|---|---|
| **All diffusers and grilles are installed and match design?** | Yes |
| **Comment:** | |
| **All hood filters installed and accounted for?** | N/A |
| **Comment:** | |
| **Hoods are wired and have power?** | N/A |
| **Comment:** | |
| **Hood is free of alarms?** | N/A |
| **Comment:** | |
| **Thermostats have power?** | Yes |
| **Comment:** | |

**Have trades/general contractor been notified about any issues and are they created on FaciliBuild?**

**Comment:**

Yes

# 11-18-24 DOLLAR TREE - COLUMBUS, WI

## CheckList Information

| | | | |
|---|---|---|---|
| **Name :** | TECH 02: UNIT DATA AND EVALUATION | **Status :** | Completed |
| **Assigned Organization :** | National TAB | **Asset :** | |
| **Requesting Organization :** | National TAB | | |
| **Created Date :** | 11/19/2024 - Michael McDonnell - National TAB | | |
| **Completed Date :** | 11/20/2024 - Michael McDonnell - National TAB | | |

## CheckList Item Details

**UNIT DATA AND EVALUATION WHILE GATHERING UNIT DATA CHECK THE FOLLOWING:**

**RTU's/AHU's**

| | |
|---|---|
| **Economizers are assembled and functional?** | Yes |
| **Comment:** | |
| **DCV Max damper opening position is set to minimum?** | Yes |
| **Comment:** | |
| **Free cooling enthalpy set point set for lowest setting (Typically "D")** | Yes |
| **Comment:** | |
| **Motors are all operating below the FLA rating?** | Yes |
| **Comment:** | |
| **Are belts tight?** | |

**Comment:**

NA, Direct Drive Units.

---

**If direct drive unit is the speed controller working.**

**Comment:**

Yes

---

| | |
|---|---|
| **Is gas piping installed and valves turned on?** | Yes |

**Comment:**

---

| | |
|---|---|
| **Unit free of noticeable noise and vibration** | Yes |

**Comment:**

---

**EF's**

---

| | |
|---|---|
| **Rotation is correct?** | Yes |

**Comment:**

---

**Belts are tight?**

**Comment:**

NA, Direct Drive

---

| | |
|---|---|
| **Is the motor operating below the motor FLA rating?** | Yes |

**Comment:**

---

| | |
|---|---|
| **For restroom fan(s) is the back draft damper installed and can it fully open?** | N/A |

**Comment:**

---

| | |
|---|---|
| **Unit free of noticeable noise and vibration?** | Yes |

**Comment:**

---

**DOCUMENTATION**

---

| | |
|---|---|
| **Have trades/general contractor been notified about any issues and are they created on FaciliBuild?** | Yes |

**Comment:**

---

# 11-18-24 DOLLAR TREE - COLUMBUS, WI

## CheckList Information

| | | | |
|---|---|---|---|
| **Name :** | TECH 03: TEST, ADJUST, AND BALANCE | **Status :** | Completed |
| **Assigned Organization :** | National TAB | **Asset :** | |
| **Requesting Organization :** | National TAB | | |
| **Created Date :** | 11/19/2024 - Michael McDonnell - National TAB | | |
| **Completed Date :** | 11/20/2024 - Michael McDonnell - National TAB | | |

## CheckList Item Details

**TEST, ADJUST, AND BALANCE ALL EQUIPMENT:**

**DURING TESTING MAKE NOTE OF THE FOLLOWING:**

| | |
|---|---|
| **Is space free of drafting?** | Yes |
| **Comment:** | |
| **Is space comfortable in all areas?** | Yes |
| **Comment:** | |
| **Is the space free of ventilation noise?** | Yes |
| **Comment:** | |

**If deviations from design were necessary to resolve 1-3 what were they? Otherwise put "NA".**

**Comment:**

NA

# 11-18-24 DOLLAR TREE - COLUMBUS, WI

## CheckList Information

| | | | |
|---|---|---|---|
| **Name :** | TECH 04: FINAL TESTS | **Status :** | Completed |
| **Assigned Organization :** | National TAB | **Asset :** | |
| **Requesting Organization :** | National TAB | | |
| **Created Date :** | 11/19/2024 - Michael McDonnell - National TAB | | |
| **Completed Date :** | 11/20/2024 - Michael McDonnell - National TAB | | |

## CheckList Item Details

**FINAL TESTS**

**WITNESS**

| | |
|---|---|
| **Date test was completed** | 11/19/2024 |

**Comment:**

**TAB tech name / Firm**

**Comment:**

Michael McDonnell / National TAB

**Site super name / Firm**

**Comment:**

NA

**Building pressure at front & back doors (All Systems On)**

**Comment:**

0.021"

**ADDITIONAL**

| | |
|---|---|
| **Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)** | |
| **Comment:** | |
| **Thermostats are programmed?** | No |
| **Comment:** | |
| To be programmed by store. | |

# National TAB

**Project: 11-18-24 DOLLAR TREE - COLUMBUS, WI**

## System/Unit: AHU/RTU

**Asset: RTU 1** AREA:STORAGE

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | CARRIER | CARRIER |
| **Serial Num** | - | 3823C10457 |
| **Model Num** | 48FCEM12A2M5A6W1F0 | 48GCEM05A2M5A6W1F0 |
| **Type** | RTU | RTU |
| **Configuration** | VERTICAL | VERTICAL |
| **Num OA Filters 1** | - | 1 |
| **OA Filter Size 1** | - | 28X14 |
| **Num Final Filter 1** | - | 2 |
| **Final Filter Size 1** | - | 18X24X2 |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | NL |
| **Horsepower** | 1.4 | NL |
| **Motor Rpm** | - | NL |
| **Phase** | 1 | 1 |
| **Rated Voltage** | 208 | 208 |
| **Rated Amperage** | - | 7.1 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SF CFM** | 1750 | 1737 |
| **SF RPM** | - | 1921 |
| **RA CFM** | 1600 | 1573 |
| **OA CFM** | 150 | 164 |
| **RL Voltage** | - | 211/211/210 |
| **RL Amperage** | - | 3.2 |
| **SF Rotation** | - | CORRECT |
| **SF System SetPt** | - | 8.6 VDC (CAV) |
| **RA Damper Position** | - | MECHANICALLY LINKED DAMPER |
| **Min OA Damper Position** | - | 2.95V (11%) |
| **Min OA Damper Type** | - | ECONOMIZER |
| **OA Enthalpy Setpt** | - | ES5 |

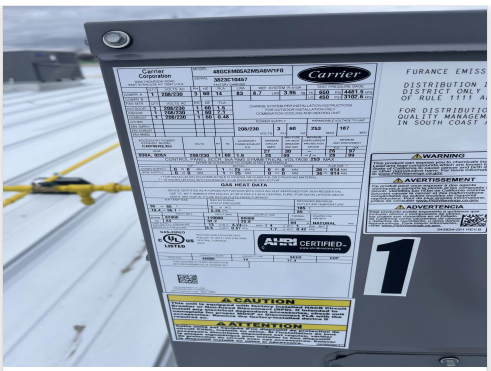
| Performance Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MA Plenum SP** | - | -0.55" |
| **Fan Suction SP** | - | -0.79" |
| **Fan Discharge SP** | - | 0.34" |
| **Total ESP** | 1.00 | 0.89" |
| **Fan Total SP** | - | 1.13" |

| General | |
|---|---|
| | **Actual** |
| **Fan Rotation Correct** | YES |
| **Unit Filters Clean** | YES |
| **Condensate Drain Installed** | YES |

Completed By: Michael McDonnell on 11/20/2024

## Unit Data - PHOTO LOG

**11/20/2024**




**11/20/2024**

### Diffuser Supply (GRD)

**RTU 1/STORAGE**

| Asset | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Asset Name** | **Location** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** | **FINAL CFM** | **% to design** |
| RTU 1-SGRD1 | BACK HALL | A | 8" | 100 | 1.0 | 224 | 109 | 109 | 109.0 |
| RTU 1-SGRD2 | RESTROOM | A | 8" | 50 | 1.0 | 201 | 54 | 54 | 108.0 |
| RTU 1-SGRD3 | RESTROOM | A | 8" | 50 | 1.0 | 184 | 48 | 48 | 96.0 |
| RTU 1-SGRD4 | STORAGE | D | 14X6 | 387 | 0.44 | 308 | 390 | 390 | 100.8 |
| RTU 1-SGRD5 | STORAGE | D | 14X6 | 387 | 0.44 | 320 | 387 | 387 | 100.0 |
| RTU 1-SGRD6 | STORAGE | A | 14X6 | 388 | 0.44 | 348 | 365 | 365 | 94.1 |
| RTU 1-SGRD7 | STORAGE | A | 14X6 | 388 | 0.44 | 330 | 384 | 384 | 99.0 |
| Total | | | | 1750 | | 1915 | 1737 | 1737 | 99.26% |

**Completed By: Michael McDonnell on 11/20/2024**

# National TAB

**Project: 11-18-24 DOLLAR TREE - COLUMBUS, WI**

## System/Unit: AHU/RTU

**Asset: RTU 2** AREA:EAST SALES

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | CARRIER | CARRIER |
| **Serial Num** | - | 3223P67839 |
| **Model Num** | 48FCEM12A2M5A6W1F0 | 48FCEM08A2M5A6W1J |
| **Type** | RTU | RTU |
| **Configuration** | VERTICAL | VERTICAL |
| **Num OA Filters 1** | - | 1 |
| **OA Filter Size 1** | - | 35X19.5 |
| **Num Final Filter 1** | - | 4 |
| **Final Filter Size 1** | - | 16X20X2 |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | NL |
| **Horsepower** | 2.4 | NL |
| **Motor Rpm** | - | NL |
| **Phase** | 3 | 3 |
| **Rated Voltage** | 208 V | 208 |
| **Rated Amperage** | - | 6.4 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SF CFM** | 2800 | 2876 |
| **SF RPM** | - | 1450 |
| **RA CFM** | 2450 | 2514 |
| **OA CFM** | 350 | 362 |
| **RL Voltage** | - | 211/211/211 |
| **RL Amperage** | - | 3.0/3.0/2.9 |
| **SF Rotation** | - | CORRECT |
| **SF System SetPt** | - | 6.7 VDC (MSAV) |
| **RA Damper Position** | - | MECHANICALLY LINKED |
| **Min OA Damper Position** | - | HIGH: 3.35V (19%) LOW: 4.10V (27%) |
| **Min OA Damper Type** | - | ECONOMIZER |
| **OA Enthalpy Setpt** | - | ES5 |

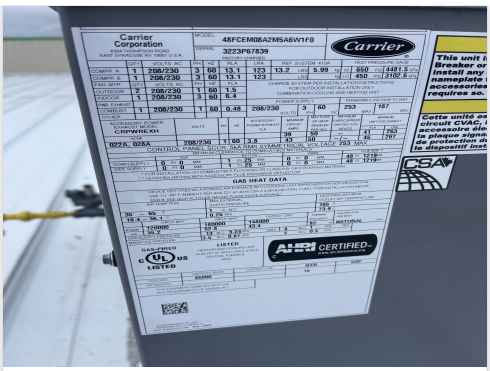
| Performance Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MA Plenum SP** | - | -0.45" |
| **Fan Suction SP** | - | -0.78" |
| **Fan Discharge SP** | - | 0.42" |
| **Total ESP** | 1.00 | 0.87" |
| **Fan Total SP** | - | 1.20" |

| General | |
|---|---|
| | **Actual** |
| **Fan Rotation Correct** | YES |
| **Unit Filters Clean** | YES |
| **Condensate Drain Installed** | YES |

Completed By: Michael McDonnell on 11/20/2024

## Unit Data - PHOTO LOG

**11/20/2024**




**11/20/2024**

### Diffuser Supply (GRD)

**RTU 2/EAST SALES**

| Asset | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Asset Name** | **Location** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** | **FINAL CFM** | **% to design** |
| RTU 2-SGRD1 | WEST SALES | B | 12 | 350 | 1.0 | 334 | 361 | 361 | 103.1 |
| RTU 2-SGRD2 | WEST SALES | B | 12 | 350 | 1.0 | 428 | 366 | 366 | 104.6 |
| RTU 2-SGRD3 | WEST SALES | B | 12 | 350 | 1.0 | 450 | 372 | 372 | 106.3 |
| RTU 2-SGRD4 | WEST SALES | B | 12 | 350 | 1.0 | 345 | 365 | 365 | 104.3 |
| RTU 2-SGRD5 | WEST SALES | B | 12 | 350 | 1.0 | 319 | 366 | 366 | 104.6 |
| RTU 2-SGRD6 | WEST SALES | B | 12 | 350 | 1.0 | 371 | 345 | 345 | 98.6 |
| RTU 2-SGRD7 | WEST SALES | B | 12 | 350 | 1.0 | 418 | 348 | 348 | 99.4 |
| RTU 2-SGRD8 | WEST SALES | B | 12 | 350 | 1.0 | 362 | 353 | 353 | 100.9 |
| Total | | | | 2800 | | 3027 | 2876 | 2876 | 102.71% |

**Completed By: Michael McDonnell on 11/19/2024**

# National TAB

**Project: 11-18-24 DOLLAR TREE - COLUMBUS, WI**

## System/Unit: AHU/RTU

**Asset: RTU 3** AREA:WEST SALES

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | CARRIER | CARRIER |
| **Serial Num** | - | 3323P67906 |
| **Model Num** | 48FCEM12A2M5A6W1F0 | 48FCEM08A2M5A6W1F0 |
| **Type** | RTU | RTU |
| **Configuration** | VERTICAL | VERTICAL |
| **Num OA Filters 1** | - | 1 |
| **OA Filter Size 1** | - | 35X19.5 |
| **Num Final Filter 1** | - | 4 |
| **Final Filter Size 1** | - | 16X20X2 |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | NL |
| **Horsepower** | 2.4 | NL |
| **Motor Rpm** | - | NL |
| **Phase** | 3 | 3 |
| **Rated Voltage** | 208 V | 208 |
| **Rated Amperage** | - | 6.4 |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SF CFM** | 2800 | 2820 |
| **SF RPM** | - | 1442 |
| **RA CFM** | 2450 | 2440 |
| **OA CFM** | 350 | 380 |
| **RL Voltage** | - | 210/210/211 |
| **RL Amperage** | - | 2.8/2.9/2.9 |
| **SF Rotation** | - | CORRECT |
| **SF System SetPt** | - | 6.7 VDC (CAV) |
| **RA Damper Position** | - | MECHANICALLY LINKED |
| **Min OA Damper Position** | - | HIGH: 3.4V (17%) LOW: 4.0V (25%) |
| **Min OA Damper Type** | - | ECONOMIZER |
| **OA Enthalpy Setpt** | - | ES5 |

| Performance Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MA Plenum SP** | - | -0.45" |
| **Fan Suction SP** | - | -0.76" |
| **Fan Discharge SP** | - | 0.38" |
| **Total ESP** | 1.00 | 0.83" |
| **Fan Total SP** | - | 1.14" |

| General | |
|---|---|
| | **Actual** |
| **Fan Rotation Correct** | YES |
| **Unit Filters Clean** | YES |
| **Condensate Drain Installed** | YES |

Completed By: Michael McDonnell on 11/20/2024

## Unit Data - PHOTO LOG

**11/20/2024**


**11/20/2024**

### Diffuser Supply (GRD)

**RTU 3/WEST SALES**

| Asset | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Asset Name** | **Location** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** | **FINAL CFM** | **% to design** |
| RTU 3-SGRD1 | EAST SALES | B | 12 | 350 | 1.0 | 361 | 376 | 376 | 107.4 |
| RTU 3-SGRD2 | EAST SALES | B | 12 | 350 | 1.0 | 402 | 332 | 332 | 94.9 |
| RTU 3-SGRD3 | EAST SALES | B | 12 | 350 | 1.0 | 470 | 338 | 338 | 96.6 |
| RTU 3-SGRD4 | EAST SALES | B | 12 | 350 | 1.0 | 344 | 340 | 340 | 97.1 |
| RTU 3-SGRD5 | EAST SALES | B | 12 | 350 | 1.0 | 331 | 350 | 350 | 100.0 |
| RTU 3-SGRD6 | EAST SALES | B | 12 | 350 | 1.0 | 471 | 343 | 343 | 98.0 |
| RTU 3-SGRD7 | EAST SALES | B | 12 | 350 | 1.0 | 362 | 363 | 363 | 103.7 |
| RTU 3-SGRD8 | EAST SALES | B | 12 | 350 | 1.0 | 372 | 378 | 378 | 108.0 |
| Total | | | | 2800 | | 3113 | 2820 | 2820 | 100.71% |

**Completed By: Michael McDonnell on 11/19/2024**

# National TAB

**Project: 11-18-24 DOLLAR TREE - COLUMBUS, WI**

## System/Unit: AHU/RTU

**Asset: RTU 4** AREA:FRONT SALES

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | CARRIER | CARRIER |
| **Serial Num** | - | 3523P69286 |
| **Model Num** | 48FCEM12A2M5A6W1F0 | 48FCEM12A2M5A6W1F0 |
| **Type** | RTU | RTU |
| **Configuration** | VERTICAL | VERTICAL |
| **Num OA Filters 1** | - | 1 |
| **OA Filter Size 1** | - | 35X19.5 |
| **Num Final Filter 1** | - | 4 |
| **Final Filter Size 1** | - | 20X20X2 |

| Motor Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **Motor MFG** | - | NL |
| **Horsepower** | 3.0 | NL |
| **Motor Rpm** | - | NL |
| **Phase** | 3 | 3 |
| **Rated Voltage** | 208 V | 208 |
| **Rated Amperage** | - | 6.4 |

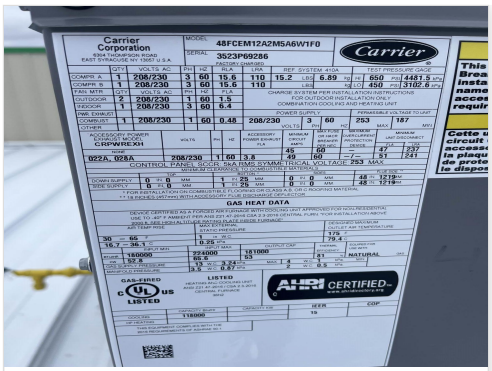
| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **SF CFM** | 3500 | 3517 |
| **SF RPM** | - | 1648 |
| **RA CFM** | 3100 | 3133 |
| **OA CFM** | 400 | 384 |
| **RL Voltage** | - | 211/211/211 |
| **RL Amperage** | - | 3.7/3.9/3.7 |
| **SF Rotation** | - | CORRECT |
| **SF System SetPt** | - | 7.7 VDC (MSAV) |
| **RA Damper Position** | - | MECHANICALLY LINKED |
| **Min OA Damper Position** | - | HIGH: 3.0 (12%) LOW: 3.9 (23%) |
| **Min OA Damper Type** | - | ECONOMIZER |
| **OA Enthalpy Setpt** | - | ES5 |

| Performance Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MA Plenum SP** | - | -0.65" |
| **Fan Suction SP** | - | -0.89" |
| **Fan Discharge SP** | - | 0.43" |
| **Total ESP** | 1.00 | 1.08" |
| **Fan Total SP** | - | 1.32" |

| General | |
|---|---|
| | **Actual** |
| **Fan Rotation Correct** | YES |
| **Unit Filters Clean** | YES |
| **Condensate Drain Installed** | YES |

Completed By: Michael McDonnell on 11/20/2024

## Unit Data - PHOTO LOG




**11/20/2024**

**11/20/2024**

### Diffuser Supply (GRD)

**RTU 4/FRONT SALES**

| Asset | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Asset Name** | **Location** | **Type** | **Size** | **DESIGN CFM** | **AK** | **CFM(1)** | **CFM(2)** | **FINAL CFM** | **% to design** |
| RTU 4-SGRD1 | SOUTH SALES | B | 12 | 440 | 1.0 | 386 | 424 | 424 | 96.4 |
| RTU 4-SGRD2 | SOUTH SALES | B | 12 | 435 | 1.0 | 461 | 423 | 423 | 97.2 |
| RTU 4-SGRD3 | SOUTH SALES | B | 12 | 435 | 1.0 | 512 | 452 | 452 | 103.9 |
| RTU 4-SGRD4 | SOUTH SALES | B | 12 | 440 | 1.0 | 361 | 454 | 454 | 103.2 |
| RTU 4-SGRD5 | SOUTH SALES | B | 12 | 440 | 1.0 | 497 | 439 | 439 | 99.8 |
| RTU 4-SGRD6 | SOUTH SALES | B | 12 | 435 | 1.0 | 548 | 422 | 422 | 97.0 |
| RTU 4-SGRD7 | SOUTH SALES | B | 12 | 435 | 1.0 | 511 | 444 | 444 | 102.1 |
| RTU 4-SGRD8 | SOUTH SALES | B | 12 | 440 | 1.0 | 427 | 459 | | - |
| Total | | | | 3500 | | 3703 | 3517 | 3058 | 87.37% |

# National TAB

**Project: 11-18-24 DOLLAR TREE - COLUMBUS, WI**

## System/Unit: FAN - Exhaust

**Asset: EF1** AREA:RR

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | BROAN | BROAN |
| **Model Num** | NL | AE80B-B |
| **Serial Num** | - | 42G31T |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 75 | 75 |

Completed By: Michael McDonnell on 11/19/2024

### Unit Data - PHOTO LOG

**11/20/2024**

# National TAB

**Project: 11-18-24 DOLLAR TREE - COLUMBUS, WI**

## System/Unit: FAN - Exhaust

**Asset: EF2** AREA:RR

| Unit Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **MFG** | BROAN | BROAN |
| **Model Num** | NL | AE80B-B |
| **Serial Num** | - | 42G31T |

| Test Data | | |
|---|---|---|
| | **Design** | **Actual** |
| **CFM** | 75 | 72 |

Completed By: Michael McDonnell on 11/19/2024

### Unit Data - PHOTO LOG

**11/20/2024**

COORDINATE SA & RA DROPS FROM RTU WITH
STORAGE AREA WALLS. LOCATE RTU DROPS
INSIDE STORAGE AREA.
10'-0" MIN
1-8
1-7
1-6
1-5
1-4
1-3
1-2
1-1
2-8
2-7
2-6
2-5
2-4
2-3
2-2
2-1
3-8
3-7
3-6
3-5
3-4
3-3
3-2
3-1
4-8
4-7
4-6
4-5
4-4
4-3
4-2
4-1
RTU-1
RTU-2
RTU-3
RTU-4
AIR-1
EF-1
EF-2
12"x12"
20"x12"
20"x14"
14"x14"
24"x18"
24"x20"