

Report By:

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**Report: TAB REPORT**  
**Function: Test, Adjust, & Balance**  
**Date: 08/28/2023**

**PROJECT**

**08-28-23 FAMILY DOLLAR - TWIN LAKES, WI**

need

need, AK 11111

Client

Oliphant Heating  
208 WOLLARD BLVD  
  
RICHMOND, MO

## 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.

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### Project: 08-28-23 FAMILY DOLLAR - TWIN LAKES, WI

- [Open](#) BALANCE\_SCHEDULE\_LARGE\_JOBS.xlsx

## CheckList List

- TECH - SITE PICTURES
- TECH - STEP 1: INITIAL WALKTHROUGH
- TECH - STEP 2: UNIT DATA AND EVAL
- TECH - STEP 3: TEST, ADJUST AND BALANCE
- TECH - STEP 4: FINAL TESTS





**RTU-1**  
**08/28/2023**



**Label**  
**08/28/2023**

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RTU-2

**Comment:**



**RTU-2(1)**  
**08/28/2023**



**Label**  
**08/28/2023**

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RTU-3

**Comment:**



**RTU-3(1)**  
**08/28/2023**



**Label**  
**08/28/2023**

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RTU-4

**Comment:**



**RTU-4**  
**08/28/2023**



**Label**  
**08/28/2023**

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EF-1

**Comment:**



**EF-1**  
**08/28/2023**

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EF-2

---

**Comment:**



**EF-2**  
**08/28/2023**



## 08-28-23 FAMILY DOLLAR - TWIN LAKES, WI

### CheckList Information

**Name :** TECH - STEP 1: INITIAL WALKTHROUGH      **Status :** Not Completed  
**Assigned Organization :** National TAB      **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 08/28/2023 - Brianna Biggs - National TAB

### CheckList Item Details

#### INITIAL SITE WALKTHROUGH

Review Plan Review Checklist, has it been signed off and meets our standards to start balancing? If not contact processor to ensure job is ready.

**Comment:**

Yes

All diffusers and grilles are installed and match design?

**Comment:**

Yes

Thermostats have power?

**Comment:**

Yes

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

**Comment:**

Yes



## 08-28-23 FAMILY DOLLAR - TWIN LAKES, WI

### CheckList Information

**Name :** TECH - STEP 2: UNIT DATA AND EVAL **Status :** Not Completed

**Assigned Organization :** National TAB **Asset :**

**Requesting Organization :** National TAB

**Created Date :** 08/28/2023 - Brianna Biggs - National TAB

### CheckList Item Details

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

RTU's/AHU's

**Comment:**

Economizers are assembled and functional?

**Comment:**

Yes

DCV Max damper opening position is set to minimum?

**Comment:**

Yes

Free cooling enthalpy set point set for lowest setting (Typically "D")

**Comment:**

ESS

Motors are all operating below the FLA rating?

**Comment:**

Yes

Are belts tight?

**Comment:**

Yes

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If direct drive unit is the speed controller working.

**Comment:**

Yes

---

Is gas piping installed and valves turned on?

**Comment:**

Yes

---

Unit free of noticeable noise and vibration

**Comment:**

Yes

**EF's**

---

Rotation is correct?

**Comment:**

Yes

---

Belts are tight?

**Comment:**

NA, direct drive.

---

There is no major leakage around base of fan?

**Comment:**

Yes

---

Is the motor operating below the motor FLA rating?

**Comment:**

NA, single speed ceiling fan.

---

For restroom fan(s) is the back draft damper installed and can it fully open?

**Comment:**

NA, single speed ceiling fan.

---

Unit free of noticeable noise and vibration?

**Comment:**

Yes

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**DOCUMENTATION**

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

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**Comment:**

Yes

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## 08-28-23 FAMILY DOLLAR - TWIN LAKES, WI

### CheckList Information

**Name :** TECH - STEP 3: TEST, ADJUST AND BALANCE **Status :** Not Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 08/28/2023 - Brianna Biggs - National TAB

### CheckList Item Details

TEST, ADJUST, AND BALANCE ALL EQUIPMENT:

DURING TESTING MAKE NOTE OF THE FOLLOWING:

Is space free of drafting?

**Comment:**

Yes

Is space comfortable in all areas?

**Comment:**

Yes

Is the space free of ventilation noise?

**Comment:**

Yes

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

**Comment:**

NA



## 08-28-23 FAMILY DOLLAR - TWIN LAKES, WI

### CheckList Information

**Name :** TECH - STEP 4: FINAL TESTS      **Status :** Not Completed  
**Assigned Organization :** National TAB      **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 08/28/2023 - Brianna Biggs - National TAB

### CheckList Item Details

**FINAL TESTS**

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**ADDITIONAL**

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Thermostats are programmed?

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**Comment:**

No, left in fan on as told by GC.

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# National TAB

Project: 08-28-23 FAMILY DOLLAR - TWIN LAKES, WI

## System/Unit: AHU/RTU



Asset: RTU1

AREA:

| Unit Data           |          |            |
|---------------------|----------|------------|
|                     | Design   | Actual     |
| MFG                 | CARRIER  | CARRIER    |
| Serial Num          | -        | 2222C10472 |
| Model Num           | 48GCE    | 48GCEM05F2 |
| Type                | RTU      | RTU        |
| Configuration       | VERTICAL | VERTICAL   |
| Num OA Filters 1    | -        | 1          |
| OA Filter Size 1    | -        | 28X14.25   |
| Num Final Filter 1  | -        | 2          |
| Final Filter Size 1 | -        | 16X25X2    |

| Motor Data     |        |         |
|----------------|--------|---------|
|                | Design | Actual  |
| Motor MFG      | -      | NL      |
| Frame          | -      | NL      |
| Horsepower     | -      | NL      |
| Motor Rpm      | -      | NL      |
| Phase          | 3      | 1       |
| Rated Voltage  | 208    | 208/230 |
| Rated Amperage | -      | 7.1     |

| Drive Data         |        |        |
|--------------------|--------|--------|
|                    | Design | Actual |
| Motor Sheave Size  | -      | DD     |
| Motor Bore Size    | -      | DD     |
| Motor Sheave SetPt | -      | 9.4V   |
| Fan Sheave Size    | -      | DD     |
| Fan Sheave Bore    | -      | DD     |
| Belt CL Distance   | -      | DD     |
| Num of Belts       | -      | DD     |
| Belt Size          | -      | DD     |
| Belt Alignment     | -      | DD     |

| Test Data              |        |  |
|------------------------|--------|--|
|                        | Design | Actual   |
| SF CFM                 | 1750   | 1756   |
| SF RPM                 | -      | 2145   |
| RA CFM                 | 1600   | 1612   |
| OA CFM                 | 150    | 144  |
| RL Voltage             | -      | 210  |
| RL Amperage            | -      | 3.4  |
| SF Rotation            | -      | CORRECT  |
| RA Damper Position     | -      | 94%  |
| Min OA Damper Position | -      | VENT MIN:<br>2.55V (6%) /<br>VENT MAX:<br>2.55V (6%) |
| Min OA Damper Type     | -      | ECONOMIZER   |
| OA Enthalpy Setpt      | -      | ES5  |

| Performance Data |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| MA Plenum SP     | -      | -0.59" |
| Fan Suction SP   | -      | -0.98" |
| Fan Discharge SP | -      | 0.55"  |
| Total ESP        | -      | 1.14"  |
| Fan Total SP     | -      | 1.53"  |

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

Completed By: Michael McDonnell on 08/28/2023

Notes:  
DIFFUSER DESIGN TOTALS =1400  
ADJUSTED TOTALS.

Written By: Brianna Biggs on 08/28/2023

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Project:08-28-23 FAMILY DOLLAR - TWIN LAKES, WI

## AHU/RTU



### Diffuser Supply (GRD)

#### RTU1/

| Asset      |          |      |      |            |      |        |        |           |             |
|------------|----------|------|------|------------|------|--------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK   | CFM(1) | CFM(2) | FINAL CFM | % to design |
| SGRD1      | STORAGE  | D    | 14X6 | 363        | 0.48 | 219    | 322    | 365       | 100.6       |
| SGRD2      | STORAGE  | D    | 14X6 | 363        | 0.48 | 205    | 303    | 358       | 98.6        |
| SGRD3      | STORAGE  | D    | 14X6 | 363        | 0.48 | 191    | 283    | 359       | 98.9        |
| SGRD4      | STORAGE  | D    | 14X6 | 363        | 0.48 | 201    | 297    | 372       | 102.5       |
| SGRD5      | OFFICE   | A    | 8"   | 100        | 1.0  | 172    | 237    | 96        | 96.0        |
| SGRD6      | HALLWAY  | A    | 8"   | 100        | 1.0  | 147    | 202    | 102       | 102.0       |
| SGRD7      | RESTROOM | C    | 8"   | 50         | 1.0  | 84     | 116    | 54        | 108.0       |
| SGRD8      | RESTROOM | C    | 8"   | 50         | 1.0  | 78     | 108    | 50        | 100.0       |
| Total      |          |      |      | 1752       |      | 1297   | 1868   | 1756      | 100.23%     |

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Project: 08-28-23 FAMILY DOLLAR - TWIN LAKES, WI

## System/Unit: AHU/RTU



Asset: RTU2

AREA:

| Unit Data           |          |            |
|---------------------|----------|------------|
|                     | Design   | Actual     |
| MFG                 | CARRIER  | CARRIER    |
| Serial Num          | -        | 4322P66644 |
| Model Num           | 48FCE    | 48HCED08F2 |
| Type                | RTU      | RTU        |
| Configuration       | VERTICAL | VERTICAL   |
| Num OA Filters 1    | -        | 1          |
| OA Filter Size 1    | -        | 35.5X19.5  |
| Num Final Filter 1  | -        | 4          |
| Final Filter Size 1 | -        | 20X20X2    |

| Motor Data     |        |          |
|----------------|--------|----------|
|                | Design | Actual   |
| Motor MFG      | -      | MARATHON |
| Frame          | -      | 56HZ     |
| Horsepower     | -      | NL       |
| Motor Rpm      | -      | 1670     |
| Phase          | 3      | 3        |
| Rated Voltage  | 208    | 208-230  |
| Rated Amperage | -      | 6.7-6.6  |

| Drive Data         |        |              |
|--------------------|--------|--------------|
|                    | Design | Actual       |
| Motor Sheave Size  | -      | 1VL44        |
| Motor Bore Size    | -      | 5/8"         |
| Motor Sheave SetPt | -      | 4 TURNS OPEN |
| Fan Sheave Size    | -      | AFD74 (7.5") |
| Fan Sheave Bore    | -      | 1"           |
| Belt CL Distance   | -      | 16.75"       |
| Num of Belts       | -      | 1            |
| Belt Size          | -      | A48          |
| Belt Alignment     | -      | VERIFIED     |

| Test Data              |        |  |
|------------------------|--------|--|
|                        | Design | Actual   |
| SF CFM                 | 2800   | 2826   |
| SF RPM                 | -      | 801  |
| RA CFM                 | 2150   | 2154   |
| OA CFM                 | 650    | 672  |
| RL Voltage             | -      | 210/209/210  |
| RL Amperage            | -      | 3.4/3.2/3.1  |
| SF Rotation            | -      | CCW,<br>CORRECT  |
| RA Damper Position     | -      | HIGH-MAX: 77%<br>MIN: 92% LOW-<br>MAX: 72% MIN:<br>85%     |
| Min OA Damper Position | -      | HIGH-MAX:<br>3.85V MIN: 2.9<br>LOW-MAX:<br>4.25V MIN: 3.2V |
| Min OA Damper Type     | -      | ECONOMIZER   |
| OA Enthalpy Setpt      | -      | ES5  |

| Performance Data |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| MA Plenum SP     | -      | -0.60" |
| Fan Suction SP   | -      | -0.78" |
| Fan Discharge SP | -      | 0.60"  |
| Total ESP        | 1.0"   | 1.20"  |
| Fan Total SP     | -      | 1.38"  |

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

Completed By: Michael McDonnell on 08/28/2023

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Project:08-28-23 FAMILY DOLLAR - TWIN LAKES, WI

## AHU/RTU



### Diffuser Supply (GRD)

#### RTU2/

| Asset      |          |      |      |            |     |        |        |           |             |
|------------|----------|------|------|------------|-----|--------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK  | CFM(1) | CFM(2) | FINAL CFM | % to design |
| SGRD1      | SALES    | B    | 12"  | 350        | 1.0 | 373    | 346    | 346       | 98.9        |
| SGRD2      | SALES    | B    | 12"  | 350        | 1.0 | 356    | 350    | 350       | 100.0       |
| SGRD3      | SALES    | B    | 12"  | 350        | 1.0 | 379    | 371    | 371       | 106.0       |
| SGRD4      | SALES    | B    | 12"  | 350        | 1.0 | 341    | 324    | 324       | 92.6        |
| SGRD5      | SALES    | B    | 12"  | 350        | 1.0 | 372    | 346    | 346       | 98.9        |
| SGRD6      | SALES    | B    | 12"  | 350        | 1.0 | 398    | 343    | 343       | 98.0        |
| SGRD7      | SALES    | B    | 12"  | 350        | 1.0 | 348    | 370    | 370       | 105.7       |
| SGRD8      | SALES    | B    | 12"  | 350        | 1.0 | 371    | 376    | 376       | 107.4       |
| Total      |          |      |      | 2800       |     | 2938   | 2826   | 2826      | 100.93%     |

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Project: 08-28-23 FAMILY DOLLAR - TWIN LAKES, WI

## System/Unit: AHU/RTU



Asset: RTU3

AREA:

| Unit Data           |          |             |
|---------------------|----------|-------------|
|                     | Design   | Actual      |
| MFG                 | CARRIER  | CARRIER     |
| Serial Num          | -        | 4322P66645  |
| Model Num           | 48FCE    | 48HCED08F2  |
| Type                | RTU      | RTU         |
| Configuration       | VERTICAL | VERTICAL    |
| Num OA Filters 1    | -        | 1           |
| OA Filter Size 1    | -        | 35.5"X19.5" |
| Num Final Filter 1  | -        | 4           |
| Final Filter Size 1 | -        | 20X20X2     |

| Motor Data     |        |          |
|----------------|--------|----------|
|                | Design | Actual   |
| Motor MFG      | -      | MARATHON |
| Frame          | -      | 56HZ     |
| Horsepower     | -      | NL       |
| Motor Rpm      | -      | 1670     |
| Phase          | 3      | 3        |
| Rated Voltage  | 208    | 208-230  |
| Rated Amperage | -      | 6.7-6.6  |

| Drive Data         |        |              |
|--------------------|--------|--------------|
|                    | Design | Actual       |
| Motor Sheave Size  | -      | 1VL44        |
| Motor Bore Size    | -      | 5/8"         |
| Motor Sheave SetPt | -      | 4 TURNS OPEN |
| Fan Sheave Size    | -      | AFD74 (7.5") |
| Fan Sheave Bore    | -      | 1"           |
| Belt CL Distance   | -      | 16.5"        |
| Num of Belts       | -      | 1            |
| Belt Size          | -      | A48          |
| Belt Alignment     | -      | VERIFIED     |

| Test Data              |        |  |
|------------------------|--------|--|
|                        | Design | Actual   |
| SF CFM                 | 2800   | 2797   |
| SF RPM                 | -      | 778  |
| RA CFM                 | 2150   | 2163   |
| OA CFM                 | 650    | 634  |
| RL Voltage             | -      | 210/210/210  |
| RL Amperage            | -      | 3.4/3.0/2.9  |
| SF Rotation            | -      | CCW,<br>CORRECT  |
| RA Damper Position     | -      | HIGH-MAX: 79%<br>MIN: 89% LOW-<br>MAX:73%<br>MIN:86%       |
| Min OA Damper Position | -      | HIGH-MAX:<br>3.75V MIN: 2.95<br>LOW-MAX:4.2V<br>MIN: 3.15V |
| Min OA Damper Type     | -      | ECONOMIZER   |
| OA Enthalpy Setpt      | -      | ES5  |

| Performance Data |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| MA Plenum SP     | -      | -0.58" |
| Fan Suction SP   | -      | -0.76" |
| Fan Discharge SP | -      | 0.56"  |
| Total ESP        | 1.0"   | 1.14"  |
| Fan Total SP     | -      | 1.32"  |

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

Completed By: Michael McDonnell on 08/28/2023

# National TAB

Project:08-28-23 FAMILY DOLLAR - TWIN LAKES, WI

## AHU/RTU



### Diffuser Supply (GRD)

#### RTU3/

| Asset      |          |      |      |            |     |        |        |           |             |
|------------|----------|------|------|------------|-----|--------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK  | CFM(1) | CFM(2) | FINAL CFM | % to design |
| SGRD1      | SALES    | B    | 12"  | 350        | 1.0 | 339    | 376    | 376       | 107.4       |
| SGRD2      | SALES    | B    | 12"  | 350        | 1.0 | 384    | 344    | 344       | 98.3        |
| SGRD3      | SALES    | B    | 12"  | 350        | 1.0 | 375    | 353    | 353       | 100.9       |
| SGRD4      | SALES    | B    | 12"  | 350        | 1.0 | 246    | 323    | 323       | 92.3        |
| SGRD5      | SALES    | B    | 12"  | 350        | 1.0 | 329    | 333    | 333       | 95.1        |
| SGRD6      | SALES    | B    | 12"  | 350        | 1.0 | 393    | 345    | 345       | 98.6        |
| SGRD7      | SALES    | B    | 12"  | 350        | 1.0 | 387    | 375    | 375       | 107.1       |
| SGRD8      | SALES    | B    | 12"  | 350        | 1.0 | 351    | 348    | 348       | 99.4        |
| Total      |          |      |      | 2800       |     | 2804   | 2797   | 2797      | 99.89%      |

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Project: 08-28-23 FAMILY DOLLAR - TWIN LAKES, WI

## System/Unit: AHU/RTU



Asset: RTU4

AREA:

| Unit Data           |          |            |
|---------------------|----------|------------|
|                     | Design   | Actual     |
| MFG                 | CARRIER  | CARRIER    |
| Serial Num          | -        | 4422P67341 |
| Model Num           | 48FCE    | 48HCED11F2 |
| Type                | RTU      | RTU        |
| Configuration       | VERTICAL | VERTICAL   |
| Num OA Filters 1    | -        | 1          |
| OA Filter Size 1    | -        | 35.5X19.5  |
| Num Final Filter 1  | -        | 4          |
| Final Filter Size 1 | -        | 20X20X2    |

| Motor Data     |        |          |
|----------------|--------|----------|
|                | Design | Actual   |
| Motor MFG      | -      | MARATHON |
| Frame          | -      | 56HZ     |
| Horsepower     | -      | NL       |
| Motor Rpm      | -      | 1750     |
| Phase          | 3      | 3        |
| Rated Voltage  | 208    | 230      |
| Rated Amperage | -      | 9.2      |

| Drive Data         |        |              |
|--------------------|--------|--------------|
|                    | Design | Actual       |
| Motor Sheave Size  | -      | 1VM50        |
| Motor Bore Size    | -      | 7/8"         |
| Motor Sheave SetPt | -      | 4 TURNS OPEN |
| Fan Sheave Size    | -      | AFD74 (7.5") |
| Fan Sheave Bore    | -      | 1"           |
| Belt CL Distance   | -      | 16.75"       |
| Num of Belts       | -      | 1            |
| Belt Size          | -      | A48          |
| Belt Alignment     | -      | VERIFIED     |

| Test Data              |        |  |
|------------------------|--------|--|
|                        | Design | Actual   |
| SF CFM                 | 3500   | 3660   |
| SF RPM                 | -      | 926  |
| RA CFM                 | 2725   | 2873   |
| OA CFM                 | 775    | 787  |
| RL Voltage             | -      | 209/210/210  |
| RL Amperage            | -      | 4.9/5.3/5.2  |
| SF Rotation            | -      | CCW,<br>CORRECT                                    |
| RA Damper Position     | -      | HIGH-MAX: 77%<br>MIN: 87% LOW-MAX: 68% MIN: 83%    |
| Min OA Damper Position | -      | HIGH-MAX-3.95V<br>MIN:3.05V LOW-MAX:4.6V MIN: 3.4V |
| Min OA Damper Type     | -      | ECONOMIZER   |
| OA Enthalpy Setpt      | -      | ES5  |

| Performance Data |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| MA Plenum SP     | -      | -0.76" |
| Fan Suction SP   | -      | -1.05" |
| Fan Discharge SP | -      | 0.72"  |
| Total ESP        | 1.0"   | 1.48"  |
| Fan Total SP     | -      | 1.77"  |

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

Completed By: Michael McDonnell on 08/28/2023

# National TAB

Project:08-28-23 FAMILY DOLLAR - TWIN LAKES, WI

## AHU/RTU



### Diffuser Supply (GRD)

#### RTU4/

| Asset      |          |      |      |            |     |        |        |           |             |
|------------|----------|------|------|------------|-----|--------|--------|-----------|-------------|
| Asset Name | Location | Type | Size | DESIGN CFM | AK  | CFM(1) | CFM(2) | FINAL CFM | % to design |
| SGRD1      | SALES    | B    | 12"  | 440        | 1.0 | 436    | 457    | 457       | 103.9       |
| SGRD2      | SALES    | B    | 12"  | 435        | 1.0 | 485    | 470    | 470       | 108.0       |
| SGRD3      | SALES    | B    | 12"  | 435        | 1.0 | 570    | 434    | 434       | 99.8        |
| SGRD4      | SALES    | B    | 12"  | 440        | 1.0 | 439    | 471    | 471       | 107.0       |
| SGRD5      | SALES    | B    | 12"  | 440        | 1.0 | 413    | 447    | 447       | 101.6       |
| SGRD6      | SALES    | B    | 12"  | 435        | 1.0 | 486    | 478    | 478       | 109.9       |
| SGRD7      | SALES    | B    | 12"  | 435        | 1.0 | 450    | 441    | 441       | 101.4       |
| SGRD8      | SALES    | B    | 12"  | 440        | 1.0 | 365    | 462    | 462       | 105.0       |
| Total      |          |      |      | 3500       |     | 3644   | 3660   | 3660      | 104.57%     |

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# National TAB

Project: 08-28-23 FAMILY DOLLAR - TWIN LAKES, WI

System/Unit: FAN - Exhaust



Asset: EF1

AREA:

| Unit Data     |           |          |
|---------------|-----------|----------|
|               | Design    | Actual   |
| MFG           | GREENHECK | BROAN    |
| Model Num     | SP-B110   | NA       |
| Serial Num    | -         | NA       |
| Type          | CEILING   | CEILING  |
| Configuration | VERTICAL  | VERTICAL |

| Test Data    |        |              |
|--------------|--------|--------------|
|              | Design | Actual       |
| CFM          | 75     | 75           |
| Fan RPM      | -      | DD           |
| Fan Rotation | -      | CORRECT      |
| Motor RPM    | -      | DD           |
| System SetPt | -      | SINGLE SPEED |
| RL Voltage   | -      | NA           |
| RL Amperage  | -      | NA           |

| Motor Data       |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| Motor MFG        | -      | NA     |
| Phase            | 1      | 1      |
| Voltage (rated)  | 120    | 120    |
| Amperage (rated) | -      | NA     |

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# National TAB

Project: 08-28-23 FAMILY DOLLAR - TWIN LAKES, WI

## System/Unit: FAN - Exhaust



Asset: EF2

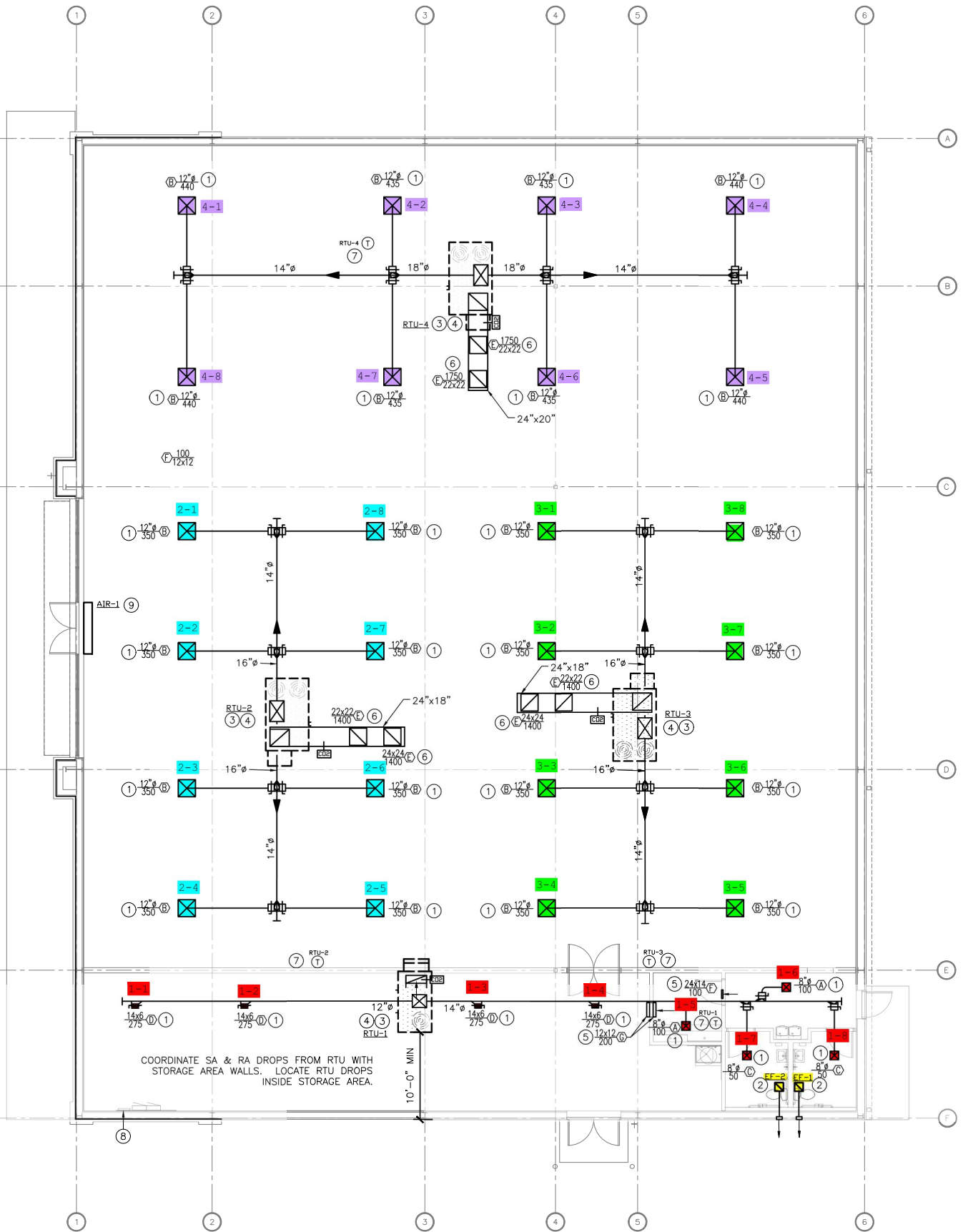
AREA:

| Unit Data     |           |          |
|---------------|-----------|----------|
|               | Design    | Actual   |
| MFG           | GREENHECK | BROAN    |
| Model Num     | SP-B110   | NA       |
| Serial Num    | -         | NA       |
| Type          | CEILING   | CEILING  |
| Configuration | VERTICAL  | VERTICAL |

| Test Data    |        |              |
|--------------|--------|--------------|
|              | Design | Actual       |
| CFM          | 75     | 92           |
| Fan RPM      | -      | DD           |
| Fan Rotation | -      | CORRECT      |
| Motor RPM    | -      | DD           |
| System SetPt | -      | SINGLE SPEED |

| Motor Data       |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| Motor MFG        | -      | NA     |
| Phase            | 1      | 1      |
| Voltage (rated)  | 120    | 120    |
| Amperage (rated) | -      | NA     |

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COORDINATE SA & RA DROPS FROM RTU WITH STORAGE AREA WALLS. LOCATE RTU DROPS INSIDE STORAGE AREA.

**1** MECHANICAL HVAC PLAN  
SCALE: 1/8" = 1'-0"