

**Report By:**

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



**Report: TAB Report**  
**Function: Test, Adjust, & Balance**  
**Date: 08/06/2025**  
**Completed By: National TAB**

**PROJECT**  
**08-04-25 CAVA KILDEER, IL**

20413 NORTH RAND ROAD

KILDEER , IL 60074

**Client**

CAVA  
702 H ST NW  
2nd floor  
Washington, DC 20001

# National TAB

Project: 08-04-25 CAVA KILDEER, IL

## Table Of Contents

<b>Section</b>	<b>Page #</b>
SUMMARY	3
REMARKS	4
BALANCE SCHEDULE	9
CHECKLIST	10
AHU/RTU	37
FAN - Exhaust	42
FAN - Supply	45
Kitchen Hood Type I	46

## 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.

### Kitchen Exhaust Hood & Associated Fans

Each kitchen exhaust fan was measured at the hood filter bay utilizing a velocity matrix and a manufacturer's correction factor. Each filter velocity is multiplied by the manufacturer's corrected area. The sum of these readings equals the total flow of the exhaust fans. The total flow of the exhaust was then adjusted to within tolerance of the design flow. . Any EF's that fell outside of this tolerance is noted throughout the report.

### MUA (Make Up Air Unit) w/ PSP

Total flow for the MAU (Make-up Air Unit) unit was measured by readings taken at the discharge of the hood's perforated supply plenum. Readings taken with a velocity matrix were averaged and multiplied by a manufacturer's corrected area. Adjustments to the fan speed were made in order to bring the unit to within design tolerance. Any MUA's that fell outside of this 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 of  $-0.02''$  wc to  $+0.02''$  wc and that the pressure measurement coincides with the actual and design net airflow. Any deviations from these standards are noted throughout the report.

The hood capture was tested at the perimeter of the hood and the cook top level with the equipment heat on to ensure satisfactory hood capture and containment.

## Issue List

- Diffuser 1-6 Inaccessible damper
- EF-2/EF-3 high on flow
- RTU-1 alarm
- RTU-1/RTU-2 final filters



08-04-25 CAVA KILDEER, IL

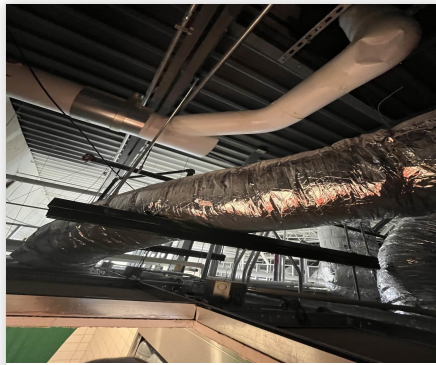
Project Issue Information

**Issue Name :** Diffuser 1-6 Inaccessible damper  
**Description :** Diffuser 1-6 is high on flow (left of hood control panel) at 534/400CFM. I am unable to reduce the airflow to this diffuser the access panel above hard ceiling is too far away from takeoff where damper is located. The rest of the diffusers on this unit have been balanced to design airflow.  
**Created By :** National TAB                      **Assigned To :** National TAB - Dylan Crisman  
**Status :** Open  
**Priority :** High                                      **Asset Tag :**  
**Originated Date :** 08/05/2025 - Dylan Crisman - National TAB

Project Issue File Details



08/05/2025



08/05/2025



08/05/2025



08-04-25 CAVA KILDEER, IL

**Project Issue Information**

**Issue Name :** EF-2/EF-3 high on flow  
**Description :** EF-2/EF-3 are high on flow @ EF-2 97/75 EF-3 101/75 fans are direct wired without a speed controller installed. Unable to decrease speed of fan to low CFM to design airflow.  
**Created By :** National TAB                      **Assigned To :** National TAB - Dylan Crisman  
**Status :** Open  
**Priority :** High                                      **Asset Tag :**  
**Originated Date :** 08/04/2025 - Dylan Crisman - National TAB

Project Issue File Details



08/04/2025



08/04/2025



08/04/2025



08-04-25 CAVA KILDEER, IL

**Project Issue Information**

**Issue Name :** RTU-1 alarm  
**Description :** Alarm is present on RTU-1 showing “space humidity active” and “space humidity input” Recommend mechanical checking wiring and landings at RTU as well as space sensor to confirm proper termination.  
**Created By :** National TAB                      **Assigned To :** National TAB - Dylan Crisman  
**Status :** Open  
**Priority :** High                                      **Asset Tag :**  
**Originated Date :** 08/04/2025 - Dylan Crisman - National TAB

Project Issue File Details



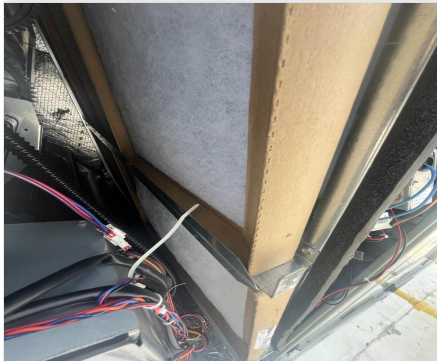


**08-04-25 CAVA KILDEER, IL**

**Project Issue Information**

**Issue Name :** RTU-1/RTU-2 final filters  
**Description :** RTU-1/RTU-2 have construction filters installed. Recommend replacing with correct size minimum MERV 8 rated pleated filters.  
**Created By :** National TAB                      **Assigned To :** National TAB - Dylan Crisman  
**Status :** Open  
**Priority :** Low                                      **Asset Tag :**  
**Originated Date :** 08/04/2025 - Dylan Crisman - National TAB

Project Issue File Details



08/04/2025



08/04/2025

### 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	KITCHEN	3400	3450	3015	3049	385	401	11.3%	11.6%						
RTU-2	DINING	4000	3912	3120	3013	880	899	22.0%	23.0%						
MUA-1	KITCHEN HD									1855	1862				
EF-1	KITCHEN HD											2317	2329		
EF-2	MENS RR													75	97
EF-3	WOMENS RR													75	101
<b>TOTALS</b>		7400	7362	6135	6062	1265	1300			1855	1862	2317	2329	150	198

#### NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	3120	3162
TOTAL EXHAUST	2467	2527
<b>NET AIRFLOW</b>	<b>653</b>	<b>635</b>

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H2O)
FRONT	0.007
SIDE	
REAR	0.0056
<b>AVERAGE</b>	<b>0.0063</b>

#### 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

- FIV - EF'S
- FIV - HOODS
- FIV - HVAC DUCTWORK
- FIV - MUA
- FIV - RTU'S
- FPT - BUILDING PRESSURE AND HOOD CONTAINMENT
- FPT - KEF'S
- FPT - MUA
- FPT - RTU's



08-04-25 CAVA KILDEER, IL

**CheckList Information**

**Name :** FIV - EF'S **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 07/24/2025 - Natasha Louw - National TAB  
**Completed Date :** 08/04/2025 - Dylan Crisman - National TAB

**CheckList Item Details**

Unit Tag matches the design and submittal MFG and Model Pass

Comment:

Each exhaust fan is proper tagged for proper identification with tags sized and placed on the fan for visual ease Pass

Comment:

Fans are installed in the correct location and orientation Pass

Comment:

All packing, material and debris has been removed from the blower/wheel housing and the motor compartment Pass

Comment:

Fan wheels turn easily by hand (turn power off prior to testing) Pass

Comment:

Fans grease duct curb top plate is properly transitioned to the fan inlet and flush on top of the curb, sealed to the fan base to prevent leakage Pass

Comment:

**Exhaust fans have external disconnects and are connected to allow full hinging of each exhaust fan**

Pass

**Comment:**

**Fan is properly hinged and supported when hinged fully back for grease duct access (for Halton fans, ensure the base mounted disconnect is not hitting the fan base/curb when fully hinged back)**

Pass

**Comment:**

**Grease cups are properly installed and connected to the fan base grease drain to prevent spilling outside of the grease cup**

Pass

**Comment:**

**Exhaust fans are located 5ft from parapet wall and 10ft from any fresh air intake.**

Pass

**Comment:**



08-04-25 CAVA KILDEER, IL

CheckList Information

**Name :** FIV - HOODS **Status :** Completed

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

**Requesting Organization :** National TAB

**Created Date :** 07/24/2025 - Natasha Louw - National TAB

**Completed Date :** 08/05/2025 - Dylan Crisman - National TAB

CheckList Item Details

HOOD INSTALLATION DETAILS

Kitchen hoods tags match design and submitted information Pass

Comment:

Kitchen hoods are hung Level using 1/2" threaded rod Pass

Comment:

Kitchen hoods are supported using beam clamps and/or Unistrut per required structural and local AHJ requirements Pass

Comment:

Kitchen hoods are hung level front to back and side to side Pass

Comment:

Kitchen hoods are hung at 80" AFF Pass

Comment:

Kitchen Hoods are flush against the wall along the bottom and each of it's side walls. Pass

Comment:

Caulk is applied (less than 1/8" thick) from the hood against all wall surfaces or between connecting side to side hoods to prevent grease accumulation inside any crevice.

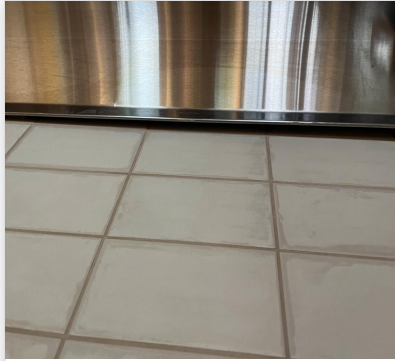
Fail

**Comment:**

Back of hood connection to wall is not caulked.



08/05/2025



08/05/2025

There are no penetrations into the hood canopy other than fire system nozzles

Pass

**Comment:**

The hood is in "As New" condition with no visible damage, rust, pitting, or other blemishes

Pass

**Comment:**

All protective film has been peeled away from the wall or other areas of impingement to assure it can be easily and fully removed prior to cleaning.

Pass

**Comment:**

**HOOD ACCESSORIES**

End panels are installed

Fail

**Comment:**

No end panels installed.

Hood filters are installed

Pass

**Comment:**

Grease cups are installed

Pass

**Comment:**

**Ceiling Wrappers are installed and the ceiling grid is fixed to the top of the ceiling wrappers**

Pass

**Comment:**

**Hood control panel has been identified and is located as per plan, is accessible, and contains all components and temperature sensors to meet local interlock (normal and abnormal conditions) and heat auto on/off functionality.**

Pass

**Comment:**



08-04-25 CAVA KILDEER, IL

CheckList Information

**Name :** FIV - HVAC DUCTWORK **Status :** Completed

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

**Requesting Organization :** National TAB

**Created Date :** 07/24/2025 - Natasha Louw - National TAB

**Completed Date :** 08/05/2025 - Dylan Crisman - National TAB

CheckList Item Details

KVS - GREASE DUCT (HOOD SYSTEM)

Grease duct is sized and routed per plan Pass

Comment:

Grease duct is properly supported Pass

Comment:

Grease duct has code required negative pitch from fan inlet back to the hood riser connection Pass

Comment:

Grease duct has required clean-out doors installed, labeled, and accessible for removal/cleaning. Doors are located as required by code Pass

Comment:

Grease duct clean-out doors are secured using tool less fasteners and seal fully when hand tightened Pass

Comment:

Grease duct is centered in the curb and transitions as required to ensure the fan inlet is fully covered by the grease duct opening. Duct top plate flanges to the edges of the curb and is secured and flat so that the fan sits flush and square. Pass

Comment:

Grease duct is wrapped if welded duct, or is double wall round duct?

Pass

Comment:

Wrapped welded duct.

**KVS - MUA DUCT (HOOD SYSTEM)**

MUA duct is routed and sized as per plan

Pass

Comment:

MUA duct is properly supported

Pass

Comment:

MUA duct seams are sealed air tight using proper sealant and application for SMACNA pressure rating of duct systems

Yes

Comment:

MUA duct is externally insulated and taped to prevent vapor barrier from being breached

Pass

Comment:

MUA duct drop box and transitions are done to encourage laminar flow and avoid restrictions

Pass

Comment:

Branch take-off's have accessible dampers exposed for the TAB team to adjust each line as necessary

Pass

Comment:

Flex duct (if used) is supported and straight with no more than one (1) hard 90 degree elbow and less than 5ft in total length

Pass

Comment:

Connection to the hood MUA plenum is secured and foil taped to prevent air leakage

Pass

Comment:

**RESTROOM DUCT**

Restroom duct is routed and sized per plan

Pass

Comment:

Restroom duct is properly supported

Pass

Comment:

Duct seams are sealed

Yes

Comment:

Dampers are accessible to TAB team for balancing

Pass

Comment:

Flex duct (if used) is supported and straight with no more than one (1) hard 90 degree elbow and less than 5ft in total length

Pass

Comment:

Duct is secured to exhaust register

Pass

Comment:

Gravity damper is installed, opens and closes freely, and is sealed to prevent air leakage

Pass

Comment:

Duct to curb transition is centered and sized to ensure it covers the entire fan inlet. Curb top plate is flush and secured to the ends of the curb.

Pass

Comment:

#### HVAC DUCT

Kitchen and Dining room duct is routed and sized as per plan

Pass

Comment:

Ducts are properly supported

Pass

Comment:

Ductwork is externally insulated

Yes

**Comment:**

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<b>Duct seams are sealed air tight using proper sealant and application for SMACNA pressure rating of duct systems</b>	<b>Pass</b>
--	-------------

---

**Comment:**

---

<b>Ducts are securely insulated as per specificatins and foil taped to prevent air barrier from being breached</b>	<b>Pass</b>
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**Comment:**

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<b>Takeoffs are installed to serve required terminal diffusers and are equipped with accessible dampers for TAB team access and can be opened or closed fully with no impingements</b>	<b>Pass</b>
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**Comment:**

---

<b>Flex duct (if used) is supported and straight with no more than one (1) hard 90 degree elbow and less than 5ft in total length</b>	<b>Pass</b>
---	-------------

---

**Comment:**

---

<b>Takeoff to diffuser is installed securely to prevent slippage and air leakage</b>	<b>Pass</b>
--	-------------

---

**Comment:**

---

<b>All diffuser neck or opening sizes are installed as planned</b>	<b>Pass</b>
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---

**Comment:**

---

<b>Supply and Return duct transitions to top of RTU curb, sized to full width and length of opening and is flashed fully to the sides of the curb.</b>	<b>Pass</b>
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---

**Comment:**

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**08-04-25 CAVA KILDEER, IL**

**CheckList Information**

**Name :** FIV - MUA **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 07/24/2025 - Natasha Louw - National TAB  
**Completed Date :** 08/04/2025 - Dylan Crisman - National TAB

**CheckList Item Details**

MUA Tag information matches design and submittal criteria Pass

Comment:

MUA Fan has a permanent tag for identification located on the unit located and sized for visual ease Pass

Comment:

MUA is installed in the proper location and orientation Pass

Comment:

MUA intake is a minimum 10ft from any exhaust, roof vent or dirty air source Pass

Comment:

Blower compartment and internal heater area is free of packing material, debris, and dirt Pass

Comment:

Blower wheel turns freely by hand (turn power off prior to testing) Pass

Comment:

All MUA compartment and control doors are fully accessible, minimum 36" clearance for service allowing the doors to fully open without restriction Pass

Comment:

MUA Electrical disconnect is external to the unit and properly wired

Pass

Comment:

Outdoor air awning is installed and fitted with proper OA mesh filters

Pass

Comment:

Condensate drain is installed (for cooling MUA's) with proper traps, clean-outs, and drain away from the unit to an acceptable roof drain

Pass

Comment:

Refrigeration line sets are installed and connected properly with adequate supports per specifications

Pass

Comment:

Condenser is installed away from any grease producing exhaust fans and located as per roof plan

Pass

Comment:

Condenser's electrical disconnect is external to the unit and properly wired (if applicable)

Pass

Comment:

Condenser hail guards are installed (if applicable)

Pass

Comment:

All Condenser compartment and control doors are fully accessible, minimum 36" clearance for service allowing the doors to fully open without restriction (if applicable)

Pass

Comment:

Gas line is installed per specification and properly supported

Pass

Comment:

Gas line is installed per specification and properly supported and contains maintenance shut-off valve, trap, and regulator (if line pressure requires it). MUA is equipped with inlet gas pressure gauge to validate incoming gas pressure is suitable

Pass

Comment:



**08-04-25 CAVA KILDEER, IL**

**CheckList Information**

**Name :** FIV - RTU'S **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 07/24/2025 - Natasha Louw - National TAB  
**Completed Date :** 08/05/2025 - Dylan Crisman - National TAB

**CheckList Item Details**

**RTU IDENTIFICATION, ORIENTATION & LOCATION**

**Each RTU is tagged for proper identification with tags sized and placed on the fan for visual ease** Pass

**Comment:**

**Identify and ensure the RTU label information and size is correct** Pass

**Comment:**

**Ensure proper location of unit** Pass

**Comment:**

**Ensure orientation of curb & RTU is per plan** Pass

**Comment:**

**Ensure Packing in the blower compartment has been removed** Pass

**Comment:**

**RTU - INSTALLATION DETAILS**

**With disconnect switch "off" spin the indoor and outdoor fan wheel's by hand and ensure they spin freely** Pass

Comment:

Ensure Roof Curb is fully flashed by roofing material and secured and curb is level

Pass

Comment:

Inspect the interior of the supply heat exchange compartment and return air compartment - validate that the duct is flashed and sealed to the top of the curb to prevent leakage or short cycling

Pass

Comment:

Hail guards installed on outdoor condenser coils

Pass

Comment:

**RTU - ACCESSORIES**

Power connected & disconnect installed

Pass

Comment:

Gas line connected per specification (size, painting, supports, shut-off valves, traps)

Pass

Comment:

OA hood & filters installed

Pass

Comment:

Economizer wired to control board

Pass

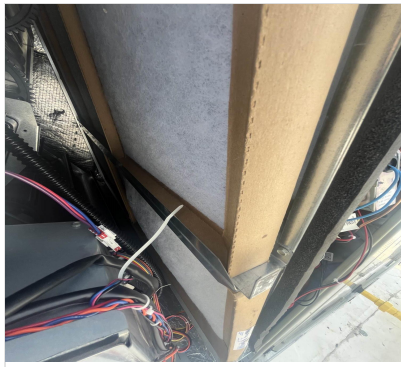
Comment:

Evaporator coil filters are properly installed with specified MERV rating

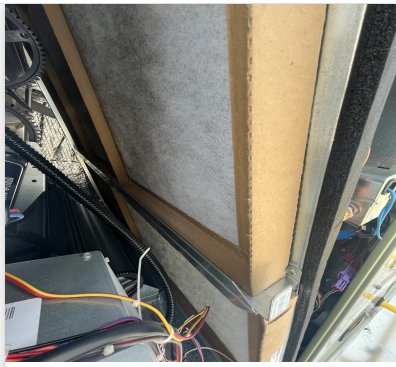
Fail

Comment:

Construction filters installed, Issue Created.



08/05/2025



08/05/2025

<b>Economizer damper is installed properly</b>	Pass
<b>Comment:</b>	
<b>Economizer OA temperature / enthalpy sensors installed and wired</b>	Pass
<b>Comment:</b>	
<b>Thermostat and humidity (if applicable) control wires wired to RTU terminals</b>	Fail
<b>Comment:</b>	RTU-1 Has an alarm for humidity sensor. RTU-2 Is wired properly/
<b>Condensate drain installed per specification</b>	Pass
<b>Comment:</b>	
<b>Condensate line drains away from unit to a approved roof drain</b>	Pass
<b>Comment:</b>	
<b>Belts are tight?</b>	N/A
<b>Comment:</b>	
<b>Pulleys aligned?</b>	N/A
<b>Comment:</b>	
<b>MERV rated filters are installed and are clean?</b>	Fail

**Comment:**

Issue Created,



08-04-25 CAVA KILDEER, IL

CheckList Information

**Name :** FPT - BUILDING PRESSURE AND HOOD CONTAINMENT **Status :** Completed

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

**Requesting Organization :** National TAB

**Created Date :** 07/24/2025 - Natasha Louw - National TAB

**Completed Date :** 08/05/2025 - Dylan Crisman - National TAB

CheckList Item Details

FINAL TESTS

HOOD CAPTURE TEST

List equipment turned on for testing

Comment:

None

List smoke candle type used

Comment:

CE0163 45 sec 150CF

Smoke test capture - Perimeter of hood (%)

Comment:

100%

Smoke test capture - Top of cooking surface (%)

Comment:

100%

WITNESS

Date test was completed

08/05/2025

**Comment:**

---

**TAB tech name / Firm**

**Comment:**

Dylan Crisman / NTi

---

**Site super name / Firm**

**Comment:**

Scott Figueroa / Vequity Construction

---

**Owner representative name / Firm (if Applicable)**

**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)**

**Comment:**

Yes



08-04-25 CAVA KILDEER, IL

CheckList Information

**Name :** FPT - KEF'S **Status :** Completed

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

**Requesting Organization :** National TAB

**Created Date :** 07/24/2025 - Natasha Louw - National TAB

**Completed Date :** 08/05/2025 - Dylan Crisman - National TAB

CheckList Item Details

Exhaust fans wheel rotation is correct Pass

Comment:

TAB firm has balanced the exhaust fans to proper design levels Pass

Comment:

EF-2/EF-3 in restrooms are high on flow. Issue created.

All motor and electrical readings are below the full load rating of each fan Pass

Comment:

Exhaust Fans do not have any unusual noise or vibration while operating Pass

Comment:

Smoke and Grease from exhaust fans appear to properly elevate above the parapet wall and off the roof. Pass

Comment:

Hoods have been started up by the manufacturers rep? Pass

Comment:

Hoods free of alarms? Pass

**Comment:**

---

**Exhaust fans modulate to high speed when kitchen equipment is on and at cooking temperatures? If not, adjust modulation/offset down.**

Pass

---

**Comment:**

---



08-04-25 CAVA KILDEER, IL

CheckList Information

**Name :** FPT - MUA **Status :** Completed

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

**Requesting Organization :** National TAB

**Created Date :** 07/24/2025 - Natasha Louw - National TAB

**Completed Date :** 08/05/2025 - Dylan Crisman - National TAB

CheckList Item Details

TAB firm has balanced the MUA to within proper design limits Pass

Comment:

Blower wheel rotation is correct Pass

Comment:

MUA does not have any unusual noise or vibration while operating Pass

Comment:

Motor and electrical measurements are below the full load rating Pass

Comment:

Startup has been completed by the manufacturers rep? Pass

Comment:

Heater tested and is functional? Pass

Comment:

Cooling is tested and is functional? Yes

Comment:



08-04-25 CAVA KILDEER, IL

CheckList Information

**Name :** FPT - RTU's **Status :** Completed

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

**Requesting Organization :** National TAB

**Created Date :** 07/24/2025 - Natasha Louw - National TAB

**Completed Date :** 08/05/2025 - Dylan Crisman - National TAB

CheckList Item Details

THERMOSTAT PROGRAMMING AND CALIBRATION

Time is correct on the thermostats	Pass
------------------------------------	------

Comment:

Occupied Time = 7:30 AM	Pass
-------------------------	------

Comment:

Occupied Heat setpoint = 68	Pass
-----------------------------	------

Comment:

Occupied Cooling setpoint = 72	Pass
--------------------------------	------

Comment:

Dehumidification Setpoint = 55%	N/A
---------------------------------	-----

Comment:

Occupied Fan = On	Pass
-------------------	------

Comment:

Unoccupied Time = 12:00AM	Pass
---------------------------	------

Comment:

Unoccupied Heat setpoint = 60

Pass

Comment:

Occupied Cooling setpoint = 80

Pass

Comment:

Unoccupied Fan = Auto

Pass

Comment:

Actual measured temperature is within +/-1 degree of temperature displayed on thermostat. If not calibrate the sensor

Pass

Comment:

Actual measured RH is within +/-3 % of displayed RH at RTU or thermostat. If not calibrate the sensor

Pass

Comment:

#### CONTROL WIRING VALIDATION

Economizer Dry Bulb sensor wired

Pass

Comment:

Economizer Dry Bulb sensor operational

Pass

Comment:

OCP/OCC terminal wired correctly

Pass

Comment:

Thermostat Wired correctly (R,C,Y1,Y2,W1,W2)

Pass

Comment:

Humidity Sensor Wired correctly

Fail

**Comment:**

RTU-2 humidity sensor alarm is present

---

**CALIBRATION & PROGRAMMING**

---

**RTU OA DB StPt, Reading Accuracy (+/- 2 degrees / 10 minute time to calibrate to actual reading)**

N/A

**Comment:**

---

**RTU MAT StPt, Reading Accuracy (+/- 2 degrees / 10 minute time to calibrate to actual reading)**

N/A

**Comment:**

---

**RTU MAT Low StPt**

**Comment:**

N/A

---

**RTU Low T Lockout**

**Comment:**

N/A

---

**Economizer set to 28 BTU/lb enthalpy setpoint.**

Pass

**Comment:**

---

**Temperature tests**

---

**Outside air temperature / humidity**

**Comment:**

83F/70.3%RH

---

**Full cooling LAT/H**

**Comment:**

RTU-1: 59.9F/82.4%RH RTU-2 57.8F/84.9%RH

---

**Full heating LAT/H**

**Comment:**

RTU-1 98.7F/28.7%RH RTU-2 96.9F/30.8%RH

---

**OUTDOOR AIR / RELIEF DAMPER**

---

If power exhaust installed, set point is higher than the OA damper setpoint

Pass

Comment:

If power exhaust installed, open the OA damper above the power exhaust setpoint and ensure that the power exhaust turns on

Pass

Comment:

If relief damper is installed, ensure that it is installed properly and can open freely.

Pass

Comment:

#### OCCUPANCY VALIDATION

Place the thermostat in "unoccupied" - Does the OA damper close fully

Pass

Comment:

Stage cooling and Heating in "unoccupied" - Does the unit properly stage and does the OA damper remain closed

Pass

Comment:

Place the thermostat in "Occupied" - Does the OA damper open to the TAB preset minimum position in High speed

Pass

Comment:

Place the thermostat in "Occupied" - Does the OA damper open to the TAB preset minimum position in Low speed (if applicable)

Pass

Comment:

# National TAB

Project: 08-04-25 CAVA KILDEER, IL  
System/Unit: AHU/RTU



Asset: RTU1

AREA: KITCHEN

Unit Data		
	Design	Actual
MFG	TRANE	TRANE
Serial Num	-	233310920L
Model Num	YSJ102A3SOL	YSJ102A3SOL02M
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	37.25X23X5
Num Final Filter 1	-	3
Final Filter Size 1	-	16X24X2
Num Final Filter 2	-	2
Final Filter Size 2	-	18X24X2

Motor Data		
	Design	Actual
Motor MFG	-	TRANE
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	8.8

Test Data		
	Design	Actual
SF CFM	3400	3450
SF RPM	-	1086
RA CFM	3015	3049
OA CFM	385	401
RL Voltage	-	204/206/204
RL Amperage	-	2.8/2.9/2.8
SF Rotation	-	CW
SF System SetPt	-	75%
RA Damper Position	-	MECHANICAL LINKAGE
Min OA Damper Position	-	14%
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.56"
Fan Suction SP	-	-0.86"
Fan Discharge SP	-	0.41"
Total ESP	0.80"	0.97"
Fan Total SP	-	1.27"

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

Completed By: Dylan Crisman on 08/05/2025

Notes:  
[1] Diffuser 1-6 high on flow at 535/400CFM unable to access damper to reduce airflow. Issue Created.

Written By: Dylan Crisman on 08/05/2025

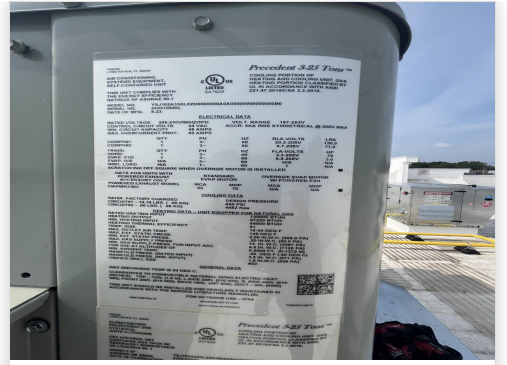
# Unit Data - PHOTO LOG



08/04/2025



08/04/2025



08/04/2025

# National TAB

Project:08-04-25 CAVA KILDEER, IL

## AHU/RTU



**Diffuser Supply (GRD)**

**RTU1/KITCHEN**

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	KITCHEN	PL1	8"	150	1.0	210	178	158	105.3
SGRD2	KITCHEN	PL1	8"	150	1.0	202	172	151	100.7
SGRD3	KITCHEN	PL1	8"	150	1.0	179	152	161	107.3
SGRD4	KITCHEN	PL1	8"	150	1.0	210	178	156	104.0
SGRD5	KITCHEN	PL1	8"	150	1.0	132	112	140	93.3
SGRD6	KITCHEN	CD1	12"	400	1.0	668	568	534	133.5
SGRD7	KITCHEN HD	ACPSP	152X6	918	4.97	879	747	841	91.6
SGRD8	BOH	CD1	10"	400	1.0	460	391	397	99.3
SGRD9	BOH	CD1	10"	400	1.0	432	367	403	100.8
SGRD10	BOH	CD1	10"	330	1.0	344	292	318	96.4
SGRD11	OFFICE	CD1	8"	200	1.0	440	374	191	95.5
Total				3398		4156	3531	3450	101.53%

Completed By: Dylan Crisman on 08/05/2025

# National TAB

Project: 08-04-25 CAVA KILDEER, IL  
System/Unit: AHU/RTU



Asset: RTU2

AREA:DINING

Unit Data		
	Design	Actual
MFG	TRANE	TRANE
Serial Num	-	235010463L
Model Num	YHJ120A3SOL	YHJ120A3SOL04P
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	37X23.5
Num Final Filter 1	-	3
Final Filter Size 1	-	16X24X2
Num Final Filter 2	-	2
Final Filter Size 2	-	18X24X2

Motor Data		
	Design	Actual
Motor MFG	-	TRANE
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	8.8

Test Data		
	Design	Actual
SF CFM	4000	3912
SF RPM	-	1197
RA CFM	3120	3013
OA CFM	880	899
RL Voltage	-	204/206/205
RL Amperage	-	3.2/3.2/3.2
SF Rotation	-	CW
SF System SetPt	-	72%
RA Damper Position	-	MECHANICAL LINKAGE
Min OA Damper Position	-	28%
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.61"
Fan Suction SP	-	-0.92"
Fan Discharge SP	-	0.30"
Total ESP	0.80"	0.91"
Fan Total SP	-	1.22"

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

Completed By: Dylan Crisman on 08/05/2025

## Unit Data - PHOTO LOG



08/04/2025



08/04/2025



08/04/2025

# National TAB

Project:08-04-25 CAVA KILDEER, IL

## AHU/RTU



**Diffuser Supply (GRD)**

**RTU2/DINING**

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	ENTRANCE	CD-2	8"	100	1.0	76	71	93	93.0
SGRD2	DINING	SG1	18X6	400	0.67	440	409	416	104.0
SGRD3	DINING	SG1	18X6	300	0.67	434	404	318	106.0
SGRD4	DINING	SG1	18X6	400	0.67	491	457	383	95.8
SGRD5	DINING	SG1	18X6	400	0.67	439	408	387	96.8
SGRD6	DINING	SG1	18X6	300	0.67	491	457	322	107.3
SGRD7	DINING	SG1	18X6	400	0.67	451	419	405	101.3
SGRD8	DINING	SG1	22X6	500	0.67	464	431	473	94.6
SGRD9	DINING	SG1	18X6	300	0.67	339	315	299	99.7
SGRD10	DINING	SG1	22X6	500	0.67	587	546	538	107.6
SGRD11	BEVERAGE STATION	CD-2	10"	300	1.0	200	186	278	92.7
Total				3900		4412	4103	3912	100.31%

Completed By: Dylan Crisman on 08/05/2025

# National TAB

Project: 08-04-25 CAVA KILDEER, IL

## System/Unit: FAN - Exhaust



Asset: EF1

AREA: KITCHEN HD

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU85HFA	DU85HFA
Serial Num	-	7244759
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	2317	2329
Fan RPM	-	1296
Fan Rotation	-	CCW
Motor RPM	-	1296
System SetPt	-	72%
RL Voltage	-	208/206
RL Amperage	-	4.4/4.8
Total ESP	1.2"	0.72"
Fan Inlet SP	-	-0.72"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	TELCO-GREEN
Horsepower	1.0	1.0
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	208	208
Amperage (rated)	-	6.9
Service Factor	-	1.15

Completed By: Dylan Crisman on 08/05/2025

### Unit Data - PHOTO LOG



08/04/2025



08/04/2025

# National TAB

Project: 08-04-25 CAVA KILDEER, IL

## System/Unit: FAN - Exhaust



Asset: EF2

AREA:MENS RR

Unit Data		
	Design	Actual
MFG	LOREN COOK	LOREN COOK
Model Num	GC-148	GC-148
Type	CEILING	CEILING
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	75	97
Fan Rotation	-	CCW
System SetPt	-	HIGH SPEED
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	BROAN
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	1.1

Completed By: Dylan Crisman on 08/04/2025

Notes:

Fan is high on flow at 97/75 CFM. Direct wired without speed controller, unable to decrease fan speed to design airflow.

Written By: Dylan Crisman on 08/04/2025

### Unit Data - PHOTO LOG



08/04/2025



08/04/2025

# National TAB

Project: 08-04-25 CAVA KILDEER, IL  
System/Unit: FAN - Exhaust



Asset: EF3

AREA:WOMENS RR

Unit Data		
	Design	Actual
MFG	LOREN COOK	LOREN COOK
Model Num	GC-148	GC-148
Type	CEILING	CEILING
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	75	101
Fan Rotation	-	CCW
System SetPt	-	HIGH SPEED
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	BROAN
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	1.1

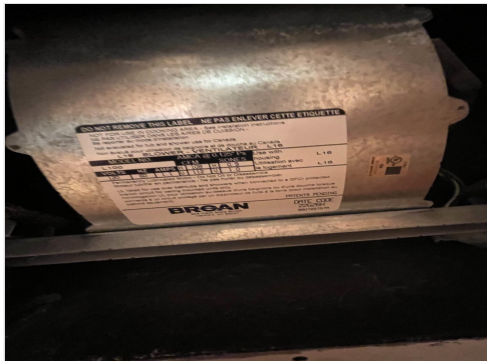
Completed By: Dylan Crisman on 08/04/2025

Notes:

Fan is high on flow at 101/75CFM. Direct wired with no speed controller, unable to decrease airflow to design.

Written By: Dylan Crisman on 08/04/2025

### Unit Data - PHOTO LOG



08/04/2025



08/04/2025

# National TAB

Project: 08-04-25 CAVA KILDEER, IL  
System/Unit: FAN - Supply



Asset: MAU1

AREA: KITCHEN HD

Unit Data		
	Design	Actual
MFG	ECON-AIR	ECON-AIR
Model Num	EARTU1-I.200-15-4T-MPU	EARTU1-I.200-15-4T-MPU
Serial Num	-	7244759
Type	MAU	MAU
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TECO-WESTINGHOUSE
Frame	-	145T
Horsepower	1.5	1.5
Motor Rpm	-	1740
Phase	3	3
Voltage (rated)	208	230
Amperage (rated)	-	4.02
Service Factor	-	1.15

Gas Heat		
	Design	Actual
Heater Operates (y/n)	-	Y
Flame Status (pass/fail)	-	PASS
Inlet Air Temp SetPt	55	55
Discharge Air Temp SetPt	60	60
Air Flow Switch SP Actual	-	0.37"

Test Data		
	Design	Actual
CFM	1855	1862
SF RPM	-	1415
Motor RPM	-	1415
SF System SetPt	-	48.8Hz
RL Voltage	-	174@VFD
RL Amperage	-	3.4@VFD
Fan Discharge SP	-	0.30"

General	
	Actual
Fan Rotation Correct	YES

Completed By: Dylan Crisman on 08/05/2025

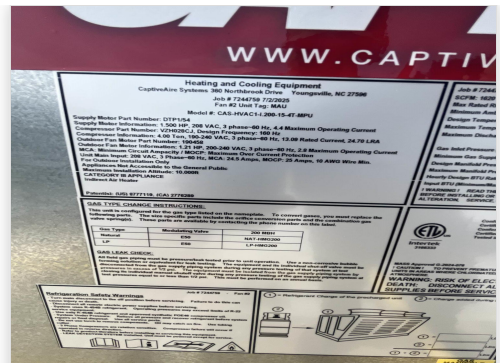
## Unit Data - PHOTO LOG



08/04/2025



08/04/2025



08/04/2025

# National TAB

Project: 08-04-25 CAVA KILDEER, IL

## System/Unit: Kitchen Hood Type I



Asset: HD1

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	CAPTIVE AIRE	CAPTIVE AIRE
Model Num	6030 ND-2-ACPSP-F	6030 ND-2-ACPSP-F
Job / Serial Num	-	7244750
Type	TYPE 1 CANOPY	TYPE I CANOPY
Hood length	139"	140"
Hood Width	60"	60"
Supply Plenum Type	-	ACPSP
Supply Plenum Width	12"	12"
Supply Plenum Length	152"	152"

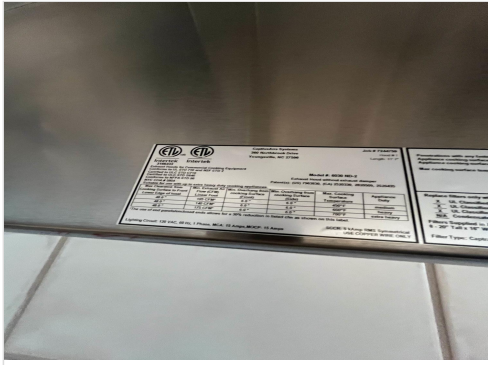
Test Data Exhaust		
	Design	Actual
Filter Type	-	CAPTRATE SOLO
Filter Size 1	-	16X20
Filter Qty 1	-	8
Filter AK factor size 1	-	2.08
Filter Total AK Area	-	16.64
Filter1 FPM	-	138
Filter2 FPM	-	140
Filter3 FPM	-	154
Filter4 FPM	-	153
Filter5 FPM	-	147
Filter6 FPM	-	139
Filter7 FPM	-	131
Filter8 FPM	-	124
Filter Ave FPM(corr)	-	140
CFM	2317	2329

Cooking Equipment	
	Actual
Item 1	OVEN
Item 2	STOVE
Item 3	GRIDDLE
Item 4	FRYER

Test Data Supply		
	Design	Actual
Total Area	12.67	12.67
Kv factor (Vel)	0.87	0.87
Num of Readings	-	14
Reading1 FPM	-	194
Reading2 FPM	-	155
Reading3 FPM	-	147
Reading4 FPM	-	188
Reading5 FPM	-	188
Reading6 FPM	-	180
Reading7 FPM	-	150
Reading8 FPM	-	159
Reading9 FPM	-	188
Reading10 FPM	-	184
Reading11 FPM	-	166
Reading12 FPM	-	137
Reading13 FPM	-	156
Reading14 FPM	-	184
Ave FPM(corr)	-	169
CFM	1855	1862

Completed By: Dylan Crisman on 08/05/2025

## Unit Data - PHOTO LOG



08/04/2025



08/04/2025