

Report By:

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



Report: TAB

Function: Test, Adjust, & Balance

Date: 04/14/2025

Completed By: National TAB

PROJECT

04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

1615 N 99TH AVE

PHOENIX, AZ 85037

Client

CAVA

702 H ST NW

2nd floor

Washington, DC 20001

National TAB

Project: 04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

Table Of Contents

Section	Page #
SUMMARY	3
Remarks	4
BALANCE SCHEDULE	9
Checklist Data	10
AHU/RTU	35
FAN - Exhaust	41
FAN - Supply	45
Kitchen Hood Type I	47
GRD LAYOUT	49

Project Summary

The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report are further details 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.

WSHP's w/ Diffusers

Each of the WSHP were measured at their terminal devices utilizing a flow hood. The sum of these readings is equal to the total flow for that particular unit. The total flow of each WSHP was then adjusted to within tolerance of the specified design. Each terminal diffuser was balanced to within tolerance of the engineer's design volume utilizing the provided hand damper located at the takeoff of the main & branch trunk line(s). Any equipment that fell outside of this 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.

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 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

- HOOD END PANEL NOT INSTALLED
- KEF GREASE CUPS NOT INSTALLED
- KEF HINGE NOT INSTALLED
- MERV FILTERS NOT INSTALLED



04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

Project Issue Information

Issue Name : HOOD END PANEL NOT INSTALLED
Description : Hood vertical end panel not yet installed at the time of TAB. Recommend installing for increased smoke capture efficiency. Please refer to M6.5 on Mechanical plans.
Created By : National TAB **Assigned To :** National TAB - Brianna Biggs
Status : Open
Priority : Low **Asset Tag :**
Originated Date : 04/14/2025 - David Nicolas Sanchez - National TAB

Project Issue File Details





04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

Project Issue Information

Issue Name : KEF GREASE CUPS NOT INSTALLED
Description : KEF-1 grease cups are not installed. Recommend installing grease cups to the base of the fan to prevent grease from spilling on the roof. Refer to M6.7 on Mechanical plans.
Created By : National TAB **Assigned To :** National TAB - Brianna Biggs
Status : Open
Priority : Low **Asset Tag :**
Originated Date : 04/14/2025 - David Nicolas Sanchez - National TAB

Project Issue File Details



04/14/2025



04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

Project Issue Information

Issue Name : KEF HINGE NOT INSTALLED
Description : KEF-1 fan hinge is not installed. Recommend finishing hinge install by connecting hinge to the base of the fan. Refer to M6.7 on mechanical plans.
Created By : National TAB **Assigned To :** National TAB - Brianna Biggs
Status : Open
Priority : Low **Asset Tag :**
Originated Date : 04/14/2025 - David Nicolas Sanchez - National TAB

Project Issue File Details



04/14/2025



04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

Project Issue Information

Issue Name : MERV FILTERS NOT INSTALLED

Description : Construction filters installed during TAB. Recommend replacing construction filters with MERV filters.

Created By : National TAB

Assigned To : National TAB - Brianna Biggs

Status : Open

Priority : Low

Asset Tag :

Originated Date : 04/14/2025 - David Nicolas Sanchez - 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	DINING	4000	4123	3350	3415	650	708	16.3%	17.2%						
RTU-2	RESTROOM	3000	3060	2700	2735	300	325	10.0%	10.6%						
MUA-1	KITCHEN									1976	2022				
KEF-1	MUA											2381	2271		
EF-1	RESTROOM													120	110
EF-2	RESTROOM													120	109
TOTALS		7000	7183	6050	6150	950	1033			1976	2022	2381	2271	240	219

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2926	3055
TOTAL EXHAUST	2621	2490
NET AIRFLOW	305	565

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H2O)
FRONT	0.0039
SIDE	0.0043
REAR	0.0031
AVERAGE	0.0038

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



04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

CheckList Information

Name : FIV - EF'S **Status :** Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 03/17/2025 - Nicole Seever - National TAB

Completed Date : 04/09/2025 - David Nicolas Sanchez - 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)

Fail

Comment:

In process of being installed.

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

Fail

Comment:

In process of being installed.

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

Pass

Comment:



04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

CheckList Information

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

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 03/17/2025 - Nicole Seever - National TAB

Completed Date : 04/09/2025 - David Nicolas Sanchez - 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:

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	N/A
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.	N/A
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:

Duct seams are sealed air tight using proper sealant and application for SMACNA pressure rating of duct systems	Pass
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Comment:

Ducts are securely insulated as per specificatins and foil taped to prevent air barrier from being breached	Pass
--	-------------

Comment:

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	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:

Takeoff to diffuser is installed securely to prevent slippage and air leakage	Pass
--	-------------

Comment:

All diffuser neck or opening sizes are installed as planned	Pass
--	-------------

Comment:

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.	Pass
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Comment:



04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

CheckList Information

Name : FIV - RTU'S **Status :** Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 03/17/2025 - Nicole Seever - National TAB

Completed Date : 04/09/2025 - David Nicolas Sanchez - 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

Pass

Comment:

Economizer damper is installed properly

Pass

Comment:

Economizer OA temperature / enthalpy sensors installed and wired

Pass

Comment:

Thermostat and humidity (if applicable) control wires wired to RTU terminals

Pass

Comment:

Condensate drain installed per specification

Pass

Comment:

Condensate line drains away from unit to a approved roof drain

Pass

Comment:

Belts are tight?

N/A

Comment:

Pulleys aligned?

N/A

Comment:

MERV rated filters are installed and are clean?

Fail

Comment:

MERV filters not installed.



04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

CheckList Information

Name : FIV – HOODS **Status :** Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 03/17/2025 - Nicole Seever - National TAB

Completed Date : 04/09/2025 - David Nicolas Sanchez - 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. Pass

Comment:

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:

In process of being installed.

Hood filters are installed Pass

Comment:

Grease cups are installed Pass

Comment:

In process of being installed.

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:



04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

CheckList Information

Name : FIV – MUA **Status :** Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 03/17/2025 - Nicole Seever - National TAB

Completed Date : 04/09/2025 - David Nicolas Sanchez - 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)

N/A

Comment:

Condenser hail guards are installed (if applicable)

N/A

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)

N/A

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:



04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

CheckList Information

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

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 03/17/2025 - Nicole Seever - National TAB

Completed Date : 04/14/2025 - David Nicolas Sanchez - National TAB

CheckList Item Details

FINAL TESTS

HOOD CAPTURE TEST

List equipment turned on for testing

Comment:

None

List smoke candle type used

Comment:

CEO165 45 Second

Smoke test capture - Perimeter of hood (%)

Comment:

100%

Smoke test capture - Top of cooking surface (%)

Comment:

100%

WITNESS

Date test was completed

04/10/2025

Comment:

TAB tech name / Firm

Comment:

David Nicolas Sanchez / National TAB Intelligence

Site super name / Firm

Comment:

John Bellantoni / 41 North Contractors LLC

Owner representative name / Firm (if Applicable)

Comment:

N/A

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:

Front: 0.0039" Side: 0.0043" Back: 0.0031"



04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

CheckList Information

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

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 03/17/2025 - Nicole Seever - National TAB

Completed Date : 04/09/2025 - David Nicolas Sanchez - 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:

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:



04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

CheckList Information

Name : FPT - RTU's **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 03/17/2025 - Nicole Seever - National TAB
Completed Date : 04/11/2025 - David Nicolas Sanchez - 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% Pass

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

Pass

Comment:

CALIBRATION & PROGRAMMING

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

Comment:

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

Comment:

RTU MAT Low StPt

Comment:

48F

RTU Low T Lockout

Comment:

32F

Economizer set to 28 BTU/lb enthalpy setpoint. Pass

Comment:

Temperature tests

Outside air temperature / humidity

Comment:

91.6F/12.8%

Full cooling LAT/H

Comment:

RTU 1: 29.8%/52.6F; RTU 2: 31.2%/51.3F

Full heating LAT/H

Comment:

RTU 2: 15.6%/83.4F; RTU 2: 16.5%/82.1F

OUTDOOR AIR / RELIEF DAMPER

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

Comment:

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

N/A

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:



04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

CheckList Information

Name : FPT – MUA **Status :** Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 03/17/2025 - Nicole Seever - National TAB

Completed Date : 04/09/2025 - David Nicolas Sanchez - 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:

National TAB

Project: 04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

System/Unit: AHU/RTU



Asset: RTU1

AREA:DINING

Unit Data		
	Design	Actual
MFG	TRANE	TRANE
Serial Num	-	242610711L
Model Num	YSJ120	YSJ120A3S0L07
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	39X25
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	-	NL
Frame	-	NL
Horsepower	3.1	3.0
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	8.8

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

Test Data		
	Design	Actual
SF CFM	4000	4123
SF RPM	-	DD
RA CFM	3350	3415
OA CFM	650	708
RL Voltage	-	218/219/220
RL Amperage	-	3.01/3.06/3.07
SF Rotation	-	CCW
SF System SetPt	-	84%
RA Damper Position	-	83%
Min OA Damper Position	-	17%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	28/BTU

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.61"
Fan Suction SP	-	-0.99"
Fan Discharge SP	-	0.65"
Total ESP	1"	1.26"
Fan Total SP	-	1.64"

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

Completed By: David Nicolas Sanchez on 04/10/2025

Unit Data - PHOTO LOG



04/14/2025

National TAB

Project:04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

AHU/RTU



Diffuser Supply (GRD)

RTU1/DINING

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	DINING	SD-5	10"	275	1	157	180	283	102.9
SGRD2	DINING	SD-5	10"	350	1	258	277	369	105.4
SGRD3	DINING	SD-5	10"	350	1	365	460	373	106.6
SGRD4	DINING	SD-5	10"	275	1	46	49	254	92.4
SGRD5	DINING	SD-5	10"	350	1	281	398	345	98.6
SGRD6	DINING	SD-4	20"	350	1	95	279	382	109.1
SGRD7	DINING	SD-4	20"	250	1	133	351	267	106.8
SGRD8	DINING	SD-4	20"	250	1	144	328	251	100.4
SGRD9	DINING	SD-4	20"	350	1	147	317	347	99.1
SGRD10	DINING	SD-4	16"	250	1	146	430	249	99.6
SGRD11	DINING	SD-4	16"	350	1	150	397	371	106.0
SGRD12	DINING	SD-4	12"	230	1	104	199	248	107.8
SGRD13	DINING	SD-4	12"	350	1	143	458	384	109.7
Total				3980		2169	4123	4123	103.59%

National TAB

Project: 04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

System/Unit: AHU/RTU



Asset: RTU2

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	TRANE	TRANE
Serial Num	-	242610177L
Model Num	YSJ120	YSJ120A3S0L07
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	39X25
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	-	NL
Frame	-	NL
Horsepower	3.1	3.0
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	8.8

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

Test Data		
	Design	Actual
SF CFM	3000	3060
SF RPM	-	DD
RA CFM	2700	2736
OA CFM	300	325
RL Voltage	-	218/219/220
RL Amperage	-	4.45/4.40/4.51
SF Rotation	-	CCW
SF System SetPt	-	74%
RA Damper Position	-	92%
Min OA Damper Position	-	8%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	28/BTU

Performance Data		
	Design	Actual
MA Plenum SP	-	-1.09"
Fan Suction SP	-	-1.26"
Fan Discharge SP	-	0.41"
Total ESP	1"	1.50"
Fan Total SP	-	1.67"

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

Completed By: David Nicolas Sanchez on 04/10/2025

Unit Data - PHOTO LOG



04/14/2025

National TAB

Project:04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

AHU/RTU



Diffuser Supply (GRD)

RTU2/KITCHEN

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	KITCHEN	SD-3	8"	150	1	41	162	162	108.0
SGRD2	KITCHEN	SD-3	8"	150	1	288	159	159	106.0
SGRD3	KITCHEN	SD-3	8"	150	1	197	158	158	105.3
SGRD4	KITCHEN	SD-3	8"	150	1	416	164	164	109.3
SGRD5	KITCHEN	SD-1	8"	200	1	243	206	206	103.0
SGRD6	KITCHEN	SD-6	12"	370	1	187	338	338	91.4
SGRD7	KITCHEN	SD-1	12"	450	1	514	462	462	102.7
SGRD8	BOH	SD-1	12"	450	1	118	478	478	106.2
SGRD9	RESTROOM	SD-2		100	1	71	102	102	102.0
SGRD10	RESTROOM	SD-2		100	1	82	106	106	106.0
SGRD11	AC	PSP	28X6"	730	4.43	731	725	725	99.3
Total				3000		2888	3060	3060	102%

National TAB

Project: 04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

System/Unit: FAN - Exhaust



Asset: EF1

AREA:RESTROOMS

Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	SP-150	SP-B150-QD
Serial Num	-	189203290
Type	CEILING	CEILING
Configuration	VERTICAL	VERTICAL

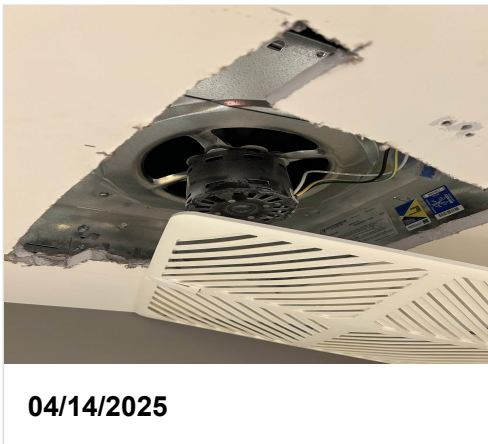
Test Data		
	Design	Actual
CFM	120	110
Fan RPM	-	DD
Fan Rotation	-	CW
Motor RPM	-	DD

Motor Data		
	Design	Actual
Motor MFG	-	GREENHECK
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	1050
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	1.8
Service Factor	-	NL

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

Completed By: David Nicolas Sanchez on 04/10/2025

Unit Data - PHOTO LOG



National TAB

Project: 04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

System/Unit: FAN - Exhaust



Asset: EF2

AREA:RESTROOMS

Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	SP-150	SP-150
Serial Num	-	NA
Type	CEILING	CEILING
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	120	109
Fan RPM	-	DD
Fan Rotation	-	CW
Motor RPM	-	DD

Motor Data		
	Design	Actual
Motor MFG	-	GREENHECK
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	1050
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	1.8
Service Factor	-	NL

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

Completed By: David Nicolas Sanchez on 04/10/2025

Notes:
Fan label coated in white paint. Unable to read serial and model number.

Written By: David Nicolas Sanchez on 04/10/2025

Unit Data - PHOTO LOG



04/14/2025

National TAB

Project: 04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

System/Unit: FAN - Exhaust



Asset: KEF1

AREA:HOOD 1

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU180HFA	DU180HFA
Serial Num	-	7216061
Type	UPBLAST/CEILING	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	NEMA
Frame	-	182/4T
Horsepower	2	2
Motor Rpm	-	1170
Phase	3	3
Voltage (rated)	208	230
Amperage (rated)	-	6.44
Service Factor	-	1.25

Test Data		
	Design	Actual
CFM	2381	2271
Fan RPM	-	870
Fan Rotation	-	CCW
Motor RPM	-	870
System SetPt	-	55.8HZ
RL Voltage	-	118@VFD
RL Amperage	-	5.3@VFD
Total ESP	1.5"	0.81"
Fan Inlet SP	-	-0.87"
Fan Discharge SP	-	ATMS

Completed By: David Nicolas Sanchez on 04/10/2025

Unit Data - PHOTO LOG



04/14/2025

National TAB

Project: 04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

System/Unit: FAN - Supply



Asset: MAU1

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	ECONAIRE	ECONAIRE
Model Num	EARTU1-I.125-18-5T-MPU	EARTU1-I.125-18-5T-MPU
Serial Num	-	7216061
Type	MAU	MUA
Configuration	HORIZONTAL	HORIZONTAL

Motor Data		
	Design	Actual
Motor MFG	-	NEMA
Frame	-	145T
Horsepower	2	2
Motor Rpm	-	1745
Phase	3	3
Voltage (rated)	208	230
Amperage (rated)	-	5.64
Service Factor	-	1.15

Drive Data	
	Actual
Motor Sheave Size	DD
Motor Bore Size	DD
Fan Sheave Size	DD
Fan Sheave Bore	DD
Belt CL Distance	DD
Num of Belts	DD
Belt Size	DD
Belt Alignment Verified	DD

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

Test Data		
	Design	Actual
CFM	1976	2022
SF RPM	-	1400
Motor RPM	-	1400
SF System SetPt	-	60.2
RL Voltage	-	202@VFD
RL Amperage	-	5.8@VFD
Total ESP	-	NA
Fan Discharge SP	-	NA

General	
	Actual
Fan Rotation Correct	YES

Completed By: David Nicolas Sanchez on 04/09/2025

Unit Data - PHOTO LOG



04/14/2025

National TAB

Project: 04-07-25 CAVA PHOENIX, AZ (99TH & MCDOWELL)

System/Unit: Kitchen Hood Type I



Asset: HD1

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	ECONAIRE	ECONAIRE
Model Num	6030 EX-2-ACPSP-F	6030 EX-2-ACPSP-F
Job / Serial Num	-	7216061
Type	CANOPY	CANOPY
Hood length	127"	127"
Hood Width	60"	60"
Supply Plenum Type	-	ACPSP
Supply Plenum Width	14"	14"
Supply Plenum Length	140"	140"

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO FILTER	CAPTRATE
Filter Size 1	20X16"	20X16
Filter Qty 1	7	7
Filter AK factor size 1	2.08	2.08
Filter Total AK Area	14.56	14.56
Filter1 FPM	-	146
Filter2 FPM	-	160
Filter3 FPM	-	173
Filter4 FPM	-	156
Filter5 FPM	-	166
Filter6 FPM	-	151
Filter7 FPM	-	144
Filter Ave FPM(corr)	-	156
CFM	2381	2271

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

Test Data Supply		
	Design	Actual
Total Area	13.61	13.61
Kv factor (Vel)	0.89"	0.89
Num of Readings	-	8
Reading1 FPM	-	180
Reading2 FPM	-	136
Reading3 FPM	-	128
Reading4 FPM	-	185
Reading5 FPM	-	177
Reading6 FPM	-	156
Reading7 FPM	-	131
Reading8 FPM	-	245
Ave FPM(corr)	-	167
CFM	1976	2022

Completed By: David Nicolas Sanchez on 04/08/2025

Unit Data - PHOTO LOG



04/14/2025

