

**Report By:**

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



**Report: TAB Report**  
**Function: Test, Adjust, & Balance**  
**Date: 03/19/2025**  
**Completed By: National TAB**

**PROJECT**  
**03-17-25 CAVA TEMECULA, CA (REDHAWK)**

31709 TEMECULA PKWY

TEMECULA, CA 92592

**Client**

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

# National TAB

Project: 03-17-25 CAVA TEMECULA, CA (REDHAWK)

## Table Of Contents

| Section             | Page # |
|---------------------|--------|
| Summary             | 3      |
| Remarks             | 4      |
| Balance             | 7      |
| Checklist Data      | 8      |
| AHU/RTU             | 33     |
| FAN - Exhaust       | 39     |
| FAN - Supply        | 42     |
| Kitchen Hood Type I | 43     |
| GRD                 | 45     |

## 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**

- HOOD SIDE PANELS NOT INSTALLED
- KEF GREASE CUP

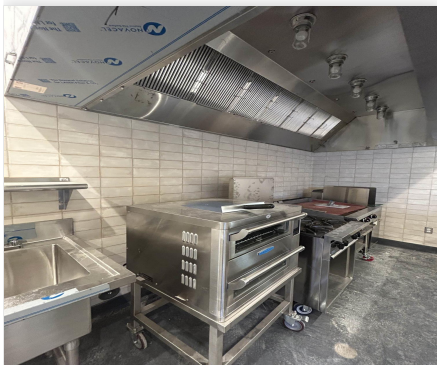


03-17-25 CAVA TEMECULA, CA (REDHAWK)

Project Issue Information

**Issue Name :** HOOD SIDE PANELS NOT INSTALLED  
**Description :** Hood left vertical side panels have not been installed. Recommend installing panels as shown in the MSET.  
**Created By :** National TAB      **Assigned To :** National TAB - Dan Hertenstein  
**Status :** Open  
**Priority :** Medium      **Asset Tag :**  
**Originated Date :** 03/19/2025 - David Nicolas Sanchez - National TAB

Project Issue File Details



03/19/2025



**03-17-25 CAVA TEMECULA, CA (REDHAWK)**

**Project Issue Information**

**Issue Name :** KEF GREASE CUP  
**Description :** KEF grease cup is not installed. Recommend installing grease cup to prevent grease from dripping on the roof.  
**Created By :** National TAB      **Assigned To :** National TAB - Dan Hertenstein  
**Status :** Open  
**Priority :** Low      **Asset Tag :**  
**Originated Date :** 03/19/2025 - David Nicolas Sanchez - National TAB

**Project Issue File Details**



**03/19/2025**

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     | 2400        | 2432   | 2050        | 2060   | 350          | 372    | 14.6%  | 15.3%  |              |        |              |        |              |        |
| RTU-2  | DINING      | 2400        | 2380   | 2050        | 2007   | 350          | 373    | 14.6%  | 15.7%  |              |        |              |        |              |        |
| MUA-1  | KITCHEN     |             |        |             |        |              |        |        |        | 1699         | 1687   |              |        |              |        |
| KEF-1  | HOOD        |             |        |             |        |              |        |        |        |              |        | 2117         | 2157   |              |        |
| EF-2   | RESTROOM    |             |        |             |        |              |        |        |        |              |        |              |        | 120          | 122    |
| EF-3   | RESTROOM    |             |        |             |        |              |        |        |        |              |        |              |        | 120          | 127    |
| TOTALS |             | 4800        | 4812   | 4100        | 4067   | 700          | 745    |        |        | 1699         | 1687   | 2117         | 2157   | 240          | 249    |

NET BUILDING AIRFLOW CALCULATION

| TOTALS        | DESIGN | ACTUAL |
|---------------|--------|--------|
| TOTAL OA      | 2399   | 2432   |
| TOTAL EXHAUST | 2357   | 2406   |
| NET AIRFLOW   | 42     | 26     |

| DOOR TESTED | BUILDING PRESSURE MEASUREMENTS (IN. H2O) |
|-------------|------------------------------------------|
| FRONT       | 0.0025                                   |
| SIDE        | 0.0012                                   |
| REAR        |                                          |
| AVERAGE     | 0.0019                                   |

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





### 03-17-25 CAVA TEMECULA, CA (REDHAWK)

#### CheckList Information

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

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

**Requesting Organization :** National TAB

**Created Date :** 02/26/2025 - Nicole Seever - National TAB

**Completed Date :** 03/19/2025 - 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)

Pass

Comment:

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

Fail

Comment:

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

Pass

Comment:



## 03-17-25 CAVA TEMECULA, CA (REDHAWK)

### CheckList Information

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

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

**Requesting Organization :** National TAB

**Created Date :** 02/26/2025 - Nicole Seever - National TAB

**Completed Date :** 03/19/2025 - 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

N/A

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

N/A

Comment:

Duct is secured to exhaust register

N/A

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

Comment:

Ducts are securely insulated as per specifications 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

Comment:



## 03-17-25 CAVA TEMECULA, CA (REDHAWK)

### CheckList Information

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

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

**Requesting Organization :** National TAB

**Created Date :** 02/26/2025 - Nicole Seever - National TAB

**Completed Date :** 03/19/2025 - 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?

Pass

Comment:



## 03-17-25 CAVA TEMECULA, CA (REDHAWK)

### CheckList Information

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

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

**Requesting Organization :** National TAB

**Created Date :** 02/26/2025 - Nicole Seever - National TAB

**Completed Date :** 03/19/2025 - 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 the process of getting 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:



## 03-17-25 CAVA TEMECULA, CA (REDHAWK)

### CheckList Information

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

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

**Requesting Organization :** National TAB

**Created Date :** 02/26/2025 - Nicole Seever - National TAB

**Completed Date :** 03/17/2025 - 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

N/A

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

N/A

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

N/A

Comment:



## 03-17-25 CAVA TEMECULA, CA (REDHAWK)

### CheckList Information

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

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

**Requesting Organization :** National TAB

**Created Date :** 02/26/2025 - Nicole Seever - National TAB

**Completed Date :** 03/19/2025 - 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:

45 Seconds CE0163

Smoke test capture - Perimeter of hood (%)

Comment:

100%

Smoke test capture - Top of cooking surface (%)

Comment:

100%

#### WITNESS

Date test was completed

03/19/2025

**Comment:**

**TAB tech name / Firm**

**Comment:**

David Nicolas Sanchez / National TAB Intelligence

**Site super name / Firm**

**Comment:**

Ric Ragan / Gray West Construction

**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: 0.0025 Back: 0.0012





## 03-17-25 CAVA TEMECULA, CA (REDHAWK)

### CheckList Information

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

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

**Requesting Organization :** National TAB

**Created Date :** 02/26/2025 - Nicole Seever - National TAB

**Completed Date :** 03/17/2025 - 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?

**Comment:**

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

Pass

**Comment:**



## 03-17-25 CAVA TEMECULA, CA (REDHAWK)

### CheckList Information

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

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

**Requesting Organization :** National TAB

**Created Date :** 02/26/2025 - Nicole Seever - National TAB

**Completed Date :** 03/19/2025 - 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:

**RTU Low T Lockout**

Comment:

32F

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

Pass

Comment:

**Temperature tests****Outside air temperature / humidity**

Comment:

72.5F/21.7%

**Full cooling LAT/H**

Comment:

RTU-1: 49.2F/35.2% RTU-1: 36.0F/51.1%

**Full heating LAT/H**

Comment:

RTU-1: 92.2F/14.5% RTU-1: 90.1F/15.6%

**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.

N/A

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)

N/A

Comment:



## 03-17-25 CAVA TEMECULA, CA (REDHAWK)

### CheckList Information

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

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

**Requesting Organization :** National TAB

**Created Date :** 02/26/2025 - Nicole Seever - National TAB

**Completed Date :** 03/17/2025 - 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? N/A

Comment:

Cooling is tested and is functional? Yes

Comment:



# National TAB

Project: 03-17-25 CAVA TEMECULA, CA (REDHAWK)

System/Unit: AHU/RTU



Asset: RTU1

AREA: KITCHEN

| Unit Data           |          |               |
|---------------------|----------|---------------|
|                     | Design   | Actual        |
| MFG                 | CARRIER  | CARRIER       |
| Serial Num          | -        | 0424C07483    |
| Model Num           | 50FCQM07 | 50FCQM07A2A5B |
| Type                | RTU      | RTU           |
| Configuration       | VERTICAL | VERTICAL      |
| Num OA Filters 1    | -        | 1             |
| OA Filter Size 1    | -        | 29.5X15       |
| Num Final Filter 1  | -        | 4             |
| Final Filter Size 1 | -        | 16X16X2       |

| Motor Data     |        |        |
|----------------|--------|--------|
|                | Design | Actual |
| Motor MFG      | -      | NL     |
| Frame          | -      | NL     |
| Horsepower     | 1.76   | NL     |
| Motor Rpm      | -      | NL     |
| Phase          | 3      | 3      |
| Rated Voltage  | 208    | 208    |
| Rated Amperage | -      | 5.5    |

| 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                 | 2400   | 2432           |
| SF RPM                 | -      | 2427           |
| RA CFM                 | 2050   | 2060           |
| OA CFM                 | 350    | 372            |
| RL Voltage             | -      | 213/213/214    |
| RL Amperage            | -      | 3.77/3.46/3.65 |
| SF Rotation            | -      | CCW            |
| SF System SetPt        | -      | C              |
| RA Damper Position     | -      | 6.0V           |
| Min OA Damper Position | -      | 4.0V           |
| Min OA Damper Type     | -      | ECONOMIZER     |
| OA Enthalpy Setpt      | -      | 28/BTU         |

| Performance Data |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| MA Plenum SP     | -      | -0.66" |
| Fan Suction SP   | -      | -1.03" |
| Fan Discharge SP | -      | 0.50"  |
| Total ESP        | 1"     | 1.16"  |
| Fan Total SP     | -      | 1.53"  |

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

Completed By: David Nicolas Sanchez on 03/19/2025

## Unit Data - PHOTO LOG



03/19/2025

# National TAB

Project:03-17-25 CAVA TEMECULA, CA (REDHAWK)

## 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  | SD3  | 8"    | 165        | 1    | 193    | 238    | 178       | 107.9       |
| SGRD2      | KITCHEN  | SD3  | 8"    | 165        | 1    | 189    | 233    | 166       | 100.6       |
| SGRD3      | KITCHEN  | SD3  | 12"   | 165        | 1    | 188    | 232    | 178       | 107.9       |
| SGRD4      | KITCHEN  | SD6  | 10"   | 304        | 1    | 221    | 273    | 310       | 102.0       |
| SGRD5      | KITCHEN  | SD1  | 8"    | 200        | 1    | 144    | 178    | 204       | 102.0       |
| SGRD6      | KITCHEN  | SD1  | 8"    | 150        | 1    | 96     | 114    | 145       | 96.7        |
| SGRD7      | KITCHEN  | SD1  | 10"   | 250        | 1    | 193    | 230    | 251       | 100.4       |
| SGRD8      | KITCHEN  | SD1  | 8"    | 125        | 1    | 141    | 177    | 135       | 108.0       |
| SGRD9      | KITCHEN  | SD1  | 6"    | 70         | 1    | 71     | 90     | 77        | 110.0       |
| SGRD10     | PSP      | AC   | 8X24" | 806        | 4.33 | 563    | 695    | 788       | 97.8        |
| Total      |          |      |       | 2400       |      | 1999   | 2460   | 2432      | 101.33%     |

# National TAB

Project: 03-17-25 CAVA TEMECULA, CA (REDHAWK)

## System/Unit: AHU/RTU



Asset: RTU2

AREA:DINING

| Unit Data           |          |               |
|---------------------|----------|---------------|
|                     | Design   | Actual        |
| MFG                 | CARRIER  | CARRIER       |
| Serial Num          | -        | 0424C07503    |
| Model Num           | 50FCQM07 | 50FCQM07A2A5B |
| Type                | RTU      | RTU           |
| Configuration       | VERTICAL | VERTICAL      |
| Num OA Filters 1    | -        | 1             |
| OA Filter Size 1    | -        | 29.5X15       |
| Num Final Filter 1  | -        | 4             |
| Final Filter Size 1 | -        | 16X16X2       |

| Motor Data     |        |        |
|----------------|--------|--------|
|                | Design | Actual |
| Motor MFG      | -      | NL     |
| Frame          | -      | NL     |
| Horsepower     | 1.76   | NL     |
| Motor Rpm      | -      | NL     |
| Phase          | 3      | 3      |
| Rated Voltage  | 208    | 208    |
| Rated Amperage | -      | 5.5    |

| 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                 | 2400   | 2380           |
| SF RPM                 | -      | 2310           |
| RA CFM                 | 2050   | 2007           |
| OA CFM                 | 350    | 373            |
| RL Voltage             | -      | 215/215/215    |
| RL Amperage            | -      | 3.21/3.07/3.02 |
| SF Rotation            | -      | CCW            |
| SF System SetPt        | -      | C              |
| RA Damper Position     | -      | 5.2V           |
| Min OA Damper Position | -      | 4.8V           |
| Min OA Damper Type     | -      | ECONOMIZER     |
| OA Enthalpy Setpt      | -      | 28/BTU         |

| Performance Data |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| MA Plenum SP     | -      |        |
| Fan Suction SP   | -      | -1.08" |
| Fan Discharge SP | -      | 0.73"  |
| Total ESP        | 1"     | 1.30"  |
| Fan Total SP     | -      | 1.81"  |

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

Completed By: David Nicolas Sanchez on 03/19/2025

## Unit Data - PHOTO LOG



**03/19/2025**

# National TAB

Project:03-17-25 CAVA TEMECULA, CA (REDHAWK)

## 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      | DINING   | SD4  | 12"  | 450        | 1  | 525    | 418    | 418       | 92.9        |
| SGRD2      | DINING   | SD5  | 12"  | 100        | 1  | 82     | 105    | 105       | 105.0       |
| SGRD3      | DINING   | SD5  | 18"  | 100        | 1  | 48     | 94     | 94        | 94.0        |
| SGRD4      | DINING   | SD6  | 12"  | 400        | 1  | 579    | 440    | 440       | 110.0       |
| SGRD5      | DINING   | SD5  | 12"  | 100        | 1  | 51     | 98     | 98        | 98.0        |
| SGRD6      | DINING   | SD6  | 12"  | 400        | 1  | 316    | 364    | 364       | 91.0        |
| SGRD7      | DINING   | SD5  | 14"  | 100        | 1  | 73     | 98     | 98        | 98.0        |
| SGRD8      | DINING   | SD6  | 8"   | 225        | 1  | 194    | 225    | 225       | 100.0       |
| SGRD9      | DINING   | SD5  | 12"  | 100        | 1  | 113    | 106    | 106       | 106.0       |
| SGRD10     | DINING   | SD6  | 8"   | 225        | 1  | 196    | 221    | 221       | 98.2        |
| SGRD11     | DINING   | SD5  | 8"   | 100        | 1  | 79     | 109    | 109       | 109.0       |
| SGRD12     | RESTROOM | SD2  | 6"   | 50         | 1  | 169    | 53     | 53        | 106.0       |
| SGRD13     | RESTROOM | SD2  | 6"   | 50         | 1  | 354    | 49     | 49        | 98.0        |
| Total      |          |      |      | 2400       |    | 2779   | 2380   | 2380      | 99.17%      |

# National TAB

Project: 03-17-25 CAVA TEMECULA, CA (REDHAWK)

## System/Unit: FAN - Exhaust



Asset: EF1

AREA:RESTROOM

| Unit Data     |           |            |
|---------------|-----------|------------|
|               | Design    | Actual     |
| MFG           | GREENHECK | GREENHECK  |
| Model Num     | SP-150    | SP-B150-QD |
| Serial Num    | -         | 184389281  |
| Type          | CEILING   | CEILING    |
| Configuration | VERTICAL  | VERTICAL   |

| 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     |

| Test Data     |        |        |
|---------------|--------|--------|
|               | Design | Actual |
| CFM           | 120    | 122    |
| Fan RPM       | -      | NA     |
| Fan Rotation  | -      | CW     |
| Motor RPM     | -      | NA     |
| RL Voltage    | -      | NA     |
| RL Amperage   | -      | NA     |
| Suction ESP   | -      | -0.38" |
| Discharge ESP | -      | ATMS   |
| Total ESP     | 0.5"   | 0.35   |

Completed By: David Nicolas Sanchez on 03/19/2025

### Unit Data - PHOTO LOG



# National TAB

Project: 03-17-25 CAVA TEMECULA, CA (REDHAWK)

## System/Unit: FAN - Exhaust



Asset: EF2

AREA:RESTROOM

| Unit Data     |           |            |
|---------------|-----------|------------|
|               | Design    | Actual     |
| MFG           | GREENHECK | GREENHECK  |
| Model Num     | SP-150    | SP-B150-QD |
| Serial Num    | -         | 18438281   |
| Type          | CEILING   | CEILING    |
| Configuration | VERTICAL  | VERTICAL   |

| 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     |

| Test Data     |        |        |
|---------------|--------|--------|
|               | Design | Actual |
| CFM           | 120    | 127    |
| Fan RPM       | -      | NA     |
| Fan Rotation  | -      | CW     |
| Motor RPM     | -      | NA     |
| RL Voltage    | -      | NA     |
| RL Amperage   | -      | NA     |
| Suction ESP   | -      | -0.42" |
| Discharge ESP | -      | ATMS   |
| Total ESP     | 0.5"   | 0.42   |

Completed By: David Nicolas Sanchez on 03/19/2025

### Unit Data - PHOTO LOG



03/19/2025



# National TAB

Project: 03-17-25 CAVA TEMECULA, CA (REDHAWK)

## System/Unit: FAN - Exhaust



Asset: KEF1

AREA:HOOD

| Unit Data     |                 |             |
|---------------|-----------------|-------------|
|               | Design          | Actual      |
| MFG           | CAPTIVEAIRE     | CAPTIVEAIRE |
| Model Num     | DU85HFA         | DU85HFA     |
| Serial Num    | -               | 7144251     |
| Type          | UPBLAST/CEILING | UPBLAST     |
| Configuration | VERTICAL        | VERTICAL    |

| Motor Data       |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| Motor MFG        | -      | NEMA   |
| Frame            | -      | NL     |
| Horsepower       | 1      | 1      |
| Motor Rpm        | -      | 1800   |
| Phase            | 1      | 1      |
| Voltage (rated)  | 115    | 115    |
| Amperage (rated) | -      | 11.6   |
| Service Factor   | -      | NL     |

| Test Data        |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| CFM              | 2117   | 2154   |
| Fan RPM          | -      | 1458   |
| Fan Rotation     | -      | CCW    |
| Motor RPM        | -      | 1458   |
| System SetPt     | -      | 81%    |
| RL Voltage       | -      | 123    |
| RL Amperage      | -      | 11.10  |
| Total ESP        | 0.9"   | 0.73"  |
| Fan Inlet SP     | -      | -0.73" |
| Fan Discharge SP | -      | ATMS   |

Completed By: David Nicolas Sanchez on 03/17/2025

### Unit Data - PHOTO LOG



03/19/2025

# National TAB

Project: 03-17-25 CAVA TEMECULA, CA (REDHAWK)

## System/Unit: FAN - Supply



Asset: MAU1

AREA:HOOD

| Unit Data     |             |             |
|---------------|-------------|-------------|
|               | Design      | Actual      |
| MFG           | CAPTIVEAIRE | CAPTIVEAIRE |
| Model Num     | A1-15D      | A1-15D      |
| Serial Num    | -           | 7144251     |
| Type          | MAU         | MAU         |
| Configuration | VERTICAL    | VERTICAL    |

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

| Test Data        |        |         |
|------------------|--------|---------|
|                  | Design | Actual  |
| CFM              | 1699   | 1687    |
| SF RPM           | -      | 1295    |
| Motor RPM        | -      | 1295    |
| SF System SetPt  | -      | 55.7    |
| RL Voltage       | -      | 93@VFD  |
| RL Amperage      | -      | 4.4@VFD |
| Total ESP        | -      | N/A     |
| Fan Discharge SP | -      | N/A     |

| General              |        |
|----------------------|--------|
|                      | Actual |
| Fan Rotation Correct | YES    |

Completed By: David Nicolas Sanchez on 03/17/2025

### Unit Data - PHOTO LOG



03/19/2025

# National TAB

Project: 03-17-25 CAVA TEMECULA, CA (REDHAWK)

System/Unit: Kitchen Hood Type I



Asset: HD1

AREA:KITCHEN

| Unit Data            |                   |             |
|----------------------|-------------------|-------------|
|                      | Design            | Actual      |
| MFG                  | CAPTIVEAIRE       | CAPTIVEAIRE |
| Model Num            | 6030 ND-2-ACPSP-F | 6030 ND-2   |
| Job / Serial Num     | -                 | 7144251     |
| Type                 | CANOPY            | CANOPY      |
| Hood length          | 127"              | 127"        |
| Hood Width           | 60"               | 60"         |
| Supply Plenum Type   | -                 | ACPSP       |
| Supply Plenum Width  | 12"               | 12"         |
| Supply Plenum Length | 140"              | 140"        |

| Test Data Exhaust       |                      |                      |
|-------------------------|----------------------|----------------------|
|                         | Design               | Actual               |
| Filter Type             | CAPTRATE SOLO FILTER | CAPTRATE SOLO FILTER |
| 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             | -                    | 149                  |
| Filter2 FPM             | -                    | 149                  |
| Filter3 FPM             | -                    | 152                  |
| Filter4 FPM             | -                    |                      |
| Filter5 FPM             | -                    | 153                  |
| Filter6 FPM             | -                    | 131                  |
| Filter7 FPM             | -                    | 143                  |
| Filter Ave FPM(corr)    | -                    | 148                  |
| CFM                     | 2117                 | 2154                 |

| Cooking Equipment |         |
|-------------------|---------|
|                   | Actual  |
| Item 1            | FRYER   |
| Item 2            | STOVE   |
| Item 3            | GRIDDLE |
| Item 4            | FRYER   |

| Test Data Supply |        |        |
|------------------|--------|--------|
|                  | Design | Actual |
| Total Area       | 11.97  | 11.97  |
| Kv factor (Vel)  | 0.87"  | 0.87"  |
| Num of Readings  | -      | 10     |
| Reading1 FPM     | -      | 250    |
| Reading2 FPM     | -      | 200    |
| Reading3 FPM     | -      | 200    |
| Reading4 FPM     | -      | 223    |
| Reading5 FPM     | -      | 202    |
| Reading6 FPM     | -      | 117    |
| Reading7 FPM     | -      | 86     |
| Reading8 FPM     | -      | 102    |
| Reading9 FPM     | -      | 107    |
| Reading10 FPM    | -      | 142    |
| Ave FPM(corr)    | -      | 162    |
| CFM              | 1699   | 1687   |

Completed By: David Nicolas Sanchez on 03/17/2025

## Unit Data - PHOTO LOG



03/19/2025

