Report By:

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

Report: TAB Report

Function: Test, Adjust, & Balance

Date: 09/04/2025

Completed By: National TAB

PROJECT

08-25-25 CAVA DANBURY, CT

44 BACKUS AVENUE

DANBURY, CT 06810

Client

CAVA

702 H ST NW

2nd floor

Washington, DC 20001

National TAB

Project: 08-25-25 CAVA DANBURY, CT

Table Of Contents

Project Summary

The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report is further detail about your building performance including recommendations, asset data, and pictures. Our focus is to work with the trades to remedy any issues or deficiencies during the actual field balancing and not after the balancing has occurred to achieve a positive environment and outcome. The level of success is determined by the availability of the trades, possible parts needed, or time constraints.

RTU's (Roof Top Units) w/ Diffusers
Each of the RTU's were measured at their terminal devices or via traverse to establish a total flow for that unit. Each RTU was adjusted to within tolerance of the engineer's design flow. Each outlet was then adjusted to within tolerance of the design flow. Outside air was measured by reading the intake air opening with a velocity grid and multiplying by the free area. The outside air damper was adjusted until the airflow was within the design requirements. Any equipment that fell outside of that tolerance is noted throughout the report.

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

- HD1: Gap Next to Wall
- HD1: Left End Panel Not Installed
- HD1: Not Caulked Along Wall
- HD1: Small Penetration in Canopy
- KEF1: Electrical Boxes Left Open
- Rooftop Assets & Thermostats: No Identification Tags
- RTU1, RTU2: Construction Filters Still Installed
- RTU1, RTU2: Controller Wiring Incorrect
- RTU1, RTU2: Gas Valves Closed
- RTU1, RTU2: No Hailguards on Condenser Fins
- RTU1, RTU2: Power Exhaust Not Operational
- RTU1-1: No Dampers in ACPSP
- RTU2-10,12: No Dampers in Bathroom Supply Diffusers

08-25-25 CAVA DANBURY, CT

Project Issue Information

Issue Name : HD1: Gap Next to Wall

Description : Small gap between hood and well. Recommend filling.

Created By :	National TAB	**Assigned To :**	National TAB - Dan Hertenstein
Status :	Open		
Priority :	Low	**Asset Tag :**	
Originated Date :	08/25/2025 - Ryan Smith - National TAB		

Project Issue File Details

08/25/2025

08-25-25 CAVA DANBURY, CT

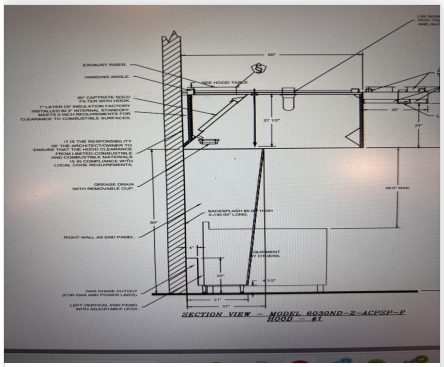
Project Issue Information

Issue Name : HD1: Left End Panel Not Installed

Description : Hood is designed to have left end panel. Recommend installing according to drawings.

Created By :	National TAB	**Assigned To :**	National TAB - Dan Hertenstein
Status :	Open		
Priority :	Medium	**Asset Tag :**	
Originated Date :	08/25/2025 - Ryan Smith - National TAB		

Project Issue File Details



08/25/2025

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08-25-25 CAVA DANBURY, CT

Project Issue Information

Issue Name : HD1: Not Caulked Along Wall
Description : Hood not caulked where it meets wall. Recommend caulking.

Created By : National TAB
Assigned To : National TAB - Dan Hertenstein

Status : Open
Priority : Medium
Asset Tag :
Originated Date : 08/25/2025 - Ryan Smith - National TAB

Project Issue File Details

08/25/2025

08/25/2025

08-25-25 CAVA DANBURY, CT

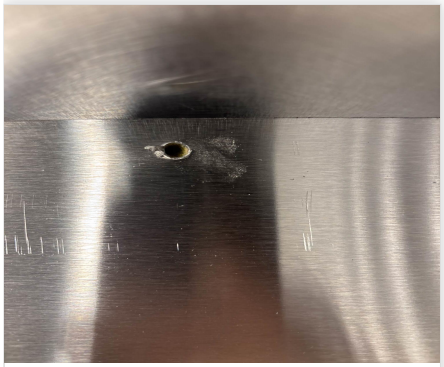
Project Issue Information

Issue Name : HD1: Small Penetration in Canopy

Description : Small penetration in hood canopy high up on right side. Recommend repairing according to manufacture directions.

Created By :	National TAB	**Assigned To :**	National TAB - Dan Hertenstein
Status :	Open		
Priority :	Low	**Asset Tag :**	
Originated Date :	08/25/2025 - Ryan Smith - National TAB		

Project Issue File Details



08/25/2025

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08-25-25 CAVA DANBURY, CT

Project Issue Information

Issue Name : KEF1: Electrical Boxes Left Open

Description : Electrical boxes are open, potentially exposing wiring to elements. Recommend closing.

Created By : National TAB

Assigned To : National TAB - Dan Hertenstein

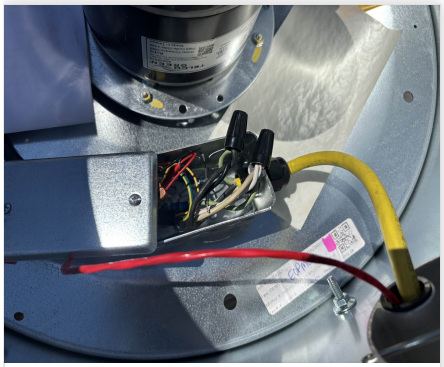
Status : Open

Priority : Low

Asset Tag :

Originated Date : 08/25/2025 - Ryan Smith - National TAB

Project Issue File Details



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08-25-25 CAVA DANBURY, CT

Project Issue Information

Issue Name : Rooftop Assets & Thermostats: No Identification Tags

Description : No permanent tags or labels to identify rooftop units as RTU1, RTU2, MAU, KEF1. Also no permanent tags or labels to identify which thermostat serves which area.

Created By : National TAB

Assigned To : National TAB - Dan Hertenstein

Status : Open

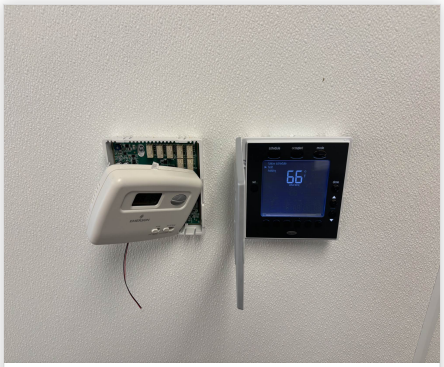
Priority : Low

Asset Tag :

Originated Date : 08/25/2025 - Ryan Smith - National TAB

Project Issue File Details

08/25/2025



08/25/2025

08/25/2025

Project Issue Response Details

- **08/27/2025 National TAB - Ryan Smith**
  - Tags have been applied to rooftop assets, but not thermostats.

08-25-25 CAVA DANBURY, CT

Project Issue Information

Issue Name : RTU1, RTU2: Construction Filters Still Installed

Description : Construction filters still installed in both RTUs. Recommend replacing with MERV8 filters.

Created By : National TAB

Assigned To : National TAB - Dan Hertenstein

Status : Open

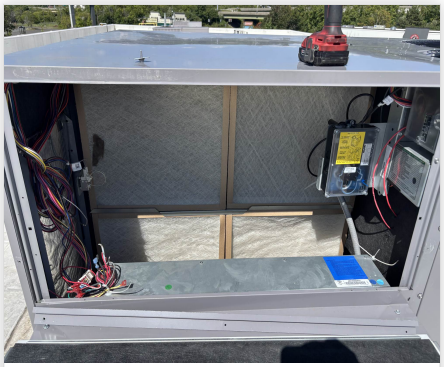
Priority : Medium

Asset Tag :

Originated Date : 08/25/2025 - Ryan Smith - National TAB

Project Issue File Details

08/25/2025



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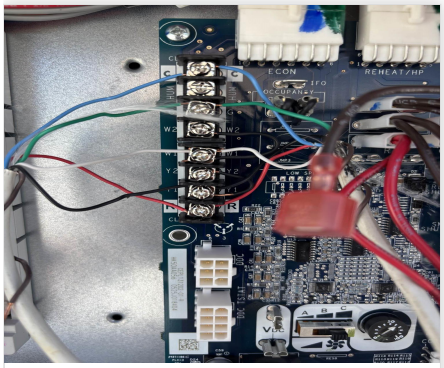
Project Issue Information

Issue Name : RTU1, RTU2: Controller Wiring Incorrect

Description : Controllers in RTUs are wired incorrectly. Y1 is jumped to Y2 and W1 is jumped to W2. Also, thermostats do not send occupancy signal to correct terminal on board, only toggling fan mode instead.

Created By :	National TAB	**Assigned To :**	National TAB - Dan Hertenstein
Status :	Open		
Priority :	Low	**Asset Tag :**	
Originated Date :	08/27/2025 - Ryan Smith - National TAB		

Project Issue File Details



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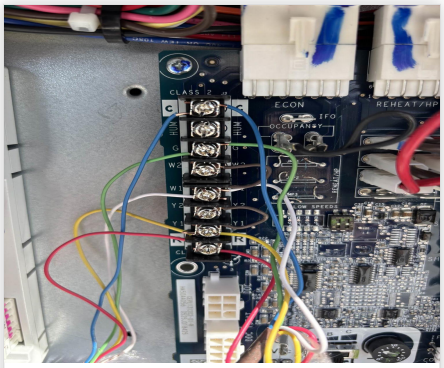

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08-25-25 CAVA DANBURY, CT

Project Issue Information

Issue Name : RTU1, RTU2: Gas Valves Closed

Description : Gas valves for both RTUs are closed. Open valves and perform burner startup.

Created By : National TAB

Assigned To : National TAB - Dan Hertenstein

Status : Open

Priority : Low

Asset Tag :

Originated Date : 08/25/2025 - Ryan Smith - National TAB

Project Issue File Details

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08-25-25 CAVA DANBURY, CT

Project Issue Information

Issue Name : RTU1, RTU2: No Hailguards on Condenser Fins
Description : No hailguards installed on condenser fins. Recommend installing.

Created By : National TAB
Assigned To : National TAB - Dan Hertenstein

Status : Open
Priority : Low
Asset Tag :
Originated Date : 08/27/2025 - Ryan Smith - National TAB

Project Issue File Details

08/27/2025

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08-25-25 CAVA DANBURY, CT

Project Issue Information

Issue Name : RTU1, RTU2: Power Exhaust Not Operational

Description : Power exhaust on both RTUs is not operational. Recommend servicing.

Created By : National TAB

Assigned To : National TAB - Dan Hertenstein

Status : Open

Priority : Low

Asset Tag :

Originated Date : 08/27/2025 - Ryan Smith - National TAB

Project Issue File Details

08/27/2025

08-25-25 CAVA DANBURY, CT

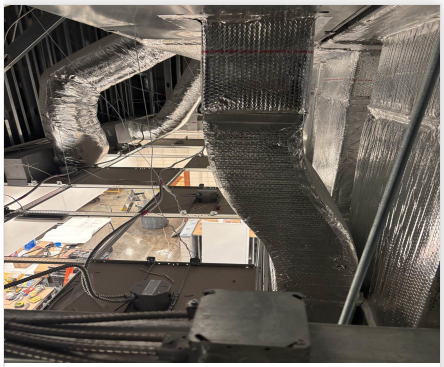
Project Issue Information

Issue Name : RTU1-1: No Dampers in ACPSP
Description : No dampers in ACPSP. Unable to adjust kitchen diffusers.

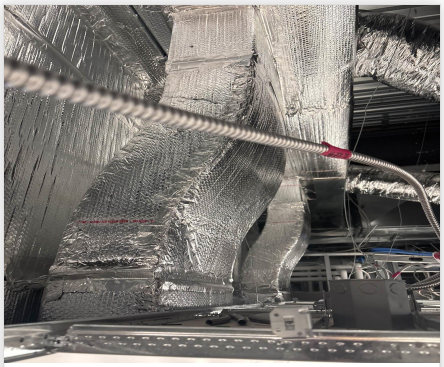
Created By : National TAB
Assigned To : National TAB - Dan Hertenstein

Status : Open
Priority : High
Asset Tag :
Originated Date : 08/27/2025 - Ryan Smith - National TAB

Project Issue File Details



08/27/2025



08/27/2025

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08-25-25 CAVA DANBURY, CT

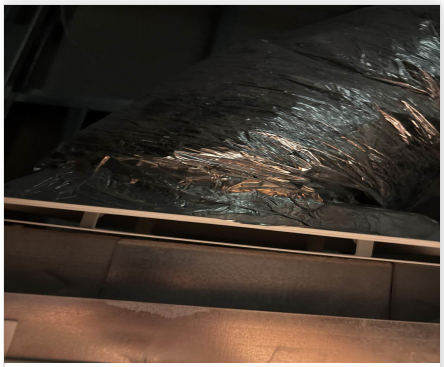
Project Issue Information

Issue Name : RTU2-10,12: No Dampers in Bathroom Supply Diffusers
Description : Bathroom supply diffusers do not have dampers. Unable to adjust.

Created By : National TAB
Assigned To : National TAB - Dan Hertenstein

Status : Open
Priority : Low
Asset Tag :
Originated Date : 08/27/2025 - Ryan Smith - National TAB

Project Issue File Details



08/27/2025

08/27/2025

National TAB

Project: 08-25-25 CAVA DANBURY, CT

- Open BALANCE_SCHEDULE_LARGE_JOBS.xlsx

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

08-25-25 CAVA DANBURY, CT

CheckList Information

Name :	FIV - EF'S	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/30/2025 - Natasha Louw - National TAB		
Completed Date :	08/25/2025 - Ryan Smith - 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	Fail
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:	

08-25-25 CAVA DANBURY, CT

CheckList Information

Name :	FIV - HOODS	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/30/2025 - Natasha Louw - National TAB		
Completed Date :	08/25/2025 - Ryan Smith - 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.	Fail
Comment:	
Small gap between right side of hood and wall.	

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: Caulk not applied	
There are no penetrations into the hood canopy other than fire system nozzles	Fail
Comment: Small hole drilled high up onn the right side.	
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.	Fail
Comment:	
HOOD ACCESSORIES	
End panels are installed	Fail
Comment: Left end panel not 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:	

08-25-25 CAVA DANBURY, CT

CheckList Information

Name :	FIV - HVAC DUCTWORK	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/30/2025 - Natasha Louw - National TAB		
Completed Date :	08/27/2025 - Ryan Smith - 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	N/A
Comment:	
Grease duct has required clean-out doors installed, labeled, and accessible for removal/cleaning. Doors are located as required by code	N/A
Comment:	
Grease duct clean-out doors are secured using tool less fasteners and seal fully when hand tightened	N/A
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	Fail
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:	
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	Fail
Comment: No dampers	
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	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	No

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

08-25-25 CAVA DANBURY, CT

CheckList Information

Name :	FIV - MUA	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/30/2025 - Natasha Louw - National TAB		
Completed Date :	08/25/2025 - Ryan Smith - 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	Fail
Comment: No identification tag	
MUA is installed in the proper location and orientation	
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	N/A
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	Fail
Comment: Located as per roof fan, but is in close proximity to hood exhaust fan.	
Condenser's electrical disconnect is external to the unit and properly wired (if applicable)	
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)	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:

08-25-25 CAVA DANBURY, CT

CheckList Information

Name :	FIV - RTU'S	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/30/2025 - Natasha Louw - National TAB		
Completed Date :	08/27/2025 - Ryan Smith - 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	Fail
Comment: No identification tags.	
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	Fail
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:	
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:	

08-25-25 CAVA DANBURY, CT

CheckList Information

Name :	FPT - BUILDING PRESSURE AND HOOD CONTAINMENT	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/30/2025 - Natasha Louw - National TAB		
Completed Date :	08/27/2025 - Ryan Smith - 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 SEC SMOKE BOMB	
Smoke test capture - Perimeter of hood (%)	
Comment:	
100%	
Smoke test capture - Top of cooking surface (%)	
Comment:	
100%	
WITNESS	
Date test was completed	08/26/2025

Comment:

TAB tech name / Firm

Comment:

Ryan Smith / National TAB

Site super name / Firm

Comment:

Todd Jones

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

08-25-25 CAVA DANBURY, CT

CheckList Information

Name :	FPT - KEF'S	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/30/2025 - Natasha Louw - National TAB		
Completed Date :	08/27/2025 - Ryan Smith - 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?	Fail

Comment:

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

Comment:

08-25-25 CAVA DANBURY, CT

CheckList Information

Name :	FPT - MUA	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/30/2025 - Natasha Louw - National TAB		
Completed Date :	08/27/2025 - Ryan Smith - 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:

08-25-25 CAVA DANBURY, CT

CheckList Information

Name :	FPT - RTU's	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/30/2025 - Natasha Louw - National TAB		
Completed Date :	08/27/2025 - Ryan Smith - 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	Fail
Comment:	
Occupied Cooling setpoint = 72	Pass
Comment:	
Dehumidification Setpoint = 55%	N/A
Comment:	
RTUs not equipped with dehumidification.	
Occupied Fan = On	N/A
Comment:	
No option to schedule fan on these thermostats.	

Unoccupied Time = 12:00AM	Pass
Comment:	
Unoccupied Heat setpoint = 60	Pass
Comment:	
Occupied Cooling setpoint = 80	Pass
Comment:	
Unoccupied Fan = Auto	N/A
Comment: No option to schedule fan on these thermostats.	
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	N/A
Comment: RTUs not equipped with dehumidification.	
CONTROL WIRING VALIDATION	
Economizer Dry Bulb sensor wired	Pass
Comment:	
Economizer Dry Bulb sensor operational	Pass
Comment:	
OCP/OCC terminal wired correctly	N/A
Comment: Unit is always occupied. Thermostat controls occupancy.	
Thermostat Wired correctly (R,C,Y1,Y2,W1,W2)	Fail

Comment:

Y1 is jumped to Y2. W1 is jumped to W2 on both RTUs.

Humidity Sensor Wired correctly	N/A

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:

45F

RTU Low T Lockout

Comment:

32F

Economizer set to 28 BTU/lb enthalpy setpoint.	Pass

Comment:

Temperature tests

Outside air temperature / humidity

Comment:

73 F

Full cooling LAT/H

Comment:

RTU1: 47F RTU2: 47F

Full heating LAT/H

Comment:

Gas valves closed and burners not started up. See OA temperature.

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	Fail
Comment: Power exhaust is not operational.	
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	Fail
Comment: Damper opens when unit heats or cools. Thermostat only toggles fan mode, does not send occupancy to RTU controller.	
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: 08-25-25 CAVA DANBURY, CT

System/Unit: AHU/RTU

Asset: RTU1 AREA:KITCHEN

Unit Data		
	Design	**Actual**
MFG	CARRIER	CARRIER
Serial Num	-	0825P72484
Model Num	48FEEN09	48FEEN09B2A5A8W0A0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	36X21
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	3	2.4
Motor Rpm	-	NA
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	6.4

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

Test Data		
	Design	**Actual**
SF CFM	3400	3183
SF RPM	-	1892
RA CFM	2830	2600
OA CFM	570	583
RL Voltage	-	211.3/210.6/211.2 V
RL Amperage	-	6.4/6.24/6.19 A
SF Rotation	-	CCW
SF System SetPt	-	8.92 V
RA Damper Position	-	MECHANICAL LINKAGE
Min OA Damper Position	-	3.9 V
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	28 BTU

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.92”
Fan Suction SP	-	-1.33”
Fan Discharge SP	-	0.53”
Total ESP	1.0"	1.45”
Fan Total SP	-	1.86”

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

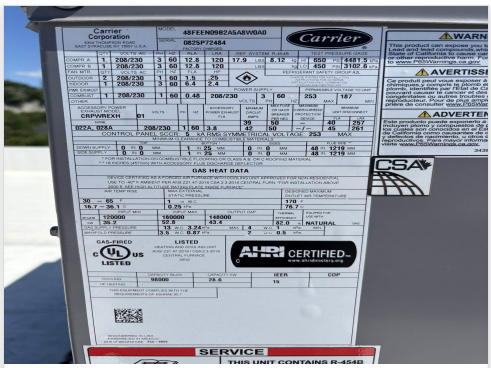
Completed By: Ryan Smith on 08/27/2025

Notes:
ACPSP does not have dampers. Not able to adjust diffusers. Only balanced total airflow on entire unit.

Written By: Ryan Smith on 08/26/2025

Unit Data - PHOTO LOG

08/25/2025



08/25/2025

08/25/2025

National TAB

Project:08-25-25 CAVA DANBURY, CT

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 HD	ACPSP	140X6	856	1	982		982	114.7
SGRD2	ORDER STATION	L1	10"	350	0.6	154		154	44.0
SGRD3	ORDER STATION	L1	10"	350	0.6	178		178	50.9
SGRD4	ORDER STATION	L1	10"	350	0.6	186		186	53.1
SGRD5	KITCHEN	D1	10"	350	1	331		331	94.6
SGRD6	KITCHEN	D1	8"	300	1	324		324	108.0
SGRD7	KITCHEN	D1	8"	200	1	231		231	115.5
SGRD8	KITCHEN	D1	8"	300	1	397		397	132.3
SGRD9	KITCHEN	D1	8"	350	1	400		400	114.3
Total				3406		3183	0	3183	93.45%

Completed By: Ryan Smith on 08/27/2025

National TAB

Project: 08-25-25 CAVA DANBURY, CT

System/Unit: AHU/RTU

Asset: RTU2 AREA:DINING

Unit Data		
	Design	**Actual**
MFG	CARRIER	CARRIER
Serial Num	-	0825P72485
Model Num	48FEEN09	48FEEN09B2A5A8W0A0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	36X21
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	3	2.4
Motor Rpm	-	NA
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	6.4

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

Test Data		
	Design	**Actual**
SF CFM	3400	3483
SF RPM	-	1512
RA CFM	2720	2795
OA CFM	680	688
RL Voltage	-	211.6/211.1/211.6 V
RL Amperage	-	3.38/3.39/3.36 A
SF Rotation	-	CCW
SF System SetPt	-	7.11 V
RA Damper Position	-	MECHANICAL LINKAGE
Min OA Damper Position	-	4.6 V
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	28 BTU

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.30”
Fan Suction SP	-	-0.62”
Fan Discharge SP	-	0.75”
Total ESP	1.0"	1.05”
Fan Total SP	-	1.37”

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

Completed By: Ryan Smith on 08/27/2025

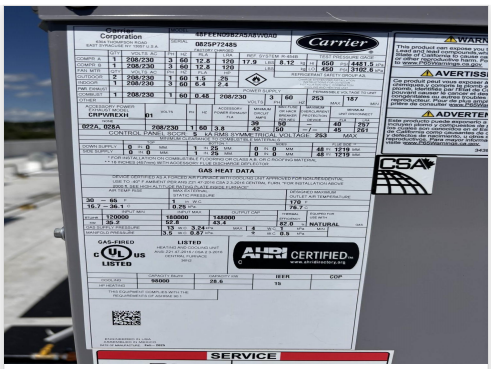
Notes:
Balanced total flow only because dining area diffusers were not accessible.

No dampers in bathrooms.

Written By: Ryan Smith on 08/26/2025

Unit Data - PHOTO LOG

08/25/2025



08/25/2025

08/25/2025

National TAB

Project:08-25-25 CAVA DANBURY, CT

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	L1	10"	200					-
SGRD2	DINING	L1	10"	200					-
SGRD3	DINING	L1	10"	200					-
SGRD4	DINING	R1		400					-
SGRD5	DINING	R1		400					-
SGRD6	DINING	R1		400					-
SGRD7	DINING	R1		400					-
SGRD8	DINING	R1		400					-
SGRD9	DINING	R1		400					-
SGRD10	RESTROOM	D2	6"	50	1	67		67	134.0
SGRD11	HALLWAY	D2	6"	150	1	102		102	68.0
SGRD12	RESTROOM	D2	6"	50	1	61		61	122.0
SGRD13	HALLWAY	D2	6"	150	1	115			-
Total				3400		345	0	230	6.76%

National TAB

Project: 08-25-25 CAVA DANBURY, CT

System/Unit: FAN - Exhaust

Asset: EF2 AREA:RESTROOM

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	SP-A290	SP-A250-QD
Serial Num	-	26682537
Type	CEILING	CEILING
Configuration	VERTICAL	HORIZONTAL

Motor Data		
	Design	**Actual**
Motor MFG	-	GREENHECK
Frame	-	NL
Horsepower	0.03	1/30
Motor Rpm	-	1000
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	0.56
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	125	157
Fan RPM	-	NA
Fan Rotation	-	NA
Motor RPM	-	NA
System SetPt	-	NA
RL Voltage	-	94 V
RL Amperage	-	0.47 A
Total ESP	0.3"	NA
Fan Inlet SP	-	NA
Fan Discharge SP	-	NA

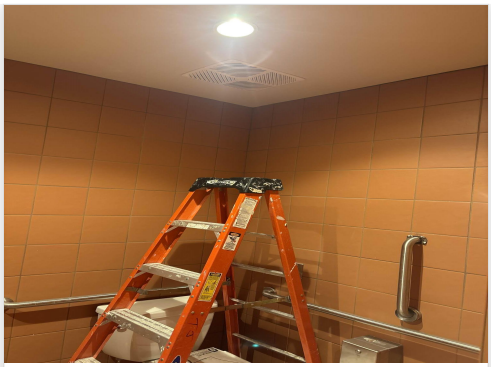
Completed By: Ryan Smith on 08/26/2025

Notes:
Dial has been fully reduced.

Written By: Ryan Smith on 08/26/2025

Unit Data - PHOTO LOG

08/25/2025



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Motor Data - PHOTO LOG

08/25/2025

National TAB

Project: 08-25-25 CAVA DANBURY, CT

System/Unit: FAN - Exhaust

Asset: EF3 AREA:RESTROOM

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	SP-A290	SP-A250-QD
Serial Num	-	25351012
Type	CEILING	CEILING
Configuration	VERTICAL	HORIZONTAL

Motor Data		
	Design	**Actual**
Motor MFG	-	GREENHECK
Frame	-	NL
Horsepower	0.03	1/30
Motor Rpm	-	1000
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	0.56
Service Factor	-	NL

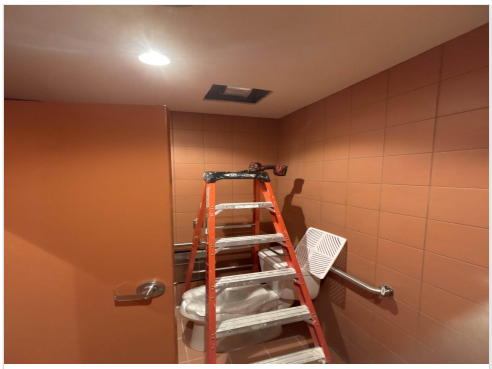
Test Data		
	Design	**Actual**
CFM	125	148
Fan RPM	-	NA
Fan Rotation	-	NA
Motor RPM	-	NA
System SetPt	-	NA
RL Voltage	-	95.5 V
RL Amperage	-	0.46 A
Total ESP	0.3"	NA
Fan Inlet SP	-	NA
Fan Discharge SP	-	NA

Completed By: Ryan Smith on 08/26/2025

Notes:
Dial has been fully reduced.

Written By: Ryan Smith on 08/26/2025

Unit Data - PHOTO LOG



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National TAB

Project: 08-25-25 CAVA DANBURY, CT

System/Unit: FAN - Exhaust

Asset: KEF1 AREA:KITCHEN HD

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU85HFA	DU85HFA
Serial Num	-	7084742
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TELCO GREEN
Frame	-	NL
Horsepower	1.000	1
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	11.6
Service Factor	-	NL

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

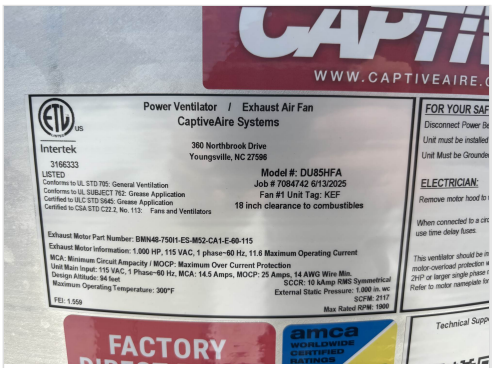
Test Data		
	Design	**Actual**
CFM	2400	2242
Fan RPM	1576	1404
Fan Rotation	-	CCW
Motor RPM	-	1404
RL Voltage	-	120.5 V
RL Amperage	-	10.2 A
Suction ESP	-	-1.02”
Discharge ESP	-	ATM
Total ESP	1.000"	1.02”

Completed By: Ryan Smith on 08/25/2025

Notes:
ECM High Speed set to 78%

Written By: Ryan Smith on 08/25/2025

Unit Data - PHOTO LOG



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Motor Data - PHOTO LOG

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08/25/2025

National TAB

Project: 08-25-25 CAVA DANBURY, CT

System/Unit: FAN - Supply

Asset: MAU1 AREA:KITCHEN HD

Unit Data		
	Design	**Actual**
MFG	ECON-AIR	CAPTIVEAIRE
Model Num	EARTU1-I.200-15-5T-MPU	CAS-HVAC1-I.200-15-5T-MPU
Serial Num	-	7084742
Type	MAU	MAU
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TECO Westinghouse
Frame	-	145T
Horsepower	3.00	2
Motor Rpm	-	1745
Phase	3	3
Voltage (rated)	208	230
Amperage (rated)	-	5.64
Service Factor	-	1.15

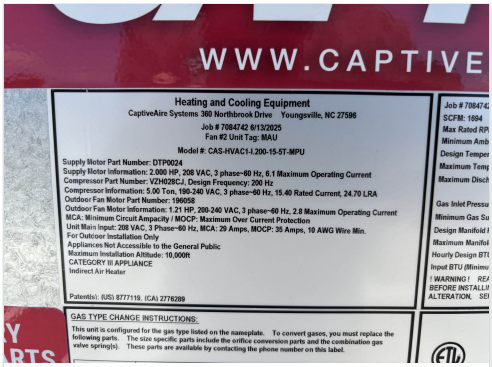
Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	Y
Flame Status (pass/fail)	-	PASS
Inlet Air Temp SetPt	55	55
Discharge Air Temp SetPt	60	60
Air Flow Switch SP Actual	-	NA

Test Data		
	Design	**Actual**
CFM	1694	1773
SF RPM	-	1280
Motor RPM	-	1280
SF System SetPt	-	44.0 Hz
RL Voltage	-	115 V VFD
RL Amperage	-	3.9 A VFD
Total ESP	-	0.26”
Fan Discharge SP	-	0.26”

General	
	Actual
Fan Rotation Correct	YES

Completed By: Ryan Smith on 08/25/2025

Unit Data - PHOTO LOG



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Motor Data - PHOTO LOG

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National TAB

Project: 08-25-25 CAVA DANBURY, CT

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-ACPSP-F
Job / Serial Num	-	7084742
Type	TYPE 1 CANOPY	TYPE 1 CANOPY
Hood length	127"	127"
Hood Width	60"	60"
Supply Plenum Type	-	ACPSP
Supply Plenum Width	12"	12"
Supply Plenum Length	140"	139"

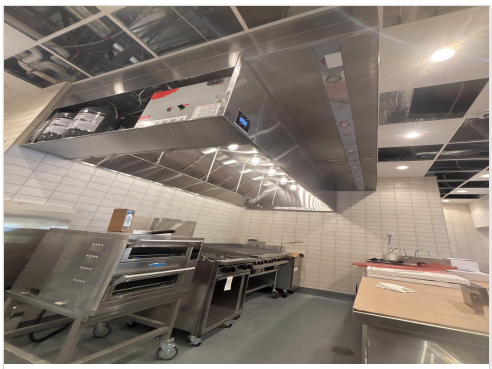
Test Data Exhaust		
	Design	**Actual**
Filter Type	CAPTRATE SOLO FILTER	CAPTRATE SOLO FILTER
Filter Size 1	16X20	16X20
Filter Qty 1	7	7
Filter AK factor size 1	2.08	2.08
Filter Total AK Area	14.56	14.56
Filter1 FPM	-	137
Filter2 FPM	-	158
Filter3 FPM	-	158
Filter4 FPM	-	179
Filter5 FPM	-	167
Filter6 FPM	-	146
Filter7 FPM	-	135
Filter Ave FPM(corr)	-	154
CFM	2400	2242

Cooking Equipment	
	Actual
Item 1	TURBOCHEF OVEN
Item 2	4 BURNER STOVE
Item 3	GRILL
Item 4	DEEP FRYER

Test Data Supply		
	Design	**Actual**
Total Area	11.67	11.58
Kv factor (Vel)	0.87	0.87
Num of Readings	-	11
Reading1 FPM	-	177
Reading2 FPM	-	150
Reading3 FPM	-	136
Reading4 FPM	-	176
Reading5 FPM	-	189
Reading6 FPM	-	175
Reading7 FPM	-	158
Reading8 FPM	-	224
Reading9 FPM	-	171
Reading10 FPM	-	156
Reading11 FPM	-	220
Ave FPM(corr)	-	176
CFM	1694	1773

Completed By: Ryan Smith on 08/25/2025

Unit Data - PHOTO LOG



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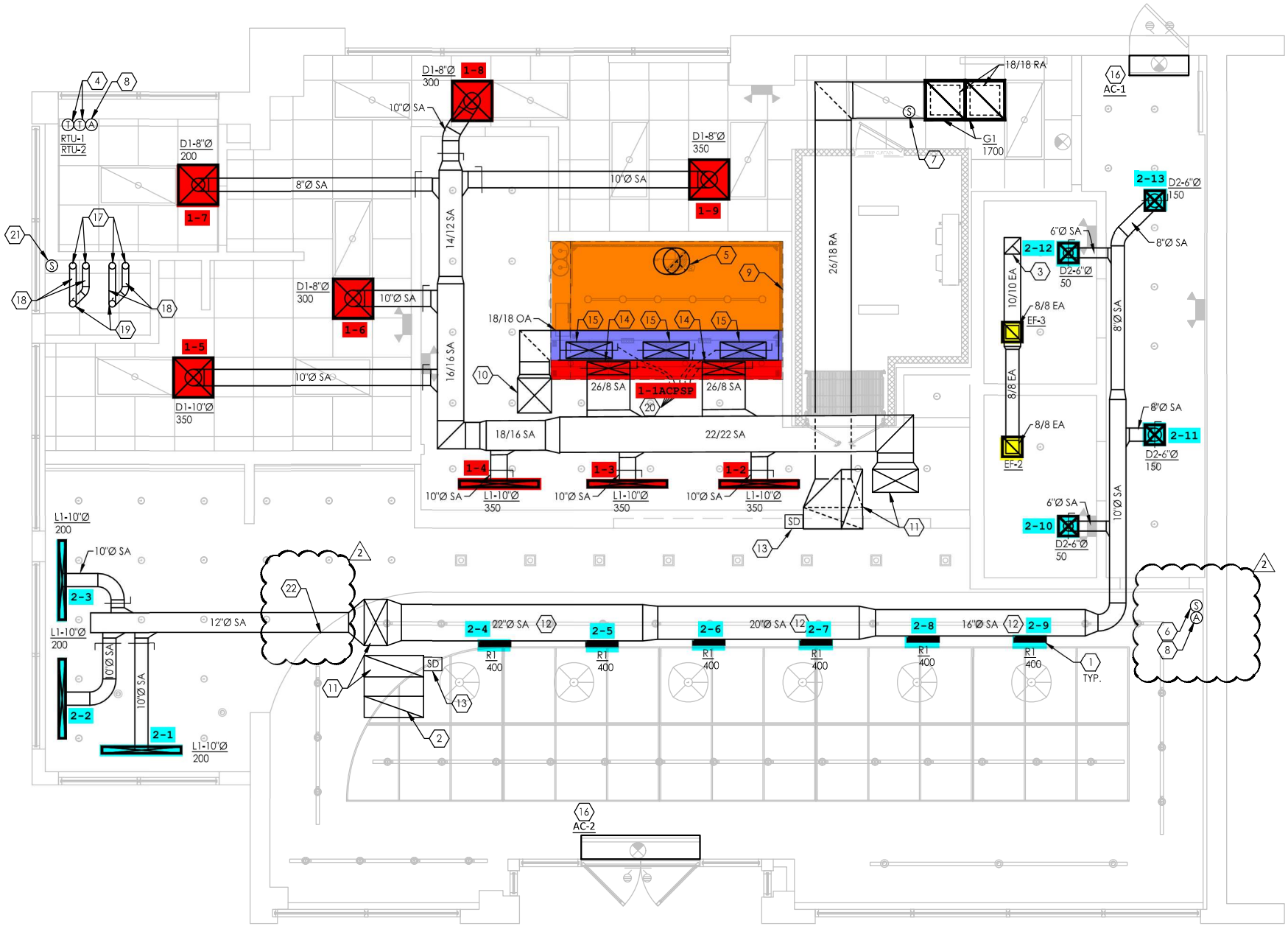

1 MECHANICAL PLAN
1/4" = 1'-0"