

Report By:

National TAB
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Report: TAB Report
Function: Test, Adjust, & Balance
Date: 03/24/2025
Completed By: National TAB

PROJECT
03-24-25 CAVA MARLTON, NJ

349 ROUTE 70 WEST

MARLTON, NJ 08053

Client

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

National TAB

Project: 03-24-25 CAVA MARLTON, NJ

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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.

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



03-24-25 CAVA MARLTON, NJ

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 : 03/21/2025 - Tyler Youells - National TAB

CheckList Item Details

Unit Tag matches the design and submittal MFG and Model Pass

Comment:

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

Comment:

Fans are installed in the correct location and orientation Pass

Comment:

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

Comment:

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

Comment:

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

Comment:

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

Pass

Comment:

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

Pass

Comment:

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

Pass

Comment:

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

Pass

Comment:



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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 : 03/21/2025 - Tyler Youells - 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

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

Pass

Comment:

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

Pass

Comment:

Duct is secured to exhaust register

Pass

Comment:

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

Pass

Comment:

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

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:

Dining exposed duct is internally insulated

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 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:



03-24-25 CAVA MARLTON, NJ

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 : 03/21/2025 - Tyler Youells - 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

N/A

Comment:

Landlord provided units

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

N/A

Comment:

Belts are tight?

Pass

Comment:

Pulleys aligned?

Pass

Comment:

MERV rated filters are installed and are clean?

Pass

Comment:



03-24-25 CAVA MARLTON, NJ

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 : 03/21/2025 - Tyler Youells - 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

Pass

Comment:

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:



03-24-25 CAVA MARLTON, NJ

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 : 03/21/2025 - Tyler Youells - 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

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

N/A

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:



03-24-25 CAVA MARLTON, NJ

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 :	03/24/2025 - Tyler Youells - National TAB		

CheckList Item Details

FINAL TESTS

HOOD CAPTURE TEST

List equipment turned on for testing

Comment:

BURNER

List smoke candle type used

Comment:

45 SEC SMOKE

Smoke test capture - Perimeter of hood (%)

Comment:

100%

Smoke test capture - Top of cooking surface (%)

Comment:

100%

WITNESS

Date test was completed

03/24/2025

Comment:

TAB tech name / Firm

Comment:

Tyler/NTi

Site super name / Firm

Comment:

Pete/ELS

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



03-24-25 CAVA MARLTON, NJ

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 : 03/24/2025 - Tyler Youells - 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:

SDV complete

Hoods free of alarms? Pass

Comment:

Only alarm is for pressure switch which will go away when ansul tank is connected

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

Pass

Comment:



03-24-25 CAVA MARLTON, NJ

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 : 03/24/2025 - Tyler Youells - National TAB

CheckList Item Details

THERMOSTAT PROGRAMMING AND CALIBRATION

Time is correct on the thermostats Pass

Comment:

Occupied Time = 7:30 AM Pass

Comment:

Occupied Heat setpoint = 68 Pass

Comment:

Occupied Cooling setpoint = 72 Pass

Comment:

Dehumidification Setpoint = 55% N/A

Comment:

Occupied Fan = On Pass

Comment:

Unoccupied Time = 12:00AM Pass

Comment:

Unoccupied Heat setpoint = 60

Pass

Comment:

Occupied Cooling setpoint = 80

Pass

Comment:

Unoccupied Fan = Auto

Pass

Comment:

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

Pass

Comment:

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

N/A

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

N/A

Comment:

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

N/A

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

N/A

Comment:**RTU MAT Low StPt****Comment:**

N/A

RTU Low T Lockout**Comment:**

N/A

Economizer set to 28 BTU/lb enthalpy setpoint.

Pass

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

52.1F/74%

Full cooling LAT/H**Comment:**

RTU-1: 44F/68.1% RTU-2: 53.6F/75.7%

Full heating LAT/H**Comment:**

RTU-1: 110.5F/14% RTU-2: 112.3F/14.7%

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:



03-24-25 CAVA MARLTON, NJ

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 : 03/24/2025 - Tyler Youells - 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:

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	3892	3570	3448	430	444	10.8%	11.4%						
RTU-2	KITCHEN	4000	3838	3535	3346	465	492	11.6%	12.8%						
MUA-1	KITCHEN									1960	1985				
KEF-1	HOOD											2275	2286		
EF-1	RESTROOM													125	158
EF-2	RESTROOM													125	168
TOTALS		8000	7730	7105	6794	895	936			1960	1985	2275	2286	250	326

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2855	2921
TOTAL EXHAUST	2525	2612
NET AIRFLOW	330	309

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H2O)
FRONT	0.0061
SIDE	0.0023
REAR	0.0044
AVERAGE	0.0043

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:

National TAB

Project: 03-24-25 CAVA MARLTON, NJ

System/Unit: AHU/RTU



Asset: RTU1

AREA:DINING

Unit Data		
	Design	Actual
MFG	YORK	YORK
Serial Num	-	N2F4480811
Model Num	ZJ120S	ZJ120S24U2D6RCE2E3
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	20X24X2
Num Final Filter 1	-	4
Final Filter Size 1	-	20X24X2

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR RELIANCE
Frame	-	56HZ
Horsepower	3.1	3
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	8.3

Drive Data	
	Actual
Motor Sheave Size	1VL50
Motor Bore Size	0.875
Motor Sheave SetPt	4 TURNS OUT
Fan Sheave Size	AK61
Fan Sheave Bore	1"
Belt CL Distance	18.5"
Num of Belts	1
Belt Size	A52
Belt Alignment	GOOD

Test Data		
	Design	Actual
SF CFM	4000	3892
SF RPM	-	1077
RA CFM	3570	3448
OA CFM	430	444
RL Voltage	-	213.9
RL Amperage	-	7.1VFD
SF Rotation	-	CW
SF System SetPt	-	60HZ
RA Damper Position	-	MECHANICAL LINKAGE
Min OA Damper Position	-	18%/26%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	DEFAULT

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.74"
Fan Suction SP	-	-1.01"
Fan Discharge SP	-	0.68"
Total ESP	1.5"	1.42"
Fan Total SP	-	1.69"

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

Completed By: Tyler Youells on 03/24/2025

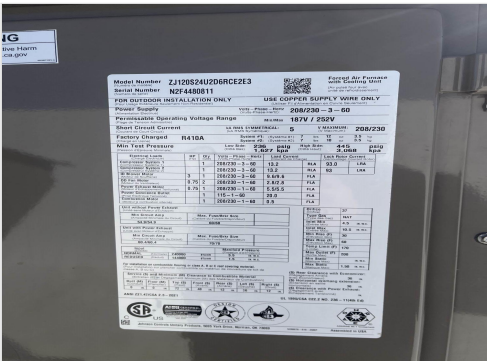
Unit Data - PHOTO LOG



03/21/2025



03/21/2025



03/21/2025

National TAB

Project:03-24-25 CAVA MARLTON, NJ

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	D	24"	330	0.56	486	440	335	101.5
SGRD2	DINING	D	24"	330	0.56	537	486	323	97.9
SGRD3	DINING	D	22"	330	0.56	461	417	309	93.6
SGRD4	DINING	D	22"	330	0.56	292	264	334	101.2
SGRD5	DINING	D	20"	330	0.56	345	312	330	100.0
SGRD6	DINING	D	20"	330	0.56	494	446	341	103.3
SGRD7	DINING	D	18"	330	0.56	341	309	320	97.0
SGRD8	DINING	D	18"	330	0.56	383	347	318	96.4
SGRD9	DINING	D	16"	330	0.56	279	253	333	100.9
SGRD10	DINING	D	16"	330	0.56	271	246	329	99.7
SGRD11	DINING	D	12"	330	0.56	236	213	301	91.2
SGRD12	DINING	D	12"	330	0.56	226	205	319	96.7
Total				3960		4351	3938	3892	98.28%

Completed By: Tyler Youells on 03/21/2025

National TAB

Project: 03-24-25 CAVA MARLTON, NJ

System/Unit: AHU/RTU



Asset: RTU2

AREA: KITCHEN

Unit Data		
	Design	Actual
MFG	YORK	YORK
Serial Num	-	N2F4480812
Model Num	ZJ120S	ZJ120S24U2D6RCE2E3
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	30X22"
Num Final Filter 1	-	4
Final Filter Size 1	-	20X24X2

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR RELIANCE
Frame	-	56HZ
Horsepower	3.1	3
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	8.3

Drive Data	
	Actual
Motor Sheave Size	1VM50
Motor Bore Size	0.875"
Motor Sheave SetPt	1 TURN OUT
Fan Sheave Size	6.5"
Fan Sheave Bore	1"
Belt CL Distance	18.5"
Num of Belts	1
Belt Size	A52
Belt Alignment	GOOD

Test Data		
	Design	Actual
SF CFM	4000	3838
SF RPM	-	1224
RA CFM	3535	3346
OA CFM	465	492
RL Voltage	-	214.1
RL Amperage	-	8.25 VFD
SF Rotation	-	CW
SF System SetPt	-	60HZ
RA Damper Position	-	MECHANICAL LINKAGE
Min OA Damper Position	-	19%/28%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	DEFAULT

Performance Data		
	Design	Actual
MA Plenum SP	-	-1.08"
Fan Suction SP	-	-1.45"
Fan Discharge SP	-	0.77"
Total ESP	1.5"	1.85"
Fan Total SP	-	2.22"

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

Completed By: Tyler Youells on 03/24/2025

Notes:

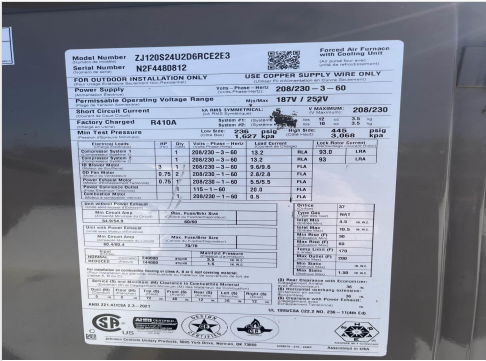
[1] CONNECTED LOAD 4200CFM, UNIT DESIGN 4000. PROPORTIONALLY REDUCED CONNECTED LOAD TO 4000CFM

Written By: Tyler Youells on 03/21/2025

Unit Data - PHOTO LOG



03/21/2025



03/21/2025



03/21/2025

National TAB

Project: 03-24-25 CAVA MARLTON, NJ

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	E	10"	266	1	215	200	249	93.6
SGRD2	KITCHEN	E	10"	266	1	201	207	243	91.4
SGRD3	KITCHEN	E	10"	266	1	193	194	251	94.4
SGRD4	KITCHEN	E	10"	266	1	201	210	240	90.2
SGRD5	KITCHEN	A	6"	95	1	88	93	97	102.1
SGRD6	KITCHEN	A	12"	380	1	630	504	382	100.5
SGRD7	KITCHEN	A	6"	95	1	33	83	91	95.8
SGRD8	RESTROOM	C	6"	47	1	56	56	45	95.7
SGRD9	RESTROOM	C	6"	47	1	71	79	46	97.9
SGRD10	KITCHEN	A	8"	190	1	225	148	201	105.8
SGRD11	KITCHEN	A	8"	190	1	145	234	188	98.9
SGRD12	KITCHEN	A	12"	380	1	305	350	377	99.2
SGRD13	KITCHEN	A	12"	380	1	356	348	369	97.1
SGRD14	KITCHEN	A	12"	380	1	308	343	384	101.1
SGRD15	PSP	ACPSP	6X140	737	4.43	713	717	675	91.6
Total				3985		3740	3766	3838	96.31%

Completed By: Tyler Youells on 03/24/2025

National TAB

Project: 03-24-25 CAVA MARLTON, NJ

System/Unit: FAN - Exhaust



Asset: EF1

AREA:RESTROOM

Unit Data		
	Design	Actual
MFG	LOREN COOK	GREENHECK
Model Num	GC-186	SP-B150-QD
Serial Num	-	188825984-0040
Type	CEILING	CEILING
Configuration	HORIZONTAL	HORIZONTAL DISCHARGE

Motor Data		
	Design	Actual
Motor MFG	-	GREENHECK
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	1050
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	1.8
Service Factor	-	1

Test Data		
	Design	Actual
CFM	125	158
Fan RPM	-	1050
Fan Rotation	-	CW
Motor RPM	-	1050
System SetPt	-	FULL SPEED
RL Voltage	-	122.9
RL Amperage	-	1.72

Completed By: Tyler Youells on 03/21/2025

Notes:

[1] EF HIGH ON FLOW, NOT EQUIPPED WITH SPEED SWITCH. NOT EXPECTED TO CAUSE COMFORT ISSUE

Written By: Tyler Youells on 03/21/2025

Unit Data - PHOTO LOG



03/21/2025



03/21/2025

National TAB

Project: 03-24-25 CAVA MARLTON, NJ

System/Unit: FAN - Exhaust



Asset: EF2

AREA:RESTROOM

Unit Data		
	Design	Actual
MFG	LOREN COOK	GREENHECK
Model Num	GC-186	SP-B150-QD
Serial Num	-	188825984-0034
Type	CEILING	CEILING
Configuration	HORIZONTAL	HORIZONTAL DISCHARGE

Motor Data		
	Design	Actual
Motor MFG	-	GREENHECK
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	1050
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	1.8
Service Factor	-	1

Test Data		
	Design	Actual
CFM	125	168
Fan RPM	-	1050
Fan Rotation	-	CW
Motor RPM	-	1050
System SetPt	-	FULL SPEED
RL Voltage	-	122.6
RL Amperage	-	1.71

Completed By: Tyler Youells on 03/21/2025

Notes:

[1] EF HIGH ON FLOW, NOT EQUIPPED WITH SPEED SWITCH. NOT EXPECTED TO CAUSE COMFORT ISSUE

Written By: Tyler Youells on 03/21/2025

Unit Data - PHOTO LOG



03/21/2025



03/21/2025

National TAB
Project: 03-24-25 CAVA MARLTON, NJ
System/Unit: FAN - Exhaust



Asset: KEF1 AREA:HOOD

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	ECONAIR
Model Num	DU85HFA	EADU85H
Serial Num	-	7142692
Type	UPBLAST	UPBLASY
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Frame	-	NL
Horsepower	1	1
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	11.6
Service Factor	-	1

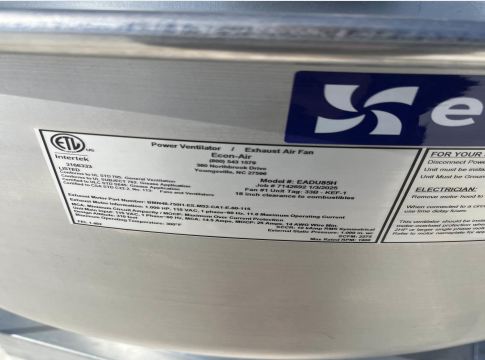
Test Data		
	Design	Actual
CFM	2275	2286
Fan RPM	-	1458
Fan Rotation	-	CCW
Motor RPM	-	1458
RL Voltage	-	122.9
RL Amperage	-	11.12
Suction ESP	-	-1.17"
Discharge ESP	-	ATM
Total ESP	1"	1.17"

Completed By: Tyler Youells on 03/21/2025

Notes:
[1] 81% MAX SPEED

Written By: Tyler Youells on 03/21/2025

Unit Data - PHOTO LOG



03/21/2025



03/21/2025



03/21/2025

National TAB

Project: 03-24-25 CAVA MARLTON, NJ

System/Unit: FAN - Supply



Asset: MAU1

AREA:HOOD

Unit Data		
	Design	Actual
MFG	ECON-AIRE	ECON-AIRE
Model Num	EARTU1-I.200-16-5T-MPU	EARTU1-I.200-16-5T-MPU
Serial Num	-	7142692
Type	MAU	DOAS
Configuration	HORIZONTAL	VERTICAL DISCHARGE

Motor Data		
	Design	Actual
Motor MFG	-	ZHIEL ABEGG
Frame	-	NL
Horsepower	-	1.8KW
Motor Rpm	-	2150
Phase	-	3
Voltage (rated)	-	200
Amperage (rated)	-	6.1
Service Factor	-	1

Gas Heat		
	Design	Actual
Heater Operates (y/n)	-	YES
Flame Status (pass/fail)	-	PASS
Inlet Air Temp SetPt	-	55
Discharge Air Temp SetPt	-	60

Test Data		
	Design	Actual
CFM	1960	1985
SF RPM	-	1226
Motor RPM	-	1226
SF System SetPt	-	57%
RL Voltage	-	215.4/213.8/215.2/
RL Amperage	-	0.84/0.84/0.86
Total ESP	-	0.16"
Fan Discharge SP	-	0.16"

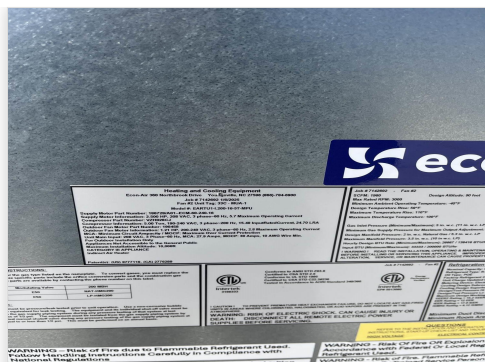
General	
	Actual
Fan Rotation Correct	YES

Completed By: Tyler Youells on 03/21/2025

Unit Data - PHOTO LOG



03/21/2025



03/21/2025



03/21/2025

National TAB

Project: 03-24-25 CAVA MARLTON, NJ

System/Unit: Kitchen Hood Type I



Asset: HD1

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	ECON-AIR	ECON-AIR
Model Num	6030 EX-2-ACPSP-F	6030 EX-2-ACPSP-F
Job / Serial Num	-	7142692
Type	CANOPY	TYPE I CANOPY
Hood length	127"	127"
Hood Width	60"	60"
Supply Plenum Type	-	ACPSP
Supply Plenum Width	14"	14"
Supply Plenum Length	140"	140"

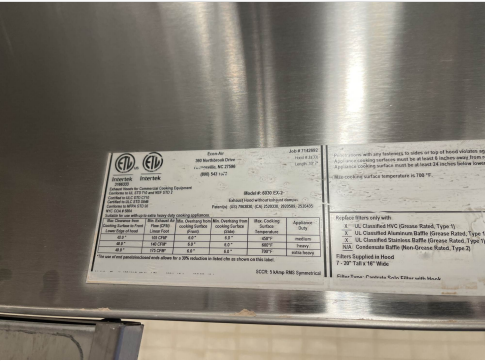
Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO FILTER	CAPTRATE SOLO
Filter Size 1	20X16"	20X16"
Filter Qty 1	7	7
Filter AK factor size 1	2.08	2.08
Filter Total AK Area	14.56	14.56
Filter1 FPM	-	133
Filter2 FPM	-	155
Filter3 FPM	-	164
Filter4 FPM	-	176
Filter5 FPM	-	166
Filter6 FPM	-	157
Filter7 FPM	-	150
Filter Ave FPM(corr)	-	157
CFM	2275	2286

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

Test Data Supply		
	Design	Actual
Total Area	13.61	13.6
Kv factor (Vel)	0.89	0.89
Num of Readings	-	11
Reading1 FPM	-	152
Reading2 FPM	-	161
Reading3 FPM	-	142
Reading4 FPM	-	173
Reading5 FPM	-	178
Reading6 FPM	-	144
Reading7 FPM	-	151
Reading8 FPM	-	189
Reading9 FPM	-	173
Reading10 FPM	-	179
Reading11 FPM	-	163
Ave FPM(corr)	-	164
CFM	1960	1985

Completed By: Tyler Youells on 03/21/2025

Unit Data - PHOTO LOG



03/21/2025



03/21/2025

