Report By:

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

Report: TAB REPORT

Function: Test, Adjust, & Balance

Date: 01/30/2024

PROJECT

12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

209 Marketplace Boulevard Block 2613, Lot 38

Hamilton Township, NJ 08691

Client

Mezeh Mediterranean Grill

3975 FAIR RIDE DR

SUITE 430

FAIRFAX, VA 22033

National TAB

Project: 12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

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

- Both RTU hail guards are not installed
- EF-1 and EF-2 (restroom exhaust fans) are below design
- EF-4 (Janitors room) is not installed
- EF-5 (Dishwasher hood) is low on flow
- Kitchen diffusers do not have damper installed
- Missing filters for RTU-1
- MUA Interlock alarm active

12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

Project Issue Information

Issue Name :	Both RTU hail guards are not installed		
Description :	Both RTU's do not have hail guards installed. They are not specified on the RTU schedule, but they are recommended to prevent condenser coil damage.		
Created By :	National TAB	**Assigned To :**	National TAB - David Annan
Status :	Open		
Priority :	Low	**Asset Tag :**	
Originated Date :	01/30/2024 - David Annan - National TAB		

12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

Project Issue Information

Issue Name :	EF-1 and EF-2 (restroom exhaust fans) are below design		
Description :	Restrooms are designed for 100 CFM each but the ceiling fans are only rated for 80 CFM on the unit tag.		
Created By :	National TAB	**Assigned To :**	National TAB - David Annan
Status :	Open		
Priority :	Low	**Asset Tag :**	
Originated Date :	01/30/2024 - David Annan - National TAB		

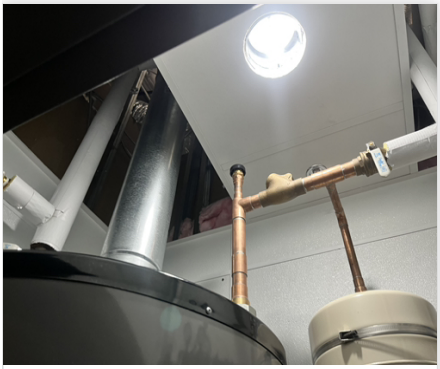
12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

Project Issue Information

Issue Name : EF-4 (Janitors room) is not installed
Description : Fan is not installed.

Created By :	National TAB	**Assigned To :**	National TAB - David Annan
Status :	Open		
Priority :	Medium	**Asset Tag :**	EF4
Originated Date :	01/30/2024 - David Annan - National TAB		

Project Issue File Details



Water_heater_vent.jpe..
01/30/2024

12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

Project Issue Information

Issue Name :	EF-5 (Dishwasher hood) is low on flow		
Description :	EF-5 is currently 75% of design running at the maximum fan setting. There does appear to be a total of (3) 90 rounded transitions coming from Hood-2. There is also a mesh filter located at the inlet of Hood-2.		
Created By :	National TAB	**Assigned To :**	National TAB - David Annan
Status :	Open		
Priority :	High	**Asset Tag :**	
Originated Date :	01/30/2024 - David Annan - National TAB		

12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

Project Issue Information

Issue Name :	Kitchen diffusers do not have damper installed		
Description :	All kitchen diffusers do not have dampers installed. Unable to complete diffuser balance. Recommend having dampers installed.		
Created By :	National TAB	**Assigned To :**	National TAB - David Annan
Status :	Open		
Priority :	High	**Asset Tag :**	RTU2
Originated Date :	01/30/2024 - David Annan - National TAB		

12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

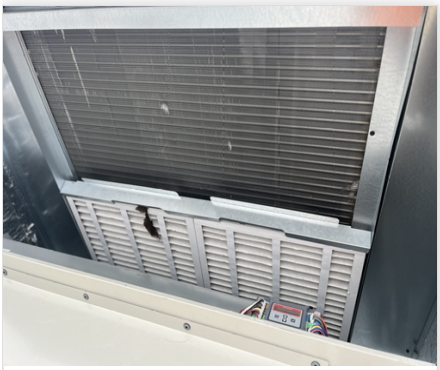
Project Issue Information

Issue Name : Missing filters for RTU-1

Description : RTU-1 is missing 2 filters. Recommend installing filters prior to sites opening.

Created By :	National TAB	**Assigned To :**	National TAB - David Annan
Status :	Open		
Priority :	Medium	**Asset Tag :**	RTU1
Originated Date :	01/30/2024 - David Annan - National TAB		

Project Issue File Details



Missing_filters
01/30/2024

12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

Project Issue Information

Issue Name :	MUA Interlock alarm active		
Description :	The MUA interlock alarm is active and unable to balance the MUA as a result. There are missing wires from. SF1 and SF01 to the MUA board that need to be landed. Unable to open damper manually due to the nuts stripping trying to open them. Recommend having electricians trouble shoot with CAS to land missing connections.		
Created By :	National TAB	**Assigned To :**	National TAB - David Annan
Status :	Open		
Priority :	Urgent	**Asset Tag :**	SF1
Originated Date :	01/30/2024 - David Annan - National TAB		

NATIONAL TAB

AIR BALANCE SCHEDULE

UNIT	AREA SERVED	HVAC SUPPLY		HVAC RETURN		HVAC OUTDOOR		OA %		HOOD MAKE-UP		HOOD EXHAUST		GENERAL EXH.	
		DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
RTU-1	DINING	3380	3421	2530	2503	850	918	25.1%	26.8%						
RTU-2	KITCHEN	3420	3142	2880	2600	540	542	15.8%	17.3%						
MUA-1	HOOD									3870	0				
EF-1	HOOD1											4837	4957		
EF-5	HOOD2											800	602		
EF-2	RESTROOM													100	62
EF-3	RESTROOM													100	74
EF-4	JANITOR RM.													100	0
TOTALS		6800	6563	5410	5103	1390	1460			3870	0	5637	5559	300	136

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	5260	1460
TOTAL EXHAUST	5937	5695
NET AIRFLOW	-677	-4235

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H20)
FRONT	-0.124
SIDE	
REAR	-0.13
AVERAGE	**-0.127**

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:

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CheckList List

- SITE PICTURES
- TECH - STEP 1: INITIAL WALKTHROUGH
- TECH - STEP 2: UNIT DATA AND EVAL
- TECH - STEP 3: TEST, ADJUST AND BALANCE
- TECH - STEP 4: FINAL TESTS

12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

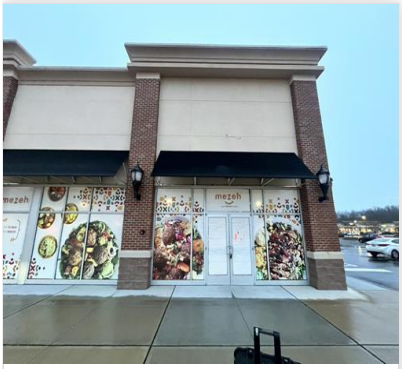
CheckList Information

Name :	SITE PICTURES	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	12/26/2023 - Wale Odofin - National TAB		
Completed Date :	01/30/2024 - David Annan - National TAB		

CheckList Item Details

STORE FRONT

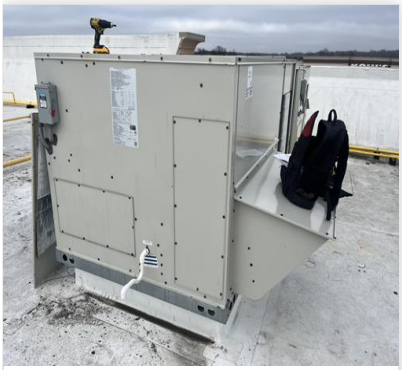
Comment:



Storefront
01/30/2024

RTU-1

Comment:



RTU-1(1)
01/30/2024

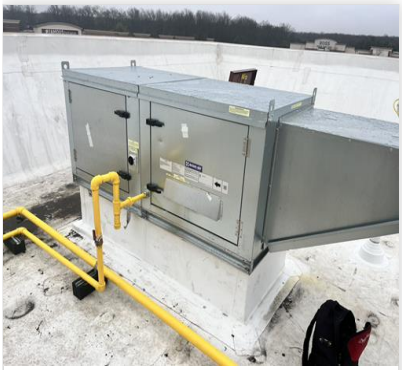
RTU-2

Comment:

RTU-2(2)
01/30/2024

MAU-1

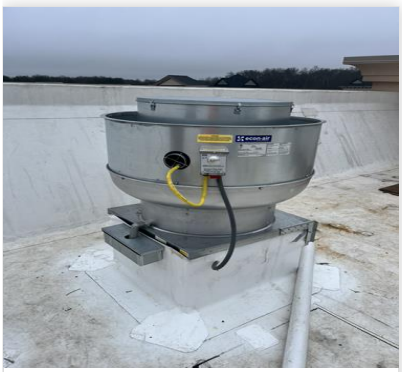
Comment:



MUA
01/30/2024

EF-1

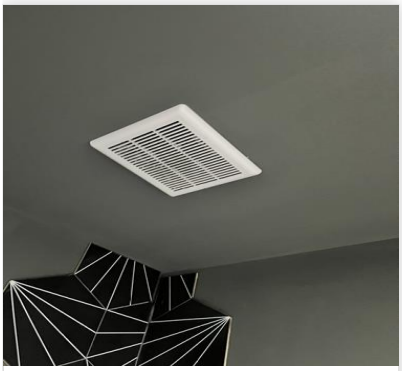
Comment:



EF-1
01/30/2024

EF-2

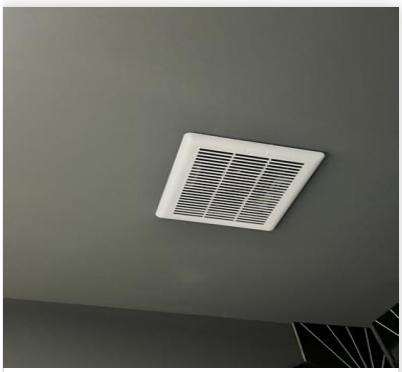
Comment:



EF-2
01/30/2024

EF-3

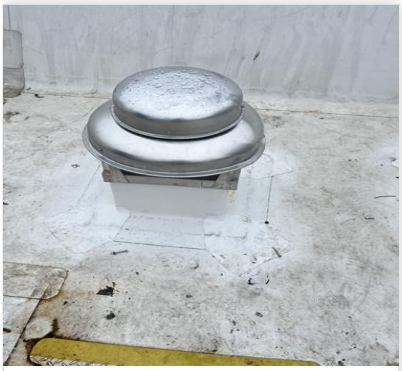
Comment:



EF-3(1)
01/30/2024

EF-5

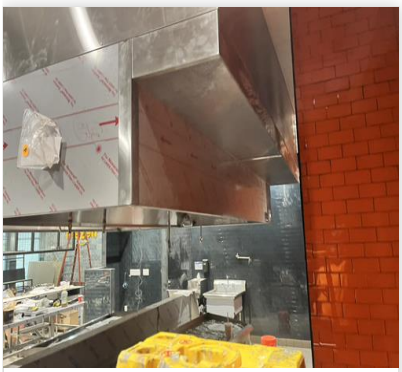
Comment:



EF-5
01/30/2024

HOOD-1 BACK

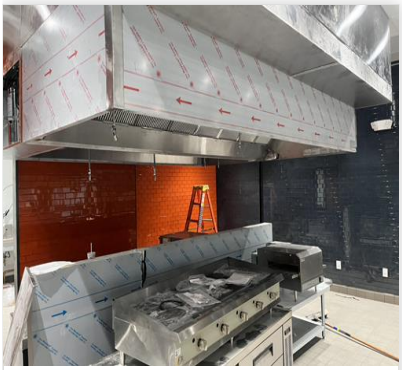
Comment:



Hood-1Back
01/30/2024

HOOD-1 FRONT

Comment:

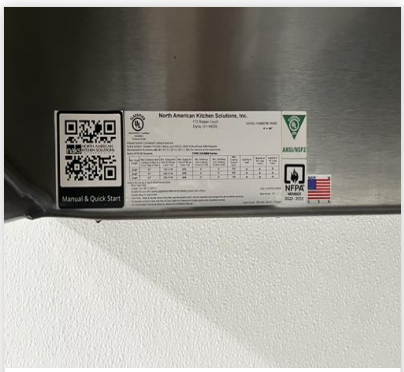


Hood-1Front
01/30/2024

HOOD-2

Comment:

hood-2
01/30/2024



Hood-2_info
01/30/2024

12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

CheckList Information

Name :	TECH - STEP 1: INITIAL WALKTHROUGH	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	12/26/2023 - Wale Odofin - National TAB		
Completed Date :	01/30/2024 - David Annan - National TAB		

CheckList Item Details

INITIAL SITE WALKTHROUGH

All diffusers and grilles are installed and match design?	Yes
Comment:	
All hood filters installed and accounted for?	Yes
Comment:	
Hoods are wired and have power?	Yes
Comment:	
Hood is free of alarms?	No
Comment: Hood has MUA interlock alarm active.	
Thermostats have power?	Yes
Comment:	
Have trades/general contractor been notified about any issues and are they created on FaciliBuild?	

Comment:

Yes

12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

CheckList Information

Name :	TECH - STEP 2: UNIT DATA AND EVAL	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	12/26/2023 - Wale Odofin - National TAB		
Completed Date :	01/30/2024 - David Annan - National TAB		

CheckList Item Details

UNIT DATA AND EVALUATION WHILE GATHERING UNIT DATA CHECK THE FOLLOWING:

RTU's/AHU's

Economizers are assembled and functional?	Yes
Comment:	
DCV Max damper opening position is set to minimum?	Yes
Comment:	
Free cooling enthalpy set point set for lowest setting (Typically "D")	Yes
Comment:	
Motors are all operating below the FLA rating?	Yes
Comment:	
Are belts tight?	
Comment:	
Yes	
If direct drive unit is the speed controller working.	

Comment:

Yes

Is gas piping installed and valves turned on?	Yes

Comment:

Unit free of noticeable noise and vibration	Yes

Comment:

EF's

Rotation is correct?	Yes

Comment:

Belts are tight?

Comment:

N/A

Grease cup installed on hood fan?	Yes

Comment:

Hinge kit installed installed on hood fan?	Yes

Comment:

Lean fan back. Is grease duct installation adequate and is duct ran all the way to the base of the fan?	Yes

Comment:

Flex conduit is long enough so that fan can be completely tilted back?	Yes

Comment:

There is no major leakage around base of fan?	Yes

Comment:

Is the motor operating below the motor FLA rating?	Yes

Comment:

For restroom fan(s) is the back draft damper installed and can it fully open?	N/A

Comment:

Unit free of noticeable noise and vibration?	Yes

Comment:

MUA

Rotation is correct?	Yes

Comment:

Gas piping is installed and valves are in on position?	Yes

Comment:

Heater tested and is functional?	Yes

Comment:

Internal motorized damper is fully opening?	No

Comment:

Motorize damper did not open due to missing wiring connections

Motor is operating below the FLA rating?	Yes

Comment:

Unit free of noticeable noise and vibration?	Yes

Comment:

HOODS

Kitchen equipment installed in proper places?	Yes

Comment:

Can kitchen equipment be turned on for final smoke test?	No

Comment:

Kitchen Equipment start up was not complete

DOCUMENTATION

Have trades/general contractor been notified about any issues and are they created on FaciliBuild?	Yes

Comment:

12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

CheckList Information

Name :	TECH - STEP 3: TEST, ADJUST AND BALANCE	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	12/26/2023 - Wale Odofin - National TAB		
Completed Date :	01/30/2024 - David Annan - National TAB		

CheckList Item Details

TEST, ADJUST, AND BALANCE ALL EQUIPMENT:

DURING TESTING MAKE NOTE OF THE FOLLOWING:

Is space free of drafting?	Yes
Comment:	
Is space comfortable in all areas?	Yes
Comment:	
Is the space free of ventilation noise?	Yes
Comment:	

If deviations from design were necessary to resolve 1-3 what were they? Otherwise put "NA".

Comment:

NA

12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

CheckList Information

Name :	TECH - STEP 4: FINAL TESTS	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	12/26/2023 - Wale Odofin - National TAB		
Completed Date :	01/30/2024 - David Annan - National TAB		

CheckList Item Details

FINAL TESTS

HOOD CAPTURE TEST

List equipment turned on for testing

Comment:

None

List smoke candle type used

Comment:

S102 45 Sec emitter

Smoke test capture - Perimeter of hood

Comment:

100%

Smoke test capture - Top of cooking surface

Comment:

100%

WITNESS

Date test was completed	12/27/2023

Comment:

TAB tech name / Firm

Comment:

David Annan/ National TAB

Site super name / Firm

Comment:

N/A

Owner representative name / Firm (if Applicable)

Comment:

N/A

Building pressure at front & back doors (All Systems On)

Comment:

ADDITIONAL

Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)

Comment:

No, MUA was does not have a reading due to the motorized damper not opening.

Thermostats are programmed?	Yes

Comment:

National TAB

Project: 12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

System/Unit: AHU/RTU

Asset: RTU1 AREA:DINING

Unit Data		
	Design	**Actual**
MFG	DAIKIN	DAIKIN
Serial Num	-	2208294534
Model Num	DBG120-150	DBG120-150
Type	RTU	RTU
Configuration	VERTICAL	Vertical
Num OA Filters 1	-	1
OA Filter Size 1	-	40X21
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2

Motor Data		
	Design	**Actual**
Motor MFG	-	US Motors
Frame	-	56HZ
Horsepower	3	2.0
Motor Rpm	-	1740
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	6.0

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	VL40
Motor Bore Size	-	7/8"
Motor Sheave SetPt	-	3.5
Fan Sheave Size	-	AK74H
Fan Sheave Bore	-	1"
Belt CL Distance	-	18 3/4"
Num of Belts	-	1
Belt Size	-	AX52
Belt Alignment	-	Good

Test Data		
	Design	**Actual**
SF CFM	3380	3421
SF RPM	-	761
RA CFM	2530	2503
OA CFM	850	918
RL Voltage	-	209/210/211
RL Amperage	-	4.5/4.5/4.4
SF Rotation	-	CW
RA Damper Position	-	6.60 V
Min OA Damper Position	-	3.40 V
Min OA Damper Type	-	Economizer
OA Enthalpy Setpt	-	ES5

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.35"
Fan Suction SP	-	-0.71"
Fan Discharge SP	-	0.54"
Total ESP	1.0"	0.89"
Fan Total SP	-	1.25"

General		
	Design	**Actual**
Fan Rotation Correct	-	Yes
Unit Filters Clean	-	Yes
Condensate Drain Installed	-	Yes

Completed By: David Annan on 12/27/2023

Notes:
Unable to adjust dining room grilles due to trash, materials and construction debris in the way. Was able to balance the restrooms and diffuser BOH.

Written By: David Annan on 01/30/2024

Diffuser Supply (GRD)

RTU1/DINING

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	DINING	NA	10"	320	0.91	137	207	208	65.0
SGRD2	DINING	NA	12"	320	0.91	211	310	312	97.5
SGRD3	DINING	NA	14"	320	0.91	205	301	303	94.7
SGRD4	DINING	NA	10"	320	0.91	173	254	257	80.3
SGRD5	DINING	NA	12"	320	0.91	222	326	331	103.4
SGRD6	DINING	NA	14"	320	0.91	215	316	321	100.3
SGRD7	DINING	NA	16"	320	0.91	369	542	549	171.6
SGRD8	DINING	NA	12"	320	0.91	161	237	239	74.7
SGRD9	DINING	NA	12"	320	0.91	258	379	383	119.7
SGRD10	DINING	NA	10"	320	1	168	260	279	87.2
SGRD11	RESTROOM	NA	6"	50	1	128	178	103	206.0
SGRD12	RESTROOM	NA	6"	50	1	51	64	52	104.0
SGRD13	CORRIDOR	NA	6"	80	1	113	124	84	105.0
Total				3380		2411	3498	3421	101.21%

National TAB

Project: 12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

System/Unit: AHU/RTU

Asset: RTU2 AREA:KITCHEN

Unit Data		
	Design	**Actual**
MFG	DAIKIN	DAIKIN
Serial Num	-	230379127
Model Num	DBG090-150	DBG0903D25CAA
Type	RTU	RTU
Configuration	VERTICAL	Vertical
Num OA Filters 1	-	1
OA Filter Size 1	-	40X21
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2

Motor Data		
	Design	**Actual**
Motor MFG	-	Broad-Ocean
Frame	-	N/L
Horsepower	3	2.4
Motor Rpm	-	1600
Phase	1	3
Rated Voltage	115	208-230
Rated Amperage	-	8.0-7.2

Drive Data		
	Design	**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	3420	3142
SF RPM	-	NA
RA CFM	2880	2600
OA CFM	540	542
RL Voltage	-	210/210/210
RL Amperage	-	3.0/2.9/3.0
SF Rotation	-	CW
RA Damper Position	-	7.25 V
Min OA Damper Position	-	2.75 V
Min OA Damper Type	-	Economizer
OA Enthalpy Setpt	-	ES5

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.89"
Fan Suction SP	-	-1.24"
Fan Discharge SP	-	0.53"
Total ESP	1.0'	1.42"
Fan Total SP	-	1.77"

General		
	Design	**Actual**
Fan Rotation Correct	-	Yes
Unit Filters Clean	-	Yes
Condensate Drain Installed	-	Yes

Completed By: David Annan on 12/27/2023

Diffuser Supply (GRD)

RTU2/KITCHEN

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	KITCHEN	NA	12"	550	1	516	-	516	93.8
SGRD2	KITCHEN	NA	12"	530	1	587	-	587	110.8
SGRD3	KITCHEN	NA	12"	530	1	489	-	489	92.3
SGRD4	KITCHEN	NA	12"	530	1	436	-	436	82.3
SGRD5	KITCHEN	NA	12"	530	1	509	-	509	96.0
SGRD6	KITCHEN	NA	12"	530	1	475	-	475	89.6
SGRD7	KITCHEN	NA	8"	220	1	130	-	130	59.1
Total				3420		3142	0	3142	91.87%

National TAB

Project: 12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

System/Unit: FAN - Exhaust

Asset: EF1 AREA:

Unit Data		
	Design	**Actual**
MFG	ECONAIRE	ECONAIRE
Model Num	EADU240H	EADU240H
Serial Num	-	6000562
Type	UTILITY	Upblast
Configuration	VERTICAL	Vertical

Motor Data		
	Design	**Actual**
Motor MFG	-	Westinghouse
Frame	-	215T
Horsepower	5 HP	5.0
Motor Rpm	-	1165
Phase	3	3
Voltage (rated)	208	208
Amperage (rated)	-	15.8
Service Factor	-	1.0

Drive Data		
	Design	**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	4837	4957
Fan RPM	998	915
Fan Rotation	-	CCW
Motor RPM	-	915
RL Voltage	-	209/208/209
RL Amperage	-	9.1 "VFD"
Suction ESP	-	-1.28"
Discharge ESP	-	ATM
Total ESP	1.8"	1.28"

Completed By: David Annan on 01/30/2024

National TAB

Project: 12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

System/Unit: FAN - Exhaust

Asset: EF2 AREA:

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	GC-148	GC-148
Serial Num	-	773352
Type	CEILING	Ceiling
Configuration	VERTICAL	Vertical

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	NA
Motor Rpm	-	NA
Phase	1	1
Voltage (rated)	115	120
Amperage (rated)	-	0.18
Service Factor	-	NA

Test Data		
	Design	**Actual**
CFM	100	62
Fan RPM	1075	NA
Fan Rotation	-	CCW
Motor RPM	-	NA
System SetPt	-	High speed
RL Voltage	-	122
RL Amperage	-	0.18
Total ESP	0.5"	NA
Fan Inlet SP	-	NA
Fan Discharge SP	-	NA

Completed By: David Annan on 12/27/2023

National TAB

Project: 12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

System/Unit: FAN - Exhaust

Asset: EF3 AREA:

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	GC-148	GC-148
Serial Num	-	769797
Type	CEILING	Ceiling
Configuration	VERTICAL	Vertical

Motor Data		
	Design	**Actual**
Motor MFG	-	
Frame	-	
Horsepower	-	
Motor Rpm	-	
Phase	1	1
Voltage (rated)	115	120
Amperage (rated)	-	0.18
Service Factor	-	NA

Test Data		
	Design	**Actual**
CFM	100	74
Fan RPM	1075	NA
Fan Rotation	-	CCW
Motor RPM	-	NA
System SetPt	-	High Speed
RL Voltage	-	123
RL Amperage	-	0.18
Total ESP	0.5"	NA
Fan Inlet SP	-	NA
Fan Discharge SP	-	NA

Completed By: David Annan on 12/27/2023

National TAB

Project: 12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

System/Unit: FAN - Exhaust

Asset: EF4 AREA:

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	GC-148	GC-148
Serial Num	-	DNE
Type	CEILING	DNE
Configuration	VERTICAL	DNE

Motor Data		
	Design	**Actual**
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	NA
Motor Rpm	-	NA
Phase	1	NA
Voltage (rated)	115	NA
Amperage (rated)	-	NA
Service Factor	-	NA

Test Data		
	Design	**Actual**
CFM	100	-
Fan RPM	1075	NA
Fan Rotation	-	NA
Motor RPM	-	NA
System SetPt	-	NA
RL Voltage	-	NA
RL Amperage	-	NA
Total ESP	0.5"	NA
Fan Inlet SP	-	NA
Fan Discharge SP	-	NA

Completed By: David Annan on 12/27/2023

National TAB

Project: 12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

System/Unit: FAN - Exhaust

Asset: EF5 AREA:

Unit Data		
	Design	**Actual**
MFG	HALIFAX	HALIFAX
Model Num	CHP448	CHP448
Serial Num	-	20230710
Type	DOWNBLAST	Downblast
Configuration	VERTICAL	Vertical

Motor Data		
	Design	**Actual**
Motor MFG	-	US Motors
Frame	-	42Y
Horsepower	-	0.1
Motor Rpm	-	1550
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	1.7
Service Factor	-	N/L

Test Data		
	Design	**Actual**
CFM	800	602
Fan RPM	1150	1550
Fan Rotation	-	CCW
Motor RPM	-	1550
System SetPt	-	High Speed
RL Voltage	-	123
RL Amperage	-	1.2
Total ESP	0.25"	0.61"
Fan Inlet SP	-	-0.61"
Fan Discharge SP	-	ATM

Completed By: David Annan on 12/27/2023

National TAB

Project: 12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

System/Unit: FAN - Supply

Asset: SF1 AREA:

Unit Data		
	Design	**Actual**
MFG	ECONAIRE	ECONAIRE
Model Num	EA2-D.250-20D	EA2-D.250-20D
Serial Num	-	6000562
Type	MUA	MUA
Configuration	VERTICAL	Vertical

Motor Data		
	Design	**Actual**
Motor MFG	-	Westinghouse
Frame	-	184T
Horsepower	-	5.0
Motor Rpm	-	1750
Phase	3	3
Voltage (rated)	208	208
Amperage (rated)	-	15.0
Service Factor	-	1.0

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

Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	Yes
Flame Status (pass/fail)	-	Pass
Inlet Air Temp SetPt	-	55
Discharge Air Temp SetPt	-	65
Air Flow Switch SP Actual	-	NA

Test Data		
	Design	**Actual**
CFM	3870	-
SF RPM	1632	NA
Motor RPM	-	NA
RL Voltage	-	209/209/209
RL Amperage	-	NA
Total ESP	-	NA
Fan Discharge SP	-	NA

General		
	Design	**Actual**
Fan Rotation Correct	-	Yes

Completed By: David Annan on 12/27/2023

Notes:
MUA is missing the damper wiring into the hood control panel. Was unable to manually open the damper for TAB. Would require D3 and D7 wires be landed on IL1A and IL1B.

Written By: David Annan on 12/27/2023

National TAB

Project: 12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

System/Unit: Kitchen Hood Type I

Asset: HD(BACK)1 AREA:

Unit Data		
	Design	**Actual**
MFG	ECON -AIR	ECON -AIR
Model Num	EX-2-ACPSP-F	EX-2-ACPSP-F
Job / Serial Num	-	6000562
Type	TYPE I	Type I high proximity
Hood length	123"	123"
Hood Width	54	54"
Supply Plenum Type	-	PSP
Supply Plenum Width	-	16"
Supply Plenum Length	-	135"

Test Data Exhaust		
	Design	**Actual**
Filter Type	CAPTRATE SOLO	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	-	144
Filter2 FPM	-	154
Filter3 FPM	-	170
Filter4 FPM	-	177
Filter5 FPM	-	167
Filter6 FPM	-	156
Filter7 FPM	-	166
Filter Ave FPM(corr)	-	162
CFM	2306	2359

Cooking Equipment		
	Design	**Actual**
Item 1	-	Grill
Item 2	-	Stove
Item 3	-	Oven

Test Data Supply		
	Design	**Actual**
Total AK Area	-	15
Kv factor (Vel)	-	0.91
Num of Readings	-	-
Reading1 FPM	-	-
Reading2 FPM	-	-
Reading3 FPM	-	-
Reading4 FPM	-	-
Reading5 FPM	-	-
Reading6 FPM	-	-
Reading7 FPM	-	-
Reading8 FPM	-	-
Reading9 FPM	-	-
Reading10 FPM	-	-
Reading11 FPM	-	-
Reading12 FPM	-	-
Reading13 FPM	-	-
Reading14 FPM	-	-
Ave FPM(corr)	-	-
CFM	2297	-

Completed By: David Annan on 12/27/2023

National TAB

Project: 12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

System/Unit: Kitchen Hood Type I

Asset: HD-(FRONT)1 AREA:

Unit Data		
	Design	**Actual**
MFG	ECON-AIR	ECON-AIR
Model Num	EX-2-ACPSP-F	EX-2-ACPSP-F
Job / Serial Num	-	6000562
Type	TYPE I	Type I High Proximity
Hood length	132"	135"
Hood Width	54"	"54"
Supply Plenum Type	-	PSP
Supply Plenum Width	-	135"
Supply Plenum Length	-	16"

Test Data Exhaust		
	Design	**Actual**
Filter Type	CAPTRATE SOLO	Captrate Solo
Filter Size 1	20X16	20X16
Filter Qty 1	8	8
Filter AK factor size 1	2.03	2.03
Filter Total AK Area	16.24	16.24
Filter1 FPM	-	146
Filter2 FPM	-	153
Filter3 FPM	-	162
Filter4 FPM	-	178
Filter5 FPM	-	178
Filter6 FPM	-	162
Filter7 FPM	-	154
Filter8 FPM	-	146
Filter Ave FPM(corr)	-	160
CFM	2531	2598

Cooking Equipment		
	Design	**Actual**
Item 1	-	Stove
Item 2	-	Broiler

Test Data Supply		
	Design	**Actual**
Total AK Area	-	15
Kv factor (Vel)	-	0.91
Num of Readings	-	NA
Reading1 FPM	-	-
Reading2 FPM	-	-
Reading3 FPM	-	-
Reading4 FPM	-	-
Reading5 FPM	-	-
Reading6 FPM	-	-
Reading7 FPM	-	-
Reading8 FPM	-	-
Reading9 FPM	-	-
Reading10 FPM	-	-
Reading11 FPM	-	-
Reading12 FPM	-	-
Reading13 FPM	-	-
Reading14 FPM	-	-
Ave FPM(corr)	-	-
CFM	2477	0

Completed By: David Annan on 12/27/2023

National TAB

Project: 12-25-23 MEZEH HAMILTON TOWNSHIP, NJ

System/Unit: Kitchen Hood Type II

Asset: HD2 AREA:DISHWASHER

Unit Data		
	Design	**Actual**
MFG	NA	NA
Model Num	NA	NA
Serial Num	-	162002
Type	-	Type II Canopy
Hood length	-	48"
Hood Width	-	48"

Test Data		
	Design	**Actual**
Exhaust CFM	800	602

Completed By: David Annan on 01/30/2024

Notes:
The fan is already running at the highest fan speed setting.

Written By: David Annan on 01/30/2024