Report By:

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

Report: TAB REPORT

Function: Test, Adjust, & Balance

Date: 07/31/2024

PROJECT

07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

7801 WINDROSE AVE

PLANO, TX 75254

Client

HAI Hospitality

National TAB

Project: 07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

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 are further details about your building performance including recommendations, asset data, and pictures. Our focus is to work with the trades to remedy any issues or deficiencies during the actual field balancing and not after the balancing has occurred to achieve a positive environment and outcome. The level of success is determined by the availability of the trades, possible parts needed, or time constraints.

FCU's
Each of the FCU's were measured at their terminal devices utilizing a flow hood. The sum of these readings is equal to the total flow for that particular unit. The total flow of each FCU was then adjusted to within tolerance of the specified design. Any equipment that fell outside of this tolerance is noted throughout the report.

DOAS
The DOAS unit supplies outside air to the FCU's via an open plenum return. The outside air was measured by traversing the outside air opening with a velgrid.

Outside air supply fan
The supply fan was added as a supplemental fan to the DOAS unit since the ductwork in the case was too small to accommodate the full airflow. The airflow for the supply fan was measured by traversing the inlet at the roof with a velgrid.

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.

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
FCU-1	SUNROOM DINING	6000	6042	6000	6042			0.0%	0.0%						
FCU-2	ENTRY DINING	6000	5936	6000	5936			0.0%	0.0%						
FCU-3	BOH	6000	5995	6000	5995			0.0%	0.0%						
FCU-4	PRIVATE DINING	1200	1318	1200	1318			0.0%	0.0%						
SF-1	OA	1850	1391	0	0	1850	1391	100.0%							
OSA-1	OA	2500	2610	0	0	2500	2610	100.0%	100.0%						
MUA-1	MUA									6200	6124				
KEF-1	1A & 1B											4350	4091		
KEF-2	HOOD 2											3400	3667		
KEF-3	DW											1400	981		
EF-4	RR													450	371
6217		23550	23292	19200	19291	4350	4001			6200	6124	9150	8739	450	371

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	10550	10125
TOTAL EXHAUST	9600	9110
NET AIRFLOW	950	1015

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H20)
FRONT	0.015
SIDE	0.01
REAR	0.02
AVERAGE	**0.015**

FINAL CHECKS

ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✓

MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW: ✓

PRESSURE FALLS WITHIN IMC TOLERANCE OF +/-0.02" W.C. ✓

NOTES:

CheckList List

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

07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

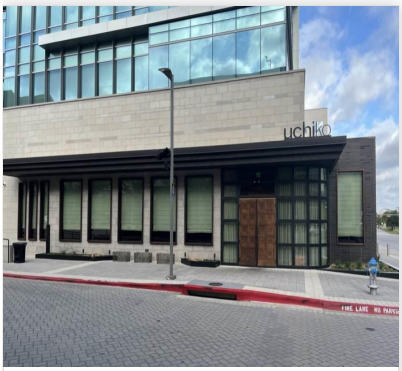
CheckList Information

Name :	TECH - SITE PICTURES	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/15/2024 - Brianna Biggs - National TAB		

CheckList Item Details

STORE FRONT

Comment:



08/26/2024

FCU-1

Comment:

07/30/2024

FCU-2

Comment:

07/30/2024

FCU-3

Comment:

07/30/2024

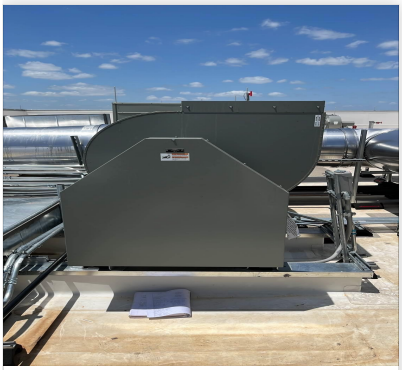
FCU-4

Comment:

08/08/2024

EF-1

Comment:



07/30/2024

EF-2

Comment:

07/30/2024

EF-3

Comment:

07/30/2024

EF-4

Comment:

07/30/2024

MUA-1

Comment:

07/30/2024

OSA-1

Comment:

07/30/2024

07/30/2024

HD-1A

Comment:

07/30/2024

HD-1B

Comment:

07/30/2024

HD-2

Comment:

07/30/2024

DISH-HD1

Comment:

07/30/2024

07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

CheckList Information

Name :	TECH - STEP 1: INITIAL WALKTHROUGH	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/15/2024 - Brianna Biggs - National TAB		
Completed Date :	07/30/2024 - Bayley Morvant - National TAB		

CheckList Item Details

INITIAL SITE WALKTHROUGH

All diffusers and grilles are installed and match design?	N/A

Comment:

They match where they should be installed, but cfm design does not match. FC-1, FC-2 and FC-3 diffuser design equals 8,000 cfm. Schedule design is 6,000 cfm per unit. units were balanced for total cfm to match schedule design.

All hood filters installed and accounted for?	Yes

Comment:

Hoods are wired and have power?	Yes

Comment:

Hood is free of alarms?	Yes

Comment:

Thermostats have power?	Yes

Comment:

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

Comment:

yes

07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

CheckList Information

Name :	TECH - STEP 2: UNIT DATA AND EVAL	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/15/2024 - Brianna Biggs - National TAB		
Completed Date :	08/08/2024 - Bayley Morvant - 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?	N/A
Comment:	
DCV Max damper opening position is set to minimum?	N/A
Comment:	
Free cooling enthalpy set point set for lowest setting (Typically "D")	N/A
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:

YES

Grease cup installed on hood fan?	No

Comment:

Hinge kit installed installed on hood fan?	No

Comment:

ALL FANS ARE UTILITY SET STYLE FANS.

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

Comment:

Flex conduit is long enough so that fan can be completely tilted back?	N/A

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?	No

Comment:

UNABLE TO TEST MUA-1 HEAT DUE TO OUTDOOR AMBIET TEMP

Internal motorized damper is fully opening?	Yes

Comment:

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?	Yes

Comment:

DOCUMENTATION

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

Comment:

07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

CheckList Information

Name :	TECH - STEP 3: TEST, ADJUST AND BALANCE	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/15/2024 - Brianna Biggs - National TAB		
Completed Date :	07/30/2024 - Bayley Morvant - 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:

ALL AREAS FEEL COMFORTABLE EXCEPT FOR FRONT ENTRY. THERE IS A NOTICABLE TEMPERATURE CHANGE WHEN WALKING INTO THE FRONT ENTRY AREA.

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:

National TAB

Project: 07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

System/Unit: AHU/RTU

Asset: DOAS1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Serial Num	-	22650757
Model Num	NA	RV-25-15I-J-F1
Type	-	DOAS
Configuration	-	HORIZONTAL
Num OA Filters 1	-	4
OA Filter Size 1	-	18X18
Num Final Filter 1	-	2
Final Filter Size 1	-	20X24X2
Num Final Filter 2	-	2
Final Filter Size 2	-	20X20X2

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	184T
Horsepower	-	5.00
Motor Rpm	-	1750
Phase	-	3
Rated Voltage	-	460
Rated Amperage	-	6.6

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	2500	2610
SF RPM	-	1313
RA CFM	-	0
OA CFM	-	2610
RL Voltage	-	416/416/416
RL Amperage	-	3.3/3.3/3.4
SF Rotation	-	CW
SF System SetPt	-	45Hz(62%)
RA Damper Position	-	NA
Min OA Damper Position	-	100% OPEN
Min OA Damper Type	-	OPOSED BLADE

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.13
Fan Suction SP	-	-0.33
Fan Discharge SP	-	1.33
Total ESP	-	1.46
Fan Total SP	-	1.79

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

Completed By: Bayley Morvant on 07/30/2024

Notes:
2610 CFM READING WAS OBTAINED VIA VELGRID READING OF DOAS OUTSIDE AIR INTAKE.

THE DUCT THAT SERVES THE MEZZANINE FROM THIS UNIT WAS ALSO READ VIA VELGRID AT 1348 CFM.

0.53" WC DISCHARGE MEASURED AT SUPPLY DUCT ON ROOF.

Written By: Will Turnbough on 07/29/2024

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Project: 07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

System/Unit: AHU/RTU

Asset: FCU1 AREA:SUNROOM DINING

Unit Data		
	Design	**Actual**
MFG	TRANE	LENNOX
Serial Num	-	5623D03085
Model Num	TWE18044	EL180XASD-1G
Type	FCU	FCU
Configuration	VERTICAL	HORIZONTAL
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2
Num Final Filter 2	-	1
Final Filter Size 2	-	16X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	184T
Horsepower	3	5.00
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	6.7

Drive Data	
	Actual
Motor Sheave Size	4.75"
Motor Bore Size	1 1/8"
Motor Sheave SetPt	2 TURNS OUT
Fan Sheave Size	AK86
Fan Sheave Bore	1 3/16"
Belt CL Distance	18.5"
Num of Belts	1
Belt Size	BX57
Belt Alignment	Verified

Test Data		
	Design	**Actual**
SF CFM	6000	6042
SF RPM	-	614
RA CFM	4675	6042
OA CFM	1325	*1
RL Voltage	-	491/485/483
RL Amperage	-	3.3/4.5/2.6
SF Rotation	-	CW
SF System SetPt	-	47Hz

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.05
Fan Discharge SP	-	0.02
Total ESP	0.60"	0.07

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	NO
Condensate Drain Installed	YES

Completed By: Bayley Morvant on 07/30/2024

Notes:
*1 UNIT GETS OSA FROM OPEN AIR PLENUM.

Written By: Bayley Morvant on 07/30/2024

National TAB

Project: 07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

System/Unit: AHU/RTU

Asset: FCU2 AREA:ENTY AND DINING

Unit Data		
	Design	**Actual**
MFG	TRANE	LENNOX
Serial Num	-	5623D05657
Model Num	TWE18044	EL180XASD-1G
Type	FCU	FCU
Configuration	VERTICAL	HORIZONTAL
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2
Num Final Filter 2	-	1
Final Filter Size 2	-	16X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	184T
Horsepower	3	5
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	6.7

Drive Data	
	Actual
Motor Sheave Size	4.75"
Motor Bore Size	1 1/8"
Motor Sheave SetPt	2 TURNS OUT
Fan Sheave Size	BK85
Fan Sheave Bore	1 3/16"
Belt CL Distance	18.5"
Num of Belts	1
Belt Size	BX57
Belt Alignment	VERIFIED

Test Data		
	Design	**Actual**
SF CFM	6000	5936
SF RPM	-	546
RA CFM	4675	5930
OA CFM	1325	*1
RL Voltage	-	490/491/493
RL Amperage	-	3.3/2.2/1.8
SF Rotation	-	CW
SF System SetPt	-	38.5Hz

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.03
Fan Discharge SP	-	0.05
Total ESP	0.60"	0.08

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	NO
Condensate Drain Installed	YES

Completed By: Bayley Morvant on 07/30/2024

Notes:
*1 UNIT GETS OSA FROM OPEN AIR PLENUM.

Written By: Bayley Morvant on 07/30/2024

National TAB

Project: 07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

System/Unit: AHU/RTU

Asset: FCU3 AREA:BOH

Unit Data		
	Design	**Actual**
MFG	TRANE	LENNOX
Serial Num	-	5623D03087
Model Num	TWE18044	EL180XASD-1G
Type	FCU	FCU
Configuration	VERTICAL	HORIZONTAL
Num Final Filter 1	-	4
Final Filter Size 1	-	16x25x2
Num Final Filter 2	-	1
Final Filter Size 2	-	20x25x2

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	184T
Horsepower	3	5
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	6.7

Drive Data	
	Actual
Motor Sheave Size	4.75"
Motor Bore Size	1 1/8"
Motor Sheave SetPt	2 TURNS OUT
Fan Sheave Size	BX86
Fan Sheave Bore	1 3/16"
Belt CL Distance	18.5"
Num of Belts	1
Belt Size	BX57
Belt Alignment	VERIFIED

Test Data		
	Design	**Actual**
SF CFM	6000	5995
SF RPM	-	651
RA CFM	4600	5995
OA CFM	1400	*1
RL Voltage	-	483/486/486
RL Amperage	-	5.6/3.9/4.6
SF Rotation	-	CW
SF System SetPt	-	46.50Hz

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.04
Fan Discharge SP	-	0.05
Total ESP	0.60"	0.09

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	NO
Condensate Drain Installed	Yes

Completed By: Bayley Morvant on 07/30/2024

Notes:
*1 UNIT GETS OSA FROM OPEN AIR PLENUM.

Written By: Bayley Morvant on 07/30/2024

National TAB

Project: 07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

System/Unit: AHU/RTU

Asset: FCU4 AREA:PRIVATE DINING

Unit Data		
	Design	**Actual**
MFG	TRANE	LENNOX
Serial Num	-	1623C06294
Model Num	TEM6A0C36	CBA27UHE-042-230-6-06
Type	FCU	FCU
Configuration	VERTICAL	HORIZONTAL
Num Final Filter 1	-	1
Final Filter Size 1	-	20X24

Motor Data		
	Design	**Actual**
Motor MFG	-	ND
Frame	-	ND
Horsepower	1/2	1.00
Motor Rpm	-	ND
Phase	3	1
Rated Voltage	208	208
Rated Amperage	-	7.5

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	1200	1318
SF RPM	-	DIRECT DRIVE
RA CFM	900	1312
OA CFM	300	*1
RL Voltage	-	208
RL Amperage	-	1.2
SF Rotation	-	CCW
SF System SetPt	-	MEDIUM-LOW SPEED

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.05
Fan Discharge SP	-	0.22
Total ESP	0.60"	0.27

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

Completed By: Bayley Morvant on 07/30/2024

Notes:
*1 UNIT GETS OSA FROM OPEN AIR PLENUM.

Written By: Bayley Morvant on 07/30/2024

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Project: 07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

System/Unit: FAN - Exhaust

Asset: EF1 AREA:MAIN HOODS 1A &1B

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	USF-24	USF-24-3-B1-00-01-01
Serial Num	-	22721504
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	VERTICAL	HORIZONTAL

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	182T
Horsepower	3	3
Motor Rpm	-	1765
Phase	3	3
Voltage (rated)	480	230
Amperage (rated)	-	8.4
Service Factor	-	1.15

Drive Data	
	Actual
Motor Sheave Size	2AK34
Motor Bore Size	1 1/8"
Motor Sheave SetPt	0 TURNS OUT
Fan Sheave Size	2AK64
Fan Sheave Bore	1 7/16"
Belt CL Distance	21.5"
Num of Belts	2
Belt Size	A56

Test Data		
	Design	**Actual**
CFM	4350	4091
Fan RPM	971	942
Fan Rotation	-	CCW
Motor RPM	-	1775
RL Voltage	-	226/223/224
RL Amperage	-	6.0/6.0/6.1
Suction ESP	-	Grease Duct
Discharge ESP	-	ATM
Total ESP	2.0"	ND

Completed By: Bayley Morvant on 07/30/2024

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Project: 07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

System/Unit: FAN - Exhaust

Asset: EF2 AREA:HOOD 2/WOOD FIRE GRILLE HOOD

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	USF-20	USF-20-3-B1-00-01-01
Serial Num	-	22721508
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	VERTICAL	HORIZONTAL

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	182T
Horsepower	3	3
Motor Rpm	-	1765
Phase	3	3
Voltage (rated)	480	230
Amperage (rated)	-	8.4
Service Factor	-	1.15

Drive Data	
	Actual
Motor Sheave Size	2AK30
Motor Bore Size	2AK30
Motor Sheave SetPt	1 1/8"
Fan Sheave Size	2AK39
Fan Sheave Bore	1 3/16"
Belt CL Distance	16.25"
Num of Belts	2
Belt Size	AX41

Test Data		
	Design	**Actual**
CFM	3400	3667
Fan RPM	1433	1440
Fan Rotation	-	CCW
Motor RPM	-	1765
RL Voltage	-	225/221/222
RL Amperage	-	7.1/7.2/7.2
Suction ESP	-	GREASE DUCT
Discharge ESP	-	ATM
Total ESP	3.0"	ND

Completed By: Bayley Morvant on 07/30/2024

National TAB

Project: 07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

System/Unit: FAN - Exhaust

Asset: EF3 AREA:DISHWASHING HOOD

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	USF-13	USF-13-5-B1-00-01-01
Serial Num	-	22657998
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	VERTICAL	HORIZONTAL

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	56
Horsepower	3/4	0.75
Motor Rpm	-	1760
Phase	3	3
Voltage (rated)	480	230
Amperage (rated)	-	2.88
Service Factor	-	1.25

Drive Data	
	Actual
Motor Sheave Size	AK30
Motor Bore Size	5/8"
Motor Sheave SetPt	HUB PULLEY
Fan Sheave Size	AK34
Fan Sheave Bore	1.00"
Belt CL Distance	11"
Num of Belts	1
Belt Size	A30

Test Data		
	Design	**Actual**
CFM	1400	981
Fan RPM	1580	1542
Fan Rotation	-	CW
Motor RPM	-	1760
RL Voltage	-	210/213/213
RL Amperage	-	1.9/1.9/1.9
Suction ESP	-	-0.93
Discharge ESP	-	ATM
Total ESP	1.25"	-0.93

Completed By: Bayley Morvant on 07/30/2024

National TAB

Project: 07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

System/Unit: FAN - Exhaust

Asset: EF4 AREA:RESTROOMS

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	USF-09	USF-09-5-B1-00-01-01
Serial Num	-	22658006
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	VERTICAL	HORIZONTAL

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	W56
Horsepower	3/4	1/4
Motor Rpm	-	1740
Phase	3	1
Voltage (rated)	480	115
Amperage (rated)	-	2.92
Service Factor	-	1.35

Drive Data	
	Actual
Motor Sheave Size	AK32
Motor Bore Size	5/8"
Motor Sheave SetPt	HUB PULLEY
Fan Sheave Size	AK41
Fan Sheave Bore	1.00"
Belt CL Distance	9.25"
Num of Belts	1
Belt Size	3L290R

Test Data		
	Design	**Actual**
CFM	425	371
Fan RPM	1432	2721
Fan Rotation	-	CW
Motor RPM	-	1740
RL Voltage	-	122
RL Amperage	-	2.6
Suction ESP	-	-0.31
Discharge ESP	-	ATM
Total ESP	0.5"	0.31

Completed By: Bayley Morvant on 07/30/2024

Notes:
1: 31
2: 46
3: 206
4: 44
5: 44

Written By: Bayley Morvant on 07/29/2024

National TAB

Project: 07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

System/Unit: FAN - Supply

Asset: MUA1 AREA:COOKLINE

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	RV-45-25I-J-F1	RV-45-25I-J-F1
Serial Num	-	22650748
Type	MUA	MUA
Configuration	VERTICAL	HORIZONTAL

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	184T
Horsepower	7.5	5.00
Motor Rpm	-	1750
Phase	3	3
Voltage (rated)	480	460
Amperage (rated)	-	6.6
Service Factor	-	1.15

Drive Data	
	Actual
Motor Sheave Size	DIRECT DRIVE
Motor Bore Size	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 Verified	DIRECT DRIVE

Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	*1
Flame Status (pass/fail)	-	*1
Inlet Air Temp SetPt	55	ND
Discharge Air Temp SetPt	60	72
Air Flow Switch SP Actual	-	ND

Test Data		
	Design	**Actual**
CFM	6200	6124
SF RPM	-	DIRECT DRIVE
Motor RPM	-	DIRECT DRIVE
SF System SetPt	-	55.08Hz (100%)
RL Voltage	-	496/493/496
RL Amperage	-	6.1/6.1/6.3
Total ESP	-	2.21
Fan Discharge SP	-	2.21

General	
	Actual
Fan Rotation Correct	YES

Completed By: Bayley Morvant on 07/30/2024

Notes:
UNABLE TO TEST HEAT DUE TO AMBIET OUTDOOR TEMP.

Written By: Bayley Morvant on 07/30/2024

National TAB

Project: 07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

System/Unit: FAN - Supply

Asset: SF1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	NA	BSQ-180-5-X
Serial Num	-	23495188
Type	-	MUA
Configuration	-	HORIZONTAL

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	56
Horsepower	-	1/2
Motor Rpm	-	1765
Phase	-	3
Voltage (rated)	-	460
Amperage (rated)	-	0.861
Service Factor	-	1.25

Drive Data	
	Actual
Motor Sheave Size	1VP34
Motor Bore Size	5/8"
Fan Sheave Size	AK64
Fan Sheave Bore	1"
Belt CL Distance	20.5"
Num of Belts	1
Belt Size	4L560R
Belt Alignment Verified	VERIFIED

Test Data		
	Design	**Actual**
CFM	1850	1391
SF RPM	-	813
Motor RPM	-	1777
SF System SetPt	-	HIGH SPEED
RL Voltage	-	491/487/485
RL Amperage	-	0.8/0.8/0.8
Total ESP	-	0.26
Fan Discharge SP	-	ATM

General	
	Actual
Fan Rotation Correct	YES

Completed By: Bayley Morvant on 07/30/2024

National TAB

Project: 07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

System/Unit: Kitchen Hood Type I

Asset: HD2 AREA:SERVES WOOD FIRE GRILLE BEHIND SUSHI BAR SERVED BY EF-2

Unit Data		
	Design	**Actual**
MFG	ACCUREX	ACCUREX
Model Num	XXEW-95-S	XXEW-95.00-S
Job / Serial Num	-	22802804
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	95"	95"
Hood Width	60"	60"
Supply Plenum Type	-	PSP
Supply Plenum Width	18"	18"
Supply Plenum Length	95"	95"

Test Data Exhaust		
	Design	**Actual**
Filter Type	XTRACTOR	EXTRACTOR
Filter Size 1	16X20	16X20
Filter Size 2	20X20	20X20
Filter Qty 1	2	2
Filter Qty 2	3	3
Filter AK factor size 1	2.00	2.00
Filters AK factor size 2	3.00	3.00
Filter Total AK Area	13	13.00
Filter1 FPM	-	282
Filter2 FPM	-	293
Filter3 FPM	-	267
Filter4 FPM	-	276
Filter5 FPM	-	294
Filter Ave FPM(corr)	-	282
CFM	3400	3667

Cooking Equipment	
	Actual
Item 1	OPEN FIRE GRILL

Test Data Supply		
	Design	**Actual**
Total AK Area	9.24	11.875
Kv factor (Vel)	0.88	0.88
Num of Readings	-	8
Reading1 FPM	-	232
Reading2 FPM	-	217
Reading3 FPM	-	185
Reading4 FPM	-	213
Reading5 FPM	-	234
Reading6 FPM	-	217
Reading7 FPM	-	221
Reading8 FPM	-	217
Ave FPM(corr)	-	215
CFM	2720	2246

Completed By: Bayley Morvant on 07/30/2024

National TAB

Project: 07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

System/Unit: Kitchen Hood Type I

Asset: HD-A1 AREA:LEFT HOOD

Unit Data		
	Design	**Actual**
MFG	ACCUREX	ACCUREX
Model Num	XXEW-116-S	XXEW-116.00-S
Job / Serial Num	-	22802798
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	116"	116"
Hood Width	60"	60"
Supply Plenum Type	-	PSP
Supply Plenum Width	14"	14"
Supply Plenum Length	128"	128"

Test Data Exhaust		
	Design	**Actual**
Filter Type	XTRACTOR	XTRACTOR
Filter Size 1	16X20	16X20
Filter Size 2	20X20	20X20
Filter Qty 1	1	1
Filter Qty 2	5	5
Filter AK factor size 1	2.00	2.00
Filters AK factor size 2	3.00	3.00
Filter Total AK Area	17	17.00
Filter1 FPM	-	105
Filter2 FPM	-	118
Filter3 FPM	-	137
Filter4 FPM	-	147
Filter5 FPM	-	116
Filter6 FPM	-	117
Filter Ave FPM(corr)	-	123
CFM	2175	2091

Cooking Equipment	
	Actual
Item 1	OVEN
Item 2	FLAT TOP
Item 3	GAS STOVE

Test Data Supply		
	Design	**Actual**
Total AK Area	12.44	12.44
Kv factor (Vel)	0.89	0.89
Num of Readings	-	11
Reading1 FPM	-	173
Reading2 FPM	-	208
Reading3 FPM	-	226
Reading4 FPM	-	181
Reading5 FPM	-	198
Reading6 FPM	-	176
Reading7 FPM	-	154
Reading8 FPM	-	73
Reading9 FPM	-	81
Reading10 FPM	-	76
Reading11 FPM	-	109
Ave FPM(corr)	-	150
CFM	1826	1660

Completed By: Bayley Morvant on 07/30/2024

National TAB

Project: 07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

System/Unit: Kitchen Hood Type I

Asset: HD-B1 AREA:RIGHT HOOD SERVED BY

Unit Data		
	Design	**Actual**
MFG	ACCUREX	ACCUREX
Model Num	XXEW-116-S	XXEW-115.00-S
Job / Serial Num	-	22802800
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	115"	115"
Hood Width	60"	60"
Supply Plenum Type	-	PSP
Supply Plenum Width	14"	14"
Supply Plenum Length	116"	115"

Test Data Exhaust		
	Design	**Actual**
Filter Type	X TRACTOR	XTRACTOR
Filter Size 1	16X20	16X20
Filter Size 2	20X20	20X20
Filter Qty 1	2	2
Filter Qty 2	4	4
Filter AK factor size 1	2.00	2.00
Filters AK factor size 2	3.00	3.00
Filter Total AK Area	16	16.00
Filter1 FPM	-	131
Filter2 FPM	-	114
Filter3 FPM	-	121
Filter4 FPM	-	135
Filter5 FPM	-	135
Filter6 FPM	-	115
Filter Ave FPM(corr)	-	125
CFM	2175	2000

Cooking Equipment	
	Actual
Item 1	GAS STOVE
Item 2	GAS STOVE
Item 3	FRYER

Test Data Supply		
	Design	**Actual**
Total AK Area	11.28	11.18
Kv factor (Vel)	0.89	0.89
Num of Readings	-	10
Reading1 FPM	-	135
Reading2 FPM	-	105
Reading3 FPM	-	106
Reading4 FPM	-	170
Reading5 FPM	-	276
Reading6 FPM	-	283
Reading7 FPM	-	300
Reading8 FPM	-	290
Reading9 FPM	-	290
Reading10 FPM	-	275
Ave FPM(corr)	-	223
CFM	1654	2218

Completed By: Bayley Morvant on 07/30/2024

National TAB

Project: 07-18-24 UCHIKO (LEGACY WEST) PLANO, TX

System/Unit: Kitchen Hood Type II

Asset: DISH HD1 AREA:SERVED BY EF-3

Unit Data		
	Design	**Actual**
MFG	ACCUREX	ACCUREX
Model Num	XD1-84-S	XD1-84.00-S
Serial Num	-	22802797
Type	TYPE II CANOPY	TYPE II CANOPY
Hood length	84"	84"
Hood Width	36"	39"

Test Data		
	Design	**Actual**
Exhaust CFM	1400	981

Completed By: Bayley Morvant on 07/30/2024