Report By:

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

Report: TAB REPORT

Function: Test, Adjust, & Balance

Date: 09/24/2024

PROJECT

09-09-24 YARD HOUSE - SAN ANTONIO, TX

15900 La Cantera Pkwy

San Antonio, TX 78256

Client

Air Care Experts

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

Table Of Contents

1329 E Kemper Rd
Suite 4210
Cincinnati, OH 45246
[855] 682 6822

National TAB was called to Yard House La Cantera San Antonio TX to address concerns of humidity/condensation, in the space. Initial findings were of positive building pressure (+0.022" W.C.). Initially employees reported negative building pressure and large drafts of outside air into the space when exterior doors were opened, but this had improved since the building received new RTU-4.

Supply and exhaust CFM values were measured for each hood. Supply from the MUA was found to be right at design. Hood exhaust values ranged from 72%-120% of design air flow, however no changes were made to hood exhaust air flow as the hoods were reported to be performing well. Attention was mostly given to RTUs.

RTUs 1-3 were read for supply air flow via the economizer, or the return air opening as was the case for RTU-3. This was due to duct/diffusers being located high above the floor. RTU-1 was very low on supply air flow initially due to a loose drive belt. RTU-4 in the kitchen was read via a flow hood and found initially to be at 78% of design air flow. All RTUs were adjusted to bring supply air flow to within tolerance, and outside air was set.

After all changes were made, the final building pressure was recorded at +0.018" W.C. All areas feel comfortable, and no condensation is noted.

Issue List

- KEF-2
- Missing Outside Air Filters
- MUA

09-09-24 YARD HOUSE - SAN ANTONIO, TX

Project Issue Information

Issue Name : KEF-2

Description : KEF-2 is missing hinge kit. Unit is not secured to curb.

Created By : National TAB

Assigned To : National TAB - Will Turnbough

Status : Open

Priority :

Asset Tag :

Originated Date : 09/25/2024 - Wesley John - National TAB

Project Issue File Details

09/25/2024

09-09-24 YARD HOUSE - SAN ANTONIO, TX

Project Issue Information

Issue Name : Missing Outside Air Filters

Description : RTU-1&2 are missing outside air filters. Recommend replacement.

Created By : National TAB

Assigned To : National TAB - Will Turnbough

Status : Open

Priority :

Asset Tag :

Originated Date : 09/24/2024 - Wesley John - National TAB

Project Issue File Details

09/24/2024

09-09-24 YARD HOUSE - SAN ANTONIO, TX

Project Issue Information

Issue Name :	MUA		
Description :	MUA cooling coil was frozen until mechanical adjusted cooling set point. Recommend monitoring. Unit has broken/missing filters. Recommend repair or replacement. Bottom of unit is rusted out. Recommend repair.		
Created By :	National TAB	**Assigned To :**	National TAB - Will Turnbough
Status :	Open		
Priority :		**Asset Tag :**	
Originated Date :	09/25/2024 - Wesley John - 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/ENTRY	9000	8638	7800	7490	1200	1148	13.3%	13.3%						
RTU-2	DINING/RESTROOMS	9000	8552	7800	7380	1200	1172	13.3%	13.7%						
RTU-3	DINING	9000	9412	7800	9412	1200	0	13.3%	0.0%						
RTU-4	KITCHEN	10000	10141	8800	8902	1200	1239	12.0%	12.2%						
MUA-1	HOODS									13650	13727				
KEF-1	HOOD-1											2575	3091		
KEF-2	HOOD-2											3540	2544		
KEF-3	HOOD-3											1900	1699		
KEF-4	HOOD-4											2885	2384		
KEF-5	HOOD-5											4325	3323		
KEF-6	HOOD-6											1575	1621		
EF-7	CUSTOMER RESTROOM													1000	391
EF-8	EMPLOYEE RESTROOM													200	191
TOTALS		37000	36743	32200	33184	4800	3559			13650	13727	16800	14662	1200	582

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	18450	17286
TOTAL EXHAUST	18000	15244
NET AIRFLOW	450	2042

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H20)
FRONT	0.018
SIDE	-
REAR	-
AVERAGE	**0.018**

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

09-09-24 YARD HOUSE - SAN ANTONIO, TX

CheckList Information

Name :	TECH - SITE PICTURES	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	09/06/2024 - Brian Turnbough - National TAB		
Completed Date :	09/11/2024 - Wesley John - National TAB		

CheckList Item Details

STORE FRONT

Comment:

09/10/2024

RTU-1

Comment:

09/10/2024

RTU-2

Comment:

09/10/2024

RTU-3

Comment:

09/10/2024

RTU-4

Comment:

09/10/2024

MUA-1

Comment:

09/10/2024

MUA-1 CU

Comment:

09/10/2024

EF-1

Comment:

09/10/2024

EF-2&4

Comment:

09/10/2024

EF-3

Comment:

09/10/2024

EF-5

Comment:

09/10/2024

EF-6

Comment:

09/10/2024

EF-7&8

Comment:

09/10/2024

HOOD-1

Comment:

09/10/2024

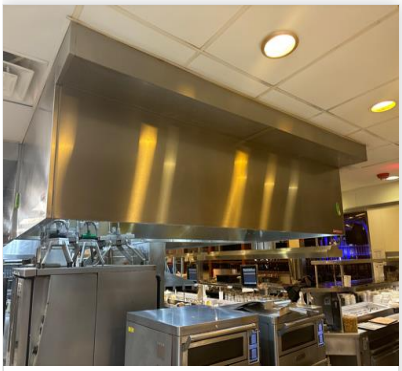
HOOD-2

Comment:

09/10/2024

HOOD-3

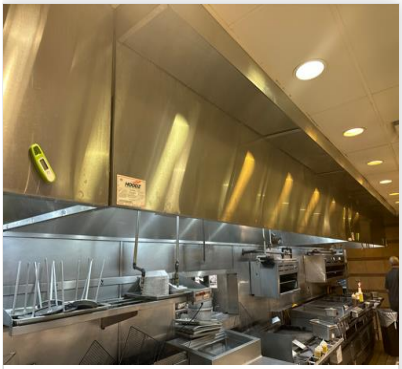
Comment:



09/10/2024

HOOD-4

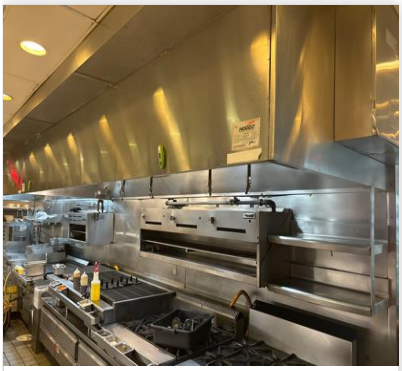
Comment:



09/10/2024

HOOD-5

Comment:



09/10/2024

HOOD-6

Comment:

09/10/2024

CheckList List

- REVIVE CONDITIONS
- TECH - STEP 1: INITIAL SITE WALKTHROUGH
- TECH - STEP 2: UNIT DATA AND EVAL
- TECH - STEP 3: INITIAL SITE WALKTHROUGH
- TECH - STEP 4: FINAL TESTS

09-09-24 YARD HOUSE - SAN ANTONIO, TX

CheckList Information

Name :	REVIVE CONDITIONS	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	09/11/2024 - Brian Turnbough - National TAB		
Completed Date :	09/24/2024 - Wesley John - National TAB		

CheckList Item Details

INITIAL BUILDING REVIEW:

What is the initial building pressure before making any changes?

Comment:

+0.022"

Are thermostats programmed? Yes

Comment:

Are building pressure relief working properly?

Comment:

N/A

INITIAL AIRFLOWS:

SUPPLY RTU-1

Comment:

4194

OA RTU-1

Comment:

313

SUPPLY RTU-2

Comment:

7934

OA RTU-2

Comment:

1243

SUPPLY RTU-3

Comment:

10064

OA RTU-3

Comment:

0

SUPPLY RTU-4

Comment:

7819

OA RTU-4

Comment:

413

KEF-1

Comment:

3091

KEF-2

Comment:

2544

KEF-3

Comment:

1699

KEF-4

Comment:

2384

KEF-5

Comment:

3323

KEF-6

Comment:

1964

EF-7

Comment:

391

EF-8

Comment:

262

MUA-1

Comment:

13727

09-09-24 YARD HOUSE - SAN ANTONIO, TX

CheckList Information

Name :	TECH - STEP 1: INITIAL SITE WALKTHROUGH	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	09/06/2024 - Brian Turnbough - National TAB		
Completed Date :	09/24/2024 - Wesley John - 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?	No
Comment: 12x18 FILTER GAP ON HOOD-1	
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	

09-09-24 YARD HOUSE - SAN ANTONIO, TX

CheckList Information

Name :	TECH - STEP 2: UNIT DATA AND EVAL	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	09/06/2024 - Brian Turnbough - National TAB		
Completed Date :	09/24/2024 - Wesley John - 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: MISSING ON RTU-3	
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:

YES

Grease cup installed on hood fan?	Yes

Comment:

Hinge kit installed installed on hood fan?	Yes

Comment:

NO HINGE KIT INSTALLED ON KEF-2. FAN IS NOT SECURED TO CURB IN ANY WAY.

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?	Yes
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?	N/A
Comment:	
Heater tested and is functional?	N/A
Comment:	
Internal motorized damper is fully opening?	N/A
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:

09-09-24 YARD HOUSE - SAN ANTONIO, TX

CheckList Information

Name :	TECH - STEP 3: INITIAL SITE WALKTHROUGH	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	09/06/2024 - Brian Turnbough - National TAB		
Completed Date :	09/24/2024 - Wesley John - 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	

09-09-24 YARD HOUSE - SAN ANTONIO, TX

CheckList Information

Name :	TECH - STEP 4: FINAL TESTS	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	09/06/2024 - Brian Turnbough - National TAB		
Completed Date :	09/24/2024 - Wesley John - National TAB		

CheckList Item Details

FINAL TESTS

HOOD CAPTURE TEST

List equipment turned on for testing

Comment:

ALL

List smoke candle type used

Comment:

OBSERVED COOKING

Smoke test capture - Perimeter of hood

Comment:

100%

Smoke test capture - Top of cooking surface

Comment:

100%

WITNESS

Date test was completed	09/10/2024

Comment:

TAB tech name / Firm

Comment:

WESLEY JOHN / NATIONAL TAB

Site super name / Firm

Comment:

OPEN STORE. NO SITE SUPER. WITNESS TO SMOKE CAPTURE WAS CHUCK MCCABE.

Owner representative name / Firm (if Applicable)

Comment:

N/A

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

Comment:

FRONT 0.018"

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:

YES

Thermostats are programmed?	Yes

Comment:

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: AHU/RTU

Asset: RTU1 AREA:DINING/ENTRY

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Serial Num	-	925100593D
Model Num	NA	YCD301C4LACA
Type	-	RTU
Configuration	-	VERTICAL DISCHARGE
Num OA Filters 1	-	MISSING
OA Filter Size 1	-	MISSING
Num Final Filter 1	-	4
Final Filter Size 1	-	20x20x2
Num Final Filter 2	-	4
Final Filter Size 2	-	20x25x2

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	184T
Horsepower	-	5.0
Motor Rpm	-	3465
Phase	-	3
Rated Voltage	-	460
Rated Amperage	-	8.72

Drive Data	
	Actual
Motor Sheave Size	1VP50
Motor Bore Size	1 1/8"
Motor Sheave SetPt	1.0 TURN OPEN
Fan Sheave Size	BK190
Fan Sheave Bore	1 3/16"
Belt CL Distance	21 1/2"
Num of Belts	1
Belt Size	BX81
Belt Alignment	CORRECT

Test Data		
	Design	**Actual**
SF CFM	9000	8638
SF RPM	-	869
RA CFM	7800	7490
OA CFM	1200	1148
RL Voltage	-	476/479/478
RL Amperage	-	5.6/5.8/5.7
SF Rotation	-	CCW
Min OA Damper Position	-	3/4"
Min OA Damper Type	-	SINGLE BLADE
OA Enthalpy Setpt	-	E

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.38"
Fan Suction SP	-	-0.74"
Fan Discharge SP	-	0.49"
Total ESP	-	0.87"
Fan Total SP	-	1.23"

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

Completed By: Wesley John on 09/24/2024

Notes:
UNABLE TO REACH SUPPLY GRILLES/DUCT TO MEASURE. MEASURED SUPPLY VIA ECONOMIZER.

Written By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: AHU/RTU

Asset: RTU2 AREA:DINING/RESTROOMS

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Serial Num	-	925100530D
Model Num	NA	YCD301C4LACA
Type	-	RTU
Configuration	-	VERTICAL DISCHARGE
Num OA Filters 1	-	MISSING
OA Filter Size 1	-	MISSING
Num Final Filter 1	-	4
Final Filter Size 1	-	20x20x2
Num Final Filter 2	-	4
Final Filter Size 2	-	20x25x2

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	184T
Horsepower	-	5.0
Motor Rpm	-	3465
Phase	-	3
Rated Voltage	-	460
Rated Amperage	-	8.72

Drive Data	
	Actual
Motor Sheave Size	1VP50
Motor Bore Size	1 1/8"
Motor Sheave SetPt	1 TURN OPEN
Fan Sheave Size	BK190
Fan Sheave Bore	1 3/16"
Belt CL Distance	21 1/2"
Num of Belts	1
Belt Size	BX81
Belt Alignment	CORRECT

Test Data		
	Design	**Actual**
SF CFM	9000	8552
SF RPM	-	865
RA CFM	7800	7380
OA CFM	1200	1172
RL Voltage	-	481/483/482
RL Amperage	-	5.9/6.2/6.1
SF Rotation	-	CCW
Min OA Damper Position	-	3/4"
Min OA Damper Type	-	SINGLE BLADE
OA Enthalpy Setpt	-	E

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.63"
Fan Suction SP	-	-0.91"
Fan Discharge SP	-	0.38"
Total ESP	-	1.01"
Fan Total SP	-	1.29"

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

Completed By: Wesley John on 09/24/2024

Notes:
UNABLE TO REACH SUPPLY GRILLES/DUCT TO MEASURE. MEASURED SUPPLY VIA ECONOMIZER.

Written By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: AHU/RTU

Asset: RTU3 AREA:DINING

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Serial Num	-	17021238JA
Model Num	NA	GAD300A4EHA
Type	-	RTU
Configuration	-	VERTICAL DISCHARGE
Num OA Filters 1	-	MISSING
OA Filter Size 1	-	MISSING
Num Final Filter 1	-	8
Final Filter Size 1	-	20x25x2

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	184TZ
Horsepower	-	7.5
Motor Rpm	-	3465
Phase	-	3
Rated Voltage	-	460
Rated Amperage	-	8.67

Drive Data	
	Actual
Motor Sheave Size	1VP50
Motor Bore Size	1 1/8"
Motor Sheave SetPt	1 TURN OPEN
Fan Sheave Size	BK140
Fan Sheave Bore	1 7/16"
Belt CL Distance	14 3/4"
Num of Belts	1
Belt Size	BX56
Belt Alignment	CORRECT

Test Data		
	Design	**Actual**
SF CFM	9000	9412
SF RPM	-	1071
RA CFM	7800	9412
OA CFM	1200	0
RL Voltage	-	480/479/480
RL Amperage	-	7.6/7.6/7.8
SF Rotation	-	CCW
RA Damper Position	-	N/A
Min OA Damper Position	-	CLOSED
Min OA Damper Type	-	N/A

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.41"
Fan Suction SP	-	-0.85"
Fan Discharge SP	-	0.70"
Total ESP	-	1.11"
Fan Total SP	-	1.55"

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

Completed By: Wesley John on 09/24/2024

Notes:
UNABLE TO REACH SUPPLY GRILLES/DUCT TO MEASURE. MEASURED SUPPLY VIA RETURN AIR OPENING INSIDE UNIT.

Written By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: AHU/RTU

Asset: RTU4 AREA:KITCHEN

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Serial Num	-	234310326D
Model Num	NA	YSJ300A4S0L02D
Type	-	RTU
Configuration	-	VERTICAL DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	18X80
Num Final Filter 1	-	8
Final Filter Size 1	-	20x24x2

Motor Data		
	Design	**Actual**
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	(2) 5.0
Motor Rpm	-	NL
Phase	-	3
Rated Voltage	-	460
Rated Amperage	-	(2) 5.5

Test Data		
	Design	**Actual**
SF CFM	10000	10141
SF RPM	-	DIRECT DRIVE
RA CFM	8800	8902
OA CFM	1200	1239
RL Voltage	-	480/482/481
RL Amperage	-	7.9/7.6/7.7
SF Rotation	-	CCW
SF System SetPt	-	100%
RA Damper Position	-	87%
Min OA Damper Position	-	13%
Min OA Damper Type	-	SINGLE BLADE

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.52"
Fan Suction SP	-	-1.56"
Fan Discharge SP	-	0.56"
Total ESP	-	1.08"
Fan Total SP	-	2.12"

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

Completed By: Wesley John on 09/24/2024

Notes:
SUPPLY FAN SPEED SET POINT 100%.

Written By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: FAN - Exhaust

Asset: EF7 AREA:CUSTOMER RESTROOM

Unit Data		
	Design	**Actual**
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	DDIIFA	DR10HFA
Serial Num	-	3872739
Type	-	CENTRIFUGAL
Configuration	-	DOWNBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	HSSA
Frame	-	NL
Horsepower	-	1/15
Motor Rpm	-	1550
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	0.94
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	1000	391
Fan RPM	-	1550
Fan Rotation	-	CCW
Motor RPM	-	1550
System SetPt	-	HIGH
RL Voltage	-	121
RL Amperage	-	0.50
Total ESP	-	0.31"
Fan Inlet SP	-	-0.31"
Fan Discharge SP	-	ATM

Completed By: Wesley John on 09/24/2024

Notes:
FAN OPERATING AT 39%. ORIGINAL PLANS CALL FOR 1/3 HP MOTOR. ACTUAL FAN HAS 1/15 HP MOTOR.

Written By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: FAN - Exhaust

Asset: EF8 AREA:EMPLOYEE RESTROOM

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DR10FA	DR10HFA
Serial Num	-	3872739
Type	-	CENTRIFUGAL
Configuration	-	DOWNBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	HSSA
Frame	-	NL
Horsepower	-	1/15
Motor Rpm	-	1550
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	0.94
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	200	191
Fan RPM	-	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
System SetPt	-	HIGH
RL Voltage	-	121
RL Amperage	-	0.8
Total ESP	-	0.31"
Fan Inlet SP	-	-0.31"
Fan Discharge SP	-	ATM

Completed By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: FAN - Exhaust

Asset: KEF1 AREA:HOOD-1

Unit Data		
	Design	**Actual**
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	NCA18HPFA	NCA18HPFA
Serial Num	-	NOT LEGIBLE
Type	-	CENTRIFUGAL
Configuration	-	UPBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	D56
Horsepower	-	1.5
Motor Rpm	-	1730
Phase	-	3
Voltage (rated)	-	460
Amperage (rated)	-	2.25
Service Factor	-	1.15

Test Data		
	Design	**Actual**
CFM	2575	3091
Fan RPM	-	1698
Fan Rotation	-	CCW
Motor RPM	-	1323
RL Voltage	-	476/476/478
RL Amperage	-	2.3/2.3/2.3
Total ESP	-	1.84"
Fan Inlet SP	-	-1.84"
Fan Discharge SP	-	ATM

Completed By: Wesley John on 09/24/2024

Notes:
FAN PULLEY IS ADJUSTABLE AS WELL AS MOTOR PULLEY. FAN IS OVER AMPING SLIGHTLY BUT WELL WITHIN SERVICE FACTOR.

Written By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: FAN - Exhaust

Asset: KEF2 AREA:HOOD-2

Unit Data		
	Design	**Actual**
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	NCA18HPFA	DU180HFA
Serial Num	-	6039774
Type	-	CENTRIFUGAL
Configuration	-	UPBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	TECO
Frame	-	184T
Horsepower	-	2.0
Motor Rpm	-	1165
Phase	-	3
Voltage (rated)	-	460
Amperage (rated)	-	3.76
Service Factor	-	1.15

Test Data		
	Design	**Actual**
CFM	3540	2544
Fan RPM	-	835
Fan Rotation	-	CCW
Motor RPM	-	835
System SetPt	-	43.0 Hz
RL Voltage	-	167 VFD
RL Amperage	-	1.7 VFD
Total ESP	-	1.42"
Fan Inlet SP	-	-1.42"
Fan Discharge SP	-	ATM

Completed By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: FAN - Exhaust

Asset: KEF3 AREA:HOOD-3

Unit Data		
	Design	**Actual**
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	NCA18HPFA	NCA16HPFA
Serial Num	-	869492
Type	-	CENTRIFUGAL
Configuration	-	UPBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	E56
Horsepower	-	1.0
Motor Rpm	-	1720
Phase	-	3
Voltage (rated)	-	460
Amperage (rated)	-	1.70
Service Factor	-	1.15

Test Data		
	Design	**Actual**
CFM	1900	1699
Fan RPM	-	1055
Fan Rotation	-	CCW
Motor RPM	-	1747
RL Voltage	-	477/477/478
RL Amperage	-	1.5/1.5/1.4
Total ESP	-	1.06"
Fan Inlet SP	-	-1.06"
Fan Discharge SP	-	ATM

Completed By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: FAN - Exhaust

Asset: KEF4 AREA:HOOD-4

Unit Data		
	Design	**Actual**
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	NCA16FA	NCA16FA
Serial Num	-	869492
Type	-	CENTRIFUGAL
Configuration	-	UPBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	E56
Horsepower	-	2.0
Motor Rpm	-	1710
Phase	-	3
Voltage (rated)	-	460
Amperage (rated)	-	3.10
Service Factor	-	1.15

Test Data		
	Design	**Actual**
CFM	2885	2384
Fan RPM	-	[1]
Fan Rotation	-	CCW
Motor RPM	-	[1]
RL Voltage	-	476/478/476
RL Amperage	-	2.4/2.3/2.5
Total ESP	-	[1]
Fan Inlet SP	-	[1]
Fan Discharge SP	-	[1]

Completed By: Wesley John on 09/24/2024

Notes:
[1] ACTIVELY COOKING UNDER HOOD-4. LARGE AMOUNT OF SMOKE COMING FROM KEF-4. UNABLE TO OBTAIN RPMs AND STATIC PRESSURE READINGS.

Written By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: FAN - Exhaust

Asset: KEF5 AREA:HOOD-5

Unit Data		
	Design	**Actual**
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	HRE-20	CASRE24DD
Serial Num	-	3192603
Type	-	CENTRIFUGAL
Configuration	-	UTILITY

Motor Data		
	Design	**Actual**
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	5.0
Motor Rpm	-	NL
Phase	-	3
Voltage (rated)	-	460
Amperage (rated)	-	7.2
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	4325	3323
Fan RPM	-	[1]
Fan Rotation	-	CCW
Motor RPM	-	[1]
System SetPt	-	[1]
RL Voltage	-	[1]
RL Amperage	-	[1]
Total ESP	-	[2]
Fan Inlet SP	-	[2]
Fan Discharge SP	-	[2]

Completed By: Wesley John on 09/24/2024

Notes:
[1] UNABLE TO REMOVE COVER TO CHECK VFD FOR SET POINT AND RETRIEVE AMPS/VOLTS.
[2] UTILITY SET FAN. UNABLE TO HINGE TO GET SUCTION STATIC PRESSURE.

Written By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: FAN - Exhaust

Asset: KEF6 AREA:HOOD-6

Unit Data		
	Design	**Actual**
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	DU75HFA	DU75HFA
Serial Num	-	869492
Type	-	CENTRIFUGAL
Configuration	-	UPBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	HSSA
Frame	-	48Y
Horsepower	-	0.75
Motor Rpm	-	1625
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	7.2
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	1575	1621
Fan RPM	-	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
System SetPt	-	HIGH
RL Voltage	-	120
RL Amperage	-	6.4
Total ESP	-	0.73"
Fan Inlet SP	-	-0.73"
Fan Discharge SP	-	ATM

Completed By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: FAN - Supply

Asset: MUA1 AREA:HOODS

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVE-AIRE
Model Num	NA	A5-925
Serial Num	-	869492
Type	-	MUA
Configuration	-	VERTICAL DISCHARGE

Motor Data		
	Design	**Actual**
Motor MFG	-	TECO
Frame	-	215T
Horsepower	-	10.0
Motor Rpm	-	1755
Phase	-	3
Voltage (rated)	-	460
Amperage (rated)	-	12.2
Service Factor	-	1.15

Test Data		
	Design	**Actual**
CFM	13650	13727
SF RPM	-	549
Motor RPM	-	1779
RL Voltage	-	480/480/480
RL Amperage	-	7.2/6.9/7.1

General	
	Actual
Fan Rotation Correct	YES

Completed By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: Kitchen Hood Type I

Asset: HD1 AREA:COOKLINE

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVE-AIRE
Model Num	NA	NL
Job / Serial Num	-	NL
Type	-	TYPE I CANOPY
Hood length	-	154"
Hood Width	-	54"
Supply Plenum Type	-	PSP
Supply Plenum Width	-	12"
Supply Plenum Length	-	154"

Test Data Exhaust		
	Design	**Actual**
Filter Type	-	CAPTRATE SOLO
Filter Size 1	-	16x20
Filter Size 2	-	20x20
Filter Qty 1	-	5
Filter Qty 2	-	3
Filter AK factor size 1	-	2.08
Filters AK factor size 2	-	2.68
Filter Total AK Area	-	[1] 19.94
Filter1 FPM	-	150
Filter2 FPM	-	145
Filter3 FPM	-	160
Filter4 FPM	-	155
Filter5 FPM	-	165
Filter6 FPM	-	140
Filter7 FPM	-	170
Filter8 FPM	-	150
Filter Ave FPM(corr)	-	155
CFM	2575	3091

Cooking Equipment	
	Actual
Item 1	FRYERS
Item 2	RICE COOKER

Test Data Supply		
	Design	**Actual**
Total AK Area	-	12.83
Kv factor (Vel)	-	0.87
Num of Readings	-	12
Reading1 FPM	-	220
Reading2 FPM	-	230
Reading3 FPM	-	240
Reading4 FPM	-	215
Reading5 FPM	-	250
Reading6 FPM	-	210
Reading7 FPM	-	235
Reading8 FPM	-	225
Reading9 FPM	-	200
Reading10 FPM	-	240
Reading11 FPM	-	260
Reading12 FPM	-	210
Ave FPM(corr)	-	228
CFM	-	2545

Completed By: Wesley John on 09/24/2024

Notes:
[1] 12x18 OPEN SPACE IN FILTER BANK. FILTER MISSING. OPEN SPACE FACTORED INTO TOTAL AREA.

Written By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: Kitchen Hood Type I

Asset: HD2 AREA:COOKLINE

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVE-AIRE
Model Num	NA	NL
Job / Serial Num	-	NL
Type	-	TYPE I CANOPY
Hood length	-	154"
Hood Width	-	54"
Supply Plenum Type	-	PSP
Supply Plenum Width	-	12"
Supply Plenum Length	-	154"

Test Data Exhaust		
	Design	**Actual**
Filter Type	-	CAPTRATE SOLO
Filter Size 1	-	16x20
Filter Size 2	-	20x20
Filter Qty 1	-	6
Filter Qty 2	-	3
Filter AK factor size 1	-	2.08
Filters AK factor size 2	-	2.68
Filter Total AK Area	-	20.52
Filter1 FPM	-	120
Filter2 FPM	-	130
Filter3 FPM	-	115
Filter4 FPM	-	125
Filter5 FPM	-	135
Filter6 FPM	-	110
Filter7 FPM	-	120
Filter8 FPM	-	140
Filter9 FPM	-	115
Filter Ave FPM(corr)	-	124
CFM	3540	2544

Cooking Equipment	
	Actual
Item 1	FRYER
Item 2	RICE COOKER
Item 3	RANGE

Test Data Supply		
	Design	**Actual**
Total AK Area	-	12.83
Kv factor (Vel)	-	0.87
Num of Readings	-	12
Reading1 FPM	-	230
Reading2 FPM	-	225
Reading3 FPM	-	240
Reading4 FPM	-	210
Reading5 FPM	-	235
Reading6 FPM	-	250
Reading7 FPM	-	215
Reading8 FPM	-	245
Reading9 FPM	-	200
Reading10 FPM	-	215
Reading11 FPM	-	235
Reading12 FPM	-	220
Ave FPM(corr)	-	227
CFM	-	2534

Completed By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: Kitchen Hood Type I

Asset: HD3 AREA:COOKLINE

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVE-AIRE
Model Num	NA	NL
Job / Serial Num	-	NL
Type	-	TYPE I CANOPY
Hood length	-	114"
Hood Width	-	60"
Supply Plenum Type	-	PSP
Supply Plenum Width	-	12"
Supply Plenum Length	-	114"

Test Data Exhaust		
	Design	**Actual**
Filter Type	-	CAPTRATE SOLO
Filter Size 1	-	16x20
Filter Size 2	-	20x20
Filter Qty 1	-	3
Filter Qty 2	-	3
Filter AK factor size 1	-	2.08
Filters AK factor size 2	-	2.68
Filter Total AK Area	-	14.28
Filter1 FPM	-	115
Filter2 FPM	-	123
Filter3 FPM	-	117
Filter4 FPM	-	121
Filter5 FPM	-	118
Filter6 FPM	-	122
Filter Ave FPM(corr)	-	119
CFM	1900	1699

Cooking Equipment	
	Actual
Item 1	OVEN X3

Test Data Supply		
	Design	**Actual**
Total AK Area	-	9.50
Kv factor (Vel)	-	0.87
Num of Readings	-	9
Reading1 FPM	-	210
Reading2 FPM	-	225
Reading3 FPM	-	220
Reading4 FPM	-	215
Reading5 FPM	-	230
Reading6 FPM	-	212
Reading7 FPM	-	218
Reading8 FPM	-	225
Reading9 FPM	-	205
Ave FPM(corr)	-	218
CFM	-	1802

Completed By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: Kitchen Hood Type I

Asset: HD4 AREA:COOKLINE

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVE-AIRE
Model Num	NA	NL
Job / Serial Num	-	NL
Type	-	TYPE I CANOPY
Hood length	-	172"
Hood Width	-	54"
Supply Plenum Type	-	PSP
Supply Plenum Width	-	12"
Supply Plenum Length	-	172"

Test Data Exhaust		
	Design	**Actual**
Filter Type	-	CAPTRATE SOLO
Filter Size 1	-	16x20
Filter Size 2	-	20x20
Filter Qty 1	-	2
Filter Qty 2	-	7
Filter AK factor size 1	-	2.08
Filters AK factor size 2	-	2.68
Filter Total AK Area	-	22.92
Filter1 FPM	-	140
Filter2 FPM	-	145
Filter3 FPM	-	150
Filter4 FPM	-	151
Filter5 FPM	-	155
Filter6 FPM	-	144
Filter7 FPM	-	149
Filter8 FPM	-	142
Filter9 FPM	-	138
Filter Ave FPM(corr)	-	145
CFM	2885	2384

Cooking Equipment	
	Actual
Item 1	GRIDDLE
Item 2	CHARGRILL
Item 3	RANGE
Item 4	SALAMANDER

Test Data Supply		
	Design	**Actual**
Total AK Area	-	14.33
Kv factor (Vel)	-	0.87
Num of Readings	-	14
Reading1 FPM	-	195
Reading2 FPM	-	205
Reading3 FPM	-	198
Reading4 FPM	-	202
Reading5 FPM	-	190
Reading6 FPM	-	210
Reading7 FPM	-	198
Reading8 FPM	-	197
Reading9 FPM	-	204
Reading10 FPM	-	196
Reading11 FPM	-	201
Reading12 FPM	-	193
Reading13 FPM	-	199
Reading14 FPM	-	200
Ave FPM(corr)	-	199
CFM	-	2482

Completed By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: Kitchen Hood Type I

Asset: HD5 AREA:COOKLINE

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVE-AIRE
Model Num	NA	NL
Job / Serial Num	-	NL
Type	-	TYPE I CANOPY
Hood length	-	172"
Hood Width	-	54"
Supply Plenum Type	-	PSP
Supply Plenum Width	-	12"
Supply Plenum Length	-	172"

Test Data Exhaust		
	Design	**Actual**
Filter Type	-	CAPTRATE SOLO
Filter Size 1	-	16x20
Filter Size 2	-	20x20
Filter Qty 1	-	2
Filter Qty 2	-	7
Filter AK factor size 1	-	2.08
Filters AK factor size 2	-	2.68
Filter Total AK Area	-	22.92
Filter1 FPM	-	140
Filter2 FPM	-	150
Filter3 FPM	-	145
Filter4 FPM	-	147
Filter5 FPM	-	142
Filter6 FPM	-	148
Filter7 FPM	-	135
Filter8 FPM	-	155
Filter9 FPM	-	140
Filter Ave FPM(corr)	-	145
CFM	4325	3323

Cooking Equipment	
	Actual
Item 1	GRIDDLE
Item 2	CHARGRILL
Item 3	RANGE
Item 4	SALAMANDER

Test Data Supply		
	Design	**Actual**
Total AK Area	-	14.33
Kv factor (Vel)	-	0.87
Num of Readings	-	14
Reading1 FPM	-	205
Reading2 FPM	-	198
Reading3 FPM	-	202
Reading4 FPM	-	197
Reading5 FPM	-	201
Reading6 FPM	-	193
Reading7 FPM	-	206
Reading8 FPM	-	199
Reading9 FPM	-	192
Reading10 FPM	-	207
Reading11 FPM	-	200
Reading12 FPM	-	195
Reading13 FPM	-	204
Reading14 FPM	-	195
Ave FPM(corr)	-	199
CFM	-	2482

Completed By: Wesley John on 09/24/2024

National TAB

Project: 09-09-24 YARD HOUSE - SAN ANTONIO, TX

System/Unit: Kitchen Hood Type II

Asset: HD(Type2)6 AREA:DISHWASHER

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVE-AIRE
Model Num	NA	NL
Serial Num	-	NL
Type	-	TYPE II CANOPY
Hood length	-	108"
Hood Width	-	48"

Test Data		
	Design	**Actual**
Exhaust CFM	1575	1621

Completed By: Wesley John on 09/24/2024