Report By:

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

Report: TAB REPORT

Function: Test, Adjust, & Balance

Date: 07/20/2023

PROJECT

07-10-23 FREDDY'S - NORTH PLATTE, NE

1100 S Dewey

NORTH PLATTE, NE 69101

Client

TR HOSPITALITY GROUP

National TAB

Project: 07-10-23 FREDDY'S - NORTH PLATTE, NE

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.

DOAS w/ Diffusers

Each DOAS was measured at their terminal devices or via traverse to establish a total flow for that unit. Each DOAS 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.

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.

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

- KEF1 Conduit Too Short

07-10-23 FREDDY'S - NORTH PLATTE, NE

Project Issue Information

Issue Name : KEF1 Conduit Too Short

Description : The flex conduit on KEF-1 is too short and does not allow the fan to hinge back. This prevented NTi from taking a static pressure measurement on this fan and will inhibit proper cleaning of the grease duct.

Created By : National TAB

Assigned To : National TAB - Will Turnbough

Status : Open

Originated Date : 07/19/2023 - Stephen Tassinaro - National TAB

Project Issue File Details

FLEX_CONDUIT
07/20/2023

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	3000	2961	2500	2425	500	536	16.7%	18.1%						
RTU-2	DINING	3000	2904	2500	2393	500	511	16.7%	17.6%						
DOAS	KITCHEN	2300	2360	0	0	2300	2360	100.0%	100.0%						
KEF-1	HD1 GRIDDLE											1600	1466		
KEF-2	HD2 FRYER											775	739		
EF-1	RESTROOM													225	205
EF-2	RESTROOM													225	209
TOTALS		8300	8225	5000	4818	3300	3407			0	0	2375	2205	450	414

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	3300	3407
TOTAL EXHAUST	2825	2619
NET AIRFLOW	475	788

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H20)
FRONT	0.005
SIDE	0.005
REAR	0.003
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:

CheckList List

- TECH - 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
- TECH - STEP 5: FINAL DOCUMENTATION

07-10-23 FREDDY'S - NORTH PLATTE, NE

CheckList Information

Name :	TECH - SITE PICTURES	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/20/2023 - Stephen Tassinaro - National TAB		

CheckList Item Details

STORE FRONT

Comment:

STOREFRONT
07/20/2023

RTU-1

Comment:

RTU1
07/20/2023

RTU-2

Comment:

RTU2
07/20/2023

DOAS-1

Comment:

DOAS1
07/20/2023

EF-1

Comment:

EF1
07/20/2023

EF-2

Comment:

EF2
07/20/2023

KEF-1

Comment:

KEF1
07/20/2023

KEF-2

Comment:

KEF2
07/20/2023

HOOD-1

Comment:

HOOD1
07/20/2023

HOOD-2

Comment:

HOOD2
07/20/2023

07-10-23 FREDDY'S - NORTH PLATTE, NE

CheckList Information

Name :	TECH - STEP 1: INITIAL WALKTHROUGH	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/13/2023 - Brianna Biggs - National TAB		

CheckList Item Details

INITIAL SITE WALKTHROUGH

All diffusers and grilles are installed and match design?	No

Comment:

DOAS INCOMPLETE DUCTWORK. DIFFUSER 1 DUCT INCOMPLETE. DIFFUSER 3 NOT INSTALLED. // RESOLVED BY MC DURING TAB

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

07-10-23 FREDDY'S - NORTH PLATTE, NE

CheckList Information

Name :	TECH - STEP 2: UNIT DATA AND EVAL	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/13/2023 - Brianna Biggs - 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?	No

Comment:

NOT ASSEMBLED ON RTU 1 & 2. // RESOLVED BY MC DURING TAB.

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:

N/A DIRECT DRIVE

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 DIRECT DRIVE

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?	No

Comment:

KEF-1 FLEX CONDUIT IS NOT LONG ENOUG. KEF-2 IS ACCEPTABLE.

There is no major leakage around base of fan?	No

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?	N/A

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?	N/A

Comment:

Unit free of noticeable noise and vibration?	N/A

Comment:

HOODS

Kitchen equipment installed in proper places?	Yes

Comment:

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

Comment:	
Griddle is completely centered underneath hood?	Yes
Comment:	
DOCUMENTATION	
Have trades/general contractor been notified about any issues and are they created on FaciliBuild?	Yes
Comment:	
PICTURES TAKEN OF:	
All Issues	Yes
Comment:	
Each Piece of equipment	Yes
Comment:	
Each Hood	Yes
Comment:	
Front of Store	Yes
Comment:	

07-10-23 FREDDY'S - NORTH PLATTE, NE

CheckList Information

Name :	TECH - STEP 3: TEST, ADJUST AND BALANCE	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/13/2023 - Brianna Biggs - 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:

N/A

07-10-23 FREDDY'S - NORTH PLATTE, NE

CheckList Information

Name :	TECH - STEP 4: FINAL TESTS	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/13/2023 - Brianna Biggs - National TAB		

CheckList Item Details

FINAL TESTS

HOOD CAPTURE TEST

List equipment turned on for testing

Comment:

NONE

List smoke candle type used

Comment:

45S SMOKE EMITTER

Smoke test capture - Perimeter of hood

Comment:

100%

Smoke test capture - Top of cooking surface

Comment:

100%

WITNESS

Date test was completed	07/14/2023

Comment:

TAB tech name / Firm

Comment:

STEPHEN TASSINARO / NTi

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:

+0.0043"

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:

Thermostats Schdedules: Program all thermostats to following settings:

All three thermostats have correct time/date? (if not set correctly)	Yes

Comment:

Occupied Time: 8am-11:55pm	Yes

Comment:

Occupied Fan ON	Yes

Comment:

Occupied cooling 74	Yes

Comment:	
Occupied heating 68	Yes
Comment:	
Unoccupied Time 11:55pm-8am	Yes
Comment:	
Unoccupied Fan Auto	Yes
Comment:	
Unoccupied cooling 79	Yes
Comment:	
Unoccupied heating 63	Yes
Comment:	
Set a Partial Screen Lock for Thermostats (i.e., make sure temperature is adjustable but not schedule)	Yes
Comment:	
Password is set to 999 for Partial Screen Lock?	Yes
Comment:	
RTU Economizers	
Note: These instructions are for Lennox units. There are similar settings for other OEMs. Call office for assistance if needed.	
Enthalpy is set to "D" for all three units	N/A
Comment:	
"DCV Set" dials turned all the way to the left (counter clockwise)	N/A
Comment:	
"DCV Max" dials turned all the way to the left (counter clockwise)	N/A

Comment:

07-10-23 FREDDY'S - NORTH PLATTE, NE

CheckList Information

Name :	TECH - STEP 5: FINAL DOCUMENTATION	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	07/13/2023 - Brianna Biggs - National TAB		

CheckList Item Details

FINAL DOCUMENTATION

Marked Data capture complete for all assets?	Yes
Comment:	
Picture file sent to processing team or uploaded?	Yes
Comment:	
Balance schedule complete and uploaded?	Yes
Comment:	
Prelim report generated and reviewed?	Yes
Comment:	

National TAB

Project: 07-10-23 FREDDY'S - NORTH PLATTE, NE

System/Unit: AHU/RTU

Asset: DOAS1 AREA:KITCHEN

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Serial Num	-	5326084
Model Num	CASRTU3-I.300-15-12.5T-DOAS	CASRTU3-I.300-15-12.5T
Type	DOAS	DOAS
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	4
OA Filter Size 1	-	16X25X2
Num Final Filter 1	-	8
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	TECO WESTINGHOUSE
Frame	-	145T
Horsepower	2	2.0
Motor Rpm	-	1740
Phase	3	3
Rated Voltage	208	230/460
Rated Amperage	-	5.48/2.74

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	2300	2360
SF RPM	-	55HZ
RA CFM	0	0
OA CFM	2300	2360
RL Voltage	-	213/213/214
RL Amperage	-	4.5VFD
SF Rotation	-	CCW
RA Damper Position	-	0%
Min OA Damper Position	-	100%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	N/A

Performance Data		
	Design	**Actual**
MA Plenum SP	-	NR
Fan Suction SP	-	-0.40"
Fan Discharge SP	-	0.34"
Total ESP	0.5"	NR
Fan Total SP	-	0.74"

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

Completed By: Stephen Tassinaro on 07/19/2023

National TAB

Project:07-10-23 FREDDY'S - NORTH PLATTE, NE

AHU/RTU

Diffuser Supply (GRD)

DOAS1/KITCHEN

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	CUSTOMER SERVICE	C	8"	200	1	0	251	213	106.5
SGRD2	CUSTOMER SERVICE	C	8"	200	1	220	220	187	93.5
SGRD3	DRIVE THRU	C	8"	225	1	0	269	229	101.8
SGRD4	KITCHEN	C	8"	225	1	274	273	232	103.1
SGRD5	KITCHEN	C	8"	225	1	61	285	242	107.6
SGRD6	OFFICE	D	8"	100	1	164	122	104	104.0
SGRD7	KITCHEN	C	8"	225	1	98	274	233	103.6
SGRD8	KITCHEN	C	8"	225	1	273	275	234	104.0
SGRD9	KITCHEN	C	8"	225	1	242	252	214	95.1
SGRD10	KITCHEN	C	8"	225	1	247	281	239	106.2
SGRD11	BOH	E	10X6	225	1	381	274	233	103.6
Total				2300		1960	2776	2360	102.61%

National TAB

Project: 07-10-23 FREDDY'S - NORTH PLATTE, NE

System/Unit: AHU/RTU

Asset: RTU1 AREA:DINING

Unit Data		
	Design	**Actual**
MFG	LENNOX	CARRIER
Serial Num	-	2323P62877
Model Num	KGB092S4B	48FCEN08A2M5A3W1C0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	35X19.5
Num Final Filter 1	-	4
Final Filter Size 1	-	16X20X2

Motor Data		
	Design	**Actual**
Motor MFG	-	N/L
Frame	-	N/L
Horsepower	-	N/L
Motor Rpm	-	N/L
Phase	3	3
Rated Voltage	208	208/230
Rated Amperage	-	6.4

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	3000	2961
SF RPM	-	1750
RA CFM	2500	2425
OA CFM	500	536
RL Voltage	-	212/213/214
RL Amperage	-	4.8/4.8/5.2
SF Rotation	-	CORRECT
RA Damper Position	-	76%
Min OA Damper Position	-	24%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	N/A

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.56"
Fan Suction SP	-	-1.08"
Fan Discharge SP	-	0.66"
Total ESP	0.8"	1.22"
Fan Total SP	-	1.74"

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

Completed By: Stephen Tassinaro on 07/19/2023

National TAB

Project:07-10-23 FREDDY'S - NORTH PLATTE, NE

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	VESTIBULE	B1	8"	150	1	166	131	153	102.0
SGRD2	DINING	A	12"	400	1	317	322	377	94.3
SGRD3	DINING	A	12"	400	1	299	308	360	90.0
SGRD4	DINING	A	12"	425	1	388	390	456	107.3
SGRD5	DINING	A	12"	425	1	326	346	405	95.3
SGRD6	DINING	A	12"	425	1	260	328	384	90.4
SGRD7	DINING	A	12"	425	1	382	388	454	106.8
SGRD8	RR HALLWAY	B	6"	100	1	109	91	106	106.0
SGRD9	MENS RR	B1	8"	125	1	144	112	131	104.8
SGRD10	WOMENS RR	B1	8"	125	1	149	115	135	108.0
Total				3000		2540	2531	2961	98.7%

National TAB

Project: 07-10-23 FREDDY'S - NORTH PLATTE, NE

System/Unit: AHU/RTU

Asset: RTU2 AREA:DINING

Unit Data		
	Design	**Actual**
MFG	LENNOX	CARRIER
Serial Num	-	2123P61421
Model Num	KGB092S4B	48FCEN08K2M5A6B3C0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	35X19.5
Num Final Filter 1	-	4
Final Filter Size 1	-	16X20X2

Motor Data		
	Design	**Actual**
Motor MFG	-	N/L
Frame	-	N/L
Horsepower	-	N/L
Motor Rpm	-	N/L
Phase	3	3
Rated Voltage	208	208/230
Rated Amperage	-	6.4

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	3000	2904
SF RPM	-	1919
RA CFM	2500	2393
OA CFM	500	511
RL Voltage	-	212/213/214
RL Amperage	-	6.2/6.0/6.3
SF Rotation	-	CORRECT
RA Damper Position	-	5.80V
Min OA Damper Position	-	4.20V
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	N/A

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.64"
Fan Suction SP	-	-1.20"
Fan Discharge SP	-	0.75"
Total ESP	0.8"	1.39"
Fan Total SP	-	1.95"

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

Completed By: Stephen Tassinaro on 07/19/2023

National TAB

Project:07-10-23 FREDDY'S - NORTH PLATTE, NE

AHU/RTU

Diffuser Supply (GRD)

RTU2/DINING

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	DINING	A	12"	500	1	452	394	480	96.0
SGRD2	DINING	A	12"	500	1	380	402	490	98.0
SGRD3	DINING	A	12"	500	1	341	369	451	90.2
SGRD4	DINING	A	12"	500	1	357	372	455	91.0
SGRD5	DINING	A	12"	500	1	410	421	512	102.4
SGRD6	DINING	A	12"	500	1	521	424	516	103.2
Total				3000		2461	2382	2904	96.8%

Completed By: Stephen Tassinaro on 07/19/2023

National TAB

Project: 07-10-23 FREDDY'S - NORTH PLATTE, NE

System/Unit: FAN - Exhaust

Asset: EF1 AREA:RESTROOM

Unit Data		
	Design	**Actual**
MFG	COOK	N/L
Model Num	GC-184	N/L
Serial Num	-	N/L
Type	CELING	CEILING
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	N/L
Frame	-	N/L
Horsepower	183W	N/L
Motor Rpm	-	N/L
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	N/L
Service Factor	-	N/L

Test Data		
	Design	**Actual**
CFM	225	205
Fan RPM	-	DD
Fan Rotation	-	CORRECT
Motor RPM	-	DD
System SetPt	-	N/A
RL Voltage	-	120
RL Amperage	-	0.5
Total ESP	0.25"	INACCESSIBLE
Fan Inlet SP	-	-
Fan Discharge SP	-	-

Completed By: Stephen Tassinaro on 07/14/2023

National TAB

Project: 07-10-23 FREDDY'S - NORTH PLATTE, NE

System/Unit: FAN - Exhaust

Asset: EF2 AREA:RESTROOM

Unit Data		
	Design	**Actual**
MFG	COOK	N/L
Model Num	GC-184	N/L
Serial Num	-	N/L
Type	CEILING	CEILING
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	N/L
Frame	-	N/L
Horsepower	183W	N/L
Motor Rpm	-	N/L
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	N/L
Service Factor	-	N/L

Test Data		
	Design	**Actual**
CFM	225	209
Fan RPM	-	DD
Fan Rotation	-	CORRECT
Motor RPM	-	DD
System SetPt	-	N/A
RL Voltage	-	120
RL Amperage	-	0.6
Total ESP	0.25"	INACCESSIBLE
Fan Inlet SP	-	-
Fan Discharge SP	-	-

Completed By: Stephen Tassinaro on 07/14/2023

National TAB

Project: 07-10-23 FREDDY'S - NORTH PLATTE, NE

System/Unit: FAN - Exhaust

Asset: KEF1 AREA:HD1 GRIDDLE

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	CASRE18DD	CASRE18DD
Serial Num	-	5326084
Type	UTILITY	UTILITY
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TECO WESTINGHOUSE
Frame	-	145T
Horsepower	1.0	1.0
Motor Rpm	-	1150
Phase	3	3
Voltage (rated)	208	230/460
Amperage (rated)	-	3.44/1.72
Service Factor	-	1.15

Test Data		
	Design	**Actual**
CFM	1600	1466
Fan RPM	1170	1246
Fan Rotation	-	CCW
Motor RPM	-	1246
System SetPt	-	65HZ
RL Voltage	-	212/213/214
RL Amperage	-	3.2
Total ESP	1.5"	NOT ACCESSIBLE
Fan Inlet SP	-	NOT ACCESSIBLE
Fan Discharge SP	-	ATM

Completed By: Stephen Tassinaro on 07/19/2023

Notes:
CONDUIT TOO SHORT TO TILT FAN BACK FOR STATIC PRESSURE MEASUREMENT.

Written By: Stephen Tassinaro on 07/19/2023

National TAB

Project: 07-10-23 FREDDY'S - NORTH PLATTE, NE

System/Unit: FAN - Exhaust

Asset: KEF2 AREA:HD2 FRYER

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU50HFA	DU50HFA
Serial Num	-	5326084
Type	UPBLAST	CENTRIFUGAL
Configuration	VERTICAL	UPBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	N/L
Frame	-	N/L
Horsepower	0.5	0.5
Motor Rpm	-	N/L
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	6.3
Service Factor	-	N/L

Test Data		
	Design	**Actual**
CFM	775	739
Fan RPM	1532	DD
Fan Rotation	-	CORRECT
Motor RPM	-	DD
System SetPt	-	62%
RL Voltage	-	120
RL Amperage	-	NOT ACCESSIBLE
Total ESP	1.250"	0.75"
Fan Inlet SP	-	-0.75"
Fan Discharge SP	-	ATM

Completed By: Stephen Tassinaro on 07/19/2023

National TAB

Project: 07-10-23 FREDDY'S - NORTH PLATTE, NE

System/Unit: Kitchen Hood Type I

Asset: HD1 AREA:GRIDDLE

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	5424 ND-2	5424 ND-2
Job / Serial Num	-	5326084
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	96	96
Hood Width	54	54

Test Data Exhaust		
	Design	**Actual**
Filter Type	CAPTRATE SOLO	CAPTRATE SOLO
Filter Size 1	16X16	16X16
Filter Qty 1	5	5
Filter AK factor size 1	1.62	1.62
Filter Total AK Area	8.1	8.1
Filter1 FPM	-	185
Filter2 FPM	-	181
Filter3 FPM	-	187
Filter4 FPM	-	186
Filter5 FPM	-	168
Filter Ave FPM(corr)	-	181
CFM	1600	1466

Cooking Equipment		
	Design	**Actual**
Item 1	-	GRIDDLE
Item 2	-	GRIDDLE

Completed By: Stephen Tassinaro on 07/13/2023

National TAB

Project: 07-10-23 FREDDY'S - NORTH PLATTE, NE

System/Unit: Kitchen Hood Type I

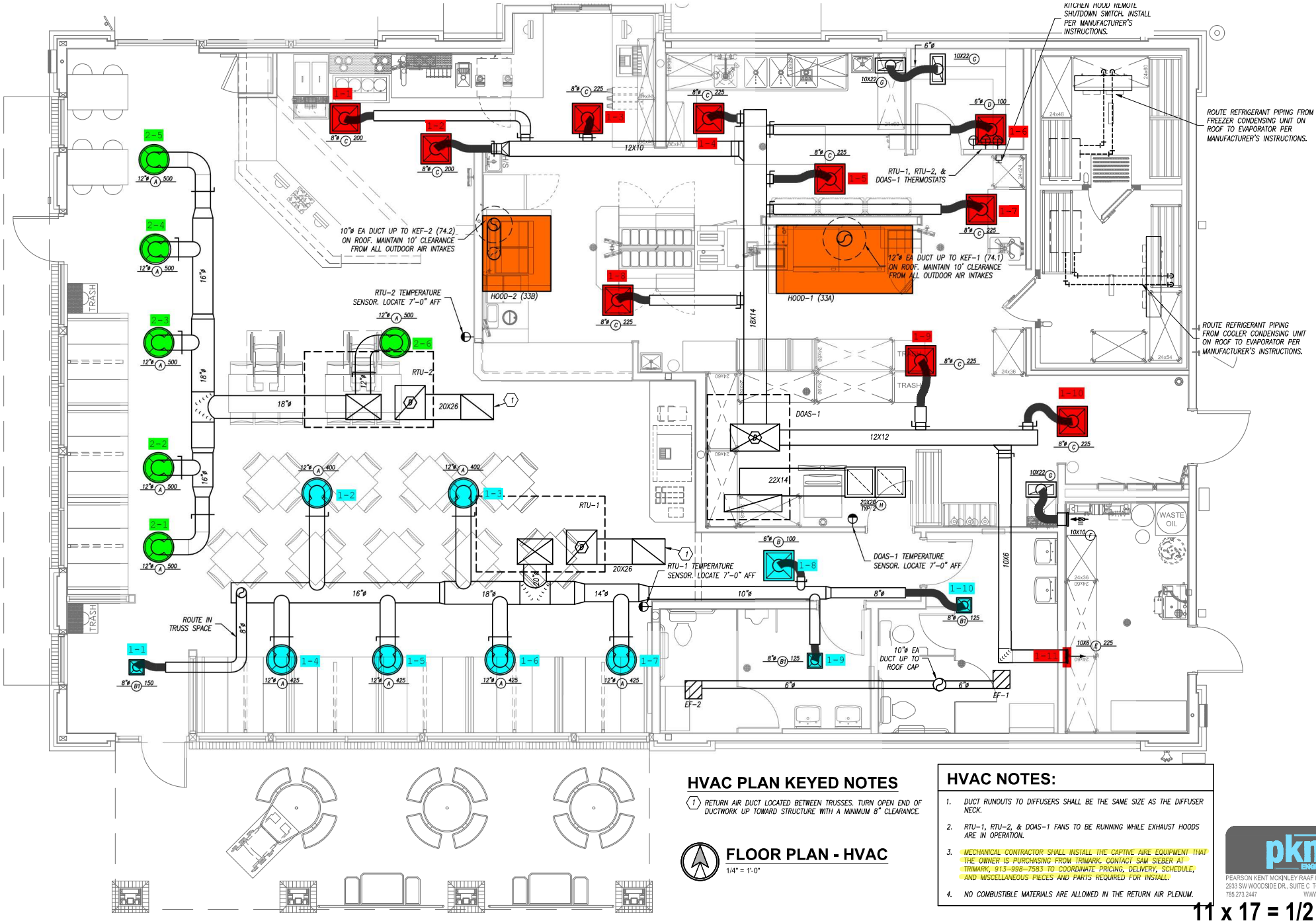
Asset: HD2 AREA:FRYER

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	5424 ND-2	5424 ND-2
Job / Serial Num	-	5326084
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	54	54
Hood Width	60	60

Test Data Exhaust		
	Design	**Actual**
Filter Type	CAPTRATE SOLO	CAPTRATE SOLO
Filter Size 1	16X16	16X16
Filter Qty 1	3	3
Filter AK factor size 1	1.62	1.62
Filter Total AK Area	4.86	4.86
Filter1 FPM	-	149
Filter2 FPM	-	154
Filter3 FPM	-	153
Filter Ave FPM(corr)	-	152
CFM	775	739

Cooking Equipment		
	Design	**Actual**
Item 1	-	FRYER
Item 2	-	FRYER

Completed By: Stephen Tassinaro on 07/13/2023



HVAC PLAN KEYED NOTES

1. RETURN AIR DUCT LOCATED BETWEEN TRUSSES. TURN OPEN END OF DUCTWORK UP TOWARD STRUCTURE WITH A MINIMUM 8" CLEARANCE.

FLOOR PLAN - HVAC

1/4" = 1'-0"

HVAC NOTES:

1. DUCT RUNOUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS THE DIFFUSER NECK.
2. RTU-1, RTU-2, & DOAS-1 FANS TO BE RUNNING WHILE EXHAUST HOODS ARE IN OPERATION.
3. MECHANICAL CONTRACTOR SHALL INSTALL THE CAPTIVE AIRE EQUIPMENT THAT THE OWNER IS PURCHASING FROM TRIMARK. CONTACT SAM SIEBER AT TRIMARK, 913-998-7583 TO COORDINATE PRICING, DELIVERY, SCHEDULE, AND MISCELLANEOUS PIECES AND PARTS REQUIRED FOR INSTALL.
4. NO COMBUSTIBLE MATERIALS ARE ALLOWED IN THE RETURN AIR PLENUM.

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Date 7/20/2023

11 x 17 = 1/2 scale