

Report By:

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



Report: Test

Function: Test, Adjust, & Balance

Date: 06/24/2023

PROJECT

06-19-23 FREDDY'S - ATHENS, TX

FLAT CREEK RD & MARYBETH LANE

ATHENS, TX

Client

Outlaw Management

National TAB

Project: 06-19-23 FREDDY'S - ATHENS, TX

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National TAB

Project: 06-19-23 FREDDY'S - ATHENS, TX

System/Unit: AHU/RTU



Asset: DOAS1

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Serial Num	-	5448404
Model Num	CASRTU3-I.300-15-20T-DOAS	CASRTU3-I.300-15-20T-DOAS
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
Frame	-	145T
Horsepower	2	2.00
Motor Rpm	N/A	1740
Phase	3	3
Rated Voltage	208	230
Rated Amperage	N/A	5.43

Drive Data		
	Design	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	2650	2731
SF RPM	N/A	DIRECT DRIVE
RA CFM	0	0
OA CFM	2650	2731
RL Voltage	-	208/208/209
RL Amperage	-	5.3/5.3/5.1
SF Rotation	-	CCW
RA Damper Position	-	0%
Min OA Damper Position	-	100%
Min OA Damper Type	-	OPOSING BLADE
OA Enthalpy Setpt	-	N/A

Performance Data		
	Design	Actual
MA Plenum SP	-	N/A
Fan Suction SP	-	N/A
Fan Discharge SP	-	N/A
Total ESP	0.5"	N/A
Fan Total SP	N/A	N/A

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

Completed By: Bayley Morvant on 06/22/2023

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Project:06-19-23 FREDDY'S - ATHENS, TX

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	BOH KITCHEN	SD2	10"	225		97	230	243	108.0
SGRD2	OFFICE	SD4	8"	150		58	131	164	109.3
SGRD3	OFFICE	SD4	8"	150		55	159	160	106.7
SGRD4	KITCHEN	SD3	10"	250		125	269	231	92.4
SGRD5	KITCHEN	SD3	10"	250		98	231	253	101.2
SGRD6	KITCHEN	SD3	10"	250		97	218	257	102.8
SGRD7	KITCHEN	SD3	10"	225		131	288	238	105.8
SGRD8	KITCHEN	SD3	10"	225		133	284	239	106.2
SGRD9	KITCHEN	SD2	10"	225		115	256	230	102.2
SGRD10	KITCHEN	SD3	10"	225		120	261	230	102.2
SGRD11	KITCHEN	SD3	10"	250		120	189	256	102.4
SGRD12	KITCHEN	SD3	10"	225		243	244	230	102.2
Total				2650		1392	2760	2731	103.06%

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Project: 06-19-23 FREDDY'S - ATHENS, TX

System/Unit: AHU/RTU



Asset: RTU1

AREA:DINING

Unit Data		
	Design	Actual
MFG	NA	CARRIER
Serial Num	-	2622C09811
Model Num	NA	48FCEN07F2M5A6B1A0
Type	NA	RTU
Configuration	NA	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	28.25x14.25
Num Final Filter 1	-	4
Final Filter Size 1	-	16x16x2

Motor Data		
	Design	Actual
Motor MFG	-	NA
Frame	-	NA
Horsepower	NA	NA
Motor Rpm	NA	NA
Phase	NA	3
Rated Voltage	NA	208
Rated Amperage	NA	4.5

Drive Data		
	Design	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	2400	2646
SF RPM	NA	2387
RA CFM	1909	2176
OA CFM	491	470
RL Voltage	-	200/210/210
RL Amperage	-	3.5/3.5/3.4
SF Rotation	-	CCW
RA Damper Position	-	85%
Min OA Damper Position	-	4.50 VOLTS
Min OA Damper Type	-	OPOSING BLADE
OA Enthalpy Setpt	-	53

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.56
Fan Suction SP	-	-1.08
Fan Discharge SP	-	0.52
Total ESP	NA	1.08
Fan Total SP	NA	1.60

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

Completed By: Bayley Morvant on 06/23/2023

Notes:
No dampers were installed on the terminal diffusers. Unit was setup for total flow to the space.

Written By: Dan Hertenstein on 06/23/2023

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Project:06-19-23 FREDDY'S - ATHENS, TX

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	SD6	8"	150	0.0	75	75	75	50.0
SGRD2	DINING	SD1	12"	480	2.18	479	479	479	99.8
SGRD3	DINING	SD1	12"	450	2.18	584	584	584	129.8
SGRD4	DINING	SD1	12"	450	2.18	499	499	499	110.9
SGRD5	DINING	SD1	12"	450	2.18	425	425	425	94.4
SGRD6	DINING	SD1	12"	450	2.18	584	584	584	129.8
Total				2430		2646	2646	2646	108.89%

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Project: 06-19-23 FREDDY'S - ATHENS, TX

System/Unit: AHU/RTU



Asset: RTU2

AREA:DINING

Unit Data		
	Design	Actual
MFG	NA	CARRIER
Serial Num	-	2622C09812
Model Num	NA	48FCEN07F2M5A6B1A0
Type	NA	RTU
Configuration	NA	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	28.25x14.25
Num Final Filter 1	-	4
Final Filter Size 1	-	16x16x2

Motor Data		
	Design	Actual
Motor MFG	-	NA
Frame	-	NA
Horsepower	NA	NA
Motor Rpm	NA	NA
Phase	NA	3
Rated Voltage	NA	208
Rated Amperage	NA	4.5

Drive Data		
	Design	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	2400	2504
SF RPM	NA	2359
RA CFM	1909	2009
OA CFM	491	495
RL Voltage	-	210/211/210
RL Amperage	-	3.2/3.3/3.3
SF Rotation	-	CCW
RA Damper Position	-	85%
Min OA Damper Position	-	4.50 VOLTS
Min OA Damper Type	-	OPOSING BLADE
OA Enthalpy Setpt	-	53

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.50
Fan Suction SP	-	-0.96
Fan Discharge SP	-	0.64
Total ESP	NA	1.14
Fan Total SP	NA	1.60

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

Completed By: Bayley Morvant on 06/23/2023

Notes:
No dampers were installed on the terminal diffusers. Unit was setup for total flow to the space.

Written By: Dan Hertenstein on 06/23/2023

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Project:06-19-23 FREDDY'S - ATHENS, TX

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	SD1	12"	450	3.05	518	518	518	115.1
SGRD2	DINING	SD1	12"	450	3.05	347	347	347	77.1
SGRD3	DINING	SD1	12"	450	3.05	362	362	362	80.4
SGRD4	DINING	SD1	12"	450	3.05	469	469	469	104.2
SGRD5	DINING	SD1	12"	450	3.05	494	494	494	109.8
SGRD6	RR VESTIBULE	SD5	6"	50	0.0	91	91	91	182.0
SGRD7	MENS RESTROOM	SD5	6"	100	0.0	126	126	126	126.0
SGRD8	WOMENS RESTROOM	SD5	6"	100	0.0	97	97	97	97.0
Total				2500		2504	2504	2504	100.16%

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Project: 06-19-23 FREDDY'S - ATHENS, TX

System/Unit: FAN - Exhaust



Asset: EF1

AREA:

Unit Data		
	Design	Actual
MFG	NA	GREENHECK
Model Num	NA	SP-B150-QD
Serial Num	-	157562776
Type	CEILING	CEILING
Configuration	VERTICAL	VERTICAL

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

Test Data		
	Design	Actual
CFM	150	183
Fan RPM	NA	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
System SetPt	-	HIGH SPEED
RL Voltage	-	119
RL Amperage	-	1.8
Total ESP	NA	0.03
Fan Inlet SP	-	-0.03
Fan Discharge SP	-	NA

Completed By: Bayley Morvant on 06/23/2023

Notes:
NO SPEED CONTROLLER INSTALLED.

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Project: 06-19-23 FREDDY'S - ATHENS, TX

System/Unit: FAN - Exhaust



Asset: EF2

AREA:

Unit Data		
	Design	Actual
MFG	NA	GREENHECK
Model Num	NA	SP-B150-QD
Serial Num	-	157562776-0068
Type	CEILING	CEILING
Configuration	VERTICAL	VERTICAL

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

Test Data		
	Design	Actual
CFM	150	161
Fan RPM	NA	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
System SetPt	-	HIGH SPEED
RL Voltage	-	121
RL Amperage	-	1.8
Total ESP	NA	0.04
Fan Inlet SP	-	-0.04
Fan Discharge SP	-	NA

Completed By: Bayley Morvant on 06/23/2023

Notes:
NO SPEED CONTROLLER INSTALLED.

Written By: Bayley Morvant on 06/23/2023

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Project: 06-19-23 FREDDY'S - ATHENS, TX

System/Unit: FAN - Exhaust



Asset: KEF1

AREA:HD1 GRIDDLE

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	CASRE18DD	CASRE18DD
Serial Num	-	5448404
Type	UTILITY	UTILITY
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TECO
Frame	-	145T
Horsepower	1	1.00
Motor Rpm	N/A	1150
Phase	3	3
Voltage (rated)	208	230
Amperage (rated)	-	3.44
Service Factor	-	1.15

Test Data		
	Design	Actual
CFM	1600	1636
Fan RPM	1107	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
System SetPt	-	59.8HZ
RL Voltage	-	206/207/208
RL Amperage	-	3.8/3.3/3.2
Total ESP	1.5"	0.53
Fan Inlet SP	-	-0.53
Fan Discharge SP	-	ATM

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Project: 06-19-23 FREDDY'S - ATHENS, TX

System/Unit: FAN - Exhaust



Asset: KEF2

AREA:HD2 FRYER

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU50HFA	DU50HFA
Serial Num	-	5448404
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Frame	-	N/A
Horsepower	0.5	1/2
Motor Rpm	N/A	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	6.3
Service Factor	-	N/A

Test Data		
	Design	Actual
CFM	775	758
Fan RPM	1532	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
System SetPt	-	64%
RL Voltage	-	120
RL Amperage	-	3.4
Total ESP	1.250"	0.45
Fan Inlet SP	-	-0.45
Fan Discharge SP	-	ATM

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Project: 06-19-23 FREDDY'S - ATHENS, TX

System/Unit: FAN - Exhaust



Asset: KEF3

AREA:HD3 DISH

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU33HFA	DU33HFA
Serial Num	-	5448404
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Frame	-	N/A
Horsepower	0.333	1/3
Motor Rpm	N/A	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	4.3
Service Factor	-	N/A

Test Data		
	Design	Actual
CFM	525	509
Fan RPM	1487	1081
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
System SetPt	-	55%
RL Voltage	-	122
RL Amperage	-	1.2
Total ESP	0.800"	0.17
Fan Inlet SP	-	-0.17
Fan Discharge SP	-	ATM

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Project: 06-19-23 FREDDY'S - ATHENS, TX

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	-	5448404
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	-	191
Filter2 FPM	-	208
Filter3 FPM	-	227
Filter4 FPM	-	204
Filter5 FPM	-	184
Filter Ave FPM(corr)	-	202
CFM	1600	1636

Cooking Equipment		
	Design	Actual
Item 1	-	FLAT TOP GRIDDLE
Item 2	-	FLAT TOP GRIDDLE

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Project: 06-19-23 FREDDY'S - ATHENS, TX

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	-	5448404
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	60	60
Hood Width	54	54

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	-	168
Filter2 FPM	-	161
Filter3 FPM	-	142
Filter Ave FPM(corr)	-	156
CFM	775	758

Cooking Equipment

	Design	Actual
Item 1	-	DUAL BAY FRYER

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Project: 06-19-23 FREDDY'S - ATHENS, TX

System/Unit: Kitchen Hood Type II



Asset: HD3

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	4224 VHB-G	4224 VHB-G
Serial Num	-	5448404
Type	TYPE II CANOPY	TYPE II CANOPY
Hood length	42	42
Hood Width	42	42

Test Data		
	Design	Actual
Exhaust CFM	525	509

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