

Report By:

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



Report: TAB REPORT
Function: Test, Adjust, & Balance
Date: 12/06/2023

PROJECT
12-04-23 FIREBIRDS - PLANO, TX

NEED

NEED, AK

Client

FIREBIRD RESTAURANTS

National TAB

Project: 12-04-23 FIREBIRDS - PLANO, TX

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CheckList List

- TECH - INITIAL AIRFLOWS
- TECH - SUPPORT



12-04-23 FIREBIRDS - PLANO, TX

CheckList Information

Name : TECH - INITIAL AIRFLOWS **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 12/06/2023 - Brianna Biggs - National TAB

CheckList Item Details

INITIAL BUILDING REVIEW:

What is the initial building pressure before making any changes?

Comment:

Are thermostats programmed?

Comment:

Are building pressure relief working properly?

Comment:

INITIAL AIRFLOWS:

SUPPLY RTU-1

Comment:

5193 CFM

OA RTU-1

Comment:

5193 CFM OSA DAMPER IS STUCK IN FULL OPEN POSITION

SUPPLY RTU-2

Comment:

1929 CFM

OA RTU-2

Comment:

1294 CFM

SUPPLY RTU-3

Comment:

OA RTU-3

Comment:

EF-1

Comment:

EF-2

Comment:

EF-3

Comment:

EF-4

Comment:

MAU-1

Comment:

EF-2

Comment:

EF-3

Comment:

EF-4

Comment:

EF-5

Comment:

HOOD-1

Comment:

HOOD-2

Comment:

HOOD-3

Comment:

HOOD-4

Comment:

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Project: 12-04-23 FIREBIRDS - PLANO, TX

System/Unit: AHU/RTU



Asset: DOAS1

AREA:

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Serial Num	-	22232853
Model Num	XRV-45-30I	XRV-75-30I-O-G1
Type	DOAS	DOAS
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	
OA Filter Size 1	-	
Num Final Filter 1	-	
Final Filter Size 1	-	
Num Final Filter 2	-	
Final Filter Size 2	-	

Test Data		
	Design	Actual
SF CFM	5170	6363
SF RPM	-	
RA CFM	0	0
OA CFM	5170	6363
RL Voltage	-	213/212/213
RL Amperage	-	6.0/4.8/5.5
SF Rotation	-	
RA Damper Position	-	0% OPEN
Min OA Damper Position	-	100% OPEN
Min OA Damper Type	-	OPOSED BLADE
OA Enthalpy Setpt	-	

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	182T
Horsepower	2	1.5
Motor Rpm	-	1170
Phase	3	3
Rated Voltage	208	230
Rated Amperage	-	5.0

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

Drive Data		
	Design	Actual
Motor Sheave Size	-	DIRECT DRIVE
Motor Bore Size	-	DIRECT DRIVED
Motor Sheave SetPt	-	DIRECT DRIVE
Fan Sheave Size	-	DIRECT DRIVE
Fan Sheave Bore	-	DIRECT DRIVE
Belt CL Distance	-	DIRECT DRIVED
Num of Belts	-	DIRECT DRIVE
Belt Size	-	DIRECT DRIVED
Belt Alignment	-	DIRECT DRIVE

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

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Project: 12-04-23 FIREBIRDS - PLANO, TX

System/Unit: AHU/RTU



Asset: DOAS2

AREA:

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Serial Num	-	
Model Num	XRV-45-30I	XRV-45-30I
Type	DOAS	
Configuration	VERTICAL	
Num OA Filters 1	-	
OA Filter Size 1	-	
Num Final Filter 1	-	
Final Filter Size 1	-	
Num Final Filter 2	-	
Final Filter Size 2	-	

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	182T
Horsepower	2	1.5
Motor Rpm	-	1170
Phase	3	3
Rated Voltage	208	230
Rated Amperage	-	5.0

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 DRIVED
Belt Alignment	-	DIRECT DRIVE

Test Data		
	Design	Actual
SF CFM	5530	6363
SF RPM	-	
RA CFM	0	0
OA CFM	5530	6363
RL Voltage	-	212/214/214
RL Amperage	-	5.9/4.6/6.1
SF Rotation	-	
RA Damper Position	-	0% OPEN
Min OA Damper Position	-	100% OPEN
Min OA Damper Type	-	OPOSED BLADE
OA Enthalpy Setpt	-	

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

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

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Project: 12-04-23 FIREBIRDS - PLANO, TX

System/Unit: AHU/RTU



Asset: RTU1

AREA:

Unit Data		
	Design	Actual
MFG	TRANE	TRANE
Serial Num	-	
Model Num	YSJ150	YSJ150
Type	RTU	
Configuration	VERTICAL	
Num OA Filters 1	-	
OA Filter Size 1	-	
Num Final Filter 1	-	
Final Filter Size 1	-	
Num Final Filter 2	-	
Final Filter Size 2	-	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	3.1	
Motor Rpm	-	
Phase	3	
Rated Voltage	208	
Rated Amperage	-	

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

Test Data		
	Design	Actual
SF CFM	5000	5193
SF RPM	-	
RA CFM	4000	0
OA CFM	1000	5193
RL Voltage	-	213/212/213
RL Amperage	-	5.2/5.3/5.2
SF Rotation	-	
RA Damper Position	-	0% OPEN
Min OA Damper Position	-	100% OPEN
Min OA Damper Type	-	OPOSED BLADE
OA Enthalpy Setpt	-	

Performance Data		
	Design	Actual
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	1.0"	
Fan Total SP	-	

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

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Project: 12-04-23 FIREBIRDS - PLANO, TX

System/Unit: AHU/RTU



Asset: RTU2

AREA:

Unit Data		
	Design	Actual
MFG	TRANE	TRANE
Serial Num	-	
Model Num	YHC048	YHC048
Type	RTU	
Configuration	VERTICAL	
Num OA Filters 1	-	
OA Filter Size 1	-	
Num Final Filter 1	-	
Final Filter Size 1	-	
Num Final Filter 2	-	
Final Filter Size 2	-	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	1	
Motor Rpm	-	
Phase	3	
Rated Voltage	208	
Rated Amperage	-	

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

Test Data		
	Design	Actual
SF CFM	1600	1929
SF RPM	-	
RA CFM	1280	635
OA CFM	320	1294
RL Voltage	-	213/217/212
RL Amperage	-	2.8/2.7/2.8
SF Rotation	-	
RA Damper Position	-	65% OPEN
Min OA Damper Position	-	35% OPEN
Min OA Damper Type	-	OPOSED BLADE
OA Enthalpy Setpt	-	

Performance Data		
	Design	Actual
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	1.0"	
Fan Total SP	-	

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

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Project: 12-04-23 FIREBIRDS - PLANO, TX

System/Unit: FAN - Exhaust



Asset: EF1

AREA:HOOD 1 ITEM 33 (COOKLINE L.R)

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XCUE-160-VG	XCUE-160-10-VG-1-26-G
Serial Num	-	22199958
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	BROAD-OCEAN
Frame	-	NA
Horsepower	1	1.00
Motor Rpm	1300	300-1750
Phase	1	1
Voltage (rated)	208	208-230
Amperage (rated)	-	7.0
Service Factor	-	NA

Test Data		
	Design	Actual
CFM	2350	2246
Fan RPM	1246	DIRECT DRIVE
Fan Rotation	-	
Motor RPM	-	DIRECT DRIVE
System SetPt	-	
RL Voltage	-	213
RL Amperage	-	3.3
Total ESP	1.078"	
Fan Inlet SP	-	
Fan Discharge SP	-	

Notes:
SERVES HD-1

Written By: Bayley Morvant on 12/06/2023

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Project: 12-04-23 FIREBIRDS - PLANO, TX

System/Unit: FAN - Exhaust



Asset: EF2

AREA:HOOD 2 ITEM 33 (COOKLINE L.R)

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XCUE-160-VG	XCUE-160-A-20-1-26-G
Serial Num	-	22199963
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	143
Horsepower	2	2.00
Motor Rpm	1725	1740
Phase	1	3
Voltage (rated)	208	230
Amperage (rated)	-	5.38
Service Factor	-	1.00

Test Data		
	Design	Actual
CFM	2820	2970
Fan RPM	1400	DIRECT DRIVE
Fan Rotation	-	
Motor RPM	-	DIRECT DRIVE
System SetPt	-	
RL Voltage	-	213
RL Amperage	-	3.9
Total ESP	1.227"	
Fan Inlet SP	-	
Fan Discharge SP	-	

Notes:

SERVES HD-2

Written By: Bayley Morvant on 12/06/2023

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Project: 12-04-23 FIREBIRDS - PLANO, TX

System/Unit: FAN - Exhaust



Asset: EF3

AREA:HOOD 3 ITEM 38 (SOLID FUEL)

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XRUBS-180HP-20	XRUBS-180HP-20-1-30-G
Serial Num	-	22199968
Type	UPBLAST	UPBALST
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	3000	2712
Fan RPM	1538	
Fan Rotation	-	
Motor RPM	-	
RL Voltage	-	205/205/205
RL Amperage	-	0.9/0.4/0.7
Suction ESP	-	
Discharge ESP	-	
Total ESP	1.864"	

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	143T
Horsepower	2	2.00
Motor Rpm	1725	1755
Phase	3	3
Voltage (rated)	208	200
Amperage (rated)	-	6.00
Service Factor	-	1.15

Drive Data		
	Design	Actual
Motor Sheave Size	-	
Motor Bore Size	-	
Motor Sheave SetPt	-	
Fan Sheave Size	-	
Fan Sheave Bore	-	
Belt CL Distance	-	
Num of Belts	-	
Belt Size	-	

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Project: 12-04-23 FIREBIRDS - PLANO, TX

System/Unit: FAN - Exhaust



Asset: EF4

AREA:HOOD 4 ITEM 70

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XCUE-160-VG	XCUE-160-10-VG-1-26-G
Serial Num	-	22199969
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	BROAD-OCEAN
Frame	-	NA
Horsepower	1	1.0
Motor Rpm	1300	300-1750
Phase	1	1
Voltage (rated)	208	208-230
Amperage (rated)	-	7.0
Service Factor	-	NA

Test Data		
	Design	Actual
CFM	2438	2297
Fan RPM	1239	DIRECT DRIVE
Fan Rotation	-	
Motor RPM	-	DIRECT DRIVE
System SetPt	-	
RL Voltage	-	212
RL Amperage	-	3.2
Total ESP	1.002"	
Fan Inlet SP	-	
Fan Discharge SP	-	

Notes:

SERVES HD-4

Written By: Bayley Morvant on 12/06/2023

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Project: 12-04-23 FIREBIRDS - PLANO, TX

System/Unit: FAN - Exhaust



Asset: EF5

AREA:

Unit Data		
	Design	Actual
MFG	GREENHECK	NA
Model Num	CSP-A390	NA
Serial Num	-	NA
Type	INLINE	NA
Configuration	HORIZONTAL	NA

Motor Data		
	Design	Actual
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	NA
Motor Rpm	-	NA
Phase	1	NA
Voltage (rated)	208	NA
Amperage (rated)	-	NA
Service Factor	-	NA

Test Data		
	Design	Actual
CFM	100	0
Fan RPM	0.5"	NA
Fan Rotation	-	NA
Motor RPM	-	NA
System SetPt	-	NA
RL Voltage	-	NA
RL Amperage	-	NA
Total ESP	-	NA
Fan Inlet SP	-	NA
Fan Discharge SP	-	NA

Completed By: Bayley Morvant on 12/06/2023

Notes:
FAN WAS NOT INSTALLED.

Written By: Bayley Morvant on 12/06/2023

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Project: 12-04-23 FIREBIRDS - PLANO, TX

System/Unit: FAN - Exhaust



Asset: EF-DISH6

AREA:

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XRUD-099-VG	XCUE-099-4-VG-1-22-G
Serial Num	-	22199970
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	BROAD-OCEAN
Frame	-	NA
Horsepower	0.25	1/4
Motor Rpm	1725	300-1750
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	2.85
Service Factor	-	1.25

Test Data		
	Design	Actual
CFM	800	
Fan RPM	1386	DIRECT DRIVE
Fan Rotation	-	
Motor RPM	-	DIRECT DRIVE
System SetPt	-	
RL Voltage	-	123
RL Amperage	-	3.2
Total ESP	0.375"	
Fan Inlet SP	-	
Fan Discharge SP	-	

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Project: 12-04-23 FIREBIRDS - PLANO, TX

System/Unit: FAN - Exhaust



Asset: TEF1

AREA:

Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	G-080	G-090- DGE117X9D
Serial Num	-	22644958
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	MCMILLAN ELECTRIC
Frame	-	NA
Horsepower	-	1/15
Motor Rpm	-	1550
Phase	1	1
Voltage (rated)	208	120
Amperage (rated)	-	1.2
Service Factor	-	NA

Test Data		
	Design	Actual
CFM	200	422
Fan RPM	-	DIRECT DRIVE
Fan Rotation	-	
Motor RPM	-	DIRECT DRIVE
System SetPt	-	HIGH SPEED
RL Voltage	-	121
RL Amperage	-	1.2
Total ESP	0.5"	
Fan Inlet SP	-	
Fan Discharge SP	-	

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Project: 12-04-23 FIREBIRDS - PLANO, TX

System/Unit: Kitchen Hood Type I



Asset: HD1

AREA:ITEM 33 (COOKLINE L.R)

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XXEW-120-S	XBEW-120.00-S
Job / Serial Num	-	22391959
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	120"	120"
Hood Width	54"	54"

Test Data Exhaust		
	Design	Actual
Filter Type	XTRACTOR	BAFFLE
Filter Size 1	20X20	20X20
Filter Qty 1	6	6
Filter AK factor size 1	3.00	2.40
Filter Total AK Area	18.00	14.4
Filter1 FPM	-	125
Filter2 FPM	-	143
Filter3 FPM	-	200
Filter4 FPM	-	188
Filter5 FPM	-	143
Filter6 FPM	-	134
Filter Ave FPM(corr)	-	156
CFM	2350	2246

Cooking Equipment		
	Design	Actual
Item 1	-	GAS STOVETOP
Item 2	-	OVEN

Notes:
SERVED BY EF-1

Written By: Bayley Morvant on 12/06/2023

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Project: 12-04-23 FIREBIRDS - PLANO, TX

System/Unit: Kitchen Hood Type I



Asset: HD2

AREA:

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XXEW--144-S	XBEW--144.00-S
Job / Serial Num	-	22391960
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	144"	144"
Hood Width	54"	54"

Test Data Exhaust		
	Design	Actual
Filter Type	XTRACTOR	BAFFLE
Filter Size 1	16X20	16X20
Filter Size 2	20X20	20X20
Filter Qty 1	4	4
Filter Qty 2	4	4
Filter AK factor size 1	2.00	2.10
Filters AK factor size 2	3.00	2.40
Filter Total AK Area	20	18
Filter1 FPM	-	120
Filter2 FPM	-	148
Filter3 FPM	-	186
Filter4 FPM	-	221
Filter5 FPM	-	207
Filter6 FPM	-	158
Filter7 FPM	-	148
Filter8 FPM	-	134
Filter Ave FPM(corr)	-	165
CFM	2820	2970

Cooking Equipment		
	Design	Actual
Item 1	-	FLAT TOP GRILLE
Item 2	-	FRYER

Notes:
SERVED BY EF-2

Written By: Bayley Morvant on 12/06/2023

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Project: 12-04-23 FIREBIRDS - PLANO, TX

System/Unit: Kitchen Hood Type I



Asset: HD3

AREA:ITEM 38 (SOLID FUEL)

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XWAE-B-98-S	XWAE-B-98.00-S
Job / Serial Num	-	22391961
Type	TYPE I LOW PROXIMITY	TYPE I LOW PROXIMITY
Hood length	60"	60"
Hood Width	98"	98"

Test Data Exhaust		
	Design	Actual
Filter Type	BAFFLE	OPEN FACE
Filter Size 1	16X20	86X3.875
Filter Qty 1	4	1
Filter AK factor size 1	2.10	2.31
Filter Total AK Area	8.4	2.31
Filter Ave FPM(corr)	-	1174
CFM	3000	2712

Cooking Equipment		
	Design	Actual
Item 1	-	WOOD FIRED GRILLE

Notes:
SERVED BY EF-3

Written By: Bayley Morvant on 12/06/2023

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Project: 12-04-23 FIREBIRDS - PLANO, TX

System/Unit: Kitchen Hood Type I



Asset: HD4

AREA:ITEM 70

Unit Data

	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XXEW-126-S	XBEW-135.00-S
Job / Serial Num	-	22391963
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	126"	135"
Hood Width	60"	60"

Test Data Exhaust

	Design	Actual
Filter Type	XTRACTOR	BAFFLE
Filter Size 1	16X20	16X20
Filter Size 2	20X20	20X20
Filter Qty 1	4	6
Filter Qty 2	3	2
Filter AK factor size 1	2.00	2.10
Filters AK factor size 2	3.00	2.40
Filter Total AK Area	17	17.4
Filter1 FPM	-	105
Filter2 FPM	-	111
Filter3 FPM	-	130
Filter4 FPM	-	165
Filter5 FPM	-	170
Filter6 FPM	-	138
Filter7 FPM	-	129
Filter8 FPM	-	104
Filter Ave FPM(corr)	-	132
CFM	2438	2297

Cooking Equipment

	Design	Actual
Item 1	-	GAS STOVE TOP
Item 2	-	

Notes:

SERVED BY EF-4

Written By: Bayley Morvant on 12/06/2023