Report By:

National TAB
1329 E Kemper Rd, Ste 4210
Cincinnati, OH 45246

Report: **Test and Balance**
Date: **8/26/2022**

PROJECT

FREDDY'S HCI - JUNCTION CITY, KS (1302) - RENEW 1 (2)

802 E Chestnut
Junction City, KS 66441

Client

HCI Hospitality
520 McCall Road
Manhattan, KS 66502

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Project: FREDDY'S HCI - JUNCTION CITY, KS (1302) - RENEW 1 (2)

System/Unit: AHU/RTU

Asset: RTU1 AREA: DINING

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Model Num	NA	YSC090E3EHA
Serial Num	-	100610821L
Num OA Filters 1	-	1
OA Filter Size 1	-	36X15.5
Num Final Filter 1	-	4
Final Filter Size 1	-	16X25X2
Num Final Filter 2	-	NA
Final Filter Size 2	-	NA

Motor Data		
	Design	**Actual**
Motor MFG	-	GE
Frame	-	56
Horsepower	-	1
Motor Rpm	-	1725
Phase	-	3
Rated Voltage	-	208-230/460
Rated Amperage	-	5.0-4.6/2.3

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	3.75
Motor Bore Size	-	0.625
Motor Sheave SetPt	-	
Fan Sheave Size	-	6
Fan Sheave Bore	-	1
Belt CL Distance	-	10
Num of Belts	-	1
Belt Size	-	AP32
Belt Alignment	-	GOOD

Gas Heat		
	Design	**Actual**
Gas Type	-	
Burner Type	-	
Heater Operates (y/n)	-	

Test Data		
	Design	**Actual**
SF CFM (Initial)	-	
SF CFM	-	
SF RPM (Initial)	-	994
SF RPM	-	
OA CFM	-	
RL Voltage	-	212/211/212
RL Amperage	-	37/3.7/3.7

Performance Data		
	Design	**Actual**
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	-	
Fan Total SP	-	
MA Temp (db/wb)	-	
SA Temp (db/wb)	-	

Compressors		
	Design	**Actual**
Refrigerant Charge	-	R410A
Refrigerant Type	-	
Comp 1 RLA	-	1 COMP
Comp 2 RLA	-	
Circuit 1 Superheat	-	
Circuit 2 Superheat	-	

General		
	Design	**Actual**
Unit free of Damage	-	
Unit Completely Assembled	-	
Unit Leveled	-	
Curb & Unit Installed Air Tight	-	
Controls Complete	-	
Unit Filters Clean	-	
Evap Coil Clean	-	
Evap Coil Free of Frost	-	
Condensor Coil Clean	-	
Condensor Fins Straight	-	
Refr Sight Glass Dry	-	
Condensate Drain Installed	-	

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System/Unit: AHU/RTU

General		
	Design	**Actual**
Crankcase Heaters Operate	-	

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System/Unit: AHU/RTU

Asset: RTU2 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Model Num	NA	YSC090E3EHA001S
Serial Num	-	100610813L
Num OA Filters 1	-	1
OA Filter Size 1	-	36X15.5
Num Final Filter 1	-	4
Final Filter Size 1	-	16X25X2
Num Final Filter 2	-	NA
Final Filter Size 2	-	NA

Motor Data		
	Design	**Actual**
Motor MFG	-	GE
Frame	-	56
Horsepower	-	1
Motor Rpm	-	1725
Phase	-	3
Rated Voltage	-	208-230/460
Rated Amperage	-	3.6-3.5/1.7

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	3.75
Motor Bore Size	-	0.625
Motor Sheave SetPt	-	
Fan Sheave Size	-	6
Fan Sheave Bore	-	1
Belt CL Distance	-	10.5
Num of Belts	-	1
Belt Size	-	A32
Belt Alignment	-	GOOD

Gas Heat		
	Design	**Actual**
Gas Type	-	
Burner Type	-	
Heater Operates (y/n)	-	

Test Data		
	Design	**Actual**
SF CFM (Initial)	-	
SF CFM	-	
SF RPM (Initial)	-	1019
SF RPM	-	
OA CFM	-	
RL Voltage	-	213/213/213
RL Amperage	-	2.8/2.9/2.7

Performance Data		
	Design	**Actual**
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	-	
Fan Total SP	-	
MA Temp (db/wb)	-	
SA Temp (db/wb)	-	

Compressors		
	Design	**Actual**
Refrigerant Charge	-	
Refrigerant Type	-	
Comp 1 RLA	-	
Comp 2 RLA	-	
Circuit 1 Superheat	-	
Circuit 2 Superheat	-	

General		
	Design	**Actual**
Unit free of Damage	-	
Unit Completely Assembled	-	
Unit Leveled	-	
Curb & Unit Installed Air Tight	-	
Controls Complete	-	
Unit Filters Clean	-	
Evap Coil Clean	-	
Evap Coil Free of Frost	-	
Condensor Coil Clean	-	
Condensor Fins Straight	-	
Refr Sight Glass Dry	-	
Condensate Drain Installed	-	

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System/Unit: AHU/RTU

General		
	Design	**Actual**
Crankcase Heaters Operate	-	

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System/Unit: AHU/RTU

Asset: RTU3 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Model Num	NA	YSC120E3EMB001S
Serial Num	-	10411726L
Num OA Filters 1	-	36X15.5
OA Filter Size 1	-	4
Num Final Filter 1	-	20X25X2
Final Filter Size 1	-	NA
Num Final Filter 2	-	NA
Final Filter Size 2	-	NA

Motor Data		
	Design	**Actual**
Motor MFG	-	UNIT
Frame	-	
Horsepower	-	0.75
Motor Rpm	-	
Phase	-	3
Rated Voltage	-	208
Rated Amperage	-	8.4

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	-	

Gas Heat		
	Design	**Actual**
Gas Type	-	
Burner Type	-	
Heater Operates (y/n)	-	

Test Data		
	Design	**Actual**
SF CFM (Initial)	-	
SF CFM	-	
SF RPM (Initial)	-	2.96 DCV
SF RPM	-	
OA CFM	-	
RL Voltage	-	213/213/213
RL Amperage	-	6.2/6.0/5.8

Performance Data		
	Design	**Actual**
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	-	
Fan Total SP	-	
MA Temp (db/wb)	-	
SA Temp (db/wb)	-	

Compressors		
	Design	**Actual**
Refrigerant Charge	-	
Refrigerant Type	-	
Comp 1 RLA	-	
Comp 2 RLA	-	
Circuit 1 Superheat	-	
Circuit 2 Superheat	-	

General		
	Design	**Actual**
Unit free of Damage	-	
Unit Completely Assembled	-	
Unit Leveled	-	
Curb & Unit Installed Air Tight	-	
Controls Complete	-	
Unit Filters Clean	-	
Evap Coil Clean	-	
Evap Coil Free of Frost	-	
Condensor Coil Clean	-	
Condensor Fins Straight	-	
Refr Sight Glass Dry	-	
Condensate Drain Installed	-	

System/Unit: AHU/RTU

General		
	Design	**Actual**
Crankcase Heaters Operate	-	

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Project: FREDDY'S HCI - JUNCTION CITY, KS (1302) - RENEW 1 (2)

System/Unit: FAN - Supply

Asset: SF1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	ACCUREX
Model Num	NA	XDGK-109-H115 -DB
Serial Num	-	12037695
Num Filters Size 1	-	4
Filter Size 1	-	16X20X2
Num Filters Size 2	-	NA
Filter Size 2	-	NA

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	D56
Horsepower	-	1.5
Motor Rpm	-	1735
Phase	-	3
Voltage (rated)	-	208-230/460
Amperage (rated)	-	5.1-4.6/2.3
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	3.75
Motor Bore Size	-	0.625
Motor Sheave SetPt	-	
Fan Sheave Size	-	4.5
Fan Sheave Bore	-	0.75
Belt CL Distance	-	21.25
Num of Belts	-	1
Belt Size	-	AX53
Belt Alignment Verified	-	GOOD

Gas Heat		
	Design	**Actual**
Gas Type	-	
Burner Type	-	
Heater Operates (y/n)	-	
Flame Status (pass/fail)	-	
Inlet Air Temp SetPt	-	
Discharge Air Temp SetPt	-	
Air Flow Switch SP Actual	-	

Test Data		
	Design	**Actual**
CFM	-	
SF RPM	-	1351
Motor RPM	-	1755
RL Voltage	-	211/212/213
RL Amperage	-	3.5/3.4/3.3

General		
	Design	**Actual**
Unit free of Damage	-	
Curb & Unit Installed Air Tight	-	
Fan Rotation Correct	-	
Fan Belt Condition	-	
Unit Filters Clean	-	

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Project: FREDDY'S HCI - JUNCTION CITY, KS (1302) - RENEW 1 (2)

System/Unit: FAN - Exhaust

Asset: EF1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	NA
Model Num	CEILING	CEILING
Serial Num	-	

Test Data		
	Design	**Actual**
CFM	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	
Horsepower	-	
Motor Rpm	-	
Phase	-	
Voltage (rated)	-	
Amperage (rated)	-	

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System/Unit: FAN - Exhaust

Asset: EF2 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	NA
Model Num	CEILING	CEILING
Serial Num	-	

Test Data		
	Design	**Actual**
CFM	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	
Horsepower	-	
Motor Rpm	-	
Phase	-	
Voltage (rated)	-	
Amperage (rated)	-	

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System/Unit: FAN - Exhaust

Asset: KEF1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	ACCUREX
Model Num	BELT	XRUB-141-7-G
Serial Num	-	12037755 1003
Type	-	CENTRIFUGAL
Configuration	-	UPBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	B56
Horsepower	-	0.75
Motor Rpm	-	1740
Phase	-	3
Voltage (rated)	-	208-230/460
Amperage (rated)	-	2.52-2.4/1.2
Service Factor	-	1.25

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	3.25
Motor Bore Size	-	0.625
Motor Sheave SetPt	-	
Fan Sheave Size	-	4
Fan Sheave Bore	-	0.75
Belt CL Distance	-	5.5 TENSIONER
Num of Belts	-	1
Belt Size	-	3L250W
Belt Alignment Verified	-	GOOD

Test Data		
	Design	**Actual**
CFM	-	
Fan RPM	-	1367
Fan Rotation	-	CW
Motor RPM	-	1758
RL Voltage	-	213/212/211
RL Amperage	-	2.3/2.2/2.1
Suction ESP	-	
Discharge ESP	-	
Total ESP	-	

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Project: FREDDY'S HCI - JUNCTION CITY, KS (1302) - RENEW 1 (2)

System/Unit: FAN - Exhaust

Asset: KEF2 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	ACCUREX
Model Num	BELT	XRUB-121-4-G
Serial Num	-	12037754 1003
Type	-	
Configuration	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	MARATHON
Frame	-	48Y
Horsepower	-	0.25
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	5.0
Service Factor	-	1.35

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	3.25
Motor Bore Size	-	0.625
Motor Sheave SetPt	-	
Fan Sheave Size	-	4
Fan Sheave Bore	-	0.75
Belt CL Distance	-	4.5 TENSIONER
Num of Belts	-	1
Belt Size	-	4L240
Belt Alignment Verified	-	GOOD

Test Data		
	Design	**Actual**
CFM	-	
Fan RPM	-	1231
Fan Rotation	-	CW
Motor RPM	-	1753
RL Voltage	-	122
RL Amperage	-	4.8
Suction ESP	-	
Discharge ESP	-	
Total ESP	-	

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System/Unit: Kitchen Hood Type I

Asset: HD1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	NA
Model Num	NA	NA
Job / Serial Num	-	
Type	-	
Hood length	-	
Hood Width	-	
Supply Plenum Type	-	
Supply Plenum Width	-	
Supply Plenum Length	-	

Test Data Exhaust		
	Design	**Actual**
Filter Type	-	
Filter Size 1	-	
Filter Size 2	-	
Filter Qty 1	-	
Filter Qty 2	-	
Filter AK factor size 1	-	
Filters AK factor size 2	-	
Filter Total AK Area	-	
Filter1 FPM	-	
Filter2 FPM	-	
Filter3 FPM	-	
Filter4 FPM	-	
Filter5 FPM	-	
Filter6 FPM	-	
Filter7 FPM	-	
Filter8 FPM	-	
Filter9 FPM	-	
Filter10 FPM	-	
Filter11 FPM	-	
Filter12 FPM	-	
Filter Ave FPM(corr)	-	
CFM	-	

Cooking Equipment		
	Design	**Actual**
Item 1	-	
Item 2	-	
Item 3	-	
Item 4	-	
Item 5	-	

Test Data Supply		
	Design	**Actual**
AK factor	-	
Total AK Area	-	
Kv factor (Vel)	-	
Num of Readings	-	
Reading1 FPM	-	
Reading2 FPM	-	
Reading3 FPM	-	
Reading4 FPM	-	
Reading5 FPM	-	
Reading6 FPM	-	
Reading7 FPM	-	
Reading8 FPM	-	
Reading9 FPM	-	
Reading10 FPM	-	
Reading11 FPM	-	
Reading12 FPM	-	
Reading13 FPM	-	
Reading14 FPM	-	
Ave FPM(corr)	-	
CFM	-	

Performance Data		
	Design	**Actual**
Exh-Supply Net CFM	-	
Smoke Generation Type	-	
Cooking Equip Heat On	-	
Hood Capture %	-	
End Panels Installed (Y/N)	-	
Space Offset Temp Riser 1	-	
Space Offset Temp Riser 2	-	
Riser Temp F (idle) Riser 1	-	
Riser Temp F (idle) Riser 2	-	
Ambient Room Temp	-	

General		
	Design	**Actual**
Third Party Witness	-	
Third Party Company	-	
Tech Witness	-	
Tech Company	-	

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System/Unit: Kitchen Hood Type I

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Project: FREDDY'S HCI - JUNCTION CITY, KS (1302) - RENEW 1 (2)

System/Unit: Kitchen Hood Type I

Asset: HD2 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	NA
Model Num	NA	NA
Job / Serial Num	-	
Type	-	
Hood length	-	
Hood Width	-	
Supply Plenum Type	-	
Supply Plenum Width	-	
Supply Plenum Length	-	

Test Data Exhaust		
	Design	**Actual**
Filter Type	-	
Filter Size 1	-	
Filter Size 2	-	
Filter Qty 1	-	
Filter Qty 2	-	
Filter AK factor size 1	-	
Filters AK factor size 2	-	
Filter Total AK Area	-	
Filter1 FPM	-	
Filter2 FPM	-	
Filter3 FPM	-	
Filter4 FPM	-	
Filter5 FPM	-	
Filter6 FPM	-	
Filter7 FPM	-	
Filter8 FPM	-	
Filter9 FPM	-	
Filter10 FPM	-	
Filter11 FPM	-	
Filter12 FPM	-	
Filter Ave FPM(corr)	-	
CFM	-	

Cooking Equipment		
	Design	**Actual**
Item 1	-	
Item 2	-	
Item 3	-	
Item 4	-	
Item 5	-	

Test Data Supply		
	Design	**Actual**
AK factor	-	
Total AK Area	-	
Kv factor (Vel)	-	
Num of Readings	-	
Reading1 FPM	-	
Reading2 FPM	-	
Reading3 FPM	-	
Reading4 FPM	-	
Reading5 FPM	-	
Reading6 FPM	-	
Reading7 FPM	-	
Reading8 FPM	-	
Reading9 FPM	-	
Reading10 FPM	-	
Reading11 FPM	-	
Reading12 FPM	-	
Reading13 FPM	-	
Reading14 FPM	-	
Ave FPM(corr)	-	
CFM	-	

Performance Data		
	Design	**Actual**
Exh-Supply Net CFM	-	
Smoke Generation Type	-	
Cooking Equip Heat On	-	
Hood Capture %	-	
End Panels Installed (Y/N)	-	
Space Offset Temp Riser 1	-	
Space Offset Temp Riser 2	-	
Riser Temp F (idle) Riser 1	-	
Riser Temp F (idle) Riser 2	-	
Ambient Room Temp	-	

General		
	Design	**Actual**
Third Party Witness	-	
Third Party Company	-	
Tech Witness	-	
Tech Company	-	

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System/Unit: Kitchen Hood Type I

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Project: FREDDY'S HCI - JUNCTION CITY, KS (1302) - RENEW 1 (2)

System/Unit: Kitchen Hood Type II

Asset: HD(Type2)1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	NA
Model Num	NA	NA
Serial Num	-	
Type	-	
Hood length	-	
Hood Width	-	
Num of Exhaust Risers	-	

Test Data		
	Design	**Actual**
Exhaust VEL(corr)	-	
Exhaust CFM	-	

Cooking Equipment		
	Design	**Actual**
Item 1	-	
Item 2	-	
Item 3	-	
Item 4	-	
Item 5	-	

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