

Report By:

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



**Report: pre
Function: Test, Adjust, & Balance
Date: 10/27/2022**

**PROJECT
11-07 PENN STATION - MINT HILL, NC**

6816 MATTHEWS - MINT HILL RD

MINT HILL, NC 28227

Client

C&T DESIGN
4025 PORT UNION RD.
FAIRFIELD, OH 45014

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Project: 11-07 PENN STATION - MINT HILL, NC

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Project: 11-07 PENN STATION - MINT HILL, NC

System/Unit: AHU/RTU



Comfort. Under control.

Asset: RTU1

AREA: DINING

Unit Data		
	Design	Actual
MFG	LENNOX	TRANE
Serial Num	-	221411030L
Model Num	LGH090H	YSC092H3ELA26D
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	35X15
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2
Num Final Filter 2	-	NA
Final Filter Size 2	-	NA

Motor Data		
	Design	Actual
Motor MFG	-	MARATHON
Frame	-	56
Horsepower	-	1
Motor Rpm	-	1725
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	3.3

Drive Data		
	Design	Actual
Motor Sheave Size	-	3"
Motor Bore Size	-	0.625
Motor Sheave SetPt	-	3.5 OPEN
Fan Sheave Size	-	6"
Fan Sheave Bore	-	0.875
Belt CL Distance	-	13
Num of Belts	-	1
Belt Size	-	AX35
Belt Alignment	-	GOOD

Test Data		
	Design	Actual
SF CFM	3000	3115
SF RPM	-	675
RA CFM	2250	2372
OA CFM	750	743
RL Voltage	-	208
RL Amperage	-	3.3/3.2/3.1
SF Rotation	-	CCW
RA Damper Position	-	75%
Min OA Damper Position	-	25%
Min OA Damper Type	-	SINGLE BLADE DAMPER
OA Enthalpy Setpt	-	NA

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.41"
Fan Suction SP	-	-0.59"
Fan Discharge SP	-	0.39"
Total ESP	-	0.80"
Fan Total SP	-	0.98"

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

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Project: 11-07 PENN STATION - MINT HILL, NC

AHU/RTU



Comfort. Under control.

Diffuser Supply (GRD)

RTU1/DINING

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	ENTRY	S3	10"	0	NA	0	0	0	-
SGRD2	ENTRY	S3	10"	0	NA	0	0	0	-
SGRD3	DINING	S2	10"	403	1	647	384	421	104.5
SGRD4	DINING	S2	10"	403	1	654	389	415	103.0
SGRD5	DINING	S2	10"	403	1	355	415	425	105.5
SGRD6	DINING	S2	10"	403	1	384	420	428	106.2
SGRD7	DINING	S2	10"	403	1	375	404	419	104.0
SGRD8	DINING	S2	10"	403	1	423	490	399	99.0
SGRD9	RESTROOM	S2	8"	205	1	225	321	193	94.1
SGRD10	PREP AREA	S2	10"	403	1	354	479	415	103.0

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Project: 11-07 PENN STATION - MINT HILL, NC

System/Unit: AHU/RTU



Comfort. Under control.

Asset: RTU2

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	LENNOX	TRANE
Serial Num	-	YSC092H3ELA26D
Model Num	LGH090H	221410253L
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	35X15
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2
Num Final Filter 2	-	NA
Final Filter Size 2	-	NA

Test Data		
	Design	Actual
SF CFM	3000	2967
SF RPM	-	670
RA CFM	2250	2186
OA CFM	750	781
RL Voltage	-	207/208/209
RL Amperage	-	3.1/3.1/3.2
SF Rotation	-	CCW
RA Damper Position	-	80%
Min OA Damper Position	-	25%
Min OA Damper Type	-	SINGLE BLADE
OA Enthalpy Setpt	-	NA

Motor Data		
	Design	Actual
Motor MFG	-	MARATHON
Frame	-	56
Horsepower	-	1
Motor Rpm	-	1725
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	3.3

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.27"
Fan Suction SP	-	-0.56"
Fan Discharge SP	-	0.38"
Total ESP	-	0.65"
Fan Total SP	-	0.94"

Drive Data		
	Design	Actual
Motor Sheave Size	-	3"
Motor Bore Size	-	0.625"
Motor Sheave SetPt	-	3.5 OPEN
Fan Sheave Size	-	6"
Fan Sheave Bore	-	0.875
Belt CL Distance	-	13
Num of Belts	-	1
Belt Size	-	AX35
Belt Alignment	-	GOOD

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

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Project:11-07 PENN STATION - MINT HILL, NC

AHU/RTU



Comfort. Under control.

Diffuser Supply (GRD)

RTU2/KITCHEN

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	PREP AREA	S2	10"	400	1	425	381	381	95.3
SGRD2	KITCHEN	S1		300	1	342	291	291	97.0
SGRD3	SERVING	S3		350	1	372	336	336	96.0
SGRD4	SERVING	S3		350	1	397	340	340	97.1
SGRD5	SERVING	S3		350	1	385	346	346	98.9
SGRD6	KITCHEN	S1		300	1	282	313	313	104.3
SGRD7	HOOD 1	ACPSP	12"	600	3.3	590	616	616	102.7
SGRD8	HOOD2	ACPSP	12"	350	1.6	264	344	344	98.3

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Project: 11-07 PENN STATION - MINT HILL, NC

System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: EF4

AREA:RESTROOM

Unit Data		
	Design	Actual
MFG	NA	NO ACCESS
Model Num	NA	NO ACCESS

Motor Data		
	Design	Actual

Test Data		
	Design	Actual
CFM	75	77
Fan RPM	-	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
RL Amperage	-	0.53

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Project: 11-07 PENN STATION - MINT HILL, NC

System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: KEF1

AREA:HD1 GRILL

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU85HFA	DU85HFA
Serial Num	-	5317880
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Frame	-	48EC
Horsepower	0.750	0.75
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	7.6
Service Factor	-	1

Test Data		
	Design	Actual
CFM	1120	1121
Fan RPM	1215	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
System SetPt	-	60%
RL Voltage	-	120
RL Amperage	-	5.2
Total ESP	1.150"	0.99"
Fan Inlet SP	-	-0.99
Fan Discharge SP	-	ATM

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Project: 11-07 PENN STATION - MINT HILL, NC

System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: KEF2

AREA:HD2 OVEN

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU33HFA	DU33HFA
Serial Num	-	5317880
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Frame	-	48EC
Horsepower	.333	0.33
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	3.9
Service Factor	-	1

Test Data		
	Design	Actual
CFM	600	616
Fan RPM	1360	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
System SetPt	-	85%
RL Voltage	-	120
RL Amperage	-	3.7
Total ESP	0.600"	0.56"
Fan Inlet SP	-	-0.56"
Fan Discharge SP	-	ATM

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Project: 11-07 PENN STATION - MINT HILL, NC

System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: KEF3

AREA:HD3 FRYERS

Unit Data

	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU85HFA	DU85HFA
Serial Num	-	5317880
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data

	Design	Actual
Motor MFG	-	TELCO GREEN
Frame	-	48EC
Horsepower	0.750	0.75
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	7.9
Service Factor	-	1

Test Data

	Design	Actual
CFM	833	818
Fan RPM	1144	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
System SetPt	-	60%
RL Voltage	-	120
RL Amperage	-	5.0
Total ESP	1.150"	0.73"
Fan Inlet SP	-	-0.73"
Fan Discharge SP	-	ATM

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