

Report By:

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



Report: prelim

Function: Test, Adjust, & Balance

Date: 02/12/2025

Completed By: National TAB

PROJECT

7W 7th Street (Cincinnati, OH)

7 West 7th Street

Cincinnati, OH 45202

Client

TP Mechanical

1500 Kemper Meadow Drive

Cincinnati, OH 45240

National TAB

Project: 7W 7th Street (Cincinnati, OH)

Table Of Contents

Section	Page #
AHU/RTU	3
Diffuser Supply (GRD)	9
FAN - Exhaust	11
FAN - Supply	16

National TAB

Project: 7W 7th Street (Cincinnati, OH)

System/Unit: AHU/RTU



Asset: B1

AREA:105 LEASING OFFICE

Unit Data		
	Design	Actual
MFG	NA	mitsubishi
Serial Num	-	
Model Num	NA	PEFY-P36NMAU-E4
Configuration	HORIZONTAL	
Num PreFilter 1	-	
PreFilter Size 1	-	
Num PreFilter 2	-	
PreFilter Size 2	-	
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@	
Motor Rpm	-	
Phase	1	
Rated Voltage	208	
Rated Amperage	3.4	
Service Factor	-	

Test Data		
	Design	Actual
SF CFM	1271	
SF RPM	-	
RA CFM	-	
OA CFM	-	
RL Voltage	208	
RL Amperage	3.4	
VFD Max SetPt	-	
SF Motor Freq(HZ)	-	
SF System SetPt	-	
RA Damper Position	-	
OA Damper Position	-	
Brake Horse Power	-	

Performance Data		
	Design	Actual
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	0.2	
Fan Total SP	-	
Pre-Filter P.D.	-	
Final Filters P.D.	-	
Cooling Coil P.D.	-	
PreHeat Coil P.D.	-	
Heating Coil P.D.	-	
Hot Gas Reheat P.D.	-	

National TAB
 Project: 7W 7th Street (Cincinnati, OH)
AHU/RTU



Diffuser Supply (GRD)

B1/105 LEASING OFFICE

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
B1-SGRD1	100 LOBBY	G		200			-
B1-SGRD2	100 LOBBY	G		200			-
B1-SGRD3	100 LOBBY	G		200			-
B1-SGRD4	100D ELEV LOBBY	G		300			-
Total				900	0	0	0%

National TAB

Project: 7W 7th Street (Cincinnati, OH)
System/Unit: AHU/RTU



Asset: B2

AREA:107 FIRE COMMAND

Unit Data		
	Design	Actual
MFG	NA	mitsubishi
Serial Num	-	
Model Num	NA	PEFY-P54NMAU-E4
Configuration	HORIZONTAL	
Num PreFilter 1	-	
PreFilter Size 1	-	
Num PreFilter 2	-	
PreFilter Size 2	-	
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@	
Motor Rpm	-	
Phase	1	
Rated Voltage	208	
Rated Amperage	3.5	
Service Factor	-	

Test Data		
	Design	Actual
SF CFM	1400	
SF RPM	-	
RA CFM	-	
OA CFM	-	
RL Voltage	208	
RL Amperage	3.5	
VFD Max SetPt	-	
SF Motor Freq(HZ)	-	
SF System SetPt	-	
RA Damper Position	-	
OA Damper Position	-	
Brake Horse Power	-	

Performance Data		
	Design	Actual
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	0.2	
Fan Total SP	-	
Pre-Filter P.D.	-	
Final Filters P.D.	-	
Cooling Coil P.D.	-	
PreHeat Coil P.D.	-	
Heating Coil P.D.	-	
Hot Gas Reheat P.D.	-	

National TAB
 Project: 7W 7th Street (Cincinnati, OH)
AHU/RTU



Diffuser Supply (GRD)

B2/107 FIRE COMMAND

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
B2-SGRD1	107 FIRE COMMAND	D	10X6	100			-
B2-SGRD2	106D AMAZON PKG	D	12X6	150			-
B2-SGRD3	106A CORR VEST	G		175			-
B2-SGRD4	106C MAIL ROOM	D		175			-
B2-SGRD5	100A ENTRY VEST	G		175			-
B2-SGRD6	100 LOBBY CORR	G		250			-
B2-SGRD7	100 LOBBY CORR	G		250			-
B2-SGRD8	101 MEETING RM	G		125			-
Total				1400	0	0	0%

National TAB

Project: 7W 7th Street (Cincinnati, OH)
System/Unit: AHU/RTU



Asset: B3

AREA:105C STORAGE

Unit Data		
	Design	Actual
MFG	NA	MITSUBISHI
Serial Num	-	
Model Num	NA	PV FY- P36NAMU-E1
Type	-	
Configuration	HORIZONTAL	
Num PreFilter 1	-	
PreFilter Size 1	-	
Num PreFilter 2	-	
PreFilter Size 2	-	
Num Final Filter 1	-	
Final Filter Size 1	-	
Num Final Filter 2	-	
Final Filter Size 2	-	

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

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

Test Data		
	Design	Actual
SF CFM	725	
SF RPM	-	
RA CFM	-	
OA CFM	-	
RL Voltage	-	
RL Amperage	-	
VFD Max SetPt	-	
SF Motor Freq(HZ)	-	
SF System SetPt	-	
RA Damper Position	-	
OA Damper Position	-	
Brake Horse Power	-	

Performance Data		
	Design	Actual
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	-	
Fan Total SP	-	
Pre-Filter P.D.	-	
Final Filters P.D.	-	
Cooling Coil P.D.	-	
CHW Coil P.D.	-	
PreHeat Coil P.D.	-	
HW Coil P.D.	-	

National TAB
 Project: 7W 7th Street (Cincinnati, OH)
AHU/RTU



Diffuser Supply (GRD)

B3/105C STORAGE

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
B3-SGRD1	105A PM OFFICE	D	10X6	125			-
B3-SGRD2	105B MEETING RM	D	10X6	125			-
B3-SGRD3	105 LEASING OFFICE	D	10X6	175			-
B3-SGRD4	104 OFFICE	D	10X6	100			-
B3-SGRD5	103 OFFICE	D	10X6	100			-
B3-SGRD6	102 OFFICE	D	10X6	100			-
Total				725	0	0	0%

National TAB

Project: 7W 7th Street (Cincinnati, OH)



Diffuser Supply (GRD)

B1/105 LEASING OFFICE

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
B1-SGRD1	100 LOBBY	G		200			-
B1-SGRD2	100 LOBBY	G		200			-
B1-SGRD3	100 LOBBY	G		200			-
B1-SGRD4	100D ELEV LOBBY	G		300			-
Total				900	0	0	0%

B2/107 FIRE COMMAND

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
B2-SGRD1	107 FIRE COMMAND	D	10X6	100			-
B2-SGRD2	106D AMAZON PKG	D	12X6	150			-
B2-SGRD3	106A CORR VEST	G		175			-
B2-SGRD4	106C MAIL ROOM	D		175			-
B2-SGRD5	100A ENTRY VEST	G		175			-
B2-SGRD6	100 LOBBY CORR	G		250			-
B2-SGRD7	100 LOBBY CORR	G		250			-
B2-SGRD8	101 MEETING RM	G		125			-
Total				1400	0	0	0%

B3/105C STORAGE

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
B3-SGRD1	105A PM OFFICE	D	10X6	125			-
B3-SGRD2	105B MEETING RM	D	10X6	125			-
B3-SGRD3	105 LEASING OFFICE	D	10X6	175			-
B3-SGRD4	104 OFFICE	D	10X6	100			-
B3-SGRD5	103 OFFICE	D	10X6	100			-
B3-SGRD6	102 OFFICE	D	10X6	100			-
Total				725	0	0	0%

MAU/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
OA-801	801	A	8X8	30			-
OA-802	802	A	8X8	30			-
OA-803	803	A	8X8	30			-
OA-804	804	A	8X8	30			-
OA-805	805	A	8X8	30			-
OA-806	806	A	8X8	30			-
OA-807	807	B	8X8	45			-
OA-808	808	B	8X8	45			-
OA-809	809	A	8X8	30			-
OA-810	810	A	8X8	30			-
OA-811	811	A	8X8	30			-
OA-812	812	A	8X8	30			-
OA-813	813	B	8X8	45			-
OA-814	814	B	8X8	45			-
OA-815	815	B	8X8	45			-
OA-816	816	A	8X8	30			-
OA-817	817	A	8X8	30			-
OA-818	818	A	8X8	30			-
OA-819	819	A	8X8	45			-
OA-820	820	A	8X8	30			-
OA-825	824	D	12X12	400			-
OA-8COOR1	CORR	D	12X12	300			-
OA-8COOR2	CORR	D	12X12	300			-
Total				1690	0	0	0%

National TAB

Project: 7W 7th Street (Cincinnati, OH)
System/Unit: FAN - Exhaust



Asset: EF-22

AREA:

Unit Data		
	Design	Actual
MFG	NA	TWIN CITY FAN
Model Num	NA	TSL-330
Serial Num	-	24-848315-3-1
Type	INLINE	INLINE

Test Data		
	Design	Actual
CFM	22000	
Fan RPM	1269	
RL Voltage	460	
RL Amperage	-	
Suction ESP	-	
Discharge ESP	-	
Total ESP	2.0	
Brake Horse Power	-	

Motor Data		
	Design	Actual
Motor MFG	-	TECO WESTINGHOUSE
Frame	-	256T
Horsepower	20.0	20
Motor Rpm	1800	1770
Phase	3	3
Voltage (rated)	460	460
Amperage (rated)	-	24.0
Service Factor	-	1.15

Drive Data	
	Actual
Motor Sheave Size	285V64
Motor Bore Size	1-5/8"
Motor Sheave SetPt	NA
Fan Sheave Size	INACCESSIBLE
Fan Sheave Bore	INACCESSIBLE
Belt CL Distance	36"
Num of Belts	2
Belt Size	BX94

National TAB
Project: 7W 7th Street (Cincinnati, OH)
FAN - Exhaust



Diffuser Ret/Exh (GRD)

EF-22/

Asset								
Asset Name	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EA-801	B	8X8	45					-
EA-802	B	8X8	45					-
EA-803	B	8X8	45					-
EA-804	B	8X8	45					-
EA-805	B	8X8	45					-
EA-806	B	8X8	45					-
EA-809	B	8X8	45					-
EA-810	B	8X8	45					-
EA-811	B	8X8	45					-
EA-812	B	8X8	45					-
EA-816	B	8X8	45					-
EA-817	B	8X8	45					-
EA-818	B	8X8	45					-
EA-820	B	8X8	45					-
EA-822	B	8X8	70					-
EA-823	B	8X8	70					-
EA-824	B	8X8	40					-
EA-901								
EA-902								
EA-903								
EA-904								
EA-905								
EA-906								
EA-908								
EA-909								
EA-910								
EA-911								
EA-913								
EA-914								
EA-915								
EA-918								
EA-919								
EA-920								
EA-930								
EA-807A 1	A	8X8	45					-
EA-807B 1	A	8X8	45					-
EA-808A 1	A	8X8	45					-
EA-808B 1	A	8X8	45					-
EA-813A 1	A	8X8	45					-
EA-813B 1	A	8X8	45					-
EA-814A 1	A	8X8	45					-
EA-814B 1	A	8X8	45					-
EA-815A 1	A	8X8	45					-
EA-815B 1	A	8X8	45					-
EA-819A 1	A	8X8	45					-
EA-819B 1	A	8X8	45					-
EA-907A 1								
EA-907B 1								
EA-912A 1								
EA-912B 1								
EA-916A 1								
EA-916B 1								
EA-917A 1								
EA-917B 1								
EA-921A 1								
EA-921B 1								
EA-925A 1								
EA-925B 1								
Total			1350		0	0	0	0%

National TAB

Project: 7W 7th Street (Cincinnati, OH)
System/Unit: FAN - Exhaust



Asset: EF-1/1

AREA:

Unit Data		
	Design	Actual
MFG	NA	TWIN CITY FAN
Model Num	NA	T-400H
Serial Num	-	
Type	CEILING	

Test Data		
	Design	Actual
CFM	175	
RL Voltage	115	
RL Amperage	-	
Discharge ESP	-	
Total ESP	0.33	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	0.25	
Motor Rpm	545	
Phase	1	
Voltage (rated)	115	
Amperage (rated)	-	
Service Factor	-	

National TAB

Project: 7W 7th Street (Cincinnati, OH)
System/Unit: FAN - Exhaust



Asset: EF-B 1

AREA:BASEMENT

Unit Data		
	Design	Actual
MFG	NA	TWIN CITY FAN
Model Num	NA	T-400H
Serial Num	-	
Type	CEILING	

Test Data		
	Design	Actual
CFM	250	
RL Voltage	115	
RL Amperage	-	
Discharge ESP	-	
Total ESP	0.20	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	0.25	
Motor Rpm	735	
Phase	1	
Voltage (rated)	115	
Amperage (rated)	-	
Service Factor	-	

National TAB

Project: 7W 7th Street (Cincinnati, OH)
System/Unit: FAN - Supply



Asset: SF-E1

AREA:MECHANICAL RM

Unit Data		
	Design	Actual
MFG	NA	TWIN CITY FAN
Model Num	NA	QCLB-365A2
Serial Num	-	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	15.0	
Motor Rpm	1800	
Phase	3	
Voltage (rated)	460	
Amperage (rated)	-	
Service Factor	-	

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

Test Data		
	Design	Actual
CFM	30000	
SF RPM	898	
RL Voltage	460	
RL Amperage	-	
Suction ESP	-	
Discharge ESP	-	
Total ESP	1.40	
Brake Horse Power	-	13.89

National TAB

Project: 7W 7th Street (Cincinnati, OH)
System/Unit: FAN - Supply



Asset: SF-E2

AREA:ST2B STAIR 2 VEST

Unit Data		
	Design	Actual
MFG	NA	TWIN CITY FAN
Model Num	NA	QCLB-365A2
Serial Num	-	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	15.0	
Motor Rpm	1800	
Phase	3	
Voltage (rated)	460	
Amperage (rated)	-	
Service Factor	-	

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

Test Data		
	Design	Actual
CFM	30000	
SF RPM	898	
RL Voltage	460.	
RL Amperage	-	
Suction ESP	-	
Discharge ESP	-	
Total ESP	1.40	
Brake Horse Power	-	13.89

National TAB

Project: 7W 7th Street (Cincinnati, OH)
System/Unit: FAN - Supply



Asset: SF-W1

AREA:MECHANICAL RM

Unit Data		
	Design	Actual
MFG	NA	TWIN CITY FAN
Model Num	NA	QCLB-365A2
Serial Num	-	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	15.0	
Motor Rpm	1800	
Phase	3	
Voltage (rated)	460	
Amperage (rated)	-	
Service Factor	-	

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

Test Data		
	Design	Actual
CFM	30000	
SF RPM	898	
RL Voltage	460	
RL Amperage	-	
Suction ESP	-	
Discharge ESP	-	
Total ESP	1.40	
Brake Horse Power	-	13.89

National TAB

Project: 7W 7th Street (Cincinnati, OH)
System/Unit: FAN - Supply



Asset: SF-W2

AREA:ST1B STAIR 1 VEST

Unit Data		
	Design	Actual
MFG	NA	TWIN CITY FAN
Model Num	NA	QCLB-365A2
Serial Num	-	

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

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

Test Data		
	Design	Actual
CFM	-	
SF RPM	-	
RL Voltage	-	
RL Amperage	-	
Suction ESP	-	
Discharge ESP	-	
Total ESP	-	
Brake Horse Power	-	