

Report By:

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

NATIONAL

TAB

Comfort. Under control.

**Report: PRELIM REPORT
Function: Test, Adjust, & Balance
Date: 09/29/2022**

PROJECT

Wainscott CATS Studio (Cincinnati, OH)

5050 MADISON RD

CINCINNATI, OH 45227

Client

Cinfab, LLC

5240 Lester Road

Cincinnati, OH 45213

National TAB

Project: Wainscott CATS Studio (Cincinnati, OH)

Table Of Contents

Section	Page #
Circuit Setter	3
Diffuser Ret/Exh (GRD)	4
Diffuser Supply (GRD)	5
Heat Pump	7

National TAB

Project:Wainscott CATS Studio (Cincinnati, OH)



Comfort. Under control.

Circuit Setter

3WSHP BVs/

Asset							
Asset Name	Size	Type	Design GPM	Setting	Delta P	Final GPM	% to Design
CS1	3/4"	CIRCUIT SETTER	3	40	39.0FT	3.3	110.0
CS2	3/4	CIRCUIT SETTER	6.00	18	32.9	5.7	95.0

National TAB

Project:Wainscott CATS Studio (Cincinnati, OH)



Diffuser Ret/Exh (GRD)

3EA Dampers/

Asset								
Asset Name	Type	Size	AK	CFM(1)	CFM(2)	FINAL CFM	% to design	DESIGN CFM
EGRD1	R3		1	250	36	36	-	
EGRD2	DUCT		1	770	71	71	-	
HP-8-EGRD1	R2							300

3HP-8/

Asset								
Asset Name	Type	Size	AK	CFM(1)	CFM(2)	FINAL CFM	% to design	DESIGN CFM
EGRD1	R3		1	250	36	36	-	
EGRD2	DUCT		1	770	71	71	-	
HP-8-EGRD1	R2							300

National TAB

Project:Wainscott CATS Studio (Cincinnati, OH)



Comfort. Under control.

Diffuser Supply (GRD)

3Ex HPLL-7/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
SGRD1	021	S3		175	268	182	104.0
SGRD2	021	S3		175	291	179	102.3
SGRD3	021	S3		175	256	186	106.3
SGRD4	021	S3		175	261	176	100.6
SGRD1	017A	S4		25	62	24	96.0
SGRD2	017B	DUCT		180	223	186	103.3
SGRD3	017C	DUCT		200	209	209	104.5
SGRD4	021	DUCT		360	433	373	103.6
HP-8-SGRD1			EX	300	476	410	136.7
HP-17-SGRD1	017A	S1		50	85	54	108.0
HP-17-SGRD2	CORRIDOR	S2		50	59	52	104.0
HP-17-SGRD3	CORRIDOR	S2		50	62	50	100.0
HP-17-SGRD4	CORRIDOR	S2		50	50	48	96.0
HP-17-SGRD5	CORRIDOR	S2		50	49	52	104.0
HP-17-SGRD6	017B	S2		110	223	120	109.1
HP-17-SGRD7	017B	S2		110	230	111	100.9
HP-17-SGRD8	017C	S2		100	140	105	105.0
HP-17-SGRD9	017C	S2		100	120	106	106.0

30A Dampers/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
SGRD1	021	S3		175	268	182	104.0
SGRD2	021	S3		175	291	179	102.3
SGRD3	021	S3		175	256	186	106.3
SGRD4	021	S3		175	261	176	100.6
SGRD1	017A	S4		25	62	24	96.0
SGRD2	017B	DUCT		180	223	186	103.3
SGRD3	017C	DUCT		200	209	209	104.5
SGRD4	021	DUCT		360	433	373	103.6
HP-8-SGRD1			EX	300	476	410	136.7
HP-17-SGRD1	017A	S1		50	85	54	108.0
HP-17-SGRD2	CORRIDOR	S2		50	59	52	104.0
HP-17-SGRD3	CORRIDOR	S2		50	62	50	100.0
HP-17-SGRD4	CORRIDOR	S2		50	50	48	96.0
HP-17-SGRD5	CORRIDOR	S2		50	49	52	104.0
HP-17-SGRD6	017B	S2		110	223	120	109.1
HP-17-SGRD7	017B	S2		110	230	111	100.9
HP-17-SGRD8	017C	S2		100	140	105	105.0
HP-17-SGRD9	017C	S2		100	120	106	106.0

3HP-8/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
SGRD1	021	S3		175	268	182	104.0
SGRD2	021	S3		175	291	179	102.3
SGRD3	021	S3		175	256	186	106.3
SGRD4	021	S3		175	261	176	100.6
SGRD1	017A	S4		25	62	24	96.0
SGRD2	017B	DUCT		180	223	186	103.3
SGRD3	017C	DUCT		200	209	209	104.5
SGRD4	021	DUCT		360	433	373	103.6
HP-8-SGRD1			EX	300	476	410	136.7
HP-17-SGRD1	017A	S1		50	85	54	108.0
HP-17-SGRD2	CORRIDOR	S2		50	59	52	104.0
HP-17-SGRD3	CORRIDOR	S2		50	62	50	100.0
HP-17-SGRD4	CORRIDOR	S2		50	50	48	96.0
HP-17-SGRD5	CORRIDOR	S2		50	49	52	104.0
HP-17-SGRD6	017B	S2		110	223	120	109.1
HP-17-SGRD7	017B	S2		110	230	111	100.9
HP-17-SGRD8	017C	S2		100	140	105	105.0
HP-17-SGRD9	017C	S2		100	120	106	106.0

3HP-17/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
SGRD1	021	S3		175	268	182	104.0
SGRD2	021	S3		175	291	179	102.3
SGRD3	021	S3		175	256	186	106.3
SGRD4	021	S3		175	261	176	100.6
SGRD1	017A	S4		25	62	24	96.0
SGRD2	017B	DUCT		180	223	186	103.3
SGRD3	017C	DUCT		200	209	209	104.5
SGRD4	021	DUCT		360	433	373	103.6
HP-8-SGRD1			EX	300	476	410	136.7
HP-17-SGRD1	017A	S1		50	85	54	108.0
HP-17-SGRD2	CORRIDOR	S2		50	59	52	104.0
HP-17-SGRD3	CORRIDOR	S2		50	62	50	100.0
HP-17-SGRD4	CORRIDOR	S2		50	50	48	96.0
HP-17-SGRD5	CORRIDOR	S2		50	49	52	104.0
HP-17-SGRD6	017B	S2		110	223	120	109.1
HP-17-SGRD7	017B	S2		110	230	111	100.9
HP-17-SGRD8	017C	S2		100	140	105	105.0
HP-17-SGRD9	017C	S2		100	120	106	106.0

National TAB

Project: Wainscott CATS Studio (Cincinnati, OH)

System/Unit: Heat Pump



Comfort. Under control.

Asset: HP-8

AREA:

Unit Data		
	Design	Actual
Unit MFG	NA	CLIMATE MASTER
Model Num	NA	TC-012AEC40CTBS
Serial Num	-	22310006
Configuration	HORIZONTAL	HORIZONTAL
Num Filters Size 1	-	1
Filter Size 1	-	9.625X17.625X1

Test Data		
	Design	Actual
SA CFM	300	410
SFAN RPM	MED	LOW SPEED
Motor Speed Setpt	-	TAP 3
RL Voltage	-	210.2
RL Amperage	-	0.45
RA CFM	300	401
OA CFM	0	0

Motor Data		
	Design	Actual
Motor MFG	-	US MOTOR
Frame	-	42Y
Horsepower	-	1/5
Motor Rpm	-	NL
Phase	1	1
Voltage	265	208
Amperage	-	0.85

Performance Data		
	Design	Actual
Suction ESP	-	-0.11"
Discharge ESP	-	0.03"
Total ESP	0.30	0.14"

Completed By: Tyler Youells

Notes:

National TAB

Project: Wainscott CATS Studio (Cincinnati, OH)

Heat Pump



Comfort. Under control.

Diffuser Supply (GRD)

HP-8/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
HP-8-SGRD1			EX	300	476	410	136.7

Diffuser Ret/Exh (GRD)

HP-8/

Asset								
Asset Name	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
HP-8-EGRD1	R2		300	1	476		401	133.7

Completed By: Tyler Youells on

National TAB

Project: Wainscott CATS Studio (Cincinnati, OH)

System/Unit: Heat Pump



Comfort. Under control.

Asset: HP-17

AREA:

Unit Data		
	Design	Actual
Unit MFG	NA	CLIMATE MASTER
Model Num	NA	TCH024AEC40CSBS
Serial Num	-	222810979
Configuration	HORIZONTAL	HORIZONTAL
Num Filters Size 1	-	1
Filter Size 1	-	18X24X1

Test Data		
	Design	Actual
SA CFM	670	694
SFAN RPM	MED	LOW
Motor Speed Setpt	-	TAP 3
RL Voltage	-	218.5
RL Amperage	-	0.82
RA CFM	670	694

Motor Data		
	Design	Actual
Motor MFG	-	US MOTOR
Frame	-	48Y
Horsepower	-	1/3
Motor Rpm	-	1000
Phase	1	1
Voltage	265	265
Amperage	-	1.2

Performance Data		
	Design	Actual
Suction ESP	-	-0.09
Discharge ESP	-	0.24"
Total ESP	0.30	0.33"

Completed By: Tyler Youells

Notes:

National TAB

Project: Wainscott CATS Studio (Cincinnati, OH)

Heat Pump



Comfort. Under control.

Diffuser Supply (GRD)

HP-17/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
HP-17-SGRD1	017A	S1		50	85	54	108.0
HP-17-SGRD2	CORRIDOR	S2		50	59	52	104.0
HP-17-SGRD3	CORRIDOR	S2		50	62	50	100.0
HP-17-SGRD4	CORRIDOR	S2		50	50	48	96.0
HP-17-SGRD5	CORRIDOR	S2		50	49	52	104.0
HP-17-SGRD6	017B	S2		110	223	120	109.1
HP-17-SGRD7	017B	S2		110	230	111	100.9
HP-17-SGRD8	017C	S2		100	140	105	105.0
HP-17-SGRD9	017C	S2		100	120	106	106.0

Completed By: Stephan Gabbert on