Report By:

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

Report: PRE

Function: Test, Adjust, & Balance

Date: 07/09/2025

Completed By: National TAB

PROJECT

Cincinnati Classical Academy (Blue Ash, OH)

10200 Anderson Way

Cincinnati, OH 45242

Client

Mechanical Services & Design (MSD)

4401 Springfield St

Dayton, OH 45431

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

Table Of Contents

Section	Page #
AHU/RTU	3
FAN - Exhaust	35
FAN - Supply	36
Kitchen Hood Type I	37
AHU-DUAL FAN	39

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: AHU/RTU

Asset: RTU-A 1 AREA:FLOOR 1,2 AREA A

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Model Num	NA	SFHLF604LK67C9AD80010BZB
Configuration	-	VERTICAL

Test Data		
	Design	**Actual**
SF CFM	21000	20656

Motor Data		
	Design	**Actual**
Horsepower	40.0	40
Phase	3	3
Rated Voltage	460	460

National TAB

Project:Cincinnati Classical Academy (Blue Ash, OH)

AHU/RTU

VAV - Single Duct

RTU-A 1/FLOOR 1,2 AREA A

Asset											
Asset Name	MFG	Model Num	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
VAV-123	TITUS	DESV	COOLING	10	1195	1165	410	407	0	0	1364
VAV-126	TITUS	DESV	COOLING	10	1100	1112	410	421	0	0	1407
VAV-138	TITUS	DESV	COOLING	6	350	355	145	139	0	0	473
VAV-215	TITUS	DESV	COOLING	10	1000	986	410	412	0	0	1363
VAV-217	TITUS	DESV	COOLING	10	1030	1046	410	418	0	0	1438
VAV-219	TITUS	DESV	COOLING	8	550	557	175	177	0	0	912
VAV-236	TITUS	DESV	COOLING	8	650	652	175	177	0	0	927
VAV-238	TITUS	DESV	COOLING	8	650	656	175	179	0	0	859
VAVR-113	TITUS	DESV	REHEAT	10	1000	1017	280	291	380	376	1392
VAVR-114	TITUS	DESV	REHEAT	10	1000	1012	280	286	380	389	1476
VAVR-115	TITUS	DESV	REHEAT	10	1000	1002	280	288	380	397	1482
VAVR-116	TITUS	DESV	REHEAT	8	900	934	160	170	265	259	975
VAVR-119	TITUS	DESV	REHEAT	8	700	718	160	169	245	257	957
VAVR-120	TITUS	DESV	REHEAT	6	500	447	100	97	215	221	481
VAVR-200	TITUS	DESV	REHEAT	6	450	448	100	105	215	222	425
VAVR-208	TITUS	DESV	REHEAT	10	1200	1229	280	289	425	411	1429
VAVR-209	TITUS	DESV	REHEAT	10	1200	1223	280	271	425	418	1329
VAVR-210	TITUS	DESV	REHEAT	10	1200	1232	280	290	425	431	1462
VAVR-211	TITUS	DESV	REHEAT	10	1000	996	280	274	425	433	1244
VAVR-213	TITUS	DESV	REHEAT	8	750	785	160	162	265	258	822

Diffuser Supply (GRD)

VAV-123/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
SGRD1	123	S-1	8	150	135	135	90.0
SGRD2	125 RR	S-1	6	75	80	80	106.7
SGRD3	124 RR	S-1	6	75	67	69	92.0
SGRD4	127	S-1	8	150	143	143	95.3
SGRD5	123	S-1	8	150	141	141	94.0
SGRD6	122	S-1	8	125	153	134	107.2
SGRD7	140 RR	S-1	8	135	164	143	105.9
SGRD8	141 RR	S-1	8	135	200	139	103.0
SGRD9	139 RR	S-1	8	200	145	181	90.5
Total				1195	1228	1165	97.49%

VAV-126/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
SGRD1	126	S-1	8	200	136	205	102.5
SGRD2	126	S-1	8	200	195	195	97.5
SGRD3	126	S-1	8	200	147	198	99.0
SGRD4	126	S-1	8	150	205	138	92.0
SGRD5	126	S-1	8	200	149	211	105.5
SGRD6	126	S-1	8	150	246	165	110.0
Total				1100	1078	1112	101.09%

VAV-138/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	138	S-1	10	350	378	355	101.4
Total				350	378	355	101.43%

VAV-215/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	215	S-1	8	200	165	198	99.0
SGRD2	215	S-1	8	200	155	188	94.0
SGRD3	215	S-1	8	200	230	205	102.5
SGRD4	215	S-1	8	200	225	185	92.5
SGRD5	215	S-1	8	200	193	210	105.0
Total				1000	968	986	98.6%

VAV-217/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	217	S-1	8	150	59	161	107.3
SGRD2	217	S-1	8	150	164	155	103.3
SGRD3	217	S-1	8	150	162	147	98.0
SGRD4	217	S-1	8	150	92	153	102.0
SGRD5	216	S-1	8	115	193	118	102.6
SGRD6	218	S-1	8	115	158	121	105.2
SGRD7	CORR	S-1	8	200	228	191	95.5
Total				1030	1056	1046	101.55%

VAV-219/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	219	S-1	10	225	281	235	104.4
SGRD2	220A	S-1	8	125	146	127	101.6
SGRD3	220B	S-1	8	125	153	119	95.2
SGRD4	221	S-2	6	75	28	76	101.3
Total				550	608	557	101.27%

VAV-236/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	236	S-1	8	200	264	180	90.0
SGRD2	236	S-1	10	225	209	231	102.7
SGRD3	236	S-1	10	225	194	241	107.1
Total				650	667	652	100.31%

VAV-238/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	238	S-1	8	200	184	209	104.5
SGRD2	238	S-1	10	225	191	216	96.0
SGRD3	238	S-1	10	225	243	231	102.7
Total				650	618	656	100.92%

VAVR-113/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	113	S-1	10	300	287	305	101.7
SGRD2	113	S-1	8	200	200	205	102.5
SGRD3	113	S-1	8	200	167	186	93.0
SGRD4	113	S-1	10	300	316	321	107.0
Total				1000	970	1017	101.7%

VAVR-114/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	114	S-1	10	300	331	298	99.3
SGRD2	114	S-1	8	200	156	206	103.0
SGRD3	114	S-1	8	200	226	199	99.5
SGRD4	114	S-1	10	300	315	309	103.0
Total				1000	1028	1012	101.2%

VAVR-115/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	115	S-1	10	300	314	309	103.0
SGRD2	115	S-1	8	200	173	191	95.5
SGRD3	115	S-1	8	200	204	196	98.0
SGRD4	115	S-1	10	300	341	306	102.0
Total				1000	1032	1002	100.2%

VAVR-116/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	116	S-1	8	150	135	161	107.3
SGRD2	116	S-1	10	250	311	267	106.8
SGRD3	116	S-1	10	250	318	245	98.0
SGRD4	116	S-1	10	250	207	261	104.4
Total				900	971	934	103.78%

VAVR-119/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	119	S-1	8	125	125	122	97.6
SGRD2	119	S-1	8	125	112	113	90.4
SGRD3	119	S-1	10	225	249	238	105.8
SGRD4	119	S-1	10	225	248	245	108.9
Total				700	734	718	102.57%

VAVR-120/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1		EXISTING		150	121	154	102.7
SGRD2		EXISTING		300	171	293	97.7
Total				450	292	447	99.33%

VAVR-200/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1		EXISTING	8	150		159	106.0
SGRD2		EXISTING	12	300		289	96.3
Total				450	0	448	99.56%

VAVR-208/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	208	S-1	10	300		319	106.3
SGRD2	208	S-1	10	300		311	103.7
SGRD3	208	S-1	10	300		290	96.7
SGRD4	208	S-1	10	300		309	103.0
Total				1200	0	1229	102.42%

VAVR-209/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	209	S-1	10	300	297	325	108.3
SGRD2	209	S-1	10	300	309	328	109.3
SGRD3	209	S-1	10	300	253	282	94.0
SGRD4	209	S-1	10	300	259	288	96.0
Total				1200	1118	1223	101.92%

VAVR-210/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	210	S-1	10	300		324	108.0
SGRD2	210	S-1	10	300		324	108.0
SGRD3	210	S-1	10	300		276	92.0
SGRD4	210	S-1	10	300		308	102.7
Total				1200	0	1232	102.67%

VAVR-211/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	211	S-1	8	175	144	160	91.4
SGRD2	211	S-1	10	275	273	285	103.6
SGRD3	211	S-1	10	275	271	299	108.7
SGRD4	211	S-1	10	275	178	252	91.6
Total				1000	866	996	99.6%

VAVR-213/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	213	S-1	8	150	136	155	103.3
SGRD2	213	S-1	8	150	110	135	90.0
SGRD3	213	S-1	10	225	244	248	110.2
SGRD4	213	S-1	10	225	235	247	109.8
Total				750	725	785	104.67%

Completed By: Nick Payne on 07/02/2025

Asset	Notes	Date	Written By
VAV-123	Dampers for diffusers 2 and 3 were unable to locate and access. Dampers for diffuser 8 unable t o locate	07/02/2025	Corey Dick

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: AHU/RTU

Asset: RTU-B 1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Model Num	NA	YSD240G4RHA00D001000
Configuration	-	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	20x60
Num PreFilter 1	-	4/4
PreFilter Size 1	-	20”x20”x2”/20”x25”x2”

Motor Data		
	Design	**Actual**
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	5.0	5.0
Motor Rpm	-	3450
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	6.3
Service Factor	-	1.15

Test Data		
	Design	**Actual**
SF CFM	7850	7931
RL Voltage	460	475/475/472
RL Amperage	-	5.5/5.8/5.8

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.37"
Fan Suction SP	-	-0.88"
Fan Discharge SP	-	0.5"
Total ESP	1.50	0.87"
Fan Total SP	-	1.38"

National TAB

Project:Cincinnati Classical Academy (Blue Ash, OH)

AHU/RTU

Diffuser Supply (GRD)

RTU-B 1/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	STAIRS	EXISTING	12X6	250		251	100.4
SGRD2	234 RR	EXISTING	12X6	150		149	99.3
SGRD3	233 RR	S-2	10	250		238	95.2
SGRD5	249	S-1	10	300	408	321	107.0
SGRD6	249	S-1	10	300	330	329	109.7
SGRD7	249	S-1	10	300	278	294	98.0
SGRD8	249	S-1	10	300	318	286	95.3
SGRD9	250	S-1	10	300		298	99.3
SGRD10	250	S-1	10	300		292	97.3
SGRD11	250	S-1	10	300		328	109.3
SGRD12	250	S-1	10	300		326	108.7
SGRD13	235	S-1	10	300		316	105.3
SGRD14	235	S-1	10	300		297	99.0
SGRD15	235	S-1	10	300		304	101.3
SGRD16	235	S-1	10	300		325	108.3
SGRD17	251	S-1	10	300		283	94.3
SGRD18	251	S-1	10	300		329	109.7
SGRD19	251	S-1	10	300		324	108.0
SGRD20	251	S-1	10	300		292	97.3
SGRD21	248	S-1	10	300		313	104.3
SGRD22	248	S-1	10	300		290	96.7
SGRD23	248	S-1	10	300		289	96.3
SGRD24	248	S-1	10	300		287	95.7
SGRD25	247	S-1	10	300		285	95.0
SGRD26	247	S-1	10	300		320	106.7
SGRD27	247	S-1	10	300		291	97.0
SGRD28	247	S-1	10	300		274	91.3
Total				7850	1334	7931	101.03%

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: AHU/RTU

Asset: RTU-C 1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Model Num	NA	YSD240G4RHA00D001000
Configuration	-	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	20x60
Num PreFilter 1	-	4/4
PreFilter Size 1	-	20”x20”x2”/20”x25”x2”

Motor Data		
	Design	**Actual**
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	5.0	5.0
Motor Rpm	-	3450
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	6.3
Service Factor	-	1.15

Test Data		
	Design	**Actual**
SF CFM	8000	6922
RL Voltage	460	477/475/477
RL Amperage	-	6.00/6.1/6.1

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.47"
Fan Suction SP	-	-0.99"
Fan Discharge SP	-	0.66"
Total ESP	1.50	1.13"
Fan Total SP	-	1.65"

National TAB

Project:Cincinnati Classical Academy (Blue Ash, OH)

AHU/RTU

Diffuser Supply (GRD)

RTU-C 1/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	147 CAFETERIA	S-1	10	275	382	270	98.2
SGRD2	147 CAFETERIA	S-1	10	250	199	239	95.6
SGRD3	147 CAFETERIA	S-1	10	250	240	245	98.0
SGRD4	147 CAFETERIA	S-1	10	325	239	309	95.1
SGRD5	147 CAFETERIA	S-1	10	325	207	319	98.2
SGRD6	147 CAFETERIA	S-1	10	325	191	305	93.8
SGRD7	147 CAFETERIA	S-1	10	325	214	300	92.3
SGRD8	147 CAFETERIA	S-1	10	250	245	241	96.4
SGRD9	147 CAFETERIA	S-1	10	250	234	251	100.4
SGRD10	147 CAFETERIA	S-1	10	250	200	259	103.6
SGRD11	147 CAFETERIA	S-1	10	250	172	238	95.2
SGRD12	KITCHEN	S-1	8	175	87	170	97.1
SGRD13	KITCHEN	S-1	10	300	92	286	95.3
SGRD14	KITCHEN	S-1	10	300	105	295	98.3
SGRD15	KITCHEN	S-1	8	175	75	181	103.4
SGRD16	147 CAFETERIA	S-1	10	250	140	268	107.2
SGRD17	147 CAFETERIA	S-1	10	325	154	307	94.5
SGRD18	147 CAFETERIA	S-1	10	325	183	298	91.7
SGRD19	147 CAFETERIA	S-1	10	250	243	241	96.4
SGRD20	147 CAFETERIA	S-1	10	250	228	235	94.0
SGRD21	142 LOBBY	S-1	10	250	193	244	97.6
SGRD22	142 LOBBY	S-1	10	250	226	248	99.2
SGRD23	142 LOBBY	S-1	10	325	231	295	90.8
SGRD24	147 CAFETERIA	S-1	10	275	383	262	95.3
SGRD25	147 CAFETERIA	S-1	10	325	418	303	93.2
SGRD26	147 CAFETERIA	S-1	10	325	395	313	96.3
Total				7175	5676	6922	96.47%

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: AHU/RTU

Asset: RTU-D 1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Serial Num	-	175011320D
Model Num	NA	YSD240G4RHA00D001000
Configuration	-	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	20x60
Num PreFilter 1	-	4/4
PreFilter Size 1	-	20”x20”x2”/20”x25”x2”

Test Data		
	Design	**Actual**
SF CFM	8000	7032
SF RPM	-	812
RA CFM	-	7032
OA CFM	-	0
RL Voltage	460	488/490/489
RL Amperage	-	5.9/5.8/5.9
OA Damper Position	-	0%
Brake Horse Power	-	4.81

Motor Data		
	Design	**Actual**
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	5.0	5.0
Motor Rpm	-	3450
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	6.3
Service Factor	-	1.15

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.53”
Fan Suction SP	-	-0.95”
Fan Discharge SP	-	0.87”
Total ESP	1.50	1.48”
Fan Total SP	-	1.82”
Cooling Coil P.D.	-	0.42”*

Drive Data	
	Actual
Motor Sheave Size	3-3/4”
Motor Bore Size	7/8”
Motor Sheave SetPt	5 OUT
Fan Sheave Size	Bk130
Fan Sheave Bore	1-3/16”
Belt CL Distance	22-1/4”*
Num of Belts	1
Belt Size	BX70

Notes:
*PD combined with filters.
Unit supply traversed before any takeoffs at cross section of 18"x58" interior dimensions at 970 average fpm over 50 readings for total of 7032 cfm at 0.34"WC static pressure.

Written By: Gabe Merk on 08/01/2025

National TAB

Project:Cincinnati Classical Academy (Blue Ash, OH)

AHU/RTU

Diffuser Supply (GRD)

RTU-D 1/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD2	FLR 1 CORR	S-1	8	145	144	115	79.3
SGRD3	135 RR	S-1	8	135	168	117	86.7
SGRD4	134 RR	S-1	8	135	161	119	88.1
SGRD5	149 NURSE	S-2	10	350	342	276	78.9
SGRD6	150 RR	S-2	6	75	71	64	85.3
SGRD7	151 WORKROOM	S-1	10	215	224	176	81.9
SGRD8	FLR 1 RR	S-2	6	75	102	61	81.3
SGRD9	FLR 1 RR	S-2	6	75	83	66	88.0
SGRD10	151 WORKROOM	S-1	10	215	265	181	84.2
SGRD11	164 OFFICE	S-1	8	125	164	98	78.4
SGRD12	163 OFFICE	S-1	8	145	24	119	82.1
SGRD13	161 OFFICE	S-1	8	145	20	117	80.7
SGRD14	157 OFFICE	S-1	8	145	135	117	80.7
SGRD15	159 OFFICE	S-1	8	145	162	111	76.6
SGRD16	158 OFFICE	S-1	8	145	100	128	88.3
SGRD17	156 OFFICE	S-1	10	425	295	345	81.2
SGRD18	155 OFFICE	S-1	10	425	277	364	85.6
SGRD19	154 OFFICE	S-1	10	425	140	339	79.8
SGRD20	153 OFFICE	S-1	10	275	159	223	81.1
SGRD21	173 OFFICE	S-1	10	275	145	209	76.0
SGRD22	173 OFFICE	S-1	10	275	168	211	76.7
SGRD23	165 RECEPTION	S-2	10	300	184	241	80.3
SGRD24	166 OFFICE	S-1	8	135	111	109	80.7
SGRD25	167 OFFICE	S-1	8	135	106	105	77.8
SGRD26	168 WORKROOM	S-1	8	175	123	141	80.6
SGRD27	168 WORKROOM	S-1	8	175	164	139	79.4
SGRD28	169 OFFICE	S-1	8	135	102	111	82.2
SGRD29	100 LOBBY		8	125	149	115	92.0
SGRD30	100 LOBBY		8	125	199	102	81.6
SGRD31	100 LOBBY		8	125	185	98	78.4
SGRD32	100 LOBBY		8	125	90	96	76.8
SGRD33	176 HM MEETING	S-1	10	275	219	258	93.8
SGRD34	176 HM MEETING	S-1	10	275	233	253	92.0
SGRD35	175 HM	S-3	10	225	180	212	94.2
SGRD36	175 HM	S-3	10	225	189	209	92.9
SGRD37	179 OFFICE	S-1	10	275	210	182	66.2
SGRD38	178 OFFICE	S-1	10	300	204	195	65.0
SGRD39	177 OFFICE	S-3	10	275	144	228	82.9
SGRD40	177 OFFICE	S-3	10	275	244	216	78.5
Total				8050	6385	6566	81.57%

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: AHU/RTU

Asset: RTU-E 1 AREA:FLOOR 1,2 AREA C

Unit Data		
	Design	**Actual**
MFG	NA	TRANE
Model Num	NA	SFHLF604LK67C9AD80010BZB
Configuration	-	VERTICAL

Motor Data		
	Design	**Actual**
Horsepower	40.0	40
Phase	3	3
Rated Voltage	460	460

Test Data		
	Design	**Actual**
SF CFM	21000	19886

VAV - Single Duct

RTU-E 1/FLOOR 1,2 AREA C

Asset											
Asset Name	MFG	Model Num	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
VAV-61	TITUS	DESV	COOLING	6	450	446	145	155	0	0	434
VAV-103	TITUS	DESV	COOLING	10	980	1009	410	416	0	0	1564
VAV-128	TITUS	DESV	COOLING	6	470	464	145	149	0	0	470
VAV-130	TITUS	DESV	COOLING	6	300	310	145	156	0	0	473
VAV-131	TITUS	DESV	COOLING	10	1000	995	410	412	0	0	1463
VAV-200	TITUS	DESV	COOLING	6	500	519	145	151	0	0	480
VAV-201	TITUS	DESV	COOLING	10	1000	1015	410	416	0	0	1420
VAV-228	TITUS	DESV	COOLING	8	750	769	175	177	0	0	983
VAV-239	TITUS	DESV	COOLING	8	650	628	175	183	0	0	948
VAV-240	TITUS	DESV	COOLING	8	650	664	175	179	0	0	942
VAVR-100	TITUS	DESV	REHEAT	6	450	440	100	97	215	221	558
VAVR-107	TITUS	DESV	REHEAT	10	1200	1212	280	289	425	416	1483
VAVR-108	TITUS	DESV	REHEAT	10	1200	1187	280	291	425	409	1383
VAVR-109	TITUS	DESV	REHEAT	8	800	817	160	166	300	279	871
VAVR-110	TITUS	DESV	REHEAT	10	1000	1023	280	277	380	388	1323
VAVR-111	TITUS	DESV	REHEAT	10	1000	988	280	269	380	394	1407
VAVR-112	TITUS	DESV	REHEAT	10	1000	1004	280	276	380	394	1436
VAVR-202	TITUS	DESV	REHEAT	10	1400	1275	280	276	425	431	1413
VAVR-203	TITUS	DESV	REHEAT	10	1400	1461	280	294	425	450	1517
VAVR-204	TITUS	DESV	REHEAT	8	800	812	160	166	265	259	796
VAVR-205	TITUS	DESV	REHEAT	10	1200	1217	160	151	425	431	1414
VAVR-206	TITUS	DESV	REHEAT	10	1200	1199	280	274	425	433	1562
VAVR-207	TITUS	DESV	REHEAT	10	1200	1213	280	290	425	413	1436

Diffuser Supply (GRD)

VAV-61/FLOOR 1,2 AREA C

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
SGRD1	133	S-1	10	225	229	231	102.7
SGRD2	133	S-1	10	225	207	215	95.6
Total				450	436	446	99.11%

VAV-103/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
SGRD1	103	S-1	8	150	168	148	98.7
SGRD2	103	S-1	8	150	169	161	107.3
SGRD3	105	S-1	8	115	175	155	134.8
SGRD4	103	S-1	8	150	159	149	99.3
SGRD5	103	S-1	8	150	148	147	98.0
SGRD6	106	S-1	8	115	133	133	115.7
SGRD7	102	S-1	8	150	138	116	77.3
Total				980	1090	1009	102.96%

VAV-128/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	129	S-1	8	135	163	136	100.7
SGRD2	128	S-1	8	135	158	131	97.0
SGRD3	102	S-1	8	200	173	197	98.5
Total				470	494	464	98.72%

VAV-130/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	130	S-1	8	150	161	159	106.0
SGRD2	130	S-1	8	150	156	151	100.7
Total				300	317	310	103.33%

VAV-131/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	131	S-1	10	250	266	264	105.6
SGRD2	131	S-1	10	250	329	235	94.0
SGRD3	131	S-1	10	250	336	229	91.6
SGRD4	131	S-1	10	250	88	267	106.8
Total				1000	1019	995	99.5%

VAV-200/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	WOMEN RR	S-1	8	150	45	151	100.7
SGRD2	MENS RR	S-1	8	150	210	163	108.7
SGRD3	200	S-1	8	200	285	205	102.5
Total				500	540	519	103.8%

VAV-201/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	201	S-1	8	200	115	188	94.0
SGRD2	201	S-1	8	200	145	185	92.5
SGRD3	201	S-1	8	200	221	215	107.5
SGRD4	201	S-1	8	200	267	209	104.5
SGRD5	200	S-1	8	200	241	218	109.0
Total				1000	989	1015	101.5%

VAV-228/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	200 CORR	S-1	8	200	196	195	97.5
SGRD2	200 CORR	S-1	8	200	233	215	107.5
SGRD3	228	S-1	8	200	225	209	104.5
SGRD4	RR	S-2	6	75	76	73	97.3
SGRD5	RR	S-2	6	75	86	77	102.7
Total				750	816	769	102.53%

VAV-239/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	239	S-1	10	200	218	198	99.0
SGRD2	239	S-1	10	225	256	209	92.9
SGRD3	239	S-1	10	225	96	221	98.2
Total				650	570	628	96.62%

VAV-240/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	240	S-1	10	200	228	205	102.5
SGRD2	240	S-1	10	225	320	231	102.7
SGRD3	240	S-1	10	225	130	228	101.3
Total				650	678	664	102.15%

VAVR-100/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	STAIR HALL	EXISTING		150	38	164	109.3
SGRD2	STAIR HALL	EXISTING		300	240	276	92.0
Total				450	278	440	97.78%

VAVR-107/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	107	S-1	10	300	198	297	99.0
SGRD2	107	S-1	10	300	116	321	107.0
SGRD3	107	S-1	10	300	103	305	101.7
SGRD4	107	S-1	10	300	680	289	96.3
Total				1200	1097	1212	101%

VAVR-108/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	108	S-1	10	300	298	287	95.7
SGRD2	108	S-1	10	300	330	304	101.3
SGRD3	108	S-1	10	300	355	271	90.3
SGRD4	108	S-1	10	300	195	325	108.3
Total				1200	1178	1187	98.92%

VAVR-109/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	109	S-1	10	300	199	297	99.0
SGRD2	109	S-1	8	200	150	199	99.5
SGRD3	109	S-1	10	300	390	321	107.0
Total				800	739	817	102.12%

VAVR-110/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	110	S-1	10	300	295	330	110.0
SGRD2	110	S-1	8	200	178	193	96.5
SGRD3	110	S-1	8	200	170	189	94.5
SGRD4	110	S-1	10	300	279	311	103.7
Total				1000	922	1023	102.3%

VAVR-111/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	111	S-1	10	300	367	296	98.7
SGRD2	111	S-1	8	200	153	204	102.0
SGRD3	111	S-1	8	200	216	188	94.0
SGRD4	111	S-1	10	300	244	300	100.0
Total				1000	980	988	98.8%

VAVR-112/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	112	S-1	10	300	267	329	109.7
SGRD2	112	S-1	8	200	210	184	92.0
SGRD3	112	S-1	8	200	164	205	102.5
SGRD4	112	S-1	10	300	361	286	95.3
Total				1000	1002	1004	100.4%

VAVR-202/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	202	S-1	10	350	245	321	91.7
SGRD2	202	S-1	10	350	271	316	90.3
SGRD3	202	S-1	10	350	354	317	90.6
SGRD4	202	S-1	10	350	370	321	91.7
Total				1400	1240	1275	91.07%

VAVR-203/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	203	S-1	10	350	246	367	104.9
SGRD2	203	S-1	10	350	190	346	98.9
SGRD3	203	S-1	10	350	497	371	106.0
SGRD4	203	S-1	10	350	496	377	107.7
Total				1400	1429	1461	104.36%

VAVR-204/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	204	S-1	10	300	354	328	109.3
SGRD2	204	S-1	8	200	105	189	94.5
SGRD3	204	S-1	10	300	206	295	98.3
Total				800	665	812	101.5%

VAVR-205/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	205	S-1	10	300	487	310	103.3
SGRD2	205	S-1	10	300	485	305	101.7
SGRD3	205	S-1	10	300	348	285	95.0
SGRD4	205	S-1	10	300	432	317	105.7
Total				1200	1752	1217	101.42%

VAVR-206/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	206	S-1	10	300	194	285	95.0
SGRD2	206	S-1	10	300	240	311	103.7
SGRD3	206	S-1	10	300	404	297	99.0
SGRD4	206	S-1	10	300	360	306	102.0
Total				1200	1198	1199	99.92%

VAVR-207/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	207	S-1	10	300	234	276	92.0
SGRD2	207	S-1	10	300	450	330	110.0
SGRD3	207	S-1	10	300	475	286	95.3
SGRD4	207	S-1	10	300	589	321	107.0
Total				1200	1748	1213	101.08%

Completed By: Corey Dick on 07/14/2025

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: AHU/RTU

Asset: RTU-1 AREA:107,108,OFFICES

Unit Data		
	Design	**Actual**
MFG	NA	CARRIER
Serial Num	-	
Model Num	NA	48FEEN09B2A6-8F2A0
Configuration	VERTICAL	
Num OA Filters 1	-	4
OA Filter Size 1	-	20X20X2
Num PreFilter 1	-	
PreFilter Size 1	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	
Frame	-	
Horsepower	3.0	
Motor Rpm	-	
Phase	3	
Rated Voltage	460	
Rated Amperage	3.0	
Service Factor	-	

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

Test Data		
	Design	**Actual**
SF CFM	2800	
SF RPM	1712	
RA CFM	2260	
OA CFM	540	
Relief CFM	-	
RL Voltage	460	
RL Amperage	3.00	
OA Damper Position	-	
Brake Horse Power	1.84	

Performance Data		
	Design	**Actual**
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	1.20	
Fan Total SP	1.41	
Cooling Coil P.D.	-	

National TAB

Project:Cincinnati Classical Academy (Blue Ash, OH)

AHU/RTU

Diffuser Supply (GRD)

RTU-1/107,108,OFFICES

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
1-1	107	S-3	10	300			-
1-2	107	S-3	10	300			-
1-3	113	S-1	8	200			-
1-4	107	S-3	10	300			-
1-5	107	S-3	10	300			-
1-6	107	S-3	10	300			-
1-7	107	S-3	10	300			-
1-8	109	S-2	8	120			-
1-9	108	S-3	10	360			-
1-10	110	S-2	8	120			-
1-11	111	S-2	8	120			-
Total				2720	0	0	0%

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: AHU/RTU

Asset: RTU-2 AREA:112

Unit Data		
	Design	**Actual**
MFG	NA	CARRIER
Serial Num	-	
Model Num	NA	48FEEN09B2A6-8F2A0
Configuration	VERTICAL	
Num OA Filters 1	-	4
OA Filter Size 1	-	20X20X2
Num PreFilter 1	-	
PreFilter Size 1	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	
Frame	-	
Horsepower	3.0	
Motor Rpm	-	
Phase	3	
Rated Voltage	460	
Rated Amperage	3.0	
Service Factor	-	

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

Test Data		
	Design	**Actual**
SF CFM	2800	
SF RPM	1712	
RA CFM	2260	
OA CFM	540	
Relief CFM	-	
RL Voltage	460	
RL Amperage	3.00	
OA Damper Position	-	
Brake Horse Power	1.84	

Performance Data		
	Design	**Actual**
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	1.20	
Fan Total SP	1.41	
Cooling Coil P.D.	-	

National TAB

Project:Cincinnati Classical Academy (Blue Ash, OH)

AHU/RTU

Diffuser Supply (GRD)

RTU-2/112

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
2-1	112	S-3	10	325			-
2-2	112	S-3	10	325			-
2-3	112	S-3	10	325			-
2-4	112	S-3	10	325			-
2-5	112	S-3	10	325			-
2-6	113	S-1	8	200			-
2-7	112	S-3	10	325			-
2-8	112	S-3	10	325			-
2-9	112	S-3	10	325			-
Total				2800	0	0	0%

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: AHU/RTU

Asset: RTU-3 AREA:LOCKERS,RR,GYM

Unit Data		
	Design	**Actual**
MFG	NA	CARRIER
Serial Num	-	
Model Num	NA	48FEEB04A2A6-8F2A0
Configuration	VERTICAL	
Num OA Filters 1	-	2
OA Filter Size 1	-	16X25X2
Num PreFilter 1	-	
PreFilter Size 1	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	
Frame	-	
Horsepower	2.0	
Motor Rpm	-	
Phase	3	
Rated Voltage	460	
Rated Amperage	1.2	
Service Factor	-	

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

Test Data		
	Design	**Actual**
SF CFM	1200	
SF RPM	2132	
RA CFM	-	
OA CFM	-	
Relief CFM	-	
RL Voltage	460	
RL Amperage	1.20	
OA Damper Position	-	
Brake Horse Power	0.71	

Performance Data		
	Design	**Actual**
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	1.20	
Fan Total SP	1.29	
Cooling Coil P.D.	-	

National TAB

Project:Cincinnati Classical Academy (Blue Ash, OH)

AHU/RTU

Diffuser Supply (GRD)

RTU-3/LOCKERS,RR,GYM

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
3-1	119	S-2	8	150			-
3-2	117	S-2	8	125			-
3-3				300			-
3-4	116	S-2	8	125			-
3-5	118	S-2	6	75			-
3-6	115	S-2	8	175			-
3-7	115	S-2	8	175			-
3-8	123	S-5	168	300			-
3-9	114	S-2	8	175			-
3-10	114	S-2	8	175			-
Total				1775	0	0	0%

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: AHU/RTU

Asset: RTU-4 AREA:RR, CORR

Unit Data		
	Design	**Actual**
MFG	NA	CARRIER
Serial Num	-	
Model Num	NA	48FEEB06B3A6-8M2A0
Configuration	VERTICAL	
Num OA Filters 1	-	2
OA Filter Size 1	-	16X25X2
Num PreFilter 1	-	
PreFilter Size 1	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	
Frame	-	
Horsepower	2.0	
Motor Rpm	-	
Phase	3	
Rated Voltage	460	
Rated Amperage	3.1	
Service Factor	-	

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

Test Data		
	Design	**Actual**
SF CFM	2000	
SF RPM	2432	
RA CFM	800	
OA CFM	400	
Relief CFM	-	
RL Voltage	460	
RL Amperage	3.10	
OA Damper Position	-	
Brake Horse Power	1.55	

Performance Data		
	Design	**Actual**
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	1.00	
Fan Total SP	1.30	
Cooling Coil P.D.	-	

Diffuser Supply (GRD)

RTU-4/RR, CORR

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
4-1	122	S-2	8	150			-
4-2	121	S-2	8	150			-
4-3	CORR	S-1	8	200			-
4-4	CORR	S-1	10	350			-
4-5	CORR	S-1	10	350			-
Total				1200	0	0	0%

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: AHU/RTU

Asset: RTU-5 AREA:BAND/ORCHESTRA

Unit Data		
	Design	**Actual**
MFG	NA	CARRIER
Serial Num	-	
Model Num	NA	48FEEN09B2A6-8M2A0
Configuration	VERTICAL	
Num OA Filters 1	-	4
OA Filter Size 1	-	20X20X2
Num PreFilter 1	-	
PreFilter Size 1	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	
Frame	-	
Horsepower	3.0	
Motor Rpm	-	
Phase	3	
Rated Voltage	460	
Rated Amperage	3.0	
Service Factor	-	

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

Test Data		
	Design	**Actual**
SF CFM	2800	
SF RPM	1712	
RA CFM	2400	
OA CFM	400	
Relief CFM	-	
RL Voltage	460	
RL Amperage	3.0	
OA Damper Position	-	
Brake Horse Power	1.84	

Performance Data		
	Design	**Actual**
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	1.20	
Fan Total SP	1.41	
Cooling Coil P.D.	-	

National TAB

Project:Cincinnati Classical Academy (Blue Ash, OH)

AHU/RTU

Diffuser Supply (GRD)

RTU-5/BAND/ORCHESTRA

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
5-1	102	S-1	10	380			-
5-2	102	S-1	10	380			-
5-3	102	S-1	10	380			-
5-4	102	S-1	10	380			-
5-5	102	S-1	10	380			-
5-6	102	S-1	10	380			-
5-7	102	S-1	10	380			-
5-8	102	S-1	10	380			-
Total				3040	0	0	0%

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: AHU/RTU

Asset: RTU-6 AREA:CHOIR,OFFICES,OFFICES

Unit Data		
	Design	**Actual**
MFG	NA	CARRIER
Serial Num	-	
Model Num	NA	48FEEN09B2A6-8M2A0
Configuration	VERTICAL	
Num OA Filters 1	-	4
OA Filter Size 1	-	20X20X2
Num PreFilter 1	-	
PreFilter Size 1	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	
Frame	-	
Horsepower	3.0	
Motor Rpm	-	
Phase	3	
Rated Voltage	460	
Rated Amperage	3.0	
Service Factor	-	

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

Test Data		
	Design	**Actual**
SF CFM	2800	
SF RPM	1712	
RA CFM	2400	
OA CFM	400	
Relief CFM	-	
RL Voltage	460	
RL Amperage	3.0	
OA Damper Position	-	
Brake Horse Power	1.84	

Performance Data		
	Design	**Actual**
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	1.20	
Fan Total SP	1.41	
Cooling Coil P.D.	-	

National TAB

Project:Cincinnati Classical Academy (Blue Ash, OH)

AHU/RTU

Diffuser Supply (GRD)

RTU-6/CHOIR,OFFICES,OFFICES

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
6-1	103	S-1	8	200			-
6-2	104	S-2	8	120			-
6-3	105	S-2	8	120			-
6-4	103	S-1	8	200			-
6-5	CORR	S-2	8	200			-
6-6	106	S-1	10	360			-
6-7	106	S-1	10	360			-
6-8	106	S-1	10	360			-
6-9	106	S-1	10	360			-
6-10	106	S-1	10	360			-
Total				2640	0	0	0%

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: AHU/RTU

Asset: RTU-7 AREA:GYM 123

Unit Data		
	Design	**Actual**
MFG	NA	CARRIER
Serial Num	-	1425P18061
Model Num	NA	48FEEN28B3A6-8F2A0
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	4
OA Filter Size 1	-	18x20
Num PreFilter 1	-	9
PreFilter Size 1	-	16x25

Motor Data		
	Design	**Actual**
Horsepower	7.5	7.5
Phase	3	3
Rated Voltage	460	460
Rated Amperage	5.6	5.6

Test Data		
	Design	**Actual**
SF CFM	10000	
RA CFM	9600	
OA CFM	400	
RL Voltage	460	
RL Amperage	5.6	
OA Damper Position	-	

Performance Data		
	Design	**Actual**
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	1.20	
Fan Total SP	1.42	

Diffuser Supply (GRD)

RTU-7/GYM 123

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
7-1	123	S-4	14X8	385			-
7-2	123	S-4	14X8	385			-
7-3	123	S-4	14X8	385			-
7-4	123	S-4	14X8	385			-
7-5	123	S-4	14X8	385			-
7-6	123	S-4	14X8	385			-
7-7	123	S-4	14X8	385			-
7-8	123	S-4	14X8	385			-
7-9	123	S-4	14X8	385			-
7-10	123	S-4	14X8	385			-
7-11	123	S-4	14X8	385			-
7-12	123	S-4	14X8	385			-
7-13	123	S-4	14X8	385			-
7-14	123	S-4	14X8	385			-
7-15	123	S-4	14X8	385			-
7-16	123	S-4	14X8	385			-
7-17	123	S-4	14X8	385			-
7-18	123	S-4	14X8	385			-
7-19	123	S-4	14X8	385			-
7-20	123	S-4	14X8	385			-
7-21	123	S-4	14X8	385			-
7-22	123	S-4	14X8	385			-
7-23	123	S-4	14X8	385			-
7-24	123	S-4	14X8	385			-
7-25	123	S-4	14X8	385			-
7-26	123	S-4	14X8	385			-
Total				10010	0	0	0%

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: AHU/RTU

Asset: RTU-8 AREA:GYM 123

Unit Data		
	Design	**Actual**
MFG	NA	CARRIER
Serial Num	-	1425P18060
Model Num	NA	48FEEN28B3A6-8F2A0
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	4
OA Filter Size 1	-	18x20
Num PreFilter 1	-	9
PreFilter Size 1	-	16x25

Motor Data		
	Design	**Actual**
Horsepower	7.5	7.5
Phase	3	3
Rated Voltage	460	460
Rated Amperage	5.6	5.6

Test Data		
	Design	**Actual**
SF CFM	10000	
RA CFM	9600	
OA CFM	400	
RL Voltage	460	
RL Amperage	5.6	
OA Damper Position	-	

Performance Data		
	Design	**Actual**
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	1.20	
Fan Total SP	1.42	

National TAB

Project:Cincinnati Classical Academy (Blue Ash, OH)

AHU/RTU

Diffuser Supply (GRD)

RTU-8/GYM 123

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
8-1	123	S-4	14X8	385			-
8-2	123	S-4	14X8	385			-
8-3	123	S-4	14X8	385			-
8-4	123	S-4	14X8	385			-
8-5	123	S-4	14X8	385			-
8-6	123	S-4	14X8	385			-
8-7	123	S-4	14X8	385			-
8-8	123	S-4	14X8	385			-
8-9	123	S-4	14X8	385			-
8-10	123	S-4	14X8	385			-
8-11	123	S-4	14X8	385			-
8-12	123	S-4	14X8	385			-
8-13	123	S-4	14X8	385			-
8-14	123	S-4	14X8	385			-
8-15	123	S-4	14X8	385			-
8-16	123	S-4	14X8	385			-
8-17	123	S-4	14X8	385			-
8-18	123	S-4	14X8	385			-
8-19	123	S-4	14X8	385			-
8-20	123	S-4	14X8	385			-
8-21	123	S-4	14X8	385			-
8-22	123	S-4	14X8	385			-
8-23	123	S-4	14X8	385			-
8-24	123	S-4	14X8	385			-
8-25	123	S-4	14X8	385			-
8-26	123	S-4	14X8	385			-
Total				10010	0	0	0%

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: FAN - Exhaust

Asset: UREF-1 AREA:HOODS 1 & 2

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVEAIRE
Model Num	NA	DU240HFA
Serial Num	-	7304718
Type	CRE UPBLAST	CRE UPBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	213/5T
Horsepower	5.0	5.0
Motor Rpm	1071	1170
Phase	3	3
Voltage (rated)	460	460
Amperage (rated)	-	6.83
Service Factor	-	1.25

Test Data		
	Design	**Actual**
CFM	5281	5192
Motor Frequency	-	49.9
RL Voltage	460	470 VFD
RL Amperage	7.0	4.9 VFD
Brake Horse Power	-	3.481

Notes:
Hinge kit installed such that screws fix unit to curb. Unable to tilt for cleaning and static pressure.

Written By: Gabe Merk on 07/31/2025

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: FAN - Supply

Asset: MAU-1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVEAIRE
Model Num	NA	CAS-HVAC3-I.400-20-12.5T-MPU
Serial Num	-	7304718
Type	DOAS	DOAS
Configuration	VERTICAL	VERTICAL
Num Filters Size 1	-	4/4
Filter Size 1	-	16”x25”x2”/20”x25”x2”

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	213/5T
Horsepower	3.00	3.0
Motor Rpm	-	1175
Phase	3	3
Voltage (rated)	460	460
Amperage (rated)	-	4.41
Service Factor	-	1.25

Test Data		
	Design	**Actual**
CFM	4200	4199
Motor Frequency	-	65 HZ
RL Voltage	460	465 AV
RL Amperage	-	3.3 AV

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: Kitchen Hood Type I

Asset: H-1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVEAIRE
Model Num	NA	5424 ND-2-PSP-F
Job / Serial Num	-	7142471
Type	TYPE I CANOPY	TYPE 1 CANOPY
Hood length	147	147"
Hood Width	54	54"
Supply Plenum Type	-	PSP
Supply Plenum Width	18	18"
Supply Plenum Length	159	159"

Test Data Exhaust		
	Design	**Actual**
Filter Type	CAPTRATE SOLO	CAPTRATE SOLO
Filter Size 1	20X16	20"X26"
Filter Qty 1	9	9
Filter AK factor size 1	2.08	2.08
Filter Total AK Area	18.72	18.72
Filter1 FPM	-	154
Filter2 FPM	-	173
Filter3 FPM	-	171
Filter4 FPM	-	162
Filter5 FPM	-	158
Filter6 FPM	-	160
Filter7 FPM	-	155
Filter8 FPM	-	167
Filter9 FPM	-	159
Filter Ave FPM(corr)	-	337.0
CFM	3369	3033

Test Data Supply		
	Design	**Actual**
Total Area	19.88	19.88
Kv factor (Vel)	0.91	0.88
Num of Readings	-	9
Reading1 FPM	-	197
Reading2 FPM	-	161
Reading3 FPM	-	185
Reading4 FPM	-	155
Reading5 FPM	-	153
Reading6 FPM	-	155
Reading7 FPM	-	126
Reading8 FPM	-	127
Reading9 FPM	-	142
Ave FPM(corr)	-	137.0
CFM	2695	2710

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: Kitchen Hood Type I

Asset: H-2 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVEAIRE
Model Num	NA	5424 ND-2-PSP-F
Job / Serial Num	-	7142471
Type	TYPE I CANOPY	TYPE 1 CANOPY
Hood length	102	102"
Hood Width	54	54"
Supply Plenum Type	-	PSP
Supply Plenum Width	14	14"
Supply Plenum Length	114	114"

Test Data Exhaust		
	Design	**Actual**
Filter Type	CAPTRATE SOLO	CAPTRATE SOLO
Filter Size 1	20X16	20"X16"
Filter Qty 1	6	6
Filter AK factor size 1	2.08	2.08
Filter Total AK Area	12.48	12.48
Filter1 FPM	-	153
Filter2 FPM	-	196
Filter3 FPM	-	190
Filter4 FPM	-	171
Filter5 FPM	-	177
Filter6 FPM	-	151
Filter Ave FPM(corr)	-	359.8
CFM	1912	2159

Test Data Supply		
	Design	**Actual**
Total Area	11.08	11.08
Kv factor (Vel)	0.90	0.89
Num of Readings	-	6
Reading1 FPM	-	149
Reading2 FPM	-	136
Reading3 FPM	-	158
Reading4 FPM	-	155
Reading5 FPM	-	140
Reading6 FPM	-	170
Ave FPM(corr)	-	134
CFM	1530	1489

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: AHU-DUAL FAN

Asset: DOAS-1 AREA:OA FOR RTU-A

UNIT DATA - SUPPLY		
	Design	**Actual**
Manufacturer	NA	CAPTIVEAIRE
Model Number	NA	CAS-HVAC4-I.500-22-22T-ERV
Serial Number	-	7304718
No. Pre-Filters / Size (1)	-	8 / 16x20x2
No. Pre-Filters / Size (2)	-	8 / 16x25x2
No. Pre-Filters / Size (3)	-	8 / 20x20x2
No. Final Filters / Size (1)	-	12 / 20x20x2
No. Final Filters / Size (2)	-	12 / 20x20x2

MOTOR DATA - SUPPLY	
	Actual
Motor MFG / Frame	ZIEHL
Horsepower / RPM	5.00
Rated Volts / Phase	460 / 3
Rated Amperage / SF	5.1

TEST DATA - SUPPLY		
	Design	**Actual**
Total CFM	5245	5128
VFD Speed	-	60 hz
RL Voltage	460	461 AV
RL Amperage	-	4.1 AV

PERFORMANCE DATA - SUPPLY		
	Design	**Actual**
Suction S.P.	-	-0.48"
Discharge S.P.	-	0.65"
Total S.P.	-	1.13

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: AHU-DUAL FAN

Asset: DOAS-2 AREA:OA FOR RTU-B, RTU-C

UNIT DATA - SUPPLY		
	Design	**Actual**
Manufacturer	NA	CAPTIVEAIRE
Model Number	NA	CAS-HVAC3-I.300-18-12.5T-ERV
Serial Number	-	7304718
No. Pre-Filters / Size (1)	-	4 / 16x25x2
No. Pre-Filters / Size (2)	-	4 / 16x25x2
No. Pre-Filters / Size (3)	-	4 / 16x25x2
No. Final Filters / Size (1)	-	4 / 16x25x2
No. Final Filters / Size (2)	-	4 / 16x25x2
No. Final Filters / Size (3)	-	4 / 16x25x2

MOTOR DATA - SUPPLY	
	Actual
Motor MFG / Frame	
Horsepower / RPM	5.00 /
Rated Volts / Phase	460 / 3
Rated Amperage / SF	

TEST DATA - SUPPLY		
	Design	**Actual**
Total CFM	4255	4237
Fan RPM	-	
VFD Speed	-	
RL Voltage	460	379
RL Amperage	-	8.2
Motor B.H.P.	-	

PERFORMANCE DATA - SUPPLY		
	Design	**Actual**
Static Pressure Stpt	-	
Suction S.P.	-	
Discharge S.P.	-	
Total S.P.	-	
Chilled Water Coil P.D.	-	
Pre Heat Coil P.D.	-	
Final Filters P.D.	-	
Heat Wheel P.D.	-	
Pre-Filters P.D.	-	
Total ESP	0.750	

National TAB

Project:Cincinnati Classical Academy (Blue Ash, OH)

AHU-DUAL FAN

Diffuser Supply (GRD)

DOAS-2/OA FOR RTU-B, RTU-C

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	TO RTU-B	DUCT	26X14	2310	1645	2323	100.6
SGRD2	TO RTU-C	DUCT	26X12	1945	2713	1914	98.4
Total				4255	4358	4237	99.58%

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: AHU-DUAL FAN

Asset: DOAS-3 AREA:OA FOR RTU-1, RTU-D

UNIT DATA - SUPPLY		
	Design	**Actual**
Manufacturer	NA	CAPTIVEAIRE
Model Number	NA	CAS-HVAC3-I.400-24-20T-ERV
Serial Number	-	730-4718
No. Pre-Filters / Size (1)	-	4 / 16x25x2
No. Pre-Filters / Size (2)	-	4 / 16x25x2
No. Pre-Filters / Size (3)	-	4 / 16x25x2
No. Final Filters / Size (1)	-	4 / 16x25x2
No. Final Filters / Size (2)	-	4 / 20x25x2
No. Final Filters / Size (3)	-	4 / 20x25x2

MOTOR DATA - SUPPLY	
	Actual
Motor MFG / Frame	TECO WESTINGHOUSE / 184T
Horsepower / RPM	5 / 1750
Rated Volts / Phase	460 / 3
Rated Amperage / SF	6.80 / 1.15

TEST DATA - SUPPLY		
	Design	**Actual**
Total CFM	2660	2728
VFD Speed	-	
RL Voltage	460	258 VFD
RL Amperage	-	4.5 VFD

PERFORMANCE DATA - SUPPLY		
	Design	**Actual**
Suction S.P.	-	-0.45"
Discharge S.P.	-	0.46"
Total S.P.	-	1.01

National TAB

Project:Cincinnati Classical Academy (Blue Ash, OH)

AHU-DUAL FAN

Diffuser Supply (GRD)

DOAS-3/OA FOR RTU-1, RTU-D

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	TO RTU-D	DUCT		350	1086	352	100.6
SGRD2	TO RTU-1	DUCT	26X14	2310	1774	2376	102.9
Total				2660	2860	2728	102.56%

National TAB

Project: Cincinnati Classical Academy (Blue Ash, OH)

System/Unit: AHU-DUAL FAN

Asset: DOAS-4 AREA:OA FOR RTU-E

UNIT DATA - SUPPLY		
	Design	**Actual**
Manufacturer	NA	CAPTIVEAIRE
Model Number	NA	CAS-HVAC4-I.600-30-22T-ERV
Serial Number	-	7304718
No. Pre-Filters / Size (1)	-	8 / 16x20x2
No. Pre-Filters / Size (2)	-	8 / 16x25x2
No. Pre-Filters / Size (3)	-	8 / 20x20x2
No. Final Filters / Size (1)	-	12 / 20x20x2
No. Final Filters / Size (2)	-	12 / 20x20x2
No. Final Filters / Size (3)	-	

MOTOR DATA - SUPPLY	
	Actual
Motor MFG / Frame	TECO WESTINGHOUSE/ 256T
Horsepower / RPM	10.00 / 1165
Rated Volts / Phase	460 / 3
Rated Amperage / SF	12.9 / 1.15

TEST DATA - SUPPLY		
	Design	**Actual**
Total CFM	5670	5488
RL Voltage	460	461 av
RL Amperage	-	10.5 av

PERFORMANCE DATA - SUPPLY		
	Design	**Actual**
Suction S.P.	-	-0.87"
Discharge S.P.	-	0.42"
Total S.P.	-	1.29"