

Report By:

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



Report: TAB REPORT
Function: Test, Adjust, & Balance
Date: 10/10/2023

PROJECT
10-09-23 NIKE UNITE - ANTIOCH, TN

4060 CANE RIDGE PARKWAY

ANTIOCH, TX 37013

Client

Lakeview Construction

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Project: 10-09-23 NIKE UNITE - ANTIOCH, TN

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Project: 10-09-23 NIKE UNITE - ANTIOCH, TN

System/Unit: AHU/RTU



Asset: RTU 1

AREA: MULTI-ZONE

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Serial Num	-	5842712
Model Num	CASRTU-1-E.154-15	CASRTU-1-E.154-15-5T
Type	-	DOAS
Configuration	-	Vertical
Num OA Filters 1	-	2
OA Filter Size 1	-	16" X 20" X 2"
Num Final Filter 1	-	8
Final Filter Size 1	-	16" X 16" X 2"

Motor Data		
	Design	Actual
Motor MFG	-	Nema
Frame	-	145T
Horsepower	-	1.5
Motor Rpm	-	1740
Phase	-	3
Rated Voltage	-	230
Rated Amperage	-	4.03

Electrical		
	Design	Actual
VFD Min Setpt	-	
VFD Max Setpt	-	

Test Data		
	Design	Actual
SF CFM	1320	
SF RPM	-	
RA CFM	-	
OA CFM	175	
RL Voltage	-	
RL Amperage	-	
SF Rotation	-	CCW
RA Damper Position	-	
Min OA Damper Position	-	
Min OA Damper Type	-	ECON

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

General		
	Design	Actual
Fan Rotation Correct	-	Yes
Unit Filters Clean	-	Yes

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Project:10-09-23 NIKE UNITE - ANTIOCH, TN

AHU/RTU



Diffuser Supply (GRD)

RTU 1/MULTI-ZONE

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
RTU 1-SGRD1				150	1	101			-
RTU 1-SGRD2				150	1	149			-
RTU 1-SGRD3				120	1	144			-
RTU 1-SGRD4				225	1	197			-
RTU 1-SGRD5				225	1	181			-
RTU 1-SGRD6				225	1	224			-
RTU 1-SGRD7				50	1	76			-
RTU 1-SGRD8				125	1	176			-
RTU 1-SGRD9				50	1	61			-
Total				1320		1309	0	0	0%

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Project: 10-09-23 NIKE UNITE - ANTIOCH, TN

System/Unit: AHU/RTU



Asset: RTU 2

AREA:SINGLE ZONE

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Serial Num	-	5482712
Model Num	CASRTU-1-E.304-18	CASRTU-1-E.304-18-7.5T
Type	-	DOAS
Configuration	-	Vertical
Num OA Filters 1	-	2
OA Filter Size 1	-	16" X 20" X 2"
Num Final Filter 1	-	8
Final Filter Size 1	-	16" X 16" X 2"

Test Data		
	Design	Actual
SF CFM	2580	
SF RPM	-	
RA CFM	-	
OA CFM	325	
RL Voltage	-	
RL Amperage	-	
SF Rotation	-	CCW
RA Damper Position	-	
Min OA Damper Position	-	
Min OA Damper Type	-	ECON

Motor Data		
	Design	Actual
Motor MFG	-	EC Blue
Frame	-	NA
Horsepower	-	5
Motor Rpm	-	2900
Phase	-	3
Rated Voltage	-	460
Rated Amperage	-	5.4

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

Electrical		
	Design	Actual
VFD Min Setpt	-	
VFD Max Setpt	-	

General		
	Design	Actual
Fan Rotation Correct	-	Yes
Unit Filters Clean	-	Yes

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Project:10-09-23 NIKE UNITE - ANTIOCH, TN

AHU/RTU



Diffuser Supply (GRD)

RTU 2/SINGLE ZONE

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
RTU 2-SGRD1				290	1				-
RTU 2-SGRD2				290	1	297			-
RTU 2-SGRD3				290	1	272			-
RTU 2-SGRD4				290	1	287			-
RTU 2-SGRD5				290	1	245			-
RTU 2-SGRD6				290	1	290			-
RTU 2-SGRD7				290	1	260			-
RTU 2-SGRD8				290	1	224			-
RTU 2-SGRD9				260	1	187			-
Total				2580		2062	0	0	0%

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Project: 10-09-23 NIKE UNITE - ANTIOCH, TN

System/Unit: AHU/RTU



Asset: RTU 3

AREA: MULTI-ZONE

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Serial Num	-	5842712
Model Num	CASRTU-1-E.604-20	CASRTU-3-E.604-24-15T
Type	-	DOAS
Configuration	-	Vertical
Num OA Filters 1	-	4
OA Filter Size 1	-	16" X 25" X 2"
Num Final Filter 1	-	8
Final Filter Size 1	-	20" X 25" X 2"

Motor Data		
	Design	Actual
Motor MFG	-	Nema
Frame	-	215T
Horsepower	-	5
Motor Rpm	-	1165
Phase	-	3
Rated Voltage	-	230
Rated Amperage	-	14.3

Electrical		
	Design	Actual
VFD Min Setpt	-	
VFD Max Setpt	-	

Test Data		
	Design	Actual
SF CFM	4500	
RA CFM	-	
OA CFM	1200	
RL Voltage	-	
RL Amperage	-	
SF Rotation	-	CCW
RA Damper Position	-	
Min OA Damper Position	-	
Min OA Damper Type	-	ECON

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

General		
	Design	Actual
Fan Rotation Correct	-	Yes
Unit Filters Clean	-	Yes

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Project:10-09-23 NIKE UNITE - ANTIOCH, TN

AHU/RTU



VAV - Single Duct

RTU 3/MULTI-ZONE

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)
RTU 3-VAV1	TITUS	DESV		10"	600		300				

Diffuser Supply (GRD)

RTU 3/MULTI-ZONE

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
RTU 3-SGRD1			13"	975	0.92	828			-
RTU 3-SGRD2			13"	975	0.92	977			-
RTU 3-SGRD3			13"	975	0.92	948			-
RTU 3-SGRD4			13"	975	0.92	814			-
Total				3900		3567	0	0	0%

RTU 3-VAV1/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1									
SGRD2									
SGRD3									
SGRD4									
SGRD5									
SGRD6									
Total				0		0	0	0	0%

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Project: 10-09-23 NIKE UNITE - ANTIOCH, TN

System/Unit: AHU/RTU



Asset: RTU 4

AREA: MULTI-ZONE

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Serial Num	-	5482712
Model Num	CASRTU-1-E.604-18	CASRTU-3-E.604-18-15T
Type	-	DOAS
Configuration	-	Vertical
Num OA Filters 1	-	4
OA Filter Size 1	-	16" X 25" X 2"
Num Final Filter 1	-	8
Final Filter Size 1	-	20" X 25" X 2"

Test Data		
	Design	Actual
SF CFM	4300	
SF RPM	-	
RA CFM	-	
OA CFM	-	
RL Voltage	-	
RL Amperage	-	
SF Rotation	-	CCW
RA Damper Position	-	
Min OA Damper Position	-	
Min OA Damper Type	-	ECON

Motor Data		
	Design	Actual
Motor MFG	-	Nema
Frame	-	184T
Horsepower	-	5
Motor Rpm	-	1750
Phase	-	3
Rated Voltage	-	230
Rated Amperage	-	13.6

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

Electrical		
	Design	Actual
VFD Min Setpt	-	
VFD Max Setpt	-	

General		
	Design	Actual
Fan Rotation Correct	-	Yes
Unit Filters Clean	-	Yes

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AHU/RTU



Diffuser Supply (GRD)

RTU 4/MULTI-ZONE

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
RTU 4-SGRD1			13"	1075	0.92	497			-
RTU 4-SGRD2			13"	1075	0.92	873			-
RTU 4-SGRD3			13"	1075	0.92	574			-
RTU 4-SGRD4			13"	1075	0.92	1004			-
Total				4300		2948	0	0	0%

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Project: 10-09-23 NIKE UNITE - ANTIOCH, TN

System/Unit: AHU/RTU



Asset: RTU 5

AREA: MULTI-ZONE

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Serial Num	-	5482712
Model Num	CASRTU-1-E.604-24	CASRTU-1-E.604-24
Type	-	DOAS
Configuration	-	Vertical
Num OA Filters 1	-	4
OA Filter Size 1	-	16" X 25" X 2"
Num Final Filter 1	-	8
Final Filter Size 1	-	20" X 25" X 2"

Test Data		
	Design	Actual
SF CFM	5055	5171
SF RPM	-	NA
RA CFM	-	5171
OA CFM	0	0
RL Voltage	-	438
RL Amperage	-	7
SF Rotation	-	CCW
RA Damper Position	-	100%
Min OA Damper Position	-	0
Min OA Damper Type	-	ECON

Motor Data		
	Design	Actual
Motor MFG	-	Nema
Frame	-	215T
Horsepower	-	5
Motor Rpm	-	1165
Phase	-	3
Rated Voltage	-	430
Rated Amperage	-	14.3

Performance Data		
	Design	Actual
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	-	
OA Temp (db/wb)	-	67.5
RA Temp (db/wb)	-	69.4
SA Temp (db/wb)	-	72.3

Electrical		
	Design	Actual
VFD Min Setpt	-	37.5
VFD Max Setpt	-	80

General		
	Design	Actual
Fan Rotation Correct	-	Yes
Unit Filters Clean	-	Yes

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AHU/RTU



Diffuser Supply (GRD)

RTU 5/MULTI-ZONE

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
RTU 5-SGRD2									
SGRD1	ENTRY/CASH REGISTER	Round Fabric Duct	26"	5055	3.14	4653	5171	5171	102.3
Total				5055		4653	5171	5171	102.29%

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Project: 10-09-23 NIKE UNITE - ANTIOCH, TN

System/Unit: VAV - Single Duct



Asset: VAV1

AREA:

Unit Data

	Design	Actual
MFG	TITUS	TITUS
Model Num	DESV	DESV
Type	-	6
Inlet Size	-	6

Test Data

	Design	Actual
Design Max CFM	-	600
Max CFM	-	
Design Min CFM	-	300
Min CFM	-	
Design Heat CFM	-	
Heat CFM	-	
Ak (max)	-	

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VAV - Single Duct



Diffuser Supply (GRD)

VAV1/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1		6	6	100					-
SGRD2		6	6	100					-
SGRD3		6	6	100					-
SGRD4		6	6	100					-
SGRD5		6	6	100					-
SGRD6		6	6	100					-
Total				600		0	0	0	0%

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Project: 10-09-23 NIKE UNITE - ANTIOCH, TN

System/Unit: VAV - Single Duct



Asset: RTU 3-VAV1

AREA:

Unit Data

	Design	Actual
MFG	TITUS	TITUS
Model Num	DESV	DESV
Inlet Size	-	10"

Test Data

	Design	Actual
Design Max CFM	-	600
Max CFM	-	
Design Min CFM	-	300
Min CFM	-	
Ak (max)	-	

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Project:10-09-23 NIKE UNITE - ANTIOCH, TN

VAV - Single Duct



Diffuser Supply (GRD)

RTU 3-VAV1/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1									
SGRD2									
SGRD3									
SGRD4									
SGRD5									
SGRD6									
Total				0		0	0	0	0%

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Project: 10-09-23 NIKE UNITE - ANTIOCH, TN

System/Unit: FAN - Exhaust



Asset: EF1

AREA:

Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	G-080-VG	G-080-VG-1-17-X
Serial Num	-	22180861
Type	-	Downblast
Configuration	-	Vertical

Motor Data		
	Design	Actual
Motor MFG	-	Vari-Green
Frame	-	NA
Horsepower	-	0.1
Motor Rpm	-	1750
Phase	-	1
Voltage (rated)	-	208
Amperage (rated)	-	1.38
Service Factor	-	NA
Efficiency	-	NA

Test Data		
	Design	Actual
CFM	325	347
Fan RPM	-	NA
Fan Rotation	-	CCW
Motor RPM	-	NA
System SetPt	-	10
RL Voltage	-	
RL Amperage	-	
Suction ESP	-	
Discharge ESP	-	
Total ESP	-	
Fan Inlet SP	-	
Fan Discharge SP	-	
Total Fan SP	-	
Brake Horse Power	-	

Notes:

Speed controller set at 10/10

Written By: Jordan Best on 10/10/2023

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Project:10-09-23 NIKE UNITE - ANTIOCH, TN

FAN - Exhaust



Diffuser Ret/Exh (GRD)

EF1/

Asset												
Asset Name	Model Num	MFG	Type	Size	DESIGN CFM	AK	VEL(1)	CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design
EF1-EGRD1	NA	NA			115	1		142		118	118	102.6
EF1-EGRD2	NA	NA			115	1		98		120	120	104.3
EF1-EGRD3	NA	NA			95	1		103		109	109	114.7
Total					325			343		347	347	106.77%

Asset	Notes	Date	Written By
EF1-EGRD1	Men's RR	10/10/2023	Jordan Best
EF1-EGRD2	Women's RR	10/10/2023	Jordan Best
EF1-EGRD3	Janitors Closet	10/10/2023	Jordan Best

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Project: 10-09-23 NIKE UNITE - ANTIOCH, TN

System/Unit: FAN - Exhaust



Asset: EF2

AREA:

Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	SQ-100-VG	SQ-100-VG
Serial Num	-	NA
Type	-	Ceiling
Configuration	-	Horizontal

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

Test Data		
	Design	Actual
CFM	1000	943
Fan RPM	-	NA
Fan Rotation	-	CCW
Motor RPM	-	NA
System SetPt	-	10
RL Voltage	-	NA
RL Amperage	-	NA
Total ESP	-	
Fan Inlet SP	-	
Fan Discharge SP	-	ATM

Notes:

IT Room. Fan speed fully maximized.

Written By: Jordan Best on 10/10/2023