Report By:

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

NATIONAL TAB

Comfort. Under control.

Report: TAB REPORT
Function: Test, Adjust, & Balance
Date: 01/25/2023

PROJECT

01-16-23 NIKE - SILVER SPRING, MD

910 ELLSWORTH DR

SILVER SPRINGS, MD 20910

Client

Lakeview Construction

National TAB

Project: 01-16-23 NIKE - SILVER SPRING, MD

Table Of Contents

Project Summary

The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report is further detail about your building performance including recommendations, asset data, and pictures. Our focus is to work with the trades to remedy any issues or deficiencies during the actual field balancing and not after the balancing has occurred to achieve a positive environment and outcome. The level of success is determined by the availability of the trades, possible parts needed, or time constraints.

RTU's

Each of the RTU's were measured at their terminal devices utilizing a flow hood. The sum of these readings is equal to the total flow for that particular unit. The total flow of each RTU was then adjusted within tolerance of the specified design. Each terminal diffuser was balanced to within tolerance of the engineer's design volume utilizing the provided hand damper located at the takeoff of the main & branch trunk line(s). Any equipment that fell outside of this tolerance is noted throughout the report.

Variable Air Volume (VAV) Terminals

The VAV's were calibrated in a call for max cooling and the correction factors are reported on the individual asset. While in a call for full cooling, the individual air devices were then balanced within design tolerance. The VAVs were then stroked to minimum cool and the airflow values reported. The VAV was then stroked to heating and the airflow values reported. It was verified that there was a sufficient temp rise on each VAV.

General Exhaust Fans

The general exhaust fans were measured by reading each air device with a flow hood. The total airflow for each fan is equivalent to the sum of these readings. Fan speed was then adjusted so that the airflow was within tolerance of design. Each terminal device was balanced to within tolerance of the design volume using the installed volume dampers. Any equipment that fell outside of this tolerance is noted throughout the report.

Final Building Tests

After completing the test and balance the final building pressure was measured. It was confirmed that the building pressure fell within acceptable tolerances of -0.02" wc to +0.02" wc and that the pressure measurement coincides with the actual and design net airflow. Any deviations from these standards are noted throughout the report.

Project Summary

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01-16-23 NIKE - SILVER SPRING, MD

CheckList Information

Name :	TECH - SITE PICTURES	**Status :**	NotSubmitted
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		

CheckList Item Details

STORE FRONT

Storefront.jpeg

WSHP-1

WSHP-1.jpeg

WSHP-2

WSHP-2.jpeg

WSHP-3

WSHP-3.jpeg

WSHP-4

WSHP-4.jpeg

WSHP-4.jpeg

WSHP-5

WSHP-5.jpeg

WSHP-6

WSHP-6.jpeg

WSHP-7

WSHP-7.jpeg

EF-1

EF-1.jpeg

EF-2

EF-2.jpeg

Notes/Comments :

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01-16-23 NIKE - SILVER SPRING, MD

CheckList Information

Name :	TECH - STEP 1: INITIAL WALKTHROUGH	**Status :**	NotSubmitted
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		

CheckList Item Details

INITIAL SITE WALKTHROUGH

Review Plan Review Checklist, has it been signed off and meets our standards to start balancing? If not contact processor to ensure job is ready.	Yes
All diffusers and grilles are installed and match design?	Yes
Thermostats have power?	Yes
All HVAC units and fans and powered and operational?	Yes
VAV diffusers (if applicable) are powered and responding to adjustment at thermostat?	Yes
Have trades/general contractor been notified about any issues and are they created on FaciliBuild?	Yes

Notes/Comments :

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CheckList Information

Name :	TECH - STEP 2: UNIT DATA AND EVAL	**Status :**	NotSubmitted
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		

CheckList Item Details

UNIT DATA AND EVALUATION WHILE GATHERING UNIT DATA CHECK THE FOLLOWING:

RTU's/AHU's	
Economizers are assembled and functional?	Yes
Motors are all operating below the FLA rating?	Yes
Are belts tight?	Unable to access motor compartment.
If direct drive unit is the speed controller working.	NA
Is gas piping installed and valves turned on?	NA
Unit free of noticeable noise and vibration	Yes
EF's	
Rotation is correct?	Yes
Belts are tight?	NA
Grease cup installed on hood fan	NA
Hinge kit installed installed on hood fan?	NA
Lean fan back. Is grease duct installation adequate and is duct ran all the way to the base of the fan?	NA
Flex conduit is long enough so that fan can be completely tilted back?	NA
There is no major leakage around base of fan?	No major leakage.
Is the motor operating below the motor FLA rating?	Yes

For restroom fan(s) is the back draft damper installed and can it fully open?	NA
Unit free of noticeable noise and vibration?	Yes
DOCUMENTATION	
Have trades/general contractor been notified about any issues and are they created on FaciliBuild?	Yes

Notes/Comments :

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01-16-23 NIKE - SILVER SPRING, MD

CheckList Information

Name :	TECH - STEP 3: TEST, ADJUST AND BALANCE	**Status :**	NotSubmitted
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		

CheckList Item Details

TEST, ADJUST, AND BALANCE ALL EQUIPMENT:	
DURING TESTING MAKE NOTE OF THE FOLLOWING:	
Is space free of drafting?	Yes
Is space comfortable in all areas?	Yes
Is the space free of ventilation noise?	Yes
If deviations from design were necessary to resolve 1-3 what were they? Otherwise put "NA".	NA
FABRIC DUCT STATIC PRESSURES (IF APPLICABLE)	
Take static pressures near takeoff for each fabric duct once balancing is completed. Input this into the "VEL (1)" field on the diffuser asset. If not a fabric duct then, put "N/A" into the "VEL (1)" field instead.	Yes.

Notes/Comments :

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01-16-23 NIKE - SILVER SPRING, MD

CheckList Information

Name :	TECH - STEP 4: FINAL TESTS	**Status :**	NotSubmitted
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		

CheckList Item Details

FINAL TESTS	
BUILDING PRESSURE	
Building pressure at front & back doors (All Systems On)	Front: 0.0062" Rear:0.0058"
Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)	Yes
CARRIER VFD PARAMETERS (IF APPLICABLE)	
Use Carrier provided VFD cable to verify VFD speed parameters for each unit (Defaults - high speed = 60Hz, low speed = 40Hz). Can adjust high speed parameter for balancing but requires that the low speed is proportionally adjusted. Record VFD speeds on the individual assets	NA
TEMPERATURES/HUMIDITIES	
Measure temperatures/humidities for outside air (taken in shade), return air, and supply air for each HVAC unit during full cooling and input into appropriate fields on the individual asset	Yes
VAV DIFFUSERS (IF APPLICABLE)	
Each VAV-diffuser is calibrated for max airflow?	Yes
Each VAV diffuser is set for minimum airflow? Record value in notes on the individual diffuser asset	Yes.

Notes/Comments :

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Project: 01-16-23 NIKE - SILVER SPRING, MD

System/Unit: AHU/RTU

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Asset: WSHP1 AREA:

Unit Data		
	Design	**Actual**
MFG	CARRIER	CARRIER
Serial Num	-	2122V56825
Model Num	50PTH036	50PTH036
Type	WSHP	WSHP
Configuration	VERTICAL	Vertical
Num OA Filters 1	-	NA
OA Filter Size 1	-	NA
Num Final Filter 1	-	2
Final Filter Size 1	-	20X24X1

Motor Data		
	Design	**Actual**
Phase	3	3
Rated Voltage	480	460

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	DD
Motor Bore Size	-	DD
Fan Sheave Size	-	DD
Fan Sheave Bore	-	DD
Belt CL Distance	-	DD
Num of Belts	-	DD
Belt Size	-	DD

Electrical		
	Design	**Actual**

Test Data		
	Design	**Actual**
SF CFM	1200	1170
RA CFM	1045	1000
OA CFM	155	170
RL Voltage	-	472/474/470
RL Amperage	-	0.8/0.7/0.6
RA Damper Position	-	90%
Min OA Damper Position	-	10%
Min OA Damper Type	-	Motorized Damper

Performance Data		
	Design	**Actual**
MA Plenum SP	-	NA
Fan Suction SP	-	NA
Fan Discharge SP	-	0.4971"
Total ESP	0.6"	0.4971"
OA Temp (db/wb)	-	45.6/30.8
RA Temp (db/wb)	-	71.2/44.5
SA Temp (db/wb)	-	97.5/55.2

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

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Notes:

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Project:01-16-23 NIKE - SILVER SPRING, MD

AHU/RTU

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Diffuser Supply (GRD)

WSHP1/

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	SALES CORRIDOR	CSD3	6"	50	1	52	-	52	104.0
SGRD2	WOMENS RR	CSD3	6"	50	1	55	-	55	110.0
SGRD3	EGRESS CORRIDOR	CSD3	6"	50	1	50	-	50	100.0
SGRD4	MENS RR	CSD3	6"	50	1	54	-	54	108.0
SGRD5	EMPLOYEE LOUNGE	CSD2	10"	250	1	238	-	238	95.2
SGRD6	EMPLOYEE LOUNGE	CSD2	10"	225	1	206	-	206	91.6
SGRD7	HC OFFICE	CSD1	8"	175	1	168	-	168	96.0
SGRD8	ASM OFFICE	CSD1	8"	175	1	172	-	172	98.3
SGRD9	ASM OFFICE	CSD1	8"	175	1	175	-	175	100.0

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Project: 01-16-23 NIKE - SILVER SPRING, MD

System/Unit: AHU/RTU

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Asset: WSHP2 AREA:

Unit Data		
	Design	**Actual**
MFG	CARRIER	CARRIER
Serial Num	-	2122V56826
Model Num	50PTH036	50PTH036
Type	WSHP	WSHP
Configuration	VERTICAL	Vertical
Num OA Filters 1	-	NA
OA Filter Size 1	-	NA
Num Final Filter 1	-	2
Final Filter Size 1	-	20X24X1

Motor Data		
	Design	**Actual**
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	3.2

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	DD
Motor Bore Size	-	DD
Fan Sheave Size	-	DD
Fan Sheave Bore	-	DD
Belt CL Distance	-	DD
Num of Belts	-	DD
Belt Size	-	DD

Electrical		
	Design	**Actual**
VFD Min Setpt	-	No VFD
VFD Max Setpt	-	No VFD

Test Data		
	Design	**Actual**
SF CFM	1150	924
SF RPM	-	NA
RA CFM	935	-
OA CFM	215	-
RL Voltage	-	474/472/470
RL Amperage	-	0.6/0.6/0.5
SF Rotation	-	NA
RA Damper Position	-	Plenum
Min OA Damper Position	-	10%
Min OA Damper Type	-	Supply Fan

Performance Data		
	Design	**Actual**
Total ESP	0.6"	NA
OA Temp (db/wb)	-	45.2/29.4
RA Temp (db/wb)	-	68.9/43.0
SA Temp (db/wb)	-	96.8/54.9

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

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Notes:

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Project:01-16-23 NIKE - SILVER SPRING, MD

AHU/RTU

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Diffuser Supply (GRD)

WSHP2/

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	STOCK ROOM	CSD2	10"	225	1	137	-	137	60.9
SGRD2	STOCK ROOM	CSD2	10"	225	1	261	-	261	116.0
SGRD3	STOCK ROOM	CSD2	10"	225	1	326	-	326	144.9
SGRD4	STOCK ROOM	CSD2	10"	225	1	156	-	156	69.3
SGRD5	IT CLOSET	CSD3	10"	250	1	44	-	44	17.6

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Project: 01-16-23 NIKE - SILVER SPRING, MD

System/Unit: AHU/RTU

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Asset: WSHP3 AREA:

Unit Data		
	Design	**Actual**
MFG	CARRIER	CARRIER
Serial Num	-	2122V56827
Model Num	50PTH036	50PTH036
Type	WSHP	WSHP
Configuration	VERTICAL	Vertical
Num Final Filter 1	-	2
Final Filter Size 1	-	20X24X1

Motor Data		
	Design	**Actual**
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	3.2

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	DD
Motor Bore Size	-	DD
Fan Sheave Size	-	DD
Fan Sheave Bore	-	DD
Belt CL Distance	-	DD
Num of Belts	-	DD
Belt Size	-	DD

Electrical		
	Design	**Actual**
VFD Min Setpt	-	No VFD
VFD Max Setpt	-	No VFD

Test Data		
	Design	**Actual**
SF CFM	1150	1169
RA CFM	935	-
OA CFM	215	-
RL Voltage	-	476/474/472
RL Amperage	-	0.5/0.6/0.5
RA Damper Position	-	90%
Min OA Damper Position	-	10%
Min OA Damper Type	-	Actuator damper

Performance Data		
	Design	**Actual**
Total ESP	0.6"	NA
OA Temp (db/wb)	-	45.3/29.8
RA Temp (db/wb)	-	68.3/42.7
SA Temp (db/wb)	-	98.8/54.4

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

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Notes:

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Project:01-16-23 NIKE - SILVER SPRING, MD

AHU/RTU

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Diffuser Supply (GRD)

WSHP3/

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	EGRESS CORRIDOR	CSD3	6"	50	1	54	-	54	108.0
SGRD2	STOCK ROOM	CSD2	10"	220	1	207	-	207	94.1
SGRD3	STOCK ROOM	CSD2	10"	220	1	202	-	202	91.8
SGRD4	STOCK ROOM	CSD2	10"	220	1	240	-	240	109.1
SGRD5	STOCK ROOM	CSD2	10"	220	1	263	-	263	119.5
SGRD6	STOCK ROOM	CSD2	10"	220	1	203	-	203	92.3

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Project: 01-16-23 NIKE - SILVER SPRING, MD

System/Unit: AHU/RTU

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Asset: WSHP4 AREA:

Unit Data		
	Design	**Actual**
MFG	CARRIER	CARRIER
Serial Num	-	212256694
Model Num	50QP120	50QP120
Type	WSHP	WSHP
Configuration	VERTICAL	Vertical
Num OA Filters 1	-	NA
OA Filter Size 1	-	NA
Num Final Filter 1	-	4
Final Filter Size 1	-	18X20X1

Motor Data		
	Design	**Actual**
Horsepower	-	3
Motor Rpm	-	812
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	3.9

Drive Data		
	Design	**Actual**
Num of Belts	-	2
Belt Size	-	A-51

Electrical		
	Design	**Actual**
VFD Min Setpt	-	No VFD
VFD Max Setpt	-	No VFD

Test Data		
	Design	**Actual**
SF CFM	3000	2763
SF RPM	-	NA
RA CFM	900	-
OA CFM	2100	-
RL Voltage	-	474/472/470
RL Amperage	-	1.9/2.0/1.9
SF Rotation	-	NA
RA Damper Position	-	NA
Min OA Damper Position	-	NA
Min OA Damper Type	-	Motorized Damper

Performance Data		
	Design	**Actual**
Fan Discharge SP	-	0.4579
Total ESP	0.6"	0.4579"
OA Temp (db/wb)	-	45.2/29.4
RA Temp (db/wb)	-	73.4/48.4
SA Temp (db/wb)	-	99.4/56.4

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

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Notes:

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Project:01-16-23 NIKE - SILVER SPRING, MD

AHU/RTU

Comfort. Under control.

Diffuser Supply (GRD)

WSHP4/

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	SALES	FABRIC	20"	3000	0.4579"	2763	-	2763	92.1

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Project: 01-16-23 NIKE - SILVER SPRING, MD

System/Unit: AHU/RTU

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Asset: WSHP5 AREA:

Unit Data		
	Design	**Actual**
MFG	CARRIER	CARRIER
Serial Num	-	2122V56693
Model Num	50HQP120	50HQP120
Type	WSHP	WSHP
Configuration	VERTICAL	Vertical
Num OA Filters 1	-	NA
OA Filter Size 1	-	NA
Num Final Filter 1	-	4
Final Filter Size 1	-	18X20X1

Motor Data		
	Design	**Actual**
Horsepower	-	3
Motor Rpm	-	812
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	3.9

Drive Data		
	Design	**Actual**
Num of Belts	-	2
Belt Size	-	A-51

Electrical		
	Design	**Actual**
VFD Min Setpt	-	No VFD
VFD Max Setpt	-	No VFD

Test Data		
	Design	**Actual**
SF CFM	3000	2843
RA CFM	2100	-
OA CFM	900	-
RL Voltage	-	472/474/471
RL Amperage	-	1.8/2.1/2.3
Min OA Damper Type	-	Motorized Damper

Performance Data		
	Design	**Actual**
Fan Discharge SP	-	0.4682"
Total ESP	0.6"	0.4682"
OA Temp (db/wb)	-	45.2/29.4
RA Temp (db/wb)	-	73.6/56.7
SA Temp (db/wb)	-	100.5/58.9

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

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Notes:

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Project:01-16-23 NIKE - SILVER SPRING, MD

AHU/RTU

Comfort. Under control.

Diffuser Supply (GRD)

WSHP5/

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	SALES	FABRIC	20"	3000	0.4682"	2843	-	2843	94.8

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Project: 01-16-23 NIKE - SILVER SPRING, MD

System/Unit: AHU/RTU

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Asset: WSHP6 AREA:

Unit Data		
	Design	**Actual**
MFG	CARRIER	CARRIER
Serial Num	-	2122V6692
Model Num	50HQP120	50HQP120
Type	WSHP	WSHP
Configuration	VERTICAL	Vertical
Num OA Filters 1	-	NA
OA Filter Size 1	-	NA
Num Final Filter 1	-	4
Final Filter Size 1	-	18X20X1

Motor Data		
	Design	**Actual**
Horsepower	-	3
Motor Rpm	-	812
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	3.9

Drive Data		
	Design	**Actual**
Num of Belts	-	2
Belt Size	-	A-51

Electrical		
	Design	**Actual**
VFD Min Setpt	-	No VFD
VFD Max Setpt	-	No VFD

Test Data		
	Design	**Actual**
SF CFM	3000	2718
RA CFM	2100	-
OA CFM	900	-
RL Voltage	-	474/470/472
RL Amperage	-	2.4/2.0/2.4
Min OA Damper Type	-	Motorized Damper

Performance Data		
	Design	**Actual**
Fan Discharge SP	-	0.4706"
Total ESP	0.6"	0.4706"
OA Temp (db/wb)	-	45.2/29.4
RA Temp (db/wb)	-	72.9/45.7
SA Temp (db/wb)	-	100.1/58.2

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

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Notes:

Diffuser Supply (GRD)

WSHP6/

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	SALES	FABRIC	18"	2600	0.4706"	1860	2348	2348	90.3
SGRD2	FITTING RM VEST.	CSD4	8"	75	1	160	68	68	90.7
SGRD3	FITTING RM VEST.	CSD4	8"	100	1	269	92	92	92.0
SGRD4	FITTING RM 1	CSD4	8"	75	1	171	71	71	94.7
SGRD5	FITTING RM 2	CSD4	8"	75	1	165	70	70	93.3
SGRD6	ACCESSIBLE FITTING RM	CSD4	8"	75	1	140	69	69	92.0

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Project: 01-16-23 NIKE - SILVER SPRING, MD

System/Unit: AHU/RTU

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Asset: WSHP7 AREA:

Unit Data		
	Design	**Actual**
MFG	CARRIER	CARRIER
Serial Num	-	2122V5661
Model Num	50HQP072	50HQP072
Type	WSHP	WSHP
Configuration	VERTICAL	Vertical
Num Final Filter 1	-	4
Final Filter Size 1	-	18X20X1

Motor Data		
	Design	**Actual**
Horsepower	-	1.5
Motor Rpm	-	867
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	2.4

Drive Data		
	Design	**Actual**
Num of Belts	-	2
Belt Size	-	A-51

Electrical		
	Design	**Actual**
VFD Min Setpt	-	No VFD
VFD Max Setpt	-	No VFD

Test Data		
	Design	**Actual**
SF CFM	2600	2487
RA CFM	2600	2487
OA CFM	0	0
RL Voltage	-	476/474/473
RL Amperage	-	2.0/1.8/2.0
RA Damper Position	-	100%

Performance Data		
	Design	**Actual**
Fan Discharge SP	-	0.5247"
Total ESP	0.6"	0.5247"
RA Temp (db/wb)	-	75.4/47.2
SA Temp (db/wb)	-	98.4/56.8

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

Completed By: David Annan

Notes:

National TAB

Project:01-16-23 NIKE - SILVER SPRING, MD

AHU/RTU

Comfort. Under control.

Diffuser Supply (GRD)

WSHP7/

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	SALES	FABRIC	18"	2600	0.5247"	2487	-	2487	95.7

Completed By: Brianna Biggs on

Circuit Setter

CIRCUIT SETTER /

Asset							
Asset Name	**Size**	**Type**	**Design GPM**	**Setting**	**Delta P**	**Final GPM**	**% to Design**
CS1	1-1/4"	Ball	9.0	2-32	5	9	100.0
CS2	1-1/4"	Ball	9.0	2-32 Range	5	9.0	100.0
CS3	1-1/4"	Ball	9.0	2-32 Range	4.5	9.0	100.0
CS4	2"	Ball	30.0	2-32 range	8	30.0	100.0
CS5	2"	Ball	30.0	2-32 Range			-
CS6	2"	Ball	30.0	2-32 Range			-
CS7	1-1/4"	Ball	18.0	2-32 Range			-

Asset	Notes
CS5	Unable to access valve to take a reading.

National TAB

Project: 01-16-23 NIKE - SILVER SPRING, MD

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF1 AREA:

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	SQ090VG	SQ090VG-X
Serial Num	-	20374640
Type	INLINE	Inline
Configuration	HORIZONTAL	Horizontal

Motor Data		
	Design	**Actual**
Phase	1	1
Voltage (rated)	120	120

Test Data		
	Design	**Actual**
CFM	350	353
Fan Rotation	-	CCW
RL Voltage	-	122
RL Amperage	-	0.8
Total ESP	0.5"	0.4529"
Fan Inlet SP	-	-0.2783"
Fan Discharge SP	-	0.1746"

Completed By: David Annan

Notes:

National TAB

Project:01-16-23 NIKE - SILVER SPRING, MD

FAN - Exhaust

Comfort. Under control.

Diffuser Ret/Exh (GRD)

EF1/

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	NA	NA	NA	100	1	116	97	97	97.0
EGRD2	NA	NA	NA	125	1	157	132	132	105.6
EGRD3	NA	NA	NA	125	1	150	124	124	99.2

Completed By: Brianna Biggs on

National TAB

Project: 01-16-23 NIKE - SILVER SPRING, MD

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF2 AREA:

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	SQ100VG	SQ100VG
Serial Num	-	N/L
Type	INLINE	Inline
Configuration	-	Horizontal

Motor Data		
	Design	**Actual**
Phase	1	1
Voltage (rated)	120	120

Test Data		
	Design	**Actual**
CFM	1000	1089
Fan Rotation	-	CCW
RL Voltage	-	122.7
RL Amperage	-	1.8
Total ESP	0.3"	0.3051"
Fan Inlet SP	-	-0.2123"
Fan Discharge SP	-	0.0928"

Completed By: David Annan

Notes:

National TAB

Project: 01-16-23 NIKE - SILVER SPRING, MD

System/Unit: FAN - Supply

Comfort. Under control.

Asset: SF1 AREA:

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	SQ-095-VG	SQ-095-VG
Serial Num	-	NA
Type	INLINE	Inline
Configuration	HORIZONTAL	Horizontal

Motor Data		
	Design	**Actual**
Horsepower	1/6	1/6
Phase	1	1
Voltage (rated)	120	120

Gas Heat		
	Design	**Actual**

Test Data		
	Design	**Actual**
CFM	585	555
SF RPM	1725	NA
RL Voltage	-	208
RL Amperage	-	2.7
Total ESP	-	0.1846"
Fan Discharge SP	-	0.1846"

General		
	Design	**Actual**
Fan Rotation Correct	-	Yes

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Notes:

National TAB

Project: 01-16-23 NIKE - SILVER SPRING, MD

System/Unit: FAN - Supply

Comfort. Under control.

Asset: SF2 AREA:

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	SQ-140-VG	SQ-140-VG
Serial Num	-	NA
Type	INLINE	Inline
Configuration	HORIZONTAL	Horizontal

Test Data		
	Design	**Actual**
CFM	3000	-
SF RPM	1725	NA
SF System SetPt	-	CO2 controlled
RL Voltage	-	209
RL Amperage	-	3.1

Motor Data		
	Design	**Actual**
Horsepower	1	1
Phase	1	1
Voltage (rated)	208	208

General		
	Design	**Actual**
Fan Rotation Correct	-	Yes

Gas Heat		
	Design	**Actual**

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Notes:

National TAB

Project: 01-16-23 NIKE - SILVER SPRING, MD

System/Unit: FAN - Supply

Comfort. Under control.

Asset: SF3 AREA:

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	SQ-140-VG	SQ-140-VG
Serial Num	-	NA
Type	INLINE	Inline
Configuration	HORIZONTAL	Horizontal

Test Data		
	Design	**Actual**
CFM	3000	-
SF RPM	1725	NA
SF System SetPt	-	C02 controlled
RL Voltage	-	208
RL Amperage	-	3.1

Motor Data		
	Design	**Actual**
Horsepower	1	1
Phase	1	1
Voltage (rated)	208	208

General		
	Design	**Actual**
Fan Rotation Correct	-	Yes

Gas Heat		
	Design	**Actual**

Completed By: David Annan

Notes:

National TAB

Project: 01-16-23 NIKE - SILVER SPRING, MD

System/Unit: FAN - Supply

Comfort. Under control.

Asset: SF4 AREA:

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	SQ-140-VG	SQ-140-VG
Serial Num	-	NA
Type	INLINE	Inline
Configuration	HORIZONTAL	Horizontal

Test Data		
	Design	**Actual**
CFM	3000	-
SF RPM	1725	NA
SF System SetPt	-	CO2 Controlled
RL Voltage	-	209
RL Amperage	-	3.0

Motor Data		
	Design	**Actual**
Horsepower	1	1
Phase	1	1
Voltage (rated)	208	208

General		
	Design	**Actual**
Fan Rotation Correct	-	Yes

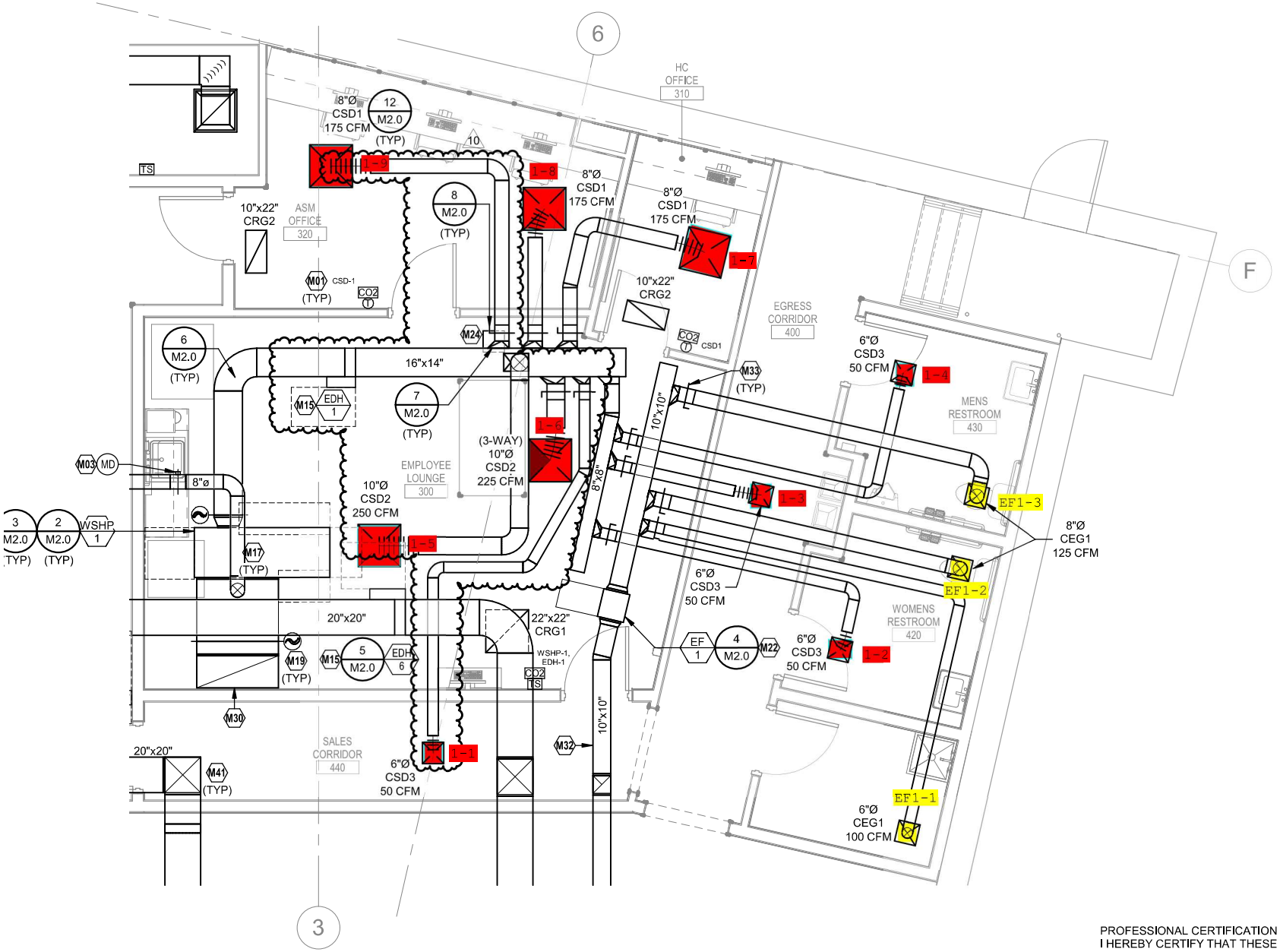
Gas Heat		
	Design	**Actual**

Completed By: David Annan

Notes:

THE DRAWINGS. ALL CONTROLS SHALL BE TIED INTO THE EMS SYSTEM UNLESS NOTED OTHERWISE.

GENERAL CONTRACTOR SHALL INSTALL CARRIER FURNISHED TEMPORARY THERMOSTATS AND FEED THE WIRING DOWN INTO THE SPACE FOR START UP AND CONTROL OF RTU(S) UNTIL THE EMS SYSTEM IS OPERABLE. REFER TO M3.0 FOR CARRIER CONTACT INFORMATION.



2 ENLARGED BACK OF HOUSE HVAC PLANS
1/4" = 1'-0"

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND,
PRINT NAME: JUSTIN M. OLDER
LICENSE # 52138
EXPIRATION DATE: 1/8/2024

Date: 1/25/2023