

**Report By:**

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



**Report: TAB REPORT**  
**Function: Test, Adjust, & Balance**  
**Date: 08/12/2025**  
**Completed By: National TAB**

# PROJECT

## 08-04-25 NIKE #202 CHESTERFIELD, MO

18521 Outlet Blvd Suite 500

Chesterfield, , MO 63005

### Client

Comfort Systems USA Strategic Accounts  
2655 Fortune Circle West, Suite E

Indianapolis, IN 46241

# National TAB

Project: 08-04-25 NIKE #202 CHESTERFIELD, MO

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## 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.

### 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.

## Issue List

- RTU-1: Clogged/Dirty Return Grille
- RTU-2: Clogged/Dirty Return Grille
- RTU-2: Duct Disconnected
- RTU-3: Clogged/Dirty Return Grille
- RTU-4: Curb Leakage



**08-04-25 NIKE #202 CHESTERFIELD, MO**

**Project Issue Information**

**Issue Name :** RTU-1: Clogged/Dirty Return Grille  
**Description :** The return grille for RTU-1 is clogged/very dirty. Supply airflow is low and the pressure is and causing duct to cave in. Recommend cleaning.  
**Created By :** National TAB                      **Assigned To :** National TAB - Dan Hertenstein  
**Status :** Open  
**Priority :** Urgent                                      **Asset Tag :** RTU1  
**Originated Date :** 08/06/2025 - Kalen Kemp - National TAB

Project Issue File Details



08/06/2025



**08-04-25 NIKE #202 CHESTERFIELD, MO**

**Project Issue Information**

**Issue Name :** RTU-2: Clogged/Dirty Return Grille  
**Description :** The return grille for RTU-2 is clogged/very dirty. Supply airflow is low and the pressure is and causing duct to cave in. Recommend cleaning.  
**Created By :** National TAB                      **Assigned To :** National TAB - Dan Hertenstein  
**Status :** Open  
**Priority :** **Urgent**                                      **Asset Tag :** RTU2  
**Originated Date :** 08/06/2025 - Kalen Kemp - National TAB

Project Issue File Details



08/06/2025



**08-04-25 NIKE #202 CHESTERFIELD, MO**

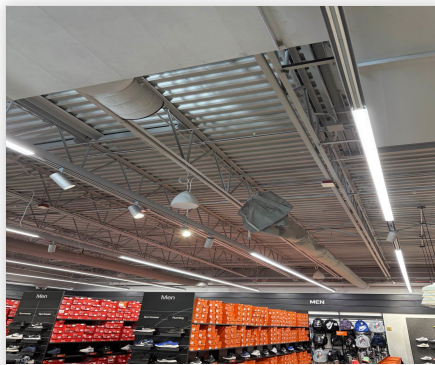
**Project Issue Information**

**Issue Name :** RTU-2: Duct Disconnected  
**Description :** The soft duct (Duct Sox) has disconnected from the main trunk of the RTU.  
**Created By :** National TAB                      **Assigned To :** National TAB - Dan Hertenstein  
**Status :** Open  
**Priority :** **Urgent**                                      **Asset Tag :** RTU2  
**Originated Date :** 08/06/2025 - Kalen Kemp - National TAB

Project Issue File Details



08/06/2025



08/06/2025



**08-04-25 NIKE #202 CHESTERFIELD, MO**

**Project Issue Information**

**Issue Name :** RTU-3: Clogged/Dirty Return Grille  
**Description :** The return grille for RTU-3 is clogged/very dirty. Supply airflow is low and the pressure is and causing duct to cave in. Recommend cleaning.  
**Created By :** National TAB                      **Assigned To :** National TAB - Dan Hertenstein  
**Status :** Open  
**Priority :** Urgent                                      **Asset Tag :** RTU3  
**Originated Date :** 08/06/2025 - Kalen Kemp - National TAB

Project Issue File Details



08/06/2025



**08-04-25 NIKE #202 CHESTERFIELD, MO**

**Project Issue Information**

**Issue Name :** RTU-4: Curb Leakage  
**Description :** There is a small amount of air leaking from the curb of RTU-4. It can be felt at the corner closest to the supply fan compartment door. It is not a significant amount of airflow.  
**Created By :** National TAB                      **Assigned To :** National TAB - Dan Hertenstein  
**Status :** Open  
**Priority :** Low                                      **Asset Tag :** RTU4  
**Originated Date :** 08/06/2025 - Kalen Kemp - National TAB

Project Issue File Details



08/06/2025



08/06/2025

## CheckList List

- ALL STEPS TECH CHECKLIST



**Comment:**

NO. RTU-4 has loose condenser fan mount that is rattling.

---

**Units are labeled and installed on proper curb**

---

**Comment:**

YES.

---

**Unit ductwork properly installed / sealed on curb**

---

**Comment:**

RTU-4 has small leakage at corner near supply fan compartment

---

**Pulleys are properly aligned**

---

**Comment:**

NA. Direct drive.

---

**Condensate lines and P-Traps installed correctly**

---

**Comment:**

YES

---

**Disconnect Switch Installed**

---

**Comment:**

YES

---

**Outside air dampers/Economizers installed and functioning**

---

**Comment:**

YES

---

**Additional Comments or recommendations:**

---

**Comment:**

Return grilles are clogged/dirty. Recommend cleaning.

---

**Documentation**

---

**If issues, have NTAB team and Comfort Systems team been notified ?**

---

**Comment:**

YES

---

**If any issues, have Facilibuild issues been created explaining in detail?**

---

**Comment:**

YES

---

**Pictures**

---

**All Issues**

---

**Comment:**

YES

---

**Each Piece of equipment**

---

**Comment:**

YES

---

**Front of store**

---

**Comment:**

YES

---

**Roof Top Layout**

---

**Comment:**

YES

---

# National TAB

Project: 08-04-25 NIKE #202 CHESTERFIELD, MO

## System/Unit: AHU/RTU



Asset: RTU1

AREA:SALES FLOOR/REGISTERS

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	1925P04331
Model Num	50GECN14A2M6-3W4F0	50GECN14A2M6
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	22.625X25.5"
Num Final Filter 1	-	6
Final Filter Size 1	-	18X24X2"
Num Final Filter 2	-	
Final Filter Size 2	-	

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	3.5

Drive Data	
	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	
	Actual
VFD Min Setpt	39 HZ
VFD Max Setpt	60 HZ

Test Data		
	Design	Actual
SF CFM	4800	4919
SF RPM	-	1482
MOTOR RPM	-	1482
RA CFM	4250	4414
OA CFM	550	505
ABS MIN OA	-	495
ABS MIN OA DAMPER POSITION	-	14%
RL Voltage	-	484
RL Amperage	-	2.17
SF Rotation	-	COUNTERCLOCKWISE
RA Damper Position	-	86%
Min OA Damper Position	-	14%
Min OA Damper Type	-	ECON

Performance Data		
	Design	Actual
MA Plenum SP	-	-1.51"
Fan Suction SP	-	-1.49"
Fan Discharge SP	-	0.25"
Total ESP	1.20	1.76"
OA Temp (db/wb)	-	95 db/75 wb
RA Temp (db/wb)	-	76 db/61 wb
SA Temp (db/wb)	-	61 db/53 wb

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	YES

Notes:

- Return Grilles Dirty/Clogged. Balanced RTU with OA method. Put OA damper at 100% and adjusted fan speed accordingly. Set OA once fan speed was balanced.
- Initial Airflow Calculation: 2589

Written By: Kalen Kemp on 08/06/2025

## Unit Data - PHOTO LOG



**08/06/2025**

# National TAB

Project: 08-04-25 NIKE #202 CHESTERFIELD, MO

## System/Unit: AHU/RTU



Asset: RTU2

AREA:MERCHANDISE/SHOES

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	1925P04332
Model Num	50GECN14A2M6-3W4F0	50GECN14A2M6-3W4F0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	22.625X25.5"
Num Final Filter 1	-	6
Final Filter Size 1	-	18X24X2"

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	3.5

Drive Data	
	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	
	Actual
VFD Min Setpt	33 Hz
VFD Max Setpt	60Hz

Test Data		
	Design	Actual
SF CFM	4000	3918
SF RPM	-	1258
MOTOR RPM	-	1258
RA CFM	3050	3061
OA CFM	950	857
ABS MIN OA	-	855
ABS MIN OA DAMPER POSITION	-	24%
RL Voltage	-	490
RL Amperage	-	1.46
SF Rotation	-	COUNTERCLOCKWISE
RA Damper Position	-	76%
Min OA Damper Position	-	24%
Min OA Damper Type	-	ECON

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.93"
Fan Suction SP	-	-1.07"
Fan Discharge SP	-	0.15"
Total ESP	-	1.08"
OA Temp (db/wb)	-	104 db/81 wb
RA Temp (db/wb)	-	87 db/72 wb
SA Temp (db/wb)	-	68 db/55 wb

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	YES

**Notes:**

- Return Grilles Dirty/Clogged. Balanced RTU with OA method. Put OA damper at 100% and adjusted fan speed accordingly. Set OA once fan speed was balanced.
- Initial Airflow Calculation: 2999

Written By: Kalen Kemp on 08/06/2025

## Unit Data - PHOTO LOG



08/06/2025

# National TAB

Project: 08-04-25 NIKE #202 CHESTERFIELD, MO

## System/Unit: AHU/RTU



Asset: RTU3

AREA:MERCHANDISE/SHOES

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	1925P04333
Model Num	50GECN14A2M6-3W4F0	50GECN14A2M6-3W4F0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	22.5X25.5"
Num Final Filter 1	-	6
Final Filter Size 1	-	18X24X2"

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	-	3
Rated Voltage	-	460
Rated Amperage	-	3.5

Drive Data	
	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	
	Actual
VFD Min Setpt	33 Hz
VFD Max Setpt	60 Hz

Test Data		
	Design	Actual
SF CFM	4000	4080
SF RPM	-	1258
MOTOR RPM	-	1258
RA CFM	3050	3092
OA CFM	950	988
ABS MIN OA	-	855
ABS MIN OA DAMPER POSITION	-	24%
RL Voltage	-	486
RL Amperage	-	1.51
SF Rotation	-	COUNTERCLOCKWISE
RA Damper Position	-	76%
Min OA Damper Position	-	24%
Min OA Damper Type	-	ECON

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.97"
Fan Suction SP	-	-1.04"
Fan Discharge SP	-	0.21"
Total ESP	1.30"	1.18"
OA Temp (db/wb)	-	99 db/77 wb
RA Temp (db/wb)	-	81 db/66 wb
SA Temp (db/wb)	-	66 db/58 wb

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	YES

**Notes:**

- Return Grilles Dirty/Clogged. Balanced RTU with OA method. Put OA damper at 100% and adjusted fan speed accordingly. Set OA once fan speed was balanced.
- Initial Airflow Calculation: 3399

Written By: Kalen Kemp on 08/06/2025

## Unit Data - PHOTO LOG



08/06/2025

# National TAB

Project: 08-04-25 NIKE #202 CHESTERFIELD, MO

## System/Unit: AHU/RTU



Asset: RTU4

AREA:BOH

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	2025C10140
Model Num	50GE-N05A2M6-3W4F0	50GE-N05A2M6-3W4F0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	14.125X28.125"
Num Final Filter 1	-	4
Final Filter Size 1	-	16X16X2"

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	2.1

Drive Data	
	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	
	Actual
VFD Min Setpt	48 Hz
VFD Max Setpt	60 Hz

Test Data		
	Design	Actual
SF CFM	1600	1535
SF RPM	-	1969
MOTOR RPM	-	1969
RA CFM	1285	1282
OA CFM	315	313
ABS MIN OA	-	284
ABS MIN OA DAMPER POSITION	-	10%
RL Voltage	-	490
RL Amperage	-	1.07
SF Rotation	-	COUNTERCLOCKWISE
RA Damper Position	-	90%
Min OA Damper Position	-	10%
Min OA Damper Type	-	ECON

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.71"
Fan Suction SP	-	-0.92"
Fan Discharge SP	-	0.56"
Total ESP	1.19"	1.27"
OA Temp (db/wb)	-	100 db/76 wb
RA Temp (db/wb)	-	79 db/64 wb
SA Temp (db/wb)	-	62 db/55 wb

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	YES

Notes:

- Balanced RTU with OA method. Put OA damper at 100% and adjusted fan speed accordingly. Set OA once fan speed was balanced.
- Unable to access return Grilles to determine if they were clean/dirty

Written By: Kalen Kemp on 08/06/2025

## Unit Data - PHOTO LOG



08/06/2025

# National TAB

Project: 08-04-25 NIKE #202 CHESTERFIELD, MO

## System/Unit: AHU/RTU



Asset: RTU5

AREA:OFFICE/BREAKROOM

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	1925C09522
Model Num	50GE-N06A2M6-3W4F0	50GE-N06A2M6-3W4F0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	14.125X28.125"
Num Final Filter 1	-	2
Final Filter Size 1	-	16X25X2"

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	1.7

Drive Data	
	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	
	Actual
VFD Min Setpt	60 Hz
VFD Max Setpt	60 Hz

Test Data		
	Design	Actual
SF CFM	1750	1756
SF RPM	-	2170
MOTOR RPM	-	2170
RA CFM	1585	1587
OA CFM	165	169
ABS MIN OA	-	149
ABS MIN OA DAMPER POSITION	-	20%
RL Voltage	-	487
RL Amperage	-	1.31
SF Rotation	-	COUNTERCLOCKWISE
RA Damper Position	-	80%
Min OA Damper Position	-	20%
Min OA Damper Type	-	ECON

Performance Data		
	Design	Actual
MA Plenum SP	-	-1.22"
Fan Suction SP	-	-1.48"
Fan Discharge SP	-	0.54"
Total ESP	1.19"	1.76"
OA Temp (db/wb)	-	96 db/75 wb
RA Temp (db/wb)	-	76 db/63 wb
SA Temp (db/wb)	-	64 db/58 wb

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	YES

Notes:

- Balanced RTU with OA method. Put OA damper at 100% and adjusted fan speed accordingly. Set OA once fan speed was balanced.
- Unable to access return Grilles to determine if they were clean/dirty

Written By: Kalen Kemp on 08/06/2025

## Unit Data - PHOTO LOG



08/06/2025