

Report By:

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



Report: TAB REPORT
Function: Test, Adjust, & Balance
Date: 11/22/2024
Completed By: National TAB

PROJECT

11-11-24 WARBY PARKER LYNNFIELD, MA

427 Walnut Street

Lynnfield, MA

Client

Russco Inc

National TAB

Project: 11-11-24 WARBY PARKER LYNNFIELD, MA

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Project Summary

The scope at Warby Parker was to balance total supply and outside air for one new RTU that was replaced. The airflow was measured at each diffuser and the sum of these diffusers was equal to the total flow of the unit. Adjustments to the direct drive speed controller was made to bring the unit within design airflow. The outside air damper was not responding to adjustment and had to be manually loosened and set. The outside air was measured with a velocity grid by multiplying by the free area of the filter.

Issue List

- Outside air damper is not functional



11-11-24 WARBY PARKER LYNNFIELD, MA

Project Issue Information

Issue Name : Outside air damper is not functional
Description : The outside air damper for RTU-1 is not functional. The damper had to be manually set. The actuator position is marked so that once the damper is operating properly it can be set to this permanently marked position.
Created By : National TAB **Assigned To :** National TAB - Will Turnbough
Status : Open
Priority : High **Asset Tag :** RTU1
Originated Date : 11/22/2024 - Will Turnbough - National TAB

National TAB

Project: 11-11-24 WARBY PARKER LYNNFIELD, MA

System/Unit: AHU/RTU



Asset: RTU1

AREA:STORE

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	1924C07796
Model Num	48FCFM07A3A6-0A0A0	48FCFM07A3A6-0A0A0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Phase	3	3
Rated Voltage	460	460
Rated Amperage	-	3.10

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

Test Data		
	Design	Actual
SF CFM	2500	2318
SF RPM	2094	NA
RA CFM	2124	1977
OA CFM	376	341
RL Voltage	-	446/444/446
RL Amperage	-	2.6/2.5/2.6
SF System SetPt	-	100%
Min OA Damper Position	-	MARKED
Min OA Damper Type	-	ACTUATED OAD

Performance Data		
	Design	Actual
MA Plenum SP	-	
Fan Suction SP	-	-0.61"
Fan Discharge SP	-	0.32"
Fan Total SP	0.63"	0.93"

Notes:

Outside air damper not functional. Position had to be manually set.

Written By: Will Turnbough on 11/22/2024