

Report By:

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



Report: prelim
Function: Test, Adjust, & Balance
Date: 09/05/2023

PROJECT
Sherwin Williams (Independence, KY)

2208 Declaration Dr

Independence, KY 41051

Client

Champion Commercial HVAC
2638 Tem Mile Rd.

Melbourne, KY 41059

National TAB

Project: Sherwin Williams (Independence, KY)

System/Unit: AHU/RTU



Asset: RTU-1

AREA:100

Unit Data		
	Design	Actual
MFG	NA	CARRIER
Serial Num	-	1723C08637
Model Num	NA	48FCEM07A2A5-0A0A0
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	14"X24"
Num PreFilter 1	-	4
PreFilter Size 1	-	16"X16"X2"

Motor Data		
	Design	Actual
Phase	3	3
Rated Voltage	208	208
Rated Amperage	5.5	5.5

Test Data		
	Design	Actual
SF CFM	2400	2207
RA CFM	2100	1916
OA CFM	300	291
RL Voltage	208	209/211/211
RL Amperage	5.5	4.6/4.5/4.6
OA Damper Position	-	1/2" open

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.78"
Fan Suction SP	-	-1.20"
Fan Discharge SP	-	0.23"
Total ESP	0.80	1.01"
Fan Total SP	0.97	1.43"

Completed By: Gabe Merk on 09/06/2023

Notes:

Unable to get adequate airflow to diffusers 1-2 and 1-3. Duct restrictions wont allow.

Written By: Gabe Merk on 09/06/2023

National TAB

Project: Sherwin Williams (Independence, KY)

AHU/RTU



Diffuser Supply (GRD)

RTU-1/100

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
1-1	100	S1	10	250	218	240	96.0
1-2	100	S1	10	250	101	182	72.8
1-3	100	S1	10	250	104	187	74.8
1-4	100	S1	10	250	310	231	92.4
1-5	101	S1	10	300	286	277	92.3
1-6	100	S1	10	250	229	250	100.0
1-7	100	S1	10	250	358	245	98.0
1-8	100	S1	10	250	360	244	97.6
1-9	100	S1	10	250	242	240	96.0
1-10	102	S1	6	50	112	57	114.0
1-11	103	S1	6	50	100	54	108.0
Total				2400	2420	2207	91.96%

National TAB

Project: Sherwin Williams (Independence, KY)

System/Unit: AHU/RTU



Asset: RTU-2

AREA:104

Unit Data		
	Design	Actual
MFG	NA	CARRIER
Serial Num	-	1523C07714
Model Num	NA	48FCEA04A2A5-0A0A0
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	14"X24"
Num PreFilter 1	-	2
PreFilter Size 1	-	16"X25"X2"

Motor Data		
	Design	Actual
Phase	3	1
Rated Voltage	208	208
Rated Amperage	5.1	5.5

Test Data		
	Design	Actual
SF CFM	1200	1253
RA CFM	1000	1042
OA CFM	200	211
RL Voltage	208	210
RL Amperage	5.1	1.6
OA Damper Position	-	3/8" open

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.23"
Fan Suction SP	-	-0.39"
Fan Discharge SP	-	0.08"
Total ESP	0.50	0.31"
Fan Total SP	0.54	0.47"

Completed By: Gabe Merk on 09/06/2023

Notes:
Unable to reach diffuser adjustments. Unit total set to design.

Written By: Gabe Merk on 09/06/2023

National TAB

Project: Sherwin Williams (Independence, KY)

AHU/RTU



Diffuser Supply (GRD)

RTU-2/104

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
2-1	104	S2	8X6	150		180	120.0
2-2	104	S2	8X6	150		122	81.3
2-3	104	S2	8X6	150		138	92.0
2-4	104	S2	8X6	150		177	118.0
2-5	104	S2	8X6	150		173	115.3
2-6	104	S2	8X6	150		136	90.7
2-7	104	S2	8X6	150		153	102.0
2-8	104	S2	8X6	150		174	116.0
Total				1200	0	1253	104.42%

National TAB

Project: Sherwin Williams (Independence, KY)

System/Unit: FAN - Exhaust



Asset: EF-1

AREA:102

Unit Data		
	Design	Actual
MFG	NA	PENNBARRY
Model Num	NA	ZJ1-SC
Serial Num	-	E23JZ78240
Type	CEILING	CEILING

Test Data		
	Design	Actual
CFM	100	134

Motor Data		
	Design	Actual
Motor MFG	-	FASCO
Motor Rpm	810	1500
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	1.4

Completed By: Gabe Merk on 09/06/2023

Notes:

[1] EFs have speed dial installed but dial has no function. EFs stuck in high speed.

Written By: Gabe Merk on 09/06/2023

National TAB

Project: Sherwin Williams (Independence, KY)

System/Unit: FAN - Exhaust



Asset: EF-2

AREA:103

Unit Data		
	Design	Actual
MFG	NA	PENNBARRY
Model Num	NA	ZJ1-SC
Serial Num	-	E23JZ78239
Type	CEILING	CEILING

Test Data		
	Design	Actual
CFM	100	150

Motor Data		
	Design	Actual
Motor MFG	-	FASCO
Motor Rpm	810	1550
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	1.4

Completed By: Gabe Merk on 09/06/2023

Notes:
See EF1 note [1].

Written By: Gabe Merk on 09/06/2023