

Report By:

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



Report: CERTIFIED TAB REPORT

Function: Test, Adjust, & Balance

Date: 11/12/2024

Completed By: National TAB

PROJECT

Sherwin Williams (Sacramento, CA)

3510 Truxel Rd

Sacramento, CA _____

Client

B&M Builders, Inc.

11330 Sunrise Park Drive

Suite C

Rancho Cordova, CA 95742

National TAB

Project: Sherwin Williams (Sacramento, CA)

Table Of Contents

Section	Page #
AHU/RTU	3
FAN - Exhaust	7
Abbreviations	8

Asset: RTU-1

AREA:SALES 101

Unit Data		
	Design	Actual
MFG	NA	TRANE
Serial Num	-	242710226L
Model Num	NA	WHC102H3RKA2FK6D1A0A
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	37.5X24
Num PreFilter 1	-	4
PreFilter Size 1	-	20X25X2

Test Data		
	Design	Actual
SF CFM	3400	3434
RA CFM	2850	2873
OA CFM	550	561
RL Voltage	-	216/216/215
RL Amperage	-	1.83/1.83/1.84
OA Damper Position	-	15%
Brake Horse Power	-	0.68

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	2.75
Motor Rpm	-	949
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	7.30
Service Factor	-	NL

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.31"
Fan Suction SP	-	-0.52"
Fan Discharge SP	-	0.33"
Total ESP	1.0	0.64"
Fan Total SP	-	0.85"

Unit Data - PHOTO LOG



173134404091886500814..

Completed By: Zack Eismin on 11/11/2024



National TAB

Project: Sherwin Williams (Sacramento, CA)

AHU/RTU



Diffuser Supply (GRD)

RTU-1/SALES 101

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
SGRD1	SALES 101	S1	16	200	123	217	108.5
SGRD2	SALES 101	S1	16	250	175	251	100.4
SGRD3	SALES 101	S1	16	200	131	211	105.5
SGRD4	SALES 101	S1	16	250	168	245	98.0
SGRD5	SALES 101	S1	10	250	203	267	106.8
SGRD6	SALES 101	S2	8	150	121	144	96.0
SGRD7	SALES 101	S2	6	50	110	49	98.0
SGRD8	SALES 101	S1	18	200	171	187	93.5
SGRD9	SALES 101	S1	18	250	209	234	93.6
SGRD10	SALES 101	S1	18	200	181	192	96.0
SGRD11	SALES 101	S1	18	250	211	261	104.4
SGRD12	SALES 101	S1	16	200	158	198	99.0
SGRD13	SALES 101	S1	16	250	201	261	104.4
SGRD14	SALES 101	S1	16	200	144	211	105.5
SGRD15	SALES 101	S1	16	250	189	259	103.6
SGRD16	SALES 101	S1	10	250	171	247	98.8
Total				3400	2666	3434	101%

Completed By: Zack Eismin on 11/11/2024



National TAB

Project: Sherwin Williams (Sacramento, CA)

System/Unit: AHU/RTU



Asset: RTU-2

AREA:WHOLESALE 102

Unit Data		
	Design	Actual
MFG	NA	TRANE
Serial Num	-	243111512L
Model Num	NA	WHC092H3RKA2FK6D1A0A6
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	37.5X24
Num PreFilter 1	-	4
PreFilter Size 1	-	20X25X2

Test Data		
	Design	Actual
SF CFM	3000	2976
RA CFM	2475	2456
OA CFM	525	520
RL Voltage	-	216/215/216
RL Amperage	-	1.79/1.8/1.78
OA Damper Position	-	18%
Brake Horse Power	-	0.67

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	2.75
Motor Rpm	-	903
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	7.30
Service Factor	-	NL

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.28"
Fan Suction SP	-	-0.45"
Fan Discharge SP	-	0.37"
Total ESP	1.0	0.65"
Fan Total SP	-	0.82"

Unit Data - PHOTO LOG



173136236226466657039..

Completed By: Zack Eismin on 11/11/2024



National TAB

Project: Sherwin Williams (Sacramento, CA)

AHU/RTU



Diffuser Supply (GRD)

RTU-2/WHOLESALE 102

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
SGRD1	WHOLESALE 102	S1	22	250	201	251	100.4
SGRD2	WHOLESALE 102	S1	22	250	193	254	101.6
SGRD3	WHOLESALE 102	S1	20	250	182	243	97.2
SGRD4	WHOLESALE 102	S1	20	250	171	230	92.0
SGRD5	WHOLESALE 102	S1	18	250	209	241	96.4
SGRD6	WHOLESALE 102	S1	18	250	222	253	101.2
SGRD7	WHOLESALE 102	S1	18	250	241	267	106.8
SGRD8	WHOLESALE 102	S1	18	250	111	239	95.6
SGRD9	WHOLESALE 102	S1	14	250	169	271	108.4
SGRD10	WHOLESALE 102	S1	14	250	177	231	92.4
SGRD11	WHOLESALE 102	S1	14	250	203	244	97.6
SGRD12	WHOLESALE 102	S1	14	250	219	252	100.8
Total				3000	2298	2976	99.2%

Completed By: Zack Eismin on 11/11/2024



National TAB

Project: Sherwin Williams (Sacramento, CA)
System/Unit: FAN - Exhaust



Asset: EF-1

AREA:RR

Unit Data		
	Design	Actual
MFG	NA	S&P
Model Num	NA	PCD110XP
Serial Num	-	220739748
Type	CEILING	CEILING

Test Data		
	Design	Actual
CFM	100	97
RL Voltage	-	NA
RL Amperage	-	NA
Total ESP	0.25	0.27"

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	1	1
Voltage (rated)	115	120
Amperage (rated)	-	0.62
Service Factor	-	NL

Unit Data - PHOTO LOG



173134561572563904763..

Completed By: Zack Eismin on 11/11/2024

Abbreviation List

A = Area (ft ²)	S.F. = Service Factor
AHU = Air Handling Unit	SF = Supply Fan
A _k = Effective Area	SP = Static Pressure
BHP = Brake Horsepower (IP) HP	SR = Supply Register
Btu = British Thermal Unit	T = Temperature
Btu/h = Btuh = BTUH = BTU/Hour	T _{ma} = Mixed Air Temperature
CL = Center Distance (used in belt formula)	T _{oa} = Outside Air Temperature
CD = Ceiling Diffuser	T _{ra} = Return Air Temperature
CF = Correction Factor	H = Head (in wc, ft wc, psi)
CFM = Volumetric Flow: Cubic Feet Per Minute	h = Enthalpy
CO ₂ = Carbon Dioxide	HP = Horsepower
CO = Carbon Monoxide	hr = Hour
C _v = Flow Constant	K _v = Flow constant (SI)
d = Diameter (in.) IP	kW = Kilowatt = 1000 Watts
Δ = Difference or Change (Final - Initial)	LAT = Leaving Air Temperature
DB = Dry Bulb	lb = Pounds
EA = Exhaust Air	LWT = Leaving Water Temperature
EAT = Entering Air Temperature	ma = Mixed Air
EF = Exhaust Fan	MIN = Minimum
Eff = Efficiency	MAX = Maximum
EG = Exhaust Grille	N/A = Not Applicable
ESP = External Static Pressure	NA = No Access
EWT = Entering Water Temperature	NL = Not Listed
°F = Degrees Fahrenheit, °F	NPSHA = Net Positive Suction Head Available
FPB = Fan Powered Box	NS = Not Specified
FLA = Full Load Amps	OA = Outside Air
fpm = Feet per Minute (fpm)	OAT = Outside Air Temperature
ft = Foot	PD = Sheave Pitch Diameter
gal = Gallons	P.D. = Pressure Drop
GPM = Gallons Per Minute (GPM)	PF = Power Factor
h = Enthalpy (BTU/lb dry air)	SG = Supply Grille
P = Pressure	SR = Supply Register
ppm = parts per million	TP = Total Pressure
psi = Pounds Per Square Inch	T _{ra} = Return Air Temperature
psid = PSI Differential	TS = Tip Speed (fpm) IP, (m/s) SI
r = Radius (in)	TSP = Total Static Pressure
% _{ra} = % of Return Air	V = Velocity
RA = Return Air	VAV = Variable Air Volume
RAT = Return Air Temperature	VD = Volume Damper
RF = Return Fan	VFD = Variable Frequency Drive
RG = Return Grille	W = Watt
RH = Relative Humidity	WB = Wet Bulb
RPM = Revolutions Per Minute	wg = wc = water gauge = water column
RTU = Roof Top Unit	WHP = Water Horsepower (IP)
SA = Supply Air	ω = Humidity Ratio