

Report By:

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



Report: PRELIMINARY TAB REPORT

Function: Test, Adjust, & Balance

Date: 06/04/2024

PROJECT

Diamonds Direct (Oak Ridge North, TX)

N Freeway Service Rd & Woodson Rd

Oak Ridge North, TX 77381

Client

Bayside Mechanical Contractors

3514 Pinemont Dr

Houston, TX 77018

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Project: Diamonds Direct (Oak Ridge North, TX)

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Project: Diamonds Direct (Oak Ridge North, TX)

System/Unit: AHU/RTU



Asset: RTU-1

AREA: SALES

Unit Data		
	Design	Actual
MFG	NA	CAPTIVE-AIRE
Serial Num	-	6025121
Model Num	NA	CASRTU2-I.200-18-10T
Configuration	VERTICAL DISCHARGE	VERTICAL DISCHARGE
Num OA Filters 1	-	2
OA Filter Size 1	-	20x25x2
Num PreFilter 1	-	4
PreFilter Size 1	-	16x20x2

Motor Data		
	Design	Actual
Motor MFG	-	TECO
Frame	-	184T
Horsepower	-	5
Motor Rpm	-	1750
Phase	-	3
Rated Voltage	-	208
Rated Amperage	-	15.0
Service Factor	-	1.15

Test Data		
	Design	Actual
SF CFM	3000	2916
SF RPM	-	1954
RA CFM	2400	2343
OA CFM	600	573
RL Voltage	-	146 @ VFD
RL Amperage	-	11.3 @ VFD
OA Damper Position	-	4.5 VDC
Brake Horse Power	-	3.77

Performance Data		
	Design	Actual
MA Plenum SP	-	[1]
Fan Suction SP	-	[1]
Fan Discharge SP	-	0.57"
Total ESP	-	[1]
Fan Total SP	-	[1]

Completed By: Wesley John on 06/21/2024

Notes:

[1] UNABLE TO DRILL INTO UNIT TO TAKE MIXED AND AND FAN SUCTION STATIC PRESSURE READINGS. DISCHARGE PRESSURE TAKEN AT DUCT BELOW UNIT. FAN SPEED SET POINT 67.0 Hz.

Written By: Wesley John on 06/21/2024

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Project: Diamonds Direct (Oak Ridge North, TX)

AHU/RTU



Diffuser Supply (GRD)

RTU-1/SALES

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
1-1	MAIN SALES	C	4	150	82	161	107.3
1-2	MAIN SALES	C	4	140	75	127	90.7
1-3	MAIN SALES	C	4	150	67	138	92.0
1-4	MAIN SALES	C	4	140	46	129	92.1
1-5	MAIN SALES	C	4	200	105	184	92.0
1-6	MAIN SALES	C	4	200	130	214	107.0
1-7	ENTRY	C	4	100	72	98	98.0
1-8	RECEPTION	A	8"	145	150	138	95.2
1-9	ENTRY	C	4	100	37	96	96.0
1-10	MAIN SALES	C	4	200	112	210	105.0
1-11	MAIN SALES	C	4	200	109	206	103.0
1-12	MAIN SALES	C	4	140	117	130	92.9
1-13	MAIN SALES	C	4	115	110	111	96.5
1-14	MAIN SALES	C	4	140	72	132	94.3
1-15	MAIN SALES	C	4	200	122	197	98.5
1-16	DIAMOND 3	A	10"	230	211	219	95.2
1-17	DIAMOND 2	A	10"	225	238	217	96.4
1-18	DIAMOND 1	A	10"	225	194	209	92.9
Total				3000	2049	2916	97.2%

Diffuser Ret/Exh (GRD)

RTU-1/SALES

Asset								
Asset Name	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
R1-1	D		155	1.0	76	-	149	96.1
R1-2	D		155	1.0	104	-	143	92.3
R1-3	D		155	1.0	137	-	160	103.2
R1-4	D		75	1.0	81	-	72	96.0
R1-5	D		75	1.0	104	-	76	101.3
R1-6	D		100	1.0	56	-	107	107.0
R1-7	D		155	1.0	98	-	144	92.9
R1-8	D		155	1.0	176	-	166	107.1
R1-9	D		155	1.0	177	-	141	91.0
R1-10	B	8X8	200	1.0	284	-	210	105.0
R1-11	D		155	1.0	133	-	140	90.3
R1-12	D		155	1.0	160	-	169	109.0
R1-13	D		155	1.0	177	-	164	105.8
R1-14	D		155	1.0	138	-	147	94.8
R1-15	B	8X8	200	1.0	176	-	214	107.0
R1-16	B	8X8	200	1.0	203	-	207	103.5
Total			2400		2280	0	2409	100.37%

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Project: Diamonds Direct (Oak Ridge North, TX)

System/Unit: AHU/RTU



Asset: RTU-2

AREA:SIDE OFFICES

Unit Data		
	Design	Actual
MFG	NA	CAPTIVE-AIRE
Serial Num	-	6025121
Model Num	NA	CASRTU2-I.200-18-10T
Configuration	VERTICAL DISCHARGE	VERTICAL DISCHARGE
Num OA Filters 1	-	2
OA Filter Size 1	-	20x25x2
Num PreFilter 1	-	4
PreFilter Size 1	-	16x20x2

Motor Data		
	Design	Actual
Motor MFG	-	TECO
Frame	-	184T
Horsepower	-	5
Motor Rpm	-	1750
Phase	-	3
Rated Voltage	-	208
Rated Amperage	-	15.0
Service Factor	-	1.15

Test Data		
	Design	Actual
SF CFM	3000	3138
SF RPM	-	1867
RA CFM	2500	2607
OA CFM	500	531
RL Voltage	-	139 @VFD
RL Amperage	-	10.7 @VFD
OA Damper Position	-	4.5 VDC
Brake Horse Power	-	3.57

Performance Data		
	Design	Actual
MA Plenum SP	-	[1]
Fan Suction SP	-	[1]
Fan Discharge SP	-	0.59"
Total ESP	-	[1]
Fan Total SP	-	[1]

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Notes:

[1] UNABLE TO DRILL INTO UNIT TO TAKE MIXED AND AND FAN SUCTION STATIC PRESSURE READINGS. DISCHARGE PRESSURE TAKEN AT DUCT BELOW UNIT. FAN SPEED SET POINT 64.0 Hz.

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Project: Diamonds Direct (Oak Ridge North, TX)

AHU/RTU



Diffuser Supply (GRD)

RTU-2/SIDE OFFICES

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
2-1	EMPLOYEE LOUNGE	A	10"	250	268	263	105.2
2-2	HALL	A	8"	125	129	134	107.2
2-3	HALL	A	8"	125	128	132	105.6
2-4	VAULT	A	6"	100	104	93	93.0
2-5	MAIN SALES	C	4	100	74	101	101.0
2-6	MAIN SALES	C	4	100	67	98	98.0
2-7	CLERICAL	A	8"	175	177	183	104.6
2-8	CLERICAL	A	8"	175	183	189	108.0
2-9	CLERICAL	A	8"	175	191	187	106.9
2-10	CLERICAL	A	8"	175	179	190	108.6
2-11	HALL	A	8"	125	118	137	109.6
2-12	JEWELER WORK	A	8"	175	141	188	107.4
2-13	HALL	A	8"	125	131	134	107.2
2-14	JEWELER WORK	A	8"	175	153	180	102.9
2-15	GIFT WRAP	A	8"	100	59	104	104.0
2-16	REAR EXIT	A	8"	200	120	209	104.5
2-17	MAIN SALES	C	4	100	103	109	109.0
2-18	MAIN SALES	C	4	100	82	97	97.0
2-19	KIDS ROOM	A	8"	200	85	204	102.0
2-20	MENS RR	A	6"	50	30	54	108.0
2-21	WOMENS RR	A	6	50	37	49	98.0
2-22	RR VESTIBULE	A	6	100	55	103	103.0
Total				3000	2614	3138	104.6%

Diffuser Ret/Exh (GRD)

RTU-2/SIDE OFFICES

Asset								
Asset Name	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
R2-1	B	8X8	150	1.0	94	-	140	93.3
R2-2	B	6X6	50	1.0	73	-	52	104.0
R2-3	B	12X12	500	1.0	343	-	487	97.4
R2-4	B	22X22	1750	1.0	1907	-	1788	102.2
R2-5	B	8X8	150	1.0	107	-	141	94.0
Total			2600		2524	0	2608	100.31%

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Project: Diamonds Direct (Oak Ridge North, TX)

System/Unit: FAN - Exhaust



Asset: EF-4

AREA:EMPLOYEE LOUNGE

Unit Data		
	Design	Actual
MFG	NA	GREENHECK
Model Num	NA	SP-A110-QD
Serial Num	-	22733329
Type	CEILING	CEILING

Test Data		
	Design	Actual
CFM	70	50
RL Voltage	-	121
RL Amperage	-	0.10
Total ESP	0.20	0.14"

Motor Data		
	Design	Actual
Motor MFG	-	GREENHECK
Frame	-	NL
Horsepower	15W	NL
Motor Rpm	900	950
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	0.19
Service Factor	-	NL

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Notes:

FAN IS SINGLE SPEED AND OPERATING AT 71% OF DESIGN.

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