Report By:

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

Report: TAB Report

Function: Test, Adjust, & Balance

Date: 10/28/2025

Completed By: National TAB

PROJECT

Brass Tap Pub (Anaheim, CA)

8295 E. MONTE VISTA RD

ANAHEIM, CA

Client

KMS Resource Group Inc.

8502 E CHAPMAN AVE

SUITE 274

ORANGE, CA 92869

National TAB

Project: Brass Tap Pub (Anaheim, CA)

Table Of Contents

CERTIFICATION

PROJECT: Brass Tap Pub (Anaheim, CA)

The data presented in this report is a record of system measurements and final adjustments that have been obtained in accordance with the current edition of the NEBB *Procedural Standards for Testing, Adjusting, and Balancing of Environmental Systems.* Any variances from design quantities, which exceed NEBB tolerances, are noted in the Test-Adjust-Balance Report Project Summary.

The air distribution system has been tested and balanced and final adjustments have been made in accordance with NEBB standards and the project specifications.

NEBB TAB FIRM: National TAB-Southeast
REGISTRATION NO: 3755
CERTIFIED BY: J. Scott Springer 23312
DATE: 10/29/2025

The hydronic distribution system has been tested and balanced and final adjustments have been made in accordance with NEBB standards and the project specifications.

NEBB TAB FIRM: National TAB-Southeast
REGISTRATION NO: 3755
CERTIFIED BY: J. Scott Springer 23312
DATE:

Submitted and Certified by:

NEBB TAB FIRM: National TAB-Southeast
TAB PROFESSIONAL: J. Scott Springer
SIGNATURE:
REGISTRATION NO: 3755 (NTAB) / 23312
CERTIFICATION EXP: 12/31/2025

National TAB

Testing, Adjusting, and Balancing Equipment

Function		Range	Minimum Accuracy	Instrument Information	Calibration Date	Date Due
AIR	AIR PRESSURE	0 in wg to 10 in wg	2% +/- 0.001 in wg	Shortridge ADM-860C S/N M19547	9/30/2025	9/30/2026
	AIR VELOCITY INSTRUMENT	50 fpm to 3900 fpm	+/- 5 % +/- 7 fpm	Shortridge ADM-860C S/N M19547	9/30/2025	9/30/2026
	DIRECT HOOD READING	100 cfm to 2000 cfm	+/- 3 % +/- 7 cfm	Evergreen Telemetry Capture Hood	8/12/2025	8/12/2026
TEMPERATURE	AIR METER	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - SRH77A S/N 041018026	9/30/2025	9/30/2026
	AIR PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - 4011 S/N 33-20	9/30/2025	9/30/2026
	IMMERSION METER	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - SRH77A S/N 041018026	9/30/2025	9/30/2026
	IMMERSION PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - 4011 S/N 33-20	9/30/2025	9/30/2026
	CONTACT METER	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - SRH77A S/N 041018026	9/30/2025	9/30/2026
	CONTACT PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - 4011 S/N 33-20	9/30/2025	9/30/2026
HUMIDITY	HUMIDITY PROBE	10 % RH to 90 % RH	3% of reading	Cooper ATKINS - SRH77A S/N 041018026	9/30/2025	9/30/2026
ELECTRICAL	VOLTAGE MEASUREMENT	0 VAC to 600 VAC	2 % reading +/- 5 digits	Dwyer CM-1 - S/N 190800099	9/30/2025	9/30/2026
	AMPERAGE MEASUREMENT	0 Amperers to 100 Amperes	2 % reading +/- 5 digits	Dwyer CM-1 - S/N 190800099	9/30/2025	9/30/2026
ROTATION	ROTATION MEASUREMENT	60 rpm to 5000 rpm	2 % reading 2 rpm	Dwyer TAC-L - S/N S1100123	9/30/2025	9/30/2026
HYDRONIC	PRESSURE MEASUREMENT	-30 in Hg to 200 psi	±2% of reading +/- 1 psi	Shortridge HDM 250 - S/N W25059	6/18/2025	6/18/2026
	DIFFERENTIAL PRESSURE MEASUREMENT	0 psi - 80 psi	±2% of reading +/- 1 psi	Shortridge HDM 250 - S/N W25059	6/18/2025	6/18/2026
DALT	DUCT LEAKAGE	-10"- +10" wc	±1% of reading +/- 0.004" wc	Kanomax DALT 6900 S/N: 080439	3/7/2025	3/7/2026

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
CO2 = 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

Issue List

- GRD Inccorect
- RTU-2 LOW AIR FLOW

Brass Tap Pub (Anaheim, CA)

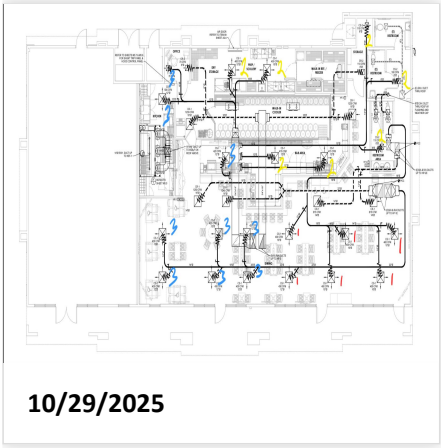
Project Issue Information

Issue Name : GRD Inccorect

Description : In the GRD layout the diffusers are not assigned to the correct RTU units. See below for correct units and diffusers.

Created By :	National TAB	**Assigned To :**	National TAB - Scott Springer
Status :	Open		
Priority :	InfoOnly	**Asset Tag :**	
Originated Date :	10/29/2025 - David Nicolas Sanchez - National TAB		

Project Issue File Details



10/29/2025

Brass Tap Pub (Anaheim, CA)

Project Issue Information

Issue Name : RTU-2 LOW AIR FLOW

Description : The RTU-2 is runnung at its highest settings the amps are at 6.7/7A and we are unable to speed the unit up any further. The fan sunction and return air pressures are high, there no dampers installed on return air therefore no restrictions. There are no leaks around the base of the unit or on the duct work.

Created By : National TAB

Assigned To : National TAB - Scott Springer

Status : Open

Priority : High

Asset Tag :

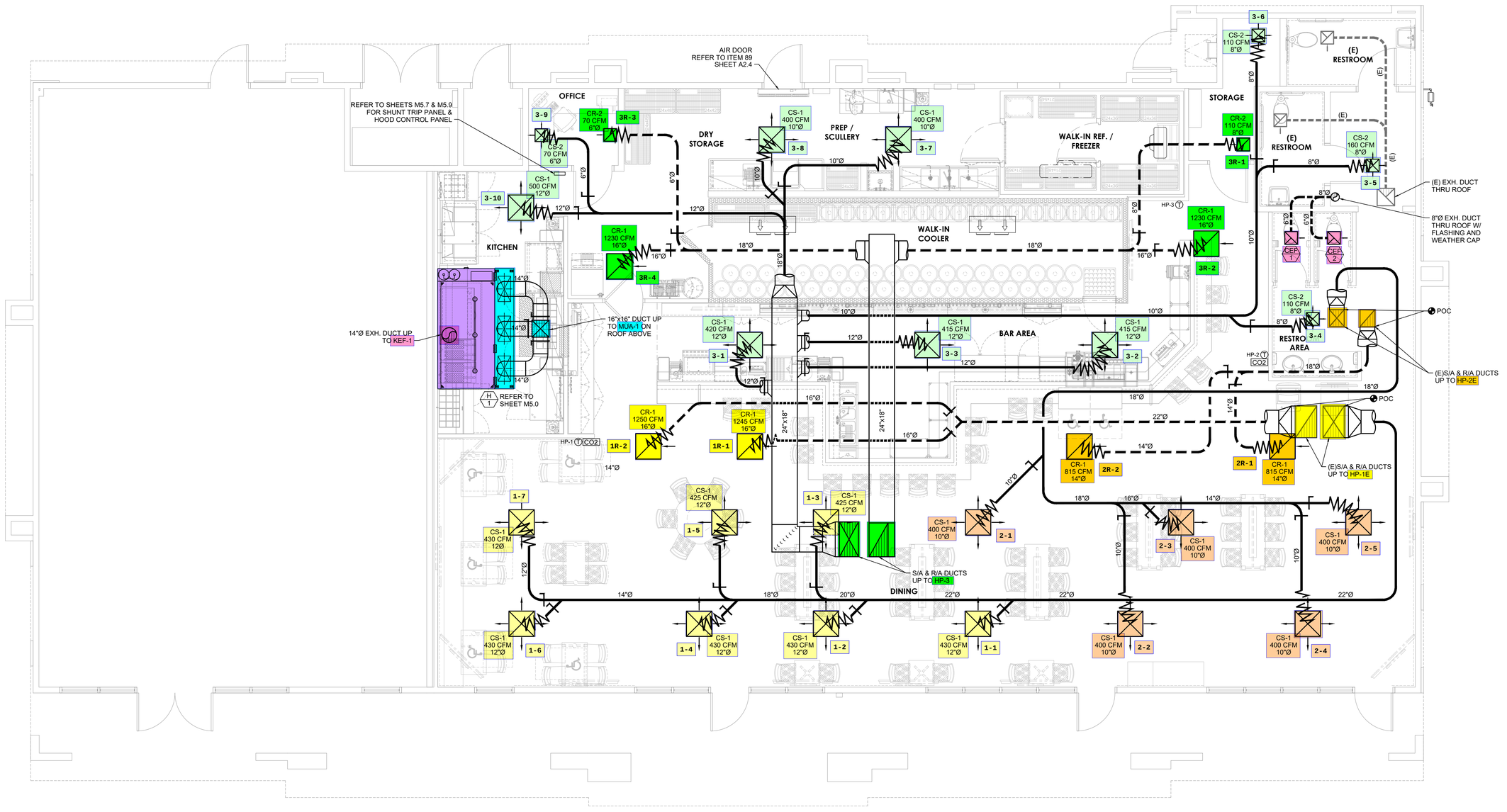
Originated Date : 10/28/2025 - David Nicolas Sanchez - National TAB

Project Issue File Details

10/29/2025

10/29/2025

10/29/2025



1 M2.0 MECHANICAL - FLOOR PLAN

SCALE: 1/4" = 1'-0"

NORTH

REVISIONS

- 1 CLARIFICATIONS - 09/27/24
- PLAN CHECK #1 - 11/18/24
- 2 CLIENT REVISIONS - 01/07/25
- 3 PLAN CHECK #2 - 03/06/25
- 4 PLAN CHECK #3 - 04/01/25
- 5 OWNER CHANGE - 07/17/25

PLANNING ARCHITECTURE

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CA

BRASS TAP
PUB
8295 E. MONTE VISTA ROAD
ANAHEIM

MECHANICAL - FLOOR PLAN

DATE :	MAY 2024
JOB NO. :	24036
DRAWN :	
CHECKED :	
SHEET :	M2.0

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Consulting Mechanical Engineers
1400 Lone Palm Ave, Suite A
Modesto, CA 95351
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www.nexusengineering.net
HVAC . Plumbing/Piping . Fire Sprinklers
Process/Plant Engineering . Refrigeration

National TAB

Project: Brass Tap Pub (Anaheim, CA)

System/Unit: AHU/RTU

Asset: (E)HP-1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	YORK
Serial Num	-	N1L6039716
Model Num	NA	XP090C00D2A1BAA1A1
Configuration	-	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	26.25x 25
Num Final Filter 1	-	4
Final Filter Size 1	-	20x24x2

Motor Data		
	Design	**Actual**
Motor MFG	-	MARATHON ELECTRIC
Frame	-	56HZ
Horsepower	-	3
Motor Rpm	-	1725
Phase	-	3
Rated Voltage	-	208
Rated Amperage	-	10.3
Service Factor	-	1.15

Test Data		
	Design	**Actual**
SF CFM	3000	2826
RA CFM	2495	2308
OA CFM	505	518
RL Voltage	-	210/211/211
RL Amperage	-	5.8/5.6/5.9
SF System SetPt	-	2 TURNS OPEN
OA Damper Position	-	15%

Performance Data		
	Design	**Actual**
Fan Suction SP	-	-0.84”
Fan Discharge SP	-	0.44”
Total ESP	0.80	0.99”
Fan Total SP	-	1.83”

Completed By: Ethan Van Orden on 10/28/2025

Unit Data - PHOTO LOG

10/28/2025

National TAB

Project:Brass Tap Pub (Anaheim, CA)

AHU/RTU

Diffuser Supply (GRD)

(E)HP-1/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	DINING	CS-1	12	430	433	414	96.3
SGRD2	DINING	CS-1	12	430	243	423	98.4
SGRD3	DINING	CS-1	12	425	264	550	129.4
SGRD4	DINING	CS-1	12	430	239	376	87.4
SGRD5	DINING	CS-1	12	425	188	512	120.5
SGRD6	DINING	CS-1	12	430	179	551	128.1
Total				2570	1546	2826	109.96%

Diffuser Ret/Exh (GRD)

(E)HP-1/

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	DINING	CR-1	16	1245	1	1297	1297	1297	104.2
EGRD2	DINING	CR-1	16	1250	1	1039	1039	1039	83.1
Total				2495		2336	2336	2336	93.63%

National TAB

Project: Brass Tap Pub (Anaheim, CA)

System/Unit: AHU/RTU

Asset: (E)HP-2 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	YORK
Serial Num	-	W1L6087850
Model Num	NA	PHE4B6031A
Configuration	-	VERTICAL
Num Final Filter 1	-	2
Final Filter Size 1	-	16x20x2

Test Data		
	Design	**Actual**
SF CFM	2000	1385
RA CFM	1630	1638
OA CFM	370	0
RL Voltage	-	212
RL Amperage	-	6.78
SF System SetPt	-	[5]

Motor Data		
	Design	**Actual**
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	1
Motor Rpm	-	NL
Phase	-	1
Rated Voltage	-	208
Rated Amperage	-	7
Service Factor	-	1.0

Performance Data		
	Design	**Actual**
Fan Suction SP	-	-1.10”
Fan Discharge SP	-	0.23"
Total ESP	0.80	0.89”
Fan Total SP	-	1.33”

Completed By: Ethan Van Orden on 10/28/2025

Unit Data - PHOTO LOG

10/28/2025

Diffuser Supply (GRD)

(E)HP-2/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	RESTROOM	CS-1	10	400	184	184	46.0
SGRD2	RESTROOM	CS-1	10	400	161	161	40.3
SGRD3	STORAGE	CS-1	10	400	115	115	28.8
SGRD4	BAR	CS-1	10	400	266	266	66.5
SGRD5	BAR	CS-1	10	400	264	264	66.0
SGRD6	BOH	CS-1	10		200	200	-
SGRD7	BOH	CS-1	10		195	195	-
Total				2000	1385	1385	69.25%

Diffuser Ret/Exh (GRD)

(E)HP-2/

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	DINING	CR-1	14	815	1	815	815	815	100.0
EGRD2	DINING	CR-1	14	815	1	823	823	823	101.0
Total				1630		1638	1638	1638	100.49%

National TAB

Project: Brass Tap Pub (Anaheim, CA)

System/Unit: AHU/RTU

Asset: HP3 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	RUUD
Serial Num	-	F182401170
Model Num	NA	RGEDZT090ACG15BAA
Configuration	-	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	20x21
Num Final Filter 1	-	4
Final Filter Size 1	-	20x20x2

Motor Data		
	Design	**Actual**
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	3
Phase	-	3
Rated Voltage	-	208
Rated Amperage	-	9.1
Service Factor	-	1.0

Test Data		
	Design	**Actual**
SF CFM	3000	2925
SF RPM (Initial)	-	718
SF RPM	-	718
RA CFM	2640	2554
OA CFM	360	371
RL Voltage	-	214/214/213
RL Amperage	-	4.8/4.5/4.2
VFD Max SetPt	-	53HZ
VFD Min SetPt	-	53HZ
SF Motor Freq(HZ)	-	53HZ
SF System SetPt	-	3 TURNS OPEN
OA Damper Position	-	3.00V

Performance Data		
	Design	**Actual**
Fan Suction SP	-	-0.78”
Fan Discharge SP	-	0.36”
Total ESP	0.80	0.96”
Fan Total SP	-	1.14”

Completed By: Ethan Van Orden on 10/28/2025

Unit Data - PHOTO LOG

10/28/2025

National TAB

Project:Brass Tap Pub (Anaheim, CA)

AHU/RTU

Diffuser Supply (GRD)

HP3/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	DINNING	CS-1	12	420	338	393	93.6
SGRD2	DINNING	CS-1	12	415	264	361	87.0
SGRD3	DINNING	CS-1	12	415	262	356	85.8
SGRD4	DINNING	CS-1	8	110	262	288	261.8
SGRD5	DINNING	CS-1	8	160	161	360	225.0
SGRD6	BAR	CS-1	8	110	80	292	265.5
SGRD7	BAR	CS-1	10	400	189	516	129.0
SGRD8	KITCHEN	CS-1	10	400	188	263	65.8
SGRD9	OFFICE	CS-1	6	70	76	96	137.1
Total				2500	1820	2925	117%

Diffuser Ret/Exh (GRD)

HP3/

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	STORAGE	CR-2	8		1	1044	831	831	-
EGRD2	BAR	CR-1	16		1	842	1068	1068	-
Total				0		1886	1899	1899	0%

National TAB

Project: Brass Tap Pub (Anaheim, CA)

System/Unit: FAN - Exhaust

Asset: EF1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	REVENT
Model Num	NA	RVS80110
Serial Num	-	NL

Test Data		
	Design	**Actual**
CFM	100	102

Motor Data		
	Design	**Actual**
Motor MFG	-	REVENT
Horsepower	-	NL
Motor Rpm	-	NL
Phase	-	1
Voltage (rated)	-	120
Amperage (rated)	-	.22

Completed By: David Nicolas Sanchez on 10/28/2025

Unit Data - PHOTO LOG

10/28/2025

National TAB

Project: Brass Tap Pub (Anaheim, CA)

System/Unit: FAN - Exhaust

Asset: EF2 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	REVENT
Model Num	NA	RVS80110
Serial Num	-	NL

Test Data		
	Design	**Actual**
CFM	100	108

Motor Data		
	Design	**Actual**
Motor MFG	-	REVENT
Horsepower	-	NL
Motor Rpm	-	NL
Phase	-	1
Voltage (rated)	-	120
Amperage (rated)	-	.22

Completed By: David Nicolas Sanchez on 10/28/2025

Unit Data - PHOTO LOG

10/28/2025

National TAB

Project: Brass Tap Pub (Anaheim, CA)

System/Unit: FAN - Exhaust

Asset: KEF1 AREA:

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU85HFA	DU85HFA
Serial Num	-	7296220
Type	CRE	CRE

Motor Data		
	Design	**Actual**
Motor MFG	-	NEMA 48
Frame	-	NL
Horsepower	-	0.75
Motor Rpm	-	1800
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	8.9
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	2125	2122
Fan RPM	1473	1380
System SetPt	-	56.2HZ
RL Voltage	208	124
RL Amperage	-	7.5
Suction ESP	-	-0.85”
Total ESP	0.971	0.85”

Completed By: David Nicolas Sanchez on 10/28/2025

Unit Data - PHOTO LOG

10/28/2025

National TAB

Project: Brass Tap Pub (Anaheim, CA)

System/Unit: FAN - Supply

Asset: MUA1 AREA:

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	A1-D.250-18Z	A1-15D
Serial Num	-	7296220
Configuration	-	VERTIVAL
Num Filters Size 1	-	3
Filter Size 1	-	20X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	NEMA 48
Frame	-	NL
Horsepower	-	1
Motor Rpm	-	NL
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	11.6
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	1912	1968
SF RPM	-	70%
SF System SetPt	-	70%
RL Voltage	-	NA
RL Amperage	-	NA
Suction ESP	-	NA
Discharge ESP	-	NA
Total ESP	-	NA

Completed By: David Nicolas Sanchez on 10/28/2025

Unit Data - PHOTO LOG

10/28/2025

National TAB

Project: Brass Tap Pub (Anaheim, CA)

System/Unit: Kitchen Hood Type I

Asset: HD1 AREA:

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	5424-ND-2-PSP-F	5424-ND-2
Job / Serial Num	-	7296220
Type	TYPE I	TYPE I
Hood length	102	102
Hood Width	54	54
Supply Plenum Type	-	PSP
Supply Plenum Width	18	18
Supply Plenum Length	114	114

Test Data Exhaust		
	Design	**Actual**
Filter Type	CAPTRATE SOLO	CAPTRATE
Filter Size 1	20X16	20X16
Filter Qty 1	6	6
Filter AK factor size 1	-	2.08
Filter Total AK Area	-	12.48
Filter1 FPM	-	174
Filter2 FPM	-	169
Filter3 FPM	-	188
Filter4 FPM	-	170
Filter5 FPM	-	159
Filter6 FPM	-	164
Filter Ave FPM(corr)	-	170
CFM	2125	2122

Cooking Equipment	
	Actual
Item 1	GRIDDLE
Item 2	FRYER

Test Data Supply		
	Design	**Actual**
Total Area	-	14.25
Kv factor (Vel)	-	0.88
Num of Readings	-	8
Reading1 FPM	-	164
Reading2 FPM	-	162
Reading3 FPM	-	137
Reading4 FPM	-	164
Reading5 FPM	-	166
Reading6 FPM	-	154
Reading7 FPM	-	146
Reading8 FPM	-	167
Ave FPM(corr)	-	157
CFM	1912	1968

Completed By: David Nicolas Sanchez on 10/27/2025

Unit Data - PHOTO LOG

10/28/2025