

Report By:  
United Test & Balance, Inc.  
7013 Flagler Rd,  
Nordland, WA 98358



INTELLIGENCE

For:  
National TAB  
1126 Swift Street  
North Kansas City, MO 64116

Report: TAB REPORT  
Function: Test, Adjust, & Balance  
Date: 04/03/2024

# PROJECT

**03-11-24 SHAKE SHACK #1453 -  
SCOTTSDALE, AZ (THE EDGE  
SCOTTSDALE) TAB. IAQ**

355 Army trail Road

Bloomington , IL 60108

Client

Torcom

## Project Summary

The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report is further detail about your building performance including recommendations, asset data, and pictures. Our focus is to work with the trades to remedy any issues or deficiencies during the actual field balancing and not after the balancing has occurred to achieve a positive environment and outcome. The level of success is determined by the availability of the trades, possible parts needed, or time constraints.

### RTU's (Roof Top Units) w/ Diffusers

Each of the RTU's were measured at their terminal devices or via traverse to establish a total flow for that unit. Each RTU was adjusted to within tolerance of the engineer's design flow. Each outlet was then adjusted to within tolerance of the design flow. Outside air was measured by reading the intake air opening with a velocity grid and multiplying by the free area. The outside air damper was adjusted until the airflow was within the design requirements. Any equipment that fell outside of that tolerance is noted throughout the report.

### Kitchen Exhaust Hood & Associated Fans

Each kitchen exhaust fan was measured at the hood filter bay utilizing a velocity matrix and a manufacturer's correction factor. Each filter velocity is multiplied by the manufacturer's corrected area. The sum of these readings equals the total flow of the exhaust fans. The total flow of the exhaust was then adjusted to within tolerance of the design flow. . Any EF's that fell outside of this tolerance is noted throughout the report.

### General Exhaust Fans w/ Grilles

The general exhaust fans were measured by reading each air device with a flow hood. The total airflow for each fan is equivalent to the sum of these readings. Fan speed was then adjusted so that the airflow was within tolerance of design. Each terminal device was balanced to within tolerance of the design volume using the installed volume dampers. Any equipment that fell outside of this tolerance is noted throughout the report.

### Final Building Tests

After completing the test and balance the final building pressure was measured. It was confirmed that the building pressure fell within acceptable tolerances of  $-0.02''$  wc to  $+0.02''$  wc and that the pressure measurement coincides with the actual and design net airflow. Any deviations from these standards are noted throughout the report.

The hood capture was tested at the perimeter of the hood and the cook top level with the equipment heat on to ensure satisfactory hood capture and containment.

---

**SYSTEM/UNIT: Project Checklist**

Tested By: Hank Wulk

Date: 3/27/2024

**Inspection Data - Project Checklist**

Verification	Response	Notes	By	Date/Time
1	All diffusers and grilles are installed and match design?		CN	3/13/24 13:16
2	Deflector plates are removed from 1x1 diffusers on the serve line (double check that this is specified on the diffuser schedule first)	NA	CN	3/13/24 13:16
3	All hood filters installed and accounted for?	Yes	CN	3/13/24 13:16
4	Hoods are wired and have power?	Yes	CN	3/13/24 13:16
5	Hood is free of alarms?	Yes	CN	3/13/24 13:16
6	Thermostats have power?	Yes	CN	3/13/24 13:16
7	Have trades/general contractor been notified about any issues and are they created on FaciliBuild?	Yes	CN	3/13/24 13:16

**General - Project Checklist**

Verification	Response	Notes	By	Date/Time
1	Is space free of drafting?	Yes	HW	3/27/24 12:18
2	Is space comfortable in all areas?	Yes	HW	3/27/24 12:18
3	Is the space free of ventilation noise?	Yes	HW	3/27/24 12:18
4	If deviations from design were necessary to resolve 103 what were they? Otherwise put "NA"	NA	HW	3/27/24 12:18

---

**SYSTEM/UNIT: RTU-01**

Tested By: Hank Wulk  
Date: 3/27/2024



Design Airflow (CFM)	
Design Total	3000
Design Grille Total	3000
Design Return	2000
Design Min O/A	1000

Unit Design Data	
Submittal Make	Not Provided
Submittal Model #	-
Submittal Airflow	3000
Sched./Sub. Volts	Not Listed
Sched./Sub. Phase	-
Sched./Sub. HP	-
Submittal BHP	Not Provided
Filter MERV Rating (Sched/Sub)	Not Listed

Design Static Pressures (in wg)	
Design Ext SP	-
Submittal Total SP	Not Provided
Submittal Clg Coil Δ SP	-

Filter Data	
Condition	Clean
Filter Type	Pleated
MERV Rating	8
Filter Size Set 1 (in)	16/20/2
# Filters Set 1	4
Filter Size Set 2 (in)	16/20/2
# Filters Set 2	4

Motor Nameplate Data	
Motor Make	TECO
Motor Frame	182T
Motor HP	3.00
Motor RPM	1755
Motor Volts	230/460
Motor Phase	3

Final Airflow (CFM)	
Actual Total CFM	2527
Actual Grille Total CFM	2527
Actual Return Air CFM	1465
Actual Min O/A CFM	1062
Fan CFM Test Method	Capture Hood
OA Method/Instrument	Face Velocity/RVA
OA Ak (sq ft)	4.610
OA Damper % (High Spd)	50% Open
OA Damper % (Low Spd)	-
RA Damper % (High Spd)	50% Open

Unit Data	
Make (tag)	CaptiveAire
Model # (tag)	CASRTU2-I.150-18-10T
Serial # (tag)	5842574
Location	Roof
Unit Discharge	Downblast
Cooling Coil Location	Unit / Drawthru
Coil Area (sq ft)	-
Clg Coil Vel (FPM)	-
Fan Service	Supply
Fan Type	Centrifugal (FC)
Fan Discharge	Downblast
Fan Arrangement	SWSI

Fan Design Data	
Submittal Motor RPM	Not Provided
Submittal Fan RPM	-

Fan Data	
Actual Fan RPM/Speed	High
Actual Motor RPM	Not Accessible

Electrical Data	
Measurement Method	V/A Meter
Motor Volts 1	211

**SYSTEM/UNIT: RTU-01**

Tested By: Hank Wulk  
Date: 3/27/2024

Motor Nameplate Data	
Motor Amps	8.6/4.3
Motor S.F.	1.15
Motor % PF	.
Motor % Eff.	89.5
Other Motor Data	-

Drive Data	
Drive Type	Direct Drive
Sheave Type	-
Fan Sheave Make	-
Fan Shv Mod# or Size (in)	-
Fan Sheave Bore (in)	.
Motor Sheave Make	-
Mtr Shv Mod# or Size (in)	-
Motor Sheave Bore (in)	-
VP Range	-
Center Distance (in)	-
No of Belts	-
Belt Make	-
Belt Size	-
Other Data	-

Electrical Data	
Motor Volts 2	212
Motor Volts 3	213
Motor Amps 1	8.9
Motor Amps 2	9.2
Motor Amps 3	9.6
Operating HZ	60.00
Approx. BHP	5633.7
Corr. Nameplate Amps	0.0
Starter Data	-
VFD Reference	Not Applicable

# Filters Set 1 Photo:



Name: # Filters Set 1.jpg  
Captured: 3/14/2024 8:52 AM  
Caption:

SYSTEM/UNIT: RTU-01

Tested By: Hank Wulk  
Date: 3/27/2024

Motor Make Photo:



Name: Motor Make.jpg  
Captured: 3/14/2024 8:42 AM  
Caption:

Make (tag) Photo:



Name: Make (tag).jpg  
Captured: 3/14/2024 8:38 AM  
Caption:

**SYSTEM/UNIT: RTU-01**

Tested By: Hank Wulk  
Date: 3/27/2024

Motor Amps 2 Photo:



Name: Motor Amps 2.jpg  
Captured: 3/27/2024 3:41 PM  
Caption:

Motor Amps 3 Photo:



Name: Motor Amps 3.jpg  
Captured: 3/27/2024 3:41 PM  
Caption:

SYSTEM/UNIT: RTU-01

Tested By: Hank Wulk  
Date: 3/27/2024

Motor Volts 3 Photo:



Name: Motor Volts 3.jpg  
Captured: 3/27/2024 3:40 PM  
Caption:

Motor Volts 2 Photo:



Name: Motor Volts 2.jpg  
Captured: 3/27/2024 3:40 PM  
Caption:

SYSTEM/UNIT: RTU-01

Tested By: Hank Wulk  
Date: 3/27/2024

Motor Amps 1 Photo:



Name: Motor Amps 1.jpg  
Captured: 3/27/2024 3:40 PM  
Caption:

Motor Volts 1 Photo:



Name: Motor Volts 1.jpg  
Captured: 3/27/2024 3:40 PM  
Caption:

SYSTEM/UNIT: RTU-01

Tested By: Hank Wulk  
Date: 3/27/2024

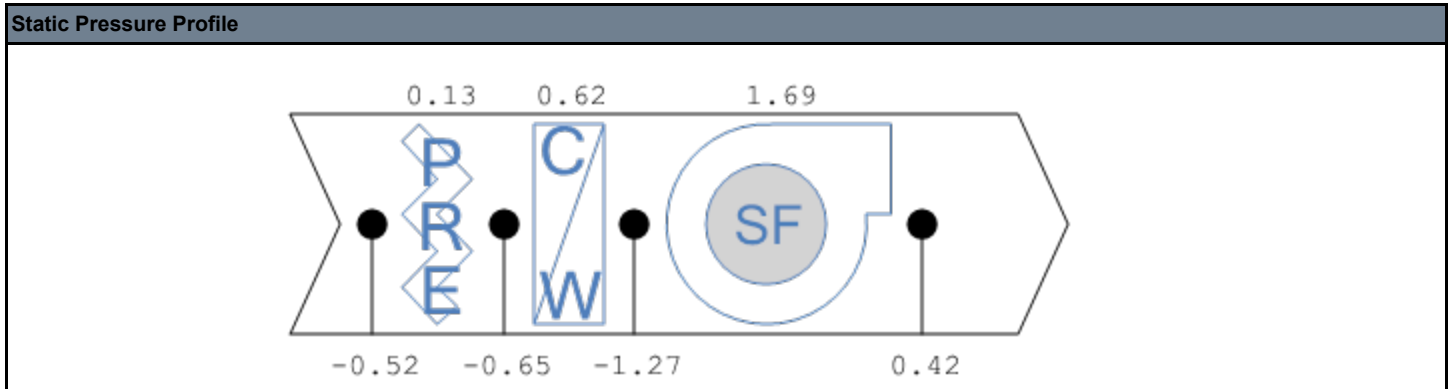
**Inspection Data - RTU-01**

Verification	Response	Notes	By	Date/Time
1	IS ECONOMIZER BLANK PLATE INSTALLED BELOW THE OUTDOOR AIR FILTERS? (IF NO, REMOVE THE PIECE FROM UNDERNEATH THE COIL FILTER BANK AND INSTALL) Trane only (N/A = not applicable)	NA		CN 3/13/24 13:17
2	Economizers are assembled and functional?	NA		HW 3/27/24 15:32
3	DCV Max damper opening position is set to minimum?	NA		CN 3/13/24 13:17
4	Free cooling enthalpy set point set for lowest setting (Typically "D")	NA		CN 3/13/24 13:17
5	Is the motor operating below the motor FLA rating?	Yes		HW 3/27/24 15:32
6	Belts are Tight?	NA		CN 3/13/24 13:17
7	If direct drive unit is the speed controller working.	NA		HW 3/27/24 15:33
8	Gas piping is installed and valves are in on position?	Yes		HW 3/27/24 15:33
9	Unit free of noticeable noise and vibration?	Yes		HW 3/27/24 15:33

Log:

SYSTEM/UNIT: RTU-01/Static Profile

Tested By: Hank Wulk  
Date: 3/27/2024



### RTU-01 Supply Outlet Summary

System/Unit	Area Served	Type	Size / Area (in)	Design CFM	Prelim CFM	Final CFM	% Final	Instrument	Ak	Open (sq ft)	Final FPM
S-01	101 Dining	SW	36/10	675	562	559	83	RVA	1.880	-	297
S-02	101 Dining	SW	12/8	300	272	258	86	RVA	0.470	-	549
S-03	101 Dining	SW	36/10	675	532	557	83	RVA	1.880	-	296
S-04	101 Dining	SW	36/10	675	540	574	85	RVA	1.880	-	305
S-05	101 Dining	SW	36/10	675	611	579	86	RVA	1.880	-	308
<b>Totals:</b>		-	-	<b>3000</b>	<b>2517</b>	<b>2527</b>	<b>84</b>	-	-	-	-

SYSTEM/UNIT: RTU-02

Tested By: Hank Wulk  
Date: 3/27/2024



Design Airflow (CFM)	
Design Total	5000
Design Grille Total	4970
Design Return	1500
Design Min O/A	3500

Unit Design Data	
Submittal Make	Not Provided
Submittal Model #	-
Submittal Airflow	5000
Sched./Sub. Volts	Not Listed
Sched./Sub. Phase	-
Sched./Sub. HP	-
Submittal BHP	Not Provided
Filter MERV Rating (Sched/Sub)	Not Listed

Design Static Pressures (in wg)	
Design Ext SP	-
Submittal Total SP	Not Provided
Submittal Clg Coil Δ SP	-

Filter Data	
Condition	Clean
Filter Type	Pleated
MERV Rating	8
Filter Size Set 1 (in)	20/25/2
# Filters Set 1	4
Filter Size Set 2 (in)	20/25/2
# Filters Set 2	4

Motor Nameplate Data	
Motor Make	TECO
Motor Frame	213T
Motor HP	7.50
Motor RPM	1755
Motor Volts	230/460
Motor Phase	3

Final Airflow (CFM)	
Actual Total CFM	4258
Actual Grille Total CFM	4253
Actual Return Air CFM	701
Actual Min O/A CFM	3557
Fan CFM Test Method	Capture Hood
OA Method/Instrument	Face Velocity/RVA
OA Ak (sq ft)	7.520
OA Damper % (High Spd)	95% Open
OA Damper % (Low Spd)	-
RA Damper % (High Spd)	5% Open

Unit Data	
Make (tag)	CaptiveAire
Model # (tag)	CASRTU3-1.300-24-20T
Serial # (tag)	5842574
Location	Roof
Unit Discharge	Downblast
Cooling Coil Location	Unit / Drawthru
Coil Area (sq ft)	-
Clg Coil Vel (FPM)	-
Fan Service	Supply
Fan Type	Centrifugal (FC)
Fan Discharge	Downblast
Fan Arrangement	SWSI

Fan Design Data	
Submittal Motor RPM	Not Provided
Submittal Fan RPM	-

Fan Data	
Actual Fan RPM/Speed	High
Actual Motor RPM	Not Accessible

Electrical Data	
Measurement Method	V/A Meter
Motor Volts 1	211

**SYSTEM/UNIT: RTU-02**

Tested By: Hank Wulk  
Date: 3/27/2024

Motor Nameplate Data	
Motor Amps	19.1/9.55
Motor S.F.	1.15
Motor % PF	-
Motor % Eff.	91
Other Motor Data	-

Drive Data	
Drive Type	Direct Drive
Sheave Type	-
Fan Sheave Make	-
Fan Shv Mod# or Size (in)	-
Fan Sheave Bore (in)	-
Motor Sheave Make	-
Mtr Shv Mod# or Size (in)	-
Motor Sheave Bore (in)	-
VP Range	-
Center Distance (in)	-
No of Belts	-
Belt Make	-
Belt Size	-
Other Data	-

Electrical Data	
Motor Volts 2	213
Motor Volts 3	213
Motor Amps 1	17.4
Motor Amps 2	18.6
Motor Amps 3	18.7
Operating HZ	60.00
Approx. BHP	27535.5
Corr. Nameplate Amps	0.0
Starter Data	-
VFD Reference	Not Applicable

Filter Size Set 1 (in) Photo:



Name: Filter Size Set 1 (in).jpg  
Captured: 3/14/2024 8:53 AM  
Caption:

SYSTEM/UNIT: RTU-02

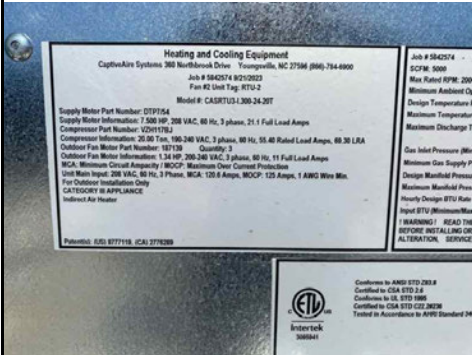
Tested By: Hank Wulk  
Date: 3/27/2024

Motor Make Photo:



Name: Motor Make.jpg  
Captured: 3/14/2024 8:50 AM  
Caption:

Make (tag) Photo:



Name: Make (tag).jpg  
Captured: 3/14/2024 8:46 AM  
Caption:

SYSTEM/UNIT: RTU-02

Tested By: Hank Wulk  
Date: 3/27/2024

Motor Amps 2 Photo:



Name: Motor Amps 2.jpg  
Captured: 3/27/2024 3:42 PM  
Caption:

Motor Amps 3 Photo:



Name: Motor Amps 3.jpg  
Captured: 3/27/2024 3:42 PM  
Caption:

**SYSTEM/UNIT: RTU-02**

Tested By: Hank Wulk  
Date: 3/27/2024

Motor Volts 3 Photo:



Name: Motor Volts 3.jpg  
Captured: 3/27/2024 3:41 PM  
Caption:

Motor Volts 2 Photo:



Name: Motor Volts 2.jpg  
Captured: 3/27/2024 3:41 PM  
Caption:

SYSTEM/UNIT: RTU-02

Tested By: Hank Wulk  
Date: 3/27/2024

Motor Amps 1 Photo:



Name: Motor Amps 1.jpg  
Captured: 3/27/2024 3:42 PM  
Caption:

Motor Volts 1 Photo:



Name: Motor Volts 1.jpg  
Captured: 3/27/2024 3:41 PM  
Caption:

SYSTEM/UNIT: RTU-02

Tested By: Hank Wulk  
Date: 3/27/2024

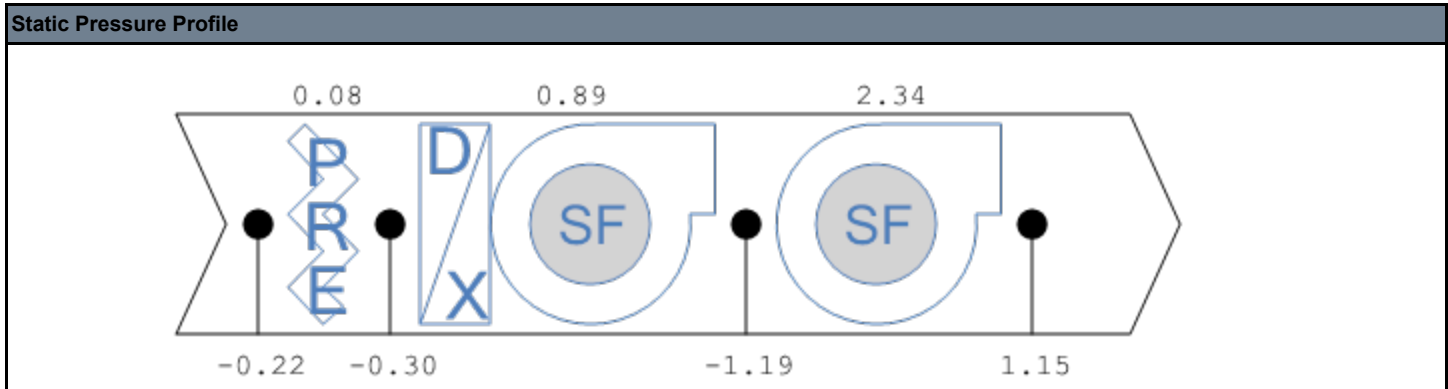
**Inspection Data - RTU-02**

Verification	Response	Notes	By	Date/Time
1	IS ECONOMIZER BLANK PLATE INSTALLED BELOW THE OUTDOOR AIR FILTERS? (IF NO, REMOVE THE PIECE FROM UNDERNEATH THE COIL FILTER BANK AND INSTALL) Trane only (N/A = not applicable)	Yes		
2	Economizers are assembled and functional?	Yes	HW	3/27/24 15:34
3	DCV Max damper opening position is set to minimum?	NA	HW	3/27/24 15:34
4	Free cooling enthalpy set point set for lowest setting (Typically "D")	NA	HW	3/27/24 15:34
5	Is the motor operating below the motor FLA rating?	Yes	HW	3/27/24 15:34
6	Belts are Tight?	NA	HW	3/27/24 15:34
7	If direct drive unit is the speed controller working.	NA	HW	3/27/24 15:34
8	Gas piping is installed and valves are in on position?	Yes	HW	3/27/24 15:34
9	Unit free of noticeable noise and vibration?	Yes	HW	3/27/24 15:34

Log:

SYSTEM/UNIT: RTU-02/Static Profile

Tested By: Hank Wulk  
Date: 3/27/2024



### RTU-02 Supply Outlet Summary

System/Unit	Area Served	Type	Size / Area (in)	Design CFM	Prelim CFM	Final CFM	% Final	Instrument	Ak	Open (sq ft)	Final FPM
S-01	Entry	CD	15	885	1480	751	85	Capture Hood	1.000	1.000	751
S-02	103 Back Kit	CD	15	885	534	754	85	Capture Hood	1.000	1.000	754
S-03	102 Open Kit	CD	16	600	512	504	84	Capture Hood	1.000	1.000	504
S-04	102 Open Kit	CD	16	600	530	505	84	Capture Hood	1.000	1.000	505
S-05	102 Open Kit	CD	16	600	495	508	85	Capture Hood	1.000	1.000	508
S-06	102 Open Kit	CD	16	600	298	514	86	Capture Hood	1.000	1.000	514
S-07	102 Open Kit	CD	15	600	188	513	86	Capture Hood	1.000	1.000	513
S-08	107 W RR	CD	6	100	183	102	102	Capture Hood	1.000	1.000	102
S-09	106 M RR	CD	6	100	130	102	102	Capture Hood	1.000	1.000	102
<b>Totals:</b>		-	-	<b>4970</b>	<b>4350</b>	<b>4253</b>	<b>86</b>	-	-	-	-

SYSTEM/UNIT: EF-01

Tested By: Hank Wulk  
Date: 3/27/2024



Design Airflow (CFM)	
Design Airflow	1970
Design Grille Airflow	Not Applicable

Unit Design Data	
Submittal Make	Not Provided
Submittal Model #	-
Submittal Airflow	-
Sched./Sub. Volts	Not Listed
Sched./Sub. Phase	-
Sched./Sub. HP	-
Submittal BHP	Not Provided

Design Static Pressures (in wg)	
Design External SP	Not Listed
Submittal Total SP	-

Motor Nameplate Data	
Motor Make (tag)	TELCO GREEN
Motor Frame (tag)	-
Motor HP (tag)	3/4
Motor RPM (tag)	1800
Motor Volts (tag)	310 VDC
Motor Phase (tag)	-
Motor Amps (tag)	-
Motor S.F. (tag)	-
Mtr % PF (tag)	-
Mtr % Eff. (tag)	-
Other Motor Data	-

Drive Data	
Drive Type	Direct Drive
Sheave Type	-
Fan Sheave Make	-
Fan Shv Mod# or Size (in)	-
Fan Sheave Bore (in.)	-
Motor Sheave Make	-

Final Airflow (CFM)	
Actual Airflow	1768
Actual Grille Airflow	Not Applicable
Fan CFM Test Method	Face Velocity - Velgid/ADM
Test Method Ak (sq ft)	-

Unit Data	
Make (tag)	CaptiveAire
Model # (tag)	DU85HFA
Serial # (tag)	5783357
Unit Location	Roof
Unit Discharge	Upblast
Fan Service	Exhaust
Fan Type	Centrifugal (AF)
Fan Discharge	Upblast
Fan Arrangement	SWSI

Fan Design Data	
Submittal Motor RPM	Not Provided
Submittal Fan RPM	-

Fan Data	
Actual Fan RPM/Speed	High
Actual Motor RPM	Not Accessible
Speed Cont. Position	100%

Electrical Data	
Measurement Method	Not Accessible
Motor Volts 1	-
Motor Volts 2	-
Motor Volts 3	-
Motor Amps 1	Not Accessible
Motor Amps 2	-
Motor Amps 3	-
Operating HZ	60.0
Starter Data	Not Applicable
Approx. BHP	-

SYSTEM/UNIT: EF-01

Tested By: Hank Wulk  
Date: 3/27/2024

Drive Data	
Mtr Shv Mod# or Size (in)	-
Motor Sheave Bore (in.)	-
VP Range	-
Center Distance (in.)	-
No of Belts	-
Belt Make	-
Belt Size	-
Other Data	-

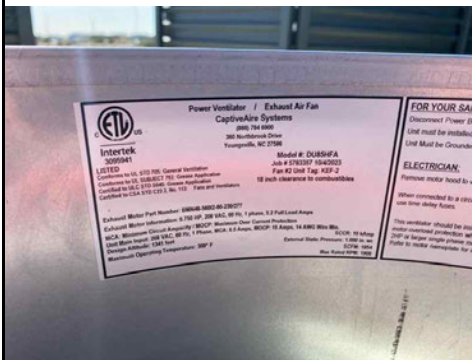
Electrical Data
Corr. Nameplate Amps

Motor Make (tag) Photo:



Name: Motor Make (tag).jpg  
Captured: 3/14/2024 8:57 AM  
Caption:

Make (tag) Photo:



Name: Make (tag).jpg  
Captured: 3/14/2024 8:55 AM  
Caption:

SYSTEM/UNIT: EF-01

Tested By: Hank Wulk  
Date: 3/27/2024

**Inspection Data - EF-01**

Verification	Response	Notes	By	Date/Time
1	Fan Rotation is Correct?	Yes	HW	3/27/24 13:06
2	Belts are Tight?	NA	CN	3/13/24 13:18
3	Internal motorized damper is fully opening?	NA	CN	3/13/24 13:18
4	Motor is operating below the FLA rating?	NA	HW	3/27/24 13:06
5	Unit free of noticeable noise and vibration?	Yes	HW	3/27/24 13:06
6	There is no major leakage around base of fan?	Yes	HW	3/27/24 13:06
7	Is the motor operating below the motor FLA rating?	NA	HW	3/27/24 13:06

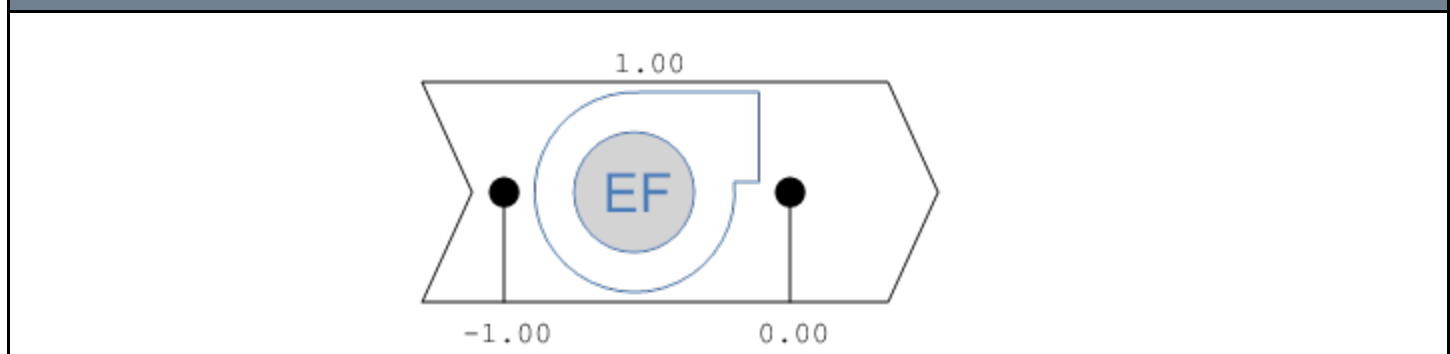
**HVAC Units / Fans - EF-01**

Verification	Response	Notes	By	Date/Time
1	Grease cup is installed on hood fan?	Yes	CN	3/13/24 13:19
2	Hinge kit installed on hood fan.	Yes	HW	3/27/24 13:06
3	Lean fan back. Is grease duct installation adequate and is duct ran all the way to the base of the fan?	Yes	HW	3/27/24 13:07
4	Flex conduit is long enough so that fan can be completely tilted back?	Yes	HW	3/27/24 13:07

SYSTEM/UNIT: EF-01/Static Profile

Tested By: Hank Wulk  
Date: 3/27/2024

**Static Pressure Profile**





SYSTEM/UNIT: EF-02

Tested By: Hank Wulk  
Date: 3/27/2024



Design Airflow (CFM)		Final Airflow (CFM)	
Design Airflow	1955	Actual Airflow	1778
Design Grille Airflow	Not Applicable	Actual Grille Airflow	Not Applicable
<b>Unit Design Data</b>		Fan CFM Test Method Face Velocity - Velgid/ADM	
Submittal Make	Not Provided	Test Method Ak (sq ft)	2.080
Submittal Model #	-	<b>Unit Data</b>	
Submittal Airflow	-	Make (tag)	CAPTIVEAIRE
Sched./Sub. Volts	Not Listed	Model # (tag)	DU85HFA
Sched./Sub. Phase	-	Serial # (tag)	5783357
Sched./Sub. HP	-	Unit Location	Roof
Submittal BHP	Not Provided	Unit Discharge	Upblast
<b>Design Static Pressures (in wg)</b>		Fan Service	Exhaust
Design External SP	Not Listed	Fan Type	Centrifugal (AF)
Submittal Total SP	-	Fan Discharge	Upblast
<b>Motor Nameplate Data</b>		Fan Arrangement	SWSI
Motor Make (tag)	TELCO GREEN	<b>Fan Design Data</b>	
Motor Frame (tag)	-	Submittal Motor RPM	Not Provided
Motor HP (tag)	3/4	Submittal Fan RPM	-
Motor RPM (tag)	1800	<b>Fan Data</b>	
Motor Volts (tag)	310 VDC	Actual Fan RPM/Speed	High
Motor Phase (tag)	-	Actual Motor RPM	Not Accessible
Motor Amps (tag)	-	Speed Cont. Position	100%
Motor S.F. (tag)	-	<b>Electrical Data</b>	
Mtr % PF (tag)	-	Measurement Method	Not Accessible
Mtr % Eff. (tag)	-	Motor Volts 1	-
Other Motor Data	-	Motor Volts 2	-
<b>Drive Data</b>		Motor Volts 3	-
Drive Type	Direct Drive	Motor Amps 1	Not Accessible
Sheave Type	-	Motor Amps 2	-
Fan Sheave Make	-	Motor Amps 3	-
Fan Shv Mod# or Size (in)	-	Operating HZ	60.0
Fan Sheave Bore (in.)	-	Starter Data	Not Applicable
Motor Sheave Make	-	Approx. BHP	-

**SYSTEM/UNIT: EF-02**

Tested By: Hank Wulk  
Date: 3/27/2024

Drive Data	
Mtr Shv Mod# or Size (in)	-
Motor Sheave Bore (in.)	-
VP Range	-
Center Distance (in.)	-
No of Belts	-
Belt Make	-
Belt Size	-
Other Data	-

Electrical Data
Corr. Nameplate Amps

Motor Make (tag) Photo:



Name: Motor Make (tag).jpg  
Captured: 3/14/2024 9:02 AM  
Caption:

Model # (tag) Photo:



Name: Make (tag).jpg  
Captured: 3/14/2024 9:00 AM  
Caption:

SYSTEM/UNIT: EF-02

Tested By: Hank Wulk  
Date: 3/27/2024

Make (tag) Photo:



Name: Make (tag).jpg  
Captured: 3/14/2024 9:00 AM  
Caption:

**Inspection Data - EF-02**

Verification	Response	Notes	By	Date/Time
1	Fan Rotation is Correct?	Yes	HW	3/27/24 13:08
2	Belts are Tight?	NA	HW	3/27/24 13:08
3	Internal motorized damper is fully opening?	NA	HW	3/27/24 13:08
4	Motor is operating below the FLA rating?	NA	HW	3/27/24 13:08
5	Unit free of noticeable noise and vibration?	Yes	HW	3/27/24 13:08
6	There is no major leakage around base of fan?	Yes	HW	3/27/24 13:08
7	Is the motor operating below the motor FLA rating?	NA	HW	3/27/24 13:08
8	Back draft damper installed and can it fully open?	NA	HW	3/27/24 13:09



SYSTEM/UNIT: EF-03

Tested By: Hank Wulk  
Date: 3/27/2024

Design Airflow (CFM)	
Design Airflow	300
Design Grille Airflow	Not Applicable

Unit Design Data	
Submittal Make	Not Provided
Submittal Model #	-
Submittal Airflow	-
Sched./Sub. Volts	115
Sched./Sub. Phase	1
Sched./Sub. HP	1/8
Submittal BHP	Not Provided

Design Static Pressures (in wg)	
Design External SP	.50
Submittal Total SP	Not Provided

Motor Nameplate Data	
Motor Make (tag)	VARI-GREEN
Motor Frame (tag)	-
Motor HP (tag)	1/6
Motor RPM (tag)	300-1750
Motor Volts (tag)	115/208-230
Motor Phase (tag)	1
Motor Amps (tag)	2.2/1.3/1.1
Motor S.F. (tag)	-
Mtr % PF (tag)	-
Mtr % Eff. (tag)	-
Other Motor Data	-

Drive Data	
Drive Type	Direct Drive
Sheave Type	-
Fan Sheave Make	-
Fan Shv Mod# or Size (in)	-
Fan Sheave Bore (in.)	-
Motor Sheave Make	-
Mtr Shv Mod# or Size (in)	-
Motor Sheave Bore (in.)	-
VP Range	-
Center Distance (in.)	-
No of Belts	-
Belt Make	-
Belt Size	-
Other Data	-

Final Airflow (CFM)	
Actual Airflow	312
Actual Grille Airflow	Not Applicable
Fan CFM Test Method	Inlet Total
Test Method Ak (sq ft)	Not Applicable

Unit Data	
Make (tag)	Greenheck
Model # (tag)	G-095-6VG117XQD
Serial # (tag)	22233356 23D
Unit Location	Roof
Unit Discharge	Upblast
Fan Service	Exhaust
Fan Type	Centrifugal (AF)
Fan Discharge	Upblast
Fan Arrangement	SWSI

Fan Design Data	
Submittal Motor RPM	Not Provided
Submittal Fan RPM	-

Fan Data	
Actual Fan RPM/Speed	Medium
Actual Motor RPM	Not Accessible
Speed Cont. Position	Medium

Electrical Data	
Measurement Method	Not Accessible
Motor Volts 1	-
Motor Volts 2	-
Motor Volts 3	-
Motor Amps 1	Not Accessible
Motor Amps 2	-
Motor Amps 3	-
Operating HZ	60.0
Starter Data	-
Approx. BHP	-
Corr. Nameplate Amps	-



SYSTEM/UNIT: EF-03

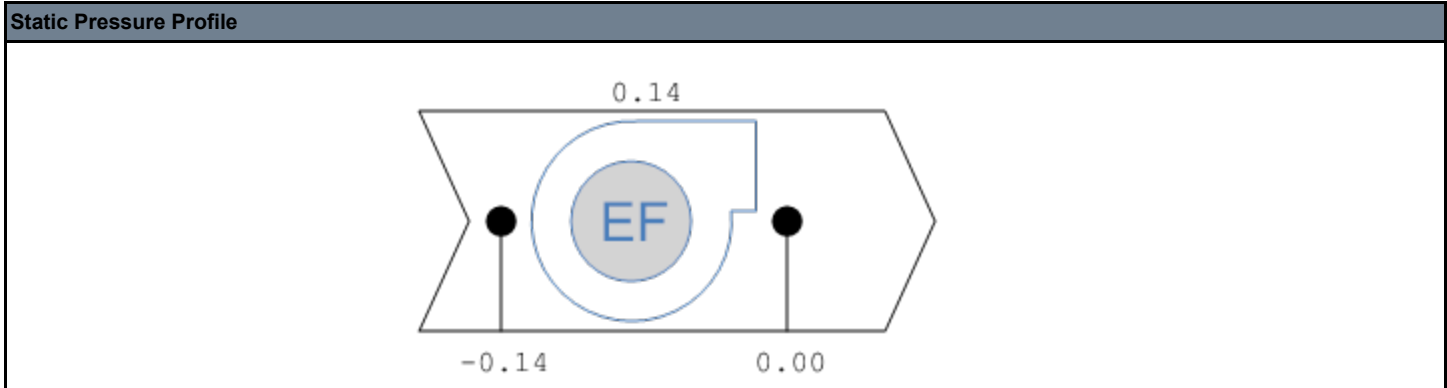
Tested By: Hank Wulk  
Date: 3/27/2024

**HVAC Units / Fans - EF-03**

Verification	Response	Notes	By	Date/Time
1 Grease cup is installed on hood fan?	NA		HW	3/27/24 13:05
2 Hinge kit installed on hood fan.	NA		HW	3/27/24 13:05
3 Lean fan back. Is grease duct installation adequate and is duct ran all the way to the base of the fan?	NA		HW	3/27/24 13:05
4 Flex conduit is long enough so that fan can be completely tilted back?	NA		HW	3/27/24 13:05

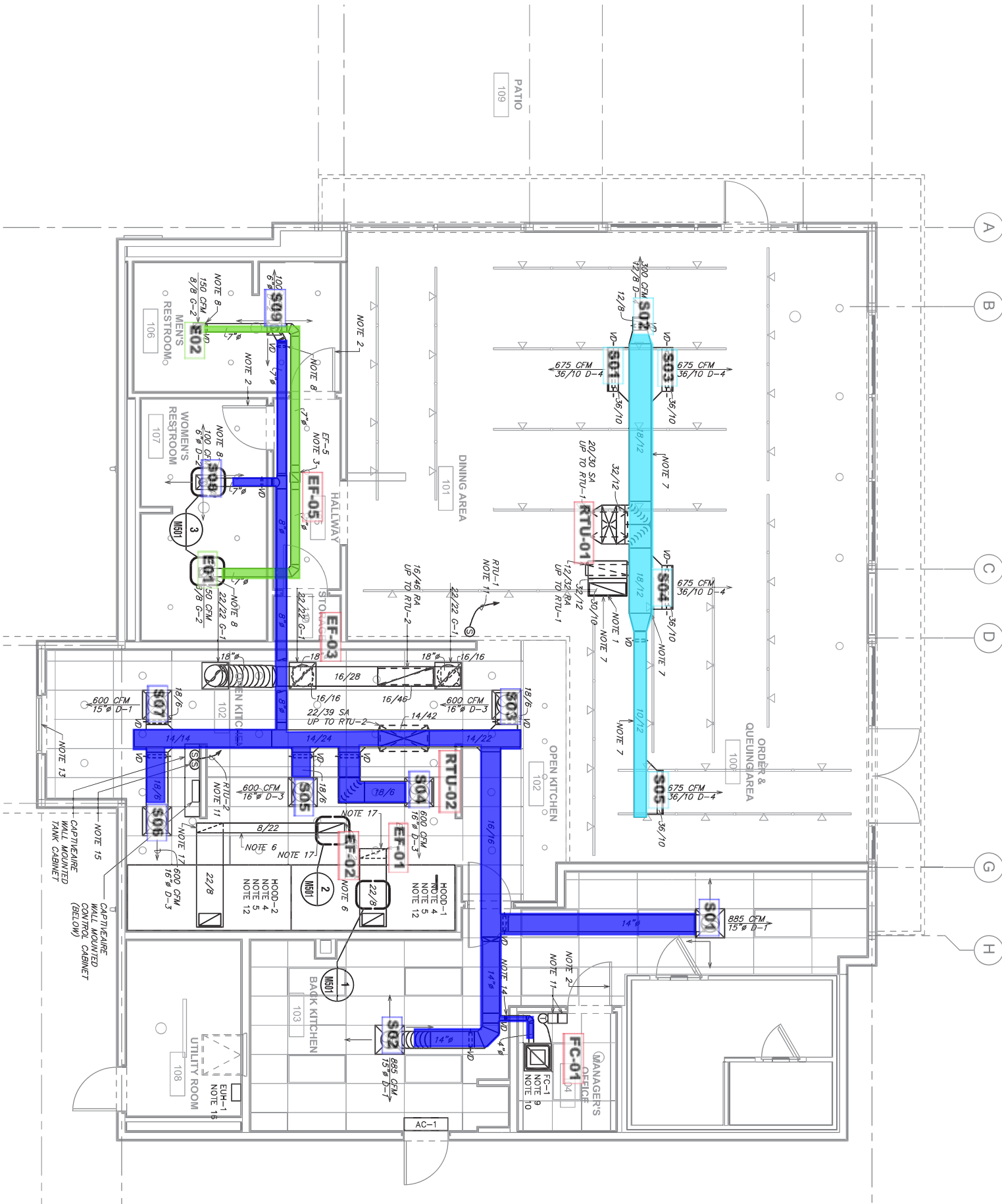
SYSTEM/UNIT: EF-03/Static Profile

Tested By: Hank Wulk  
Date: 3/27/2024



**EF-03 Exhaust Inlet Summary**

System/Unit	Area Served	Type	Size / Area (in)	Design CFM	Prelim CFM	Final CFM	% Final	Instrument	Ak	Open (sq ft)	Final FPM
E-01	Men's RR	CD	8/8	150	-	141	94	Capture Hood	1.000	1.000	141
E-02	Women's RR	CD	8/8	150	-	159	106	Capture Hood	1.000	1.000	159
<b>Totals:</b>		-	-	<b>300</b>	<b>0</b>	<b>300</b>	<b>100</b>	-	-	-	-



A  
B  
C  
D  
G  
H

1.  
J.  
K.  
L.  
M.  
N.  
O.  
P.  
Q.  
R.  
S.  
T.  
U.  
V.  
W.