

Report By:

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



**Report: Preliminary Report
Function: Test, Adjust, & Balance
Date: 03/08/2024**

**PROJECT
03-18-24 CAVA - SEMINOLE, FL**

11165 PARK BLVD

SEMINOLE, FL 33772

Client

CAVA

702 H ST NW

2nd floor

Washington, DC 20001

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Project: 03-18-24 CAVA - SEMINOLE, FL

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Project: 03-18-24 CAVA - SEMINOLE, FL

System/Unit: AHU/RTU



Asset: RTU1

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	2821P82348
Model Num	50HCD09	50HC-D09A2N5A6W1M0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	35X19
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2

Motor Data		
	Design	Actual
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	-	N/A
Motor Rpm	-	1670
Phase	3	3
Rated Voltage	208	208-230
Rated Amperage	-	6.7-6.8

Drive Data		
	Design	Actual
Motor Sheave Size	-	4.0"
Motor Bore Size	-	0.625"
Motor Sheave SetPt	-	1 TURN OUT
Fan Sheave Size	-	AFD74
Fan Sheave Bore	-	1.0"
Belt CL Distance	-	16.5"
Num of Belts	-	1
Belt Size	-	A48
Belt Alignment	-	GOOD

Test Data		
	Design	Actual
SF CFM	3000	2888
SF RPM	-	N/A
RA CFM	2637	2498
OA CFM	363	390
RL Voltage	-	209/210/211
RL Amperage	-	6.2/5.4/5.4
SF Rotation	-	CCW
RA Damper Position	-	6.75 V
Min OA Damper Position	-	3.25 V
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	ES3

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	CONSTRUCTION FILTERS
Condensate Drain Installed	-	NO

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Project:03-18-24 CAVA - SEMINOLE, FL

AHU/RTU



Diffuser Supply (GRD)

RTU1/KITCHEN

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	FRONT KITCHEN	B	10"	300	1	242	264	264	88.0
SGRD2	FRONT KITCHEN	B	10"	250	1	306	317	317	126.8
SGRD3	FRONT KITCHEN	B	10"	250	1	92	304	304	121.6
SGRD4	FRONT KITCHEN	B	10"	300	1	242	235	235	78.3
SGRD5	FRONT KITCHEN	B	10"	300	1	296	321	321	107.0
SGRD6	FRONT KITCHEN	B	10"	250	1	230	229	229	91.6
SGRD7	FRONT KITCHEN	B	10"	250	1	228	203	203	81.2
SGRD8	BACK KITCHEN	A	10"	250	1	196	202	202	80.8
SGRD9	BACK KITCHEN	A	8"	200	1	153	161	161	80.5
SGRD10	MANAGERS OFFICE	A	6"	100	1	0	103	103	103.0
SGRD11	UNFINISHED AREA	E	10"	275	1	242	280	280	101.8
SGRD12	UNFINISHED AREA	E	10"	275	1	227	269	269	97.8
Total				3000		2454	2888	2888	96.27%

Asset	Notes	Date	Written By
SGRD1	INDIVIDUAL DIFFUSER WILL BE BALANCED AT LATER DATE. TOTALS SET FOR INSPECTION PURPOSES.	03/08/2024	Ian Fuller

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Project: 03-18-24 CAVA - SEMINOLE, FL

System/Unit: AHU/RTU



Asset: RTU2

AREA: DINING

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	1422P99632
Model Num	50TCQD12	50TCQD12B2A5A5W3G0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	35X19
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20

Motor Data		
	Design	Actual
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	-	N/A
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	208	230
Rated Amperage	-	9.2

Drive Data		
	Design	Actual
Motor Sheave Size	-	4.75"
Motor Bore Size	-	0.875"
Motor Sheave SetPt	-	3 TURNS OUT
Fan Sheave Size	-	AFD74
Fan Sheave Bore	-	1.0"
Belt CL Distance	-	16.75"
Num of Belts	-	1
Belt Size	-	AX49
Belt Alignment	-	GOOD

Test Data		
	Design	Actual
SF CFM	3200	3240
SF RPM	-	N/A
RA CFM	2496	2557
OA CFM	704	683
RL Voltage	-	212/212/212
RL Amperage	-	8.6/8.6/9.0
SF Rotation	-	CCW
RA Damper Position	-	5.5 V
Min OA Damper Position	-	4.5 V
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	ES3

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	NO

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Project:03-18-24 CAVA - SEMINOLE, FL

AHU/RTU



Diffuser Supply (GRD)

RTU2/DINING

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	DINING	E	10"	260	1	296	296	296	113.8
SGRD2	DINING	E	10"	260	1	264	264	264	101.5
SGRD3	DINING	E	10"	260	1	258	258	258	99.2
SGRD4	DINING	E	10"	250	1	198	198	198	79.2
SGRD5	DINING	E	8"	190	1	174	174	174	91.6
SGRD6	DINING	E	8"	190	1	175	175	175	92.1
SGRD7	DINING	E	8"	190	1	234	234	234	123.2
SGRD8	DINING	E	10"	250	1	220	220	220	88.0
SGRD9	DINING	E	8"	160	1	130	130	130	81.3
SGRD10	DINING	E	8"	190	1	171	171	171	90.0
SGRD11	DINING	E	8"	200	1	155	155	155	77.5
SGRD12	DINING	E	8"	200	1	298	298	298	149.0
SGRD13	CORRIDOR	A	12"	500	1	442	442	442	88.4
SGRD14	WOMENS RR	D	6"	50	1	112	112	112	224.0
SGRD15	MENS RR	D	6"	50	1	113	113	113	226.0
Total				3200		3240	3240	3240	101.25%

Asset	Notes	Date	Written By
SGRD1	INDIVIDUAL DIFFUSER WILL BE BALANCED AT LATER DATE. TOTALS SET FOR INSPECTION PURPOSES.	03/08/2024	Ian Fuller

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Project: 03-18-24 CAVA - SEMINOLE, FL

System/Unit: FAN - Exhaust



Asset: CEF1

AREA:

Unit Data		
	Design	Actual
MFG	COOK	GREENHECK
Model Num	GC-148	SP-B150-QD
Serial Num	-	174522309-0019
Type	CEILING	CEILING
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	100	99
Fan RPM	-	1050
Fan Rotation	-	CCW
Motor RPM	-	1050
System SetPt	-	SINGLE SPEED
RL Voltage	-	121
RL Amperage	-	1.0
Total ESP	0.3"	N/A
Fan Inlet SP	-	N/A
Fan Discharge SP	-	N/A

Motor Data		
	Design	Actual
Motor MFG	-	GREENHECK
Frame	-	N/A
Horsepower	-	N/A
Motor Rpm	-	1050
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	1.8
Service Factor	-	N/A

Completed By: Ian Fuller on 03/08/2024

Notes:
COULD NOT TAKE FAN PRESSURES - HARD CEILING

Written By: Ian Fuller on 03/08/2024

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Project: 03-18-24 CAVA - SEMINOLE, FL

System/Unit: FAN - Exhaust



Asset: CEF2

AREA:

Unit Data		
	Design	Actual
MFG	COOK	GREENHECK
Model Num	GC-148	SP-B150-QD
Serial Num	-	174522309-0027
Type	CEILING	CEILING
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	GREENHECK
Frame	-	N/A
Horsepower	-	N/A
Motor Rpm	-	1050
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	1.8
Service Factor	-	N/A

Test Data		
	Design	Actual
CFM	100	96
Fan RPM	-	1050
Fan Rotation	-	CCW
Motor RPM	-	1050
System SetPt	-	SINGLE SPEED
RL Voltage	-	121
RL Amperage	-	1.0
Total ESP	0.3"	N/A
Fan Inlet SP	-	N/A
Fan Discharge SP	-	N/A

Completed By: Ian Fuller on 03/08/2024

Notes:
COULD NOT TAKE FAN PRESSURES - HARD CEILING

Written By: Ian Fuller on 03/08/2024

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Project: 03-18-24 CAVA - SEMINOLE, FL

System/Unit: FAN - Exhaust



Asset: KEF1

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU85HFA	DU85HFA
Serial Num	-	6292943
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Frame	-	N/A
Horsepower	0.750	0.75
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	8.9
Service Factor	-	N/A

Test Data		
	Design	Actual
CFM	1444	
Fan RPM	1371	
Fan Rotation	-	CCW
Motor RPM	-	
System SetPt	-	
RL Voltage	-	
RL Amperage	-	

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Project: 03-18-24 CAVA - SEMINOLE, FL

System/Unit: FAN - Exhaust



Asset: KEF2

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU85HFA	DU85HFA
Serial Num	-	6292943
Type	DOWNBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Frame	-	N/A
Horsepower	0.750	0.75
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	8.9
Service Factor	-	N/A

Test Data		
	Design	Actual
CFM	1269	
Fan RPM	1327	
Fan Rotation	-	CCW
Motor RPM	-	
System SetPt	-	
RL Voltage	-	
RL Amperage	-	

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Project: 03-18-24 CAVA - SEMINOLE, FL

System/Unit: FAN - Supply



Asset: MUA1

AREA:COOKLINE

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	A2-D.250-20D-MPU	A2-D.250-20D-MPU
Serial Num	-	6292943
Type	MUA	MUA
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	2185	2219
SF RPM	1298	1261
Motor RPM	-	1261
SF System SetPt	-	64.7 HZ
RL Voltage	-	210/208/209
RL Amperage	-	5.0/5.2/5.0

Motor Data		
	Design	Actual
Motor MFG	-	NEMA
Frame	-	182T
Horsepower	1.5	1.5
Motor Rpm	-	1170
Phase	3	3
Voltage (rated)	208	230
Amperage (rated)	-	6.01
Service Factor	-	1.15

General		
	Design	Actual
Fan Rotation Correct	-	YES

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Project: 03-18-24 CAVA - SEMINOLE, FL



System/Unit: Kitchen Hood Type I

Asset: HD1

AREA:

Unit Data		
	Design	Actual
MFG	NA	HOOD DEPOT
Model Num	NA	NDF- C:0904830116
Job / Serial Num	-	H-13826010117
Type	-	TYPE 1 LOW PROXIMITY
Hood length	-	47.75"
Hood Width	-	89"
Supply Plenum Type	-	PSP
Supply Plenum Width	-	14"
Supply Plenum Length	-	101"

Test Data Exhaust		
	Design	Actual
Filter Type	-	BAFFLE
Filter Size 1	-	20X20
Filter Qty 1	-	4
Filter AK factor size 1	-	2.68
Filter Total AK Area	-	10.72
Filter1 FPM	-	
Filter2 FPM	-	
Filter3 FPM	-	
Filter4 FPM	-	
Filter Ave FPM(corr)	-	
CFM	1444	

Cooking Equipment		
	Design	Actual
Item 1	-	RICE COOKER
Item 2	-	OVEN

Test Data Supply		
	Design	Actual
Total AK Area	-	18.47
Kv factor (Vel)	-	0.89
Num of Readings	-	16
Reading1 FPM	-	165
Reading2 FPM	-	186
Reading3 FPM	-	168
Reading4 FPM	-	146
Reading5 FPM	-	156
Reading6 FPM	-	148
Reading7 FPM	-	158
Reading8 FPM	-	109
Reading9 FPM	-	114
Reading10 FPM	-	122
Reading11 FPM	-	114
Reading12 FPM	-	105
Reading13 FPM	-	103
Reading14 FPM	-	93
Ave FPM(corr)	-	120
CFM	2185	2219

Notes:
 RIGHT HOOD
 15TH READING: 104 FPM
 16TH READING: 109 FPM

Written By: Ian Fuller on 03/08/2024

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Project: 03-18-24 CAVA - SEMINOLE, FL

System/Unit: Kitchen Hood Type I



Asset: HD2

AREA:

Unit Data		
	Design	Actual
MFG	NA	HOOD DEPOT
Model Num	NA	H-13828020117
Job / Serial Num	-	NDF:09000820115
Type	-	TYPE 1 LOW PROXIMITY
Hood length	-	89"
Hood Width	-	47.75"
Supply Plenum Type	-	PSP
Supply Plenum Width	-	14"
Supply Plenum Length	-	89"

Test Data Exhaust		
	Design	Actual
Filter Type	-	BAFFLE
Filter Size 1	-	20X20
Filter Qty 1	-	4
Filter AK factor size 1	-	2.68
Filter Total AK Area	-	10.72
Filter1 FPM	-	
Filter2 FPM	-	
Filter3 FPM	-	
Filter4 FPM	-	
Filter Ave FPM(corr)	-	
CFM	1269	

Cooking Equipment		
	Design	Actual
Item 1	-	GRILL
Item 2	-	GRIDDLE
Item 3	-	FRYER

Test Data Supply		
	Design	Actual
Total AK Area	-	18.47
Kv factor (Vel)	-	0.89
Num of Readings	-	16
Reading1 FPM	-	165
Reading2 FPM	-	186
Reading3 FPM	-	168
Reading4 FPM	-	146
Reading5 FPM	-	156
Reading6 FPM	-	1148
Reading7 FPM	-	158
Reading8 FPM	-	109
Reading9 FPM	-	114
Reading10 FPM	-	122
Reading11 FPM	-	114
Reading12 FPM	-	105
Reading13 FPM	-	103
Reading14 FPM	-	93
Ave FPM(corr)	-	120
CFM	2185	2219

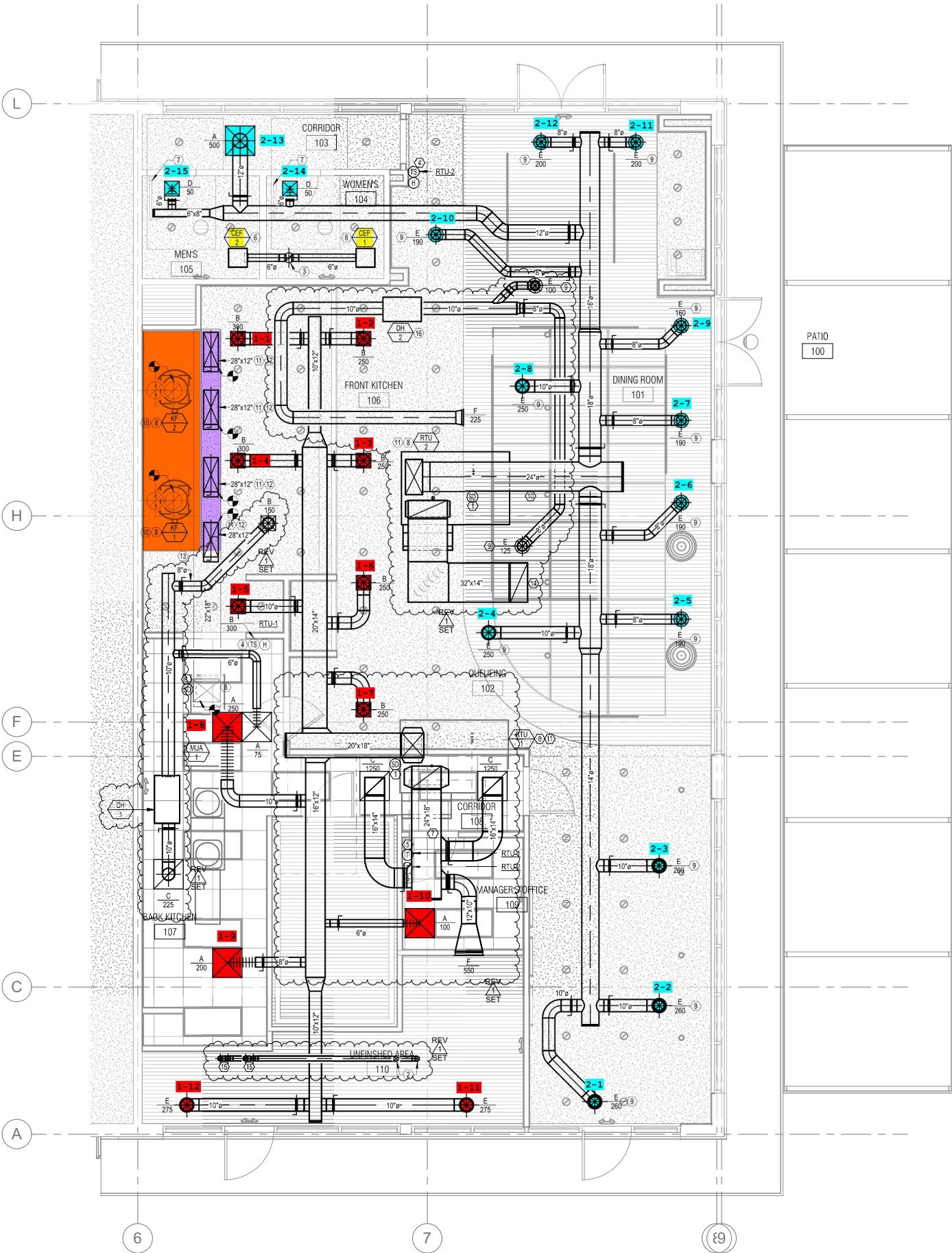
Notes:

LEFT HOOD

15TH READING: 104 FPM

16TH READING: 109 FPM

Written By: Ian Fuller on 03/08/2024




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