

**Report By:**

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



**Report: TAB Report**  
**Function: Test, Adjust, & Balance**  
**Date: 12/04/2024**  
**Completed By: National TAB**

# PROJECT

## 11-25-24 CHIPOTLE #5115 CALIFORNIA, MD

23368 THREE NOTCH RD

CALIFORNIA, MD 20619

### Client

Chipotle Mexican Grill  
610 Newport Center Drive, Suite 1100  
Newport Beach, CA 92660

# National TAB

Project: 11-25-24 CHIPOTLE #5115 CALIFORNIA, MD

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## 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.

### MUA (Make Up Air Unit) w/ PSP

Total flow for the MAU (Make-up Air Unit) unit was measured by readings taken at the discharge of the hood's perforated supply plenum. Readings taken with a velocity matrix were averaged and multiplied by a manufacturer's corrected area. Adjustments to the fan speed were made in order to bring the unit to within design tolerance. Any MUA'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.

## **Issue List**

- 4-way deflectors for serving line diffusers are not removed
- Construction filters are still installed
- KEF: Grease drain is not installed
- RTU-2: Diffuser balance cannot be complete



**11-25-24 CHIPOTLE #5115 CALIFORNIA, MD**

**Project Issue Information**

**Issue Name :** 4-way deflectors for serving line diffusers are not removed  
**Description :** The serving line diffusers still have the 4-way deflectors installed. Recommend having them removed.  
**Created By :** National TAB                      **Assigned To :** National TAB - David Annan  
**Status :** Open  
**Priority :** Medium                                      **Asset Tag :**  
**Originated Date :** 12/03/2024 - David Annan - National TAB

Project Issue File Details



12/03/2024



**11-25-24 CHIPOTLE #5115 CALIFORNIA, MD**

**Project Issue Information**

**Issue Name :** Construction filters are still installed  
**Description :** Both RTUs still have construction filters installed. Recommend that pleated filters with a MERV rating of atleast 8 be installed prior to the stores opening.  
**Created By :** National TAB                      **Assigned To :** National TAB - David Annan  
**Status :** Open  
**Priority :** Medium                                      **Asset Tag :**  
**Originated Date :** 12/03/2024 - David Annan - National TAB

Project Issue File Details



12/03/2024



**11-25-24 CHIPOTLE #5115 CALIFORNIA, MD**

**Project Issue Information**

**Issue Name :** KEF: Grease drain is not installed  
**Description :** The grease drain is not installed under the Viroguard outlet. Recommend that the drain be installed prior to stores opening.  
**Created By :** National TAB                      **Assigned To :** National TAB - David Annan  
**Status :** Open  
**Priority :** Medium                                      **Asset Tag :**  
**Originated Date :** 12/03/2024 - David Annan - National TAB

Project Issue File Details



12/03/2024



12/03/2024



**11-25-24 CHIPOTLE #5115 CALIFORNIA, MD**

**Project Issue Information**

**Issue Name :** RTU-2: Diffuser balance cannot be complete  
**Description :** RTU-2 mains dinning diffusers are not easily accessible and there are long screws restricting the dampers from closing. Unable to complete the diffuser balance. Recommend that internal OBDs be installed as stated in the plans.  
**Created By :** National TAB                      **Assigned To :** National TAB - David Annan  
**Status :** Open  
**Priority :** High                                      **Asset Tag :**  
**Originated Date :** 12/03/2024 - David Annan - National TAB

Project Issue File Details



12/03/2024

### AIR BALANCE SCHEDULE

UNIT	AREA SERVED	HVAC SUPPLY		HVAC RETURN		HVAC OUTDOOR		OA %		HOOD MAKE-UP		HOOD EXHAUST		GENERAL EXH.	
		DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
RTU-1	Kitchen	4200	4294	3150	3195	1050	1099	25.0%	25.6%						
RTU-2	Dining	5250	5469	4200	4397	1050	1072	20.0%	19.6%						
EF-1	Cook line											1900	1962		
EF-2	Bathroom													150	154
<b>TOTALS</b>		9450	9763	7350	7592	2100	2171			0	0	1900	1962	150	154

#### NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2100	2171
TOTAL EXHAUST	2050	2116
<b>NET AIRFLOW</b>	<b>50</b>	<b>55</b>

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H2O)
FRONT	0.0062
SIDE	-
REAR	0.0027
<b>AVERAGE</b>	<b>0.0045</b>

#### FINAL CHECKS

- ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✓

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- MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW: ✓

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- PRESSURE FALLS WITHIN IMC TOLERANCE OF +/-0.02" W.C. ✓

NOTES:

## CheckList List

- 01: RTU'S/AHU'S
- 02: EF'S
- 03: MUA
- 04: HOODS
- 05: FINAL TESTS



**11-25-24 CHIPOTLE #5115 CALIFORNIA, MD**

**CheckList Information**

**Name :** 01: RTU'S/AHU'S **Status :** Completed

**Assigned Organization :** National TAB **Asset :**

**Requesting Organization :** National TAB

**Created Date :** 11/26/2024 - Kyle Henry - National TAB

**Completed Date :** 12/03/2024 - David Annan - National TAB

**CheckList Item Details**

RTU's/AHU's

**Thermostats installed and have power?** Yes

**Comment:**

**All diffusers and grilles are installed and match design?** Yes

**Comment:**

**Deflector plates are removed from 1x1 diffusers on the serve line (double check that this is specified on the diffuser schedule first)** No

**Comment:**

4 way deflectors are still installed

**Economizer blank plate is installed below the outside air intake (Trane only) (N/A = not applicable)** N/A

**Comment:**

**Economizers are assembled and functional?** Yes

**Comment:**

**DCV Max damper opening position is set to minimum?** Yes

**Comment:**

**Free cooling enthalpy set point set for lowest setting (Typically "D")**

Yes

**Comment:**

**Motors are all operating below the FLA rating?**

Yes

**Comment:**

**Are belts tight?**

N/A

**Comment:**

**If direct drive unit is the speed controller working?**

Yes

**Comment:**

**Is gas piping installed and valves turned on?**

N/A

**Comment:**

Location does not use gas

**Unit free of noticeable noise and vibration**

Yes

**Comment:**

**Final outside air damper position is marked with permanent marker?**

Yes

**Comment:**



11-25-24 CHIPOTLE #5115 CALIFORNIA, MD

CheckList Information

**Name :** 02: EF'S **Status :** Completed

**Assigned Organization :** National TAB **Asset :**

**Requesting Organization :** National TAB

**Created Date :** 11/26/2024 - Kyle Henry - National TAB

**Completed Date :** 12/03/2024 - David Annan - National TAB

CheckList Item Details

EF's

<b>Rotation is correct?</b>	Yes
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**Comment:**

<b>Belts are tight?</b>	N/A
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**Comment:**

<b>Viroguard installed on hood fan(s)?</b>	Yes
--	-----

**Comment:**

<b>Hinge kit installed installed on hood fan?</b>	Yes
---	-----

**Comment:**

<b>Lean fan back. Is grease duct installation adequate and is duct ran all the way to the base of the fan?</b>	Yes
--	-----

**Comment:**

<b>Flex conduit is long enough so that fan can be completely tilted back?</b>	Yes
---	-----

**Comment:**

**There is no major leakage around base of fan?**

Yes

**Comment:**

**Is the motor operating below the motor FLA rating?**

Yes

**Comment:**

**For restroom fan(s) is the back draft damper installed and can it fully open?**

Yes

**Comment:**

**Unit free of noticeable noise and vibration?**

Yes

**Comment:**



11-25-24 CHIPOTLE #5115 CALIFORNIA, MD

CheckList Information

**Name :** 03: MUA **Status :** Completed

**Assigned Organization :** National TAB **Asset :**

**Requesting Organization :** National TAB

**Created Date :** 11/26/2024 - Kyle Henry - National TAB

**Completed Date :** 12/03/2024 - David Annan - National TAB

CheckList Item Details

MUA

**Rotation is correct?** N/A

**Comment:**

Location does not have a MUA

**Gas piping is installed and valves are in on position?** N/A

**Comment:**

Location does not have a MUA

**Internal motorized damper is fully opening?** N/A

**Comment:**

Location does not have a MUA

**Motor is operating below the FLA rating?** N/A

**Comment:**

Location does not have a MUA

**Unit free of noticeable noise and vibration?** N/A

**Comment:**

Location does not have a MUA



11-25-24 CHIPOTLE #5115 CALIFORNIA, MD

**CheckList Information**

**Name :** 04: HOODS **Status :** Completed

**Assigned Organization :** National TAB **Asset :**

**Requesting Organization :** National TAB

**Created Date :** 11/26/2024 - Kyle Henry - National TAB

**Completed Date :** 12/03/2024 - David Annan - National TAB

**CheckList Item Details**

**HOODS**

**All hood filters installed and accounted for?** Yes

**Comment:**

**Hoods are wired and have power?** Yes

**Comment:**

**Hood is free of alarms?** Yes

**Comment:**

**Hood is free of damage?** Yes

**Comment:**

**Quarter or full vertical end panels are installed if specified?** Yes

**Comment:**



11-25-24 CHIPOTLE #5115 CALIFORNIA, MD

CheckList Information

**Name :** 05: FINAL TESTS **Status :** Completed

**Assigned Organization :** National TAB **Asset :**

**Requesting Organization :** National TAB

**Created Date :** 11/26/2024 - Kyle Henry - National TAB

**Completed Date :** 12/04/2024 - David Annan - National TAB

CheckList Item Details

**FINAL CHECKS**

**Is space free of drafting?** Yes

**Comment:**

**Is space comfortable in all areas?** Yes

**Comment:**

**Is the space free of ventilation noise?** Yes

**Comment:**

**List kitchen equipment turned on for testing**

**Comment:**

Kitchen equipment start up was not completed

**List smoke candle type used**

**Comment:**

S102 45 Sec emitter

**HOOD CAPTURE TEST**

**Smoke test capture % - Perimeter of hood**

**Comment:**

100%

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**Smoke test capture % - Top of cooking surface**

**Comment:**

100%

---

**WITNESS**

**Date test was completed**

11/27/2024

**Comment:**

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**TAB tech name / Firm**

**Comment:**

David Annan/ NTI

---

**Site super name / Firm**

**Comment:**

Lee Gillespie/ Venture Construction

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**Owner representative name / Firm (if Applicable)**

**Comment:**

NA

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**BUILDING PRESSURE**

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**Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)**

Pass

**Comment:**



# National TAB

Project: 11-25-24 CHIPOTLE #5115 CALIFORNIA, MD

## System/Unit: AHU/RTU

Asset: RTU1

AREA:Kitchen

Unit Data		
	Design	Actual
MFG	York	York
Serial Num	-	N2G2679021
Model Num	ZJ150	ZJ150E18R4D5ECA1R1
Type	RTU	RTU
Configuration	Vertical	Vertical
Num OA Filters 1	-	1
OA Filter Size 1	-	29x21
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	Actual
Motor MFG	-	Baldor
Frame	-	184T
Horsepower	1	5
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	13.5

Drive Data	
	Actual
Motor Sheave Size	VP56
Motor Bore Size	1-1/8"
Motor Sheave SetPt	3 Turns Out
Fan Sheave Size	7-1/4"
Fan Sheave Bore	1"
Belt CL Distance	19"
Num of Belts	1
Belt Size	BX56
Belt Alignment	Good

Test Data		
	Design	Actual
SF CFM	4200	4294
SF RPM	-	1168
RA CFM	3150	3212
OA CFM	1050	1082
RL Voltage	-	498/497/499
RL Amperage	-	3.6/3.3/3.7
SF Rotation	-	CCW
SF System SetPt	-	100%
RA Damper Position	-	76%
Min OA Damper Position	-	24%
Min OA Damper Type	-	OBD

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.71"
Fan Suction SP	-	-1.27"
Fan Discharge SP	-	0.52"
Total ESP	0.8"	1.23"
Fan Total SP	-	1.79"

General	
	Actual
Fan Rotation Correct	Yes
Unit Filters Clean	Construction Filters
Condensate Drain Installed	Yes

Completed By: David Annan on 12/02/2024

## Unit Data - PHOTO LOG



12/02/2024



# National TAB

Project:11-25-24 CHIPOTLE #5115 CALIFORNIA, MD

## 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	Back	CD1	12"	500	1	486	524	524	104.8
SGRD2	Back	CD1	12"	500	1	579	517	517	103.4
SGRD3	Back	CD1	8"	200	1	206	207	207	103.5
SGRD4	Kitchen	CD4	12"	500	1	444	511	511	102.2
SGRD5	Kitchen	CD4	12"	500	1	553	522	522	104.4
SGRD6	Kitchen	CD2	8"	250	1	214	248	248	99.2
SGRD7	Kitchen	CD2	8"	250	1	214	243	243	97.2
SGRD8	Kitchen	CD2	8"	250	1	245	258	258	103.2
SGRD9	Kitchen	CD2	8"	250	1	236	245	245	98.0
SGRD10	Kitchen	CD1	12"	500	1	575	517	517	103.4
SGRD11	Kitchen	CD1	12"	500	1	521	502	502	100.4
Total				4200		4273	4294	4294	102.24%

Completed By: David Annan on 11/27/2024



# National TAB

Project: 11-25-24 CHIPOTLE #5115 CALIFORNIA, MD

## System/Unit: AHU/RTU

Asset: RTU2

AREA:Dining

Unit Data		
	Design	Actual
MFG	Carrier	Carrier
Serial Num	-	5023P05519
Model Num	48FC_M16	50FC-M16B3Q5A6W4C0
Type	RTU	RTU
Configuration	Vertical	Vertical
Num OA Filters 1	-	2
OA Filter Size 1	-	25X23
Num Final Filter 1	-	6
Final Filter Size 1	-	18X14X2

Motor Data		
	Design	Actual
Motor MFG	-	N/L
Frame	-	N/L
Horsepower	1	N/L
Motor Rpm	-	N/L
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	12.6

Drive Data	
	Actual
Motor Sheave Size	DD
Motor Bore Size	DD
Motor Sheave SetPt	DD
Fan Sheave Size	DD
Fan Sheave Bore	DD
Belt CL Distance	DD
Num of Belts	DD
Belt Size	DD
Belt Alignment	DD

Test Data		
	Design	Actual
SF CFM	5250	5469
SF RPM	-	1658
RA CFM	4200	4364
OA CFM	1050	1105
RL Voltage	-	498/499/500
RL Amperage	-	5.4/5.0/5.5
SF Rotation	-	CCW
RA Damper Position	-	5.35 V
Min OA Damper Position	-	4.65 V
Min OA Damper Type	-	OBD
OA Enthalpy Setpt	-	ES5

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.82"
Fan Suction SP	-	-1.07"
Fan Discharge SP	-	0.36"
Total ESP	.5	1.18"
Fan Total SP	-	1.43"

General	
	Actual
Fan Rotation Correct	Yes
Unit Filters Clean	Construction Filters
Condensate Drain Installed	Yes

Completed By: David Annan on 12/02/2024

Notes:  
Dampers were inaccessible and screws were preventing the dampers side wall diffusers from closing.

Written By: David Annan on 12/02/2024

## Unit Data - PHOTO LOG



**12/02/2024**



# National TAB

Project:11-25-24 CHIPOTLE #5115 CALIFORNIA, MD

## 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	SR2	10"	650	1.06	589	654	654	100.6
SGRD2	Dining	SR2	10"	800	1.06	525	583	583	72.9
SGRD3	Dining	SR1	14"	1000	0.94	809	898	898	89.8
SGRD4	Dining	SR1	14"	850	0.94	917	1018	1018	119.8
SGRD5	Dining	SR1	14"	700	0.94	744	826	826	118.0
SGRD6	Dining	SR1	14"	600	0.94	674	674	674	112.3
SGRD7	Dining	SR1	14"	600	0.94	447	748	748	124.7
SGRD8	Bathroom	CD3	6"	50	1	63	68	68	136.0
Total				5250		4768	5469	5469	104.17%



# National TAB

Project: 11-25-24 CHIPOTLE #5115 CALIFORNIA, MD

## System/Unit: FAN - Exhaust

Asset: EF2

AREA: Bathrooms

Unit Data		
	Design	Actual
MFG	CaptiveAire	CaptiveAire
Model Num	DR12HFA	DR12HFA
Serial Num	-	6899284
Type	Downblast	Downblast
Configuration	Vertical	Vertical

Motor Data		
	Design	Actual
Motor MFG	-	N/L
Frame	-	N/L
Horsepower	.18	0.250
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	2.9
Service Factor	-	N/L

Test Data		
	Design	Actual
CFM	250	153
Fan RPM	-	1517
Fan Rotation	-	CCW
Motor RPM	-	1517
System SetPt	-	78%
RL Voltage	-	122
RL Amperage	-	0.9
Total ESP	.6	0.33"
Fan Inlet SP	-	-0.33"
Fan Discharge SP	-	ATM

Completed By: David Annan on 12/02/2024

Notes:

Balance schedule on MSET calls for Exhaust to be 150 CFM. Unit was balance to 150 CFM to provide a positive building pressure to the store.

Written By: David Annan on 12/02/2024

### Unit Data - PHOTO LOG



12/02/2024



# National TAB

Project:11-25-24 CHIPOTLE #5115 CALIFORNIA, MD

## FAN - Exhaust

### Diffuser Ret/Exh (GRD)

#### EF2/Bathrooms

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EF2-EGRD1				125	1	55	73	73	58.4
EF2-EGRD2				125	1	59	80	80	64.0
Total				250		114	153	153	61.2%

Completed By: David Annan on 12/02/2024



# National TAB

Project: 11-25-24 CHIPOTLE #5115 CALIFORNIA, MD

## System/Unit: FAN - Exhaust

Asset: KEF1

AREA:Kitchen

Unit Data		
	Design	Actual
MFG	CaptiveAire	CaptiveAire
Model Num	DU85HFA	DU85HFA
Serial Num	-	6899284
Type	Upblast	Upblast
Configuration	Vertical	Vertical

Motor Data		
	Design	Actual
Motor MFG	-	Telco
Frame	-	N/L
Horsepower	2	1.00
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	11.6
Service Factor	-	N/L

Test Data		
	Design	Actual
CFM	1900	1962
Fan RPM	-	1314
Fan Rotation	-	CCW
Motor RPM	-	1314
System SetPt	-	73%
RL Voltage	-	122
RL Amperage	-	4.8
Total ESP	1.2	1.1"
Fan Inlet SP	-	-1.1"
Fan Discharge SP	-	ATM

Completed By: David Annan on 12/02/2024

### Unit Data - PHOTO LOG



12/02/2024



# National TAB

Project: 11-25-24 CHIPOTLE #5115 CALIFORNIA, MD

## System/Unit: Kitchen Hood Type I

Asset: HD1

AREA: Cook Line

Unit Data		
	Design	Actual
MFG	CaptiveAire	CaptiveAire
Model Num	5424 ND-2	5424 ND-2
Job / Serial Num	-	6899284
Type	Type 1 Canopy Hood	Type I
Hood length	153"	112"
Hood Width	54"	54"

Test Data Exhaust		
	Design	Actual
Filter Type	Captrate SOLO	Captrate Solo
Filter Size 1	16x16	16X16
Filter Qty 1	7	7
Filter AK factor size 1	-	1.62
Filter Total AK Area	-	11.34
Filter1 FPM	-	157
Filter2 FPM	-	170
Filter3 FPM	-	175
Filter4 FPM	-	194
Filter5 FPM	-	170
Filter6 FPM	-	173
Filter7 FPM	-	171
Filter Ave FPM(corr)	-	173
CFM	-	1962

Cooking Equipment	
	Actual
Item 1	Electric Griddle
Item 2	Electric Stove

Completed By: David Annan on 11/27/2024

## Unit Data - PHOTO LOG



12/02/2024

DRIER,  
 IP AND SLOPE  
 LL COMPLY  
 OOF DECK TO  
 R  
 INSTRUCTIONS

TECTURAL  
 VISION VALVE,  
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 T LINES PER  
 IF.  
 ERANT LINE  
 NT PIPING TO  
 AS SHOWN

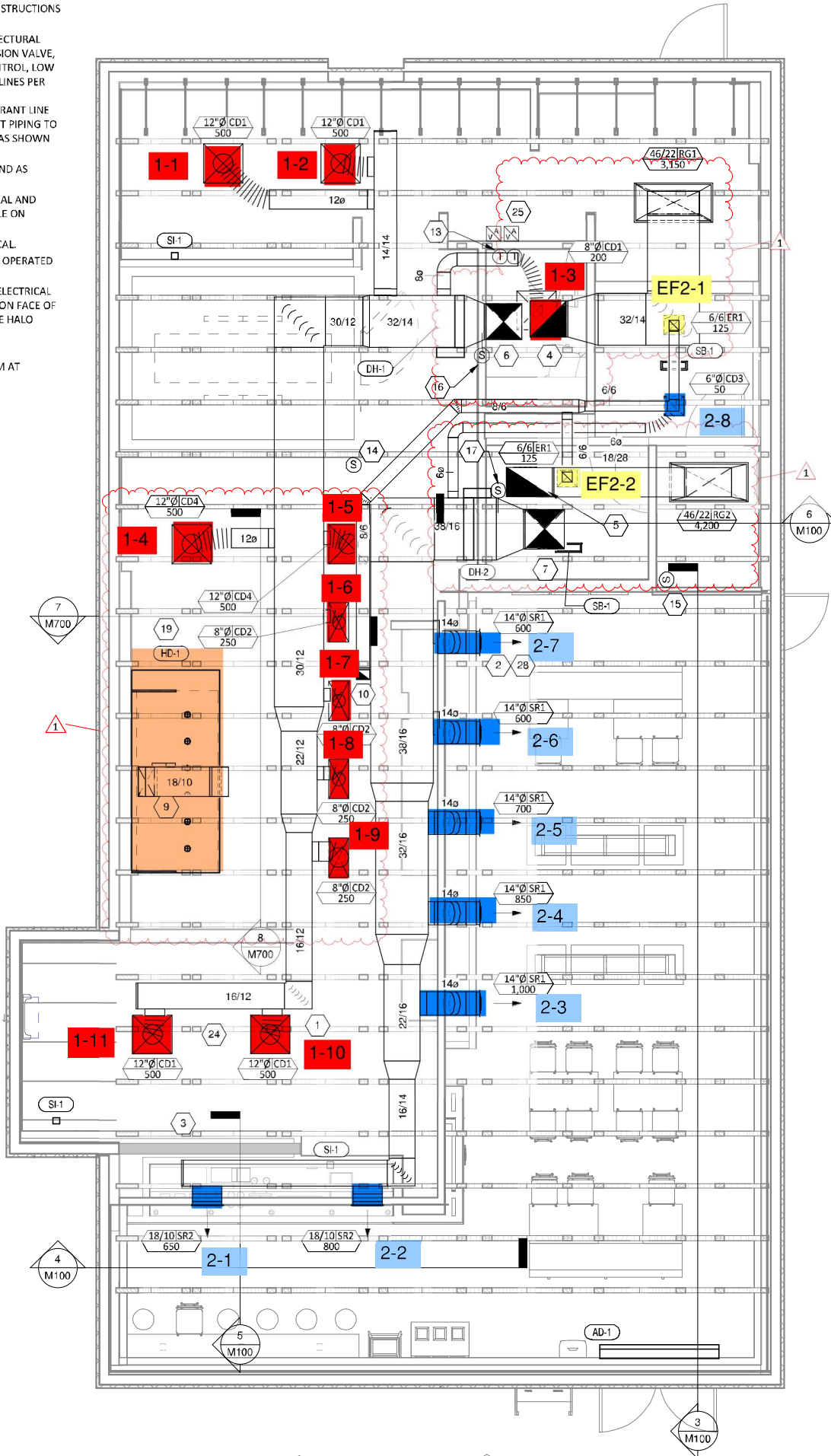
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Date: 12/5/2024



HVAC RECIRCULATION PLAN

1/4" = 1'-0"

