

Report By:

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



Report: TAB REPORT
Function: Test, Adjust, & Balance
Date: 07/11/2025
Completed By: National TAB

PROJECT

06-30-25 CHIPOTLE #5399 MT PLEASANT, PA

200 BESSEMER RD

MT PLEASANT , PA 15666

Client

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

National TAB

Project: 06-30-25 CHIPOTLE #5399 MT PLEASANT, PA

Table Of Contents

Section	Page #
Summary	3
Remarks	4
Balance Schedule	6
Checklist	7
AHU/RTU	14
FAN - Exhaust	19
FAN - Supply	22
Kitchen Hood Type I	23
GRD Layout	25

Project Summary

The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report are further details 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.

FCU's w/ Diffusers

Each of the FCU's were measured at their terminal devices utilizing a flow hood. The sum of these readings is equal to the total flow for that particular unit. The total flow of each FCU was then adjusted to within tolerance of the specified design. Each terminal diffuser was balanced to within tolerance of the engineer's design volume utilizing the provided hand damper located at the takeoff of the main & branch trunk line(s). Any equipment that fell outside of this 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.

Ceiling Exhaust Fans

The ceiling exhaust fans were measured using a flow hood. If speed adjustment was provided, the fan speed was adjusted to within design tolerance. 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

- RTUs - Construction Filters



06-30-25 CHIPOTLE #5399 MT PLEASANT, PA

Project Issue Information

Issue Name : RTUs - Construction Filters
Description : Both RTUs have temporary construction filters installed. Recommend installing required final filters.
Created By : National TAB **Assigned To :** National TAB - Mark Johnson
Status : Open
Priority : Low **Asset Tag :**
Originated Date : 07/11/2025 - Mark Johnson - National TAB

Project Issue File Details



07/11/2025

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	3400	3510	2900	3003	500	507	14.7%	14.4%						
RTU-2	DINING	4000	4050	3000	3045	1000	1005	25.0%	24.8%						
MUA-1	HOOD MUA									1300	1378				
EF-1	HOOD FAN											2550	2610		
EF-2	RESTROOMS													150	148
TOTALS		7400	7560	5900	6048	1500	1512			1300	1378	2550	2610	150	148

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2800	2890
TOTAL EXHAUST	2700	2758
NET AIRFLOW	100	132

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H2O)
FRONT	0.002
SIDE	0.0023
REAR	0.002
AVERAGE	0.0021

FINAL CHECKS

- ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✓

- MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW: ✓

- 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



06-30-25 CHIPOTLE #5399 MT PLEASANT, PA

CheckList Information

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

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 06/10/2025 - Tara Metcalf - National TAB

Completed Date : 07/11/2025 - Mark Johnson - 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)	Yes
--	-----

Comment:

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:

Direct Drive

If direct drive unit is the speed controller working?

Yes

Comment:

Is gas piping installed and valves turned on?

Yes

Comment:

Unit free of noticeable noise and vibration

Yes

Comment:

Final outside air damper position is marked with permanent marker?

Yes

Comment:



06-30-25 CHIPOTLE #5399 MT PLEASANT, PA

CheckList Information

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

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 06/10/2025 - Tara Metcalf - National TAB

Completed Date : 07/11/2025 - Mark Johnson - National TAB

CheckList Item Details

EF's

Rotation is correct?	Yes
-----------------------------	-----

Comment:

Belts are tight?	N/A
-------------------------	-----

Comment:

Direct Drive

Viroguard installed on hood fan(s)?	Yes
--	-----

Comment:

Hinge kit installed installed on hood fan?	Yes
---	-----

Comment:

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

Comment:

Flex conduit is long enough so that fan can be completely tilted back?	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:



06-30-25 CHIPOTLE #5399 MT PLEASANT, PA

CheckList Information

Name : 03: MUA **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 06/10/2025 - Tara Metcalf - National TAB
Completed Date : 07/11/2025 - Mark Johnson - National TAB

CheckList Item Details

MUA

Rotation is correct? Yes

Comment:

Gas piping is installed and valves are in on position? Yes

Comment:

Internal motorized damper is fully opening? Yes

Comment:

Motor is operating below the FLA rating? Yes

Comment:

Unit free of noticeable noise and vibration? Yes

Comment:



06-30-25 CHIPOTLE #5399 MT PLEASANT, PA

CheckList Information

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

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 06/10/2025 - Tara Metcalf - National TAB

Completed Date : 07/11/2025 - Mark Johnson - 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:

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Project: 06-30-25 CHIPOTLE #5399 MT PLEASANT, PA

System/Unit: AHU/RTU



Asset: RTU1

AREA: KITCHEN

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	1923P60234
Model Num	48FC-M09	48FCDM09A3M5A6W4C0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	35x19.5
Num Final Filter 1	-	4
Final Filter Size 1	-	20x20x2

Motor Data		
	Design	Actual
Phase	3	3
Rated Voltage	208	208/230
Rated Amperage	-	7.5

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	3400	3510
SF RPM	-	1594
RA CFM	2900	3003
OA CFM	500	507
RL Voltage	-	206/206/206
RL Amperage	-	3.8 (L2)
SF Rotation	-	CCW
SF System SetPt	-	B10
RA Damper Position	-	6.50 V
Min OA Damper Position	-	3.50 V
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	ES5

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.59"
Fan Suction SP	-	-1.14"
Fan Discharge SP	-	0.45"
Total ESP	.80"	1.04"
Fan Total SP	-	1.59"

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	CONSTRUCTION FILTERS
Condensate Drain Installed	YES

Completed By: Mark Johnson on 07/03/2025

Notes:
Lines 1 and 3 not safely accessible for amperage reading

Written By: Mark Johnson on 07/03/2025

Unit Data - PHOTO LOG



07/03/2025

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Project:06-30-25 CHIPOTLE #5399 MT PLEASANT, PA

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	KITCHEN	CD1	12"	425	1	597	479	456	107.3
SGRD2	KITCHEN	CD1	12"	425	1	651	526	447	105.2
SGRD3	KITCHEN	ACPSP	165X9	700	5.36	1153	955	729	104.1
SGRD4	KITCHEN	CD2	8"	250	1	208	178	226	90.4
SGRD5	KITCHEN	CD2	8"	250	1	296	241	268	107.2
SGRD6	KITCHEN	CD2	8"	250	1	275	231	259	103.6
SGRD7	KITCHEN	CD2	8"	250	1	163	142	229	91.6
SGRD8	KITCHEN	CD2	8"	150	1	229	183	150	100.0
SGRD9	KITCHEN	CD2	8"	350	1	160	137	379	108.3
SGRD10	KITCHEN	CD2	8"	350	1	690	551	367	104.9
Total				3400		4422	3623	3510	103.24%

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Project: 06-30-25 CHIPOTLE #5399 MT PLEASANT, PA

System/Unit: AHU/RTU



Asset: RTU2

AREA:DINING

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	2223P61833
Model Num	48FC_M12	48FCDM12A3M5A6W4C0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	35x19.5
Num Final Filter 1	-	4
Final Filter Size 1	-	20x20x2

Motor Data		
	Design	Actual
Phase	3	3
Rated Voltage	208	208/230
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	4000	4050
SF RPM	-	1815
RA CFM	3000	3045
OA CFM	1000	1005
RL Voltage	-	205/205/205
RL Amperage	-	5.1/5.1/5.1
SF Rotation	-	CCW
SF System SetPt	-	C20
RA Damper Position	-	5.30 V
Min OA Damper Position	-	4.70 V
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	ES5

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.76"
Fan Suction SP	-	-1.14"
Fan Discharge SP	-	0.38"
Total ESP	.80"	1.14"
Fan Total SP	-	1.52"

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	CONSTRUCTION FILTERS
Condensate Drain Installed	YES

Completed By: Mark Johnson on 07/11/2025

Unit Data - PHOTO LOG



07/03/2025

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Project:06-30-25 CHIPOTLE #5399 MT PLEASANT, PA

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	CD1	12"	400	1	377	350	350	87.5
SGRD2	DINING	CD1	12"	500	1	404	330	330	66.0
SGRD3	DINING	SR1	14"	800	1	808	745	745	93.1
SGRD4	DINING	SR1	14"	700	1	782	712	712	101.7
SGRD5	DINING	SR1	14"	600	1	731	652	652	108.7
SGRD6	DINING	SR1	14"	500	1	750	704	704	140.8
SGRD7	DINING	SR1	14"	450	1	555	507	507	112.7
SGRD8	RESTROOM	CD3	6"	50	1	98	50	50	100.0
Total				4000		4505	4050	4050	101.25%

Asset	Notes	Date	Written By
SGRD1	Individual dining room diffusers not balanced due to time constraint. Not expected to affect comfort as they serve an open space.	07/11/2025	Mark Johnson

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Project: 06-30-25 CHIPOTLE #5399 MT PLEASANT, PA

System/Unit: FAN - Exhaust



Asset: EF1

AREA:HOOD FAN

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DR180HFA	DU180HFA
Serial Num	-	5817167
Type	UPBLAST/CEILING	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TECO WESTINGHOUSE
Frame	-	184T
Horsepower	2	2
Motor Rpm	1240	1165
Phase	3	3
Voltage (rated)	208	230/460
Amperage (rated)	-	7.51/3.76
Service Factor	-	1.15

Test Data		
	Design	Actual
CFM	2550	2610
Fan RPM	-	1062
Fan Rotation	-	CCW
Motor RPM	-	1062
System SetPt	-	54.7 HZ
RL Voltage	-	114 VFD
RL Amperage	-	5.3 VFD
Total ESP	1.450"	0.56"
Fan Inlet SP	-	-0.56"
Fan Discharge SP	-	ATM

Completed By: Mark Johnson on 07/03/2025

Unit Data - PHOTO LOG



07/03/2025

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Project: 06-30-25 CHIPOTLE #5399 MT PLEASANT, PA

System/Unit: FAN - Exhaust



Asset: EF2

AREA:RESTROOM

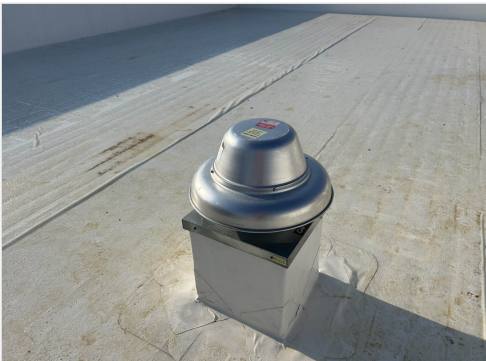
Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DR12HFA	DR12HFA
Serial Num	-	5817167
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	150	148
Fan RPM	-	1117
Fan Rotation	-	CCW
Motor RPM	-	1117
System SetPt	-	57%
RL Voltage	-	119
RL Amperage	-	0.7
Total ESP	.60"	0.24"
Fan Inlet SP	-	-0.24"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Frame	-	N/A
Horsepower	.250	1/4
Motor Rpm	1316	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	2.9
Service Factor	-	N/A

Completed By: Mark Johnson on 07/03/2025

Unit Data - PHOTO LOG



07/03/2025

National TAB

Project:06-30-25 CHIPOTLE #5399 MT PLEASANT, PA

FAN - Exhaust



Diffuser Ret/Exh (GRD)

EF2/RESTROOM

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EGRD1	RESTROOM	ER1	6"	75	1	110	80	80	106.7
EGRD2	RESTROOM	ER1	6"	75	1	95	68	68	90.7
Total				150		205	148	148	98.67%

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Project: 06-30-25 CHIPOTLE #5399 MT PLEASANT, PA

System/Unit: FAN - Supply



Asset: MAU1

AREA:HOOD MUA

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	A1-D.250-15D	A1-D.250-15D
Serial Num	-	5817167
Type	MUA	MUA
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	1300	1378
SF RPM	-	1322
Motor RPM	-	1322
SF System SetPt	-	45.6 HZ
RL Voltage	-	105 VFD
RL Amperage	-	2.1 VFD

Motor Data		
	Design	Actual
Motor MFG	-	TECO WESTINGHOUSE
Frame	-	143T
Horsepower	1	1
Motor Rpm	1562	1740
Phase	3	3
Voltage (rated)	208	230/460
Amperage (rated)	-	2.90/1.45
Service Factor	-	1.15

General	
	Actual
Fan Rotation Correct	YES

Gas Heat		
	Design	Actual
Heater Operates (y/n)	-	YES
Flame Status (pass/fail)	-	PASS
Inlet Air Temp SetPt	-	55
Discharge Air Temp SetPt	-	60
Air Flow Switch SP Actual	-	0.29"

Completed By: Mark Johnson on 07/03/2025

Unit Data - PHOTO LOG



07/03/2025

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Project: 06-30-25 CHIPOTLE #5399 MT PLEASANT, PA

System/Unit: Kitchen Hood Type I



Asset: HD1

AREA: KITCHEN HOOD

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	5424 ND-2-ACPSP-F	5424 ND-2-ACPSP-F
Job / Serial Num	-	5817167
Type	TYPE I - CANOPY	TYPE I CANOPY
Hood length	153"	153"
Hood Width	54"	54"
Supply Plenum Type	-	ACPSP
Supply Plenum Width	9"	9"
Supply Plenum Length	165"	165"

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO FILTER	CAPTRATE SOLO
Filter Size 1	16X16	16X16
Filter Qty 1	9	9
Filter AK factor size 1	1.62	1.62
Filter Total AK Area	14.58	14.58
Filter1 FPM	-	172
Filter2 FPM	-	178
Filter3 FPM	-	179
Filter4 FPM	-	202
Filter5 FPM	-	197
Filter6 FPM	-	194
Filter7 FPM	-	186
Filter8 FPM	-	150
Filter9 FPM	-	158
Filter Ave FPM(corr)	-	179
CFM	2550	2610

Cooking Equipment	
	Actual
Item 1	PLANCHA
Item 2	STOVE
Item 3	RICE COOKER
Item 4	FRYER

Test Data Supply		
	Design	Actual
Total Area	10.31	10.31
Kv factor (Vel)	.81	0.81
Num of Readings	-	9
Reading1 FPM	-	220
Reading2 FPM	-	181
Reading3 FPM	-	149
Reading4 FPM	-	178
Reading5 FPM	-	143
Reading6 FPM	-	164
Reading7 FPM	-	147
Reading8 FPM	-	138
Reading9 FPM	-	172
Ave FPM(corr)	-	165
CFM	1300	1378

Completed By: Mark Johnson on 07/03/2025

Unit Data - PHOTO LOG



07/03/2025

CONDENSER, IF REFRIGERANT PIPING TO
STAINLESS STEEL SHROUD AS SHOWN

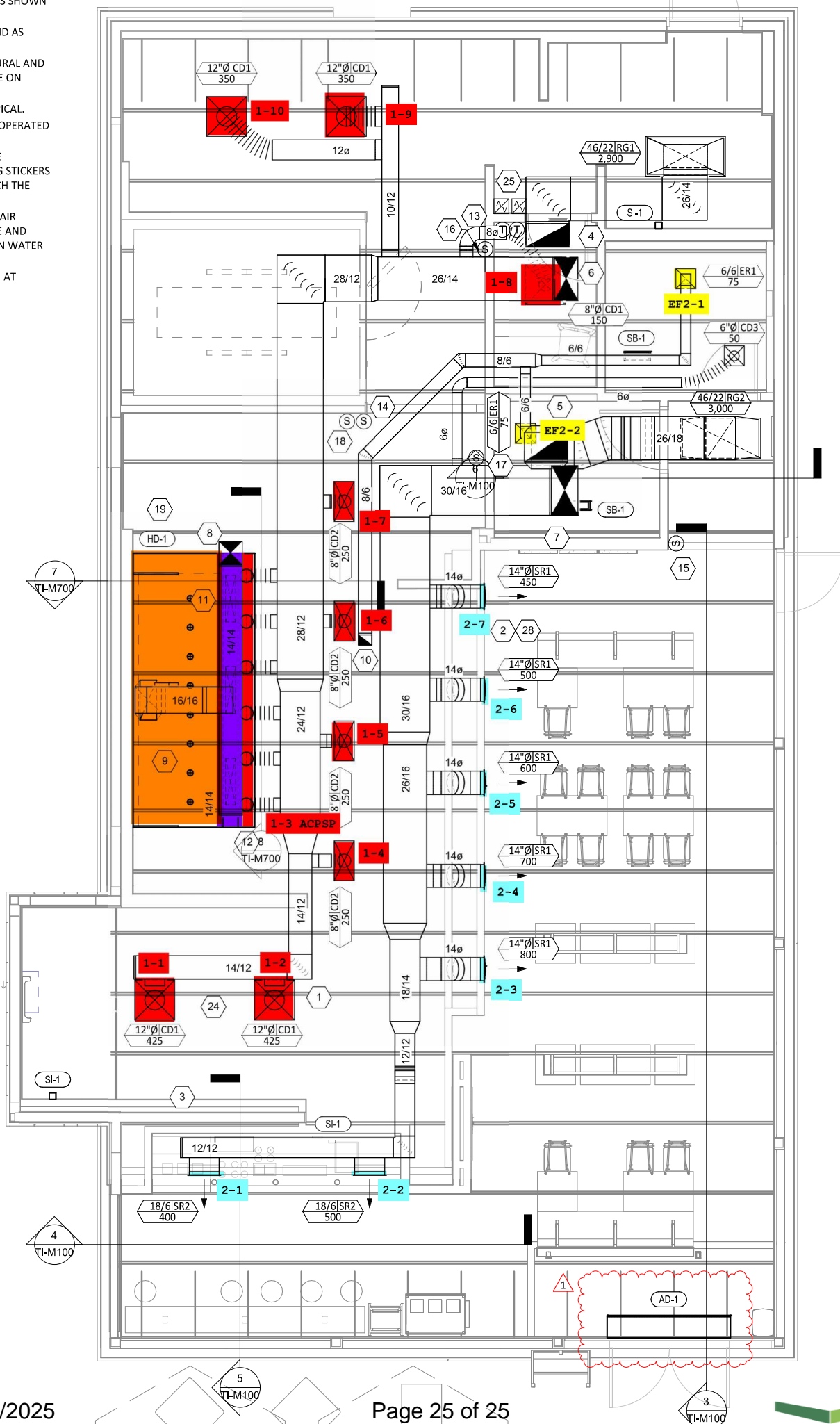
INSTALLATION INSTRUCTIONS AND AS
SHOWN.

DETAILS IN THE ARCHITECTURAL AND
MECHANICAL FURNISHED BY CHIPOTLE ON

1 PER DETAIL 1/TI-M700. TYPICAL.
INDICATOR WITH REMOTE KEY OPERATED
UNIT 60" AFF. TYPICAL.
2 PER DETAIL 6/TI-M700. SEE
SECTION. INSTALL UV WARNING STICKERS
ON GLASS DOOR(S) THROUGH WHICH THE

TERMINATION AND OUTSIDE AIR
EXHAUST COMBUSTION AIR INTAKE AND
FOR MORE INFORMATION ON WATER

ON OPPOSITE SIDE OF ROOM AT
ROOM ROOM.



EXHAUST
ON AIR INTAKE

CO

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STORE NO. 5390

Issue Reco

10.24.24
12.19.24
03.24.25

Revisions:

1	03.24.25
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Drawn:
AJJ
Project No
240105E
Contents:
HVA

