

Report By:

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



Report: TAB Report
Function: Test, Adjust, & Balance
Date: 02/25/2025
Completed By: National TAB

PROJECT
11-25-24 CHIPOTLE #4476 ATHENS, OH

960 E STATE ST

ATHENS , OH 45701

Client

Chipotle Mexican Grill
610 Newport Center Drive, Suite 1100

Newport Beach, CA 92660

National TAB

Project: 11-25-24 CHIPOTLE #4476 ATHENS, OH

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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

- EF-1 fan lean support cable too long.
- RTU-2 Missing dampers.
- RTU-2 unit insulation causing obstruction.



11-25-24 CHIPOTLE #4476 ATHENS, OH

Project Issue Information

Issue Name : EF-1 fan lean support cable too long.
Description : EF-1 fan lean support cable is too long putting all weight on only one cable.
Created By : National TAB **Assigned To :** National TAB - Will Turnbough
Status : Open
Priority : [Medium](#) **Asset Tag :** EF1
Originated Date : 12/04/2024 - Cody Collett - National TAB



11-25-24 CHIPOTLE #4476 ATHENS, OH

Project Issue Information

Issue Name : RTU-2 Missing dampers.
Description : RTU-2 Missing dampers for supply grills 2-1 and 2-2. All other supply grills have incorrect damper installed and will be replaced on 12/06/2024. Diffuser balance not completed.
Created By : National TAB **Assigned To :** National TAB - Will Turnbough
Status : Open
Priority : High **Asset Tag :** RTU2
Originated Date : 12/04/2024 - Cody Collett - National TAB



11-25-24 CHIPOTLE #4476 ATHENS, OH

Project Issue Information

Issue Name : RTU-2 unit insulation causing obstruction.
Description : RTU-2 interior unit insulation on mixed air compartment door was detached from access door on arrival and was covering 1/4 of the filter bank area. Insulation was taped back on to access door by TAB tech as a temporary fix.
Created By : National TAB **Assigned To :** National TAB - Will Turnbough
Status : Open
Priority : Low **Asset Tag :** RTU2
Originated Date : 12/04/2024 - Cody Collett - National TAB

CheckList List

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



11-25-24 CHIPOTLE #4476 ATHENS, OH

CheckList Information

Name : 01: RTU'S/AHU'S **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 11/26/2024 - Brianna Biggs - 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? N/A

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?

Yes

Comment:

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?

N/A

Comment:



11-25-24 CHIPOTLE #4476 ATHENS, OH

CheckList Information

Name : 02: EF'S **Status :** Not Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 11/26/2024 - Brianna Biggs - National TAB

CheckList Item Details

EF's

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

Comment:

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

Comment:

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?

No

Comment:

No backdraft damper installed.

Unit free of noticeable noise and vibration?

Yes

Comment:



11-25-24 CHIPOTLE #4476 ATHENS, OH

CheckList Information

Name : 03: MUA **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 11/26/2024 - Brianna Biggs - 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:



11-25-24 CHIPOTLE #4476 ATHENS, OH

CheckList Information

Name : 04: HOODS **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 11/26/2024 - Brianna Biggs - 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 #4476 ATHENS, OH

CheckList Information

Name : 05: FINAL TESTS **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 11/26/2024 - Brianna Biggs - 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	Yes
---	-----

Comment:

Griddle, Gas stove, Fryer.

List smoke candle type used

Comment:

45 second smoke candle.

HOOD CAPTURE TEST

Smoke test capture % - Perimeter of hood

Comment:

100%

Smoke test capture % - Top of cooking surface

Comment:

100%

WITNESS

Date test was completed

12/04/2024

Comment:

TAB tech name / Firm

Comment:

Cody Collett, National TAB

Site super name / Firm

Comment:

Owner representative name / Firm (if Applicable)

Comment:

Alex (store manager) Chipotle

BUILDING PRESSURE

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:

yes

National TAB

Project: 11-25-24 CHIPOTLE #4476 ATHENS, OH

System/Unit: AHU/RTU



Asset: RTU1

AREA: KITCHEN

Unit Data		
	Design	Actual
MFG	YORK	YORK
Serial Num	-	N2B3469407
Model Num	ZJ120	ZJ120N18R2B
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	20.5X29"
Num Final Filter 1	-	4
Final Filter Size 1	-	20X24X2

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR RELIANCE
Frame	-	56HZ
Horsepower	-	3
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	208	208-230
Rated Amperage	-	8.3-8.2

Drive Data	
	Actual
Motor Sheave Size	5"
Motor Bore Size	3/4"
Motor Sheave SetPt	Fully closed
Fan Sheave Size	7.5"
Fan Sheave Bore	1"
Belt CL Distance	25"
Num of Belts	1
Belt Size	A54
Belt Alignment	Vertical

Test Data		
	Design	Actual
SF CFM	3500	3327
SF RPM	-	NA
RA CFM	3000	2791
OA CFM	500	536
RL Voltage	-	213
RL Amperage	-	7.7
SF Rotation	-	CW
SF System SetPt	-	100% VFD & Pully
RA Damper Position	-	88%
Min OA Damper Position	-	12%
Min OA Damper Type	-	OPPOSED BLADE
OA Enthalpy Setpt	-	27B/#

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.64"
Fan Suction SP	-	-0.90"
Fan Discharge SP	-	0.96"
Total ESP	0.8"	1.6"
Fan Total SP	-	1.86"

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

Completed By: Cody Collett on 12/04/2024

Notes:
Fan RPM not safe to measure due to location.
Fan speed set to max (60HZ on VFD and fully closed motor sheave setpoint)

Written By: Cody Collett on 12/04/2024

National TAB

Project: 11-25-24 CHIPOTLE #4476 ATHENS, OH

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"	475	1	418	459	448	94.3
SGRD2	KITCHEN	CD1	12"	475	1	398	442	452	95.2
SGRD3	SERVING	CD3	8"	250	1	168	204	226	90.4
SGRD4	SERVING	CD3	8"	250	1	45	55	235	94.0
SGRD5	SERVING	CD3	8"	250	1	156	174	229	91.6
SGRD6	SERVING	CD3	8"	250	1	167	199	231	92.4
SGRD7	KITCHEN HOOD	ACPSP	165X6	696	5.3625	874	1018	654	94.0
SGRD8	BOH	CD1	10"	350	1	276	297	333	95.1
SGRD9	BOH	CD1	10"	350	1	290	344	370	105.7
SGRD10	OFFICE	CD1	8"	150	1	193	219	149	99.3
Total				3496		2985	3411	3327	95.17%

Completed By: Cody Collett on 12/04/2024

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Project: 11-25-24 CHIPOTLE #4476 ATHENS, OH

System/Unit: AHU/RTU



Asset: RTU2

AREA:DINING

Unit Data		
	Design	Actual
MFG	YORK	YORK
Serial Num	-	N2F3701608
Model Num	ZJ120	ZJ120N244R2B
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	29"X20.5"
Num Final Filter 1	-	4
Final Filter Size 1	-	20X24X2

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR RELIANCE
Frame	-	56HZ
Horsepower	-	3
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	208	208-230
Rated Amperage	-	8.3-8.2

Drive Data	
	Actual
Motor Sheave Size	5"
Motor Bore Size	3/4"
Motor Sheave SetPt	1 TURN OUT
Fan Sheave Size	7.5"
Fan Sheave Bore	1"
Belt CL Distance	25"
Num of Belts	1
Belt Size	A54
Belt Alignment	VERTICAL

Test Data		
	Design	Actual
SF CFM	4000	4057
SF RPM	-	NA
RA CFM	3000	2938
OA CFM	1000	1061
RL Voltage	-	212
RL Amperage	-	7.8
SF Rotation	-	CW
SF System SetPt	-	60HZ VFD 1 turn out for motor pully
RA Damper Position	-	83%
Min OA Damper Position	-	17%
Min OA Damper Type	-	OPPOSED BLADE
OA Enthalpy Setpt	-	27B/#

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.85"
Fan Suction SP	-	-1.10"
Fan Discharge SP	-	0.78"
Total ESP	0.8"	1.95"
Fan Total SP	-	1.88"

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

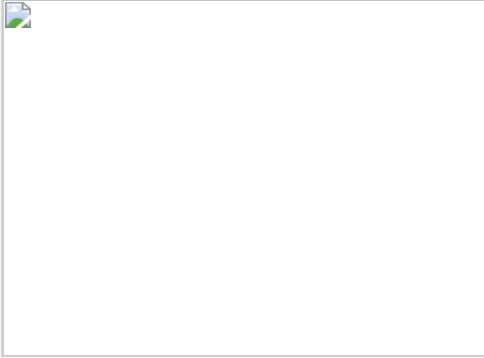
Completed By: Cody Collett on 12/04/2024

Notes:

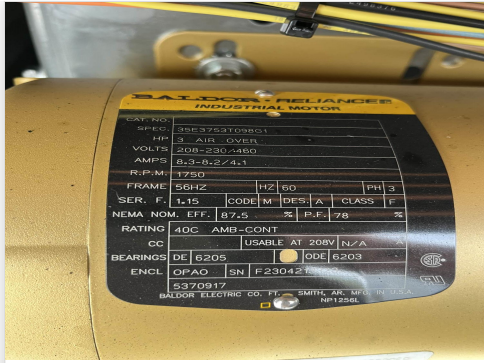
Fan speed set to 60HZ VFD and 1 turn out for motor pully.
Fan RPM not safe to measure due to location.

Written By: Cody Collett on 12/04/2024

Unit Data - PHOTO LOG



12/04/2024



12/04/2024



12/04/2024

National TAB

Project: 11-25-24 CHIPOTLE #4476 ATHENS, OH

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	18/6	400	0.63	389	407	407	101.8
SGRD2	DINING	SR2	18/6	500	0.63	352	342	342	68.4
SGRD3	ORDERING	SR1	14"	800	1	677	742	742	92.8
SGRD4	ORDERING	SR1	14"	700	1	800	869	869	124.1
SGRD5	ORDERING	SR1	14"	600	1	576	648	648	108.0
SGRD6	ORDERING	SR1	14"	500	1	595	589	589	117.8
SGRD7	ORDERING	SR1	14"	500	1	372	460	460	92.0
Total				4000		3761	4057	4057	101.43%

Completed By: Cody Collett on 12/04/2024

National TAB

Project: 11-25-24 CHIPOTLE #4476 ATHENS, OH

System/Unit: FAN - Exhaust



Asset: EF1

AREA: KITCHEN

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU180HFA	DU180HFA
Serial Num	-	6376552
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	2550	2478
Fan RPM	1231	NA
Fan Rotation	-	CCW
Motor RPM	-	NA
System SetPt	-	54HZ
RL Voltage	-	129
RL Amperage	-	4.6
Total ESP	1.450"	0.84"
Fan Inlet SP	-	ATM
Fan Discharge SP	-	-0.84"

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	182/4T
Horsepower	2	2
Motor Rpm	-	1170
Phase	3	3
Voltage (rated)	208	208
Amperage (rated)	-	7.13
Service Factor	-	1.15

Completed By: Cody Collett on 12/04/2024

Unit Data - PHOTO LOG



12/04/2024



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National TAB

Project: 11-25-24 CHIPOTLE #4476 ATHENS, OH

System/Unit: FAN - Exhaust



Asset: EF2

AREA:RESTROOMS

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DR12HFA	DR12HFA
Serial Num	-	6376552
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	150	160
Fan RPM	1304	889
Fan Rotation	-	CCW
Motor RPM	-	889
System SetPt	-	48%
RL Voltage	-	123
RL Amperage	-	.35
Total ESP	0.600"	0.15"
Fan Inlet SP	-	-0.15"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Frame	-	NL
Horsepower	0.250	0.25
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	2.9
Service Factor	-	NL

Completed By: Cody Collett on 12/04/2024

Unit Data - PHOTO LOG



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National TAB

Project: 11-25-24 CHIPOTLE #4476 ATHENS, OH

FAN - Exhaust



Diffuser Ret/Exh (GRD)

EF2/RESTROOMS

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EGRD1	RESTROOM	ER1	6/6	75	1	128	128	82	109.3
EGRD2	RESTROOM	ER1	6/6	75	1	179	179	78	104.0
Total				150		307	307	160	106.67%

Completed By: Cody Collett on 12/04/2024



National TAB

Project: 11-25-24 CHIPOTLE #4476 ATHENS, OH

System/Unit: FAN - Supply

Asset: MUA1

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	A1-D.250-15D	A1-D.250-15D
Serial Num	-	6376552
Type	MUA	MUA
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TECO WESTINGHOUSE
Frame	-	143T
Horsepower	1	1
Motor Rpm	-	1740
Phase	3	3
Voltage (rated)	208	230/460
Amperage (rated)	-	2.9/1.45
Service Factor	-	1.15

Gas Heat		
	Design	Actual
Heater Operates (y/n)	-	YES
Flame Status (pass/fail)	-	YES
Inlet Air Temp SetPt	-	55
Discharge Air Temp SetPt	-	65
Air Flow Switch SP Actual	-	0.33"

Test Data		
	Design	Actual
CFM	1300	1378
SF RPM	1555	NA
Motor RPM	-	NA
SF System SetPt	-	56HZ
RL Voltage	-	159
RL Amperage	-	2.5

General	
	Actual
Fan Rotation Correct	YES

Completed By: Cody Collett on 12/04/2024

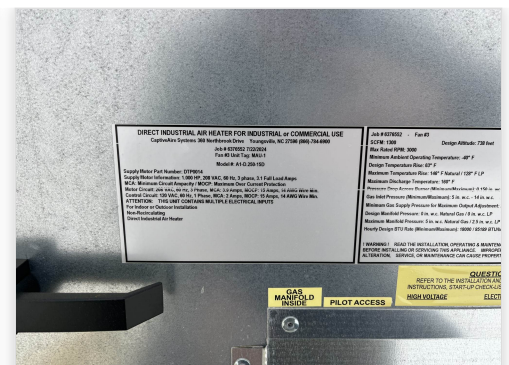
Unit Data - PHOTO LOG



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National TAB

Project: 11-25-24 CHIPOTLE #4476 ATHENS, OH

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	-	6376552
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	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	-	134
Filter2 FPM	-	153
Filter3 FPM	-	173
Filter4 FPM	-	208
Filter5 FPM	-	194
Filter6 FPM	-	195
Filter7 FPM	-	174
Filter8 FPM	-	154
Filter9 FPM	-	147
Filter Ave FPM(corr)	-	170
CFM	2550	2478

Cooking Equipment	
	Actual
Item 1	GRIDDLE
Item 2	GAS STOVETOP
Item 3	RICE COOKER
Item 4	FRYER

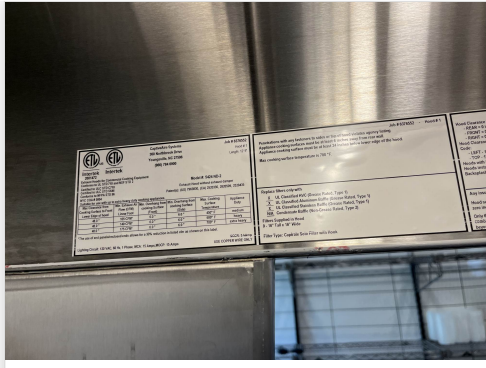
Test Data Supply		
	Design	Actual
Total Area	10.31	10.31
Kv factor (Vel)	0.81	0.81
Num of Readings	-	9
Reading1 FPM	-	137
Reading2 FPM	-	113
Reading3 FPM	-	156
Reading4 FPM	-	198
Reading5 FPM	-	182
Reading6 FPM	-	186
Reading7 FPM	-	161
Reading8 FPM	-	169
Reading9 FPM	-	184
Ave FPM(corr)	-	165
CFM	1300	1378

Completed By: Cody Collett on 12/04/2024

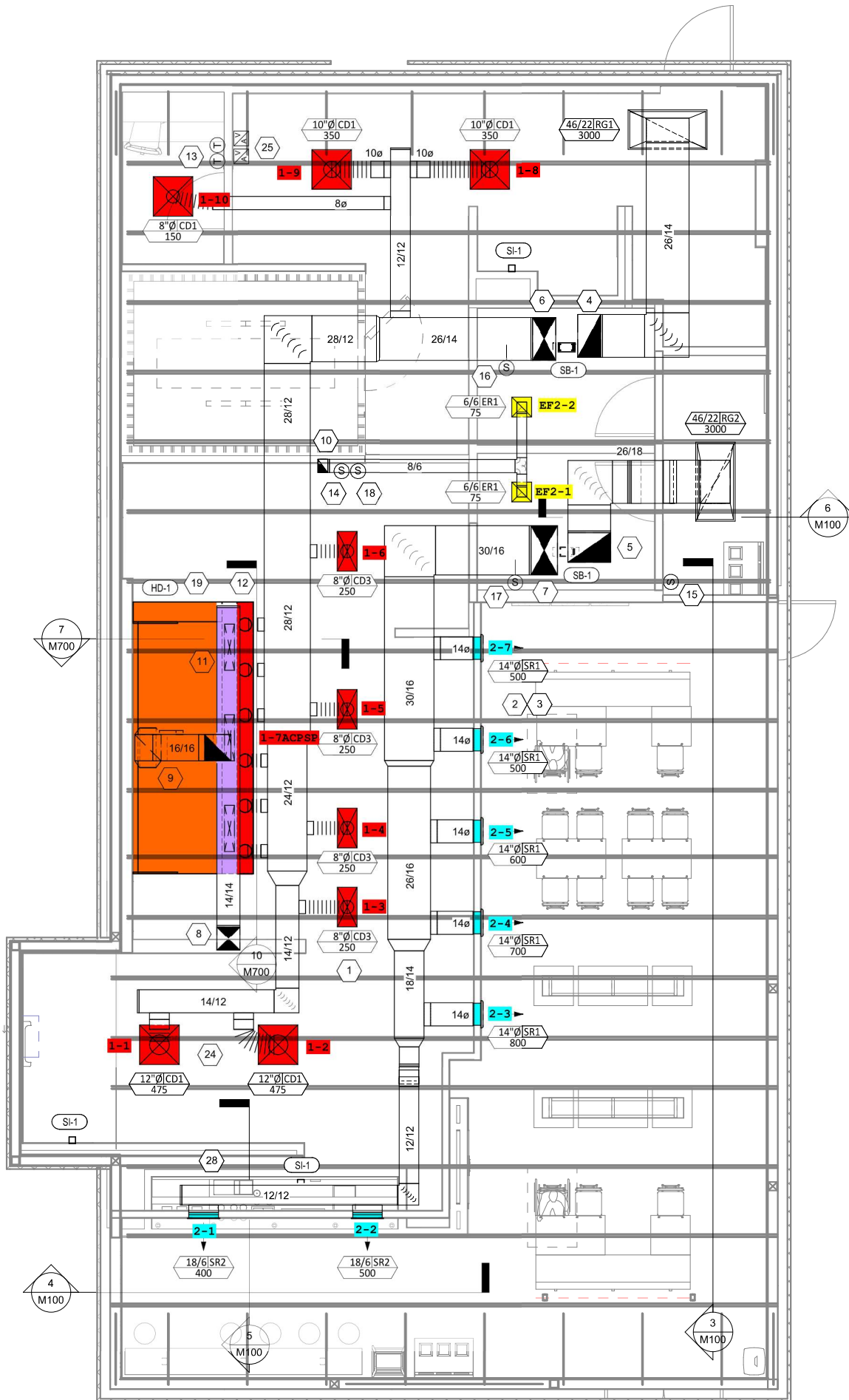
Unit Data - PHOTO LOG



12/04/2024



12/04/2024



Date: 2/25/2025



HVAC FLOOR PLAN
 1/4" = 1'-0" Page 29 of 29

