Report By:

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

Report: TAB REPORT

Function: Test, Adjust, & Balance

Date: 08/04/2025

Completed By: National TAB

PROJECT

08-04-25 CHIPOTLE #5250 WASUSAU, WI

225407 RIB MOUNTAIN DR

WAUSAU, WI 54401

Client

Chipotle Mexican Grill

610 Newport Center Drive, Suite 1100

Newport Beach, CA 92660

National TAB

Project: 08-04-25 CHIPOTLE #5250 WASUSAU, WI

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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 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.

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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	3500	3538	3000	3017	500	521	14.3%	14.7%						
RTU-2	DINING	4000	4146	3000	3179	1000	967	25.0%	23.3%						
MUA-1	HOOD MUA									1300	1349				
EF-1	HOOD FAN											2550	2561		
EF-2	RESTROOMS													150	158
TOTALS		7500	7684	6000	6196	1500	1488			1300	1349	2550	2561	150	158

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2800	2837
TOTAL EXHAUST	2700	2719
NET AIRFLOW	100	118

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H20)
FRONT	0.002
SIDE	0.003
REAR	0.003
AVERAGE	**0.0027**

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
- 05: FINAL TESTS

08-04-25 CHIPOTLE #5250 WASUSAU, WI

CheckList Information

Name :	01: RTU'S/AHU'S	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	05/06/2025 - Nicole Seever - National TAB		
Completed Date :	08/04/2025 - Michael McDonnell - 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 ouside 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:

ES5

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?	No

Comment:

Valves were turned off during TAB. Notified MC and GC.

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Unit free of noticeable noise and vibration	Yes

Comment:

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

Comment:

08-04-25 CHIPOTLE #5250 WASUSAU, WI

CheckList Information

Name :	02: EF'S	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	05/06/2025 - Nicole Seever - National TAB		
Completed Date :	08/04/2025 - Michael McDonnell - 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?	Yes
Comment: Initially installed at top of duct as pictures. MC corrected while TAB was onsite.	
Unit free of noticeable noise and vibration?	Yes
Comment:	

Notes/Comments :

GREASE DUCT NOT WRAPPED IN FIREWRAP/INSULATION AT TIME IF TAB; NOTIFIED GC/MC

Date :08/04/2025

08-04-25 CHIPOTLE #5250 WASUSAU, WI

CheckList Information

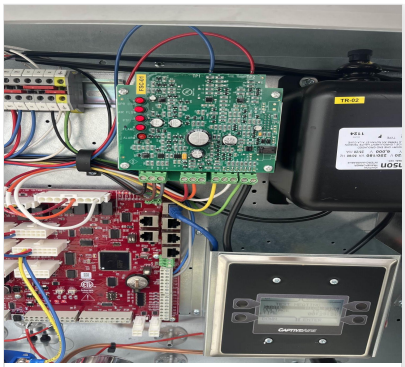
Name :	03: MUA	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	05/06/2025 - Nicole Seever - National TAB		
Completed Date :	08/04/2025 - Michael McDonnell - National TAB		

CheckList Item Details

MUA

Rotation is correct?	Yes
Comment:	

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



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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:	

08-04-25 CHIPOTLE #5250 WASUSAU, WI

CheckList Information

Name :	04: HOODS	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	05/06/2025 - Nicole Seever - National TAB		
Completed Date :	08/04/2025 - Michael McDonnell - 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:	
Panels installed as specified.	

08-04-25 CHIPOTLE #5250 WASUSAU, WI

CheckList Information

Name :	05: FINAL TESTS	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	05/06/2025 - Nicole Seever - National TAB		
Completed Date :	08/04/2025 - Michael McDonnell - 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:	
None	
List smoke candle type used	
Comment:	
second smoke emitter	

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	08/04/2025

Comment:

TAB tech name / Firm

Comment:

Michael McDonnell / National TAB

Site super name / Firm

Comment:

DJ Doherty / TW-CHICAGO

Owner representative name / Firm (if Applicable)

Comment:

na

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:

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Project: 08-04-25 CHIPOTLE #5250 WASUSAU, WI

System/Unit: AHU/RTU

Asset: RTU1 AREA:KITCHEN

Unit Data		
	Design	**Actual**
MFG	CARRIER	CARRIER
Serial Num	-	0424P63051
Model Num	48FC-M12	48FCFN12D3
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**
Motor MFG	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	12.6

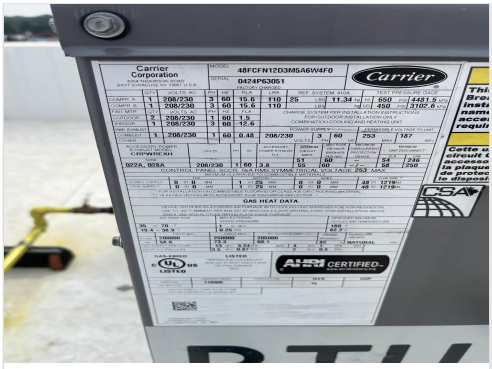
Test Data		
	Design	**Actual**
SF CFM	3500	3538
SF RPM	-	1767
RA CFM	3000	3017
OA CFM	500	521
RL Voltage	-	213/213/213
RL Amperage	-	4.8/5.0/4.8
SF Rotation	-	CORRECT
SF System SetPt	-	7.65 VDC
RA Damper Position	-	MECHANICALLY LINKED
Min OA Damper Position	-	3.20VDC (15%)
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	ES5

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.82"
Fan Suction SP	-	-1.12"
Fan Discharge SP	-	0.43"
Total ESP	.80"	1.25"
Fan Total SP	-	1.55"

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	THROW-AWAY FILTERS INSTALLED
Condensate Drain Installed	YES

Completed By: Michael McDonnell on 08/04/2025

Unit Data - PHOTO LOG



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Project:08-04-25 CHIPOTLE #5250 WASUSAU, WI

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"	375	1.0	353	380	380	101.3
SGRD2	KITCHEN	CD1	12"	375	1.0	349	387	387	103.2
SGRD3	KITCHEN	CD1	8	150	1.0	256	149	149	99.3
SGRD4	KITCHEN	CD3	8"	250	1.0	274	239	239	95.6
SGRD5	KITCHEN	CD3	8"	250	1.0	193	228	228	91.2
SGRD6	KITCHEN	CD3	8"	250	1.0	231	248	248	99.2
SGRD7	KITCHEN	CD3	8"	250	1.0	235	245	245	98.0
SGRD8	KITCHEN	CD3	14"	450	1.0	288	437	437	97.1
SGRD9	KITCHEN	CD3	14"	450	1.0	484	476	476	105.8
SGRD10	HOOD AC	ACPSP	165X6	700	5.23	1040	749	749	107.0
Total				3500		3703	3538	3538	101.09%

Completed By: Michael McDonnell on 08/04/2025

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Project: 08-04-25 CHIPOTLE #5250 WASUSAU, WI

System/Unit: AHU/RTU

Asset: RTU2 AREA:DINING

Unit Data		
	Design	**Actual**
MFG	CARRIER	CARRIER
Serial Num	-	0524P63466
Model Num	48FC-M12	48FCFN12D3
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**
Motor MFG	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	12.6

Test Data		
	Design	**Actual**
SF CFM	4000	4146
SF RPM	-	1686
RA CFM	3000	3179
OA CFM	1000	967
RL Voltage	-	213/213/213
RL Amperage	-	4.3/4.5/4.5
SF Rotation	-	CORRECT
SF System SetPt	-	7.1 VDC
RA Damper Position	-	MECHANICALLY LINKED
Min OA Damper Position	-	5.15VDC (39%)
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	ES5

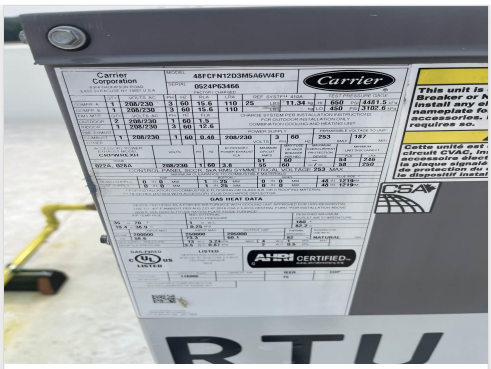
Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.74"
Fan Suction SP	-	-1.06"
Fan Discharge SP	-	0.42".
Total ESP	.80"	1.16"
Fan Total SP	-	1.48"

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	THROW-AWAY FILTERS INSTALLED
Condensate Drain Installed	YES

Completed By: Michael McDonnell on 08/04/2025

Unit Data - PHOTO LOG

08/04/2025



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National TAB

Project:08-04-25 CHIPOTLE #5250 WASUSAU, WI

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	CD4	6"	50	1.0	54	55	55	110.0
SGRD2	DINING	SR1	14"	450	1.07	598	444	444	98.7
SGRD3	DINING	SR1	14"	500	1.07	653	514	514	102.8
SGRD4	DINING	SR1	14"	600	1.07	649	624	624	104.0
SGRD5	DINING	SR1	14"	700	1.07	727	726	726	103.7
SGRD6	DINING	SR1	14"	800	1.07	717	817	817	102.1
SGRD7	DINING	SR2	18"	500	0.65	458	529	529	105.8
SGRD8	DINING	SR2	18"	400	0.65	505	437	437	109.3
Total				4000		4361	4146	4146	103.65%

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Project: 08-04-25 CHIPOTLE #5250 WASUSAU, WI

System/Unit: FAN - Exhaust

Asset: EF1 AREA:HOOD FAN

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU180HFA	DU180HFA
Serial Num	-	6820702
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TECO WESTINGHOUSE
Frame	-	184T
Horsepower	2	2.0
Motor Rpm	-	1170
Phase	3	3
Voltage (rated)	208	230
Amperage (rated)	-	6.0
Service Factor	-	1.15

Test Data		
	Design	**Actual**
CFM	2550	2561
Fan RPM	-	1026
Fan Rotation	-	CCW, CORRECT
Motor RPM	-	1026
System SetPt	-	52.6 HZ
RL Voltage	-	105 @ VFD
RL Amperage	-	4.9 @ VFD
Total ESP	1.450"	0.96"
Fan Inlet SP	-	-0.96"
Fan Discharge SP	-	ATM

Completed By: Michael McDonnell on 08/04/2025

Unit Data - PHOTO LOG

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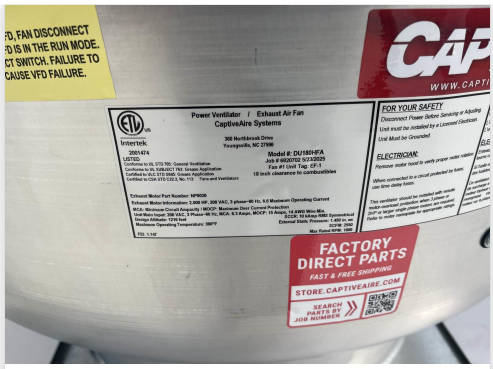

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Project: 08-04-25 CHIPOTLE #5250 WASUSAU, WI

System/Unit: FAN - Exhaust

Asset: EF2 AREA:RESTROOMS

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DR12HFA	DR12HFA
Serial Num	-	6820702
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TELCO GREEN
Horsepower	.250	0.250
Motor Rpm	1304	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	2.9
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	150	158
Fan RPM	-	1053
Fan Rotation	-	CCW, CORRECT
Motor RPM	-	1053
System SetPt	-	54%
RL Voltage	-	118
RL Amperage	-	0.60
Total ESP	.60"	0.26"
Fan Inlet SP	-	-0.26"
Fan Discharge SP	-	ATM

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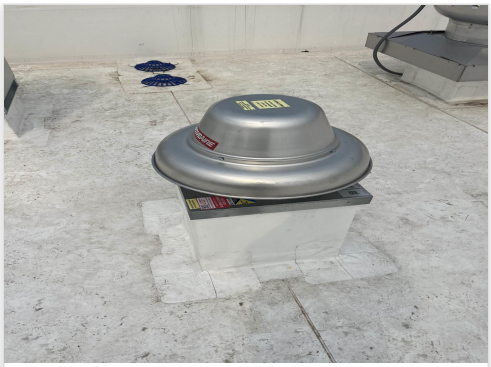
Unit Data - PHOTO LOG

08/04/2025



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Project:08-04-25 CHIPOTLE #5250 WASUSAU, WI

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"	75	1.0	48	111	76	101.3
EGRD2	RESTROOM	ER1	6"	75	1.0	56	119	82	109.3
Total				150		104	230	158	105.33%

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Project: 08-04-25 CHIPOTLE #5250 WASUSAU, WI

System/Unit: FAN - Supply

Asset: MUA1 AREA:HOOD MUA

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	A1-D.250-15D	A1-D.250-15D
Serial Num	-	6820702
Type	MUA	MUA
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TECO WESTINGHOUSE
Frame	-	143T
Horsepower	1	1.0
Motor Rpm	-	1740
Phase	3	3
Voltage (rated)	208	230
Amperage (rated)	-	2.90
Service Factor	-	1.15

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	-	0.34"

Test Data		
	Design	**Actual**
CFM	1300	1349
SF RPM	-	1291
Motor RPM	-	1291
SF System SetPt	-	44.5 HZ
RL Voltage	-	100@ VFD
RL Amperage	-	2.1 @ VFD
Total ESP	-	0.42"
Fan Discharge SP	-	0.42"

General	
	Actual
Fan Rotation Correct	YES

Completed By: Michael McDonnell on 08/04/2025

Unit Data - PHOTO LOG

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Project: 08-04-25 CHIPOTLE #5250 WASUSAU, WI

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	-	6820702
Type	TYPE I - CANOPY	TYPE I- CANOPY
Hood length	153"	153"
Hood Width	54"	54"
Supply Plenum Type	-	ACPSP
Supply Plenum Width	-	9"
Supply Plenum Length	-	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	-	174
Filter2 FPM	-	166
Filter3 FPM	-	201
Filter4 FPM	-	195
Filter5 FPM	-	187
Filter6 FPM	-	161
Filter7 FPM	-	167
Filter8 FPM	-	163
Filter Ave FPM(corr)	-	175.67
CFM	2550	2561

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

Test Data Supply		
	Design	**Actual**
Total Area	10.31	10.31
Kv factor (Vel)	0.81	0.81
Num of Readings	-	9
Reading1 FPM	-	162
Reading2 FPM	-	167
Reading3 FPM	-	146
Reading4 FPM	-	123
Reading5 FPM	-	158
Reading6 FPM	-	149
Reading7 FPM	-	147
Reading8 FPM	-	190
Reading9 FPM	-	212
Ave FPM(corr)	-	130.86
CFM	1300	1349

Completed By: Michael McDonnell on 08/04/2025

Unit Data - PHOTO LOG

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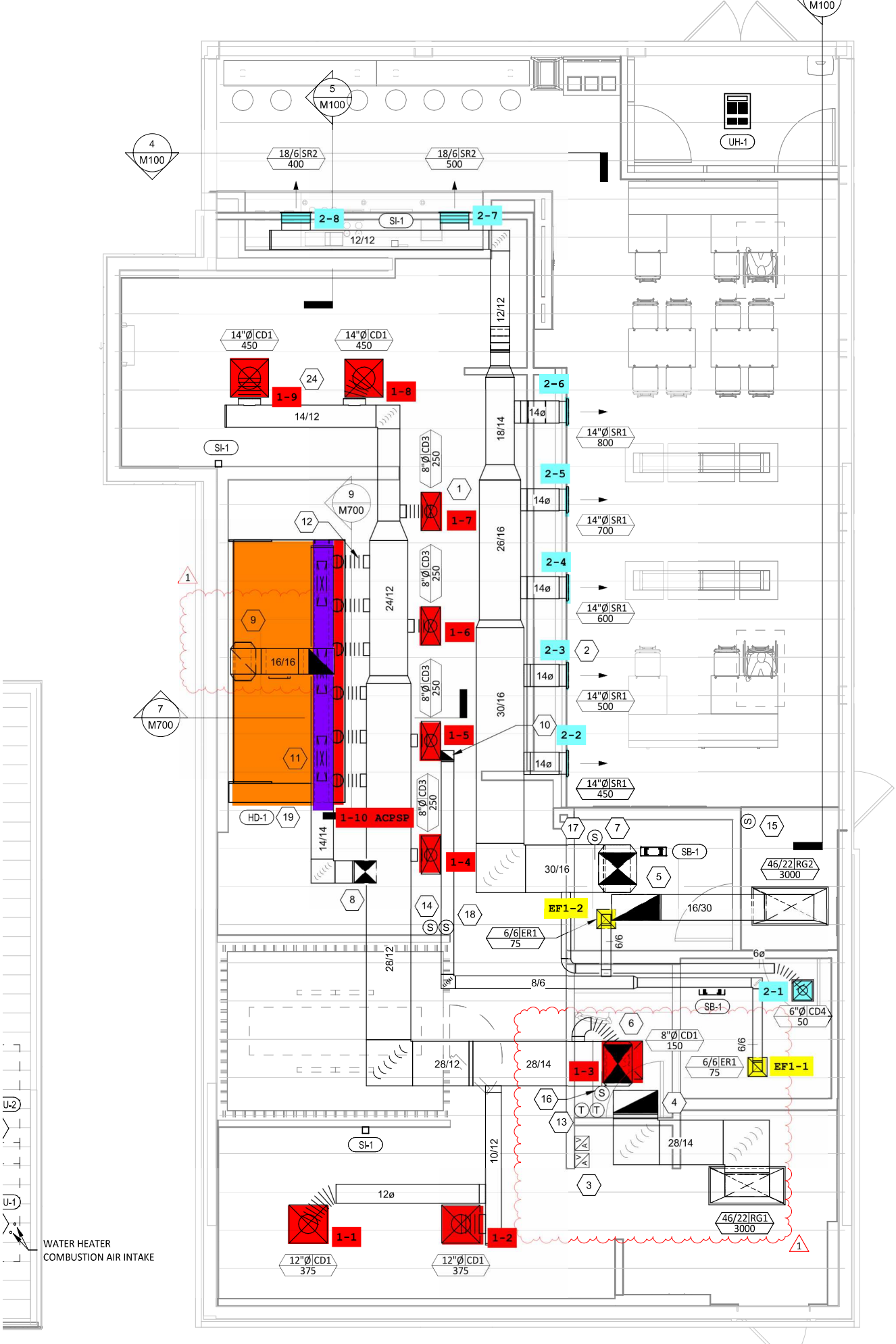

1 M100 **HVAC FLOOR PLAN**

1/4" = 1'-0"