

Report By:

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Report: INSPECTION TAB REPORT

Function: Test, Adjust, & Balance

Date: 03/25/2025

Completed By: National TAB

PROJECT

03-24-25 CHIPOTLE #5326 GREENFIELD, WI

8515 SURA LANE

GREENFIELD, WI 53228

Client

Chipotle Mexican Grill

610 Newport Center Drive, Suite 1100

Newport Beach, CA 92660

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Project: 03-24-25 CHIPOTLE #5326 GREENFIELD, 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 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.

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Project: 03-24-25 CHIPOTLE #5326 GREENFIELD, WI

System/Unit: AHU/RTU



Asset: RTU1

AREA: KITCHEN

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	0424P63021
Model Num	48FC_N12	48FCFN12
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
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	12.6

Test Data		
	Design	Actual
SF CFM	3500	3521
SF RPM	-	1913
RA CFM	3000	2981
OA CFM	500	540
RL Voltage	-	212/211/211
RL Amperage	-	4.9/5.0/4.8
SF Rotation	-	CORRECT
SF System SetPt	-	7.7 VDC
RA Damper Position	-	MECHANICALLY LINKED
Min OA Damper Position	-	3.7V (21%)
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	ES5

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.64"
Fan Suction SP	-	-1.02"
Fan Discharge SP	-	0.656"
Total ESP	.8 "	1.296"
Fan Total SP	-	1.676"

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

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Unit Data - PHOTO LOG



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Project:03-24-25 CHIPOTLE #5326 GREENFIELD, 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
RTU1-SGRD1	BACK	CD1	12"	375	1	112	351	367	97.9
RTU1-SGRD2	BACK	CD1	12"	375	1	491	475	376	100.3
RTU1-SGRD3	BACK	CD1	8"	150	1	196	204	150	100.0
RTU1-SGRD4	KITCHEN	CD2	8"	250	1	214	229	234	93.6
RTU1-SGRD5	KITCHEN	CD2	8"	250	1	250	258	267	106.8
RTU1-SGRD6	KITCHEN	CD2	8"	250	1	229	239	228	91.2
RTU1-SGRD7	KITCHEN	CD2	8"	250	1	195	239	256	102.4
RTU1-SGRD8	KITCHEN	CD1	12"	450	1	481	514	427	94.9
RTU1-SGRD9	KITCHEN	CD1	12"	450	1	471	493	475	105.6
RTU1-SGRD10	HOOD	ACPSP	165X6	700	5.23	831	935	741	105.9
Total				3500		3470	3937	3521	100.6%

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Asset	Notes	Date	Written By
RTU1-SGRD8	[1] WINGNUT STRIPPED, NEEDS NEW HARDWARE TO SECURE DAMPER.	03/25/2025	Michael McDonnell

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Project: 03-24-25 CHIPOTLE #5326 GREENFIELD, WI

System/Unit: AHU/RTU



Asset: RTU2

AREA:DINING

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	0424963007
Model Num	48FC_N12	48FCFN12
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	3	NL
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	12.6

Test Data		
	Design	Actual
SF CFM	4000	3996
SF RPM	-	1904
RA CFM	3000	2935
OA CFM	1000	1061
RL Voltage	-	212/212/212
RL Amperage	-	5.1/5.4/5.3
SF Rotation	-	CORRECT
SF System SetPt	-	8.1 VDC
RA Damper Position	-	MECHANICALLY LINKED
Min OA Damper Position	-	4.9 V (35%)
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	ES5

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.72"
Fan Suction SP	-	-1.19"
Fan Discharge SP	-	0.67"
Total ESP	.8	1.39"
Fan Total SP	-	1.86"

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

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Notes:

[1] NOT FULLY ALIGNED ON CURB. SOME LEAKAGE ON ROOF.

[2] TURBO DIFFUSERS 2-3 THRU 2-7 NOT INSTALLED. UNABLE TO BALANCE INDIVIDUAL DIFFUSERS AS A RESULT. NOT ANTICIPATED TO CAUSE ISSUE AS UNIT SERVES OPEN AREA.

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Unit Data - PHOTO LOG



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Project:03-24-25 CHIPOTLE #5326 GREENFIELD, 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
RTU2-SGRD1	DINING	SR2	18"	400	1	355	406	386	96.5
RTU2-SGRD2	DINING	SR2	18"	500	1	256	309	293	58.6
RTU2-SGRD3	DINING	SR1	14"	800	1	823	909	863	107.9
RTU2-SGRD4	DINING	SR1	14"	700	1	712	817	776	110.9
RTU2-SGRD5	DINING	SR1	14"	600	1	461	574	545	90.8
RTU2-SGRD6	DINING	SR1	14"	500	1	577	699	664	132.8
RTU2-SGRD7	DINING	SR1	14"	450	1	388	442	420	93.3
RTU2-SGRD8	BACK	CD3	6"	50	1	44	52	49	98.0
Total				4000		3616	4208	3996	99.9%

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Project: 03-24-25 CHIPOTLE #5326 GREENFIELD, WI

System/Unit: FAN - Exhaust



Asset: EF1

AREA: KITCHEN

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	DU180HFA	DU180HFA
Serial Num	-	7067009
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	182/4T
Horsepower	2	2.0
Motor Rpm	-	1170
Phase	3	3
Voltage (rated)	208	230
Amperage (rated)	-	6.44
Service Factor	-	1.25

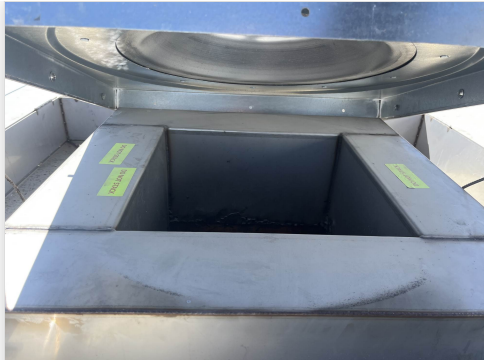
Test Data		
	Design	Actual
CFM	2550	2639
Fan RPM	-	998
Fan Rotation	-	CCW, CORRECT
Motor RPM	-	998
System SetPt	-	51.2 HZ
RL Voltage	-	100 @VFD
RL Amperage	-	5.3 @VFD
Total ESP	1.2"	1.13"
Fan Inlet SP	-	-1.13"
Fan Discharge SP	-	

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Unit Data - PHOTO LOG



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Project: 03-24-25 CHIPOTLE #5326 GREENFIELD, WI

System/Unit: FAN - Exhaust



Asset: EF2

AREA:RESTROOM

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	DR12HFA	DR12HFA
Serial Num	-	7067009
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	150	150
Fan RPM	-	1057
Fan Rotation	-	CCW, CORRECT
Motor RPM	-	1057
System SetPt	-	56%
RL Voltage	-	121
RL Amperage	-	0.6
Total ESP	.6"	0.31"
Fan Inlet SP	-	-0.31"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Horsepower	0.25	0.25
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	2.9

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Unit Data - PHOTO LOG



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Project:03-24-25 CHIPOTLE #5326 GREENFIELD, WI

FAN - Exhaust



Diffuser Ret/Exh (GRD)

EF2/RESTROOM

Asset										
Asset Name	Model Num	MFG	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EF2-EGRD1	NA	NA	ER1	6"	75	1.0	104	86	78	104.0
EF2-EGRD2	NA	NA	ER1	6"	75	1.0	70	82	72	96.0
Total					150		174	168	150	100%

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Project: 03-24-25 CHIPOTLE #5326 GREENFIELD, WI

System/Unit: FAN - Supply



Asset: MAU1

AREA:HOOD

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	A1-D.250-15D	A1-D.250-15D
Serial Num	-	7067009
Type	MAU	MAU
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TECO WESTINGHOUSE
Frame	-	NL
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	-	0.321"

Test Data		
	Design	Actual
CFM	1300	1253
SF RPM	-	1285
Motor RPM	-	1285
SF System SetPt	-	44.3 HZ
RL Voltage	-	101 @ VFD
RL Amperage	-	2.1 @ VFD
Total ESP	-	0.64"
Fan Discharge SP	-	0.64"

General	
	Actual
Fan Rotation Correct	YES

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Unit Data - PHOTO LOG



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Project: 03-24-25 CHIPOTLE #5326 GREENFIELD, WI

System/Unit: Kitchen Hood Type I



Asset: HD1

AREA: COOK LINE

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	5424 ND-2-ACPSP-F	5424 ND-2-ACPSP-F
Job / Serial Num	-	7067009
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 Supply		
	Design	Actual
Total Area	10.31	10.31
Kv factor (Vel)	0.81	0.81
Num of Readings	-	9
Reading1 FPM	-	154
Reading2 FPM	-	142
Reading3 FPM	-	137
Reading4 FPM	-	145
Reading5 FPM	-	149
Reading6 FPM	-	144
Reading7 FPM	-	148
Reading8 FPM	-	156
Reading9 FPM	-	176
Ave FPM(corr)	-	121.5
CFM	1300	1253

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	-	167
Filter2 FPM	-	165
Filter3 FPM	-	181
Filter4 FPM	-	200
Filter5 FPM	-	202
Filter6 FPM	-	199
Filter7 FPM	-	183
Filter8 FPM	-	177
Filter9 FPM	-	160
Filter Ave FPM(corr)	-	181
CFM	2550	2639

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

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Unit Data - PHOTO LOG



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