

Report By:

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



Report: TAB

Function: Test, Adjust, & Balance

Date: 10/07/2025

Completed By: National TAB

PROJECT

**10-06-25 CHIPOTLE #5669 SPRINGFIELD, MO
(SUNSHINE ST)**

2456 E SUNSHINE ST

SPRINGFIELD, MO 65804

Client

Chipotle Mexican Grill
610 Newport Center Drive, Suite 1100

Newport Beach, CA 92660

National TAB

Project: 10-06-25 CHIPOTLE #5669 SPRINGFIELD, MO (SUNSHINE ST)

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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.

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	4000	4056	3250	3292	750	764	18.8%	18.8%						
RTU-2	DINING	4000	4078	3250	3336	750	742	18.8%	18.2%						
MUA-1	KITCHEN HD									1300	1214				
EF-1	KITCHEN HD											2550	2618		
EF-2	RESTROOM													150	143
TOTALS		8000	8134	6500	6628	1500	1506			1300	1214	2550	2618	150	143

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2800	2720
TOTAL EXHAUST	2700	2761
NET AIRFLOW	100	-41

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H2O)
FRONT	-0.0033
SIDE	-0.0016
REAR	-0.0013
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
- 05: FINAL TESTS
- PLAN REVIEW



10-06-25 CHIPOTLE #5669 SPRINGFIELD, MO (SUNSHINE ST)

CheckList Information

Name : 01: RTU'S/AHU'S **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 08/29/2025 - Natasha Louw - 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)	N/A
--	-----

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:

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:



10-06-25 CHIPOTLE #5669 SPRINGFIELD, MO (SUNSHINE ST)

CheckList Information

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

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 08/29/2025 - Natasha Louw - 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?

N/A

Comment:

-COULD NOT ACCESS TO VERIFY.

Unit free of noticeable noise and vibration?

Yes

Comment:



10-06-25 CHIPOTLE #5669 SPRINGFIELD, MO (SUNSHINE ST)

CheckList Information

Name : 04: HOODS **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 08/29/2025 - Natasha Louw - 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:

Comment:

100% SMOKE CAPTURE

Smoke test capture % - Top of cooking surface

Comment:

100% SMOKE CAPTURE

WITNESS

Date test was completed

10/07/2025

Comment:

TAB tech name / Firm

Comment:

KALEN KEMP / NATIONAL TAB

Site super name / Firm

Comment:

RANDY RENTROP / STANSELL CONSTRUCTION

Owner representative name / Firm (if Applicable)

Comment:

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:

Mechanical drawings are uploaded

Yes

Comment:

If job is a Revive, Pre-design, or Remodel. Check if we have an old report on sharepoint or the old FaciliBuild and upload to files section.

N/A

Comment:

GRD Layout is uploaded

Yes

Comment:

Jurisdiction Requirements

Is job in Orlando, FL metro area or Phoenix metro area? If yes, a smoke detector checklist needs to be created for each RTU or AHU

No

Comment:

Is job in Broward County, FL? If so, is Broward County on the permit (Ask the GC)? If Broward County is on the permit, then we CANNOT perform the balance.

No

Comment:



National TAB

Project: 10-06-25 CHIPOTLE #5669 SPRINGFIELD, MO
(SUNSHINE ST)

System/Unit: AHU/RTU

Asset: RTU1

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	0424P63060
Model Num	48FCFN12	48FCFN12D3M5A6W4F0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	19.5X35"
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2"
Num Final Filter 2	-	
Final Filter Size 2	-	

Motor Data		
	Design	Actual
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	NA
Motor Rpm	-	NA
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	4056
SF RPM	-	NA
RA CFM	3250	3292
OA CFM	750	764
RL Voltage	-	213
RL Amperage	-	5.94
SF Rotation	-	COUNTERCLOCKWISE
SF System SetPt	-	8.44 VDC
RA Damper Position	-	NA
Min OA Damper Position	-	0.5" OPEN (3.75 V)
Min OA Damper Type	-	ECON
OA Enthalpy Setpt	-	ES3

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.70"
Fan Suction SP	-	-1.17"
Fan Discharge SP	-	0.20"
Total ESP	0.8"	0.90"
Fan Total SP	-	1.37"

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

Completed By: Kalen Kemp on 10/07/2025

Notes:

-DISCHARGE PRESSURE TAKEN IN SUPPLY DUCT AFTER ELBOW.

Written By: Kalen Kemp on 10/07/2025

Unit Data - PHOTO LOG



10/07/2025



National TAB

Project: 10-06-25 CHIPOTLE #5669 SPRINGFIELD, MO
(SUNSHINE ST)

System/Unit: AHU/RTU

Asset: RTU2

AREA:DINING

Unit Data		
	Design	Actual
MFG	CARRIER	CARRIER
Serial Num	-	0524P63626
Model Num	48FCFN12	48FCFN12D3M5A6W4F0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	19X34.5"
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2"
Num Final Filter 2	-	
Final Filter Size 2	-	

Motor Data		
	Design	Actual
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	NA
Motor Rpm	-	NA
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	4078
SF RPM	-	NA
RA CFM	3250	3336
OA CFM	750	742
RL Voltage	-	212
RL Amperage	-	5.31
SF Rotation	-	COUNTERCLOCKWISE
SF System SetPt	-	8.17 VDC
RA Damper Position	-	NA
Min OA Damper Position	-	0.5" OPEN
Min OA Damper Type	-	ECON
OA Enthalpy Setpt	-	ES3

Performance Data		
	Design	Actual
MA Plenum SP	-	-1.06"
Fan Suction SP	-	-1.42"
Fan Discharge SP	-	0.64"
Total ESP	0.8"	1.70"
Fan Total SP	-	2.06"

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

Completed By: Kalen Kemp on 10/07/2025

Notes:
-DISCONNECT SWITCH IS BROKEN. POWER BYPASSED FOR UNIT TO RUN.

Written By: Kalen Kemp on 10/07/2025

Unit Data - PHOTO LOG



10/07/2025



National TAB

Project: 10-06-25 CHIPOTLE #5669 SPRINGFIELD, MO
(SUNSHINE ST)

System/Unit: FAN - Exhaust

Asset: EF1

AREA:KITCHEN HD

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	ACCUREX
Model Num	DU180HFA	XCUE-160-20-VG-1-26-G
Serial Num	-	27306911 25H
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	145T
Horsepower	2	2.0
Motor Rpm	-	4000
Phase	3	1
Voltage (rated)	208	230
Amperage (rated)	-	4.8
Service Factor	-	1.0

Test Data		
	Design	Actual
CFM	2550	2618
Fan RPM	-	3080
Fan Rotation	-	COUNTERCLOCKWISE
Motor RPM	-	3080
System SetPt	-	7.7 VDC
RL Voltage	-	211
RL Amperage	-	5.64
Total ESP	1.20"	1.04"
Fan Inlet SP	-	-1.04"
Fan Discharge SP	-	ATM

Completed By: Kalen Kemp on 10/07/2025

Unit Data - PHOTO LOG



10/07/2025



National TAB

Project: 10-06-25 CHIPOTLE #5669 SPRINGFIELD, MO
(SUNSHINE ST)

System/Unit: FAN - Exhaust

Asset: EF2

AREA:RESTROOMS

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	ACCUREX
Model Num	DR12HFA	XRED-097-4-VG-1-19-X
Serial Num	-	27306910 25G
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	BROAD-OCEAN
Frame	-	NL
Horsepower	0.25	0.25
Motor Rpm	-	1750
Phase	1	1
Voltage (rated)	120	115/208
Amperage (rated)	-	2.85
Service Factor	-	1.25

Test Data		
	Design	Actual
CFM	150	143
Fan RPM	-	NA
Fan Rotation	-	COUNTERCLOCKWISE
Motor RPM	-	NA
System SetPt	-	10.0 VDC
RL Voltage	-	124
RL Amperage	-	1.67
Total ESP	0.60"	0.16"
Fan Inlet SP	-	0.16"
Fan Discharge SP	-	ATM

Completed By: Kalen Kemp on 10/07/2025

Notes:

-COULD NOT ACCESS FAN INLET. SP READING FROM DUCT DROP.

Written By: Kalen Kemp on 10/20/2025

Unit Data - PHOTO LOG



10/07/2025



National TAB

Project: 10-06-25 CHIPOTLE #5669 SPRINGFIELD, MO
(SUNSHINE ST)

System/Unit: FAN - Supply

Asset: MAU1

AREA: KITCHEN HD

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	ACCUREX
Model Num	A1-15D-MPU	XDGX-P115-H05-VG
Serial Num	-	27310820
Type	MAU	MAU
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	1.0
Motor Rpm	-	NL
Phase	3	1
Voltage (rated)	208	115
Amperage (rated)	-	11.5
Service Factor	-	NL

Gas Heat		
	Design	Actual
Heater Operates (y/n)	-	YES
Flame Status (pass/fail)	-	PASS
Inlet Air Temp SetPt	55	55
Discharge Air Temp SetPt	60	60
Air Flow Switch SP Actual	-	0.47"

Test Data		
	Design	Actual
CFM	1300	1214
SF RPM	-	NA
Motor RPM	-	NA
SF System SetPt	-	6.9 VDC
RL Voltage	-	121
RL Amperage	-	3.30
Total ESP	-	0.47"
Fan Discharge SP	-	0.47"

General	
	Actual
Fan Rotation Correct	YES

Completed By: Kalen Kemp on 10/07/2025

Unit Data - PHOTO LOG



10/07/2025



National TAB

Project: 10-06-25 CHIPOTLE #5669 SPRINGFIELD, MO
(SUNSHINE ST)

System/Unit: Kitchen Hood Type I

Asset: HD1

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	ACCUREX
Model Num	5424 ND-2-ACPSP-F	CXEW-153.00-S
Job / Serial Num	-	27314241
Type	TYPE 1 CANOPY	TYPE I - CANOPY
Hood length	153"	153"
Hood Width	51"	54"
Supply Plenum Type	-	ACPSP
Supply Plenum Width	9"	14"
Supply Plenum Length	165"	

Test Data Exhaust		
	Design	Actual
Filter Type	-	X-TRACTOR
Filter Size 1	-	20X20"
Filter Size 2	-	16X20"
Filter Qty 1	-	6
Filter Qty 2	-	2
Filter AK factor size 1	-	3.00
Filters AK factor size 2	-	2.00
Filter Total AK Area	-	22.00
Filter1 FPM	-	72
Filter2 FPM	-	113
Filter3 FPM	-	130
Filter4 FPM	-	146
Filter5 FPM	-	151
Filter6 FPM	-	131
Filter7 FPM	-	113
Filter8 FPM	-	100
Filter Ave FPM(corr)	-	120
CFM	2550	2640

Cooking Equipment	
	Actual
Item 1	GRIDDLE
Item 2	RANGE
Item 3	RICE COOKER
Item 4	FRYER
Item 5	

Test Data Supply		
	Design	Actual
Total Area	10.31	16.04
Kv factor (Vel)	0.81	0.89
Num of Readings	-	12
Reading1 FPM	-	68
Reading2 FPM	-	91
Reading3 FPM	-	65
Reading4 FPM	-	98
Reading5 FPM	-	79
Reading6 FPM	-	92
Reading7 FPM	-	108
Reading8 FPM	-	77
Reading9 FPM	-	82
Reading10 FPM	-	113
Reading11 FPM	-	94
Reading12 FPM	-	53
Ave FPM(corr)	-	85
CFM	1300	1214

Completed By: Kalen Kemp on 10/07/2025

Unit Data - PHOTO LOG



10/07/2025

