

Report By:

National TAB



Report: TAB Report

Function: Test, Adjust, & Balance

Date: 06/24/2025

Completed By: National TAB

PROJECT

06-09-25 CHIPOTLE #5491 WINCHESTER, KY

550 BULLION BLVD

WINCHESTER, KY 40391

Client

Chipotle Mexican Grill

610 Newport Center Drive, Suite 1100

Newport Beach, CA 92660

National TAB

Project: 06-09-25 CHIPOTLE #5491 WINCHESTER, KY

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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

- RTU-1 leakage / low on flow
- RTU-1&2 Unit filters dirty



06-09-25 CHIPOTLE #5491 WINCHESTER, KY

Project Issue Information

Issue Name : RTU-1 leakage / low on flow
Description : RTU-1 is 85% of design with the motor operating at FLA. There is a leak at the base of the RTU near the discharge panel that needs to be sealed on the roof. Recommend re-testing once sealed
Created By : National TAB **Assigned To :** National TAB - Dan Hertenstein
Status : Open
Priority : **Urgent** **Asset Tag :**
Originated Date : 06/10/2025 - Aaron Cosby - National TAB

Project Issue File Details

- 1. [Open](#) video_934041311.mp4
06/10/2025



06/10/2025



06-09-25 CHIPOTLE #5491 WINCHESTER, KY

Project Issue Information

Issue Name : RTU-1&2 Unit filters dirty
Description : The RTU final filters are dirty and in need of replacement. MERV 8 or greater recommended.
Created By : National TAB **Assigned To :** National TAB - Dan Hertenstein
Status : Open
Priority : Low **Asset Tag :**
Originated Date : 06/24/2025 - Aaron Cosby - National TAB

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	2971	3000	2465	500	506	14.3%	17.0%						
RTU-2	DINING	4000	3829	3000	2830	1000	999	25.0%	26.1%						
MUA-1	HOOD MUA									1300	1402				
EF-1	HOOD FAN											2550	2609		
EF-2	RESTROOM													150	161
TOTALS		7500	6800	6000	5295	1500	1505			1300	1402	2550	2609	150	161

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2800	2907
TOTAL EXHAUST	2700	2770
NET AIRFLOW	100	137

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H2O)
FRONT	0.0094
SIDE	0.0086
REAR	
AVERAGE	0.009

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



06-09-25 CHIPOTLE #5491 WINCHESTER, KY

CheckList Information

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

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 05/02/2025 - Nicole Seever - National TAB

Completed Date : 06/10/2025 - Aaron Cosby - 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?

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?

Yes

Comment:



06-09-25 CHIPOTLE #5491 WINCHESTER, KY

CheckList Information

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

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 05/02/2025 - Nicole Seever - National TAB

Completed Date : 06/10/2025 - Aaron Cosby - National TAB

CheckList Item Details

EF's

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

Comment:

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

Comment:

DD

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:



06-09-25 CHIPOTLE #5491 WINCHESTER, KY

CheckList Information

Name : 03: MUA **Status :** Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 05/02/2025 - Nicole Seever - National TAB

Completed Date : 06/10/2025 - Aaron Cosby - 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:



06-09-25 CHIPOTLE #5491 WINCHESTER, KY

CheckList Information

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

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 05/02/2025 - Nicole Seever - National TAB

Completed Date : 06/10/2025 - Aaron Cosby - 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:



06-09-25 CHIPOTLE #5491 WINCHESTER, KY

CheckList Information

Name : 05: FINAL TESTS **Status :** Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 05/02/2025 - Nicole Seever - National TAB

Completed Date : 06/24/2025 - Aaron Cosby - 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 N/A

Comment:

List smoke candle type used

Comment:

45 SEC

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

06/10/2025

Comment:

TAB tech name / Firm

Comment:

Aaron Cosby

Site super name / Firm

Comment:

Jo Johnson

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:

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Project: 06-09-25 CHIPOTLE #5491 WINCHESTER, KY

System/Unit: AHU/RTU



Asset: RTU1

AREA: KITCHEN

Unit Data		
	Design	Actual
MFG	YORK	YORK
Serial Num	-	N2D5589653
Model Num	ZJ120	ZJ120
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	29X20"
Num Final Filter 1	-	4
Final Filter Size 1	-	20X24X2"

Test Data		
	Design	Actual
SF CFM	3500	2971
SF RPM	-	1750
RA CFM	3000	2465
OA CFM	500	506
RL Voltage	-	210V AVG
RL Amperage	-	8.2A AVG
SF Rotation	-	CW
SF System SetPt	-	57HZ
Min OA Damper Position	-	7%

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	56HZ
Horsepower	-	3
Motor Rpm	-	1750
Phase	2	3
Rated Voltage	208	208
Rated Amperage	-	8.3

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.52"
Fan Suction SP	-	-0.87"
Fan Discharge SP	-	0.60"
Total ESP	0.80"	1.12"
Fan Total SP	-	1.47"

Drive Data	
	Actual
Motor Sheave Size	5"
Motor Bore Size	0.75"
Motor Sheave SetPt	3 TURNS OUT
Fan Sheave Size	7"
Fan Sheave Bore	1"
Belt CL Distance	18.5"
Num of Belts	1
Belt Size	A54
Belt Alignment	GOOD

General	
	Actual
Fan Rotation Correct	GOOD
Unit Filters Clean	NO
Condensate Drain Installed	YES

Completed By: Aaron Cosby on 06/10/2025

Notes:
Unit was slowed down to 57hz as it was running above FLA

Written By: Aaron Cosby on 06/10/2025

Unit Data - PHOTO LOG



06/10/2025

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Project:06-09-25 CHIPOTLE #5491 WINCHESTER, KY

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	BOH	CD1	12"	375	1	445	445	317	84.5
SGRD2	BOH	CD1	12"	375	1	456	456	358	95.5
SGRD3	BOH	CD1	8"	150	1	189	189	142	94.7
SGRD4	KITCHEN	CD2	8"	250	1	158	158	171	68.4
SGRD5	KITCHEN	CD2	8"	250	1	154	154	182	72.8
SGRD6	KITCHEN	CD2	8"	250	1	150	150	191	76.4
SGRD7	KITCHEN	CD2	8"	250	1	157	157	182	72.8
SGRD8	KITCHEN	CD1	12"	450	1	480	480	381	84.7
SGRD9	KITCHEN	CD1	12"	450	1	451	451	377	83.8
SGRD10	KITCHEN	ACPSP	8"	696	1	670	670	670	96.3
Total				3496		3310	3310	2971	84.98%

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Project: 06-09-25 CHIPOTLE #5491 WINCHESTER, KY

System/Unit: AHU/RTU



Asset: RTU2

AREA:DINING

Unit Data		
	Design	Actual
MFG	YORK	YORK
Serial Num	-	N2C5570789
Model Num	ZJ120	ZJ120
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	29X20"
Num Final Filter 1	-	4
Final Filter Size 1	-	20X24X2"

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	184T
Horsepower	-	5
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	13.5

Drive Data	
	Actual
Motor Sheave Size	5.5"
Motor Bore Size	1.25"
Motor Sheave SetPt	3 TURNS OUT
Fan Sheave Size	8"
Fan Sheave Bore	1"
Belt CL Distance	19"
Num of Belts	1
Belt Size	BX56
Belt Alignment	GOOD

Test Data		
	Design	Actual
SF CFM	4000	3829
SF RPM	-	991
RA CFM	3000	2830
OA CFM	1000	999
RL Voltage	-	210
RL Amperage	-	8.5
SF Rotation	-	CW
SF System SetPt	-	34HZ
Min OA Damper Position	-	20%

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.20"
Fan Suction SP	-	-0.44"
Fan Discharge SP	-	0.35"
Total ESP	0.80"	0.55"
Fan Total SP	-	0.79"

General	
	Actual
Fan Rotation Correct	GOOD
Unit Filters Clean	NO
Condensate Drain Installed	YES

Completed By: Aaron Cosby on 06/10/2025

Unit Data - PHOTO LOG



06/10/2025

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Project:06-09-25 CHIPOTLE #5491 WINCHESTER, KY

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	RESTROOMS	CD3	6"	50	1	67	52	46	92.0
SGRD2	DINING	SR1	14"	450	1	659	356	453	100.7
SGRD3	DINING	SR1	14"	500	1	844	456	535	107.0
SGRD4	DINING	SR1	14"	600	1	957	517	557	92.8
SGRD5	DINING	SR1	14"	700	1	1372	741	639	91.3
SGRD6	DINING	SR1	14"	800	1	1451	784	742	92.8
SGRD7	DINING	SR2	18X6"	500	1	689	429	474	94.8
SGRD8	DINING	SR2	18X6"	400	1	598	398	383	95.8
Total				4000		6637	3733	3829	95.72%

Completed By: Aaron Cosby on 06/09/2025

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Project: 06-09-25 CHIPOTLE #5491 WINCHESTER, KY

System/Unit: FAN - Exhaust



Asset: EF1

AREA:HOOD #1

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU180HFA	DU180HFA
Serial Num	-	7196239
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	2550	2609
Fan RPM	-	NA
Fan Rotation	-	CCW
Motor RPM	-	NA
RL Voltage	-	209
RL Amperage	-	4.9
Total ESP	1.45"	NA
Fan Inlet SP	-	NA
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	2	2
Motor Rpm	-	1800
Phase	3	3
Voltage (rated)	208	208
Amperage (rated)	-	7.3

Completed By: Aaron Cosby on 06/10/2025

Unit Data - PHOTO LOG



06/10/2025

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Project: 06-09-25 CHIPOTLE #5491 WINCHESTER, KY

System/Unit: FAN - Exhaust



Asset: EF2

AREA:RESTROOMS

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DR12HFA	DR12HFA
Serial Num	-	7196239
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	150	161
Fan RPM	-	1302
Fan Rotation	-	CCW
System SetPt	-	66P
RL Voltage	-	115
RL Amperage	-	1.0
Fan Inlet SP	-	-0.34
Fan Discharge SP	-	ATM

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

Completed By: Aaron Cosby on 06/10/2025

Unit Data - PHOTO LOG



06/10/2025

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Project:06-09-25 CHIPOTLE #5491 WINCHESTER, KY

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	RESTROOMS	ER1	6X6"	75	1	115	115	82	109.3
EGRD2	RESTROOMS	ER1	6X6"	75	1	71	71	79	105.3
Total				150		186	186	161	107.33%

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Project: 06-09-25 CHIPOTLE #5491 WINCHESTER, KY

System/Unit: FAN - Supply



Asset: MAU1

AREA:HOOD #1

Unit Data		
	Design	Actual
MFG	CAPTIVEAURE	CAPTIVEAURE
Model Num	A1-D.250-15D	A1-D.250-15D
Serial Num	-	7196239
Type	MAU	MAU
Configuration	HORIZONTAL	HORIZONTAL

Motor Data		
	Design	Actual
Motor MFG	-	TEC WESTINGHOUSE
Frame	-	143T
Horsepower	-	1
Motor Rpm	-	2400
Phase	3	3
Voltage (rated)	208	208
Amperage (rated)	-	3.1
Service Factor	-	1.15

Gas Heat		
	Design	Actual
Heater Operates (y/n)	-	Y
Flame Status (pass/fail)	-	PASS
Inlet Air Temp SetPt	55	55
Discharge Air Temp SetPt	60	60

Test Data		
	Design	Actual
CFM	1300	1402
SF RPM	-	1690
SF System SetPt	-	60HZ
RL Voltage	-	208
RL Amperage	-	2.7
Fan Discharge SP	-	0.09

General	
	Actual
Fan Rotation Correct	GOOD

Completed By: Aaron Cosby on 06/10/2025

Unit Data - PHOTO LOG



06/10/2025

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Project: 06-09-25 CHIPOTLE #5491 WINCHESTER, KY

System/Unit: Kitchen Hood Type I



Asset: HD1

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	5424 ND-2-ACPSP-F	5424 ND-2-ACPSP-F
Job / Serial Num	-	7196239
Type	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
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	-	166
Filter2 FPM	-	157
Filter3 FPM	-	177
Filter4 FPM	-	186
Filter5 FPM	-	191
Filter6 FPM	-	203
Filter7 FPM	-	180
Filter8 FPM	-	172
Filter9 FPM	-	179
Filter Ave FPM(corr)	-	179
CFM	2550	2609

Cooking Equipment	
	Actual
Item 1	GRILL
Item 2	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	-	179
Reading2 FPM	-	123
Reading3 FPM	-	143
Reading4 FPM	-	175
Reading5 FPM	-	143
Reading6 FPM	-	171
Reading7 FPM	-	184
Reading8 FPM	-	163
Reading9 FPM	-	234
Ave FPM(corr)	-	168
CFM	1300	1402

Completed By: Aaron Cosby on 06/10/2025

Unit Data - PHOTO LOG



06/10/2025

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