Report By:

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

Report: TAB Report

Function: Test, Adjust, & Balance

Date: 12/17/2025

Completed By: National TAB

PROJECT

12-08-25 WHATABURGER #1667 LARGO, FL

10150 ULMRETON ROAD

LARGO, FL 33771

Client

Whataburger Restaurants

300 Concord Plaza Dr

San Antonio, TX 78216

National TAB

Project: 12-08-25 WHATABURGER #1667 LARGO, FL

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Project Summary

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.

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.

Exhaust Fans w/ Registers
The exhaust fan was measured at the grilles to measure the total flow. The fan was then adjusted to bring airflow within tolerance of the engineer's design flow. Each grille was then adjusted to within tolerance of design flow.

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 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

- Economizers Not Operational
- EFs 1, 2 - Conduit Placement
- RTU 1 Alarms
- RTU 2 Alarms
- RTU 4 Alarms
- RTUs - Loose Wires
- RTUs 1, 2 - Filters Dirty

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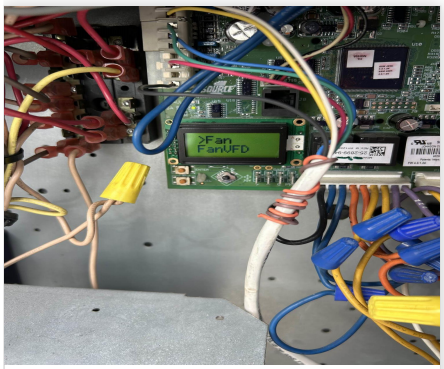
Project Issue Information

Issue Name : Economizers Not Operational

Description : All RTU economizers are not functional. For RTUs 1 and 2, the damper does not respond to setpoint changes. RTUs 3 and 4 do not have economizer setpoints enabled on the controller. All economizers must be functional to complete TAB.

Created By :	National TAB	**Assigned To :**	National TAB - Will Turnbough
Status :	Open		
Priority :	Urgent	**Asset Tag :**	
Originated Date :	12/08/2025 - Mark Johnson - National TAB		

Project Issue File Details



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Project Issue Information

Issue Name : EFs 1, 2 - Conduit Placement

Description : The conduit for both hood exhaust fans is routed around the inside of the fan, with risk of damage from grease over time.

Created By : National TAB

Assigned To : National TAB - Will Turnbough

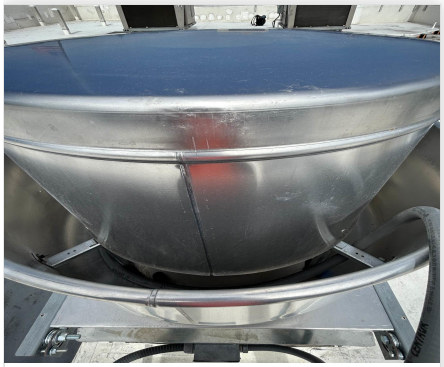
Status : Open

Priority : High

Asset Tag :

Originated Date : 12/12/2025 - Mark Johnson - National TAB

Project Issue File Details



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Project Issue Information

Issue Name :	RTU 1 Alarms		
Description :	RTU 1 is displaying the following alarms: (1) Building Pressure Sensor Failure; (2) Supply Humidity Sensor Failure; (3) Return Air Humidity Sensor Failure; (4) Condenser Coil Temp 1 Sensor Failure; (5) Outdoor Air Quality Sensor Failure. Recommend service.		
Created By :	National TAB	**Assigned To :**	National TAB - Will Turnbough
Status :	Open		
Priority :	High	**Asset Tag :**	
Originated Date :	12/12/2025 - Mark Johnson - National TAB		

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Project Issue Information

Issue Name :	RTU 2 Alarms		
Description :	RTU 2 is displaying the following alarms: (1) Freeze Protect Disabled - Bad Sensor; (2) Evaporator Coil Temp 1 Sensor Failure; (3) Return Air Humidity Sensor Failure. Recommend service.		
Created By :	National TAB	**Assigned To :**	National TAB - Will Turnbough
Status :	Open		
Priority :	High	**Asset Tag :**	
Originated Date :	12/12/2025 - Mark Johnson - National TAB		

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Project Issue Information

Issue Name :	RTU 4 Alarms		
Description :	RTU 4 is displaying the alarm “C1 Shutdown Due to Low Pressure.” Recommend service.		
Created By :	National TAB	**Assigned To :**	National TAB - Will Turnbough
Status :	Open		
Priority :	High	**Asset Tag :**	
Originated Date :	12/12/2025 - Mark Johnson - National TAB		

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Project Issue Information

Issue Name : RTUs - Loose Wires

Description : All RTUs have loose sensor wires inside their controls cabinet. Recommend installation.

Created By : National TAB

Assigned To : National TAB - Will Turnbough

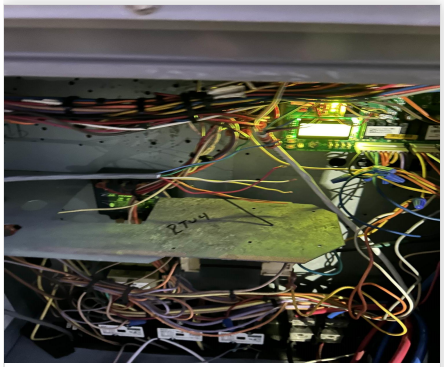
Status : Open

Priority : High

Asset Tag :

Originated Date : 12/12/2025 - Mark Johnson - National TAB

Project Issue File Details



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Project Issue Information

Issue Name : RTUs 1, 2 - Filters Dirty

Description : Final filters are dirty in RTUs 1 and 2 and will need replaced soon.

Created By : National TAB

Assigned To : National TAB - Will Turnbough

Status : Open

Priority : Medium

Asset Tag :

Originated Date : 12/12/2025 - Mark Johnson - National TAB

Project Issue File Details

12/12/2025

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	DINING	3000	3096	2200	2291	800	805	26.7%	26.0%						
RTU-2	DINING	3000	3025	2200	2200	800	825	26.7%	27.3%						
RTU-3	KITCHEN	3600	3659	1080	1097	2520	2562	70.0%	70.0%						
RTU-4	KITCHEN	3600	3615	2520	2489	1080	1126	30.0%	31.1%						
EF-1	KITCHEN HD											1995	2052		
EF-2	KITCHEN HD											1216	1260		
EF-6	RESTROOMS													300	307
TOTALS		13200	13395	8000	8077	5200	5318			0	0	3211	3312	300	307

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	5200	5318
TOTAL EXHAUST	3511	3619
NET AIRFLOW	1689	1699

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H20)
FRONT	
SIDE	
REAR	
AVERAGE	

FINAL CHECKS

ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✓

MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW: ✓

NOTES:

CheckList List

- 01: RTU's
- 02: EF's
- 03: Hoods
- 04: Final Checks

12-08-25 WHATABURGER #1667 LARGO, FL

CheckList Information

Name :	01: RTU's	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	10/21/2025 - Natasha Louw - National TAB		

CheckList Item Details

RTU's/AHU's

Thermostats installed and have power?	Pass
Comment:	
All diffusers and grilles are installed and match design?	Pass
Comment:	
Motors are all operating below the FLA rating?	Pass
Comment:	
Is gas piping installed and valves turned on?	Pass
Comment:	
Unit free of noticeable noise and vibration	Pass
Comment:	
Final outside air damper position is set manually and marked with permanent marker?	Pass
Comment:	
Supply airflow is 0 to +10%?	Pass

Comment:	
Outside airflow is 0 to +10%?	Pass
Comment:	
Return balance dampers are confirmed to be 100% open (if installed)?	
Comment:	
Screenshot of the GRD marked up with supply and return traverse locations for RTU-1 (Add picture here)	
Comment:	
Screenshot of the GRD marked up with supply and return traverse locations for RTU-2 (Add picture here)	
Comment:	
For each unit supply, is the flow hood reading within 10% of the final traverse reading? If not do you feel any major points of leakage	
Comment:	
For each unit return, is the flow hood reading within 10% of the final traverse reading? If not do you feel any major points of leakage	
Comment:	

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CheckList Information

Name :	02: EF's	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	10/21/2025 - Natasha Louw - National TAB		
Completed Date :	12/09/2025 - Mark Johnson - National TAB		

CheckList Item Details

EF's

Rotation is correct?	Pass
Comment:	
Belts are tight?	N/A
Comment:	
Direct drive	
Hinge kit installed installed on hood fan?	Pass
Comment:	
Lean fan back. Is grease duct installation adequate and is duct ran all the way to the base of the fan?	Pass
Comment:	
Flex conduit is long enough so that fan can be completely tilted back?	Pass
Comment:	
There is no major leakage around base of fan?	Pass
Comment:	

Is the motor operating below the motor FLA rating?	Pass
Comment:	
For restroom fan(s) is the back draft damper installed and can it fully open?	Pass
Comment:	
Unit free of noticeable noise and vibration?	Pass
Comment:	
Exhaust airflow is 0 to +10%?	Pass
Comment:	

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CheckList Information

Name :	03: Hoods	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	10/21/2025 - Natasha Louw - National TAB		
Completed Date :	12/09/2025 - Mark Johnson - National TAB		

CheckList Item Details

HOODS

All hood filters installed and accounted for?	Pass
Comment:	
Hoods are wired and have power?	Pass
Comment:	
Hood is free of alarms?	Pass
Comment:	
Hood is free of damage?	Pass
Comment:	
Quarter or full vertical end panels are installed if specified?	N/A
Comment:	

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CheckList Information

Name :	04: Final Checks	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	10/21/2025 - Natasha Louw - National TAB		
Completed Date :	12/12/2025 - Mark Johnson - National TAB		

CheckList Item Details

FINAL CHECKS

Is space free of drafting?	Pass
Comment:	
Is space comfortable in all areas?	Pass
Comment:	
Is the space free of ventilation noise?	Pass
Comment:	

List kitchen equipment turned on for testing

Comment:

None

List smoke candle type used

Comment:

45 sec. smoke candle

HOOD CAPTURE TEST

Smoke test capture % - Perimeter of hood

Comment:

Smoke test capture % - Top of cooking surface

Comment:

100%

WITNESS

Date test was completed	12/09/2025

Comment:

TAB tech name / Firm

Comment:

Mark Johnson / NTi

Site super name / Firm

Comment:

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)

Comment:

Is the building pressure at least +0.02"? If not, do you see any obvious areas of external building that aren't sealed?	Pass

Comment:

National TAB

Project: 12-08-25 WHATABURGER #1667 LARGO, FL

System/Unit: AHU/RTU

Asset: RTU1 AREA:DINING

Unit Data	
	Actual
MFG	JOHNSON CONTROLS
Serial Num	N1C7566653
Model Num	J07ZRE18D2B1PAA1A1
Num OA Filters 1	1
OA Filter Size 1	28.75x20.25
Num Final Filter 1	4
Final Filter Size 1	16x24x2

Motor Data		
	Design	**Actual**
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	-	3
Motor Rpm	-	1725
Phase	-	3
Rated Voltage	-	208-230/460
Rated Amperage	-	9.5-9.2/4.6

Drive Data	
	Actual
Motor Sheave Size	1VM50
Motor Bore Size	7/8”
Motor Sheave SetPt	5.0 TURNS OPEN
Fan Sheave Size	AK61
Fan Sheave Bore	1”
Belt CL Distance	17-7/8”
Num of Belts	1
Belt Size	AX48
Belt Alignment	GOOD

Test Data		
	Design	**Actual**
SF CFM (Traverse)	-	
SF CFM	3000	3096
SF RPM	-	1057
MOTOR RPM	-	1759
RA CFM (Traverse)	-	
RA CFM	2200	2291
OA CFM	800	805
RL Voltage	-	212/211/212
RL Amperage	-	6.4/6.0/6.2
SF System SetPt	-	60 HZ
RA Damper Position	-	MANUAL
Min OA Damper Position	-	MANUAL
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.18”
Fan Suction SP	-	-0.61”
Fan Discharge SP	-	0.57”
Total ESP	-	0.75”
Fan Total SP	-	1.18”

General	
	Actual
Unit free of Damage	NO
Fan Rotation Correct	YES
Unit Filters Clean	HALF LOADED
Condensate Drain Installed	YES

Unit Data - PHOTO LOG

12/08/2025

National TAB

Project:12-08-25 WHATABURGER #1667 LARGO, FL

AHU/RTU

Diffuser Supply (GRD)

RTU1/DINING

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	CUSTOMER SERVICE	ETR		500	1	324	390	509	101.8
SGRD2	DINING	ETR		500	1	413	365	541	108.2
SGRD3	DINING	ETR		300	1	462	424	311	103.7
SGRD4	DINING	ETR		300	1	475	394	301	100.3
SGRD5	DINING	ETR		450	1	774	682	453	100.7
SGRD6	DINING	ETR		450	1	595	510	483	107.3
SGRD7	DINING	ETR		500	1	491	537	498	99.6
Total				3000		3534	3302	3096	103.2%

National TAB

Project: 12-08-25 WHATABURGER #1667 LARGO, FL

System/Unit: AHU/RTU

Asset: RTU2 AREA:DINING

Unit Data	
	Actual
MFG	JOHNSON CONTROLS
Serial Num	N1C7560622
Model Num	J07ZRE18D2B1PAA1A1
Num OA Filters 1	1
OA Filter Size 1	28.75x20.25
Num Final Filter 1	4
Final Filter Size 1	16x24x2

Motor Data		
	Design	**Actual**
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	-	3
Motor Rpm	-	1725
Phase	-	3
Rated Voltage	-	208-230/460
Rated Amperage	-	9.5-9.2/4.6

Drive Data	
	Actual
Motor Sheave Size	1VM50
Motor Bore Size	7/8”
Motor Sheave SetPt	4.0 TURNS OPEN
Fan Sheave Size	AK61
Fan Sheave Bore	1”
Belt CL Distance	17-7/8”
Num of Belts	1
Belt Size	AX48
Belt Alignment	GOOD

Test Data		
	Design	**Actual**
SF CFM (Traverse)	-	
SF CFM	3000	3025
SF RPM	-	1085
MOTOR RPM	-	1757
RA CFM (Traverse)	-	
RA CFM	2200	2200
OA CFM	800	825
RL Voltage	-	212/212/213
RL Amperage	-	6.2/6.0/6.3
SF System SetPt	-	60 HZ
RA Damper Position	-	MANUAL
Min OA Damper Position	-	MANUAL
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.18”
Fan Suction SP	-	-0.59”
Fan Discharge SP	-	0.38”
Total ESP	-	0.56”
Fan Total SP	-	0.97”

General	
	Actual
Unit free of Damage	NO
Fan Rotation Correct	YES
Unit Filters Clean	HALF LOADED
Condensate Drain Installed	YES

Unit Data - PHOTO LOG

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National TAB

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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	ETR		300	1	294	307	298	99.3
SGRD2	DINING	ETR		275	1	394	348	294	106.9
SGRD3	DINING	ETR		300	1	336	320	306	102.0
SGRD4	DINING	ETR		350	1	418	409	337	96.3
SGRD5	DINING	ETR		450	1	676	645	484	107.6
SGRD6	DINING	ETR		450	1	398	396	456	101.3
SGRD7	DINING	ETR		180	1	175	179	198	110.0
SGRD8	HALLWAY	ETR		475	1	361	345	435	91.6
SGRD9	RESTROOM	ETR		110	1	109	114	109	99.1
SGRD10	RESTROOM	ETR		110	1	155	160	108	98.2
Total				3000		3316	3223	3025	100.83%

National TAB

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System/Unit: AHU/RTU

Asset: RTU3 AREA:KITCHEN

Unit Data	
	Actual
MFG	JOHNSON CONTROLS
Serial Num	N1C7560597
Model Num	J10ZFE18D2B1PAA1A2
Num OA Filters 1	1
OA Filter Size 1	28.75x20.5
Num Final Filter 1	4
Final Filter Size 1	20x24x2

Motor Data		
	Design	**Actual**
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	-	3
Motor Rpm	-	1725
Phase	-	3
Rated Voltage	-	208-230/460
Rated Amperage	-	9.5-9.2/4.6

Drive Data	
	Actual
Motor Sheave Size	1VM50
Motor Bore Size	7/8”
Motor Sheave SetPt	2.0 TURNS OPEN
Fan Sheave Size	AK74
Fan Sheave Bore	1”
Belt CL Distance	18-1/2”
Num of Belts	1
Belt Size	AX54
Belt Alignment	GOOD

Test Data		
	Design	**Actual**
SF CFM (Traverse)	-	
SF CFM	3600	3659
SF RPM	-	1009
MOTOR RPM	-	1731
RA CFM (Traverse)	-	
RA CFM	2520	2562
OA CFM	1080	1097
RL Voltage	-	212/212/213
RL Amperage	-	7.6/7.1/7.5
SF System SetPt	-	60 HZ
RA Damper Position	-	MANUAL
Min OA Damper Position	-	MANUAL
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.34”
Fan Suction SP	-	-0.68”
Fan Discharge SP	-	0.36”
Total ESP	-	0.70”
Fan Total SP	-	1.04”

General	
	Actual
Unit free of Damage	NO
Fan Rotation Correct	YES
Unit Filters Clean	YES
Condensate Drain Installed	YES

Unit Data - PHOTO LOG

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National TAB

Project:12-08-25 WHATABURGER #1667 LARGO, FL

AHU/RTU

Diffuser Supply (GRD)

RTU3/KITCHEN

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	KITCHEN	ETR		550	1	555	543	574	104.4
SGRD2	KITCHEN	ETR		550	1	398	474	501	91.1
SGRD3	KITCHEN	ETR		550	1	693	529	559	101.6
SGRD4	KITCHEN	ETR		550	1	340	477	504	91.6
SGRD5	KITCHEN	ETR		550	1	647	568	600	109.1
SGRD6	KITCHEN	ETR		250	1	194	248	262	104.8
SGRD7	KITCHEN	ETR		500	1	617	524	549	109.8
SGRD8	KITCHEN	ETR		100	11	260	104	110	110.0
Total				3600		3704	3467	3659	101.64%

National TAB

Project: 12-08-25 WHATABURGER #1667 LARGO, FL

System/Unit: AHU/RTU

Asset: RTU4 AREA:KITCHEN

Unit Data	
	Actual
MFG	JOHNSON CONTROLS
Serial Num	N1C7560595
Model Num	J10ZFE18D2B1PAA1A2
Num OA Filters 1	1
OA Filter Size 1	28.75x20.5
Num Final Filter 1	4
Final Filter Size 1	20x24x2

Motor Data		
	Design	**Actual**
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	-	3
Motor Rpm	-	1725
Phase	-	3
Rated Voltage	-	208-230/460
Rated Amperage	-	9.5-9.2/4.6

Drive Data	
	Actual
Motor Sheave Size	1VM50
Motor Bore Size	7/8”
Motor Sheave SetPt	DEFAULT
Fan Sheave Size	AK74
Fan Sheave Bore	1”
Belt CL Distance	19-1/8”
Num of Belts	1
Belt Size	AX54
Belt Alignment	GOOD

Test Data		
	Design	**Actual**
SF CFM (Traverse)	-	
SF CFM	3600	3615
SF RPM	-	1022
MOTOR RPM	-	1735
RA CFM (Traverse)	-	
RA CFM	2520	2489
OA CFM	1080	1126
RL Voltage	-	212/212/213
RL Amperage	-	6.9/6.9/7.1
SF System SetPt	-	60 HZ
RA Damper Position	-	MANUAL
Min OA Damper Position	-	MANUAL
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.51”
Fan Suction SP	-	-0.81”
Fan Discharge SP	-	0.38”
Total ESP	-	0.89”
Fan Total SP	-	1.19”

General	
	Actual
Unit free of Damage	NO
Fan Rotation Correct	YES
Unit Filters Clean	YES
Condensate Drain Installed	YES

Unit Data - PHOTO LOG

12/08/2025

National TAB

Project:12-08-25 WHATABURGER #1667 LARGO, FL

AHU/RTU

Diffuser Supply (GRD)

RTU4/KITCHEN

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	KITCHEN	ETR	640	640	1	723	591	657	102.7
SGRD2		ETR	640	640	1	598	477	613	95.8
SGRD3		ETR	640	640	1	29	701	646	100.9
SGRD4		ETR	640	640	1	810	659	647	101.1
SGRD5		ETR	640	640	1	698	563	633	98.9
SGRD6		A6	12"	400	1	495	410	419	104.8
Total				3600		3353	3401	3615	100.42%

National TAB

Project:12-08-25 WHATABURGER #1667 LARGO, FL

Diffuser Supply (GRD)

RTU1/DINING

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	CUSTOMER SERVICE	ETR		500	1	324	390	509	101.8
SGRD2	DINING	ETR		500	1	413	365	541	108.2
SGRD3	DINING	ETR		300	1	462	424	311	103.7
SGRD4	DINING	ETR		300	1	475	394	301	100.3
SGRD5	DINING	ETR		450	1	774	682	453	100.7
SGRD6	DINING	ETR		450	1	595	510	483	107.3
SGRD7	DINING	ETR		500	1	491	537	498	99.6
Total				3000		3534	3302	3096	103.2%

RTU2/DINING

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	DINING	ETR		300	1	294	307	298	99.3
SGRD2	DINING	ETR		275	1	394	348	294	106.9
SGRD3	DINING	ETR		300	1	336	320	306	102.0
SGRD4	DINING	ETR		350	1	418	409	337	96.3
SGRD5	DINING	ETR		450	1	676	645	484	107.6
SGRD6	DINING	ETR		450	1	398	396	456	101.3
SGRD7	DINING	ETR		180	1	175	179	198	110.0
SGRD8	HALLWAY	ETR		475	1	361	345	435	91.6
SGRD9	RESTROOM	ETR		110	1	109	114	109	99.1
SGRD10	RESTROOM	ETR		110	1	155	160	108	98.2
Total				3000		3316	3223	3025	100.83%

RTU3/KITCHEN

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	KITCHEN	ETR		550	1	555	543	574	104.4
SGRD2	KITCHEN	ETR		550	1	398	474	501	91.1
SGRD3	KITCHEN	ETR		550	1	693	529	559	101.6
SGRD4	KITCHEN	ETR		550	1	340	477	504	91.6
SGRD5	KITCHEN	ETR		550	1	647	568	600	109.1
SGRD6	KITCHEN	ETR		250	1	194	248	262	104.8
SGRD7	KITCHEN	ETR		500	1	617	524	549	109.8
SGRD8	KITCHEN	ETR		100	11	260	104	110	110.0
Total				3600		3704	3467	3659	101.64%

RTU4/KITCHEN

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	KITCHEN	ETR	640	640	1	723	591	657	102.7
SGRD2		ETR	640	640	1	598	477	613	95.8
SGRD3		ETR	640	640	1	29	701	646	100.9
SGRD4		ETR	640	640	1	810	659	647	101.1
SGRD5		ETR	640	640	1	698	563	633	98.9
SGRD6		A6	12"	400	1	495	410	419	104.8
Total				3600		3353	3401	3615	100.42%

TRAVERSES/

Asset					
Asset Name	**Size**	**DESIGN CFM**	**VEL(1)**	**FINAL CFM**	**% to design**
RETURN TRAVERSE - RTU 1					

TRAVERSES/

Asset					
Asset Name	**Size**	**DESIGN CFM**	**VEL(1)**	**FINAL CFM**	**% to design**
RETURN TRAVERSE - RTU 2					
RETURN TRAVERSE - RTU 3					
RETURN TRAVERSE - RTU 4					
SUPPLY TRAVERSE - RTU 1					
SUPPLY TRAVERSE - RTU 2					
SUPPLY TRAVERSE - RTU 3					
SUPPLY TRAVERSE - RTU 4					
Total		0		0	0%

National TAB

Project: 12-08-25 WHATABURGER #1667 LARGO, FL

System/Unit: FAN - Exhaust

Asset: EF1 AREA:KITCHEN HD

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	CUE-140-VG	CUE-140-7-VG-1-26-G
Serial Num	-	27765134
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	VARI-GREEN
Frame	-	N/A
Horsepower	3/4	3/4
Motor Rpm	1550	300-1750
Phase	1	1
Voltage (rated)	-	115/208-230/277
Amperage (rated)	-	8.8/5.4/4.8
Service Factor	-	N/A

Test Data		
	Design	**Actual**
CFM	1995	2052
Fan RPM	1517	DD
Fan Rotation	-	CW
Motor RPM	-	DD
System SetPt	-	SPEED CONTROLLER (MARKED)
RL Voltage	-	123
RL Amperage	-	2.6
Total ESP	1.00"	0.39”
Fan Inlet SP	-	-0.39”
Fan Discharge SP	-	ATM

Completed By: Mark Johnson on 12/08/2025

Unit Data - PHOTO LOG

12/08/2025

National TAB

Project: 12-08-25 WHATABURGER #1667 LARGO, FL

System/Unit: FAN - Exhaust

Asset: EF2 AREA:KITCHEN HD

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	CUE-120-VG	CUE-120-5-VG-1-19-G
Serial Num	-	27765143
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	VARI-GREEN
Frame	-	N/A
Horsepower	1/2	1/2
Motor Rpm	1725	300-1750
Phase	1	1
Voltage (rated)	-	115/208-230/277
Amperage (rated)	-	6.4/3.8/3.2
Service Factor	-	N/A

Test Data		
	Design	**Actual**
CFM	1216	1260
Fan RPM	1415	DD
Fan Rotation	-	CW
Motor RPM	-	DD
System SetPt	-	SPEED CONTROLLER (MARKED)
RL Voltage	-	122
RL Amperage	-	2.0
Total ESP	0.75"	0.56”
Fan Inlet SP	-	-0.56”
Fan Discharge SP	-	ATM

Completed By: Mark Johnson on 12/08/2025

Unit Data - PHOTO LOG

12/08/2025

National TAB

Project: 12-08-25 WHATABURGER #1667 LARGO, FL

System/Unit: FAN - Exhaust

Asset: EF6 AREA:RESTROOM

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVEAIRE
Model Num	NA	DR12HFA
Serial Num	-	2967804
Type	-	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	HSSA
Frame	-	42Y
Horsepower	-	1/6
Motor Rpm	-	1625
Phase	-	1
Voltage (rated)	-	115/230
Amperage (rated)	-	1.9/0.96
Service Factor	-	1.0

Drive Data	
	Actual
Motor Sheave SetPt	DIRECT DRIVE

Test Data		
	Design	**Actual**
CFM	300	307
Fan RPM	-	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
RL Voltage	-	86
RL Amperage	-	1.2
Suction ESP	-	-0.17”
Discharge ESP	-	ATM
Total ESP	-	0.17”

Completed By: Mark Johnson on 12/08/2025

Unit Data - PHOTO LOG

12/08/2025

National TAB

Project:12-08-25 WHATABURGER #1667 LARGO, FL

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF6/RESTROOM

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	MEN'S RESTROOM	ETR		150	1	146	157	157	104.7
EGRD2	WOMEN'S RESTROOM	ETR		150	1	133	150	150	100.0
Total				300		279	307	307	102.33%

National TAB

Project: 12-08-25 WHATABURGER #1667 LARGO, FL

System/Unit: Kitchen Hood Type I

Asset: HD1 AREA:KITCHEN

Unit Data		
	Design	**Actual**
MFG	H&K DALLAS	H&K INTERNATIONAL
Model Num	HKD027	HKD027
Job / Serial Num	-	8157757-001
Type	TYPE 1 CANOPY	TYPE I LOW PROXIMITY
Hood length	86.78"	86.78”
Hood Width	55.63"	55.88”

Test Data Exhaust		
	Design	**Actual**
Filter Type	BAFFLE	BAFFLE
Filter Size 1	12X20	12X20
Filter Qty 1	8	8
Filter AK factor size 1	1.50	1.50
Filter Total AK Area	12.00	12.00
Filter1 FPM	-	166
Filter2 FPM	-	190
Filter3 FPM	-	185
Filter4 FPM	-	140
Filter5 FPM	-	170
Filter6 FPM	-	190
Filter7 FPM	-	180
Filter8 FPM	-	149
Filter Ave FPM(corr)	-	171
CFM	1995	2052

Cooking Equipment	
	Actual
Item 1	GRIDDLES (x4)

Completed By: Mark Johnson on 12/08/2025

Unit Data - PHOTO LOG

12/08/2025

National TAB

Project: 12-08-25 WHATABURGER #1667 LARGO, FL

System/Unit: Kitchen Hood Type I

Asset: HD2 AREA:KITCHEN

Unit Data		
	Design	**Actual**
MFG	H&K DALLAS	H&K INTERNATIONAL
Model Num	HKD0__	HKD023
Job / Serial Num	-	8175947-001
Type	TYPE 1 CANOPY	TYPE I LOW PROXIMITY
Hood length	-	72.88”
Hood Width	-	25.88”

Test Data Exhaust		
	Design	**Actual**
Filter Type	-	BAFFLE
Filter Size 1	-	12X20
Filter Size 2	-	12X16
Filter Qty 1	-	1
Filter Qty 2	-	3
Filter AK factor size 1	-	1.50
Filters AK factor size 2	-	1.16
Filter Total AK Area	-	4.98
Filter1 FPM	-	242
Filter2 FPM	-	276
Filter3 FPM	-	273
Filter4 FPM	-	222
Filter Ave FPM(corr)	-	253
CFM	1216	1260

Cooking Equipment	
	Actual
Item 1	FRYERS

Completed By: Mark Johnson on 12/08/2025

Unit Data - PHOTO LOG

12/08/2025