Report By:

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

Report: TAB

Function: Test, Adjust, & Balance

Date: 03/14/2025

Completed By: National TAB

PROJECT

03-10-25 WHATABURGER #1582 GASTONIA, NC

3415 E FRANKLIN BLVD

GASTONIA, NC

Client

Whataburger Restaurants

300 Concord Plaza Dr

San Antonio, TX 78216

National TAB

Project: 03-10-25 WHATABURGER #1582 GASTONIA, NC

Table Of Contents

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.

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

- RTU1 / SGRD9 Duct Size

03-10-25 WHATABURGER #1582 GASTONIA, NC

Project Issue Information

Issue Name : RTU1 / SGRD9 Duct Size

Description : SGRD9 IS LOW OF DESIGN CFM DUE TO THE WRONG SIZED DUCTWORK BEING INSTALLED. A 6'' DUCT WAS INSTALLED WHEN PLANS CALL FOR A 8''. SPENT OVER AN HOUR TRYING TO PUSH AIR TO SGRD9 BUT WAS UNABLE TO INCREASE SUPPLY AIR TO DESIGN CFM.

Created By : National TAB

Assigned To : National TAB - Dan Hertenstein

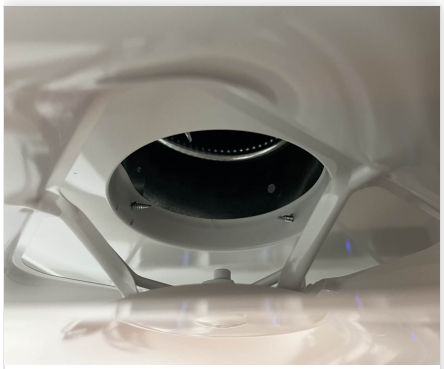
Status : Open

Priority : Medium

Asset Tag :

Originated Date : 03/14/2025 - Dale Wheeler - National TAB

Project Issue File Details



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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	3650	3781	1540	1540	2110	2241	57.8%	59.3%						
RTU-2	DINING	2240	2250	500	479	1740	1771	77.7%	78.7%						
KEF-1	KITCHEN HOOD											1994	2083		
KEF-2	KITCHEN HOOD											1216	1235		
EF-1	RESTROOMS													300	309
TOTALS		5890	6031	2040	2019	3850	4012			0	0	3210	3318	300	309

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	3850	4012
TOTAL EXHAUST	3510	3627
NET AIRFLOW	340	385

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H20)
FRONT	0.022
SIDE	0.026
REAR	0.025
AVERAGE	**0.0243**

FINAL CHECKS

ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✓

MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW: ✓

NOTES:

CheckList List

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

03-10-25 WHATABURGER #1582 GASTONIA, NC

CheckList Information

Name :	WB -01: RTU's	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	03/13/2025 - Brianna Biggs - National TAB		
Completed Date :	03/14/2025 - Dale Wheeler - National TAB		

CheckList Item Details

RTU's/AHU's

Thermostats installed and have power?	Pass
Comment: THERMOSTATS ARE INSTALLED AND LOCATED IN UNITS BUT BMS IS NOT INSTALLED AT THIS TIME	
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:	

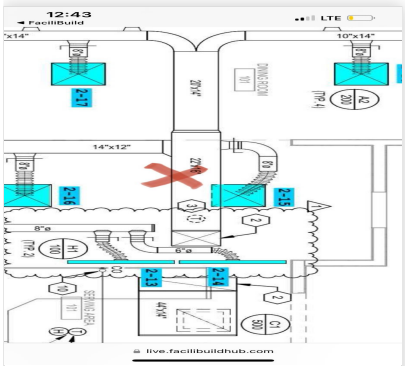
Supply airflow is 0 to +10%?	Pass
Comment:	

Outside airflow is 0 to +10%?	Pass
Comment:	

Return balance dampers are confirmed to be 100% open (if installed)?	Pass
Comment:	

Screenshot of the GRD marked up with supply and return traverse locations for RTU-1 (Add picture here)	N/A
Comment: RETURN & SUPPLY DUCT COULD NOT BE TRAVERSED DUE TO MAIN DROP / TRUCK LINE NOT HAVING A RUN OF 4FT. OR MORE OF STRAIGHT DUCTWORK. UNABLE TO TAKE AN ACCURATE TRAVERSE DUE TO THIS ISSUE	

Screenshot of the GRD marked up with supply and return traverse locations for RTU-2 (Add picture here)	Pass
Comment: RETURN DUCT COULD NOT BE TRAVERSED DUE TO MAIN DROP / TRUCK LINE NOT HAVING A RUN OF 4FT. OR MORE OF STRAIGHT DUCTWORK. UNABLE TO TAKE AN ACCURATE TRAVERSE DUE TO THIS ISSUE SUPPLY DUCTWORK WAS TRAVEERSED & HOLES PLUGED AND INSULATION RETAPED. GRD MARKED WITH RED X SHOWING WHERE TRAVERSE WAS TAKEN.	



03/14/2025

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	Fail

Comment:

RTU2 FLOW HOOD IS NOT READING WITHIN 10% OF THE TRUNK LINE TRAVERSE, WAS UNABLE TO LOCATE ANY LEAKAGE IN DUCTWORK, BUT UNIT TOTAL IS WITHIN DESIGN CFM. RETURN DUCT COULD NOT BE TRAVERSED DUE TO MAIN DROP / TRUCK LINE NOT HAVING A RUN OF 4FT. OR MORE OF STRAIGHT DUCTWORK. UNABLE TO TAKE AN ACCURATE TRAVERSE DUE TO THIS ISSUE RTU1 SUPPLY DUCT COULD NOT BE TRAVERSED DUE TO MAIN DROP / TRUCK LINE NOT HAVING A RUN OF 4FT. OR MORE OF STRAIGHT DUCTWORK. UNABLE TO TAKE AN ACCURATE TRAVERSE DUE TO THIS ISSUE

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	N/A

Comment:

RTU1 & RTU2 RETURN DUCT COULD NOT BE TRAVERSED DUE TO MAIN DROP / TRUCK LINE NOT HAVING A RUN OF 4FT. OR MORE OF STRAIGHT DUCTWORK. UNABLE TO TAKE AN ACCURATE TRAVERSE DUE TO THIS ISSUE

03-10-25 WHATABURGER #1582 GASTONIA, NC

CheckList Information

Name :	WB- 02: EF's	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	03/13/2025 - Brianna Biggs - National TAB		
Completed Date :	03/13/2025 - Chistian Moller - National TAB		

CheckList Item Details

EF's

Rotation is correct?	Pass
Comment:	
Belts are tight?	N/A
Comment:	
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:	
No leakage to note	

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:	

03-10-25 WHATABURGER #1582 GASTONIA, NC

CheckList Information

Name :	WB- 03: Hoods	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	03/04/2025 - Tara Metcalf - National TAB		
Completed Date :	03/12/2025 - Dale Wheeler - 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?	Pass
Comment:	

03-10-25 WHATABURGER #1582 GASTONIA, NC

CheckList Information

Name :	WB- 04: Final Checks	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	03/13/2025 - Brianna Biggs - National TAB		
Completed Date :	03/14/2025 - Dale Wheeler - 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:

KITCHEN EQUIPMENT UNABLE TO BE TURNED ON FOR SMOKE TEST

List smoke candle type used

Comment:

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	03/14/2025

Comment:

TAB tech name / Firm

Comment:

DALE WHEELER / NTAB

Site super name / Firm

Comment:

GC WAS NO LONGER ON SITE, SMOKE TEST WAS FILMED

Owner representative name / Firm (if Applicable)

Comment:

N/A

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:

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:

FRONT DOOR +0.022'' / SIDE DOOR +0.026'' / BACK DOOR +0.025''

Notes/Comments :

0.08” avg building pressure with all hoods off

Date :03/14/2025

National TAB

Project: 03-10-25 WHATABURGER #1582 GASTONIA, NC

System/Unit: AHU/RTU

Asset: RTU1 AREA:KITCHEN

Unit Data		
	Design	**Actual**
MFG	AAON	AAON
Serial Num	-	202501-BNGN120738
Model Num	RNA-018-C-A-8-FAB04-CB1K0	RN-018-3-0-FABY-S0-21-000-A
Num OA Filters 1	-	3
OA Filter Size 1	-	18.25x23.5"
Num Final Filter 1	-	6
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	N/L
Frame	-	N/L
Horsepower	3	3
Motor Rpm	-	1170
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	10.6

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	3650	3781
SF RPM	1008	DD / 48 HZ
MOTOR RPM	-	DD / 48HZ.
RA CFM	1540	1579
OA CFM	2110	2202
RL Voltage	-	214/ 212/212
RL Amperage	-	5.65 AVG
SF System SetPt	-	55Hz
RA Damper Position	-	1.25”
Min OA Damper Position	-	1.5”
Min OA Damper Type	-	ECON

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.326"
Fan Suction SP	-	-0.543"
Fan Discharge SP	-	0.555"
Total ESP	0.75"	0.881"
Fan Total SP	-	1.098"

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

Completed By: Dale Wheeler on 03/14/2025

Notes:
[1] SGRD9 IS LOW OF DESIGN CFM DUE TO THE WRONG SIZED DUCTWORK BEING INSTALLED. A 6" DUCT WAS INSTALLED WHEN PLANS CALL FOR A 8". SPENT OVER AN HOUR TRYING TO PUSH AIR TO SGRD9 BUT WAS UNABLE TO INCREASE SUPPLY AIR TO DESIGN CFM.
[2] RETURN & SUPPLY DUCT COULD NOT BE TRAVERSED DUE TO MAIN DROP / TRUCK LINE NOT HAVING A RUN OF 4FT. OR MORE OF STRAIGHT DUCTWORK. UNABLE TO TAKE AN ACCURATE TRAVERSE DUE TO THIS ISSUE.

Written By: Dale Wheeler on 03/14/2025

Unit Data - PHOTO LOG

03/13/2025

03/14/2025

National TAB

Project:03-10-25 WHATABURGER #1582 GASTONIA, NC

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	A3	10"	300	1	277	318	320	106.7
SGRD2	DRIVE THRU	H2	8"	200	1.03	161	182	219	109.5
SGRD3	KITCHEN	A5	12"	475	1	406	477	506	106.5
SGRD4	KITCHEN	A4	12"	475	1	395	475	504	106.1
SGRD5	KITCHEN	A5	12"	475	1	578	474	474	99.8
SGRD6	KITCHEN	A4	475	475	1	610	448	489	102.9
SGRD7	KITCHEN	A4	475	475	1	397	493	499	105.1
SGRD8	WASHROOM	A2	8"	150	1	176	136	161	107.3
SGRD9	OFFICE	A2	8"	165	1	82	122	143	86.7
SGRD10	DRY STORAGE	A2	8"	150	1	162	148	142	94.7
SGRD11	DRY STORAGE	H3	8"	160	1.03	290	152	175	109.4
SGRD12	MENS RR	B1	6"	75	1	86	77	81	108.0
SGRD13	WOMENS RR	B1	6"	75	1	120	65	68	90.7
Total				3650		3740	3567	3781	103.59%

Diffuser Ret/Exh (GRD)

RTU1/KITCHEN

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
RTU1-EGRD1	KITCHEN	C2	20"	1540	1	1271	1289	1308	84.9
Total				1540		1271	1289	1308	84.94%

National TAB

Project: 03-10-25 WHATABURGER #1582 GASTONIA, NC

System/Unit: AHU/RTU

Asset: RTU2 AREA:DINING

Unit Data		
	Design	**Actual**
MFG	AAON	AAON
Serial Num	-	202501-BNGK120786
Model Num	RNA-013-B-A-8-FAB04-CB1K0	RN-013-3-0-FABY-S0-21-000-A
Num OA Filters 1	-	2
OA Filter Size 1	-	23.5X18.5
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	N/L
Frame	-	N/L
Horsepower	2	2.0
Motor Rpm	-	1170
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	7.5

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 (Traverse)	-	2566
SF CFM	2240	2250
SF RPM	1325	DD / 68 HZ.
MOTOR RPM	-	DD / 68 HZ.
RA CFM	500	479
OA CFM	1740	1771
RL Voltage	-	213 /214/ 214
RL Amperage	-	4.04 AVG
SF System SetPt	-	68Hz
RA Damper Position	-	0.5”
Min OA Damper Position	-	4.0”
Min OA Damper Type	-	ECON

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.208"
Fan Suction SP	-	-0.422"
Fan Discharge SP	-	0.436"
Total ESP	0.75"	0.644"
Fan Total SP	-	0.858"

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

Completed By: Dale Wheeler on 03/14/2025

Notes:
[1] BALANCE SCHEDULE CALLS FOR UNIT TOTAL TO BE 2240. SUPPLY GRILLS ADD UP TO 2140 ON GRD. SUPPLY GRILLS SGRD1,4,6,10,14,17,18 DESIGNS WERE ENCREASED TO REACH 2240 CFM.
[2] SRD13 WAS REMOVED AND SGRD14 DESIGN WAS INCREASED TO 200CFM PER G.C.
[3] RETURN DUCT COULD NOT BE TRAVERSED DUE TO MAIN DROP / TRUCK LINE NOT HAVING A RUN OF 4FT. OR MORE OF STRAIGHT DUCTWORK. UNABLE TO TAKE AN ACCURATE TRAVERSE DUE TO THIS ISSUE.

Written By: Dale Wheeler on 03/14/2025

Unit Data - PHOTO LOG

03/12/2025

03/13/2025

National TAB

Project:03-10-25 WHATABURGER #1582 GASTONIA, NC

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	P1	6"	100	1.07	74	94	92	92.0
SGRD2	DINING	P1	6"	110	1.07	119	102	113	102.7
SGRD4	DINING	P1	6"	110	1.07	134	121	115	104.5
SGRD5	DINING	P1	6"	100	1.07	87	89	106	106.0
SGRD6	DINING	P1	6"	110	1.07	120	118	111	100.9
SGRD7	DINING	P1	6"	100	1.07	89	97	102	102.0
SGRD8	DINING	P1	6"	100	1.07	96	82	107	107.0
SGRD9	DINING	P1	6"	100	1.07	90	78	103	103.0
SGRD10	DINING	P1	6"	110	1.07	68	82	118	107.3
SGRD11	DINING	P2	8"	120	1.07	227	104	116	96.7
SGRD12	DINING	P2	8"	120	1.07	116	128	115	95.8
SGRD14	CUSTOMER SERVICE	H1	6"	210	1.07	196	196	215	102.4
SGRD15	ORDERING	A2	8"	200	1	221	215	210	105.0
SGRD16	ORDERING	A2	8"	200	1	216	211	199	99.5
SGRD17	DINING	A2	8"	225	1	255	202	214	95.1
SGRD18	DINING	A2	8"	225	1	275	205	214	95.1
Total				2240		2383	2124	2250	100.45%

Diffuser Ret/Exh (GRD)

RTU2/DINING

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
RTU2-EGRD1	CHECKOUT	C1	14"	500	1	928	612	499	99.8
Total				500		928	612	499	99.8%

Diffuser Supply (GRD)

TRAVERSES/

Asset					
Asset Name	**Size**	**DESIGN CFM**	**VEL(1)**	**FINAL CFM**	**% to design**
RETURN TRAVERSE RTU-1	44"X14"	1540	[1]		-
RETURN TRAVERSE RTU-2	44"X14"	500	[1]		-
SUPPLY TRAVERSE RTU-1	24X22	3650	[1]		-
SUPPLY TRAVERSE RTU-2	22x16	2240	1050	2566	114.6
Total		7930		2566	32.36%

Completed By: Dale Wheeler on 03/14/2025

Asset	Notes	Date	Written By
RETURN TRAVERSE RTU-1	[1] RETURN DUCT COULD NOT BE TRAVERSED DUE TO MAIN DROP / TRUCK LINE NOT HAVING A RUN OF 4FT. OR MORE OF STRAIGHT DUCTWORK. UNABLE TO TAKE AN ACCURATE TRAVERSE DUE TO THIS ISSUE.	03/14/2025	Dale Wheeler
RETURN TRAVERSE RTU-2	[1] RETURN DUCT COULD NOT BE TRAVERSED DUE TO MAIN DROP / TRUCK LINE NOT HAVING A RUN OF 4FT. OR MORE OF STRAIGHT DUCTWORK. UNABLE TO TAKE AN ACCURATE TRAVERSE DUE TO THIS ISSUE.	03/14/2025	Dale Wheeler
SUPPLY TRAVERSE RTU-1	[1] SUPPLY DUCT COULD NOT BE TRAVERSED DUE TO MAIN DROP / TRUCK LINE NOT HAVING A RUN OF 4FT. OR MORE OF STRAIGHT DUCTWORK. UNABLE TO TAKE AN ACCURATE TRAVERSE DUE TO THIS ISSUE.	03/14/2025	Dale Wheeler

National TAB

Project: 03-10-25 WHATABURGER #1582 GASTONIA, NC

System/Unit: FAN - Exhaust

Asset: EF1 AREA:RESTROOMS

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	G-080-VG	G-080-VG-1-17-X
Serial Num	-	25811070
Type	DOWNBLAST	UPBLAST
Configuration	VERTICAL	VERTICLE

Motor Data		
	Design	**Actual**
Motor MFG	-	Vari-green
Frame	-	NL
Horsepower	0.10	1/10
Motor Rpm	-	1750
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	1.38
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	300	309
Fan RPM	1680	1681
Fan Rotation	-	CW
Motor RPM	-	1750
System SetPt	-	7.5
RL Voltage	-	115
RL Amperage	-	1.18
Total ESP	0.50"	0.183"
Fan Inlet SP	-	-0.183"
Fan Discharge SP	-	ATM

Completed By: Dale Wheeler on 03/14/2025

Unit Data - PHOTO LOG

03/12/2025

03/12/2025

National TAB

Project:03-10-25 WHATABURGER #1582 GASTONIA, NC

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF1/RESTROOMS

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	MENS RR	F1	8X8	150	1	172	167	154	102.7
EGRD2	WOMENS RR	F1	8X8	150	1	174	163	155	103.3
Total				300		346	330	309	103%

National TAB

Project: 03-10-25 WHATABURGER #1582 GASTONIA, NC

System/Unit: FAN - Exhaust

Asset: KEF1 AREA:KTICHEN HOOD

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	CUE-140-VG	CUE-140-VG-1-22-G
Serial Num	-	25812627 24L
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICLE

Motor Data		
	Design	**Actual**
Motor MFG	-	VARI-GREEN
Frame	-	N/L
Horsepower	1	0.75
Motor Rpm	-	1750
Phase	1	1
Voltage (rated)	208	115
Amperage (rated)	-	8.8
Service Factor	-	1.0

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	D.D.

Test Data		
	Design	**Actual**
CFM	1994	2083
Fan RPM	1517	1750 / DD
Fan Rotation	-	CW
Motor RPM	-	1750
RL Voltage	-	121
RL Amperage	-	3.1
Suction ESP	-	-0.553
Discharge ESP	-	ATM
Total ESP	1.0"	0.553”

Completed By: Dale Wheeler on 03/14/2025

Unit Data - PHOTO LOG

03/14/2025

National TAB

Project: 03-10-25 WHATABURGER #1582 GASTONIA, NC

System/Unit: FAN - Exhaust

Asset: KEF2 AREA:KITCHEN HOOD

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	CUE-120-VG	CUE-120-5-VG-1-19-G
Serial Num	-	25812681-24L
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICLE

Motor Data		
	Design	**Actual**
Motor MFG	-	VAR-GREEN
Frame	-	N/L
Horsepower	0.50	0.5
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	208	115
Amperage (rated)	-	6.4
Service Factor	-	1.0

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

Test Data		
	Design	**Actual**
CFM	1216	1235
Fan RPM	1415	1750 / DD
Fan Rotation	-	CW
Motor RPM	-	1750
RL Voltage	-	121
RL Amperage	-	3.4
Suction ESP	-	-0.491
Discharge ESP	-	ATM
Total ESP	0.75"	0.491"

Completed By: Dale Wheeler on 03/14/2025

Unit Data - PHOTO LOG

03/14/2025

National TAB

Project: 03-10-25 WHATABURGER #1582 GASTONIA, NC

System/Unit: Kitchen Hood Type I

Asset: HD1 AREA:Fry

Unit Data		
	Design	**Actual**
MFG	NA	H&K INTERNATIONAL
Model Num	NA	HKD027
Job / Serial Num	-	8154950-001
Type	-	TYPE I CANOPY
Hood length	-	87"
Hood Width	-	56"

Test Data Exhaust		
	Design	**Actual**
Filter Type	-	BAFFLE
Filter Size 1	-	19.5"X11.5"
Filter Qty 1	-	8
Filter AK factor size 1	-	1.55
Filter Total AK Area	-	12.4
Filter1 FPM	-	170
Filter2 FPM	-	185
Filter3 FPM	-	172
Filter4 FPM	-	147
Filter5 FPM	-	150
Filter6 FPM	-	166
Filter7 FPM	-	188
Filter8 FPM	-	162
Filter Ave FPM(corr)	-	168
CFM	1994	2083

Cooking Equipment	
	Actual
Item 1	GRIDDLE
Item 2	GRIDDLE

Completed By: Dale Wheeler on 03/14/2025

Unit Data - PHOTO LOG

03/14/2025

03/14/2025

National TAB

Project: 03-10-25 WHATABURGER #1582 GASTONIA, NC

System/Unit: Kitchen Hood Type I

Asset: HD2 AREA:Grill

Unit Data		
	Design	**Actual**
MFG	NA	H&K INTERNATIONAL
Model Num	NA	HKD023
Job / Serial Num	-	8154948-001
Type	-	TYPE I CANOPY
Hood length	-	73"
Hood Width	-	26"

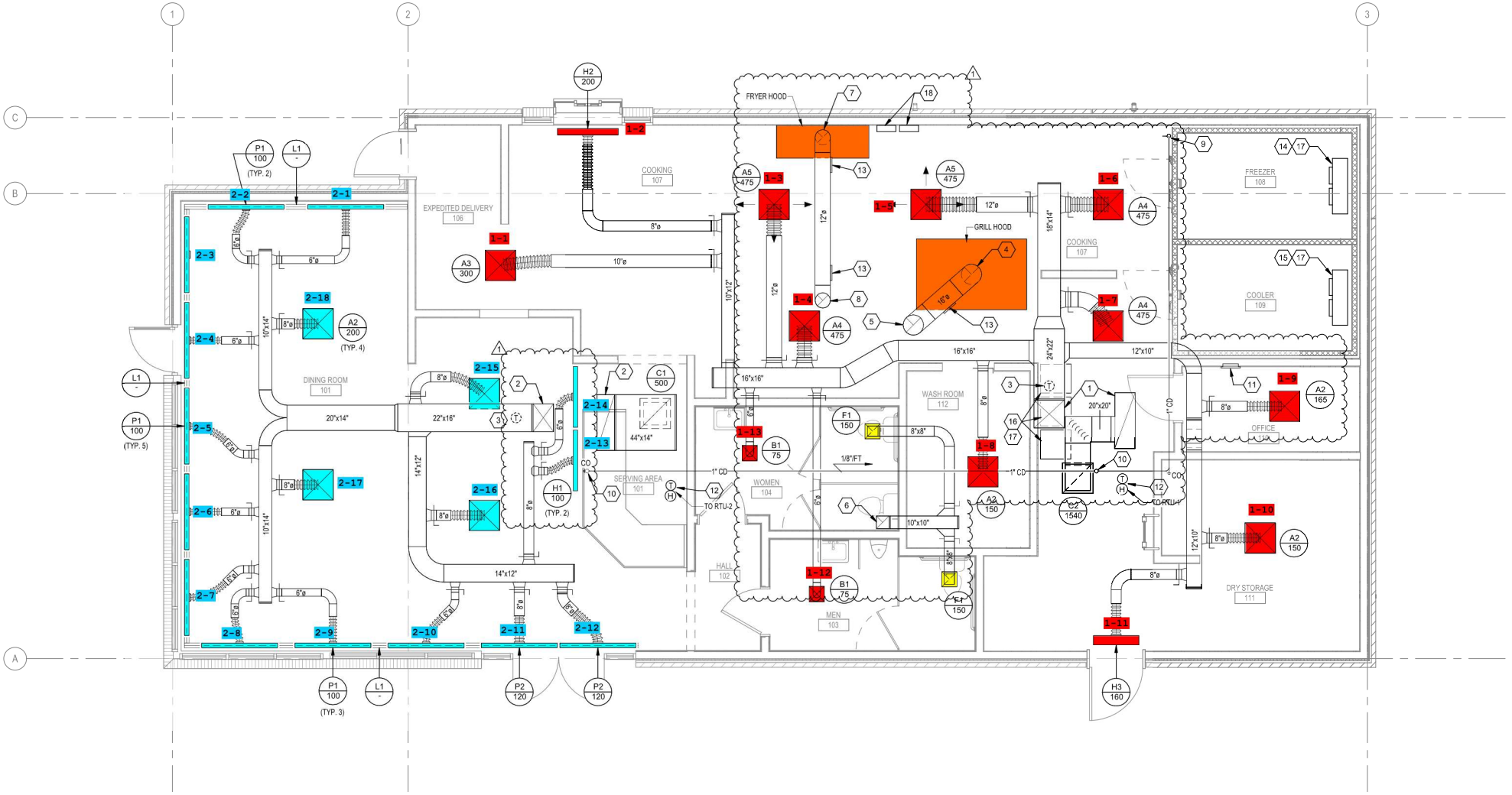
Test Data Exhaust		
	Design	**Actual**
Filter Type	BAFFLE	BAFFLE
Filter Size 1	-	19.5"X11.5"
Filter Size 2	-	15.75"X11.5"
Filter Qty 1	-	1
Filter Qty 2	-	3
Filter AK factor size 1	-	1.59
Filters AK factor size 2	-	1.23
Filter Total AK Area	-	5.28
Filter1 FPM	-	224
Filter2 FPM	-	254
Filter3 FPM	-	243
Filter4 FPM	-	217
Filter Ave FPM(corr)	-	234
CFM	1216	1235

Cooking Equipment	
	Actual
Item 1	FRYER
Item 2	FRYER

Completed By: Dale Wheeler on 03/14/2025

Unit Data - PHOTO LOG

03/14/2025



M1 MECHANICAL FLOOR PLAN - LEVEL 1

Date: 3/14/2025