

Report By:

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1329 E. KEMPER ROAD
SUITE 4210
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Report: Test Report
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

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

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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



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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%

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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

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Notes:

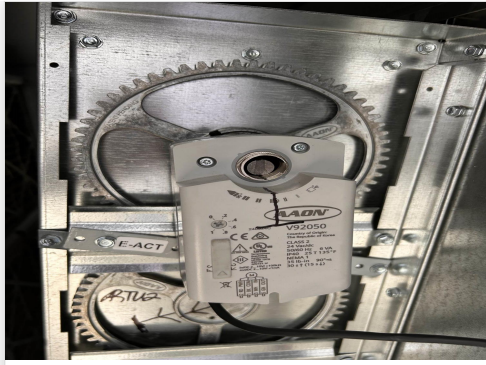
- [1] BALANCE SCHEDULE CALLS FOR UNIT TOTAL TO BE 2240. SUPPLY GRILLS ADD UP TO 2140 ON GRD. SUPPLY GRILLS SGRD1,4,6,10,14,17,18 DESIGNS WERE ENCREASED TO REACH 2240 CFM.
- [2] SRD13 WAS REMOVED AND SGRD14 DESIGN WAS INCREASED TO 200CFM PER G.C.
- [3] RETURN DUCT COULD NOT BE TRAVERSED DUE TO MAIN DROP / 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

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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%

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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

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

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

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Unit Data - PHOTO LOG



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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%

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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

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"

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.

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Unit Data - PHOTO LOG



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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

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"

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

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Unit Data - PHOTO LOG



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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

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Unit Data - PHOTO LOG



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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

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Unit Data - PHOTO LOG



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