Report By:

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

NATIONAL TAB

Comfort. Under control.

Report: FOOD LION #2823
Function: Test, Adjust, & Balance
Date: 03/23/2023

PROJECT

01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

1126 US HIGHWAY 321, BYPASS BUS SOUTH

WINNSBORO, SC 29180

Client

TRS-SESCO LLC

721-A Park Centre Dr

Kernersville, NC 27284

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. Any new diffusers were then adjusted to within tolerance of the design flow. Any existing diffusers were balanced for comfort and to reduce drafting. 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.

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 new grille 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.

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.

Comfort. Under control.

01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

Project Issue Information

Issue Name : RTU-1

Description : 20 % high on supply CFM, motor sheave is at min position. Sheave changed needed to lower supply cfm

Created By : National TAB

Assigned To : National TAB - Will Turnbough

Status : Open

Originated Date : 01/25/2023 - Scott Springer - National TAB

Project Issue Response Details

- **03/22/2023 National TAB - Zack Epps**
  - Motor sheave has not been changed. Airflow remains high on flow.

Comfort. Under control.

01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

Project Issue Information

Issue Name : SF-1

Description : Supply fan is not operational, should be interlocked with the hood EF but it does not run with the EF on.

Created By : National TAB

Assigned To : National TAB - Will Turnbough

Status : Open

Originated Date : 01/25/2023 - Scott Springer - National TAB

Project Issue Response Details

- **03/22/2023 National TAB - Zack Epps**
  - 3/22 Supply fan is not operational

Comfort. Under control.

01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

CheckList Information

Name :	SITE PICTURES	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		

CheckList Item Details

STORE FRONT

StoreFront
01/24/2023

RTU-1

RTU1-2
01/24/2023

RTU1
01/24/2023

RTU-2

RTU2-2
01/24/2023

RTU2
01/24/2023

RTU-3

RTU-3
03/23/2023

RTU DB

TF-1

TF-1
03/23/2023

EF-1

EF1-1
01/24/2023

EF1-2
01/24/2023

EF-2

EF2-1
01/24/2023

EF2-2
01/24/2023

EF-3

EF3-2
01/24/2023

EF3-1
01/24/2023

EF-6

EF6
01/24/2023

HOOD-1

HOOD1
01/24/2023

HOOD-2

HOOD2
01/24/2023

National TAB

Project: 01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

System/Unit: AHU/RTU

Comfort. Under control.

Asset: RTU1 AREA:SALES AREA

Unit Data		
	Design	**Actual**
MFG	4 SEASONS	4 SEASONS
Serial Num	-	5784-1298729
Model Num	ISJE27-0322-DN4.012RC	ISJE27-0322-DN4.012RC
Type	-	RTU
Configuration	-	VERTICAL
Num Final Filter 1	-	12
Final Filter Size 1	-	15.5"X19.5"X3.75"

Motor Data		
	Design	**Actual**
Motor MFG	-	SUPER-E
Frame	-	256T
Horsepower	-	20
Motor Rpm	-	1760
Phase	-	3
Rated Voltage	-	200
Rated Amperage	-	55

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	8.25"
Motor Bore Size	-	3.1875"
Motor Sheave SetPt	-	5TO
Fan Sheave Size	-	12.875"
Fan Sheave Bore	-	1.625"
Belt CL Distance	-	31"
Num of Belts	-	2
Belt Size	-	BX-90
Belt Alignment	-	GOOD

Test Data		
	Design	**Actual**
SF CFM	10130	12326
SF RPM	-	1778
RA CFM	8130	9743
OA CFM	2000	2583
RL Voltage	-	213.3/212.9/213.1
RL Amperage	-	38.4/35.9/35.8
SF Rotation	-	CW
Min OA Damper Position	-	100% OPEN
Min OA Damper Type	-	OBD

Performance Data		
	Design	**Actual**
MA Plenum SP	-	0.12
Fan Suction SP	-	-1.24
Fan Discharge SP	-	0.62
Total ESP	-	0.74
Fan Total SP	-	1.86

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

Notes: SHEAVE CHANGE NEEDED TO SLOW FAN DOWN / COIL P.D. 0.29" / EVAP COIL P.D. 0.62" / FILTER D.P. 0.21"

Date: 05/11/2023

Diffuser Supply (GRD)

RTU1/SALES AREA

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**VEL(1)**	**FINAL CFM**	**% to design**
RTU1-SGRD1	BACK ROOM	DUCT	16x16	880	1.78	702	1250	142.0
RTU1-SGRD2	SALES	DUCT	36x24	5350	6.0	974	5844	109.2
RTU1-SGRD3	SALES	DUCT	36x24	4500	6.0	872	5232	116.3

National TAB

Project: 01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

System/Unit: AHU/RTU

Comfort. Under control.

Asset: RTU2 AREA:SALES AREA

Unit Data		
	Design	**Actual**
MFG	4 SEASONS	4 SEASONS
Serial Num	-	5784-1298730
Model Num	2RC	ISJE27-0322-DN4.012RC
Type	-	RTU
Configuration	-	VERTICAL
Num Final Filter 1	-	12
Final Filter Size 1	-	15.5"X19.5"X3.75"

Motor Data		
	Design	**Actual**
Motor MFG	-	SUPER-E
Frame	-	256T
Horsepower	-	20
Motor Rpm	-	1760
Phase	-	3
Rated Voltage	-	200
Rated Amperage	-	55

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	8.25"
Motor Bore Size	-	3.1875"
Motor Sheave SetPt	-	5TO
Fan Sheave Size	-	12.875"
Fan Sheave Bore	-	1.625"
Belt CL Distance	-	31"
Num of Belts	-	2
Belt Size	-	BX-90
Belt Alignment	-	GOOD

Test Data		
	Design	**Actual**
SF CFM	11500	13740
SF RPM	-	1903
RA CFM	9500	11350
OA CFM	2000	2390
RL Voltage	-	212.8/213.9/214.0
RL Amperage	-	32/30.4/35.8
SF Rotation	-	CW
Min OA Damper Position	-	100% OPEN
Min OA Damper Type	-	OBD

Performance Data		
	Design	**Actual**
MA Plenum SP	-	0.18"
Fan Suction SP	-	-1.54"
Fan Discharge SP	-	0.41"
Total ESP	-	0.50"
Fan Total SP	-	2.50"

General		
	Design	**Actual**
Fan Rotation Correct	-	YES
Unit Filters Clean	-	NO
Condensate Drain Installed	-	YES

Notes: ADDITIONAL DIFFUSERS NOT SHOWN ON THE DRAWING INSTALLED. BALANCED OTHER GRILLES TO DESIGN AND READ AS IS. TOTAL AIRFLOW LEFT ABOVE SCHEDULED DESIGN DUE TO ADDITIONAL DIFFUSER AIRFLOW.

Date: 05/11/2023

Diffuser Supply (GRD)

RTU2/SALES AREA

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	BACK AREA	S1	NA	475	-	301	428	90.1
SGRD2	BACK AREA	S1	NA	475	-	350	437	92.0
SGRD3	PRODUCE PREP	S3	NA	500	-	438	513	102.6
SGRD4	DELI	S7	NA	800	-	664	783	97.9
SGRD5	DELI	S7	NA	800	-	622	748	93.5
SGRD6	DELI	S7	NA	800	-	645	747	93.4
SGRD7	DELI	S7	NA	800	-	652	755	94.4
SGRD8	DELI	S7	NA	800	-	610	736	92.0
SGRD9	SALES AREA	NOT ON DRAWING	NA		-	302	355	-
SGRD10	SALES AREA	NOT ON DRAWING	NA		-	310	367	-
SGRD11	Sales area	duct	36x24	6050	6.0	5613	6623	109.5
SGRD12	VESTIBULE	S1	NA	800	-	585	734	91.8
SGRD13	VESTIBULE	S1	NA	300	-	292	330	110.0
SGRD14	WOMEN	S1	NA	100	-	51	94	94.0
SGRD15	MEN	S1	NA	100	-	74	90	90.0

National TAB

Project: 01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

System/Unit: AHU/RTU

Comfort. Under control.

Asset: RTU3 AREA:MEZZANINE

Unit Data		
	Design	**Actual**
MFG	DAIKEN	DAIKEN
Serial Num	-	1205278150
Model Num	DSG048	CPG0480903BXXXBA
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num Final Filter 1	-	4
Final Filter Size 1	-	16X20X2

Motor Data		
	Design	**Actual**
Motor MFG	-	US MOTORS
Frame	-	58
Horsepower	-	1
Motor Rpm	-	1725
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	3.4

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	4L44
Motor Bore Size	-	0.625
Motor Sheave SetPt	-	5TO
Fan Sheave Size	-	AK66
Fan Sheave Bore	-	1"
Belt CL Distance	-	21"
Num of Belts	-	1
Belt Size	-	AX55
Belt Alignment	-	YES

Test Data		
	Design	**Actual**
SF CFM	1500	1509
SF RPM	-	957
RA CFM	1500	1509
OA CFM	0	0
RL Voltage	-	213.3, 214.2, 214.6
RL Amperage	-	2.6, 2.7, 2.9
SF Rotation	-	CCW
RA Damper Position	-	100%

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.3225"
Fan Suction SP	-	-0.6028"
Fan Discharge SP	-	0.3244"
Total ESP	-	0.6469"
Fan Total SP	-	0.9272"

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

Completed By: Zack Epps on 03/23/2023

Diffuser Supply (GRD)

RTU3/MEZZANINE

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	MEZZANINE	S1	NA	300	-	581	163	617	205.7
SGRD2	MEZZANINE	S1	NA	300	-	0	-	314	104.7
SGRD4	MEZZANINE	S1	NA	150	-	373	-	137	91.3
SGRD5	MEZZANINE	S1	NA	150	-	174	1	147	98.0
SGRD6	MEZZANINE	S1	NA	150	-	164	-	140	93.3
SGRD7	MEZZANINE	S1	NA	150	-	255	163	154	102.7

National TAB

Project: 01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF1 AREA:LOUNGE

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	100C17DEC	100C17DEC
Serial Num	-	296SJ94060
Type	DOWNBLAST	DOWNBLAST
Configuration	-	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	COOK
Frame	-	NL
Horsepower	0.25	0.25
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	3.4
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	300	303
Fan RPM	1192	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
System SetPt	-	NL
RL Voltage	-	125
RL Amperage	-	2.1
Total ESP	0.375"	0.0735"
Fan Inlet SP	-	-0.0735"
Fan Discharge SP	-	ATM

Completed By: Zack Epps on 03/22/2023

National TAB

Project: 01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF2 AREA:RR. EMP./JANITOR

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	100C17DEC	100C17DEC
Serial Num	-	296SJ94060
Type	DOWNBLAST	DOWNBLAST
Configuration	-	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	COOK
Frame	-	NL
Horsepower	0.25	0.25
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	3.4
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	300	316
Fan RPM	1192	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
RL Voltage	-	119
RL Amperage	-	2.3
Total ESP	0.375"	0.431"
Fan Inlet SP	-	-0.431"
Fan Discharge SP	-	ATM

Completed By: Zack Epps on 03/22/2023

National TAB

Project:01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

FAN - Exhaust

Comfort. Under control.

Diffuser Ret/Exh (GRD)

EF2/RR. EMP./JANITOR

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	Janitors Sink	DUCT	10/10	225	1	-	-	256	113.8
EGRD2	Emp. RR	DUCT	8	75	-	-	-	81	108.0

National TAB

Project: 01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF3 AREA:Customer RRs

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	90C17DEC	90C17DEC
Serial Num	-	296SJ94060
Type	DOWNBLAST	DOWNBLAST
Configuration	-	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	COOK
Frame	-	NL
Horsepower	0.167	0.167
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	2.36
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	250	252
Fan RPM	1296	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
RL Voltage	-	121.3
RL Amperage	-	1.2
Total ESP	0.375"	0.389"
Fan Inlet SP	-	-0.389"
Fan Discharge SP	-	ATM

Completed By: Zack Epps on 03/22/2023

National TAB

Project:01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

FAN - Exhaust

Comfort. Under control.

Diffuser Ret/Exh (GRD)

EF3/Customer RRs

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	Women	E2	8"	125	1	128	-	128	102.4
EGRD2	Men	E2	8"	125	1	124	-	124	99.2

National TAB

Project: 01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF6 AREA:MECH. ROOM

Unit Data		
	Design	**Actual**
MFG	PENN	PENN
Model Num	HS48	HS48LSU
Serial Num	-	050S5223270200105011098
Type	PROPELLER	PROPELLER
Configuration	-	VERTICAL

Test Data		
	Design	**Actual**
CFM	-	2535
Fan Rotation	-	CCW
Suction ESP	-	-0.021"
Discharge ESP	-	0.25"
Total ESP	-	0.271"

Motor Data		
	Design	**Actual**
Motor MFG	-	-
Frame	-	-
Horsepower	-	-
Motor Rpm	-	-
Phase	-	-
Voltage (rated)	-	-
Amperage (rated)	-	-
Service Factor	-	-

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	-
Motor Bore Size	-	-
Motor Sheave SetPt	-	-
Fan Sheave Size	-	-
Fan Sheave Bore	-	-
Belt CL Distance	-	-
Num of Belts	-	-
Belt Size	-	-

Completed By: Zack Epps on 03/22/2023

National TAB

Project: 01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: KH Fan1 AREA:HOOD 1

Unit Data		
	Design	**Actual**
MFG	PENN	PENN
Model Num	FX13BHFT	FX13BHFT
Serial Num	-	FX1353P
Type	WALL MTD.	CRE
Configuration	-	UPBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	NL
Horsepower	-	0.5
Motor Rpm	-	1735
Phase	1	1
Voltage (rated)	120	208
Amperage (rated)	-	2.1
Service Factor	-	1.25

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	VL40
Motor Bore Size	-	0.625"
Motor Sheave SetPt	-	0 TURNS
Fan Sheave Size	-	AK59
Fan Sheave Bore	-	1"
Belt CL Distance	-	5.5"
Num of Belts	-	1
Belt Size	-	AX23

Test Data		
	Design	**Actual**
CFM	1400	1441
Fan RPM	-	1130
Fan Rotation	-	CW
Motor RPM	-	1738
RL Voltage	-	208
RL Amperage	-	2.1
Suction ESP	-	-1.15
Discharge ESP	-	ATM
Total ESP	-	1.15

Completed By: Zack Epps on 03/22/2023

National TAB

Project: 01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: KH Fan2 AREA:HOOD

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU85HFA	DU85HFA
Serial Num	-	5261367
Type	WALL MTD.	CRE
Configuration	-	UPBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	TELCO GREEN
Frame	-	NL
Horsepower	0.75	0.75
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	7.65
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	1800	1771
Fan RPM	1375	1386
Fan Rotation	-	CCW
Motor RPM	-	1386
System SetPt	-	72P
RL Voltage	-	123
RL Amperage	-	7.5
Total ESP	1.0"	0.69"
Fan Inlet SP	-	-0.69"
Fan Discharge SP	-	ATM

Completed By: Zack Epps on 03/22/2023

National TAB

Project: 01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: TF1 AREA:Managers Office

Unit Data		
	Design	**Actual**
MFG	S&P	COOK
Model Num	SQD1250	120 SON 120SON17D
Serial Num	-	296SK13910-007000070
Type	INLINE	INLINE

Motor Data		
	Design	**Actual**
Motor MFG	-	COOK
Frame	-	NL
Horsepower	0.5	0.5
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	7.5
Service Factor	-	1

Test Data		
	Design	**Actual**
CFM	1400	1376
Fan RPM	1331	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
RL Voltage	-	121
RL Amperage	-	7.2
Total ESP	0.5"	0.81"
Fan Inlet SP	-	-0.73"
Fan Discharge SP	-	0.08"

Completed By: Zack Epps on 03/23/2023

National TAB

Project:01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

FAN - Exhaust

Comfort. Under control.

Diffuser Ret/Exh (GRD)

TF1/Managers Office

Asset							
Asset Name	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
EGRD1	EG	-	700	1	691	691	98.7
TF1-EGRD2	EG	-	700	1	685	685	97.9

National TAB

Project: 01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

System/Unit: FAN - Supply

Comfort. Under control.

Asset: SF1 AREA:

Unit Data		
	Design	**Actual**
MFG	COOK	COOK
Model Num	NA	NA
Serial Num	-	BS5-14
Type	MUA	MUA
Configuration	-	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	MAGNETIC K
Frame	-	K48
Horsepower	-	0.25
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	5.4
Service Factor	-	1.35

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	1VL34
Motor Bore Size	-	0.5"
Fan Sheave Size	-	AK64
Fan Sheave Bore	-	1"
Belt CL Distance	-	12"
Num of Belts	-	1
Belt Size	-	AX36
Belt Alignment Verified	-	YES

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

Test Data		
	Design	**Actual**
CFM	700	-
SF RPM	-	-
Motor RPM	-	-
RL Voltage	-	-
RL Amperage	-	-
Total ESP	-	-
Fan Discharge SP	-	-

General		
	Design	**Actual**
Fan Rotation Correct	-	-

Notes: NOT OPERATIONAL

Date: 01/24/2023

National TAB

Project: 01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

System/Unit: Kitchen Hood Type I

Comfort. Under control.

Asset: HD1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	NA
Model Num	NA	NA
Job / Serial Num	-	NL
Type	-	ISLAND
Hood length	-	72"
Hood Width	-	47"

Test Data Exhaust		
	Design	**Actual**
Filter Size 1	-	20x20
Filter Qty 1	-	2
Filter AK factor size 1	-	2.21
Filter Total AK Area	-	4.42
Filter1 FPM	-	351
Filter2 FPM	-	301
Filter Ave FPM(corr)	-	326
CFM	1400	1441

Cooking Equipment		
	Design	**Actual**
Item 1	-	FRYER
Item 2	-	FRYER

Completed By: Zack Epps on 03/22/2023

Notes: LABLED AS HOOD 2

Date: 03/22/2023

National TAB

Project: 01-23-23 FOOD LION #2823 - WINNSBORO, SC (REMODEL)

System/Unit: Kitchen Hood Type I

Comfort. Under control.

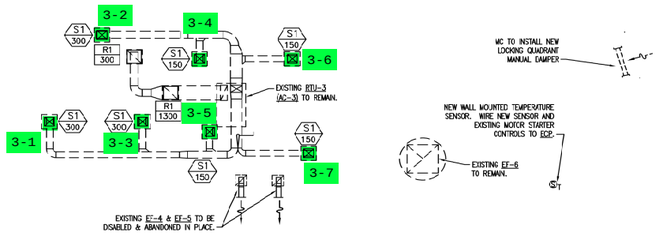
Asset: HD2 AREA:

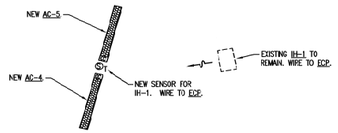
Unit Data		
	Design	**Actual**
MFG	NA	NA
Model Num	NA	NA
Job / Serial Num	-	NL
Type	-	ISLAND
Hood length	-	48"
Hood Width	-	47"

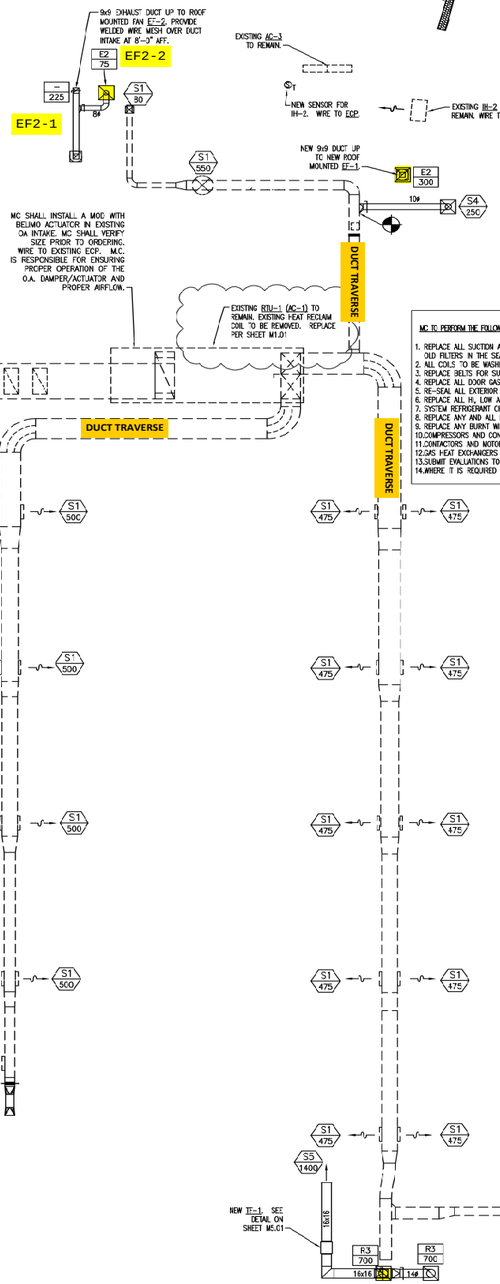
Test Data Exhaust		
	Design	**Actual**
Filter Size 1	-	20X20 & 20X25
Filter Qty 1	-	2
Filter Qty 2	-	1
Filter AK factor size 1	-	2.68 & 3.45
Filter Total AK Area	-	8.81
Filter1 FPM	-	201
Filter2 FPM	-	185
Filter3 FPM	-	218
Filter Ave FPM(corr)	-	201
CFM	1800	1771

Cooking Equipment		
	Design	**Actual**
Item 1	-	ROTISSERIE OVEN

Completed By: Zack Epps on 03/23/2023

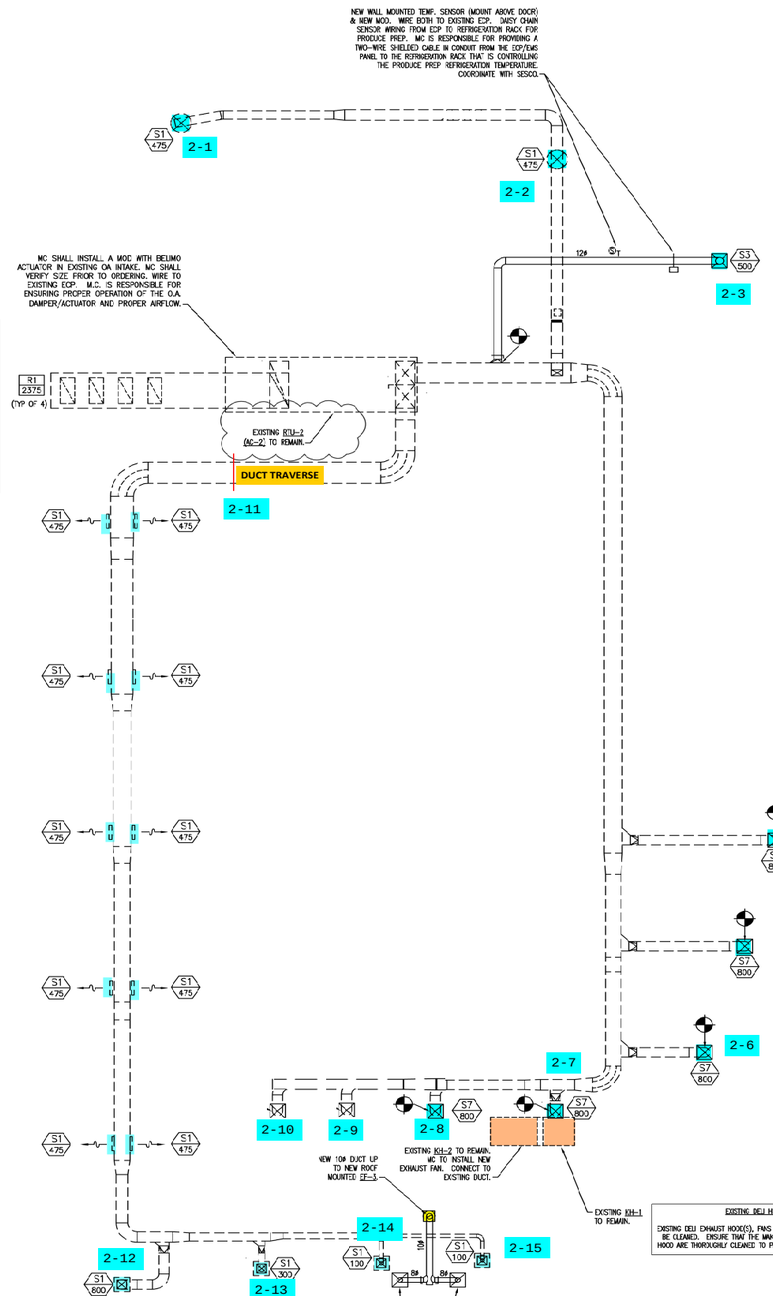






NOTE:
MC TO PERFORM THE FOLLOWING SERVICES/CHECKS ON EXISTING ROOFTOP AIR HANDLING UNITS OVER 10 TONS:

1. REPLACE ALL SUCTION AND LIQUID LINE FILTER/DRIERS AT THE START OF THE PROJECT. LEAVE OLD FILTERS IN THE SEASON FOUR FOR SESCO INSPECTION.
2. ALL COILS TO BE WASHED COMPLETELY.
3. REPLACE BELTS FOR SUPPLY FAN.
4. REPLACE ALL DOOR GASKETING.
5. RE-SEAL ALL EXTERIOR SEAMS WITH ALUMINUM SILICONE.
6. REPLACE ALL H, LOW AND OIL PRESSURE CONTROLS AND ANY ASSOCIATED HOSE CONNECTIONS.
7. SYSTEM REFRIGERANT CHARGE IS TO BE EVALUATED.
8. REPLACE ANY AND ALL FUSES AS NECESSARY.
9. REPLACE ANY BURNT WIRING AS NEEDED.
10. COMPRESSORS AND CONDENSER FANS ARE TO BE EVALUATED BY SYSTEM.
11. CONTACTORS AND MOTOR STARTERS ARE TO BE EVALUATED.
12. GAS HEAT EXCHANGERS SHALL BE EVALUATED.
13. SUBMIT EVALUATIONS TO SESCO SPECIALIST.
14. WHERE IT IS REQUIRED TO REPLACE, CONTRACTOR IS TO FURNISH ALL NEEDED PARTS.



EXISTING DELI HOOD

EXISTING DELI EXHAUST HOOD(S), FANS AND DUCT SYSTEMS SHALL BE CLEANED. ENSURE THAT THE MAKEUP AIR BAFFLES AT THE HOOD ARE THOROUGHLY CLEANED TO PROVIDE ADEQUATE AIRFLOW.

RENOVATION NOTES

1. M.C. SHALL FIELD VERIFY ALL EXISTING CONDITIONS AT THE JOB SITE PRIOR TO BEGINNING WORK. NOTIFY FOOD LION SHARED SERVICES GROUP, L.L.C. Construction Manager OF ANY DISCREPANCIES.
2. FOR TRANSVERSE JOINTS 12" WIDE AND LARGER, PROPRIETARY DUCT CONNECTORS SHALL BE DUCT MATE OR WARD AND INSTALLED IN COMPLETE ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. DUCT SEALANT TO BE DUCT MATE 440 GASKET TYPE OR EQUAL. ALL DUCTWORK SHALL BE CONSTRUCTED TO A 2" PRESSURE CLASS. FOR TRANSVERSE JOINTS 11" WIDE OR SMALLER, THE ABOVE MAY BE USED, OR REFER TO SMACNA TO DETERMINE PROPER DUCT CONSTRUCTION FOR THE SPECIFIED PRESSURE CLASS.
3. ALL DUCTWORK WITH A WIDTH DIMENSION OF 46" OR LARGER SHALL BE SUPPORTED WITH TRAPEZE TYPE HANGERS. SUPPORTS SHALL BE ATTACHED TO DUCTWORK PRIOR TO APPLICATION OF EXTERNAL INSULATION. INSULATION SHALL BE APPLIED TO COMPLETELY COVER DUCTWORK AND SUPPORTS.
4. DUCTS CONNECTING TO NEW AND/OR RELOCATED DIFFUSERS SHALL BE INLET SIZE OF DIFFUSER. PROVIDE VOLUME DAMPER FOR BRANCH TAKEOFF AS INDICATED ON PLAN.
5. ALL LONGITUDINAL SEAMS AND NON-GASKETED TRANSVERSE JOINTS SHALL BE EXTERNALLY SEALED WITH HIGH PRESSURE DUCT SEALER BY UNITED McGILL OR EQUAL. SEALER SHALL BE APPLIED BY M.C. AND APPROVED BY FOOD LION CONSTRUCTION MANAGER BEFORE DUCT INSULATION IS INSTALLED.
6. ALL NEW DUCT SIZES SHOWN ARE "INSIDE-CLEAR" DIMENSIONS. ALL NEW DUCTWORK SHALL HAVE 2", 3/4 PCF, EXTERNALLY WRAPPED INSULATION WITH VAPOR BARRIER (SEE SPECIFICATIONS). ROUTE ALL NEW DUCTWORK AS TIGHT TO ROOF JOISTS AS PRACTICAL. COORDINATE ROUTING TO AVOID CONFLICTS WITH OTHER TRADES.
7. FLEXIBLE DUCT MAY BE USED AT END OF RUNOUTS IN LENGTHS NOT EXCEEDING 4'-0". INSTALL PER SMACNA STANDARDS (SEE SPECIFICATIONS).
8. PROVIDE 90° METAL (24 GA. MINIMUM) DUCT ELBOW WITH 4 PIECE CORE AT ALL CEILING DIFFUSER/GRILLE-TO-FLEX DUCT CONNECTIONS.
9. M.C. SHALL VERIFY SIZE OF EXISTING DUCTWORK SCHEDULED TO REMAIN. EQUIPMENT OPENINGS AS REQUIRED FOR PROPER CONNECTION OF NEW TO EXISTING.
10. M.C. SHALL INSPECT AND REPAIR DUCTWORK AS REQUIRED TO PROVIDE A TIGHT AIR DISTRIBUTION SYSTEM. M.C. SHALL CAP AND INSULATE ALL OPEN DUCT TERMINATIONS AND OTHER OPENINGS IN EXISTING DUCTWORK DIRECTLY RESULTING FROM OR INCIDENTAL TO DEMOLITION. ALL SUPPLY AND RETURN OUTLETS SHALL BE BALANCED TO THE AIR FLOW QUANTITIES SHOWN ON DRAWINGS.
11. M.C. SHALL COORDINATE ALL WORK WITH OTHER TRADES TO AVOID CONFLICTS.
12. COORDINATE ALL DIFFUSER AND GRILLE LOCATIONS WITH CEILING GRID AS SHOWN ON ARCHITECTURAL DRAWINGS.
13. TEMPERATURE AND HUMIDITY SENSORS AND CONTROLS SHALL BE MOUNTED @ 5'-8" A.F.F. U.N.O. VERIFY MOUNTING HEIGHTS, LOCATIONS, AND CONTROL SETTINGS WITH PROPER FOOD LION CONSTRUCTION MANAGER.
14. CONTROL WIRING FOR NEW SENSORS, MOTORIZED DAMPERS, ETC. TO BE FURNISHED AND INSTALLED BY M.C. CONTROL WIRING SHALL BE ROUTED TO ECP/EMCC PANELS UNLESS OTHERWISE INDICATED. E.C. SHALL PROVIDE CONDUIT SYSTEM WITH PULL STRINGS. COORDINATE CONTROL WORK WITH PROPER FOOD LION CONSTRUCTION MANAGER.
15. EXISTING MOTOR STARTER CONTROLS FOR THE MACHINE ROOM TO BE WIRED TO ECP.
16. ALL SENSOR CONTROL WIRING SHALL BE SHIELDED (MINIMUM #22 AWG OR LARGER). CONTROL WIRING SHALL BE STRANDED (#14 AWG). DO NOT MIX SENSOR CABLE AND CONTROL WIRING IN SAME CONDUIT.
17. M.C. TO COORDINATE DUCTWORK SIZES WITH CLEARANCES ABOVE CEILING. M.C. TO NOTIFY PROPER FOOD LION CONSTRUCTION MANAGER OF ANY CONFLICTS.
18. REFER TO SPECIFICATIONS, DIVISION 23 SECTIONS FOR ADDITIONAL MECHANICAL REQUIREMENTS.
19. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR CONNECTING/RECONNECTING AHU DRAINS.
20. ALL EXHAUST HOODS SHALL BE INSTALLED 6'-8" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE.
21. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LABOR, MATERIAL AND WORKMANSHIP INSTALLED BY HIM UNDER THIS SECTION OF THE SPECIFICATIONS AND TO CORRECT ANY DEFICIENCIES ADJUDGED BY FOOD LION. THIS GUARANTEE SHALL EXTEND FOR A PERIOD OF NOT LESS THAN TWELVE (12) MONTHS FROM THE DATE OF THE FINAL PROJECT ACCEPTANCE BY FOOD LION SHARED SERVICES GROUP, L.L.C., AGAINST ANY DEFECTS OR SYSTEM FAILURE. ALL EQUIPMENT MANUFACTURERS' WARRANTIES WHICH EXTEND BEYOND THE FIRST TWELVE (12) MONTHS SHALL BE TRANSFERRED TO FOOD LION. HOWEVER, IT SHALL BE UNDERSTOOD BY ALL PARTIES CONCERNED THAT THE WARRANTIES PERTAIN ONLY TO FURNISHING OF MATERIAL BY THE MANUFACTURER AND SHALL NOT INCLUDE REPLACEMENT LABOR COSTS, UNLESS OTHERWISE DESCRIBED BY THE MANUFACTURER.
22. ENGINEER OF RECORD TO PROVIDE ALL SEISMIC REQUIREMENTS WHEN APPLICABLE.
23. ALL RECOVERED REFRIGERANTS SHOULD BE DOCUMENTED ON THE REFRIGERANT RECLAIM FORM AND SUBMITTED TO NICK CORDASCI BY EMAIL. (NICK.CORDASCI@RETAILBUSINESSSERVICES.COM). RECOVERED REFRIGERANT IS TO BE LEFT AT THE STORE FOR THE FOOD LION MAINTENANCE TECH.

SENSOR LEGEND

T THERMOSTAT	RH RELATIVE HUMIDITY	P AIR PRESSURE SWITCH
T TEMPERATURE	SD SMOKE DETECTOR	AS DISCHARGE AIR SENSOR

NOTES:
1. THE E.C. IS RESPONSIBLE FOR PROVIDING COMMUNICATION CABLE FOR ALL REFRIGERATION CONTROLLERS AND THE HVAC CONTROLLER. THIS WILL BE IN THE FORM OF CAT5 CABLES FOR EACH CONTROLLER WITH STORES THAT HAVE E-2 CONTROLLERS OR 4-WIRE SHIELDED CABLE WITH STORES THAT HAVE EARLIER VERSIONS OF CPC CONTROLLERS. COORDINATE WITH SESCO OR ENERGY TEAM MEMBER.
2. MC SHALL PROVIDE (1) PAIR OF CONTROL WIRES FROM EACH EXISTING AND OR NEW REFRIGERATION RACK TO THE EXISTING AND/OR NEW ECP FOR RECLAIM HEAT STAGING. EC SHALL PROVIDE REQUIRED CONDUIT. EMS PERSONNEL SHALL MAKE FINAL TERMINATION AND PANEL MODIFICATIONS AS REQUIRED.
3. NEW AND/OR EXISTING SENSORS, CONTROLS, ETC. WITH NEW WIRING AND CONNECTIONS TO ECP/EMCC AS APPLICABLE.

ABBREVIATIONS

AHU	AIR HANDLING UNIT	OA	OUTSIDE AIR
AFF	ABOVE FINISHED FLOOR	RTU	ROOFTOP UNIT (AIR CONDITIONING)

SYMBOL LEGEND

- 20x20 — NEW DUCTWORK – SIZE AS INDICATED FIRST DIMENSION IS FACE OF DUCT SHOWN ON PLAN.
- EXISTING DUCTWORK RE-USED IN PLACE.
- ELECTRIC DUCT HEATER
- MOD — MOTOR OPERATED DAMPER (NEW OR EXISTING AS INDICATED)
- VOLUME DAMPER
- CONNECT TO EXISTING
- U — UNDERCUT DOOR
- NEW SUPPLY DIFFUSER
- R — RE-USED/RELOCATED EXISTING DIFFUSER
- NEW RETURN GRILLE
- AIR CURTAIN – CC (CONTROL CABINET)

1. ALL CONTROL WIRING PROVIDED BY THE MECHANICAL CONTRACTOR IS TO BE 14 GA. STRANDED. BX CABLE IS NOT ALLOWED. ALL SHIELDED CABLE IS TO BE 22 GA OR LARGER. ALL WIRING SHALL BE IN CONDUIT PROVIDED BY ELECTRICIAN. SENSOR CABLE CANNOT BE IN THE SAME CONDUIT AS THE CONTROL WIRING. TERMINATIONS FOR THE MECHANICAL CONTROLS BY MECHANICAL CONTRACTOR.
2. IN THE EVENT THAT FOOD LION UPGRADES THE FIRE ALARM SYSTEM, M.C. WILL BE RESPONSIBLE FOR REMOVING ALL OLD SMOKE DETECTORS. ONCE SYSTEM HAS BEEN SWITCHED OVER TO FIRE ALARM CONTACT, SESCO WILL NOTIFY G.C. IN WRITING. M.C. WILL THEN REMOVE OLD DETECTORS. WIRING FROM DETECTORS IS TO BE REMOVED TO ASSOCIATED JUNCTION BOXES AND CAPPED OFF WITH WIRE NUTS. WIRING FROM ECP TERMINALS IS TO BE REMOVED TO WIRING TROUGH AND CAPPED OFF WITH WIRE NUTS.