Report By:

National TAB
1329 E Kemper Rd, Ste 4210
Cincinnati, OH 45246

Report: **Test and Balance**
Date: **11/2/2021**

PROJECT

KROGER #035-540 - PLANO, TX (PLATINUM PREDESIGN)

3305 N DALLAS PKWY
PLANO , TX

Client

Kroger Division 035
751 FREEPORT PKWY
COPPELL, TX 75019

National TAB

Project: KROGER #035-540 - PLANO, TX (PLATINUM PREDESIGN)

Table Of Contents

RECOMMENDATION LIST

Assigned Organization: National TAB

Status: Not Submitted

Asset:

PRIORITY (HIGH/LOW/INFO ONLY)	
LOW	RTU-1 (North Main Sales) has excessive trash inside the electrical compartment. Recommend removing.
HIGH	RTU-1 (North Main Sales) has rust accumulation noted on the heater section. Recommend checking that there are no leaks due to amount of rust noted.
HIGH	RTU-1 (North Main Sales) and RTU-2 (South Main Sales) outside air intakes are clogged. Recommend cleaning.
HIGH	RTU-2 (South Main Sales) belt is not on the pulley and there are also 2 groove pulleys. Recommend installing proper size and quantity of belts.
HIGH	RTU-2 (South Main Sales) one of the two motors is locked up and the RTU is not operational. The RTU is turned off.
LOW	Filters are dirty for all RTU's. Recommend replacing.
LOW	RTU-4 (Bakery) and RTU-5 (Mezz Offices) Condenser fins are damaged. Recommend trying to straightened to improve performance.
LOW	RTU-4 (Bakery) and RTU-5 (Mezz Offices) are missing mesh outside air filters. Recommend installing.
HIGH	RTU-7 (Clicklist) has the VFD bypassed. Recommend replacing the VFD.
LOW	EF8A belt is starting to crack. Recommend replacement.
HIGH	SF2 (Deli hood left) has no voltage and is not operational. Both SF-1 and SF-2 are old "box" style MUA's that are nonconditioned and nontempered. Recommend replacing both with new heated and conditioned MUA's. Or if possible, completely elimate if possible. Appears that based on the current equipment and application some MUA will be required.
INFO	EF-14 (Manager's office) is not operational. May not be necessary to replace fan depending on if the area still requires exhaust. Recommend consulting engineer of record.

Notes/Comments:

STORE FRONT

BAKERY OVEN

DELI HOOD LEFT

DELI HOOD RIGHT

CPC PANEL

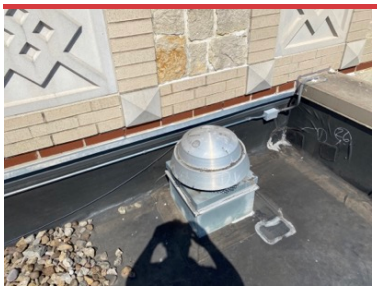
EF8 & 8A W/ SF1 & 2 DELI HOOD EXHAUST AND SUPPLY FANS

LEFT DELI HOOD EF8A

Belt starting to crack

EF9 SEAFOOD

EF10 PUBLIC RESTROOMS



EF11 ELEVATOR ROOM

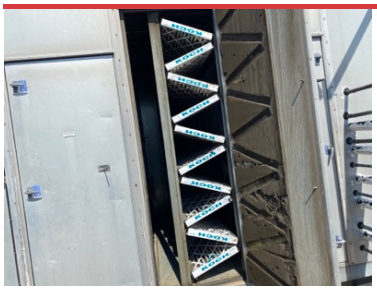
EF12 BACK RR

EF14 MANAGER OFFICE

Not running

EF16 BAKERY OVEN

RTU1 NORTH MAIN SALES



NORTH MAIN SALES RTU FILTER SECTION

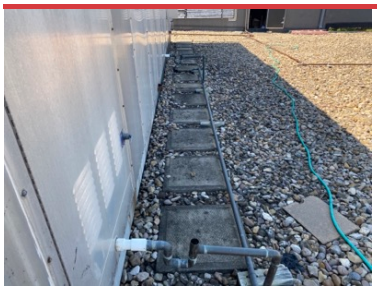
Dirty

NORTH MAIN SALES RTU ELECTRICAL

NORTH MAIN SALES RTU ELECTRICAL VESTIBULE

NORTH MAIN SALES RTU EVAPORATOR SECTION

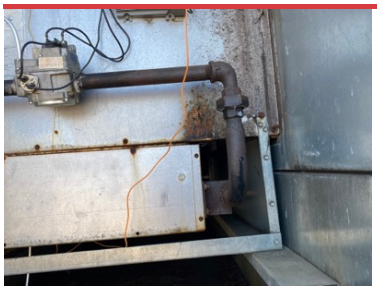
NORTH MAIN SALES RTU FAN SECTION



NORTH MAIN SALES RTU DRAINS

NORTH MAIN SALES RTU HEAT SECTION

NORTH MAIN SALES RTU HEAT SECTION RUST



NORTH MAIN SALES RTU HEAT EXCHANGER

Check for leaks due to amount of rust in heat section

NORTH MAIN SALES RTU O/A INTAKE

Clogged

RTU2 SOUTH MAIN SALES

SOUTH MAIN SALES RTU O/A INTAKE

Clogged

SOUTH MAIN SALES RTU HEAT SECTION

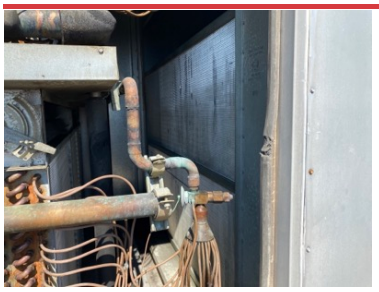
SOUTH MAIN SALES RTU DRAINS

SOUTH MAIN SALES RTU FAN SECTION

Condition of belts are good but not on pulley.

SOUTH MAIN SALES RTU BELTS

Belts are not on one of the motors



SOUTH MAIN SALES RTU EVAPORATOR SECTION

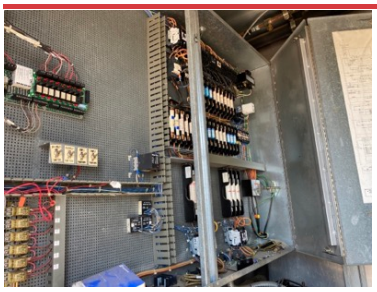
SOUTH MAIN SALES RTU MOTOR

1 of the two motors is locked up. Turned unit off

SOUTH MAIN SALES RTU FILTERS

Dirty

SOUTH MAIN SALES RTU ELECTRICAL VESTIBULE



SOUTH MAIN SALES RTU ELECTRICAL

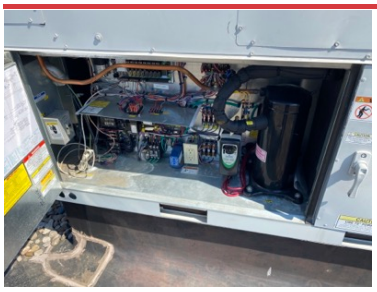
RTU3 DOCK

RTU3 FILTER SECTION

RTU3 FILTERS

Dirty

RTU3 HEAT SECTION



RTU3 ELECTRIC SECTION

RTU3 DRAIN

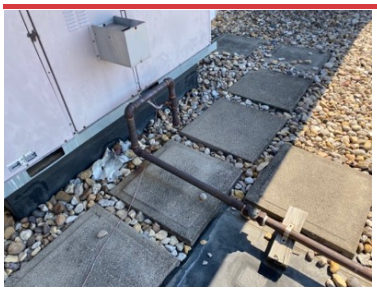
RTU4 BAKERY

RTU4 CONDENSER FINS

Damaged

RTU4 DRAIN

RTU4 O/A INTAKE



RTU4 GAS VALVE POSITION

RTU5 MEZZ OFFICES

RTU5 O/A INTAKE

Filter missing

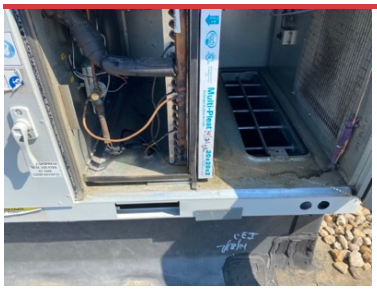
RTU5 CONDENSER FINS

Heavily damages fins

RTU5 DRAIN

RTU6 PHARMACY

RTU6 ELECTRIC SECTION



RTU6 FILTER SECTION

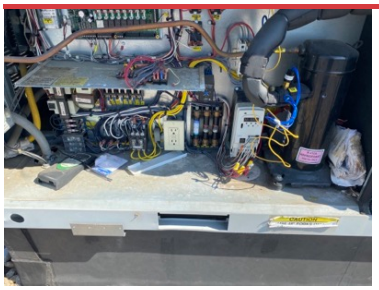
RTU6 FILTERS

Dirty

RTU6 GAS VALVE POSITION

RTU6 DRAIN

RTU7 CLICKLIST

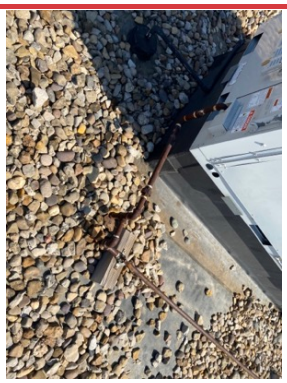


RTU7 ELECTRICAL SECTION

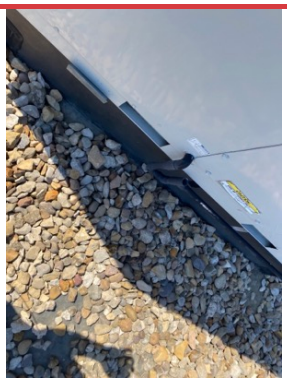
VFD Bypassed

RTU7 FILTER SECTION

RTU7 FILTERS



RTU7 GAS VALVE POSITION



RTU7 DRAIN

TECH - BUILDING ANALYSIS

Assigned Organization: National TAB

Status: Not Submitted

Asset:

GENERAL CONDITIONS Of Retail (sales) Floor	
Instructions: Fill out based upon actual experience or testing in space and/or communicate with store manager to provide any insight of issues occuring.	
Any drafting occuring? Drafts on open cooler cases, front areas, signs, etc?	NO
Any Comfort issues noticed or manager statements?	NO
Building pressure good? Is outside air drafting into space? Can you take a building pressure?	NEUTRAL
Any significant ventilation noise in Retail	NO
Perimeter Area's	
Bakery & Deli hoods Capture 100%?	YES
Office/mezzanine area's comfortable or any complaints from employees?	GOOD
Break room area comfortable or any complaints from employees?	GOOD
Any issues in meat/seafood areas or complaints from employees?	NONE
Any noticable issues in back dock areas?	NO
Does building have seperate cooler compressor room within the Facility space (not on roof)?	YES
If Yes on compressor room, is it sealed 100% to remaining space?	YES
Can you determine if the comppressor room is causing pressure issues if NOT sealed properly?	N/A
HVAC Distribution systems (within space)	
List any issues that are visually found with broken/damaged air devices:	NONE
List any issues with any clogged return filters if notices in space:	NONE
List any issues with any damaged, loose, or missing Ductwork or Air Devices exposed or above ceiling:	NONE

Notes/Comments:

TECH - RTU SITE EVAL (MAIN SALES) RTU1

Assigned Organization: National TAB

Status: Not Submitted

Asset:

RTU CHECKLIST	
RTU Unit Tag & Area Served:	RTU1 NORTH MAIN SALES FLOOR
Belts are tight and in good working order	YES
Pulleys are properly aligned	YES
Does the motor sheave have any additional adjustment?	FIXED
Disconnect switch installed?	YES
All electrical connections visually look in tack and no evidence of electrical damage? Describe:	YES
No noticeable vibration or noise exist correct? If so, specify:	YES
Outside air dampers installed and functioning	YES
If outside air is not functioning describe why?	INTAKE IS PLUGGED WITH DIRT AND WILL NOT BRING IN O/A PROPERLY
Any loose Insulation inside RTU/AHU? If so, specify where:	NONE
Condensate Pans & drains free of debris & not clogged with Debri (dirt)?	YES
Any loose debris or components withing Unit? If so, remove & describe. If cannot remove specify why.	YES
Date of Inspection	10/8/2021

Notes/Comments:

LARGE AMOUNTS OF PAPER TOWELS AND TRASH IN ELECTRICAL VESTIBULE. HEAT SECTION HAS LARGE AMOUNTS OF RUST AND POSSIBLY COMPROMISED HEAT EXCHANGER.

TECH - RTU SITE EVAL (GENERAL)

Assigned Organization: National TAB

Status: Not Submitted

Asset:

RTU CHECKLIST (GENERAL AREAS)	
List all RTU(s) Unit Tag & Area Served for this checklist:	RTU3, 4, 5, 6, & 7
List any RTU # that dont have belts tight and in good working order	NONE
List any RTU # that dont have pulleys properly aligned	NONE
Does the motor sheave have any additional adjustment? List any RTU's that are at max adjustment:	YES
List any RTU # that dont have Disconnect switch installed?	NONE
All electrical connections visually look in tack and no evidence of electrical damage? Describe for each RTU:	YES
No noticeable vibration or noise exist correct? If so, specify type of noise & which RTU #:	YES
List any RTU # that dont have Outside air dampers installed and functioning	RTU4 & 5 DON'T HAVE O/A FILTERS INSTALLED
If outside air is not functioning describe why & which RTU #'s:	NONE
Any loose Insulation inside RTU/AHU? If so, specify where & which RTU #:	NONE
List any RTU # that have Condensate Pans & drains free of debris & not clogged with Debri (dirt)?	ALL
Any loose debris or components within Unit? If so, remove & describe. If cannot remove specify why. note which RTU #	NONE
Additional notes/comments:	
Additional notes/comments:	
Date of Inspection	10/10/2021

Notes/Comments:

TECH - EXHAUST FAN
SITE EVAL (GENERAL)

Assigned Organization: National TAB

Status: Not Submitted

Asset:

EXHAUST FAN (General Purpose Exhaust Fans)	
Instructions: Document Fan # for each of the items listed below. If multiple Fans have the same issue, make sure to list all Fans next to each item (Note: use additional notes box below if needed):	
List Fan # and Area Served for each fan review on this checklist:	EF9, 10, 11, 12, 14, & 16
List any deficiency in any physical conditions in fans housing	NONE
No unusual vibration or noise present? If so list Fan # and issue	NO
Fan Belts properly tensioned and free of damage	YES
Fan & Motor Pulleys properly aligned, able to be adjusted & not rusted/warn. IF so, document issues:	YES
Any additional pulley/belt issues?:	NONE
Fans motors have power to fans & motors are operable? If not, describe:	ALL EXCEPT EF14 IN MANAGERS OFFICE
Fans have operable disconnects?	YES
Verify voltage input is correct	YES

Notes/Comments:

TECH - EXHAUST FAN SITE EVAL (GREASE)

Assigned Organization: National TAB

Status: Not Submitted

Asset:

EXHAUST FAN (Grease Rated Hood Fans)	
Instructions: Document Fan # for each of the items listed below. If multiple Fans have the same issue, make sure to list all Fans next to each item (Note: use additional notes box below if needed):	
List Fan # and Area Served for each fan review on this checklist:	EF8A & EF8
List any deficiency in any physical conditions in fans housing	NONE
No unusual vibration or noise present? If so list Fan # and issue	NONE
Fan Belts properly tensioned and free of damage	EF8a BELT IS STARTING TO CRACK
Fan & Motor Pulleys properly aligned, able to be adjusted & not rusted/warn. IF so, document issues:	YES
Any additional pulley/belt issues?:	NONE
Fans motors have power to fans & motors are operable? If not, describe:	YES
Fans have operable disconnects?	YES
Verify voltage input is correct	YES

Notes/Comments:

TECH - MAU SITE EVAL

Assigned Organization: National TAB

Status: Not Submitted

Asset:

Make Up Air Fans	
Instructions: Document Fan # for each of the items listed below. If multiple Fans have the same issue, make sure to list all Fans next to each item (Note: use additional notes box below if needed):	
List Fan # and Area Served for each fan review on this checklist:	SF1 AND SF2
List any deficiency in any physical conditions in fans housing	LATCHES ARE BROKEN BUT LIDS ARE SCREWED DOWN
No unusual vibration or noise present? If so list Fan # and issue	NONE
Fan Belts properly tensioned and free of damage	YES
Fan & Motor Pulleys properly aligned, able to be adjusted & not rusted/warn. IF so, document issues:	YES
Any additional pulley/belt issues?:	NONE
Fans motors have power to fans & motors are operable? If not, describe:	SF2 HAS NO POWER
Fans have operable disconnects?	YES
Is make up air unit Gas fired? if so, direct fired or Indirect fired?	N/A
Heaters function properly?	N/A
Any make up air systems have cooling? Do they function (if you can determine) & what type of cooling (Dx, Evaporative, CW,etc)	N/A

Notes/Comments:

System/Unit: AHU/RTU

Asset: RTU1 AREA: MAIN SALES

Unit Data		
	Design	**Actual**
MFG	AAON	FOUR SEASONS
Model Num	NA	1SJK40-0572-DN6.0-24HR
Serial Num	-	5979-7199188
Configuration	VERTICAL	VERTICAL DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	58X32
Num OA Filters 2	-	-
OA Filter Size 2	-	-
Num Final Filter 1	-	30
Final Filter Size 1	-	16X20X2
Num Final Filter 2	-	-
Final Filter Size 2	-	-

Motor Data		
	Design	**Actual**
Motor MFG	-	(2) BALDOR
Frame	-	256T
Horsepower	20	20
Motor Rpm	-	1765
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	23.5

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	JVS-210-3
Motor Bore Size	-	3.25
Motor Sheave SetPt	-	FIXED
Fan Sheave Size	-	15.4
Fan Sheave Bore	-	2.5
Num of Belts	-	2
Belt Size	-	B124
Belt Alignment	-	VERIFIED

Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	YES

Test Data		
	Design	**Actual**
SF CFM	23,880	21544
SF RPM	-	766
OA CFM	3675	3141
RL Voltage	-	474/476/476
RL Amperage	-	19.6/19.4/19.1
VFD Max SetPt	-	NA
RA Damper Position	-	NA
RA Damper Type	-	NA
OA Damper Position	-	1.5" OPEN
OA Damper Type	-	ACTUATED BLADE

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.68"
Fan Suction SP	-	-1.22"
Fan Discharge SP	-	0.89"
Total ESP	1.5"	1.57"
Fan Total SP	-	2.11"
SA Temp (db/wb)	-	58.8

General		
	Design	**Actual**
Unit free of Damage	-	YES
Fan Belt Condition	-	GOOD
Unit Filters Clean	-	YES
Evap Coil Clean	-	YES
Evap Coil Free of Frost	-	YES
Condensor Coil Clean	-	YES
Condensor Fins Straight	-	YES
Condensate Drain Installed	-	YES

Completed By: Brian Irvin on 10/28/2021

Notes:

System/Unit: AHU/RTU

Asset: RTU2 AREA: MAIN SALES

Unit Data		
	Design	**Actual**
MFG	AAON	FOUR SEASONS
Model Num	NA	1SJK40-0572-DN6.0-24HR
Serial Num	-	5979-0499188
Configuration	VERTICAL	VERTICAL DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	58X32
Num OA Filters 2	-	-
OA Filter Size 2	-	-
Num Final Filter 1	-	30
Final Filter Size 1	-	16X20X2
Num Final Filter 2	-	-
Final Filter Size 2	-	-

Motor Data		
	Design	**Actual**
Motor MFG	-	(2) BALDOR
Frame	-	256T
Horsepower	20	20
Motor Rpm	-	1765
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	23.5

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	JVS210-2
Motor Bore Size	-	3.25
Motor Sheave SetPt	-	FIXED
Fan Sheave Size	-	15.4
Fan Sheave Bore	-	2.5
Num of Belts	-	2
Belt Size	-	B124
Belt Alignment	-	BAD MOTOR

Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	NR

Test Data		
	Design	**Actual**
SF CFM	23,710	0
SF RPM	-	NR
OA CFM	2675	NR
RL Voltage	-	NR
RL Amperage	-	NR
VFD Max SetPt	-	NA
RA Damper Position	-	NA
RA Damper Type	-	NA
OA Damper Position	-	NR
OA Damper Type	-	ACTUATED BLADE

Performance Data		
	Design	**Actual**
MA Plenum SP	-	NR
Fan Suction SP	-	NR
Fan Discharge SP	-	NR
Total ESP	1.5"	NR
Fan Total SP	-	NR
SA Temp (db/wb)	-	NR

General		
	Design	**Actual**
Unit free of Damage	-	NO
Fan Belt Condition	-	GOOD
Unit Filters Clean	-	YES
Evap Coil Clean	-	YES
Evap Coil Free of Frost	-	YES
Condensor Coil Clean	-	YES
Condensor Fins Straight	-	YES
Condensate Drain Installed	-	YES

Completed By: Brian Irvin on 10/28/2021

Notes: ONE MOTOR LOCKED. BELTS WERE OFF OF OTHER MOTOR
TURN DISCONNECT OFF AND INFORMED MANAGER.

System/Unit: AHU/RTU

Asset: RTU3 AREA: DELIVERY DOCK

Unit Data		
	Design	**Actual**
MFG	AAON	AAON
Model Num	N/A	RN-005
Serial Num	-	NL
Configuration	VERTICAL	VERTICAL DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	20X20
Num OA Filters 2	-	-
OA Filter Size 2	-	-
Num Final Filter 1	-	2
Final Filter Size 1	-	20X20X2
Num Final Filter 2	-	-
Final Filter Size 2	-	-

Motor Data		
	Design	**Actual**
Horsepower	2	2
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	2.1

Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	YES

Test Data		
	Design	**Actual**
SF CFM	2240	2033
SF RPM	-	1211
OA CFM	465	400
RL Voltage	-	426
RL Amperage	-	435
VFD Max SetPt	-	60HZ
OA Damper Position	-	0.5" OPEN
OA Damper Type	-	ACTUATED BLADE

General		
	Design	**Actual**
Unit free of Damage	-	YES
Curb & Unit Installed Air Tight	-	YES
Fan Belt Condition	-	DD
Unit Filters Clean	-	NO
Evap Coil Clean	-	YES
Evap Coil Free of Frost	-	YES
Condensor Coil Clean	-	YES
Condensor Fins Straight	-	YES
Condensate Drain Installed	-	YES

Completed By: Brian Irvin on 10/28/2021

Notes:

System/Unit: AHU/RTU

Asset: RTU4 AREA: BAKERY & DELI

Unit Data		
	Design	**Actual**
MFG	AAON	CARRIER
Model Num	N/A	48TJF016
Serial Num	-	1499F10075
Configuration	VERTICAL	VERTICAL DISCHARGE
Num OA Filters 1	-	MISSING
OA Filter Size 1	-	NA
Num OA Filters 2	-	-
OA Filter Size 2	-	-
Num Final Filter 1	-	6
Final Filter Size 1	-	16X20X2
Num Final Filter 2	-	-
Final Filter Size 2	-	-

Motor Data		
	Design	**Actual**
Horsepower	3	3.7
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	4.8

Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	YES

Test Data		
	Design	**Actual**
SF CFM	5880	5656
SF RPM	-	815
OA CFM	220	244
RL Voltage	-	472
RL Amperage	-	4.0
VFD Max SetPt	-	NA
OA Damper Position	-	0.5" OPEN
OA Damper Type	-	MANUAL BLADE

General		
	Design	**Actual**
Unit free of Damage	-	NO
Curb & Unit Installed Air Tight	-	YES
Fan Belt Condition	-	GOOD
Unit Filters Clean	-	YES
Evap Coil Clean	-	YES
Evap Coil Free of Frost	-	YES
Condensor Coil Clean	-	YES
Condensor Fins Straight	-	NO
Condensate Drain Installed	-	YES

Completed By: Brian Irvin on 10/28/2021

Notes: CONDENSER FINS DAMAGED

System/Unit: AHU/RTU

Asset: RTU5 AREA: MEZZ OFFICES

Unit Data		
	Design	**Actual**
MFG	AAON	CARREIR
Model Num	N/A	NL
Serial Num	-	NL
Configuration	VERTICAL	VERTICAL DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	MISSING
Num OA Filters 2	-	-
OA Filter Size 2	-	-
Num Final Filter 1	-	6
Final Filter Size 1	-	16X20X2
Num Final Filter 2	-	-
Final Filter Size 2	-	-

Motor Data		
	Design	**Actual**
Horsepower	3	3.7
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	4.8

Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	YES

Test Data		
	Design	**Actual**
SF CFM	5645	5410
SF RPM	-	842
OA CFM	610	254
RL Voltage	-	474
RL Amperage	-	3.8
VFD Max SetPt	-	N/A
OA Damper Position	-	0.25' OPEN
OA Damper Type	-	MANUAL BLADE

General		
	Design	**Actual**
Unit free of Damage	-	YES
Curb & Unit Installed Air Tight	-	YES
Fan Belt Condition	-	GOOD
Unit Filters Clean	-	NO
Evap Coil Clean	-	YES
Evap Coil Free of Frost	-	YES
Condensor Coil Clean	-	YES
Condensor Fins Straight	-	NO
Condensate Drain Installed	-	YES

Completed By: Brian Irvin on 10/28/2021

Notes:

System/Unit: AHU/RTU

Asset: RTU6 AREA: PHARMACY

Unit Data		
	Design	**Actual**
MFG	AAON	AAON
Model Num	N/A	RQ-003-3-0-V-CA01-212
Serial Num	-	201204-AYGC03069
Configuration	VERTICAL	VERTICAL DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	20X20
Num OA Filters 2	-	-
OA Filter Size 2	-	-
Num Final Filter 1	-	2
Final Filter Size 1	-	20X20X2
Num Final Filter 2	-	-
Final Filter Size 2	-	-

Motor Data		
	Design	**Actual**
Horsepower	3	1
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	2.1

Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	YES

Test Data		
	Design	**Actual**
SF CFM	900	1104
SF RPM	-	1206
OA CFM	-	640
RL Voltage	-	428
RL Amperage	-	1.6
VFD Max SetPt	-	60HZ
OA Damper Position	-	0.5" OPEN
OA Damper Type	-	ACTUATED BLADE

General		
	Design	**Actual**
Unit free of Damage	-	YES
Curb & Unit Installed Air Tight	-	YES
Fan Belt Condition	-	DD
Unit Filters Clean	-	YES
Evap Coil Clean	-	YES
Evap Coil Free of Frost	-	YES
Condensor Coil Clean	-	YES
Condensor Fins Straight	-	YES
Condensate Drain Installed	-	YES

Completed By: Brian Irvin on 10/09/2021

Notes:

System/Unit: AHU/RTU

Asset: RTU7 AREA: CLICKLIST

Unit Data		
	Design	**Actual**
MFG	AAON	AAON
Model Num	RQ-003-3-V-EA009-212	RQ-003-3-V-CA01-212
Serial Num	-	201204-AYGC03070
Configuration	VERTICAL	VERTICAL DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	20X20
Num OA Filters 2	-	-
OA Filter Size 2	-	-
Num Final Filter 1	-	2
Final Filter Size 1	-	20X20X2
Num Final Filter 2	-	-
Final Filter Size 2	-	-

Motor Data		
	Design	**Actual**
Horsepower	0.5	1
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	2.1

Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	YES

Completed By: Brian Irvin on 10/09/2021

Notes:

Test Data		
	Design	**Actual**
SF CFM	730	688
SF RPM	-	842
OA CFM	260	234
RL Voltage	-	474
RL Amperage	-	1.5
VFD Max SetPt	-	45HZ
OA Damper Position	-	NA
OA Damper Type	-	ACTUATED BLADE

General		
	Design	**Actual**
Unit free of Damage	-	YES
Curb & Unit Installed Air Tight	-	YES
Fan Belt Condition	-	DD
Unit Filters Clean	-	YES
Evap Coil Clean	-	YES
Evap Coil Free of Frost	-	YES
Condensor Coil Clean	-	YES
Condensor Fins Straight	-	YES
Condensate Drain Installed	-	YES

System/Unit: FAN - Exhaust

Asset: EF9 AREA: SEAFOOD

Unit Data		
	Design	**Actual**
MFG	CAPTIVE AIRE	NL
Model Num	NA	NL
Serial Num	-	NL
Type	DOWNBLAST	DOWNBLAST

Test Data		
	Design	**Actual**
CFM	1200	1044
Fan Rotation	-	CCW
RL Voltage	-	122
RL Amperage	-	3.6

Motor Data		
	Design	**Actual**
Horsepower	1/6	1/6
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	4.1

Drive Data		
	Design	**Actual**
Motor Sheave SetPt	-	DD

Completed By: Brian Irvin on 10/09/2021

Notes:

System/Unit: FAN - Exhaust

Asset: EF10 AREA: PUBLIC TOILET

Unit Data		
	Design	**Actual**
MFG	CAPTIVE AIRE	DAYTON
Model Num	NA	5DVT0
Serial Num	-	15590847
Type	DOWNBLAST	DOWNBLAST

Test Data		
	Design	**Actual**
CFM	640	612
Fan Rotation	-	CCW
RL Voltage	-	121
RL Amperage	-	2.2

Motor Data		
	Design	**Actual**
Horsepower	1/6	1/6
Motor Rpm	-	1625
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	4.1

Drive Data		
	Design	**Actual**
Motor Sheave SetPt	-	DD

Completed By: Brian Irvin on 10/09/2021

Notes:

System/Unit: FAN - Exhaust

Asset: EF11 AREA: ELEVATOR EQUIPMENT

Unit Data		
	Design	**Actual**
MFG	CAPTIVE AIRE	NL
Model Num	NA	NL
Serial Num	-	NL
Type	DOWNBLAST	DOWENBLAST

Test Data		
	Design	**Actual**
CFM	400	NR
Fan Rotation	-	CCW
RL Voltage	-	122
RL Amperage	-	0.8

Motor Data		
	Design	**Actual**
Horsepower	1/25	1/25
Motor Rpm	-	1625
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	1.2

Drive Data		
	Design	**Actual**
Motor Sheave SetPt	-	DD

Completed By: Brian Irvin on 10/09/2021

Notes: NO ACCESS TO MEASURE AIRFLOW

System/Unit: FAN - Exhaust

Asset: EF12 AREA: BACKROOM TOILET

Unit Data		
	Design	**Actual**
MFG	CAPTIVE AIRE	DAYTON
Model Num	NA	16D535
Serial Num	-	15401318
Type	DOWNBLAST	DOWNBLAST

Test Data		
	Design	**Actual**
CFM	600	426
Fan Rotation	-	CCW
RL Voltage	-	122
RL Amperage	-	2.4

Motor Data		
	Design	**Actual**
Horsepower	1/12	1/12
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	3.2

Drive Data		
	Design	**Actual**
Motor Sheave SetPt	-	DD

Completed By: Brian Irvin on 10/09/2021

Notes:

System/Unit: FAN - Exhaust

Asset: EF14 AREA: MANAGER OFFICE

Unit Data		
	Design	**Actual**
MFG	CAPTIVE AIRE	NL
Model Num	NA	NL
Serial Num	-	NL
Type	DOWNBLAST	DOWNBLAST

Test Data		
	Design	**Actual**
CFM	220	0
Fan Rotation	-	NR
RL Voltage	-	NR
RL Amperage	-	NR

Motor Data		
	Design	**Actual**
Horsepower	1/25	1/25
Motor Rpm	-	1325
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	1.2

Drive Data		
	Design	**Actual**
Motor Sheave SetPt	-	DD

Completed By: Brian Irvin on 10/09/2021

Notes: NOT RUNNING

System/Unit: FAN - Exhaust

Asset: EF16 AREA: BAKERY DBL RACK OVEN

Unit Data		
	Design	**Actual**
MFG	CAPTIVE AIRE	CAPTIVE AIRE
Model Num	NCA14HPFA	NCA14HPFA
Serial Num	-	1480499
Type	UPBLAST	UPBLAST

Test Data		
	Design	**Actual**
CFM	900	944
Fan Rotation	-	CCW
RL Voltage	-	118
RL Amperage	-	6.0

Motor Data		
	Design	**Actual**
Horsepower	1/2	0.5
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	8.1

Drive Data		
	Design	**Actual**
Motor Sheave SetPt	-	2 TURNS OUT

Completed By: Brian Irvin on 10/09/2021

Notes:

System/Unit: FAN - Exhaust

Asset: EF8A AREA: DELI LEFT HOOD

Unit Data		
	Design	**Actual**
MFG	CAPTIVE AIRE	NL
Model Num	NA	NL
Serial Num	-	NL
Type	UPBLAST	UPBLAST

Test Data		
	Design	**Actual**
CFM	6000	5773
Fan Rotation	-	CCW
RL Voltage	-	NR
RL Amperage	-	NR

Motor Data		
	Design	**Actual**
Horsepower	2	2
Motor Rpm	-	1725
Phase	3	3
Voltage (rated)	208	208-230/460
Amperage (rated)	-	5.9-5.6/2.8

Drive Data		
	Design	**Actual**
Motor Sheave SetPt	-	MAXIMIZED

Completed By: Brian Irvin on 10/09/2021

Notes:

System/Unit: FAN - Exhaust

Asset: EFB8 AREA: DELI HOOD RIGHT

Unit Data		
	Design	**Actual**
MFG	CAPTIVE AIRE	NL
Model Num	NA	NL
Serial Num	-	NL
Type	UPBLAST	UPBLAST

Test Data		
	Design	**Actual**
CFM	6000	5428
Fan Rotation	-	CCW
RL Voltage	-	207/206/206
RL Amperage	-	4.2/4.1/4.1

Motor Data		
	Design	**Actual**
Horsepower	2	2
Motor Rpm	-	1725
Phase	3	3
Voltage (rated)	208	208-230/460
Amperage (rated)	-	5.9-5.6/2.8

Drive Data		
	Design	**Actual**
Motor Sheave SetPt	-	MAXIMIZED

Completed By: Brian Irvin on 10/09/2021

Notes:

System/Unit: FAN - Supply

Asset: SF1 AREA: DELI RIGHT HOOD

Unit Data		
	Design	**Actual**
MFG	CAPTIVE AIRE	NL
Model Num	N/A	NL
Serial Num	-	NL
Type	MAU	MAU
Configuration	UPBLAST	VERTICAL DISCHARGE

Test Data		
	Design	**Actual**
CFM	4320	3623
RL Voltage	-	209
RL Amperage	-	4.8

Motor Data		
	Design	**Actual**
Horsepower	2	2
Motor Rpm	-	1725
Phase	3	3
Voltage (rated)	208	208
Amperage (rated)	-	5.4

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

Completed By: Brian Irvin on 10/09/2021

Notes:

System/Unit: FAN - Supply

Asset: SF-2 AREA: DELI LEFT HOOD

Unit Data		
	Design	**Actual**
MFG	CAPTIVE AIRE	NL
Model Num	N/A	NL
Serial Num	-	NL
Type	MAU	MAU
Configuration	UPBLAST	VERTICAL DISCHARGE

Test Data		
	Design	**Actual**
CFM	4320	0
RL Voltage	-	NR
RL Amperage	-	NR

Motor Data		
	Design	**Actual**
Horsepower	2	2
Motor Rpm	-	1725
Phase	3	3
Voltage (rated)	208	208
Amperage (rated)	-	5.4

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

Completed By: Brian Irvin on 10/09/2021

Notes: NOT RUNNING. NO VOLTAGE.

System/Unit: Kitchen Hood Type I

Asset: HD1 AREA: DELI HOOD LEFT

Unit Data		
	Design	**Actual**
MFG	TYPE I	GREASE MASTER
Model Num	NA	GWC-4
Job / Serial Num	-	NL
Type	TYPE I	TYPE I CANOPY
Hood length	-	144
Hood Width	-	55

Performance Data		
	Design	**Actual**
Smoke Generation Type	-	COOKING
Hood Capture %	-	100%

Test Data Exhaust		
	Design	**Actual**
Filter Type	-	BAFFLE
Filter Size 1	-	20X25
Filter Size 2	-	20X16
Filter Qty 1	-	5
Filter Qty 2	-	1
Filter AK factor size 1	-	3.42
Filters AK factor size 2	-	2.08
Filter Total AK Area	-	19.18
Filter1 FPM	-	273
Filter2 FPM	-	308
Filter3 FPM	-	367
Filter4 FPM	-	334
Filter5 FPM	-	287
Filter6 FPM	-	236
Filter7 FPM	-	-
Filter8 FPM	-	-
Filter9 FPM	-	-
Filter10 FPM	-	-
Filter11 FPM	-	-
Filter12 FPM	-	-
Filter Ave FPM(corr)	-	301
CFM	-	5773

Cooking Equipment		
	Design	**Actual**
Item 1	-	FRYERS
Item 2	-	-
Item 3	-	-

Completed By: Brian Irvin on 10/09/2021

Notes:

System/Unit: Kitchen Hood Type I

Asset: HD2 AREA: DELI HOOD RIGHT

Unit Data		
	Design	**Actual**
MFG	TYPE I	GREASE MASTER
Model Num	NA	GWC-4
Job / Serial Num	-	NL
Type	TYPE I	TYPE I CANOPY
Hood length	-	144
Hood Width	-	55

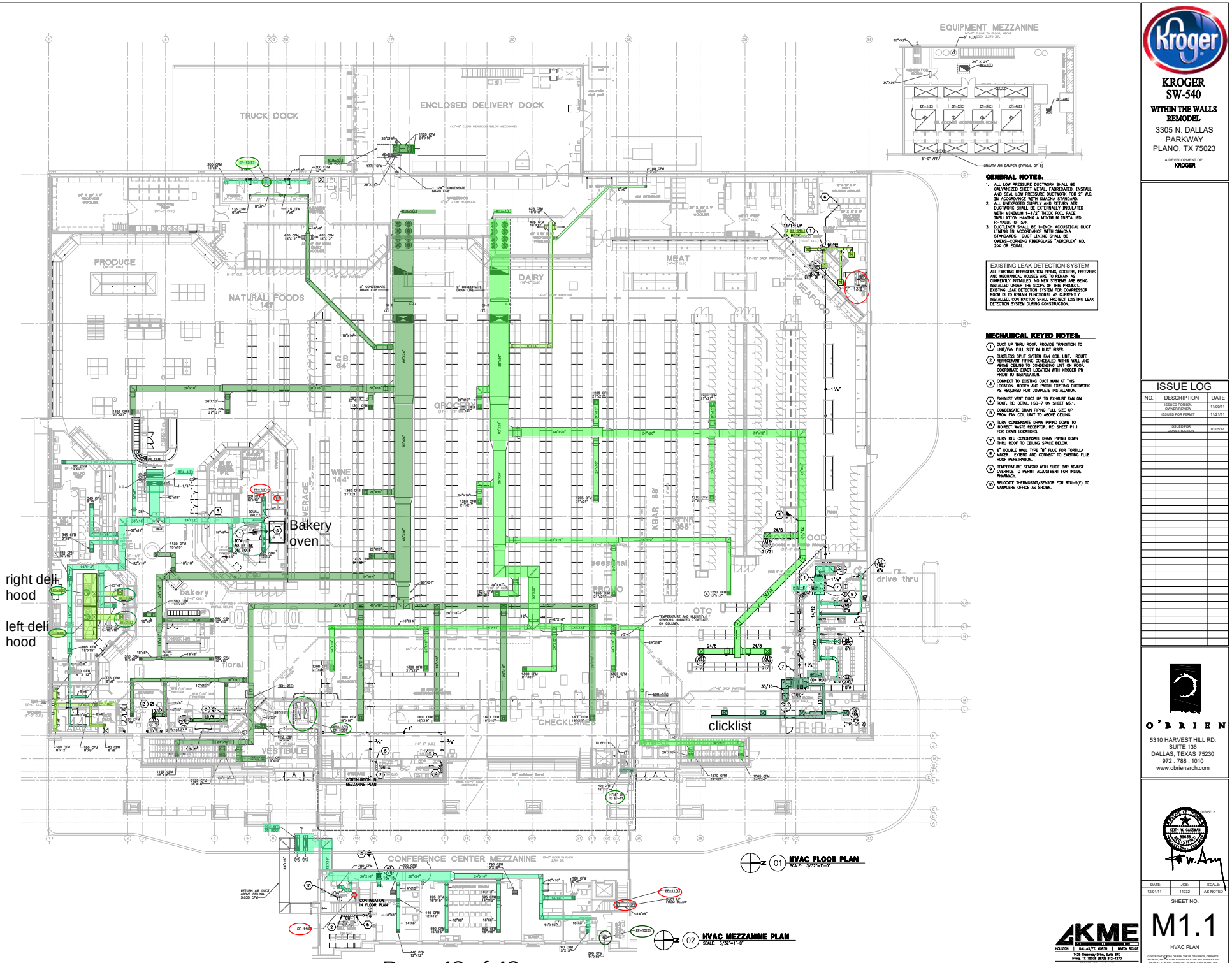
Performance Data		
	Design	**Actual**
Smoke Generation Type	-	COOKING
Hood Capture %	-	100%

Test Data Exhaust		
	Design	**Actual**
Filter Type	-	BAFFLE
Filter Size 1	-	20X25
Filter Size 2	-	20X16
Filter Qty 1	-	5
Filter Qty 2	-	1
Filter AK factor size 1	-	3.42
Filters AK factor size 2	-	2.08
Filter Total AK Area	-	19.18
Filter1 FPM	-	292
Filter2 FPM	-	257
Filter3 FPM	-	313
Filter4 FPM	-	310
Filter5 FPM	-	270
Filter6 FPM	-	255
Filter7 FPM	-	-
Filter8 FPM	-	-
Filter9 FPM	-	-
Filter10 FPM	-	-
Filter11 FPM	-	-
Filter12 FPM	-	-
Filter Ave FPM(corr)	-	283
CFM	-	5428

Cooking Equipment		
	Design	**Actual**
Item 1	-	OVENS
Item 2	-	-
Item 3	-	-

Completed By: Brian Irvin on 10/09/2021

Notes:



GENERAL NOTES:

1. ALL LOW PRESSURE DUCTWORK SHALL BE GALVANIZED SHEET METAL, FABRICATED, INSTALL AND SEAL LOW PRESSURE DUCTWORK FOR 2" W.G. IN ACCORDANCE WITH SMACNA STANDARD.
2. ALL UNEXPOSED SUPPLY AND RETURN AIR DUCTWORK SHALL BE EXTERNALLY INSULATED WITH MINIMUM 1-1/2" THICK FOIL FACE INSULATION HAVING A MINIMUM INSTALLED R-VALUE OF 5.6.
3. DUCTLINER SHALL BE 1-INCH ACOUSTICAL DUCT LINING IN ACCORDANCE WITH SMACNA STANDARDS. DUCT LINING SHALL BE OWENS-CORNING FIBERGLASS "AEROFLEX" NO. 200 OR EQUAL.

EXISTING LEAK DETECTION SYSTEM

ALL EXISTING REFRIGERATION PIPING, COOLERS, FREEZERS AND MECHANICAL HOUSES ARE TO REMAIN AS CURRENTLY INSTALLED. NO NEW SYSTEMS ARE BEING INSTALLED UNDER THE SCOPE OF THIS PROJECT. EXISTING LEAK DETECTION SYSTEM FOR COMPRESSOR ROOM IS TO REMAIN FUNCTIONAL AS CURRENTLY INSTALLED. CONTRACTOR SHALL PROTECT EXISTING LEAK DETECTION SYSTEM DURING CONSTRUCTION.

MECHANICAL KEYED NOTES:

1. DUCT UP THRU ROOF. PROVIDE TRANSITION TO UNIT/VAV FULL SIZE IN DUCT RISER.
2. DUCTLESS SPLIT SYSTEM FAN COIL UNIT. ROUTE REFRIGERANT PIPING CONCEALED WITHIN WALL AND ABOVE CEILING TO CONDENSING UNIT ON ROOF. COORDINATE EXACT LOCATION WITH KROGER PM PRIOR TO INSTALLATION.
3. CONNECT TO EXISTING DUCT MAIN AT THIS LOCATION. MODIFY AND PATCH EXISTING DUCTWORK AS REQUIRED FOR COMPLETE INSTALLATION.
4. EXHAUST VENT DUCT UP TO EXHAUST FAN ON ROOF. RE: DETAIL H5D-7 ON SHEET M5.1.
5. CONDENSATE DRAIN PIPING FULL SIZE UP FROM FAN COIL UNIT TO ABOVE CEILING.
6. TURN CONDENSATE DRAIN PIPING DOWN TO INDIRECT WASTE RECEPTOR. RE: SHEET P1.1 FOR DRAIN LOCATIONS.
7. TURN RTU CONDENSATE DRAIN PIPING DOWN THRU ROOF TO CEILING SPACE BELOW.
8. 6" DOUBLE WALL TYPE "B" FLUE FOR TORTILLA MAKER. EXTEND AND CONNECT TO EXISTING FLUE ROOF PENETRATION.
9. TEMPERATURE SENSOR WITH SLIDE BAR ADJUST OVERRIDE TO PERMIT ADJUSTMENT FOR INSIDE PHARMACY.
10. RELOCATE THERMOSTAT/SENSOR FOR RTU-5(C) TO MANAGERS OFFICE AS SHOWN.

KROGER
SW-540
WITHIN THE WALLS REMODEL
3305 N. DALLAS PARKWAY
PLANO, TX 75023
A DEVELOPMENT OF: KROGER

ISSUE LOG

NO.	DESCRIPTION	DATE
	ISSUED FOR 50% CHANGE REVIEW	11/09/11
	ISSUED FOR PERMIT	11/21/11
	ISSUED FOR CONSTRUCTION	01/05/12

O'BRIEN
5310 HARVEST HILL RD.
SUITE 136
DALLAS, TEXAS 75230
972 . 788 . 1010
www.obrienarch.com

KEITH W. GASSMAN
86636
LICENSED PROFESSIONAL ENGINEER
01/05/12

DATE:	JOB:	SCALE:
12/01/11	11032	AS NOTED

SHEET NO.

M1.1

HVAC PLAN

AKME
HOUSTON | DALLAS/FT. WORTH | BATON ROUGE
1425 Greenway Drive, Suite 440
Irving, TX 75038 (972) 513-1270
REGISTRATION # F-4111
KME PROJECT # 08211028