Report By:

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

Report: TAB Report

Function: Test, Adjust, & Balance

Date: 01/14/2026

Completed By: National TAB

PROJECT

Jersey Mikes (Liberty, MO)

1912 Star Drive

Liberty, MO 64068

Client

Meuschke Mechanical, LLC

6719 Appleton Ave

Raytown, MO 64133

National TAB

Project: Jersey Mikes (Liberty, MO)

Table Of Contents

Issue List

- Diffuser 1-1 (Restroom) diffuser face loose
- Diffuser 1-2 missing damper
- KEF-1: Not running
- KSF-1: Damper not opening

Jersey Mikes (Liberty, MO)

Project Issue Information

Issue Name : Diffuser 1-1 (Restroom) diffuser face loose

Description : Face of diffuser came loose during balancing. Temporarily secured with foil tape

Created By :	National TAB	**Assigned To :**	National TAB - Kalen Kemp
Status :	Open		
Priority :	Medium	**Asset Tag :**	
Originated Date :	07/08/2025 - Will Turnbough - National TAB		

Project Issue File Details

07/08/2025

Jersey Mikes (Liberty, MO)

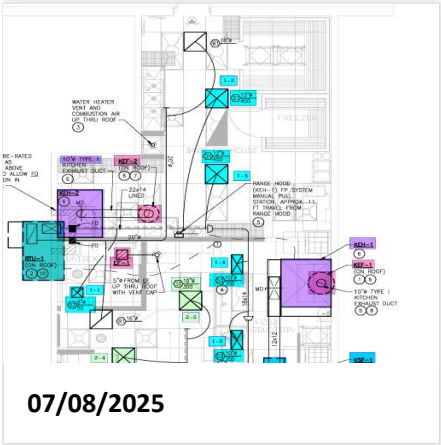
Project Issue Information

Issue Name : Diffuser 1-2 missing damper

Description : Airflow for diffuser 1-2 is above design but diffuser 1-3 in the same area is a little below design. Likely won't cause any comfort issues but damper is needed on 1-2 to balance both within design.

Created By :	National TAB	**Assigned To :**	National TAB - Kalen Kemp
Status :	Open		
Priority :	Low	**Asset Tag :**	
Originated Date :	07/08/2025 - Will Turnbough - National TAB		

Project Issue File Details



07/08/2025

Jersey Mikes (Liberty, MO)

Project Issue Information

Issue Name : KEF-1: Not running
Description : Fan is not running. No power to disconnect.

Created By :	National TAB	**Assigned To :**	National TAB - Kalen Kemp
Status :	Open		
Priority :	Urgent	**Asset Tag :**	KEF-1
Originated Date :	07/07/2025 - Kalen Kemp - National TAB		

Project Issue File Details

07/07/2025

Jersey Mikes (Liberty, MO)

Project Issue Information

Issue Name : KSF-1: Damper not opening
Description : Fan is running but damper is not opening. Airflow is low.

Created By :	National TAB	**Assigned To :**	National TAB - Kalen Kemp
Status :	Open		
Priority :	Urgent	**Asset Tag :**	KSF-1
Originated Date :	07/07/2025 - Kalen Kemp - National TAB		

Project Issue File Details

07/07/2025

National TAB

Project: Jersey Mikes (Liberty, MO)

System/Unit: AHU/RTU

Asset: RTU-1 AREA:

Unit Data	
	Actual
MFG	BRYANT
Serial Num	0924C08816
Model Num	582KP06A110A2A0AAA
Configuration	VERTICAL
Num OA Filters 1	1
OA Filter Size 1	14.25X28.25
Num PreFilter 1	2
PreFilter Size 1	16X24X2”

Motor Data		
	Design	**Actual**
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	-	1
Rated Voltage	-	208/230
Rated Amperage	-	9.2
Service Factor	-	NL

Test Data		
	Design	**Actual**
SF CFM	2000	2027
SF RPM	-	2188
RA CFM	1670	1680
OA CFM	330	347
RL Voltage	208	207
RL Amperage	-	5.98
SF System SetPt	-	89%
OA Damper Position	-	3.0 V
Brake Horse Power	-	

Performance Data		
	Design	**Actual**
Fan Suction SP	-	-0.91
Fan Discharge SP	-	0.69
Total ESP	-	1.60
Fan Total SP	-	1.60
Pre-Filter P.D.	-	0.40
Cooling Coil P.D.	-	Combined*

Completed By: Kalen Kemp on 07/07/2025

National TAB

Project:Jersey Mikes (Liberty, MO)

AHU/RTU

Diffuser Supply (GRD)

RTU-1/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
RTU1-1	RR	S2	6	50	96	48	96.0
RTU1-2	BOH	S1	12	450	551	585	130.0
RTU1-3	BOH	S1	12	450	353	386	85.8
RTU1-4	FOOD PRO	S3	10	350	314	334	95.4
RTU1-5	FOOD PRO	S3	10	350	320	343	98.0
RTU1-6	FOOD PRO	S3	10	350	322	331	94.6
Total				2000	1956	2027	101.35%

Asset	Notes	Date	Written By
RTU1-2	No damper. Left diffuser high to put area within design	07/07/2025	Kalen Kemp
RTU1-3	Diffuser is low. Other diffuser in area is high with no damper. Unable to increase airflow.	07/07/2025	Kalen Kemp

National TAB

Project: Jersey Mikes (Liberty, MO)

System/Unit: AHU/RTU

Asset: RTU-2 AREA:

Unit Data	
	Actual
MFG	BRYANT
Serial Num	0924C08815
Model Num	582KP06A110A2A0AAA
Configuration	VERTICAL
Num OA Filters 1	1
OA Filter Size 1	14.25X28.25”
Num PreFilter 1	16X24.5X1.75”
PreFilter Size 1	

Motor Data		
	Design	**Actual**
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	-	1
Rated Voltage	-	208/230
Rated Amperage	-	9.2
Service Factor	-	NL

Test Data		
	Design	**Actual**
SF CFM	2000	2063
SF RPM (Initial)	-	2188
SF RPM	-	2194
RA CFM	1670	1744
OA CFM	330	319
RL Voltage	208	206
RL Amperage	-	5.60
SF System SetPt	-	8.88 V
OA Damper Position	-	4.2 V
Brake Horse Power	-	

Performance Data		
	Design	**Actual**
Fan Suction SP	-	-0.90
Fan Discharge SP	-	0.63
Total ESP	-	1.53
Fan Total SP	-	1.53
Pre-Filter P.D.	-	0.37
Cooling Coil P.D.	-	Combined*

Completed By: Kalen Kemp on 07/07/2025

National TAB

Project:Jersey Mikes (Liberty, MO)

AHU/RTU

Diffuser Supply (GRD)

RTU-2/

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
RTU2-1	DINING	S1	10	425	444	422	99.3
RTU2-2	DINING	S1	10	425	381	383	90.1
RTU2-3	DINING	S1	12	425	407	422	99.3
RTU2-4	DINING	S1	12	425	472	431	101.4
RTU2-5	DINING	S1	10	300	395	405	135.0
Total				2000	2099	2063	103.15%

National TAB

Project: Jersey Mikes (Liberty, MO)

System/Unit: FAN - Exhaust

Asset: EF-1 AREA:

Unit Data	
	Actual
MFG	S & P
Model Num	PC50XP
Serial Num	230302840

Test Data		
	Design	**Actual**
CFM	50	46
RL Voltage	120	133
RL Amperage	-	0.08

Motor Data		
	Design	**Actual**
Motor MFG	-	S & P
Horsepower	-	NL
Motor Rpm	-	NL
Phase	-	1
Voltage (rated)	-	120
Amperage (rated)	-	NL

Completed By: Kalen Kemp on 07/07/2025

National TAB

Project: Jersey Mikes (Liberty, MO)

System/Unit: FAN - Exhaust

Asset: KEF-1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVEAIRE
Model Num	NA	DU50HFA
Serial Num	-	NL
Type	CRE	UPBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	TELCO GREEN
Frame	-	NL
Horsepower	0.50	0.50
Motor Rpm	1471	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	6.3
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	1000	
Motor Frequency	-	
System SetPt	-	
RL Voltage	115	
RL Amperage	6.3	
Suction ESP	-	
Total ESP	1.00	
Brake Horse Power	-	0.3540

National TAB

Project: Jersey Mikes (Liberty, MO)

System/Unit: FAN - Exhaust

Asset: KEF-2 AREA:OVEN HOOD

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVEAIRE
Model Num	NA	DU12HFA
Serial Num	-	NL
Type	CRE	UPBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	TELCO GREEN
Frame	-	NL
Horsepower	0.250	0.25
Motor Rpm	1481	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	2.9
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	400	404
Motor Frequency	-	32 Hz
System SetPt	-	32 Hz
RL Voltage	115	120
RL Amperage	2.9	0.19
Suction ESP	-	-0.07
Total ESP	0.30	0.07
Brake Horse Power	-	0.0970

Completed By: Kalen Kemp on 07/07/2025

National TAB

Project: Jersey Mikes (Liberty, MO)

System/Unit: FAN - Supply

Asset: KSF-1 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVEAIRE
Model Num	NA	D76
Serial Num	-	NL
Type	-	MAU
Configuration	HORIZONTAL	VERTICAL
Num Filters Size 1	-	1
Filter Size 1	-	16X20X2

Motor Data		
	Design	**Actual**
Motor MFG	-	TELCO GREEN
Frame	-	NL
Horsepower	1.00	1.00
Motor Rpm	1473	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	11.6
Service Factor	-	NL

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	750	
SF RPM	1473	
Motor Frequency	-	
SF System SetPt	-	
RL Voltage	115	
RL Amperage	11.6	
Suction ESP	-	
Discharge ESP	-	
Total ESP	0.400	
Brake Horse Power	-	

National TAB

Project: Jersey Mikes (Liberty, MO)

System/Unit: Kitchen Hood Type I

Asset: KEH-1 AREA:

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	5424-ND-2-PSP-F	5424-ND-2-PSP-F
Job / Serial Num	-	7290581
Type	TYPE I PSP	TYPE I - CANOPY
Hood length	60	60”
Hood Width	54	54”
Supply Plenum Type	-	PSP
Supply Plenum Width	12	12”
Supply Plenum Length	72	

Test Data Exhaust		
	Design	**Actual**
Filter Type	SS BAFFLE	BAFFLE
Filter Size 1	16X16	16X16”
Filter Qty 1	3	3
Filter AK factor size 1	-	1.62
Filter Total AK Area	-	4.86
Filter1 FPM	-	
Filter2 FPM	-	
Filter3 FPM	-	
Filter4 FPM	-	
Filter5 FPM	-	
Filter6 FPM	-	
Filter7 FPM	-	
Filter8 FPM	-	
Filter9 FPM	-	
Filter10 FPM	-	
Filter11 FPM	-	
Filter12 FPM	-	
Filter Ave FPM(corr)	-	
CFM	1000	

Cooking Equipment	
	Actual
Item 1	GRILL
Item 2	
Item 3	
Item 4	
Item 5	

Test Data Supply		
	Design	**Actual**
Total Area	-	6.0
Kv factor (Vel)	-	0.87
Num of Readings	-	6
Reading1 FPM	-	84
Reading2 FPM	-	86
Reading3 FPM	-	83
Reading4 FPM	-	85
Reading5 FPM	-	90
Reading6 FPM	-	83
Ave FPM(corr)	-	85
CFM	750	

National TAB

Project: Jersey Mikes (Liberty, MO)

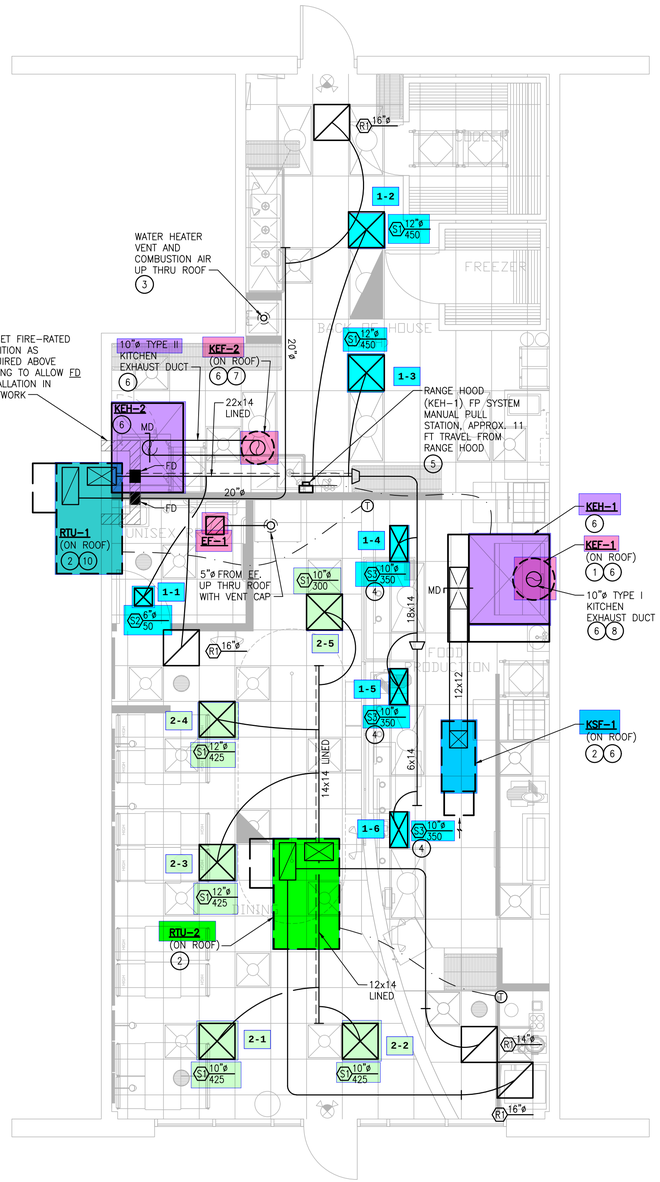
System/Unit: Kitchen Hood Type II

Asset: KEH-2 AREA:OVEN

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	6024 VHB-ND	6024 VHB-ND
Serial Num	-	7290581
Type	TYPE II	TYPE II - CANOPY
Hood length	48	48”
Hood Width	60	60”

Test Data		
	Design	**Actual**
Exhaust CFM	400	404

Completed By: Kalen Kemp on 07/07/2025



1 / H1.1 **HVAC FLOOR PLAN**

SCALE: 1/4"=1'-0"

PACKAGED ROOFTOP AIR CONDITIONING UNITS

MARK	NOM TONS	SEER2/EER2	# STAGES	SUPPLY FAN		OA CFM	GAS HEAT		ELEC		WEIGHT (LBS)	BASIS OF DESIGN		REMARKS
				CFM	ESP (W.G.)		MBH	EFF	V/PH	DISC BY		MANUFACTURER	MODEL	
RTU-1,2	5	13.4/11.4	1	2,000	0.8	330	110	80%	208/3	E.C.	850	CARRIER	48FEEB06	(1)(2)(3)(4)(5)

(1) UL AND CGA LISTED NAT GAS HEATING FURNACE AND DX COOLING UNIT; HEAVY GAUGE STEEL CABINET, BAKED ENAMEL FINISH; SEAMLESS TOP; REMOVABLE ACCESS PANELS; FWD CURVED, EVAPORATOR FAN W/ADJ BELT DRIVE; ALUMINUM STEEL HEAT EXCHANGER W/INDUCED DRAFT BLOWER AND SPARK PILOT IGNITION; ALUMINUM FIN/COPPER TUBE EVAPORATOR COIL WITH FREEZESTAT; FILTER RACK WITH 1" PLEATED MEDIA MERV-8 FILTERS; SCROLL COMPRESSOR WITH VIBRATION ISOLATION MOUNTING; THERMOSTATIC EXPANSION VALVE; ALUMINUM FIN/COPPER TUBE CONDENSER COIL W/HAIL GUARD; DIRECT DRIVE PROPELLER TYPE CONDENSER FAN; EXTERNAL SERVICE VALVES; REFRIGERANT FILTER DRYER; CRANKCASE HEATER; COMPRESSOR START ASSIST; SHORT CYCLE, THERMAL AND HI/LO PRESSURE COMPRESSOR OVERLOAD PROTECTION; CONTROL VOLTAGE TRANSFORMER; LOW AMBIENT KIT FOR COOLING OPERATION DOWN TO 0°F; SINGLE POINT ELECTRICAL CONNECTION; R-454B.

(2) 7-DAY PROGRAMMABLE, AUTOMATIC CHANGEOVER COMBINATION THERMOSTAT AND HUMIDISTAT WITH SETPOINT OVERLAP PROTECTION, 5°F DEADBAND, SETBACK CONTROL WITH 4 OCCUPIED/UNOCCUPIED EVENTS PER DAY (75°F COOL/70°F HEAT OCCUPIED, 85°F COOL/55°F HEAT UNOCCUPIED), SYSTEM AUTO/COOL/OFF CONTROL, AND 2-HOUR PROGRAM OVERRIDE. OPTIMUM START CONTROL; 24 HR BATTERY BACK-UP; DEHUMIDIFICATION CYCLE CONTROL.

(3) 100% OA ECONOMIZER WITH CLASS I SEALS, ENTHALPY CONTROL, HIGH LIMIT SHUT-OFF, FAULT DETECTION AND DIAGNOSTICS, AND BAROMETRIC RELIEF.

(4) MANUFACTURER'S ROOF CURB.

(5) **HOT GAS REHEAT AND HOT LIQUID COOLING DEHUMIDIFICATION SYSTEM. EQUAL TO CARRIER "HUMIDIMIZER".**

DIFFUSERS, REGISTERS, AND GRILLES

MARK	TYPE	MOUNTING	NECK DAMPER	MAX NC	MAX ΔP	SIZE		MAT'L	FINISH	BASIS		REMARKS
						NECK	FRAME			MFGR	MODEL	
S1	4-WAY LOUVERED DIFFUSER	LAY-IN	N	30	0.1"	PER PLANS	24x24	ALUMINUM	(3)	TITUS	TMS-AA	
S2	4-WAY LOUVERED DIFFUSER	SURFACE	Y	30	0.1"	PER PLANS	12x12	ALUMINUM	(3)	TITUS	TDC-AA	
S3	DBL-DEFLECTION REGISTER	LAY-IN	Y	30	0.1"	22x10	23.5x11.5	ALUMINUM	(3)	TITUS	272FS	(1)(2)
R1	FILTER LOUVERED GRILLE	LAY-IN	N	30	0.05"	20x20	24x24	ALUMINUM	(3)	TITUS	3FF	(4)

(1) INSTALL IN LAY-IN CEILING.

(2) PROVIDE 12"H PLENUM WITH ROUND NECK FOR FLEX DUCT CONNECTION.

(3) AIR DEVICE COLOR SHALL MATCH COLOR OF CEILING SYSTEM IN WHICH INSTALLED. CONTRACTOR SHALL COORDINATE.

(4) LOUVERED GRILLE WITH REMOVABLE FACE/CORE. WITH FOUR QUARTER-TURN FASTENERS AND NO HINGE.

FANS

MARK	TYPE	SERVICE	CFM	ESP (W.G)	MOTOR	ELEC (60 HZ)		MAX SONES	BASIS OF DESIGN		REMARKS
						V/PH	DISC BY		MANUFACTURER	MODEL	
EF-1	CEILING-MTD	RESTROOM	50	0.25	6.1 W	120/1	MC	0.6	GREENHECK	SP-80-VG	(1)

(1) DIRECT DRIVE, GALVANIZED STEEL FORWARD CURVED FAN, ECM MOTOR; LOW SOUND CONSTRUCTION: HEAVY GAUGE CABINET INTERNALLY LINED WITH 1/2" ACOUSTICAL LINER; CEILING GRILLE; BACKDRAFT DAMPER; ELECTRICAL DISCONNECT. VARIABLE SPEED CONTROLLER; INTERLOCK WITH LIGHTS

OUTDOOR AIR REQUIREMENTS (2018 NC MECH CODE)

SPACE TYPE	AREA (Az)	PEOPLE-RELATED OA			AREA-RELATED OA		MIN BREATHING ZONE OA, Vb (Pz x Rp) + (Az x Ra)
		# OCC (Pz)	CFM/OCC (Rp)	CFM (Pz x Rp)	CFM/SF (Ra)	CFM (Az x Ra)	
DINING	512	20	7.5	150	0.18	92	242
SERVICE COUNTER AND PREP AREA	755	5	7.5	38	0.18	136	174
RESTROOM	58	–	–	–	0.06	3	3
						SUB-TOTAL (Vb)	419
						ZONE AIR DISTRIBUTION EFFECTIVENESS (Ez)	0.8
						MINIMUM ZONE OUTDOOR AIR REQUIRED (Voz/Ez)	524
						ACTUAL OUTDOOR AIR PROVIDED	660

AIR BALANCE

	OA CFM	EXH CFM
RTU-1,2	660	–
KEH-1	750	1,000
KEH-2	–	400
TOTAL	+1,410	-1,400

FINAL TEST AND BALANCE SHALL PROVIDE FOR SLIGHT OVERALL POSITIVE PRESSURE. RESTROOM EXHAUST FANS ARE CONSIDERED INCIDENTAL (INTERLOCKED WITH LIGHTS) AND ARE IGNORED.

CONTRACTOR FIELD VERIFICATION

THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND MAY NOT REFLECT EXACT FIELD CONDITIONS OR CONSTRAINTS. WHILE REASONABLE EFFORTS HAVE BEEN MADE TO VERIFY THE EXISTING CONDITIONS, THE ENGINEER DOES NOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS SHOWN ON THESE PLANS.

THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS INCLUDING THE EXACT LOCATION, MANUFACTURER, MODEL NUMBER, SERIAL NUMBER, AND UTILITY REQUIREMENTS FOR ALL HVAC EQUIPMENT SERVING THIS SPACE. ANY DISCREPANCIES BETWEEN THESE PLANS AND THE ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE ENGINEER FOR RESOLUTION PRIOR TO BID. ALL COSTS TO MODIFY THE INSTALLATION TO ACCOMMODATE FIELD CONDITIONS SHALL BE INCLUDED IN THE CONTRACTOR'S BID.

LANDLORD SCOPE

THE FOLLOWING ITEMS ARE BY THE LANDLORD. THIS LIST IS FOR REFERENCE ONLY, THE CONTRACTOR SHALL COORDINATE EXACT SCOPE OF LANDLORD WORK WITH FRANCHISEE AND WITH LANDLORD PRIOR TO BID.

- SPACE PROVIDED AS-IS

GENERAL NOTES:

1. PROVIDE MINIMUM 10'-0" HORIZONTAL SEPARATION BETWEEN OA INTAKES AND TERMINATIONS OF ALL CONTAMINANT SOURCES (EXHAUST SYSTEMS, PLUMBING VENTS, OR GAS VENTS) WHERE POSSIBLE. CLEARANCE MAY BE REDUCED TO 5'-0" PROVIDED THE OA INTAKE IS NOT LESS THAN 3'-0" BELOW THE CONTAMINANT SOURCE IN ACCORDANCE WITH IMC. FIELD VERIFY LOCATIONS OF EXISTING OA AND EXH/VENT TERMINATIONS, INCLUDING THOSE OF ADJACENT TENANTS, AND ADJUST JERSEY MIKE'S SUBS' INSTALLATION AS REQUIRED TO COMPLY.
2. THERMOSTATS IN KITCHEN AREAS SHALL BE MOUNTED MINIMUM 6" ABOVE BACKSPLASH ELEVATION. THERMOSTATS IN DINING ROOM (NOT ADJUSTABLE BY THE PUBLIC) SHALL BE MOUNTED 84" AFF OR AS DIRECTED BY THE OWNER. COORDINATE LOCATION AND MOUNTING HEIGHT OF ALL OTHER THERMOSTATS WITH OWNER.
3. PROVIDE FIRE WRAP FOR TYPE I GREASE EXHAUST DUCT, FROM HOOD CONNECTION TO TERMINATION POINT, IF PARTITION BEHIND HOOD IS FRAMED WITH WOOD OR OTHER COMBUSTIBLE CONSTRUCTION – GENERAL CONTRACTOR SHALL FIELD VERIFY.
4. THE CONTRACTOR MAY, AT THEIR OPTION, SUBSTITUTE ROUND DUCT FOR RECTANGULAR DUCT AND RECTANGULAR DUCT FOR ROUND DUCT. DUCT SUBSTITUTIONS SHALL PROVIDE EQUIVALENT (SAME OR LOWER) VELOCITY AND PRESSURE DROP. FOR INTERNALLY LINED DUCTWORK THE NET FREE AREA OF THE SUBSTITUTED DUCT SHALL BE EQUIVALENT TO THE NET FREE AREA OF THE DESIGN.
5. PROVIDE GUARDS OR FALL ARREST/RESTRAINT ANCHORAGE PER MECHANICAL CODE WHERE REQUIRED.
6. PROVIDE STRUCTURAL SUPPORT FOR ALL EQUIPMENT, GUARDS, FALL ARREST/RESTRAINT ANCHORAGE AND ALL OTHER CONNECTIONS TO BUILDING STRUCTURE AS REQUIRED. CONTRACTOR SHALL PROVIDE ALL NECESSARY STRUCTURAL ENGINEERING FOR ANY ADDITIONAL SUPPORTS, FRAMING, AND OTHER STRUCTURAL IMPROVEMENTS REQUIRED BY THE INSTALLATION.

KEYED NOTES:

1. KEF-1 DISCHARGE SHALL BE MIN. 40 INCHES ABOVE THE FLAT ROOF SURFACE, MINIMUM 10 FEET HORIZONTALLY FROM OR 3 FEET ABOVE ANY OA INTAKES (INCLUDING THOSE OF ADJACENT TENANTS/BUILDINGS – FIELD VERIFY), MINIMUM 10 FEET HORIZONTALLY FROM VERTICAL WALLS PROJECTING MORE THAN 40 INCHES ABOVE THE ROOF, AND SHALL BE APPROVED BY THE AUTHORITY HAVING JURISDICTION.
2. OA INTAKE SHALL BE MIN 10'-0" FROM KITCHEN HOOD EXHAUST, RESTROOM EXHAUST, GAS VENT (FLUE), OR PLUMBING VENT TERMINATION, INCLUDING THOSE OF ADJACENT TENANTS (CONTRACTOR TO FIELD VERIFY).
3. VENT AND COMBUSTION AIR PIPING, TERMINATE WITH CONCENTRIC VENTING KIT – MATERIALS, SIZING AND INSTALLATION SHALL BE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
4. **DIFFUSER SHALL BE ADJUSTABLE, DOUBLE DEFLECTION TYPE AS SCHEDULED--NO EXCEPTIONS.** ADJUST REAR BLADES (PARALLEL TO LONG DIMENSION) FOR VERTICAL, DOWNWARD THROW. ADJUST FRONT BLADES (PARALLEL TO SHORT DIMENSION) 2-WAYS, EACH HALF OF BLADES AT 45° FROM VERTICAL. TEST KITCHEN HOOD PERFORMANCE WITH ALL SYSTEMS ON AND AFTER ALL AIR DEVICES ARE ADJUSTED AND BALANCED – ADJUST DIFFUSER THROWS IF REQUIRED TO AVOID INTERFERENCE WITH HOOD'S CAPTURE AND CONTAINMENT PERFORMANCE, AND TO AVOID DISCHARGING AIR DIRECTLY ONTO THERMOSTATS, AND AVOID NUISANCE DRAFTS (OWNERS SATISFACTION).
5. MANUAL PULL STATION SHALL BE LOCATED MINIMUM 10FT, MAXIMUM 20FT FROM RANGE HOOD ALONG THE PATH OF EGRESS. INSTALLATION SHALL BE PER IBC. COORDINATE FINAL LOCATION WITH OWNER AND AHJ.
6. HOOD SYSTEM INSTALLATION AND PERFORMANCE SHALL BE TESTED AND CERTIFIED BY A LICENSED INSTALLER OR AN APPROVED THIRD PARTY AGENCY.
7. KEF-2 DISCHARGE SHALL BE MIN. 30 INCHES ABOVE THE FLAT ROOF SURFACE, MINIMUM 10 FEET FROM ANY OA INTAKES OR BUILDING OPENINGS (INCLUDING THOSE OF ADJACENT TENANTS/BUILDINGS – FIELD VERIFY), MINIMUM 30 INCHES HORIZONTALLY FROM VERTICAL WALLS PROJECTING ABOVE THE ROOF, AND SHALL BE APPROVED BY THE AUTHORITY HAVING JURISDICTION.
8. 10"X10" RECTANGULAR DUCT MAY BE USED IN LIEU OF 10" DIAMETER ROUND DUCT.
9. PROVIDE SECTORIZING BAFFLE IN NECK OF DIFFUSER TO BLOCK AIRFLOW IN QUADRANT FACING HOOD.
10. NEW ROOFTOP UNIT TO REPLACE EXISTING. PROVIDE NEW CURB OR CURB ADAPTER AS REQUIRED.

TESTING, ADJUSTING AND BALANCING

1. PROVIDE CERTIFIED TESTING, ADJUSTING, AND BALANCING (TAB) REPORT FOR ALL MECHANICAL CONSTRUCTION SERVING AREAS UNDER THIS SCOPE OF WORK. TAB SHALL BE PERFORMED BY NEBB OR AABC CERTIFIED AGENT, USING PROCEDURES COMPLYING WITH CERTIFYING AUTHORITY. SUBMIT FINAL REPORT TO ENGINEER FOR REVIEW AND APPROVAL.
2. REPORT SHALL INCLUDE NAME, CONTACT INFORMATION, AND PROOF OF CERTIFICATION FOR TAB AGENT.
3. FINAL BALANCE ALL QUANTITIES TO WITHIN +/-5% OF DESIGN. ADJUST FAN SPEED TO LOWEST POSSIBLE.
4. KITCHEN HOODS SHALL BE BALANCED BY TESTING AGENCY CERTIFIED BY HOOD MANUFACTURER.
5. ADJUST THROW PATTERN OF ALL SUPPLY AIR DEVICES WITHIN 10FT OF KITCHEN HOODS AND ALL SUPPLY AIR DEVICES BEHIND SERVICE COUNTER TO AVOID INTERFERENCE WITH HOOD OPERATION AND TO ELIMINATE NUISANCE DRAFTS. PROVIDE BAFFLES IN AIR DEVICE NECK OR BEHIND FACE AS REQUIRED FOR DIFFUSERS WITHOUT ADJUSTABLE LOUVERS. FINAL SETTINGS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE.
6. AT A MINIMUM, THE FOLLOWING SHALL BE CERTIFIED IN THE REPORT (DESIGN QUANTITIES AND FINAL, BALANCED QUANTITIES):
   - 6.1. MANUFACTURER, MODEL #, AND SERIAL # OF ALL EXISTING AND NEW EQUIPMENT.
   - 6.2. ELECTRICAL CHARACTERISTICS OF ALL EXISTING AND NEW EQUIPMENT.
   - 6.3. AIR CONDITIONING SYSTEM PERFORMANCE: UNIT SUPPLY AIR FLOW, UNIT OUTSIDE AIR FLOW, FAN INLET AND DISCHARGE PRESSURES, UNIT INLET AND DISCHARGE PRESSURES, FAN SPEED AND AMP DRAW, COOLING AND HEATING COIL ENTERING AND LEAVING TEMPERATURES (DRY BULB AND WET BULB), OUTSIDE AIR TEMPERATURE (DRY BULB AND WET BULB).
   - 6.4. KITCHEN EXHAUST SYSTEM PERFORMANCE: EXHAUST AIRFLOW, FAN INLET AND DISCHARGE PRESSURE, FAN SPEED AND AMP DRAW.
   - 6.5. KITCHEN MAKE-UP AIR SYSTEM PERFORMANCE: AIRFLOW, FAN INLET AND DISCHARGE PRESSURE, HEAT EXCHANGER INLET AND DISCHARGE TEMPERATURES.
   - 6.6. AIR DISTRIBUTION: AIRFLOWS AT EACH AIR DEVICE, CONFIRMATION OF DIRECTIONAL ADJUSTMENT OF SUPPLY DIFFUSER PATTERN CONTROLLERS WHERE NOTED ON PLANS.
   - 6.7. DESCRIPTION OF ANY PROBLEMS NOTED DURING BALANCING.

Ray Group Consulting Engineers, Inc.
1827 Powers Ferry Road
Building 20, Suite 100
Atlanta, Georgia 30339
Tel: (770) 953-1443

JERSEY MIKE'S SUBS
1912 STAR DRIVE
LIBERTY, MO 64068

STATE OF MISSOURI
THOMAS FRANKLIN TEDROW
NUMBER 2007027943
PROFESSIONAL ENGINEER

02/18/25
ARCHITECT/ENGINEER STAMP

REV. NO.	DATE	DESCRIPTION

PROJECT NO: JMMO-211
DRAWN BY: TD
CHECKED BY: KM
ISSUE DATE:

HVAC FLOOR PLAN

H1.1