

**GENERAL:**

- LOCATE, CUT AND FRAME ROOF OPENINGS AS SHOWN FOR ALL HVAC EQUIPMENT AND EXHAUST FANS.
- IT IS VERY IMPORTANT THAT ACCURATE MEASUREMENTS ARE USED WHEN LOCATING EXHAUST FAN ROOF OPENINGS TO ENSURE THAT NO OFF-SETS ARE REQUIRED IN THE EXHAUST DUCTWORK. COORDINATE ROOF OPENINGS WITH THE KITCHEN EQUIPMENT.
- PROVIDE ANY FRAMING REQUIRED FOR DIFFUSER INSTALLATION IN HARD CEILING.

**HVAC:**

- INSTALLATION SHALL CONFORM TO THE ENERGY CONSERVATION DESIGN MANUAL STANDARDS FOR NEW NONRESIDENTIAL BUILDINGS, IF REQUIRED.
- ALL WORK AND MATERIALS SHALL COMPLY WITH GOVERNING CODES, SAFETY ORDERS AND REGULATIONS.
- OBTAIN AND PAY FOR ALL NECESSARY PERMITS, FEES AND INSPECTIONS REQUIRED BY GOVERNING AUTHORITIES UNLESS NOTED OTHERWISE.
- PROVIDE CONDUIT FOR LINE AND LOW VOLTAGE WIRING, LINE VOLTAGE WIRING SWITCHES, AND FINAL CONNECTIONS.
- ANY EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN THE SPACE PROVIDED WITH ADEQUATE ROOM FOR SERVICING, INCLUDING SUBSTITUTE EQUIPMENT NAMED IN THE SPECIFICATIONS. CONTRACTOR SHALL SUBMIT A 1/4" SCALE DRAWING OF ALL EQUIPMENT SUBSTITUTED FOR APPROVAL PRIOR TO INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STRUCTURAL AND ARCHITECTURAL IMPACT, CLEARANCE REQUIREMENTS AND UTILITY REQUIREMENTS.
- INSTALL RECHARGEABLE REFRIGERANT LINES FROM ICE MACHINE TO CONDENSER ON ROOF.
- HVAC UNITS SHALL BE MOUNTED LEVEL ON ROOF CURBS.
- ALL EXPOSED DUCTWORK TO BE INTERNALLY LINED AND PAINTED AS SHOWN ON ARCHITECTURAL DRAWINGS. ALL OTHER DUCTWORK SHALL BE INSULATED PER THE SPECIFICATIONS.
- ALL ROUND SUPPLY / RETURN DUCTS SHALL BE RIGID, WITH THE EXCEPTION OF THE LAST 5'-0", WHICH MAY BE FLEX. (ACCESSIBLE CEILING ONLY)
- SMOKE DETECTOR SHALL BE INSTALLED IN THE RETURN AIR DUCTS AND SHALL DEACTIVATE ROOFTOP UNIT UPON SENSING SMOKE. REFER TO ELECTRICAL DRAWINGS.
- ALL KITCHEN HOOD EXHAUST DUCTS SHALL BE RIGID 16 GA MINIMUM, WELDED DUCT. GRIND ALL WELDS SMOOTH.
- ALL BRANCH DUCTS FEEDING INDIVIDUAL DIFFUSERS SHALL HAVE DAMPERS AT TAKEOFFS FOR AIR BALANCING. DIFFUSERS SHALL HAVE OPPOSED BLADE DAMPER INSTALLED AT AIRFLOW DEVICE AT AREAS WHERE THE CEILING IS INACCESSIBLE.
- ALL UTILITY PIPING FOR RTUS SHALL RUN UP THROUGH ROOF INSIDE EACH UNITS ROOF CURB.
- ALL OUTSIDE AIR INTAKES SHALL BE A MINIMUM OF 10'-0" FROM EXHAUST FANS AND / OR VENTS.
- FINAL HVAC SYSTEM TESTING AND BALANCING SHALL BE PERFORMED BY THE OWNERS INDEPENDENT AGENT. A RE-TEST IS MANDATORY FOR A FALSE START (I.E. NO POWER UPON AGENT'S ARRIVAL, EQUIPMENT NOT WIRED, ETC.) AND SHALL BE A COST INCURRED BY THE G.C. IN THE EVENT A SYSTEM / STORE RECEIVES A GRADE OF 5 OR BELOW AS A RESULT OF THE HVAC SYSTEM PERFORMANCE OR OPERATIONAL DEFICIENCIES. OWNER WILL REQUEST A RE-TEST AND THE COST FOR SAME SHALL BE ALSO INCURRED BY THE GENERAL CONTRACTOR.
- TRANE PROGRAMMABLE THERMOSTAT MODEL #BAYSENS0199, PROVIDED WITH TRANE PACKAGE. (QUANTITY PER PLANS)
- TRANE THERMOSTAT SENSOR (REMOTE) MODEL #4190-7015, PROVIDED WITH TRANE PACKAGE. (QUANTITY PER PLANS)
- THESE DRAWINGS ARE ACCOMPANIED BY SPECIFICATIONS. SEE SPECIFICATIONS FOR FURTHER INFORMATION.

**GENERAL NOTES**

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XX-XXX MARK	AREA SERVED	FAN DATA				COOLING CAPACITY			HEATING CAPACITY			UNIT ELECT DATA			MAX UNIT WEIGHT (LBS)	MANUFACTURER AND MODEL NUMBER	REMARKS		
		SUPPLY CFM	MIN O.A CFM	ESP	HP	RPM	NOM TONS	MIN CAP (MBH) NET TOTAL	MIN EER	INPUT STAGE (MBH)	OUTPUT (MBH)	STAGES	AFUE	VOLTS/ PH				MCA	MCCP
RTU-1	KITCHEN	4400	1450	1.0'	3	1740	12.5	140.0	12.1	250	200	2	80%	208/3	67	80	2700	TRANE YHD150G3	1,2,3,4,5,6,7,8,9
RTU-2	DINING	3500	1050	1.0'	2.75	1740	10	109.1	12.4	200	160	2	80%	208/3	47.7	60	1500	TRANE YHC120F3	1,2,3,4,5,6,7,8,9

- REMARKS:**
- LISTED CAPACITY IS NET COOLING CAPACITY AT 96.8DBB/76.0 WB EAT AND 105°F AMBIENT.
  - SPECIFIED RTUS ARE DOWN DISCHARGE PACKAGED GAS / ELECTRIC ROOFTOP UNITS. INCLUDES THROUGH THE ROOF CURB POWER.
  - SPECIFIED UNIT INCLUDES HINGED ACCESS DOORS, PLEATED FILTERS, LOW AMBIENT CONTROL TO 0°F, DIFFERENTIAL ENTHALPY ECONOMIZER, CIRCUIT BREAKER WITH SINGLE POINT WIRING, HAIL GUARD, AND FACTORY FABRICATED KNOCK-DOWN ROOF CURB.
  - SPECIFIED UNIT INCLUDES A UN-POWERED CONVENIENCE OUTLET.
  - SPECIFIED UNIT INCLUDES SUPPLY AIR TEMPERING CONTROL WITH REMOTE MOUNTED TEMPERATURE SENSOR AT 60°F AFF, WHERE INDICATED ON PLANS.
  - SPECIFIED UNIT INCLUDES HOT-GAS REHEAT DEHUMIDIFICATION AND REMOTE DUCT-MOUNTED HUMIDITY SENSOR.
  - INTERLOCK OPERATION WITH PIZZA OVEN HOOD. SUPPLY FAN ON AND OUTDOOR AIR DAMPER OPEN WHEN HOOD EXHAUST IS ENERGIZED.
  - INTERLOCK OPERATION WITH FRYER HOOD. SUPPLY FAN ON AND OUTDOOR AIR DAMPER OPEN WHEN HOOD EXHAUST IS ENERGIZED.
  - PROVIDE FACTORY INSTALLED SUPPLY AND RETURN AIR SMOKE DETECTORS.

**HVAC UNIT SCHEDULE**

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XX-XXX MARK	CFM	SP	RPM	MOTOR HP	VOLTS/ PH	STARTER	ACCESSORIES					MANUFACTURER AND MODEL NUMBER	REMARKS
							DISC	BDD	BRD-SCREEN	V-BELT	DTR		
EF-1	1250	1.0'	1623	1/2	230/3	YES	X					ACME PDU135GA	1,2,3,6,7,8,9,10,11
EF-2	600	1.0'	1538	1/3	115/1	-	X			X		CAPTIVE DUA33H	1,2,3,6,7,8,9
EF-3	200	0.50'	1504	0.129	115/1	-		X	X	X		COOK HOOD EX-B	1,3,4,5

- REMARKS:**
- FURNISH WITH WEATHERPROOF DISCONNECT SWITCH.
  - PROVIDE UNVENTED ROOF CURB EXTENSION.
  - PROVIDE ROOF CURB, SHIM LEVEL.
  - PROVIDE SOLID STATE SPEED CONTROLLER.
  - PROVIDE ALUMINUM BACKDRAFT DAMPER.
  - FAN SHALL BE UL 762 LISTED (GREASE).
  - PROVIDE GREASE DRAIN AND TROUGH.
  - PROVIDE HINGED SUB-BASE.
  - FAN PROVIDED BY OWNER, INSTALLED BY CONTRACTOR.
  - FURNISH WITH VARIABLE FREQUENCY DRIVE.
  - EXHAUST FAN OPERATES AT 1250 CFM IN NORMAL OPERATION.

**GENERAL NOTES**

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**EXHAUST FAN SCHEDULE**

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XX-XXX MARK	NECK SIZE	DIFFUSER FLOOR OR CEILING GRID SIZE	TYPE	(NO.) & AIR PATTERN	CFM RANGE	MOUNTING			DUTY			MATERIAL			MANUFACTURER	MODEL NUMBER	REMARKS
						LAY IN	SURFACE	SUPPLY	RETURN	EXHAUST	TRANSFER	ALUMINUM	STEEL	ORB			
	PER PLAN	24x24	X		714W(4)3W	X		X				X	X	METAL-AIRE / TITUS	5000-1 / TDC-AA-1	FRN SQR TO RND ADAPTER	
	8"Ø	12x12	X		214W		X	X				X	X	METAL-AIRE / TITUS	5000-1 / TDC-AA-1	FRN SQR TO RND ADAPTER	
R-1	22x22	24x24		X	(5) 1330-1500	X			X			X		METAL-AIRE / TITUS	CC5-FB-TB / 50FF	FULLY REMOVABLE FACE, DO NOT INSTALL FILTER	
E-1	VAR	10x10		X	(2) 100		X		X			X	X	METAL-AIRE / TITUS	CC5D / 50F		

- REMARKS:**
- DIFFUSERS IN SURFACE MOUNTED CEILINGS SHALL BE PROVIDED WITH OPPOSED BLADE DAMPERS. SEE ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
  - IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY FINAL COUNTS BASED ON LOCATIONS SHOWN ON DRAWINGS.

**AIR DEVICE SCHEDULE**

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ITEM	OA	RA	SA	EA	PRESSURE
EF-1	--	--	--	1250	-1250
EF-2	--	--	--	600	-600
EF-3	--	--	--	200	-200
RTU-1	1450	2950	4400	--	+1450
RTU-2	1050	2450	3500	--	+1050
TOTAL	2500	5400	7900	2050	+450

NOTE EF-1 OPERATE AT 1600 CFM ONLY DURING EMERGENCY OPERATION.

FOR COMPLETE INFORMATION AND PRICING ON THE TRANE HVAC PACKAGE CONTACT MARTY CUSICK, THE YUM! BRANDS ACCOUNT EXECUTIVE AT TRANE NATIONAL ACCOUNTS. TOLL-FREE PHONE: (866) YUM-HVAC or (866) 968-4822. FAX: (802) 499-7870. EMAIL: mtcusick@trane.com

TRANE HAS AGREED TO SUPPLY AN HVAC PACKAGE CONSISTING OF THE ROOF-TOP UNITS, CURBS, AND THERMOSTATS. RTUS AS SPECIFIED INCLUDE AN UNPOWERED CONVENIENCE OUTLET (SEE ELECTRICAL) AND AN HACR CIRCUIT BREAKER WHICH PROVIDES UNIT DISCONNECT. TRANE ALSO HAS AVAILABLE OPTION PACKAGES WHICH INCLUDE SMOKE DETECTORS AND ENLARGERS, ECONOMIZERS, AND RTU VARIATIONS SUCH AS HIGH-EFFICIENCY MODELS.

BE PREPARED AT TIME OF ORDER OR QUOTE REQUEST TO PROVIDE ALL PROJECT DETAILS REGARDING SPECIFICATIONS AND QUANTITIES AS SITE SPECIFIC DESIGN MAY NOT MATCH NATIONAL DESIGN. SEE THE SCOPE OF WORK SHEETS FOR ADDITIONAL INFORMATION.

**MECHANICAL SYMBOLS**

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SYMBOL & ABBREV	DESCRIPTION
SA/SUP	SUPPLY AIR (RISE/DROP)
RA/RET	RETURN AIR DUCT (RISE/DROP)
EA/EXH	EXHAUST AIR DUCT (RISE/DROP)
CD/SR	CEILING DIFFUSER/SUPPLY REGISTER (ARROWHEAD REPRESENTS NUMBER OF THROW)
RR/RG	RETURN REGISTER/GRILLE
ER/EG	EXHAUST REGISTER/GRILLE
FC	RECTANGULAR DUCT ELBOW WITH TURNING VANES
FLEX	FLEXIBLE CONNECTION
MVD	MANUAL VOLUME DAMPER
FD	FIRE DAMPER
(L)	DUCT LINING (1" THICK UNLESS OTHERWISE NOTED)
	SINGLE LINE DUCT BRANCH TAKEOFF
	DUCT TRANSITION (RECTANGULAR TO ROUND)
FLEX	FLEXIBLE DUCT (5'-0" MAXIMUM)
T-STAT	PROGRAMMABLE THERMOSTAT (PROVIDED WITH TRANE PACKAGE)
T-STAT	THERMOSTAT SENSOR (REMOTE)
H	HUMIDISTAT, PROVIDED WITH TRANE PACKAGE.
D	CONDENSATE DRAIN
Ø	DIAMETER
DL	DOOR LOUVER
UC	DOOR UNDERCUT (3/4" MINIMUM)
M	FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.
E	FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
ME	FURNISHED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR.
X-X 0000	MECHANICAL EQUIPMENT DESIGNATION
S	DUCT SMOKE DETECTOR.

SYMBOL & ABBREV	DESCRIPTION
A/C, AC	AIR CONDITIONING
BDD	BACK DRAFT DAMPER
CB	CIRCUIT BREAKER
CLG.	CEILING
CONN.	CONNECT/CONNECTION
CONT.	CONTINUATION
CONTR	CONTRACTOR
CFM	CUBIC FEET PER MINUTE
DET.	DETAIL
DISC	DISCONNECT
DTR	DOWN THRU ROOF
EF	EXHAUST FAN
(E)	EXISTING
GA	GAGE/GAUGE
GC	GENERAL CONTRACTOR
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
MFR.	MANUFACTURER
MECH.	MECHANICAL
(N)	NEW
O	OUTSIDE AIR
OP	OPPOSED BLADE DAMPER
SA	STAINLESS STEEL
TYP.	TYPICAL
UNLESS	UNLESS OTHERWISE NOTED
UP THRU	UP THRU ROOF.

**TRANE PACKAGE**

N.T.S.

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**AIR BALANCE SCHEDULE**

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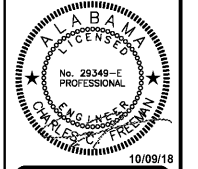
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08/10/18  
1845  
DIB NO: 1845  
DRAWN: BH, MJ, SO  
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HVAC NOTES & SCHEDULES



PIZZA HUT #1845  
5229 US HWY 231  
WETUMPKA, ALABAMA



SHEET NUMBER  
**M1.0**