

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 ADDITIONAL 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.
- 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.
- E.C. SHALL PROVIDE CONDUIT FOR LINE AND LOW VOLTAGE WIRING, LINE VOLTAGE WIRING SWITCHES, AND FINAL CONNECTIONS. M.C. SHALL PROVIDE 24V CONTROL WIRING 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. 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.
- FOR INSTALLATION OF RECHARGEABLE REFRIGERANT LINES FROM ICE MACHINE TO CONDENSER ON ROOF, SEE SCOPE OF WORK.
- HVAC UNITS SHALL BE MOUNTED LEVEL ON ROOF CURBS.
- ALL SUPPLY / RETURN DUCTWORK SHALL BE EXTERNALLY INSULATED.
- ALL SUPPLY / RETURN DUCTS SHALL BE RIGID, WITH THE EXCEPTION OF THE LAST 14'-0", WHICH MAY BE FLEX.
- SMOKE DETECTOR SHALL BE INSTALLED IN THE RETURN AIR DUCT, PRIOR TO ANY OUTSIDE AIR CONNECTIONS, AND SHALL DEACTIVATE ROOFTOP UNIT UPON SENSING SMOKE. INCLUDE SMOKE DETECTOR IN THE SUPPLY AIR DUCT ONLY IF REQUIRED BY LOCAL CODE.
- ALL HOOD EXHAUST DUCTS SHALL BE RIGID 16 GA MINIMUM, WELDED DUCT. GRIND ALL WELDS SMOOTH. PROVIDE 3M FIRE BARRIER DUCT WRAP FOR ALL HOOD EXHAUST DUCTS. SEE 15/M4.0.
- ALL BRANCH DUCTS FEEDING INDIVIDUAL DIFFUSERS SHALL HAVE DAMPERS AT TAKEOFFS FOR AIR BALANCING. PROVIDE ACCESS PANELS TO DAMPERS. SEE 8/M4.0.
- ALL UTILITY PIPING FOR RTU'S 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.
- SEE 8/M1.0 AND SCOPE OF WORK FOR DESCRIPTION OF HVAC PACKAGE TO BE PURCHASED THROUGH YUMI BRANDS NATIONAL CONTRACT.
- FINAL HVAC SYSTEM TESTING AND BALANCING SHALL BE PERFORMED BY INDEPENDENT AGENT CONTRACTED DIRECTLY BY THE OWNER. 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.
- VENSTAR THERMOSTAT & TEMP SENSOR, PROVIDED WITH TRANE PACKAGE. USE T-CONT 802 WITH RTUS W/O DE-HUMIDICATION. USE T-CONT 803 WITH RTUS W/ RTUS W/ DE-HUMIDIFICATION.
- TRANE DUCT MOUNTED HUMIDITY SENSOR MODEL #BAYSNS037A, PROVIDED WITH TRANE PACKAGE.

GENERAL NOTES

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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
	RECTANGULAR DUCT ELBOW WITH TURNING VANES
	FLEXIBLE CONNECTION
	MANUAL VOLUME DAMPER
	FIRE DAMPER
	DUCT LINING (1" THICK UNLESS OTHERWISE NOTED)
	SINGLE LINE DUCT BRANCH TAKEOFF
	DUCT TRANSITION (RECTANGULAR TO ROUND)
	FLEXIBLE DUCT (14'-0" MAXIMUM)
	T-STAT PROGRAMMABLE THERMOSTAT, PROVIDED WITH TRANE PACKAGE.
	THERMOSTAT SENSOR (REMOTE), PROVIDED WITH TRANE PACKAGE.
	HUMIDITY SENSOR (REMOTE), PROVIDED WITH TRANE PACKAGE.
	D CONDENSATE DRAIN
	DIA. DIAMETER
	DL DOOR LOUVER
	UC DOOR UNDERCUT (3/4" MINIMUM)
	MECHANICAL EQUIPMENT DESIGNATION
	RESET SMOKE DETECTOR RESET

MECHANICAL SYMBOLS

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SYMBOL & ABBREV.	DESCRIPTION
A/C, AC	AIR CONDITIONING
BDD	BACK DRAFT DAMPER
CB	CIRCUIT BREAKER
CLG.	CEILING
CONN.	CONNECT/CONNECTION
CONTR.	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
OA/OSA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
S/S	STAINLESS STEEL
TYP.	TYPICAL
UON	UNLESS OTHERWISE NOTED
UTR	UP THRU ROOF

REFER TO SCOPE OF WORK 15700-1 HVAC FOR TEST & BALANCE & COMMISSIONING REQUIREMENTS WHICH WILL BE SUPPLIED BY THE OWNER AND COORDINATED BY THE GC.

FOR COMPLETE INFORMATION AND PRICING ON THE TRANE HVAC PACKAGE CONTACT MARTY CUSICK, THE YUMI BRANDS ACCOUNT EXECUTIVE AT TRANE NATIONAL ACCOUNTS.
 TOLL-FREE PHONE: (866) YUM-HVAC or (866) 986-4822
 FAX: (502) 499-7870
 EMAIL: mjcusick@trane.com

TACO BELL HAS A NATIONAL HVAC AGREEMENT WITH YORK NATIONAL ACCOUNTS. FOR QUOTES & TECHNICAL SPECIFICATIONS, PLEASE CONTACT MATT MONAIR, YORK PRODUCT APPLICATION ENGINEER AT 800-481-9739, FAX 866-406-9875. FOR ALL OTHER INQUIRIES, PLEASE CONTACT NATALIE DEROUSSE, YORK NATIONAL ACCOUNT SALES MANAGER AT 405-419-6416.

TRANE AND YORK HAVE AGREED TO SUPPLY AN HVAC PACKAGE CONSISTING OF THE ROOF-TOP UNITS, CURBS, THERMOSTATS, TEMPERATURE SENSORS (REMOTE), AND HUMIDITY SENSORS (REMOTE). RTUS AS SPECIFIED INCLUDE AN UNPOWERED CONVENIENCE OUTLET (SEE ELECTRICAL) AND AN HACR CIRCUIT BREAKER WHICH PROVIDES UNIT DISCONNECT. TRANE AND YORK ALSO HAVE AVAILABLE OPTION PACKAGES WHICH INCLUDE SMOKE DETECTORS AND ANNUNCIATORS, 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.

TRANE PACKAGE N.T.S. 8

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) TOT/SEN	EER	INPUT (MBH)	OUTPUT (MBH)	STAGES	AFUE	VOLTS/PH	MCA	MODP			
RTU-1	DINING	3400	750	1.0"	3.75	1355	8.5	98.1/77.9	12.5	150	120	2	80	SEE ELECTRICAL DRAWINGS FOR ELECTRICAL INFORMATION			1537	TRANE YHC102F3R	SEE NOTES 1-7
RTU-2	KITCHEN	4400	950	1"	3	646	12.5	143.3/111.5	12.5	250	203	2	81				2764	TRANE YZD150F3R	SEE NOTES 1-6,8,9

SCHEDULE NOTES:

- LISTED CAPACITY IS THE STANDARD UNIT'S GROSS COOLING CAPACITY AT 80°F DB / 67°F WB EAT AND 105°F AMBIENT. OUTDOOR DESIGN CONDITION, SUMMER 105°F & 74°F WB, WINTER 17°F (ARI STANDARD CONDITIONS). THERMOSTAT SHALL BE PROGRAMMED FOR 73°F IN SUMMER AND 68°F IN WINTER WITH 2°F ADJ. FUNCTION UP OR DOWN. THE UNOCCUPIED TEMP SHALL BE SET TO THE STORE SCHEDULE AND 60°F MINIMUM.
- SPECIFIED RTUS ARE DOWN DISCHARGE PACKAGED GAS / ELECTRIC ROOFTOP UNITS WITH MINIMUM 2-STAGE COOLING. INCLUDES THROUGH THE ROOF CURB POWER, GAS & CONDENSATE DRAIN. GAS PIPING SHALL BE FACTORY PIPED WITH SHUT-OFF OUTSIDE OF UNIT.
- SPECIFIED UNIT INCLUDES HINGED ACCESS DOORS, 2" PLEATED FILTERS, LOW AMBIENT CONTROL TO 0 DEG. F., MODULATING ECONOMIZER, CIRCUIT BREAKER WITH SINGLE POINT WIRING, HAIL GUARD, AND FACTORY FABRICATED, KNOCK DOWN ROOF CURB.
- IF REQUIRED, ENHANCED DEHUMIDIFICATION OPTION TO BE INCLUDED. HUMIDITY SENSOR TO BE MOUNTED IN THE RETURN AIR AT THE UNIT. THIS OPTION IS REQUIRED FOR DESIGN WET BULB TEMPERATURE 74 DEG. F AND ABOVE.
- PROJECT LOCATED WITHIN 5 MILES FROM A SALT WATER BODY (OR AREAS PRONE TO STRONG WINDS) REQUIRE EPOXY COATED COILS.
- THERMOSTAT AND REMOTE SENSOR PROVIDED WITH HVAC PACKAGE.
- RTU-1 TO HAVE SINGLE ZONE VAV (SZVAV). SZVAV INCLUDES VARIABLE SPEED EVAPORATOR FAN.
- RTU-2 TO HAVE EFLEX OPTION. EFLEX INCLUDES VARIABLE SPEED COMPRESSOR, VARIABLE SPEED EVAPORATOR FAN MOTOR & VARIABLE SPEED CONDENSER FAN MOTOR.
- TRANE EFLEX UNITS TO HAVE STARTUP TESTING PERFORMED BY APPROVED SERVICING CONTRACTOR TO ENSURE PROPER OPERATION OF ECONOMIZER, DISCHARGE AIR LIMITS, SENSORS, ETC. AS RECOMMENDED BY MANUFACTURER.

HVAC UNIT SCHEDULE

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MARK	CFM	SP	RPM	HP	ELECT	STARTER	ACCESSORIES					MANUFACTURER AND MODEL NUMBER	REMARKS
							DISC	BDD	BIRD SCREEN	V-BELT	D-DR		
EF-1	1050	0.9	1344	0.50	120/1	-	X	-	-	X	STRATOVENT #SVDU50HFA	SEE NOTES 1,3,5,6,7,8,10	
EF-2	570	.375	1025	1/4	120/1	-	X	X	X	X	STRATOVENT #SDR30HFA	SEE NOTES 2,4,7,8,9,10	

REMARKS:

- UL 782 LISTED (GREASE)
- UL705 LISTED (HEAT OR STEAM)
- FLAT ROOF CURB, 19.5" X 19.5" X 26"H, VENTED
- FLAT ROOF CURB, 19.5" X 19.5" X 14"H
- GREASE CUP WITH DRAIN
- FACTORY ATTACHED HINGES
- WEATHERPROOF PRE-WIRED DISCONNECT SWITCH
- PROVIDE PRE-WIRED SOLID STATE SPEED CONTROLLER
- GRAVITY BACKDRAFT DAMPER
- PROVIDED BY OWNER WITH HOOD PACKAGE

SUPPLY AND EXHAUST FAN SCHEDULE

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MARK	QUANTITY	NECK SIZE	DIFFUSER FACE OR CEILING GRID SIZE	TYPE	(NO.) & AIR PATTERN	MOUNTING		DUTY			MATERIAL		MANUFACTURER	MODEL NUMBER	REMARKS
						LAY-IN	SURFACE	SUPPLY	RETURN	EXHAUST	ALUMINUM	STEEL			
S-1		15x15	24x24	X	(10)4W, (3)3W, (1)2W CFM RANGE 0-500			X			X		METAL-AIRE / TITUS	5000-6 / TDC-AA-NT	FRN SQR TO RND ADAPTER
S-3		9x9	14x14	X	(3)2W CFM RANGE 0-250		X				X		METAL-AIRE / TITUS	5000-1 / TDC-AA	FRN SQR TO RND ADAPTER
R-1		22x22	24x24	X	NO DIREC. CFM RANGE 0-2000	X		X			X		METAL-AIRE / TITUS	RHE-6 / 50FF	HINGED / FULLY REMOVABLE FACE
E-1		8x8	12x12	X	NO DIREC. CFM RANGE 0-200					X	X		METAL-AIRE / TITUS	CC5S-1 / 50F	
E-2		10x10	24x24	X	NO DIREC. CFM RANGE 0-400	X					X		METAL-AIRE / TITUS	CC5-FB-TB / 50F-NT	PROVIDE 2x2' LAY-IN PANEL

NOTES:

- DIFFUSERS IN SURFACE MOUNTED CEILING SHALL BE PROVIDED WITH OPPOSED BLADE DAMPERS. SEE ARCHITECTURAL DRAWINGS FOR CEILING TYPES.

AIR DEVICE SCHEDULE

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ITEM	OA	RA	SA	EA	PRESSURE
EF-1	--	--	--	1050	-1050
EF-2	--	--	--	570	-570
RTU-1	750	2650	3400	--	+750
RTU-2	950	3450	4400	--	+950
TOTAL	1700	6100	7800	1620	+80

NOTE: THE OUTSIDE PERCENTAGE OF TOTAL SUPPLY AIR IS 22.0% FOR RTU-1 AND 21.6% FOR RTU-2.

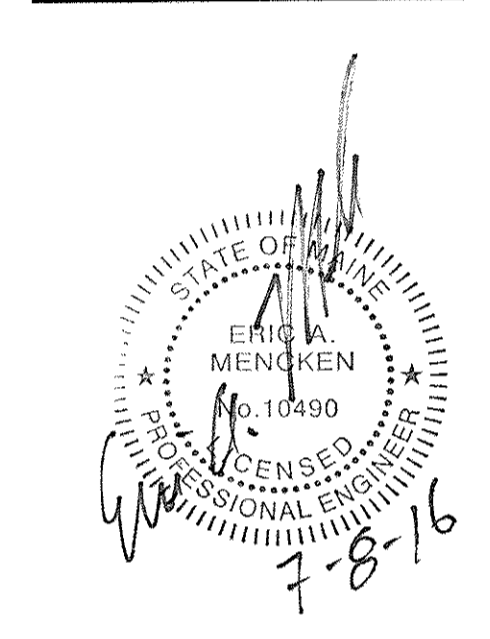
AIR BALANCE SCHEDULE CFM

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 MANE: 16002-30



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 BUILDING TYPE: CONVERSION
 PLAN VERSION: FEBRUARY 2015
 SITE NUMBER: XXX-XXX
 STORE NUMBER: XXXXX

TACO BELL
 1363 WASHINGTON AVE.
 PORTLAND, ME

TACO BELL
 CONVERSION
 LIVE MASS - MEDIUM40

MECHANICAL SCHEDULES AND NOTES

M1.0

PLOT DATE: