

MECHANICAL SYMBOLS LEGEND	
Ⓣ	THERMOSTAT
Ⓢ	TEMPERATURE SENSOR
Ⓞ	SMOKE DETECTOR
FW	FLEXIBLE DUCT
VD	VOLUME DAMPER
FD	FIRE DAMPER
Ⓢ	CEILING SUPPLY AIR DIFFUSER
Ⓢ	CEILING RETURN AIR GRILLE
SD	SEAWALL AIR DIFFUSER OR GRILLE
ND	NEW DUCTWORK
ED	EXISTING DUCTWORK
D	CONDENSATE DRAIN
G	GAS PIPING
PTD	PIPE TURNING DOWN
PTU	PIPE TURNING UP
BV	BALL VALVE
GV	GATE VALVE
CN	CONNECTION OF NEW TO EXISTING
CV	CHECK VALVE
GC	GAS COOK
UN	UNION
PG	PRESSURE GAUGE
STR	STRAINER
AF	ABOVE FINISHED FLOOR
S1	AIR DEVICE #
100	CFM
S	SUPPLY
R	RETURN
E	EXHAUST

- MECHANICAL KEYED NOTES**
- 24 HR. 7 DAY PROGRAMMABLE THERMOSTAT TO BE INSTALLED AFT ABOVE THE FLOOR.
 - FURNISH AND INSTALL ROOFTOP UNIT (RTU-1,2) ON ROOF. ROUTE CONDENSATE PIPING TO NEAREST ROOF DRAIN, OR THROUGH ROOF TO INDIRECTLY DRAIN ABOVE MOP SINK WHERE REQUIRED BY LOCAL A.H.J.
 - FURNISH AND INSTALL GALVANIZED STEEL DUCTWORK, SIZES AS SHOWN ON DRAWING. SIZES SHOWN ARE CLEAR, INSIDE DIMENSIONS. ALL DUCTWORK SHALL BE PROVIDED WITH MINIMUM R-6 INSULATION.
 - PROVIDE WALL-MOUNTED ELECTRIC AIR CURTAIN ABOVE DOOR/WINDOW. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
 - 6" EXHAUST DUCT OUT THROUGH ROOF. MAINTAIN MINIMUM OF 10 FEET FROM ANY OUTSIDE AIR INTAKES.
 - INSTALL OWNER-PROVIDED WALK-IN COOLER CONDENSING UNIT ON ROOF. REFRIGERANT PIPING FROM COOLER TO REMOTE CONDENSER ON THE ROOF PROVIDED BY CONTRACTOR PER MANUFACTURER'S RECOMMENDATIONS. VERIFY EXACT ROUTING AND ROOF PENETRATION LOCATION IN FIELD.
 - INSTALL OWNER-PROVIDED ICE MAKER CONDENSING UNIT ON ROOF. REFRIGERANT PIPING FROM ICE MAKER TO REMOTE CONDENSER ON THE ROOF PROVIDED BY CONTRACTOR PER MANUFACTURER'S RECOMMENDATIONS. VERIFY EXACT ROUTING AND ROOF PENETRATION LOCATION IN FIELD.
 - NOT USED.
 - FURNISH AND INSTALL REMOTE TEMPERATURE SENSOR AND RELATED WIRING TO CONNECT TO THERMOSTAT FOR HVAC UNIT. MOUNT ON WALL AT 60" AFF. PROVIDE WITH INSULATED SUB-BASE. VERIFY EXACT LOCATION IN FIELD.
 - UNDERCUT DOOR 1" FOR MAKEUP AIR.

PACKAGED HVAC EQUIPMENT SCHEDULE														
DESIGNATION	WPL	TONNAGE	SEER	MODEL	TOTAL AIRFLOW (CFM)	O.A. TOTAL AIRFLOW	TOTAL COOLING CAPACITY	SEERABLE COOLING CAPACITY	HEATING CAPACITY / TYP	SUPPLY FAN BHP	MCA	WSP	ELECTRIC SERVICE	WEIGHT
DIRECT RTU-1,2	CARRIER	3	16.1	50GCM04	1200	100	34.97	25.0	12KW / ELCC	0.49	49	50	208/3/60	551

- NOTES:**
- FURNISH AND INSTALL NEW ROOFTOP UNIT AND MANUFACTURER-APPROVED ROOF CURR.
 - PROVIDE UNIT WITH ECONOMIZER WITH FAULT DETECTION & DIAGNOSTICS, BAROMETRIC RELIEF DAMPER, AND THROWAWAY FILTERS.
 - VERIFY ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING EQUIPMENT.

VENTILATION FAN SCHEDULE	
DESIGNATION	EF-1
APPLICATION	BATHROOM EXHAUST
MANUFACTURER	COOK
MODEL	GC-14B
AIR FLOW (CFM)	75
STATIC PRESSURE	0.4
MOTOR (HP OR WATTS)	29W
WEIGHT	12
MCA	-
CONTROL NOTES	NOTES: PROVIDE SPEED CONTROL SWITCH AND MECHANICALLY ACTUATED, LOW LEAK DAMPER

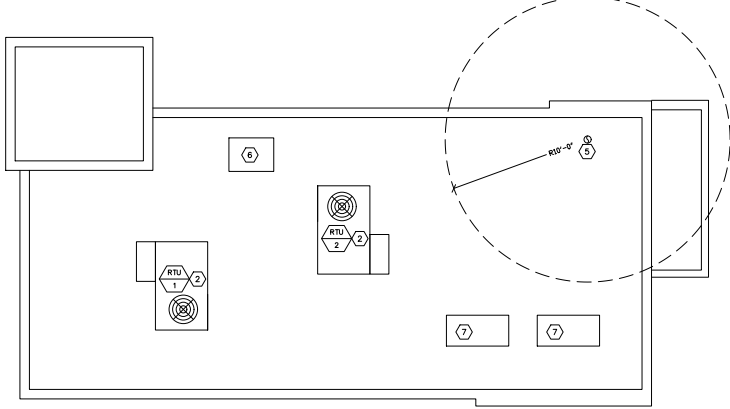
ASHRAE 62.1 O.A. CALCULATIONS						
AREA	OCCUPANT	CFM/PERSON	SUBTOTAL	SQUARE FEET	CFM/SQFT	SUBTOTAL
PRODUCTION	9	7.5	67.50	575	0.18	103.5
						171.0
						RTU-1,2

AIR BALANCE SCHEDULE			
EXHAUST UNIT	EXHAUST AIR FLOW (CFM)	PROVIDED BY	O.A. FLOW (CFM)
*EF-1	75	RTU-1	100
		RTU-2	100
TOTAL EXHAUST	75	TOTAL O.A.	200

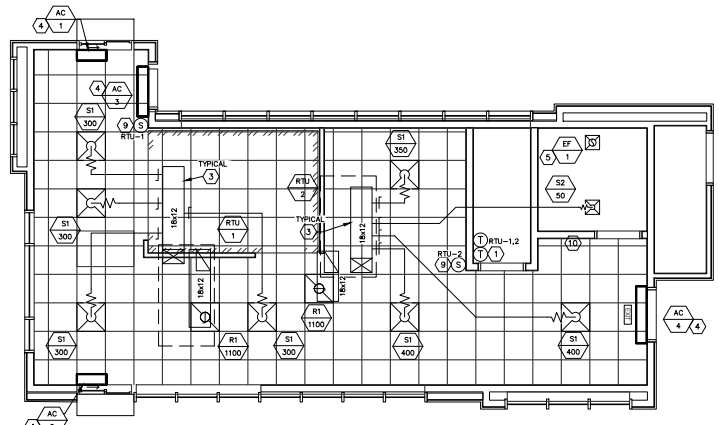
* FAN TO OPERATE ON AN INTERMITTENT BASIS.

AIR DEVICE SCHEDULE			
SYMBOL	S1	S2	R1
DUCT SIZE	10"φ	6"φ	16"φ
BOOT SIZE	10"φ	6"φ	22"x22"
FACE SIZE	24"x24"	12"x12"	24"x24"
DESIGN MFG.	TITUS	TITUS	TITUS
MODEL NO.	TMS	TMS	SSCBL
FINISH	WHITE	WHITE	WHITE

AIR CURTAIN SCHEDULE			
DESIGNATION	AC-1,2	AC-3	A-4
LENGTH	25"	42"	48"
MANUFACTURER	QUIKSERV	QUIKSERV	QUIKSERV
MODEL	QSK1025AA-BK	SAN. CERT LOW-PROFILE 7	SAN. CERT LOW-PROFILE 7
VOLTAGE	120/1φ	120/1φ	120/1φ
AMPS	3.4	3.4	3.4
ACCESSORIES	PROVIDE ALL MANUFACTURER-RECOMMENDED ACCESSORIES FOR A COMPLETE OPERATIONAL SYSTEM. VERIFY EXACT SPECIFICATION WITH OWNER PRIOR TO ORDERING.	PROVIDE ALL MANUFACTURER-RECOMMENDED ACCESSORIES FOR A COMPLETE OPERATIONAL SYSTEM. VERIFY EXACT SPECIFICATION WITH OWNER PRIOR TO ORDERING.	PROVIDE ALL MANUFACTURER-RECOMMENDED ACCESSORIES FOR A COMPLETE OPERATIONAL SYSTEM. VERIFY EXACT SPECIFICATION WITH OWNER PRIOR TO ORDERING.



MECHANICAL ROOF PLAN
SCALE: 1/4" = 1'-0"



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



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CDG PROJECT NUMBER:
202109-363



STATE OF TEXAS
FIRM# F-4284

Project No: TX2201
Dutch Bros Coffee - New Free-standing Store
9415 Barker Cypress Rd.
Cypress, Texas 77433
for: Dutch Bros Coffee
110 SW 4th Street
Grants Pass, Oregon 97526

ISSUED FOR PERMIT:
07.29.2021

REV: DATE: DESCRIPTION:

SHEET NAME:

MECHANICAL PLANS

SHEET NUMBER:

M1.0