



Castles Design Group

1 Professional Consultant
3801 Hwy. Dr., Suite 600
Houston, Texas 77056
Tel: 281-419-1100
Fax: 713-861-7700



MPW
MECHANICAL PROJECTS WASHINGTON
STATE OF TEXAS
FIRM # F-4284

Project No: TX2201
Dutch Bros Coffee - New Freestanding 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

REVISION	DESCRIPTION

SHEET NUMBER:
M1.0

PACKAGED HVAC EQUIPMENT SCHEDULE

DESCRIPTION	QTY	MANUFACTURER	MODEL	TYP. AMPERAGE	WARRANTY	NOTES
RTU-12	3	16.1	50C0004	1200	100	34.47

MODEL: 1. FURNISH AND INSTALL NEW ROOFTOP UNIT AND MANUFACTURER-APPROVED ROOF CURB, EXHAUST, SILENT DAMPER, AND DOWNFLOW FILTERS.
2. VERIFY ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING EQUIPMENT.

ASHRAE 62.1 O.A. CALCULATIONS

PRODUCTION	AREA	OCCUPANCY	CHANGES	SERIAL	SCAFF. TIE	CHANG. RT	SERIAL	TOTAL O.A.	PROVIDED BY
9	7.5	67.50	575	0.18	10.5	171.0	RTU-12	551	

AIR BALANCE SCHEDULE

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

* FAN TO OPERATE ON AN INTERMITTENT BASIS.

AIR DEVICE SCHEDULE

SYMBOL	SI	S2	S1
DOOR SIZE	10'4"	8'0"	22'x24"
FACE SIZE	24'x24"	15'x12"	24'x24"
DESIGN WIND	THIS	THIS	THIS
MODEL NO.	THIS	THIS	THIS

VENTILATION FAN SCHEDULE

DESCRIPTION	APPLICATION	EXHAUST	CONTROL NOTES
EX-1	SHOWER EXHAUST	COOK	NOTES: PROVIDE SILENT CONTROL SWITCH AND ACTIVATED LOW LEAK DAMPER

AIR CURTAIN SCHEDULE

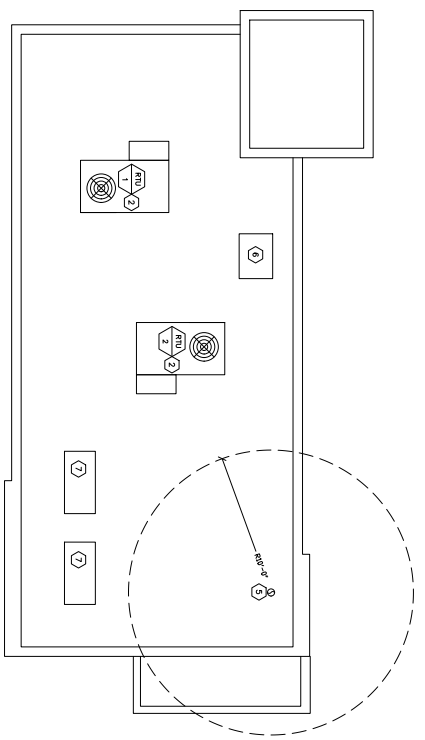
DESCRIPTION	AC-12	AC-3	A-4
LENGTH	25	42	48
MANUFACTURER	QUICKSERV	QUICKSERV	QUICKSERV
MODEL	QSR1025A-BR	LOW-PROFILE 7	LOW-PROFILE 7
VOLUME	120/19	120/19	120/19
AMPS	3.4	3.4	3.4

ACCESSORIES: PROVIDE ALL MANUFACTURER-APPROVED ROOF CURB, EXHAUST, SILENT DAMPER, AND DOWNFLOW FILTERS. PROVIDE ALL FIELD ACCESSORIES OPERATIONAL SYSTEM SPECIFICATION WITH OWNER PRIOR TO ORDERING.

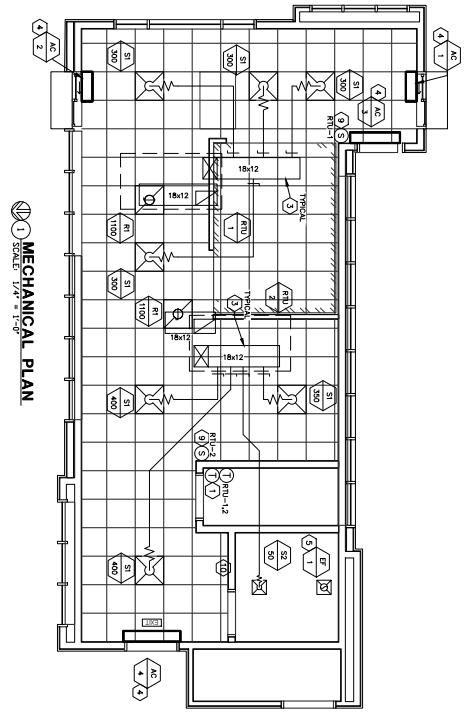
MECHANICAL SYMBOLS LEGEND

1	TEMPERATURE SENSOR
2	SPACE HEATER
3	PLUMB DUCT
4	VOLUME DAMPER
5	CEILING SPRINKLER AIR DIVERTER
6	CEILING RETURN AIR SHUTE
7	SERIAL AIR DIVERTER OR SHUTE
8	NEW DOWNWORK
9	EXISTING DOWNWORK
10	CONCRETE DOWN
11	PRE TURNING UP
12	DATE VALVE
13	CONNECTION OF NEW TO EXISTING
14	CHECK VALVE
15	NON
16	PRESSURE GAUGE
17	SHOWER
18	ABOVE FINISHED FLOOR
19	AIR SERVICE 1
20	AIR SERVICE 2

- MECHANICAL KEYED NOTES**
- 24 HR. 7 DAY PROGRAMMABLE THERMOSTAT TO BE INSTALLED ABOVE THE FLOOR.
 - FURNISH AND INSTALL ROOF TOP UNIT (RTU-12) ON ROOF. HANGING FROM ROOF TO INDIRECTLY DRAIN ABOVE AND SINK WHERE REQUIRED BY LOCAL A.U.
 - FURNISH AND INSTALL GALVANIZED STEEL DOWNWORK, SIZES AS DIMENSIONS. ALL DOWNWORK SHALL BE PROVIDED WITH MANUFACTURER'S RECOMMENDATIONS. VERIFY EXACT ROOFING AND PENETRATION LOCATION IN FIELD.
 - EXHAUST DUCT OUT THROUGH ROOF. MAINTAIN MINIMUM OF 10' FEET FROM ANY OVERHANG AIR HANDLES.
 - CONCRETE DOWNWORK ON ROOF PROVIDED BY CONTRACTOR PER MANUFACTURER'S RECOMMENDATIONS. VERIFY EXACT ROOFING AND ROOF PENETRATION LOCATION IN FIELD.
 - INSTALL OWNER PROVIDED LE WATERS CONDENSING UNIT ON ROOF. HANGING FROM ROOF TO INDIRECTLY DRAIN ABOVE AND SINK WHERE REQUIRED BY LOCAL A.U.
 - CONNECTION OF NEW TO EXISTING.
 - FURNISH AND INSTALL REMOTE TEMPERATURE SENSOR AND MOUNT ON WALL AT 6'0" HEIGHT. PROVIDE WITH INSULATED SUB-BASE. VERIFY EXACT LOCATION IN FIELD.
 - UNDERCUT ROOF 1" FOR MAKEUP AIR.



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



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