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### FAN SCHEDULE

FAN #	SERVICES	LOCATION	CFM	FAN RPM	STATIC PRESSURE (N. W.G.)	WEIGHT (LBS)	FAN WHEEL TYPE	MOTOR HP/VOLT/PHASE	EMERGENCY POWER?	DRIVE TYPE	FAN TYPE	CONTROL SWITCH & INTERLOCK TYPE	MFG. & MODEL # DESIGN BASED ON	STARTER	DISC. SW.	ACCESSORIES
EF-1	TOILETS, JAN. CLOSET	CEILING	300	1300	0.25	41	CENTRIFUGAL	0.05/120/1	NO	DIRECT	INLINE	SWITCH	GREENHECK SQ-85-G	BY M.C.	BY M.C.	B,D,E,J
EF-2	MAINTENANCE BAY	WALL	3200	1750	0.5	48	AXIAL	0.75/120/1	NO	DIRECT	PROPELLER	SWITCH	GREENHECK SE1-18-424-A	BY M.C.	BY M.C.	B,D,E,J,Z
EF-3	MAINTENANCE BAY	WALL	3200	1750	0.5	48	AXIAL	0.75/120/1	NO	DIRECT	PROPELLER	SWITCH	GREENHECK SE1-18-424-A	BY M.C.	BY M.C.	B,D,E,J,Z
EF-4	TIRE CHANGE	WALL	1000	1550	0.25	20	AXIAL	0.125/120/1	NO	DIRECT	PROPELLER	SWITCH	GREENHECK SE1-12-432-D	BY M.C.	BY M.C.	B,D,E,J,Z
EF-5	WASH BAY	WALL	1000	1550	0.25	20	AXIAL	0.125/120/1	NO	DIRECT	PROPELLER	SWITCH	GREENHECK SE1-12-432-D	BY M.C.	BY M.C.	B,D,E,J,Z
EF-6	UTILITY ROOM	WALL	300	1650	0.25	16	AXIAL	0.05/120/1	NO	DIRECT	PROPELLER	THERMOSTAT	GREENHECK SE1-12-432-E	BY M.C.	BY M.C.	B,D,E,J,Z
EF-7	COMPRESSOR ROOM	WALL	1000	1550	0.25	20	AXIAL	0.125/120/1	NO	DIRECT	PROPELLER	THERMOSTAT	GREENHECK SE1-12-432-D	BY M.C.	BY M.C.	B,D,E,J,Z

NOTES:

- ALL FANS SHALL BE UL LISTED AND LABELED.
- EQUIVALENTS BY COOK, PENNBERRY, NEW YORK BLOWER, OR BREIDERT.

ACCESSORIES:

A. ROOF CURB  
B. GRAVITY BACKDRAFT DAMPER  
C. MOTORIZED BACKDRAFT DAMPER  
D. BIRDSCREEN  
E. DISCONNECT SWITCH  
F. WALL CAP  
G. VARIABLE FREQUENCY DRIVE  
H. VIBRATION ISOLATORS  
I. ELECTRONIC SPEED CONTROL  
J. EXPLOSION-PROOF MOTOR & SPARK-PROOF FAN  
K. MOTOR-OPERATED DAMPER WITH ACTUATOR  
L. WASHABLE ALUMINUM FILTERS  
M. HIGH TEMPERATURE BEARINGS & HEAT SLINGER  
N. COMBINATION STARTER  
O. HINGED & LATCHED HOOD COVER

P. MOTOR-SIDE GUARD  
Q. BLADE GUARD  
R. BELT GUARD WITH TACHOMETER HOLES  
S. VENTILATED MOTOR COVER  
T. HOUSING DRAIN  
U. VARIABLE INLET VANE DAMPERS & LINKAGES  
V. EXHAUST GRILLE  
W. LINED GALVANIZED SHEET METAL HOUSING  
X. BUILT-IN THERMAL O.L. PROTECTION  
Y. SPECIAL COATING (AIR-DRYED PHENOLIC, 4 MILS THICK MINIMUM)  
Z. WALL-MOUNTING HOUSING  
AA. UL 782  
AB. UL LISTED FOR SPEED CONTROL APPLICATION  
AC. CHIMNEY/CHASE CAP

### RADIANT HEATER SCHEDULE

	RH-1	RH-2	RH-3	RH-4	RH-5	RH-6	RH-7	RH-8
MARK	SPACE-RAY	SPACE-RAY	SPACE-RAY	SPACE-RAY	SPACE-RAY	SPACE-RAY	SPACE-RAY	SPACE-RAY
MANUFACTURER	ETS60-20-N5	ETS40-15-N5	ETS60-20-N5	ETS60-20-N5	ETS60-20-N5	ETS60-20-N5	ETS60-20-N5	ETS50-15-N5
MODEL/SIZE								
SERVICE	TIRE CHANGE	MAINTENANCE BAYS	MAINTENANCE BAYS	MAINTENANCE BAYS	MAINTENANCE BAYS	MAINTENANCE BAYS	MAINTENANCE BAYS	WASH BAY
FUEL TYPE	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS
HIGH FIRE INPUT (MBH)	60	40	60	60	60	60	60	50
LOW FIRE INPUT (MBH)								
INTAKE/VENT CONNECTION (INCHES)	4	4	4	4	4	4	4	4
GAS CONNECTION N.P.T. (INCHES)	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
GAS INLET PRESSURE MIN. (N. W.C.)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
WEIGHT (LBS)	126	96	126	126	126	126	126	96
MOUNTING HEIGHT (FEET)	2' BELOW STRUCTURE	2' BELOW STRUCTURE	2' BELOW STRUCTURE	2' BELOW STRUCTURE	2' BELOW STRUCTURE	2' BELOW STRUCTURE	2' BELOW STRUCTURE	2' BELOW STRUCTURE
ELEC. VOLTS/Hz/PH	120/60/1	120/60/1	120/60/1	120/60/1	120/60/1	120/60/1	120/60/1	120/60/1
MCA/MOCP (AMPS)								

NOTES:

- HEATER MODELS ARE 80-85% EFFICIENT.
- PROVIDE WITH WALL MOUNTED THERMOSTAT.
- PROVIDE FACTORY OPTION ROOFTOP VENT PACKAGE.
- IF REQUIRED, PROVIDE BAFFLE IN LAST SECTION OF RADIANT TUBE.
- SUSPENSION MECHANISM MUST ALLOW FOR LATER EXPANSION CONTRACTORS.
- ALL HEATERS CONNECTED TO A COMMON VENT MUST BRANCHED AT THE SP.
- APPROVED EQUALS: SCHWANK, SUPERIOR RADIANT, SOLARWARM, MOUNTAIN CLEAN HEATERS.
- CONTRACTOR SHALL ADHERE TO MANUFACTURERS RECOMMENDED MINIMUM CLEARANCES.

### DIFFUSER SCHEDULE

KEY	SIZE CFM SUPPLY	SIZE CFM RETURN	SIZE CFM EXHAUST			
TYPE MARK	SYSTEM	FACE SIZE	NECK SIZE	UNIT DESCRIPTION	TYPE	NOTES
A	SUPPLY	24"x24"	SEE PLANS	SQUARE PLAQUE	PRICE SPD	1.2
B	RETURN/EXHAUST	24"x24"	SEE PLANS	PERFORATED	PRICE PDDR	1.2

NOTES:

- ACCEPTABLE MANUFACTURERS: TITUS, PRICE, NAILOR, METALAIR, ANEMOSTAT
- SEE ARCH CEILING PLAN FOR PROPER FRAME STYLE

### ASHRAE 62.1 CALCULATIONS

Room Name	Occupancy Category	Rp	Ra	Occupant Density (Default)? #/1000sf	Pz	Pz	Az	Rp*Pz	Ro*Az	Vbz	Ez	Voz	Vdz	Zdz	Critical Zone
106 Unisex	OB - Bathrooms	0	0	Yes	0	0.0	97	0.0	0.00	0.00	0.8	0	100	0.00	
107 Men	GEN - Bathrooms	0	0	Yes	0	0.0	132	0.0	0.00	0.00	0.8	0	50	-	
108 Break Room	EF - Restaurants (Age 9 plus)	7.5	0.12	Yes	35	11.1	317	83.2	38.04	121.25	0.8	152	450	0.34	Critical

  

Room Name	Occupancy Category	Rp	Ra	Occupant Density (Default)? #/1000sf	Pz	Pz	Az	Rp*Pz	Ro*Az	Vbz	Vps	Xs	Ev	Vot	Critical Zone
101 Office	OB - Office space	5	0.05	Yes	5	1.4	270	6.8	16.20	22.95	0.8	29	300	0.10	
102 Parts	OB - Office space	5	0.05	Yes	5	2.9	574	14.4	34.44	48.79	0.8	61	350	0.17	Critical

  

Pz	ΣPz	D	D/Rp*Pz	ΣRo*Az	Vou	Vps	Xs	Ev	Vot
11.1	11.1	1.00	83.2	38.0	121.25	600.0	0.202	0.87	140
4.2	4.2	1.00	21.1	50.6	71.74	650.0	0.110	0.94	77

### SPLIT SYSTEM AHU SCHEDULE

	AHU-1	AHU-2
MARK	LENNOX	LENNOX
MANUFACTURER	EL1950F045XE368	EL1950F045XE368
MODEL/SIZE		
WEIGHT (LBS)	131	131
VOLTS/Hz/PH	120/60/1	120/60/1
MCA/MOCP (AMPS)	6.8/15	6.8/15
FUEL TYPE	NG	NG
INPUT MBH	44	44
CAPACITY (MBH)	42	42
ANNUAL FUEL UTILIZATION EFFIC. (%)	95	95
DELTA T (°F)	64.8	64.8
COIL MANUFACTURER	LENNOX	LENNOX
COIL MODEL	CR33-18A-2F	CR33-18A-2F
CAPACITY (MBH)	18	18
WEIGHT (LBS)	44	44
AIRFLOW (CFM)	600	600
O/A AIRFLOW (CFM)	100	100
EXTERNAL STATIC PRESSURE (N. W.G.)	0.5	0.5
HORSEPOWER	1/2	1/2
WATTS	135	135

### OUTDOOR UNIT

	CU-1	CU-2
MARK	LENNOX	LENNOX
MANUFACTURER	XC13N018	XC13N018
MODEL/SIZE		
SEER	15.0	15.0
REFRIGERANT	R410-A	R410-A
WEIGHT (LBS)	160	160
COOLING CAPACITY (TONS)	1.5	1.5
VOLTS/Hz/PH	208-230/60/1	208-230/60/1
MCA/MOCP (AMPS)	12.4/20	12.4/20
COMPRESSOR RLA	9.4	9.4
CONDENSER FAN HP	1/10	1/10
CONDENSER FAN FLA	0.7	0.7

- NOTES:
- UNIT SHALL BE NATURAL GAS.
  - PROVIDE UNIT MOUNTED DISCONNECT SWITCH WITH OVER CURRENT PROTECTION.
  - PROVIDE DIRTY FILTER SWITCH AND FAN FAILURE SWITCH.
  - PROVIDE WITH POWERED CONVENIENCE GFCI OUTLET (115/15A) AS PER NEC 25 FOOT ACCESSIBILITY REQUIREMENTS.
  - PROVIDE 30-DAY PROGRAMMABLE THERMOSTAT. ENSURE THAT THERMOSTAT HAS AN ALTERNATE SWITCHOVER SETTING.
  - PROVIDE EMERGENCY DRAIN PAN. PROVIDE FLOAT SWITCH IN DRAIN PAN TO DE-ENERGIZE UNIT UPON DETECTION OF CONDENSATE IN DRAIN PAN.
  - UNIT IS SIZED AROUND AHR STANDARD RATING COOLING CONDITIONS OF 80°F DB, 67°F WB EAT FOR THE INDOOR COIL AND 95°F EAT FOR THE OUTDOOR COIL.
  - PROVIDE CONCENTRIC VENT KIT.
  - PROVIDE ACID NEUTRALIZATION KIT FOR FURNACE.
  - EQUIVALENT MANUFACTURERS INCLUDE TRANE, CARRIER, AND YORK.

BIDDING DOCUMENTS

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DRAWING TITLE / DESCRIPTION:  
**MECHANICAL SCHEDULES**

PROJECT TITLE:  
**LUMBERTON EQUIPMENT SHOP  
LUMBERTON HIGHWAY DIVISION 6**

STATE CONSTRUCTION ID.# 16-12916-01A  
ASSET NUMBER:  
CO.# SITE.# BLDG.#  
**78 x 06 x 00**

REVISIONS  
NO. DATE

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**M0.2**

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