

PACKAGED DX UNIT SCHEDULE																											
MARK	QTY	SERVICE	BASIS OF DESIGN		DESCRIPTION	MOUNT / CONFIG.	NOMINAL TONS	AIRFLOW			COOLING					HEATING					REFRIG. TYPE	COMPRESSOR	FILTER	ELECTRICAL	WEIGHT (LB.)	NOTES	
			MFR	MODEL				TYPE	CFM (MIN./MAX.)	FAN		TYPE	STAGES	TC (MBH)	SC (MBH)	EFF.	TYPE	STAGES	INPUT (MBH)	OUTPUT (MBH)							EFF.
										ESP (IN. WG.)	MOTOR (HP)																
RTU-1	1	SHOP	LENNOX	LGT180H5M-Y 1ST	PACKAGED DX, NATURAL GAS HEAT, STAGED HOT GAS REHEAT, ECONOMIZER, BAROMETRIC RELIEF	GROUND MOUNT / VERTICAL DISCHARGE	15	SUPPLY OUTSIDE AIR RELIEF	6,000 1,100 ---	0.75 --- ---	5 --- (BAROMETRIC)	DX COIL REHEAT	3 2	181.4	143.8 -49.1	12 EER 15.4 IEER	NAT. GAS	2	260	210	81%	R-454B	3-STAGE SCROLL	DISPOSABLE, MERV 8	208/3/60 71 MCA 80 MOCp	2,871	A,B,D
RTU-2	1	STORAGE	LENNOX	LGT072H5E-Y 6T	PACKAGED DX, NATURAL GAS HEAT, STAGED HOT GAS REHEAT, ECONOMIZER, BAROMETRIC RELIEF	GROUND MOUNT / HORIZONTAL DISCHARGE	6	SUPPLY OUTSIDE AIR RELIEF	2,600 340 ---	0.75 --- ---	1-1/2 --- (BAROMETRIC)	DX COIL REHEAT	2 1	74.5	63.7 -13.7	12.2 EER 17.2 IEER	NAT. GAS	2	108	87	81%	R-454B	2-STAGE SCROLL	DISPOSABLE, MERV 8	208/3/60 32 MCA 50 MOCp	780	C,E

- GENERAL NOTES:**

 - UL OR ETL APPROVED. ENTIRE UNIT SHALL BE AHRI LISTED AND CERTIFIED.
 - PROVIDE ALL MATERIALS AND/OR ACCESSORIES AS REQUIRED FOR MOUNTING (CURBS, ETC.). PROVIDE APPROPRIATE VIBRATION ISOLATION FOR APPLICATION.
 - SCHEDULED OUTSIDE AIR QUANTITIES ARE FOR OCCUPIED MODE AND DO NOT INCLUDE ECONOMIZER OR UNOCCUPIED MODES.
 - STATIC PRESSURE SHOWN IS EXTERNAL TO UNIT. MANUFACTURER SHALL ADD ACCESSORY LOSSES TO THIS VALUE BEFORE SELECTING FAN.
 - CONDENSATE TRAP SHALL BE PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR. ROUTE TO NEAREST APPROVED RECEPTOR PER PLANS OR AS OTHERWISE REQUIRED BY THE AHJ. REFER TO TRAP DETAIL.
 - PROVIDE WITH:
 - FULLY MODULATING, COMPARATIVE ENTHALPY CONTROLLED ECONOMIZER.
 - CONDENSATE OVERFLOW SWITCH TO SHUT DOWN SYSTEM IN THE EVENT OF PRIMARY DRAIN PAN OVERFLOW.
 - LOUVERED HAIL GUARDS FOR CONDENSER COIL.
 - FACTORY ELECTRICAL NON-FUSED DISCONNECT.
 - FACTORY-WIRED GFCI CONVENIENCE RECEPTACLE.
 - HINGED ACCESS PANELS.
 - PHASE LOSS AND BROWNOUT MONITOR.
 - CRANKCASE HEATER.
 - BAROMETRIC RELIEF.
 - RETURN AIR SMOKE DETECTOR.
 - LOW AMBIENT CONTROL TO 0°F.
 - UNITS MUST BE AGA APPROVED.
 - PROVIDE WITH FACTORY MOUNTED DDC CONTROLS.
 - REFER TO SEQUENCE OF OPERATION.
 - PROVIDE WITH BACNET INTERFACE TO CONNECT TO FUTURE BAS.
 - PROVIDE WITH 7-DAY PROGRAMMABLE THERMOSTAT AND HUMIDISTAT.
- NOTES (APPLICABLE ONLY WHERE NOTED):**

 - PROVIDE WITH 26" HORIZONTAL CURB FOR SLAB INSTALLATION.
 - PROVIDE WITH HORIZONTAL RETURN AIR PANEL KIT.
 - PROVIDE WITH HORIZONTAL, ECONOMIZER CONVERSION KIT.
 - PROVIDE WITH DUAL STAGE HOT GAS REHEAT.
 - PROVIDE WITH SINGLE STAGE HOT GAS REHEAT.

RTU SEQUENCE OF OPERATION

GENERAL NOTES:
PROVIDE ALL NECESSARY COMPONENTS AND MATERIALS TO ACCOMPLISH THE SEQUENCE OF OPERATION WHETHER OR NOT EXPLICITLY STATED, SCHEDULED, OR NOTED OTHERWISE.

CONTROL METHOD:
UNIT SHALL BE PLACED IN OCCUPIED/UNOCCUPIED AND HEAT/COOL MODES BY A 7-DAY PROGRAMMABLE THERMOSTAT. THERMOSTAT SHALL PROVIDE AUTOMATIC CHANGEOVER BETWEEN HEATING AND COOLING WITH 5°F DEADBAND. THE THERMOSTAT SHALL BE CAPABLE OF BEING TEMPORARILY PLACED IN OCCUPIED MODE OUTSIDE OF PROGRAMMED TIMES. PROVIDE REMOTE TEMPERATURE SENSORS, AVERAGING TEMPERATURE SENSORS, HUMIDITY SENSORS, AND CO2 SENSORS AS SCHEDULED.

OCCUPIED MODE:
DURING OCCUPIED PERIODS, THE SUPPLY FAN SHALL RUN CONTINUOUSLY AND THE OUTSIDE AIR DAMPER SHALL OPEN TO MAINTAIN MINIMUM VENTILATION REQUIREMENTS (REFER TO SCHEDULE). THE COOLING, HEATING, AND REHEAT (WHERE SCHEDULED) SHALL OPERATE PER FACTORY CONTROLS TO MAINTAIN THE OCCUPIED SPACE TEMPERATURE AND HUMIDITY SETPOINTS.

BAROMETRIC RELIEF DAMPER AT THE UNIT SHALL MODULATE TO MAINTAIN SPACE PRESSURE AT +0.1" W.C. (ADJ.) RELATIVE TO THE EXTERIOR OF THE BUILDING.

UNOCCUPIED MODE:
THE OUTDOOR AIR DAMPER SHALL REMAIN CLOSED DURING UNOCCUPIED MODE.

WHEN THE SPACE TEMPERATURE IS ABOVE THE UNOCCUPIED COOLING SETPOINT OF 80.0 DEG. F (ADJ.) THE SUPPLY FAN SHALL START. THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED AND COOLING SHALL BE ENABLED. WHEN THE SPACE TEMPERATURE FALLS BELOW THE UNOCCUPIED COOLING SETPOINT OF 80.0 DEG. F MINUS THE UNOCCUPIED DIFFERENTIAL OF 4.0 DEG. F (ADJ.) THE SUPPLY FAN SHALL STOP AND COOLING SHALL BE DISABLED.

WHEN THE SPACE TEMPERATURE IS BELOW THE UNOCCUPIED HEATING SETPOINT OF 60.0 DEG. F (ADJ.) THE SUPPLY FAN SHALL START. THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED AND HEATING SHALL BE ENABLED. WHEN THE SPACE TEMPERATURE RISES ABOVE THE UNOCCUPIED HEATING SETPOINT OF 60.0 DEG. F PLUS THE UNOCCUPIED DIFFERENTIAL OF 4.0 DEG. F (ADJ.) THE SUPPLY FAN SHALL STOP AND HEATING SHALL BE DISABLED.

ECONOMIZER MODE:
COMPARATIVE ENTHALPY ECONOMIZER SHALL OPERATE BASED ON FACTORY CONTROLS.

DX OUTDOOR UNIT SCHEDULE													
MARK	QTY	BASIS OF DESIGN		DESCRIPTION	NOMINAL TONS	COOLING		REFRIGERANT			COMPRESSOR	ELECTRICAL	WEIGHT (LB.)
		MFR	MODEL			CAPACITY (MBH)	EFF.	TYPE	CONNECTION				
									SUCTION	LIQUID			
CU-1	1	LENNOX	ML17KC2-024-230	TRADITIONAL AIR-COOLED	2.0	24.3	13.4 EER2 16.0 SEER2	R-454B	3/4"	3/8"	2-STAGE SCROLL	208/1/60 14 MCA 20 MOCp	185
CU-2	1	LENNOX	ML17KC2-048-233	TRADITIONAL AIR-COOLED	4.0	47.2	11.5 EER2 15.2 SEER2	R-454B	7/8"	3/8"	2-STAGE SCROLL	208/3/60 18 MCA 30 MOCp	206
CU-3	1	LENNOX	ML17KC2-048-233	TRADITIONAL AIR-COOLED	4.0	46.5	11.5 EER2 15.2 SEER2	R-454B	7/8"	3/8"	2-STAGE SCROLL	208/3/60 18 MCA 30 MOCp	206
CU-4	1	LENNOX	ML17KC2-048-233	TRADITIONAL AIR-COOLED	4.0	47.3	11.5 EER2 15.2 SEER2	R-454B	7/8"	3/8"	2-STAGE SCROLL	208/3/60 18 MCA 30 MOCp	206

- GENERAL NOTES:**
- UL OR ETL APPROVED. ENTIRE UNIT SHALL BE AHRI LISTED AND CERTIFIED.
 - PROVIDE ALL MATERIALS AND/OR ACCESSORIES AS REQUIRED FOR MOUNTING. REFER TO DETAIL.
 - PROVIDE AND INSTALL REFRIGERANT PIPING AND NECESSARY COMPONENTS SIZED PER MANUFACTURER'S INSTRUCTIONS. BASE SIZING ON ACTUAL PIPING INSTALLATION LENGTHS AND CONFIGURATION. EXTERIOR INSULATION ON OUTDOOR REFRIGERANT LINES SHALL BE COVERED WITH EMBOSSED ALUMINUM JACKETS.
 - PROVIDE WITH LOUVERED HAIL GUARDS FOR CONDENSER COILS.
 - ELECTRICAL DISCONNECT PROVIDED BY ELECTRICAL CONTRACTOR.
 - PROVIDE WITH LOW AMBIENT OPERATION DOWN TO 10°F.

FURNACE SCHEDULE																								
MARK	QTY	OUTDOOR UNIT	BASIS OF DESIGN		DESCRIPTION	MOUNT / CONFIG.	NOMINAL TONS	AIRFLOW				COOLING		HEATING					REFRIGERANT			FILTER	ELECTRICAL	WEIGHT (LB.)
			MFR	MODEL				TYPE	CFM (MIN./MAX.)	FAN		TC (MBH)	SC (MBH)	TYPE	STAGES	INPUT (MBH)	OUTPUT (MBH)	EFF.	TYPE	CONNECTION				
										ESP (IN. WG.)	MOTOR (HP)									SUCTION	LIQUID			
FU-1	1	CU-1	LENNOX	CK40HT-24B + EL297UH070XV36BK	TRADITIONAL FURNACE & DX COIL, BLOW THRU, 17.5" CABINET WIDTH, VARIABLE SPEED MOTOR, TXV	HORIZONTAL	2	SUPPLY OUTSIDE AIR	810 65	0.5 ---	1/2 ---	24.3	21.1	NAT. GAS	2	66	64	97% AFUE	R-454B	3/4"	3/8"	DISPOSABLE MERV 8	120/160 7.7 FLA 15 MOCP	184
FU-2	1	CU-2	LENNOX	CK40HT-48C + EL297UH090XV48CK	TRADITIONAL FURNACE & DX COIL, BLOW THRU, 21" CABINET WIDTH, VARIABLE SPEED MOTOR, TXV	HORIZONTAL	4	SUPPLY OUTSIDE AIR	1,770 105	0.5 ---	3/4 ---	47.2	41.4	NAT. GAS	2	88	86	97% AFUE	R-454B	7/8"	3/8"	DISPOSABLE MERV 8	120/160 10.1 FLA 15 MOCP	217
FU-3	1	CU-3	LENNOX	CK40HT-48C + EL297UH090XV48CK	TRADITIONAL FURNACE & DX COIL, BLOW THRU, 21" CABINET WIDTH, VARIABLE SPEED MOTOR, TXV	HORIZONTAL	4	SUPPLY OUTSIDE AIR	1,580 220	0.5 ---	3/4 ---	46.5	39.5	NAT. GAS	2	88	86	97% AFUE	R-454B	7/8"	3/8"	DISPOSABLE MERV 8	120/160 10.1 FLA 15 MOCP	217
FU-4	1	CU-4	LENNOX	CK40HT-48C + EL297UH090XV48CK	TRADITIONAL FURNACE & DX COIL, BLOW THRU, 21" CABINET WIDTH, VARIABLE SPEED MOTOR, TXV	HORIZONTAL	4	SUPPLY OUTSIDE AIR	1,645 300	0.5 ---	3/4 ---	47.3	41.0	NAT. GAS	2	88	86	97% AFUE	R-454B	7/8"	3/8"	DISPOSABLE MERV 8	120/160 10.1 FLA 15 MOCP	217

- GENERAL NOTES (ALL UNITS AS APPLICABLE):**
- UL OR ETL APPROVED. ENTIRE UNIT SHALL BE AHRI LISTED AND CERTIFIED.
 - PROVIDE ALL MATERIALS AND/OR ACCESSORIES AS REQUIRED FOR MOUNTING (HANGING RODS, FLOOR STANDS, ETC.). PROVIDE APPROPRIATE VIBRATION ISOLATION FOR APPLICATION.
 - SCHEDULED OUTSIDE AIR QUANTITIES ARE FOR OCCUPIED MODE AND DO NOT INCLUDE ECONOMIZER OR UNOCCUPIED MODES.
 - STATIC PRESSURE SHOWN IS EXTERNAL TO UNIT. MANUFACTURER SHALL ADD ACCESSORY LOSSES TO THIS VALUE BEFORE SELECTING FAN.
 - CONDENSATE TRAP SHALL BE PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR. ROUTE TO NEAREST APPROVED RECEPTOR PER PLANS.
 - PROVIDE AND INSTALL REFRIGERANT PIPING AND NECESSARY COMPONENTS SIZED PER MANUFACTURER'S INSTRUCTIONS. BASE SIZING ON ACTUAL PIPING INSTALLATION LENGTHS AND CONFIGURATION. EXTERIOR INSULATION ON OUTDOOR REFRIGERANT LINES SHALL BE COVERED WITH EMBOSSED ALUMINUM JACKETS.
 - PROVIDE WITH:
 - CONDENSATE OVERFLOW SWITCH TO SHUT DOWN SYSTEM IN THE EVENT OF PRIMARY DRAIN PAN OVERFLOW.
 - FILTER RACK.
 - CONCENTRIC VENT TERMINAL THRU ROOF.
 - 7-DAY PROGRAMMABLE THERMOSTAT AND HUMIDISTAT.
 - FACTORY INSTALLED A2L SENSOR.
 - EDA HOT LIQUID REHEAT COIL TO PROVIDE HUMIDITY CONTROL.
 - ELECTRICAL DISCONNECT PROVIDED BY ELECTRICAL CONTRACTOR.
 - PROVIDE WITH BACNET INTERFACE TO CONNECT TO FUTURE BAS.
 - PROVIDE CO2 SENSOR FOR FU-1.

FURNACE SEQUENCE OF OPERATION

GENERAL NOTES:
PROVIDE ALL NECESSARY COMPONENTS AND MATERIALS TO ACCOMPLISH THE SEQUENCE OF OPERATION WHETHER OR NOT EXPLICITLY STATED, SCHEDULED, OR NOTED OTHERWISE.

CONTROL METHOD:
UNIT SHALL BE PLACED IN OCCUPIED/UNOCCUPIED AND HEAT/COOL MODES BY A 7-DAY PROGRAMMABLE THERMOSTAT. THERMOSTAT SHALL PROVIDE AUTOMATIC CHANGEOVER BETWEEN HEATING AND COOLING WITH 5°F DEADBAND. THE THERMOSTAT SHALL BE CAPABLE OF BEING TEMPORARILY PLACED IN OCCUPIED MODE OUTSIDE OF PROGRAMMED TIMES.

OCCUPIED MODE:
DURING OCCUPIED PERIODS, THE SUPPLY FAN SHALL RUN CONTINUOUSLY AND THE OUTSIDE AIR DAMPER SHALL OPEN TO MAINTAIN MINIMUM VENTILATION REQUIREMENTS (REFER TO SCHEDULE). THE COOLING, HEATING, AND REHEAT SHALL OPERATE PER FACTORY CONTROLS TO MAINTAIN THE OCCUPIED SPACE TEMPERATURE AND HUMIDITY SETPOINT.

WHEN ANY UNIT IS IN OCCUPIED MODE, MOTORIZED DAMPER FOR GV-1 SHALL FULLY OPEN.

UNOCCUPIED MODE:
THE OUTDOOR AIR DAMPER SHALL REMAIN CLOSED DURING UNOCCUPIED MODE.

WHEN THE SPACE TEMPERATURE IS ABOVE THE UNOCCUPIED COOLING SETPOINT OF 80.0 DEG. F (ADJ.) THE SUPPLY FAN SHALL START. THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED AND COOLING SHALL BE ENABLED. WHEN THE SPACE TEMPERATURE FALLS BELOW THE UNOCCUPIED COOLING SETPOINT OF 80.0 DEG. F MINUS THE UNOCCUPIED DIFFERENTIAL OF 4.0 DEG. F (ADJ.) THE SUPPLY FAN SHALL STOP AND COOLING SHALL BE DISABLED.

WHEN THE SPACE TEMPERATURE IS BELOW THE UNOCCUPIED HEATING SETPOINT OF 60.0 DEG. F (ADJ.) THE SUPPLY FAN SHALL START. THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED AND HEATING SHALL BE ENABLED. WHEN THE SPACE TEMPERATURE RISES ABOVE THE UNOCCUPIED HEATING SETPOINT OF 60.0 DEG. F PLUS THE UNOCCUPIED DIFFERENTIAL OF 4.0 DEG. F (ADJ.) THE SUPPLY FAN SHALL STOP AND HEATING SHALL BE DISABLED.

WHEN ALL UNITS ARE IN UNOCCUPIED MODE, MOTORIZED DAMPER FOR GV-1 SHALL FULLY CLOSE.

DEMAND CONTROLLED VENTILATION (FU-1 ONLY):
UPON A RISE IN CO2 LEVELS ABOVE 800 PPM (ADJ.) THE OUTSIDE AIR DAMPER SHALL OPEN LINEARLY FROM THE MINIMUM POSITION TO THE MAXIMUM POSITION AT 1200 PPM (ADJ.). ON A FALL IN CO2 LEVELS BELOW 1200 PPM (ADJ.), THE DAMPER SHALL CLOSE LINEARLY FROM THE MAXIMUM POSITION TO THE MINIMUM POSITION AT 800 PPM (ADJ.).



05/08/2026



MECHANICAL SCHEDULES

