HVAC SEQUENCE OF OPERATION

1. GENERAL SYSTEM OPERATIONS.

1.1. TEMPERATURE CONTROL PANELS. TEMPERATURE CONTROL PANELS (TCP) AND EQUIPMENT CONTROL PANELS (ECP) IDENTIFIED IN THE SEQUENCE OF OPERATION SHALL BE PROVIDED WITH THE INDICATING LIGHTS, RUNNING LIGHTS, ALARM LIGHTS, AUDIBLE ALARMS, TIMERS, AND SELECTOR SWITCHES FOR CONTROL AND STATUS INDICATION OF THE EQUIPMENT SERVED. WHERE NO CONTROL PANELS ARE PROVIDED FOR EQUIPENT, THE LIGHTS AND SWITCHES SHALL BE AT THE STARTER OR MCC. RUNNING LIGHTS SHALL BE PROVIDED TO INDICATE BOTH ENERGIZED AND DE-ENERGIZED CONDITIONS FOR THE EQUIPMENT AND SHALL POSITIVELY INDICATE EQUIPMENT CONDITIONS FROM THE MOTOR STARTER OR CURRENT SENSOR. SWITCH POSITION SHALL NOT BE USED FOR LIGHT ILLUMINATION. INDICATING AND RUNNING LIGHTS SHALL BE LOCATED DIRECTLY ABOVE EACH RESPECTIVE SELECTOR SWITCH WITH LIGHT COLORS AS FOLLOWS:

RED – DE-ENERGIZED GREEN - ENERGIZED AMBER – ALARM WHITE – STATUS

INDICATING LIGHTS AND SELECTOR SWITCHES SHALL BE LOCATED ON THE FACE OF THE TEMPERATURE CONTROL PANEL SERVING THE RESPECTIVE EQUIPMENT. IN ADDITION TO THE LIGHTS, TIMERS, AND SELECTOR SWITCHES DESCRIBED IN THE SEQUENCE OF OPERATION FOR THE INDIVIDUAL EQUIPMENT, EACH CONTROL PANEL SHALL BE PROVIDED WITH THE FOLLOWING:

"CONTROL POWER ON" STATUS LIGHT "INDICATING LIGHT TEST" PUSHBUTTON ALARM SILENCE PUSHBUTTON PUSHBUTTON (WHERE APPLICABLE) "ALARM RESET"

CONTROL PANELS SPECIFIED TO BE PROVIDED WITH ALARM CONDITION INDICATING LIGHTS SHALL BE PROVIDED WITH AN ELECTRICALLY ISOLATED CONTACT TO PROVIDE A COMMON ALARM TO THE PLANT CONTROL SYSTEM (PCS). EACH CONTROL PANEL SHALL BE PROVIDED WITH A MINIMUM OF ONE COMMON ALARM OUTPUT POINT TO THE PCS AND ADDITIONAL INDIVIDUAL ALARM POINTS AS INDICATED BELOW.

TEMPERATURE CONTROL PANELS SHALL COME WITH PHENOLIC NAMEPLATES FOR EACH CONTROL SWITCH INDICATING SWITCH TYPE, EQUIPMENT CONTROLLED, ROOM OR AREA SERVED, AND SWITCH AUTOMATIC POSITION EQUIPMENT INTERLOCK.

1.2. SYSTEM INTERLOCKS AND ALARMS

UNLESS OTHERWISE INDICATED, ALL EQUIPMENT INTERLOCKING DEVICES AS DESCRIBED HEREIN SHALL BE PROVIDED WITHIN THE RESPECTIVE TEMPERATURE/EQUIPMENT CONTROL PANEL (TCP/ECP).

1.2.1. SMOKE DETECTION SYSTEMS

1.2.1.1. SMOKE DETECTION (DUCT MOUNTED DETECTORS). SMOKE DETECTORS SHALL BE LOCATED IN THE DUCT OF EQUIPMENT LISTED BELOW. IN THE EVENT SMOKE IS DETECTED BY A DETECTOR, A SMOKE DETECTED SIGNAL SHALL BE TRANSMITTED TO THE REMOTE TEST STATION AND FIRE ALARM PANEL OR PLANT CONTROL SYSTEM (PCS) AND TCP/ECP WHEN A FIRE ALARM PANEL IS NOT PRESENT. A "SMOKE DETECTED" ALARM LIGHT ON THE RESPECTIVE REMOTE TEST STATION SHALL BE ILLUMINATED. WHERE A TCP/ECP IS PRESENT, THE REMOTE TEST STATION SHALL BE MOUNTED ON OR ADJACENT TO THE TEMPERATURE CONTROL PANEL. THE RESPECTIVE EQUIPMENT AND ANY INTERLOCKED EQUIPMENT SHALL BE DE-ENERGIZED AND OUTSIDE AIR DAMPERS ASSOCIATED WITH THE DE-ENERGIZED EQUIPMENT SHALL CLOSE.

IN THE EVENT A SMOKE DETECTOR MALFUNCTIONS, A MALFUNCTION SIGNAL SHALL BE TRANSMITTED TO THE REMOTE TEST STATION OR FIRE ALARM PANEL, ILLUMINATING A 'SMOKE DETECTOR MALFUNCTION" INDICATING LIGHT.

DRYER BUILDING		
DE-ENERGIZED EQUIPMENT	SMOKE DETECTOR	TEMPERATURE/EQUIPMENT CONTROL PANEL
MAU-101	SMD-MAU-101	TCP-DB1
MAU-201	SMD-MAU-201	TCP-DB1
DF-201	SMD-DF-201	TCP-DB1
PAC-301	SMD-PAC-301	TCP-PAC-301
MAINTENANCE BUILDING		
DE-ENERGIZED EQUIPMENT	SMOKE DETECTOR	TEMPERATURE/EQUIPMENT CONTROL PANEL

SMD-EDH-101

1.2.1.2. SMOKE DETECTION (AREA SMOKE DETECTION). A SMOKE DETECTED SIGNAL SHALL BE SENT FROM THE FIRE ALARM PANEL TO THE RESPECTIVE TEMPERATURE/EQUIPMENT CONTROL PANEL IN THE EVENT SMOKE IS DETECTED BY THE BUILDING SMOKE DETECTION SYSTEM. THE EQUIPMENT BELOW AND ANY INTERLOCKED EQUIPMENT SHALL BE DE-ENERGIZED AND OUTSIDE AIR DAMPERS ASSOCIATED WITH THE DE-ENERGIZED EQUIPMENT SHALL CLOSE.

DRYER BUILDING AREA DE-ENERGIZED EQUIPMENT DRYER ROOM MAU-101. WF-101. WF-102. WF-103. WF-104 BOILER ROOM MAU-201, DF-201, WF-201, WF-202, WF-203 ELECTRIC ROOM SMD-PAC-301

MAINTENANCE BUILDING AREA DE-ENERGIZED EQUIPMENT VEHICLE STORAGE EDH-101, WF-101, WF-102

1.2.2. LOW TEMPERATURE PROTECTION. LOW AIR TEMPERATURE THERMOSTATS SHALL BE LOCATED IN THE SYSTEMS INDICATED BELOW. UPON DETECTION OF LOW AIR TEMPERATURE, THE THERMOSTAT SHALL DE-ENERGIZE THE RESPECTIVE EQUIPMENT AND ALL INTERLOCKED EQUIPMENT, CONTROL DAMPER(S) OF THE RESPECTIVE EQUIPMENT AND INTERLOCKED EQUIPMENT SHALL RETURN TO THE NORMAL POSITION, AND A "LOW AIR TEMPERATURE" ALARM LIGHT ON THE FACE OF THE RESPECTIVE TEMPERATURE/EQUIPMENT CONTROL PANEL SHALL BE ILLUMINATED OR ALARM INDICATION SENT TO THE DIRECT DIGITAL CONTROL SYSTEM. AN ADJUSTABLE O TO 5 MINUTE TIME DELAY RELAY SHALL BE PROVIDED TO ALLOW FOR STARTING OF THE EQUIPMENT UNDER COLD AMBIENT CONDITIONS.

DRYER BUILDING EQUIPMENT MAU-101 MAU-201

EDH—1

THERMOSTAT 7*—MAU—101* 1-MAU-201

TEMPERATURE / EQUIPMENT CONTROL PANEL TCP-DB1 TCP-DB1

TCP-MB1

MAINTENANCE BUILDING EQUIPMENT EDH-101

THERMOSTAT 1*—EDH—101* TEMPERATURE / EQUIPMENT CONTROL PANEL TCP-MB1

1.2.3. HIGH FILTER PRESSURE LOSS. A HIGH LIMIT PRESSURE DIFFERENTIAL FLOW SWITCH SHALL BE LOCATED ACROSS THE FILTER BANK OF THE EQUIPMENT INDICATED BELOW. IN THE EVENT THE PRESSURE DIFFERENTIAL ACROSS THE FILTER EXCEEDS THE PRESET VALUE, A "HIGH FILTER PRESSURE LOSS" ALARM LIGHT ON THE FACE OF THE RESPECTIVE TEMPERATURE/EQUIPMENT CONTROL PANEL OR THERMOSTAT (WHERE FURNISHED WITH LIGHTS) SHALL BE ILLUMINATED.

PRESSURE SWITCH	TEMPERATURE/EQUIPMENT CONTROL PANEL
PD-MAU-101	TCP-DB1
PD-MAU-201	TCP-DB1
FACTORY PROVIDED	TCP-PAC-301
PD-F-201	TCP-DB1
	PRESSURE SWITCH PD-MAU-101 PD-MAU-201 FACTORY PROVIDED PD-F-201

EQUIPMENT PRESS PAC-101 FACTO EDH-101 PI

1.2.4. VENTILATION SYSTEM FAILURE.

1.2.4.1. VENTILATION SYSTEM FAILURE (AIRFLOW SWITCHES). VENTILATION SYSTEM FAILURE PRESSURE DIFFERENTIAL SWITCHES SHALL BE LOCATED IN THE SYSTEMS INDICATED BELOW. IN THE EVENT THAT AIRFLOW IS NOT ATTAINED OR LOST AS DETERMINED BY THE PRESSURE DIFFERENTIAL FLOW SWITCH, A "VENTILATION SYSTEM FAILURE" SIGNAL SHALL BE TRANSMITTED TO THE FIRE ALARM SIGNALING SYSTEM. WHERE A FIRE ALARM SIGNALING SYSTEM IS NOT PRESENT, THE "VENTILATION SYSTEM FAILURE" SIGNAL SHALL BE TRANSMITTED TO THE PLANT CONTROL SYSTEM (PCS). WHERE INDICATED ON THE DRAWINGS, A VISUAL ALARM SHALL BE ILLUMINATED AND AUDIBLE ALARM SHALL SOUND AT EACH ROOM ENTRANCE AND WITHIN THE ROOM. THE FIRE ALARM SIGNALING SYSTEMS HAVE A NORMALLY OPEN CONTACT FOR TRANSMITTING A SIGNAL TO THE RESPECTIVE TEMPERATURE/EQUIPMENT CONTROL PANEL ILLUMINATING AN ALARM INDICATING LIGHT FOR THE RESPECTIVE EQUIPMENT.

DRYER BUILDING		
EQUIPMENT	PRESSURE SWITCH	TEMPERATURE/EQUIPMENT CONTROL PANEL
MAU-101	PDS-MAU-101	TCP-DB1
MAU-201	PDS-MAU-201	TCP-DB1
DF—201	PDS-DF-201	TCP-DB1
PAC-301	FACTORY PROVIDED	TCP-PAC-301

MAINTENANCE BUILDING	
EQUIPMENT	CURRENT SWITCH
EDH-101	CS-EDH-101
WF—101	CS-WF-101
EQUIPMENT EDH-101 WF-101	CURRENT SWITCH CS-EDH-101 CS-WF-101

1.2.4.2. VENTILATION SYSTEM FAILURE (CURRENT SENSOR SWITCHES). MOTOR CURRENT SENSOR SWITCHES SHALL BE INSTALLED ON THE EQUIPMENT OR AT THE EQUIPMENT MOTOR STARTER TO INDICATE VENTILATION SYSTEM FAILURE INCLUDING DETECTION OF BELT LOSS OR FAN MOTOR FAILURE. IN THE EVENT THAT THE EQUIPMENT FAILS TO OPERATE AS DETERMINED BY THE CURRENT SENSOR SWITCH, A "VENTILATION SYSTEM FAILURE" SIGNAL SHALL BE TRANSMITTED TO THE ALARM DESTINATION AS INDICATED BELOW. WHEN THE SIGNAL IS TRANSMITTED TO THE FIRE ALARM SIGNALING SYSTEM, A VISUAL ALARM SHALL BE ILLUMINATED AND AUDIBLE ALARM SHALL SOUND AT EACH ROOM ENTRANCE AND WITHIN THE ROOM. THE FIRE ALARM SIGNALING SYSTEMS SHALL HAVE A NORMALLY OPEN CONTACT FOR TRANSMITTING A SIGNAL TO THE RESPECTIVE TEMPERATURE/EQUIPMENT CONTROL PANEL ILLUMINATING A "VENTILATION FAILURE" INDICATING LIGHT FOR THE RESPECTIVE EQUIPMENT. WHEN THE SIGNAL IS TRANSMITTED TO THE PCS, A SIGNAL SHALL ALSO BE SENT TO THE RESPECTIVE TEMPERATURE/EQUIPMENT CONTROL PANEL ILLUMINATING A "VENTILATION FAILURE" INDICATING LIGHT FOR THE RESPECTIVE EQUIPMENT.

DRYER BUILDING		
EQUIPMENT	CURRENT SWITCH	TEMPERATURE/EQUIPMENT CONTROL PANEL
WF—101	CS-WF-101	TCP-DB1
WF-102	CS-WF-102	TCP-DB1
WF—103	CS-WF-103	TCP-DB1
WF—104	CS-WF-104	TCP-DB1
WF-201	CS-WF-201	TCP-DB1
WF-202	CS-WF-202	TCP-DB1
WF-203	CS-WF-203	TCP-DB1

2. HEATING SYSTEMS.

2.1. UNIT HEATERS. UNIT HEATERS SHALL BE CONTROLLED BY THEIR RESPECTIVE THERMOSTATS. LOCATE UNIT HEATER THERMOSTAT ON WALL OR COLUMN BELOW UNIT HEATER OR AS INDICATED ON PLANS AT 60" AFF.

THERMOSTATS.

THERMOSTATS.

3. VENTILATING/EXHAUST SYSTEMS.

3.1. "ON-OFF" EQUIPMENT CONTROL. EQUIPMENT INDICATED FOR "ON-OFF" CONTROL SHALL EACH BE CONTROLLED BY AN INDIVIDUAL "ON-OFF" FAN SELECTOR SWITCH. THE SWITCH LOCATION SHALL BE AS INDICATED BELOW. WHEN THE SWITCH IS PLACED IN THE "ON" POSITION, THE RESPECTIVE EQUIPMENT FAN SHALL BE ENERGIZED. BEFORE THE FAN CAN OPERATE, THE CONTROL DAMPER(S) SHALL BE PROVEN OPEN. WHEN THE EQUIPMENT FAN IS DE-ENERGIZED, THE CONTROL DAMPER(S) SHALL RETURN TO THE NORMAL POSITION.

DRYER BUILDING					
EQUIPMENT	SWITCH LOCATION	FAN INTERLOCK	CONTROL DAMPER(S)	6. THERMOSTAT SETPOINTS	
MAU-101	TCP-DB1	TCP-D1 ON/OFF	CD-MAU-101		
MAU-201	TCP-DB1	TCP-D1 ON/OFF	CD-MAU-201	6.1. THERMOSTAT SETPOINTS SHALL BE AS INDICATED B	ELOW, UNLE
WF—101		MAU-101	CD-WF-101	THIS SEQUENCE OF OPERATIONS.	
WF-102		MAU-101	CD-WF-102		
WF-103		MAU-101	CD-WF-103	ALL LOCATIONS	
WF-104		MAU-101	CD-WF-104	LOW TEMPERATURE THERMOSTATS	40F
DF—201		T-WF-201	CD-DF-201	HEATERS	60F
WF—201		T-DF-201	CD-WF-201	MAKEUP AIR SUPPLY HEATING	55F
				VENTILATING EQUIPMENT	90F
MAINTENANCE BL	JILDING			DRYER BUILDING ELECTRIC ROOM AIR CONDITIONING	80F
EQUIPMENT	SWITCH LOCATION	FAN INTERLOCK	CONTROL DAMPER(S)	PROGRAMMABLE THERMOSTATS	75F CC
EDH—101	TCP-MB1	TCP-MB1 ON/OFF	CD-IH-101		72F HE
WF-102	TCP-MB1	EDH-101	CD-IH-102		

DRIER DOILDING					
EQUIPMENT	SWITCH LOCATION	FAN INTERLOCK	CONTROL DAMPER(S)	6. THERMOSTAT SETPOINTS	
MAU-101	TCP-DB1	TCP-D1 ON/OFF	CD-MAU-101		
MAU-201	TCP-DB1	TCP-D1 ON/OFF	CD-MAU-201	6.1. THERMOSTAT SETPOINTS SHALL BE AS INDICATED B	ELOW, UNLE
WF—101		MAU-101	CD-WF-101	THIS SEQUENCE OF OPERATIONS.	
WF-102		MAU-101	CD-WF-102		
WF—103		MAU-101	CD-WF-103	ALL LOCATIONS	
WF—104		MAU-101	CD-WF-104	LOW TEMPERATURE THERMOSTATS	40F
DF-201		T-WF-201	CD-DF-201	HEATERS	60F
WF—201		T-DF-201	CD-WF-201	MAKEUP AIR SUPPLY HEATING	55F
				VENTILATING EQUIPMENT	90F
MAINTENANCE BL	<i>JILDING</i>			DRYER BUILDING ELECTRIC ROOM AIR CONDITIONING	80F
EQUIPMENT	SWITCH LOCATION	FAN INTERLOCK	CONTROL DAMPER(S)	PROGRAMMABLE THERMOSTATS	75F CC
EDH-101	TCP-MB1	TCP-MB1 ON/OFF	CD-IH-101		72F HE
WF-102	TCP-MB1	EDH-101	CD-IH-102		

SURE SWITCH	TEMPERATURE/EQUIPMENT CONTROL PANE
ORY PROVIDED	TCP-PAC-101
D-EDH-101	TCP-MB1

TEMPERATURE/EQUIPMENT CONTROL PANEL TCP-MB1 TCP-MB1

2.2. CABINET HEATERS. CABINET HEATERS SHALL BE CONTROLLED BY THEIR RESPECTIVE BUILT-IN

2.3. WALL HEATERS. WALL HEATERS SHALL BE CONTROLLED BY THEIR RESPECTIVE BUILT-IN

4. HEATING AND VENTILATING SYSTEMS. 4.1. MAINTENANCE BUILDING MAKEUP AIR UNIT (100% OUTSIDE AIR). MAKEUP AIR UNIT SHALL EACH BE CONTROLLED BY AN INDIVIDUAL "SUMMER-OFF-WINTER" SYSTEM SELECTOR SWITCH. THE SWITCH LOCATION SHALL BE AS INDICATED BELOW. WHEN THE SWITCH IS PLACED IN THE "WINTER" POSITION, THE FAN SHALL OPERATE AND THE SUPPLY AIR SENSOR/THERMOSTAT SHALL MODULATE THE HEATING OUTPUT OF THE UNIT TO MAINTAIN THE DESIRED SUPPLY AIR TEMPERATURE. BEFORE THE FAN CAN OPERATE, THE CONTROL DAMPERS SHALL BE PROVEN OPEN. WHEN THE OUTSIDE AIR TEMPERATURE IS GREATER THAN THE HEATING CHANGEOVER TEMPERATURE SETPOINT AS DETECTED BY THE OUTDOOR AIR SENSOR/THERMOSTAT, THE HEATING SHALL BE LOCKED OUT. WHEN THE SWITCH IS PLACED IN THE "SUMMER" POSITION, THE FAN SHALL OPERATE AND THE HEATING SHALL BE LOCKED OUT. WHEN THE UNIT IS DE-ENERGIZED, THE CONTROL DAMPER(S) SHALL CLOSE. ER(S) *101, CD-IH-102 103, CD-IH-103* 4.2. DRYER BUILDING MAKEUP AIR UNIT (100% OUTSIDE AIR). MAKEUP AIR UNIT SHALL EACH BE CONTROLLED BY AN INDIVIDUAL "SUMMER-OFF-WINTER" SYSTEM SELECTOR SWITCH LOCATED AT THE MAIN CONTROL PANLE AND TWO OCCUPIED/UNOCCUPIED SWITCHES LOCATED AT MAIN CONTROL PANEL AND AT THE EXTERIOR OF THE BUILDING NEXT TO THE DESIGNATED MAIN PERSONNEL ENTRANCE. WHEN THE WINTER/SUMMER SWITCH IS PLACED IN THE "WINTER" POSITION, THE SUPPLY FAN AND ALL FOUR (4) EXHAUST FANS SHALL OPERATE AND THE SUPPLY AIR SENSOR/THERMOSTAT SHALL MODULATE THE HEATING OUTPUT OF THE UNIT TO MAINTAIN THE DESIRED SUPPLY AIR TEMPERATURE. BEFORE THE FANS CAN OPERATE, THE CONTROL DAMPERS SHALL BE PROVEN OPEN. WHEN THE OUTSIDE AIR TEMPERATURE IS GREATER THAN THE HEATING CHANGEOVER TEMPERATURE SETPOINT AS DETECTED BY THE OUTDOOR AIR SENSOR/THERMOSTAT, THE HEATING SHALL BE LOCKED OUT. WHEN THE SWITCH IS PLACED IN THE "SUMMER" POSITION, ALL FANS SHALL OPERATE AND THE HEATING SHALL BE LOCKED OUT. WHEN THE UNIT IS DE-ENERGIZED, ALL FANS SHALL STOP AND THE CONTROL DAMPERS SHALL CLOSE. WHEN EITHER OF THE OCCUPED/ UNOCCUPIED SWITCHES IS IN THE "OCCUPIED" MODE, THE SYSTEM SHALL OPERATE AS INDICATED ABOVE. WHEN BOTH SWITCHES ARE IN THE "UNOCCUPIED" MODE, THE CONTROL PANEL SHALL MONITOR ADDITIONAL INPUT SIGNALS PROVIDED BY THE OWNER INCLUDING BUT NOT LIMITED TO OCCUPANCY SENSORS AND COMBUSTABLE GAS LEL SENSORS. A POSITIVE INPUT SIGNAL FROM ANY OF THE OWNER PROVIDED SENSORS SHALL OVERRIDE THE UNOCCUPIED SWITCH AND MAINTAIN THE SYSTEM AT THE FULL, OCCUPIED AIRFLOW RATE. WHEN THE SWITCHES ARE BOTH IN THE "UNOCCUPIED" MODE, AND NO SENSOR OVERRIDES ARE DETECTED, AND THE OUTDOOR TEMPERATURE IS BELOW 50°F, THE MAKEUP AIR UNIT FAN SPEED WILL REDUCE TO 50%, AND WALL FANS WF-101 AND WF-103 SHALL TURN OFF (WALL FANS WF-101 AND WF-102 WILL REMAIN ON). AMPER(S) -101 102 103 104 4.3. BOILER ROOM COMBUSTION AIR. THE MAKEUP AIR UNIT FAN SHALL BE PROVIDED WITH A TWO-SPEED MOTOR OR VARIABLE FREQUENCY DRIVE. THE FAN MOTOR SHALL OPERATE AT HALF SPEED WHEN ONE HOT WATER BOILER IS ENABLED AND FULL SPEED WHEN TWO HOT WATER BOILERS ARE ENABLED. WHEN MAKEUP AIR UNIT MAU-201 IS ENABLED, THE EXHAUST FAN DAMPER WF-203 SHALL OPEN WITH THE FAN REMAINING OFF FOR ROOM PRESSURE RELIEF. ER(S) TCP-DB1 5. AIR CONDITIONING SYSTEMS. 5.1. PACKAGED SYSTEMS. PACKAGED SYSTEMS SHALL BE CONTROLLED BY THEIR RESPECTIVE THERMOSTAT. SYSTEM OPERATION SHALL BE CONTROLLED BY A "HEAT-OFF-COOL" (MANUAL CHANGEOVER) OR AN "OFF-HEAT-AUTO-COOL" (AUTOMATIC CHANGEOVER, PROGRAMMABLE) SYSTEM SWITCH AND AN "AUTO-ON" FAN SWITCH LOCATED ON THE THERMOSTAT SUB-BASE. HEAT PUMPS SHALL ALSO HAVE AN "EMERGENCY HEAT" SYSTEM SWITCH POSITION TO ENERGIZE THE HEATING AND DE-ENERGIZE THE COMPRESSORS. EACH SYSTEM SHALL BE IN THE OCCUPIED MODE WHEN THE AREA SERVED IS OCCUPIED. IN THIS MODE, THE FAN SHALL OPERATE CONTINUOUSLY AND THE OUTSIDE AIR CONTROLS SHALL BE SET AT THE MINIMUM OUTSIDE AIR POSITION OR BE UNDER THE ECONOMIZER CONTROL (IF EQUIPPED) AS DESCRIBED BELOW. WHEN THE AREA SERVED IS UNOCCUPIED, THE FAN SHALL BE DE-ENERGIZED AND ONLY OPERATE WHEN HEATING OR COOLING IS REQUIRED TO MAINTAIN THE SETBACK TEMPERATURES. WHEN THE THERMOSTAT IS CAPABLE OF PROVIDING AUTOMATIC OCCUPIED/UNOCCUPIED CONTROL, THE FAN SHALL OPERATE AS DESCRIBED IN THE UNOCCUPIED - NIGHT SETBACK CONTROL PARAGRAPH. IN ALL CASES. THE FAN SHALL OPERATE CONTINUOUSLY WHEN THE SPACE IS OCCUPIED AND CYCLE ON AND OFF TO MEET THE HEATING OR COOLING LOADS WHEN THE SPACE IS UNOCCUPIED. THE ELECTRIC ROOM COOLING UNIT SHALL BE PROVIDED WITH AN ECONOMIZER. THE SYSTEM SHALL BE IN THE ECONOMIZER MODE WHEN THE SYSTEM IS IN THE OCCUPIED MODE, COOLING IS REQUIRED. AND THE OUTSIDE AIR IS SUITABLE FOR COOLING. OUTSIDE AIR IS SUITABLE FOR COOLING WHEN THE OUTSIDE AIR ENTHALPY IS LESS THAN THE RETURN AIR ENTHALPY ON SYSTEMS EQUIPPED WITH DIFFERENTIAL ENTHALPY CONTROL, OR WHEN THE OUTSIDE AIR CONDITIONS ARE BELOW THE "A" SETPOINT CURVE ON SYSTEMS WITH ELECTRONIC ENTHALPY CONTROLS. THE CONTROLS SHALL BE CAPABLE OF MODULATING THE OUTSIDE AIR, RETURN AIR, AND RELIEF AIR DAMPERS IN CONJUNCTION WITH THE MECHANICAL COOLING TO SATISFY THE SPACE CONDITIONS. THE HEATING CONTROLS SHALL BE LOCKED. ESS THE SETPOINT HAS BEEN DESCRIBED PREVIOUSLY IN OOLING EATING

MAINTENANCE BU	<i>'ILDING</i>		
EQUIPMENT	SWITCH LOCATION	FAN INTERLOCK	CONTROL DAMPE
EDH-101	TCP-MB1	T-EDH-101 (SUPPLY)	CD-IH-1C
WF-102		EDH-101	CD-WF-10
WF—101	TCP-MB1	T-WF-101 (SPACE)	CD-WF-10
WF-103		T-WF-103 (SPACE)	CD-WF-10

RYER BUILDING			
QUIPMENT	SWITCH LOCATION	FAN INTERLOCK	CONTROL DA
IAU-101	TCP-DB1,	T-MAU-101 (SUPPLY)	CD-MAU-
	ENTRANCE DOOR	OWNER PROVIDED SIGNALS	
VF—101		MAU-101	CD-WF-1
VF-102		MAU-101	CD-WF-1
VF—103		MAU-101	CD-WF-1
VF—104		MAU-101	CD-WF-1

DRYER BUILDING			
EQUIPMENT	SWITCH LOCATION	SA THERMOSTAT	CONTROL DAMPE
MAU-201		T-MAU-201 (SUPPLY)	CD-MAU-201 & T

DRYER BUILDING		
EQUIPMENT	SWITCH LOCATION	THERMOSTAT
PAC-301	INTEGRAL	T–PAC–301 (SPACE)
FCU-501	T-FCU-501	T-FCU-501 (SPACE)
MAINTENANCE BUILDIN	VG	
EQUIPMENT	SWITCH LOCATION	THERMOSTAT
PAC-101	T-PAC-101 (PROGRAMMABLE)	T-PAC-101

