

DUAL DUCT VAV BOXES

- A. OCCUPIED MODE - DURING THE OCCUPIED MODE, AS DETERMINED BY THE TIME OF DAY SCHEDULE, THE COLD DECK PRIMARY AIR VALVE MODULATES TO MAINTAIN AIR FLOW BETWEEN ITS MINIMUM AND MAXIMUM AIR FLOW SETPOINTS TO MAINTAIN DESIRED SPACE TEMPERATURE COOLING SETPOINT. HOT DECK PRIMARY AIR VALVE IS CLOSED DURING THE COOLING MODE. UPON A CALL FOR HEAT, THE COLD DECK PRIMARY AIR VALVE MODULATES TO THE MINIMUM POSITION (ADJ.) TO MAINTAIN MINIMUM OA REQUIREMENTS. THE HOT DECK PRIMARY AIR VALVE MODULATES TO MAINTAIN AIR FLOW BETWEEN ITS MINIMUM AND MAXIMUM AIR FLOW SETPOINTS TO MAINTAIN DESIRED SPACE TEMPERATURE HEATING SETPOINT. HEATING AND COOLING SETPOINT ARE OFFSET BY A 3 DEGREES (ADJ.) DEADBAND.
- B. UNOCCUPIED MODE - HEATING AND COOLING PRIMARY AIR VALVES ARE CLOSED. IN THE EVENT THAT SPACE TEMPERATURE RISES ABOVE THE UNOCCUPIED COOLING SETPOINT OR DROPS BELOW THE UNOCCUPIED HEATING SETPOINT, THE UNIT IS RESTORED TO THE OCCUPIED MODE. WHEN ENOUGH UNITS REQUEST NIGHT HEATING/COOLING, THIS OCCUPIES THE AREA IN WHICH THIS UNIT IS DEFINED AND THE VAV SUPPLY UNIT. OCCUPIED MODE MAY BE RESTORED FOR A PREDETERMINED AMOUNT OF TIME BY PRESSING THE "ON" BUTTON ON THE LOCAL ROOM SENSOR.

WAREHOUSE SEQUENCE OF OPERATIONS

EXHAUST FAN EF-1

THIS EXHAUST FAN WILL BE CONTROLLED BY ITS LOCAL TOGGLE SWITCH LOCATED ON THE FUME HOOD IN THE WAREHOUSE RESPONSE LAB. MOTORIZED DAMPER ON TRANSFER DUCT FROM WAREHOUSE (105) WILL BE IN CLOSED POSITION WHEN HOOD IS NOT OPERATING. WHEN HOOD IS OPERATING, DAMPER WILL BE IN FULL OPEN.

AIR CURTAIN

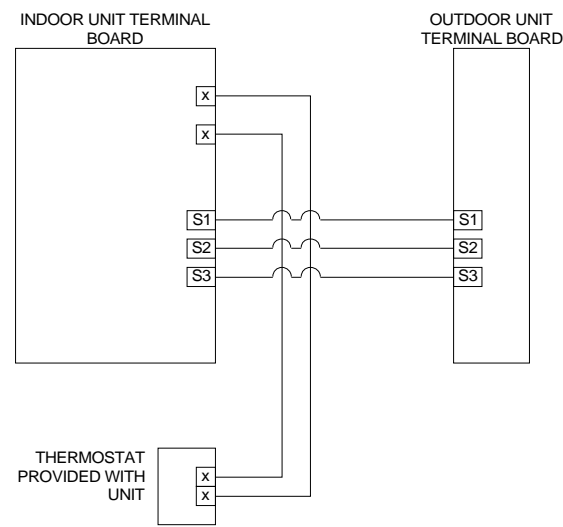
AIR CURTAIN WILL BE CONNECTED TO DOOR AND WILL TURN ON WHEN DOOR IS OPEN. DURING COOLING MONTHS, ELECTRIC HEAT WILL ALSO TURN ON WITH AIR CURTAIN BLOWERS.

ENERGY RECOVERY VENTILATOR

ERV TO OPERATE WHEN BUILDING IS OCCUPIED. ERV TO BE INTERLOCKED WITH OCCUPANCY SENSORS AND WALL SWITCH IN BOTH THE WAREHOUSE (105) AND RESPONSE PROCESSING (103) SO THAT OCCUPANCY IN EITHER WILL ACTIVATE THE UNIT. MOTORIZED DAMPERS TO ROOF INTAKE AND EXHAUST WILL BE FULL OPEN WHEN ERV IS OPERATING AND FULLY CLOSED WHEN NOT.

HEAT PUMPS

HEAT PUMP FANS TO OPERATE CONTINUOUSLY. HEATING/COOLING COILS WILL OPERATE WHEN CALLED FOR BY THERMOSTATS. CONDENSING UNITS TO OPERATE WHEN REQUIRED BY HEAT PUMPS. ELECTRIC HEAT TO ACTIVATE WHEN AMBIENT TEMPERATURES ARE TOO COLD FOR HEAT PUMP OPERATION.



COMM ROOM SPLIT SYSTEM WIRING DIAGRAM

DRAWING NOT TO SCALE

SEQUENCE OF OPERATION:

SPLIT SYSTEMS:

SPACE CONTROL:

THE DX COOLING WILL BE CYCLED ON, AS NEEDED, TO MAINTAIN THE SPACE TEMPERATURE SETPOINT.

GENERAL NOTES:

1. FOR LEGEND, SYMBOLS, AND ADDITIONAL GENERAL NOTES SEE DRAWING MP0.01.
2. FOR ADDITIONAL ELECTRICAL INFORMATION SEE ELECTRICAL DRAWINGS.
3. TEMPERATURE CONTROL DIAGRAM AND SEQUENCE OF OPERATIONS ARE PERFORMANCE BASED IN NATURE. TEMPERATURE CONTROL CONTRACTOR SHALL INCLUDE ALL DEVICES NECESSARY TO PROVIDE A FUNCTIONAL BUILDING MANAGEMENT SYSTEM.
4. CONTRACTOR SHALL EXTEND EXISTING BAS TEMPERATURE CONTROLS INTO RENOVATED AREAS OF THE CLINIC.
5. WAREHOUSE HEAT PUMPS, EXHAUST FAN, AND AIR CURTAINS SHALL HAVE STANDALONE CONTROLS.

HWA

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100% CONSTRUCTION DOCUMENTS

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RECORD DRAWINGS

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BAS Control
Diagrams

