

SEQUENCE OF OPERATION

OCCUPIED MODE: WHEN THE ROOM TEMPERATURE IS INSIDE THE SETPOINT BIAS, THE VAV CONTROLLER SETS THE BOX DAMPER AT MINIMUM CFM AND FULLY CLOSES THE REHEAT VALVE. ON A RISE IN ROOM TEMPERATURE ABOVE THE SETPOINT, THE VAV CONTROLLER MODULATES THE BOX DAMPER TO INCREASE THE CFM. THE REHEAT VALVE REMAINS FULLY CLOSED. ON A DROP IN ROOM TEMPERATURE BELOW THE SETPOINT, THE VAV CONTROLLER MODULATES THE REHEAT VALVE AND CONTROLS THE DAMPER AT MINIMUM CFM.

WARMUP MODE: WHEN THE AIR HANDLING UNIT STARTS IN WARMUP MODE, ALL VAV CONTROLLERS ARE INDEXED TO WARMUP MODE:

THE VAV CONTROLLER MODULATES THE BOX DAMPER TO MAINTAIN THE OCCUPIED SETPOINT. THE REHEAT VALVE IS DISABLED (HEATING IS PROVIDED BY THE AIR HANDLER). AT THE COMPLETION OF WARMUP MODE, THE INDIVIDUAL VAV CONTROLLERS ARE INDEXED TO EITHER OCCUPIED OR SHUTDOWN MODE, DEPENDING ON THE STATUS OF THE AIR HANDLING UNIT.

SHUTDOWN MODE: WHEN THE AIR HANDLING UNIT SHUTS DOWN, ALL OF THE DDC BOX CONTROLLERS ARE INDEXED TO SHUTDOWN MODE WHEREBY THE BOX DAMPERS AND REHEAT VALVES ARE FULLY CLOSED.

