

August 14, 2018

Mr. Jim Saisa
Director of Facilities
Amity Regional School District #5
25 Newton Rd.
Woodbridge, CT 06525

RE: Beecher Rd School BMS Survey

Dear Jim,

Here are the results and recommendations for the Beecher Rd School BMS system. Please let me know if you have any questions.

- Honeywell software issues and recommendations:
 1. Customer has no ability to edit graphics
 2. Customer has no ability to modify controller programs
 3. Recommend purchasing a Supervisor copy of WEBS Workbench software and install on a dedicated PC onsite.
- Classroom Unit Ventilator issues and recommendations:
 1. Dual Temp valve controls for space temperature only. When the space temperature satisfies, the valve shuts completely and the fan now brings in saturated unconditioned air resulting in a high space humidity condition. I recommend changing the control strategy to a discharge air reset from zone temperature. This will give us a longer runtime on our cooling coil which will wring out more moisture.
 2. No space humidity sensor in classrooms. Recommend adding one for monitoring.
 3. No space Co2 sensor in classrooms. Recommend adding one to allow us to utilize a Demand Control Ventilation sequence.
 4. Pipe temperature sensors don't read correctly. I suspect the wrong type is in the program.
 5. Pipe temperature sensors don't lock out the valve when the water temperature is not suitable for satisfying the space.
 6. Recommend adding VFD's to Unit Vents for dehumidification or locking the fans in low speed.
- ERV Unit issues and recommendations:
 1. All 4 ERV's are running at 100% speed and discharging the same temperature as the outside air. The heat exchanger doesn't seem to be working well.
 2. All 4 ERV's are only achieving 0.05 – 0.5" wc with a control set point of 1" wc
 3. I highly recommend adding a Dual Temperature coil with freeze protection to each ERV. This will protect all indoor coils in the winter and will dehumidify in the summer.
 4. Recommend that the HX be checked for proper air exchange. I suspect a possible restriction on the outside air inlet.
 5. Recommend all mechanical components be checked

- Fan Coil Units issues and recommendations:
 1. No freeze protection on the Dual Temperature coils Recommend adding freeze stats with manual reset to all FCU's.
- Roof Top Units issues and recommendations:
 1. All systems functioning normally
- Air Handling Units issues and recommendations:
 1. All systems functioning normally