

WAYNESBORO AREA SCHOOL DISTRICT

HEATING, VENTILATION & AIR-CONDITIONING QUESTIONS & ANSWERS

During this unusually warm and humid time of year, room temperatures and comfort level are often a concern for all employees and students. The Waynesboro Area School District created this informational Q&A to provide greater transparency for everyone who visits our buildings.

1. **What are the temperature set points for WASD?**
 - The set points are 71 degrees for heat and 74 degrees for cooling. The set points are approved by the School Board, and are also contractual obligations with our service company tied to system use, utilities and maintenance. Of note, the schools in Franklin County were also surveyed as to their set points, and those set points were found to be the same as WASD or no different than 1 degree.
2. **What is the acronym HVAC?**
 - Heating, Ventilation and Air Conditioning. HVAC is the standard term used to describe the air systems that heat, cool, filter and ventilate spaces in a commercial building.
3. **Why does the ventilation system bring external air into the building?**
 - Nearly all home heat & air conditioning systems are self-contained. This means that they do not bring in fresh air to the house, rather they recirculate the internal air and heat/cool as needed.
 - For WASD, our buildings pull in fresh air to reduce carbon dioxide levels. On very hot and humid days, the building systems may not be able to cool and dehumidify the external air rapidly enough, which can make the room feel less comfortable.
4. **The thermostat shows 76 degrees, but I was told the set point is 74? Is there a problem with my air conditioning unit?**
 - For most of our buildings, there is a 1-2 degree range before the system will turn on. For example, at 74 degrees, the air conditioning will turn off since the set point has been achieved. Not until the room temperature reaches 75-76 degrees, will the air conditioning system provide cool air to reduce the room temperature.
5. **The thermostat for the room is located near the classroom door, but the temperature is higher/lower close to the windows or in the back of the room, why?**
 - The system was designed with only one thermostat per room (except in very large spaces). Thus, once the thermostat reaches the set point, the system turns on/off. It is true that the temperature in other areas of the room will be higher/lower, but the system can only take the reading from the thermostat itself.
6. **How does WASD monitor the temperatures in the buildings?**
 - The WASD maintenance department uses building management systems (Siemens & Automated Logic) to monitor the temperatures in each building. The systems provide real-time and historical logs of temperatures in nearly every room across the district. Each morning the maintenance department checks the temperatures on-line and works with the building custodians to identify problems or issues with the building heating/cooling systems. When problems occur, the maintenance department works both internally and with our vendors to correct the problems, order parts and/or make repairs.
7. **What happens when I put wet towels or a heat source (i.e. lamp) in close proximity to the room thermostat?**

- Both of these practices can damage the thermostat and force the HVAC systems to work longer, resulting in added utility cost and wear & tear. Wet paper towels have damaged several thermostats, and the cost for their replacement is \$375 each.
8. **How often does the district replace the air filters on the heating/cooling systems?**
- WASD follows the equipment manuals and best practices to ensure that the filters are replaced at recommended intervals. Depending upon the type of unit and location, filters are changed 2-4 times per year. In some cases, the filters are changed more frequently on an as needed basis.
9. **What does WASD do to maintain the HVAC systems in the district?**
- WASD uses internal staff to manage the systems and review initial problems and work tickets on the HVAC systems. Additionally, WASD uses the McClure Company to perform preventative maintenance and service on the HVAC equipment. Annually, McClure's performs 1,780 service visits on the 684 separate pieces of HVAC equipment. During those service visits, McClures checks the operation and condition of the unit, checks or replaces the air filter, adjusts/replaces the belts, pulleys and tensioners, evaluates sensors & circuit boards, and cleans the equipment to ensure proper function.
10. **Why are the hallway temperatures so much different than the classrooms (hotter/colder)?**
- There are multiple reasons for these differences. First, most of the hallways in our buildings do not have heating/cooling systems. Second, when external doors are held open or utilized for long periods of time (i.e. arrival/dismissal), the unconditioned air that rapidly enters the building can result in large swings in temperature & humidity.
11. **Why should I keep my classroom door closed?**
- As noted in #10, most of the building's hallways have neither heating nor cooling systems. Some hallways may have fresh air systems, but the units are often limited to heating/cooling the outside air by 10-15 degrees (depending upon the system installed). The HVAC system in each classroom is only designed to heat/cool that specific amount of square footage. When the classroom door is left open, the HVAC system tries to condition the air in the hallway also, often without success.