

Regulation — STAFFORD TOWNSHIP BOARD OF EDUCATION

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Energy Conservation and Building Management

R 7460 - ENERGY CONSERVATION AND BUILDING MANAGEMENT

A. Responsibilities

1. Every person is expected to be an "energy saver" as well as an "energy consumer".
2. The teacher is responsible for implementing the guidelines during the time that he/she is present in the classroom.
3. The custodian is responsible for control of common areas, i.e. halls, cafeteria, etc.
4. Since the custodian is typically the last person to leave a building in the evening, he/she is responsible for verification of the nighttime shutdown.
5. The principal is responsible for the total energy usage of his/her building.
6. The Energy Manager performs routine audits of all facilities and communicates the audit results to the appropriate personnel.
7. The Energy Manager is responsible for either directly or indirectly making adjustments to the District's EMS, including temperature settings and run times for HVAC and other controlled equipment.
8. The Energy Manager provides regular reports to Principals and central office indicating performance with regards to energy savings.
9. The district's energy conservation efforts shall compliment and shall be used in conjunction with its preventative maintenance plan for its facilities and systems, including HVAC, building envelope and moisture management.
10. The district shall ensure that its energy conservation efforts remain consistent with its responsibility to maintain reasonable comfort levels for the learning and working environment.

B. General

1. Classroom doors shall remain **closed** when HVAC is operating. Ensure doors between conditioned space and non-conditioned space remain closed at all times (i.e. between hallways and gym or pool area).
2. Proper and thorough utilization of data loggers will be initiated and maintained to monitor relative humidity, temperature, and light levels throughout the district's buildings to ensure compliance with district guidelines.
3. All exhaust fans should be turned **off** every day and during unoccupied hours.
4. All office machines (copy machines, laminating equipment, etc.) shall be switched **off** each night and during unoccupied times. Fax machines should remain on.



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5. All computers should be turned **off** each night. This includes the monitor, local printer, and speakers. Network equipment is excluded.
6. All capable PC's should be programmed for the "energy saver" mode using *the power management* feature. If network constraints restrict this for the PC, ensure the monitor "sleeps" after 10 minutes of inactivity.

Cooling Season Occupied Set Points¹:	74° F - 78° F
Unoccupied Set Points:	85° F
Heating Season Occupied Set Points¹:	68° F - 72° F
Unoccupied Set Points:	55° F

1 – Set points are in accordance with ASHRAE 55 "Thermal Conditions for Human Occupancy"

C. Air Conditioning Equipment

1. Occupied temperature setting shall *NOT* be set below 74° F.
2. During unoccupied times, the air conditioning equipment shall be **off**. The unoccupied period begins when the students leave the area at the end of the school day. It is anticipated that the temperature of the classroom will be maintained long enough to afford comfort for the period the teacher remains in the class room after the students have left.
3. Air conditioning start times may be adjusted (depending on weather to ensure classroom comfort when school begins.
4. Ensure outside air dampers are closed during unoccupied times.
5. Ceiling fans should be operated in all areas that have them.
6. Relative humidity levels shall not exceed 60% for any 24 hour period.
7. Air conditioning should not be utilized in classrooms during the summer months unless the class rooms are being used for summer school or year-round school. Air conditioning may be used by exception only or in those schools that are involved in team-cleaning.
8. In all areas which have evaporative coolers such as shops, kitchens and gymnasiums, the doors leading to halls which have air conditioned classrooms or dining areas should be kept closed as much as possible.



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9. Where cross-ventilation is available during periods of mild weather, shut down HVAC equipment and adjust temperature with windows and doors. Cross-ventilation is defined as having windows and/or doors to the outside on each side of a room.
10. Ensure dry food storage areas are maintained within code requirements. Typically, this is 55°F - 75°F temperature and 35%- 60% Relative Humidity. Utilize loggers to verify.

D. Heating Equipment

1. Occupied temperature settings shall NOT be above 72°F.
2. The unoccupied temperature setting shall be 55°F (i.e. setback). This may be adjusted to a 60°F setting during extreme weather.
3. The unoccupied time shall begin when the students leave an area.
4. During the spring and fall when there is no threat of freezing, all steam and forced air heating systems should be switched off during unoccupied times. Hot water heating systems should be switched off using the appropriate loop pumps.
5. Ensure all domestic hot water systems are set no higher than 120°F or 140°F for cafeteria service (with dishwasher booster).
6. Ensure all domestic hot water re-circulating pumps are switched off during unoccupied times.
7. For heat pumps, ensure a 6°F dead-band between heating and cooling modes.

E. Lighting

1. All unnecessary lighting in unoccupied areas will be turned **off**. Teachers should make certain that lights are turned off when leaving the classroom when empty. Utilize natural lighting where appropriate.
2. All outside lighting shall be **off** during daylight hours.
3. Gym lights should not be left on unless the gym is being utilized.
4. All lights will be turned **off** when students and teachers leave school. Custodians will turn on lights only in the areas in which they are working.
5. Refrain from turning lights on unless definitely needed. Remember that lights not only consume electricity, but also give off heat that places an additional load on the air conditioning equipment and thereby increases the use of electricity necessary to cool the room.



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F. Water

1. Ensure all plumbing and/or intrusion (i.e. roof) leaks are reported and repaired immediately.
2. Grounds watering should only be done between 4 am – 10 am. Do not water during the heat of the day typically between 10 am – 8 pm.
3. When spray irrigating, ensure the water does not directly hit the building.
4. Ensure water sub-meters are installed on irrigation and cooling tower supply lines to eliminate sewer charges.

G. The district may adjust specific details of the energy management procedures set forth herein as needed to maintain health, safety and comfort levels.

Issued: 17 July 2008

