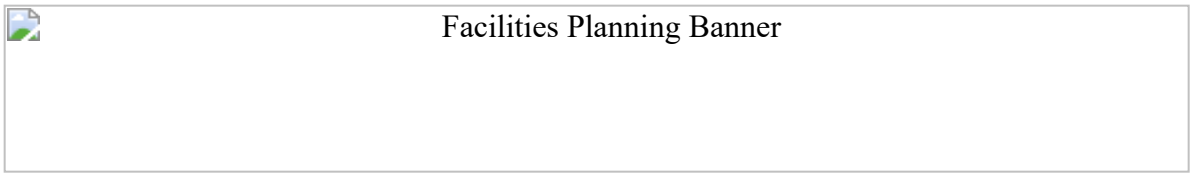

Office of Facilities Planning
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Minimum Temperature in Schools:

The new "Property Maintenance Code of New York State", section 602.4 for "Occupiable work spaces", requires that "indoor occupiable work spaces be supplied with heat during the period from September 15th to May 31st to maintain a temperature of not less than 65ºF (18ºC) during the period the spaces are occupied." The only exceptions are for processing spaces (coolers or freezers) and vigorous physical activities areas (Gymnasiums). This is a change in mandated operating requirements.

January 1, 2003 the Property Maintenance Code of New York State, based on the 2000 ICC International Codes became effective as part of the New York State Uniform Fire Prevention Building Code of New York. This new 8 volume series of Building Codes applies to all buildings in New York State outside of New York City. The many sections of the new Code each have items that will impact how districts run and maintain their buildings.

The new Codebooks are available on the IBC web site at:

http://www.icbo.org/Code_Talk/Adoptions/ny-codes.html. These Codes may also be purchased in electronic format. Be sure that you purchase the New York State version, there are many state specific enhancements added to the 2000 ICC International Codes.

Mold in School Facilities:

Excess moisture can result in mold growth. Mold often plays a part in poor indoor air quality, however mold growth may not be obvious. Deferred maintenance, building envelope changes, energy conservation measures, and unplanned changes to building fresh air requirements must be investigated. Some signs of excess moisture are fogged windows, water stains, and musty smells. If signs of moisture are noticed, a prompt response can save enormous sums of money. In addition to the dollars saved, an improved building environment may lower absenteeism, and raise the credibility of management with staff and students. The following outlines some of the circumstances that may lead to excess moisture.

- "Deferred maintenance" of roofs, walls, windows, or landscaping may allow repeated wetting of building components. The resulting moist building components may collect dust, thus supporting mold growth even on smooth inorganic materials. A single wetting of organic materials such as ceiling tiles, paper-surfaced gypsum board, carpeting, or insulation can even cause an immediate problem. Given the right temperature, several species of mold will bloom if damp for only a few hours. To correct this condition the moisture source must be controlled and the compromised organic building materials must be replaced.
- Wind-borne water penetration and condensation are also sources of moisture. Gaskets and sealant degrade over time losing resiliency and bond with adjacent materials. Components that depend on watertight joints to direct water out of the building must include water-shedding details in the exterior weather barrier. Thermally conductive materials, such as aluminum doors and windows, must have thermal breaks designed to separate interior surfaces. Air movement may help correct condensation conditions, but active air movement is an energy expensive cure to a material selection and detailing problem, and will not address hidden condensation.

- Old and new facilities are often compromised in an effort to reduce energy costs. Adding or removing insulation, as well as changes to a ventilation system can trigger other problems. Wall cavities or ceiling spaces created by either exterior or interior insulation systems of new finishes, without control of interior air laden with water vapor, can create new condensation problems. Condensation occurs when moist air hits cold structure, pipes, ductwork, or other materials. Careful detailing and selection of material with known permeability ratings, proper location of water barriers, and ventilation must be employed.
- New windows and doors or siding may trigger a requirement for mechanical ventilation. Exhaust only or no mechanical exhaust buildings depend on infiltration though windows and doors for fresh air. We see more and more of these old buildings developing indoor air quality problems as they are modernized. If Code required fresh air and balanced exhaust are provided at the time of window or door replacement, this problem can be alleviated.

These problems are surfacing at an alarming rate. Schools are faced with major repair expenses and even evacuation of areas when mold is detected. Public school design professional and facilities staff must recognize and address potential mold situations before problems develop. The community is becoming more aware of, and vulnerable, to mold-related problems.

The Health and Safety Committee required per 8NYCRR155 should be involved in the investigation of building complaints. This committee can track problems, maintain communication with the community, and help develop specific solutions to facilities operations and maintenance issues. For detailed information, see the following EPA documents:

- ***Mold Remediation in Schools and Commercial Buildings-*** Publication 402-K-01-001, March 2001 (www.epa.gov/iaq/molds/mold_remediation.html);
- ***IAQ Tools for Schools Kit*** - Publication 402-K-95-001, May 1995 (www.epa.gov/iaq/schools/tools4s2.html); and
- ***IAQ Tools for Schools: Managing Asthma in the School Environment*** - Publication 402-K-00-003, May 2000 (www.epa.gov/iaq/schools/asthma/index.html).

Using the International Building Code:

For new construction corridor walls and classroom doors are normally required to be fire-rated. In a sprinklered building, where the entire building is sprinklered, the new code allows corridor walls to be non-fire rated. The Manual of Planning Standards, S106-3, requires fire rated doors for all corridor doors except classrooms. From now on if the entire building is sprinklered, SED will allow the corridor doors to be non-rated as long as each door has a closer without a non-automatic hold open device. Even though the walls are not required to be fire-rated, SED will require a smoke barrier separating the corridor and adjacent rooms. If the building is not sprinklered, all the corridor walls and doors will be required to be fire-rated, including classroom doors.

Any building or addition built after 1984 required door closers on all doors opening onto a corridor. If closers were removed or omitted, or hold open devices installed (with the exception of automatic) they are illegal. If the occupants want a corridor door held open, it must be held open by a magnetic door holder that is connected into the fire alarm system.

Buildings build before 1984 are considered pre-existing non-conforming and are not required to have closers on corridor doors. However, if the doors are being replaced the new doors are required to have closers.

In any instance, **WOOD WEDGES HOLDING CORRIDOR DOORS OPEN ARE NEVER ALLOWED.** No matter who is using them, they should always be removed and never replaced. Please note that a door closer is a safety device that is intended to help protect the corridor escape route from becoming smoke filled. Installing a wood wedge in a door to override the closer could be considered a willful act to defeat a safety device. The intent of the MPS is safe and quick exiting.

Please continue to send in your comments and requests. If you have a subject you would like addressed, feedback on the material you read, input or general comments we are happy to hear from you.