

Phillips Exeter Academy – Facilities Management Department

Policy Title: Heating and Cooling – Energy Conservation

Policy Date: May 28, 2009

Revision Date:

Definitions:

- Heating season is generally defined as being from October 15 to April 15. Cooling season is generally defined as being from May 15 to September 20

These are subject to adjustment based on seasonal weather patterns. During the periods from April 15th through May 15th and September 20th through October 15th, individual building temperatures may vary depending on weather conditions.

Temperature Standards:

- Heating Season: During occupied hours the normal temperature set point is 68 F (actual temp +/- 2 degrees F) for all buildings. During unoccupied hours the temperature will be set back to 60⁰ F in academic and administrative buildings and to 65⁰ F in dormitories.
- Cooling Season: During occupied hours the normal temperature set point is 76 F (actual temp +/- 2 degrees F) for academic and administrative buildings. During unoccupied hours, the cooling system will be turned off and switched to outside air for cooling.

General Guidelines:

- This policy is applicable to all campus buildings (offices, classrooms, dormitories, public spaces, etc.) with special exceptions as identified below.

Policy Rationale:

- This policy is based on the Academy's commitment to environmental stewardship and responsible energy and resource management. The standards identified are consistent with industry standards for occupant comfort.

Policy

- Academic Buildings

Occupied hours are normally considered to be from 7 am to 5 pm, Monday through Saturday. Variations should be arranged through Facilities Management.

- Administrative Buildings

Occupied heating hours are normally considered to be from 7 am to 5 pm, Monday through Friday, and 7 am to 1 pm on Saturday. Variations should be arranged through Facilities Management.

- Dormitories

Occupied hours are normally considered to be from 6 am to midnight.

- Large Meeting Areas (i.e., Grainger Hall)

Occupied hours are variable depending on scheduling. Under normal conditions (no scheduled activities) the areas will be considered unoccupied for heating and cooling needs. When these areas are to be used for scheduled events, notification should be made to Facilities Management at least one day prior to the event and occupied settings will be adjusted accordingly.

Exceptions to General Guidelines

- It is recognized that some campus spaces require special temperature considerations on a routine or short-term basis. Exceptions to the identified standards should be requested through the Associate Director for Environmental and Energy Management and approved by the Director of Facilities Management.

Space Heaters

- As of April 1, 2009, portable electric space heaters are no longer allowed in Campus buildings. Facilities Management will work with individual offices to ensure heating system issues are resolved.

Window Air Conditioning Units:

Due to the difficulty in maintaining energy consumption control and the limitations of our electrical distribution system, the use of individual window air conditioning units is discouraged. However, as we do not currently have central air conditioning in all areas requiring comfort cooling, the use of window type units will be allowed in certain circumstances. Generally, we will follow the guidelines listed below for this type of installation:

- Academic and Staff Office Areas

Installation of window type A/C units will be evaluated on an individual basis to ensure proper sizing and location for optimal efficiency as well as ensuring electrical wiring requirements are met. Guidelines for proper use include:

- Output temperature setting shall be 76 degrees
- Locations where window units are installed shall be separated from non-cooled areas (such as hallways) by closing doors
- For areas with south facing windows, shades shall be drawn to reduce solar heat gain
- Units shall be shut down during periods of non-occupancy
- All new units will be Energy Star rated and purchased through Facilities Management

- Faculty Residential Units (Dormitories only)

Installation of window type A/C units will be evaluated on an individual basis to ensure proper sizing and location for optimal efficiency as well as ensuring electrical wiring requirements are met. No units should be purchased prior to consultation with Facilities Management.

The use of window type A/C units in residential occupancies will be allowed based on the following limitations and guidelines:

- Output temperature settings shall be 76 degrees
- Locations where window units are installed shall be limited to the following areas:
 - Bedrooms
 - Living areas/offices that can be isolated from other areas of the residence
 - Other areas will be evaluated based on individual needs
- For areas with south facing windows, shades shall be drawn to reduce solar heat gain
- Units shall be shut down during periods of non-occupancy (or switched to 100% outside air intake).
- All new units shall be purchased by faculty and are to be Energy Star rated.
- All window air conditioning units shall be installed by Facilities Management staff only.
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- Faculty Residential Units (Non-Dormitory)

Installation of window type A/C units should be evaluated on an individual basis to ensure proper sizing and location for optimal efficiency as well as ensuring electrical wiring requirements are met.

The use of window type A/C units in non-dormitory residential occupancies will be allowed based on the following limitations and guidelines:

- Output temperature settings shall be 76 degrees
- Locations where window units are installed shall be limited to the following areas:
 - Bedrooms
 - Living areas/offices that can be isolated from other areas of the residence
- For areas with south facing windows, shades shall be drawn to reduce solar heat gain
- Units shall be shut down during periods of non-occupancy (or switched to 100% outside air intake.
- All new units shall be purchased by faculty at their expense and are to be Energy Star rated.
- The installation of all non-dormitory residential window air conditioning units shall be the responsibility of the occupant. Facilities Management does not install units in non-dormitory housing.

In order to reduce our energy consumption and environmental impact, the following options to air conditioning should be considered and implemented for all locations:

- Use portable window fans
- Keep shades drawn during the daylight hours
- Open windows at night and close them during the warmer part of the day
- Create cross ventilation air flow by exhausting air on upper floors and introducing air from lower floors (basement areas tend to be naturally cooler).
- Consider the use of "whole house fans".
- Reduce the use of heat generating appliances such as ovens and ranges and use more efficient cooking equipment such as microwave ovens
- Unplug unused electronic devices (or use power strips to turn off "instant on" type devices such as televisions)

As a community dedicated to reducing our negative impact on the environment, we all need to work together to reduce our consumption of all forms of non-renewable energy. By following this policy, we will be able to reduce this consumption, yet still maintain a comfortable working and living environment.