

Parrish Hall 1st. Floor offices.



Heating & Cooling System Description
and
How it works.

SWARTHMORE COLLEGE

For Maintenance requests
Email workbox@swarthmore.edu or
Phone X 8280

Room Heating Tips.

Be certain that windows are shut tightly.

Don't forget the upper section of the window.

Windows that are not completely closed allow cold air into the room.

If your windows won't shut properly call

Facilities Management at x8280 to report the problem.

Closing window shades can help keep the cold out and the heat inside in the winter.

Don't place lamps or other appliances near the thermostat as this can fool the thermostat into reducing the heat / cooling supplied to the room.

Be certain that nothing blocks the air into or out of the radiators as this prevents convection from circulating warm air through the room.

Heat for the major buildings on campus is supplied by steam from the boilers in the Heat Plant. The boilers burn primarily natural gas or, as an alternative, #6 heavy oil. During the coldest winter weather the College can burn the heat equivalent of 5,500 gallons of oil per day. Cooling is provided by an underground chilled water loop served by chillers in McCabe Library and the Chiller Plant behind the Science Center.

Parrish Hall has a hybrid heating/cooling system using both steam from the heat plant as well as the latent heat in the underground piped cooling loop that serves the academic buildings on campus.

Steam from the Heat Plant is used to heat water that is circulated through the fin tube radiation along the outside walls of the offices. The first floor offices also have ceiling mounted heating/cooling units served by water source heat pumps located in the lower level of Parrish Hall. This type of installation offers a great deal of flexibility. Each of the ceiling mounted units can provide either heating or cooling. By design a unit can dump the heat it does not need into the loop to be used in a room that does need the heat. This is especially important in a building with a north-south orientation where the north side can feel chilly while the south side might feel too warm from sun load.

The cooling process works much the same way. Heat is extracted and if it can't be used in the building the excess is returned to the heat pump to be cooled by the campus chilled water loop.

Each room has its own thermostat. Occupants can adjust the temperature up or down within the limits we set and can also adjust the fan speed.

During unoccupied times the heating is reduced and in the summer unoccupied times the air conditioning is off.

More College energy information can be found at;
<http://www.swarthmore.edu/x29161.xml>

Parrish Office Thermostat Operation

