

A QUICK GUIDE TO WEATHERIZATION AND ENERGY CONSERVATION

During the winter one of the most important jobs your building does, aside from protecting you from the wind, rain and snow, is to keep the cold out and the heat in. The parts of your building which do this, the outside walls, windows, doors and roof, are called the weatherization system. Your Tenant Association's ability to conserve energy and thereby reduce your fuel costs, depends on how well your weatherization system works.

Some of the repairs, which the City will be doing to your building while you are in TIL, will involve your weatherization system. You may be getting pointing work, perhaps a new roof, and most certainly, new windows (if you don't already have them.) With all this work going on, you might be tempted to think that there is nothing for your TA to do to help make your weatherization system better. Nothing could be further from the truth.

As was mentioned before, (see "How energy efficient is your building?") your building loses heat in two ways, through transmission and infiltration. Heat loss due to transmission is primarily a result of the way your building was made and its location. Except for costly renovations involving adding insulation to your walls, there is not much that anyone can do.

But heat loss from infiltration IS DEFINITELY something you can help stop. In fact, if you and your maintenance and repair committee ignore it, then your building can waste thousands of dollars each year in fuel. Infiltration is often caused by tenants opening their windows instead of either turning off the radiator or notifying someone on the M&R committee that their apartment is overheated. Infiltration can be caused by having an entrance door which does not close because no one has fixed the lock yet!

THE STACK EFFECT-

Did you know that you have two chimneys in your building? Both of them allow heat produced by your boiler to escape from your building. The first chimney is the one connected to your boiler. But the one you may not be aware of is your hallway and stairs. In fact, if your building has an elevator, then you have THREE chimneys in your building! Anytime you have a vertical shaftway connected to your building and rising up to the roof, you have major potential source of heat loss due to the STACK EFFECT.

Whenever the wind blows across the top of an open vertical shaft, it creates a reduced air pressure inside the shaft. This is similar to the principle which creates lift in an airplane wing. This reduced pressure allows any heat inside the shaft to rise more quickly and escape out the top. The shaft doesn't need to be completely open. Even a small opening such as a slightly open door to the roof or elevator shaft or a broken pane of glass in your hallway skylight can allow a tremendous amount of heat to escape.

This reduced pressure will also pull the heat from under apartment doors and pull the cold air into the hallway from under the building's entrance door. For this reason, your building can dramatically decrease the infiltration heat loss in your building from the STACK EFFECT by doing the following:

- ⌘ Keep all roof and elevator shaft doors closed and weatherstrip them including door sweeps.
- ⌘ Replace any broken windows in skylights.
- ⌘ All building entrance doors should have working door closers and latches including inner vestibule doors.
- ⌘ All doors opening onto the public hallway including entrance, basement and apartment doors should have door sweeps.

In addition, here are several other energy conservation measures which are low cost and very effective in reducing fuel costs in your building.

- ⌘ Insulate all steam and hot water pipes in the basement.
- ⌘ Keep the boiler room door closed (fire code regulation) and have a door sweep installed.
- ⌘ Close all openings in the basement to the outside, especially openings into courtyards and airshafts. If access is needed, install a door and doorsweep. DO NOT, however, close the ventilation to the boiler room.
- ⌘ Keep the temperature of the domestic hot water from the mixing valve or hot water heater to 130°F or less.
- ⌘ Install water saving showerheads and faucet aerators in all apartments and begin a program of water conservation education and awareness in your building.