

Letting taps run in the morning helps get the lead out of water

Question. I'm interested in conserving water, but I've heard that it's best to let cold water run for a minute or two in the morning before using it for drinking or cooking. Is that a good policy, and why? — *G. Barrickman*

Answer. Flushing the pipes, or letting drinking and cooking water run for a minute or so in the morning or after any period when the water has been standing in the pipes for several hours, can help reduce exposure to lead in the water. Water can pick up lead from service pipes that carry it into homes, from solder used to connect copper water pipes, or even from faucets that contain lead. Lead was a main ingredient in solder until 1988, when lead-containing solders were outlawed.

According to the Environmental Protection Agency, household water is a leading source of lead ingestion by humans. Lead is especially dangerous to young children, who can suffer severe damage to their nervous systems and brains, and to pregnant women.

Even flushing the pipes of standing water to clear out leached lead won't guarantee that a water supply is safe. The best bet is to have the water tested for lead content before and after flushing. A source of mail-order tests is Suburban Water Testing Laboratories in Reading (800-433-6595). A sampling kit, with instructions and analysis, costs about \$35.

Q. Our garage gets heat from our warm-air furnace, but is usually cold because of outside air coming through the older overhead door. Is there any way to seal the door for more energy efficiency? *A. Vangelatos*

A. Special weatherstripping for overhead garage doors is sold at some home centers and hardware stores.

The bottom of a garage door can be a major source of air infiltration if it is not well-sealed. Even if the door already has a bottom seal, it will pay to install a new one if the old seal is damaged or fits poorly. A

form of a U-shaped rubber channel, is easy to install and comes with instructions and fasteners.

Weatherstripping also is available for the sides and tops of the door, and will close gaps in those areas that let cold air infiltrate the garage.

If the door has single-layer glass panels, you can make them more energy-efficient by covering them with plastic storm windows, which can be taped to the inside of the frame.

For best energy efficiency, invest in an insulated garage door. These doors often have a steel or fiberglass skin on the outside and inside, sandwiching a layer of foam insulation.



Gene Austin
Do It

Q. We plan to insulate the ceiling of our unheated basement. We want to keep the heat upstairs, since we don't plan to use the basement for living space. We'll use R-19 fiberglass insulation with an attached vapor barrier. Should we put the vapor barrier on top, facing the basement ceiling, or on the bottom, facing the basement? — *P. Sgarlat*

A. In the Northeast and most of the rest of the United States, the vapor barrier on insulation should always be turned toward the inside or heated space. If installed on the ceiling of an unheated crawl space or basement, the vapor barrier should be on top. On the floor of an unheated attic, the barrier should be on the bottom. In exterior walls, the barrier should face the inside.

In a few humid areas such as Florida, Hawaii and the Gulf Coast, frequent use of air conditioning can change the rules for vapor barriers. Residents of those areas who are in doubt about how to install a vapor barrier should consult a local energy expert for guidance.

Aside from vapor barriers, keeping a basement very cold by insulating the ceiling can be a mistake. Many basements contain water pipes that must be kept warm enough to prevent freezing in winter, and a cold basement can become smelly and damp. It would probably be better to insulate the

home's heat circulate in the basement.

Often-asked question. During the recent heavy snows, our roof developed dams of ice in the area of the eaves and rain gutters. I understand that these dams, which finally melted, can cause roof leaks. What can I do if there is another storm and ice dams form?

A. The best time to prepare for ice dams is during good weather. The dams are usually caused by heat from the house escaping through the roof. The heat melts snow, which runs down the roof. When the water reaches the eaves, which are cold because heat from the house does not often reach those areas, it freezes and eventually forms dams. Sometimes, when thick ice dams form, water will back up under shingles and cause roof leaks.

Inadequate attic insulation and ventilation, which cause heat buildup in the attic and let the heat escape through the roof, are the basic causes of most ice dams. A long-term solution should include beefing up the insulation and improving the ventilation. Experts call it "keeping a cold roof," which will ensure slower and more uniform melting of snow.

Another long-term solution, which should be considered when reshingling a house, is to install a waterproofing underlayment along the eaves of the roof and at other vulnerable points, such as roof valleys and around chimneys. This will prevent leaks even if ice dams form. Roofers can install the underlayment as part of reshingling.

Still another way to help keep ice dams from forming is to install heating cables along the eaves of the roof. The cables, which can be plugged into an outdoor outlet, are generally installed in a zigzag pattern and are fastened to the shingles with clips. Heating cables also can be snaked through rain gutters and downspouts. The cables are sold at some home centers and hardware stores and come with instructions, but might be difficult to find in mid-winter and would be hazardous to install if the ground or roof were wet or snow-covered.

Readers' questions and comments should be sent to Gene Austin, Box 961, Philadelphia, Pa. 19122.