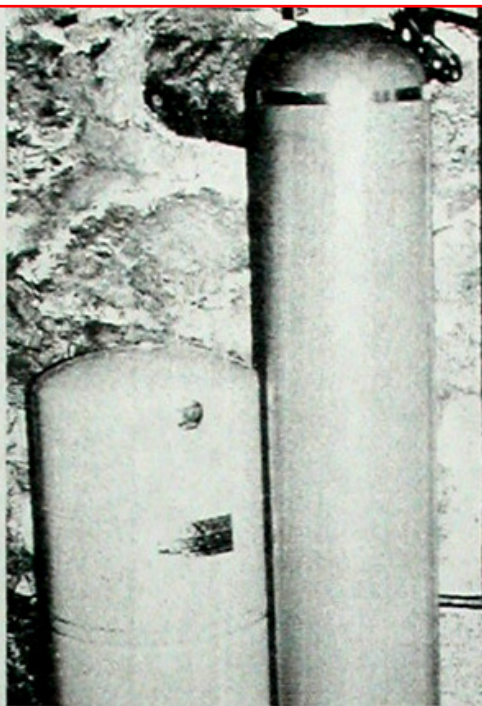


worked with great success in both Sweden and the United States. These approaches tend to work well because most homes act as chimneys for radon gas, especially in winter. The slight negative pressure created when warm air leaves the house pulls radon gas out of the ground. Stopping radon where it enters the house usually takes less extra ventilation air than whole-house ventilation and does a better job of reducing airborne levels.

New Construction. The Swedish government has reacted to the high radon levels in its nation's soil gas by setting construction standards. Their aim is to reduce the risk of radiation-caused health effects. Table 1 shows how Swedish standards compare with various U.S. limits.

Swedish builders may soon face more than these government limits. The Swedish Radon Commission has proposed construction details that vary with the radon level in soil gas at the site. When that level is 270 to 1350 pCi/l, "radon-protective" construction is called for. That means carefully sealing all gaps and cracks in the foundation. For levels over 1350 pCi/l, "radon-safe" construction would be used. This would go beyond crack-sealing to require a thicker, reinforced slab or ventilation of the foundation under the slab. These sub-slab systems reportedly add \$500 to \$1000 to construction costs.



This radon purification equipment, developed at the University of Maine in Orono, filters incoming wellwater through activated charcoal. The systems can be installed for \$500 to \$1000.

Our knowledge of the radon problem and how to deal with it is growing. Swedish researchers, for instance, have found that homes built on impermeable soils, such as moist clays, tend to have lower radon levels

than those built on sand or gravel. Several U.S. research projects that should be completed in the next two years will give us still more insights about radon and the indoor environment. ☼

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