

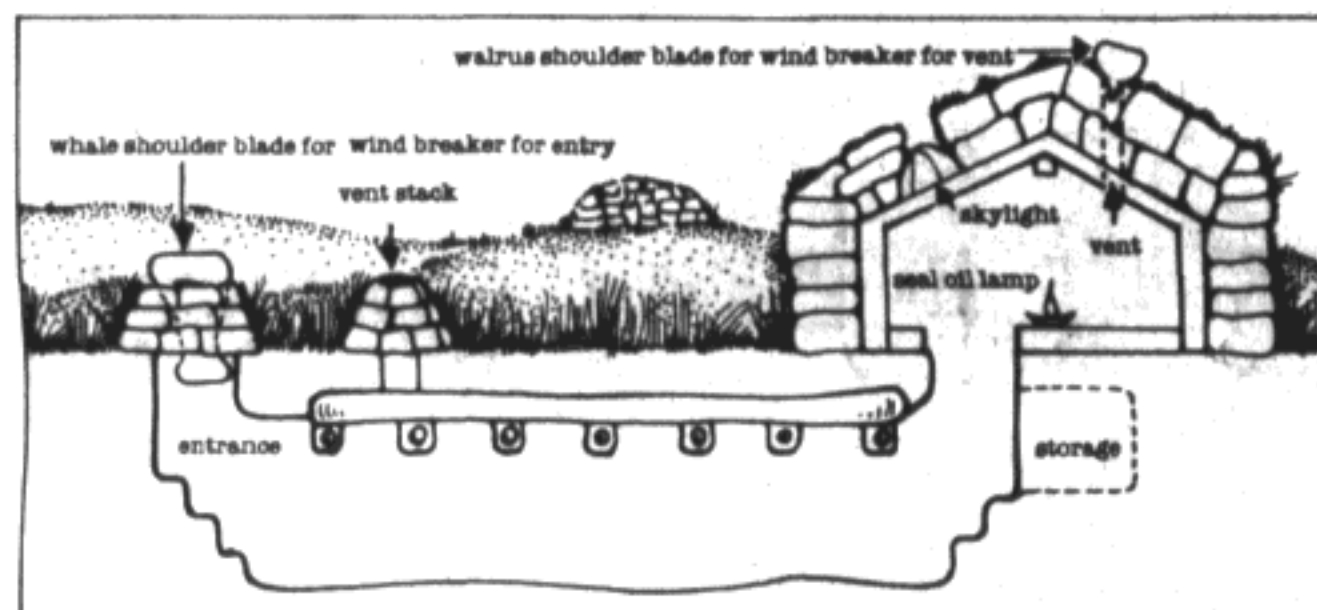
# Staying Warm this Winter

## The Inupiat sod house

is just one of many traditional Alaskan homes well-suited to our cold climate. We are using today many of the energy conservation ideas that they discovered long ago.

This particular house, located near Barrow, was built partly underground for protection from wind and cold weather. The sod walls and roof insulated so well that a seal oil lamp was the only heat source needed. Vents over the cooking and living areas let fresh air in, with walrus and whale shoulder blade bones placed at the vents and entrance to block the wind and snow. If the family wanted more fresh air, they would turn the bone to direct more air into the house. A skylight made of seal or walrus stomach faced south to catch the light and warmth of the winter sun. The underground tunnel entrance buffered the house from direct blasts of outside weather.

It takes a lot more than a seal oil lamp to heat our homes today, however, since modern houses are not as well designed for this climate as the sod house was. There are several steps you can take to improve your house. A little bit of work now will go a long way toward keeping your family warm and healthy this winter!

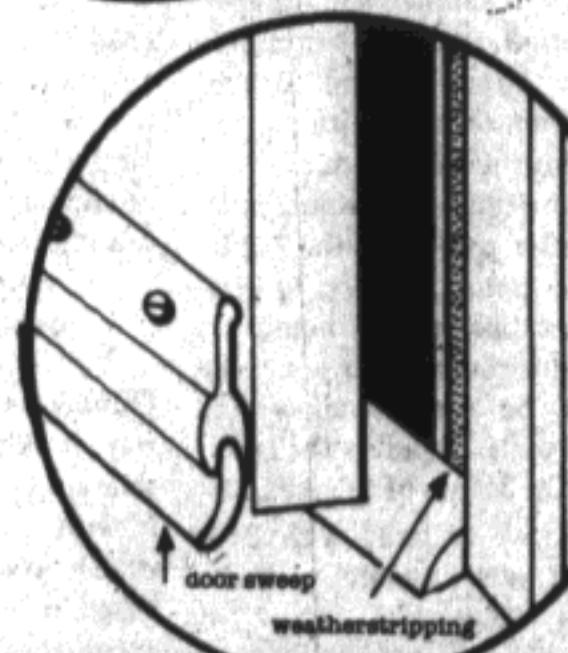


### An arctic entry is a buffer

between the warm indoors and the cold outside air. Open only one door at a time or indoor heat will be drawn outside. Place the entry out of the prevailing wind. It should be completely caulked, weatherstripped and insulated. Put a spring on the door to make sure it closes each time.

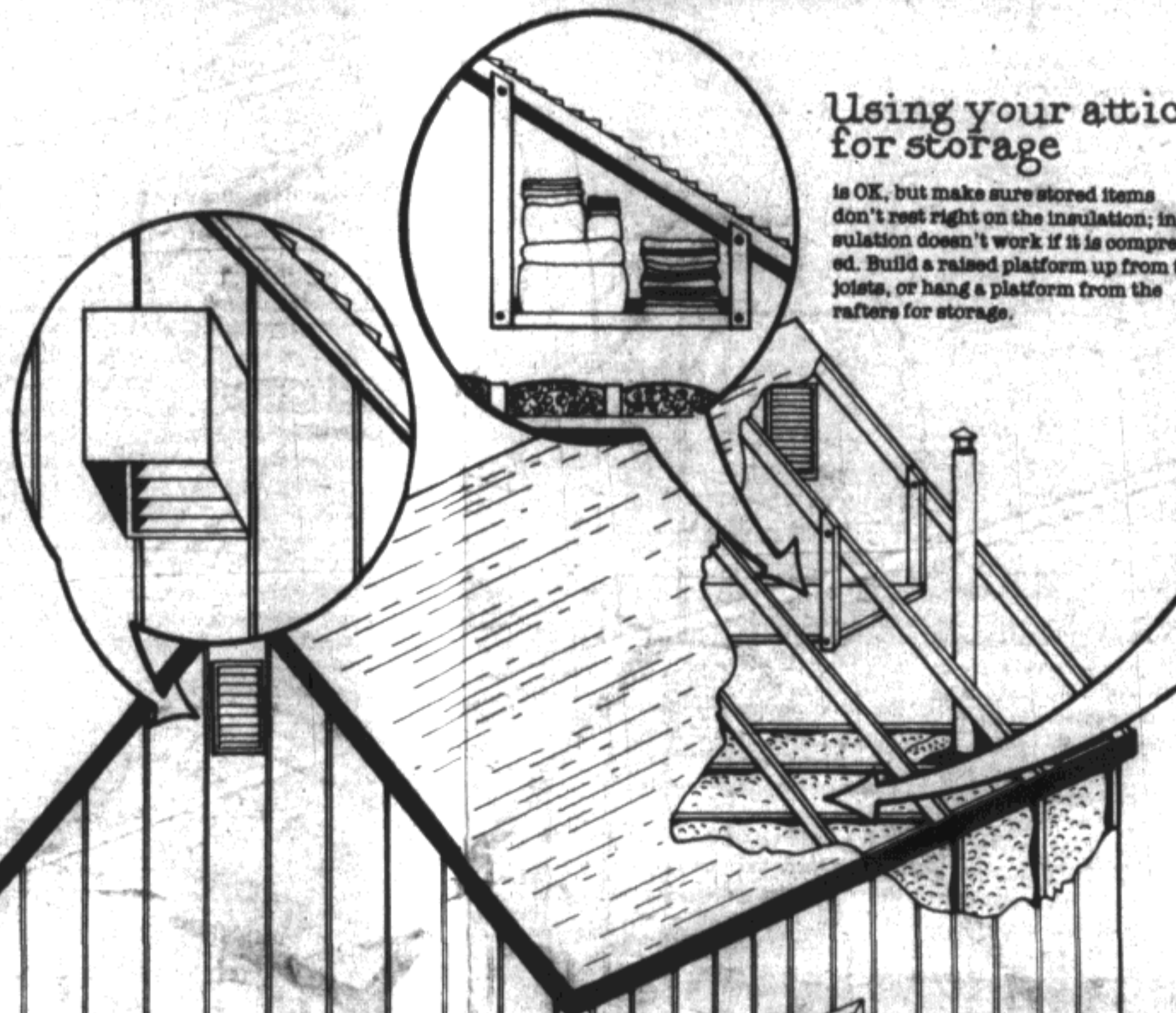
### Your door should close tightly

so that cold drafts cannot pass around it. Put weatherstripping along the sides and top of the doorway and put a door sweep across the bottom of the door. Also weatherstrip the attic door and any windows that open.



### Since heat rises,

make sure your ceiling has plenty of insulation and the attic above it has good cross-ventilation. Ventilation keeps moisture from settling into the insulation and ruining its effect. Sometimes vents become blocked with snow. If this happens, try covering the vent with a box, as shown.



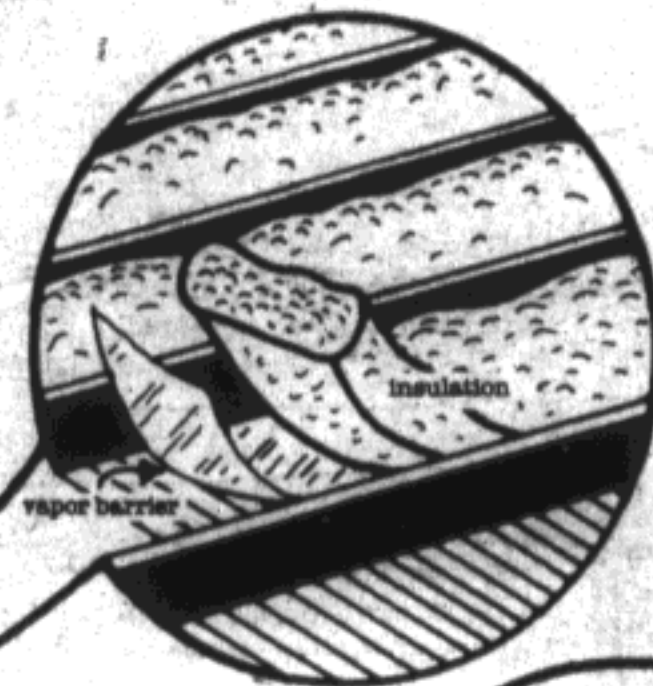
### Using your attic for storage

is OK, but make sure stored items don't rest right on the insulation; insulation doesn't work if it is compressed. Build a raised platform up from the joists, or hang a platform from the rafters for storage.



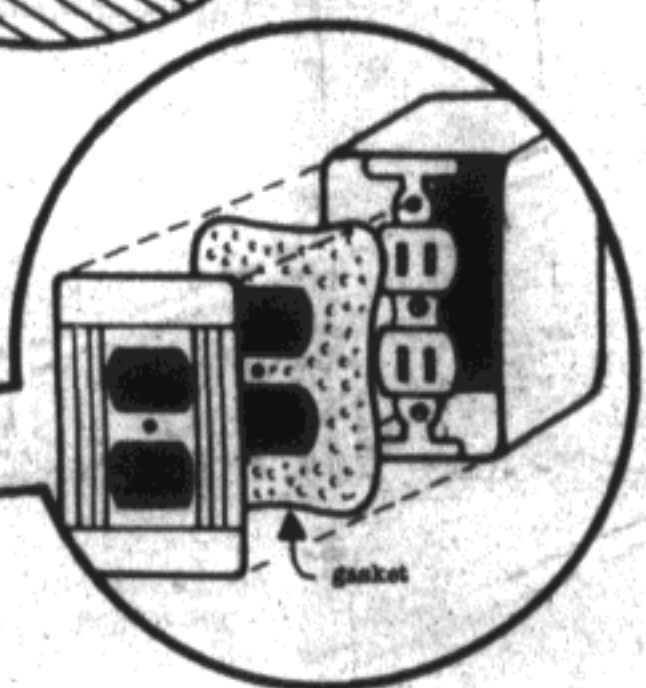
### Warm air holds moisture

but cold air doesn't. If warm indoor air enters the insulation, it cools down on its way through the wall and leaves water in the insulation. Wet insulation is like wet goose down: it doesn't work. Be sure you have a tight vapor barrier (visqueen, for example) on the warm side of the insulation to keep indoor air from getting into the insulation.



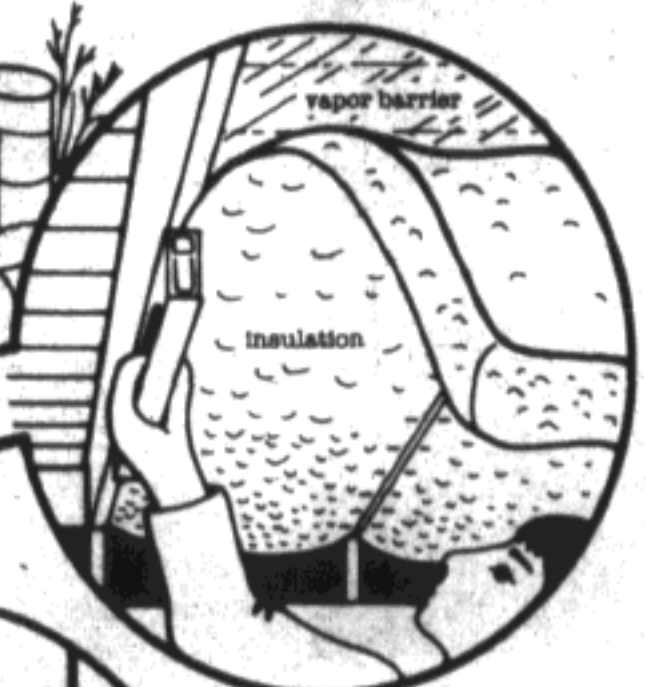
### Electrical outlets & light switches

can be cold, drafty spots in your walls because they compress the insulation wherever they are located. Place an outlet gasket behind the cover plate to cut down on drafts.



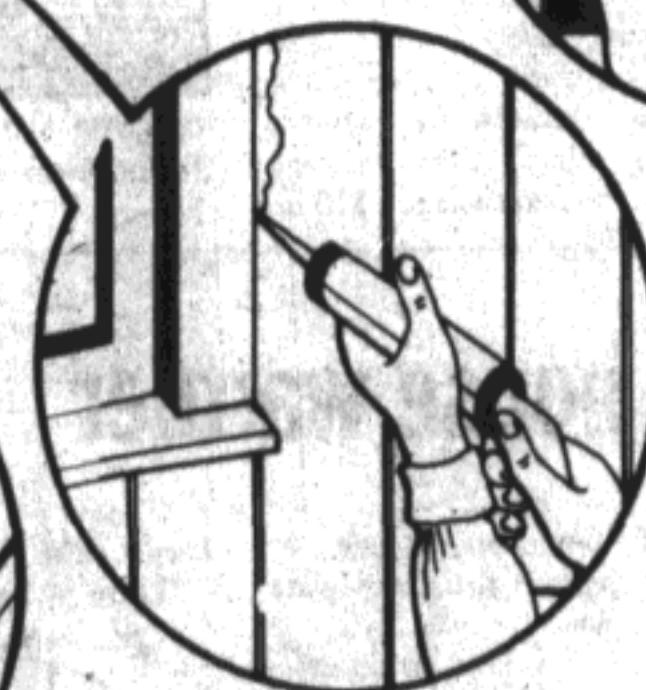
### Insulate your floor

from underneath the house. Skirting to keep wind from blowing under the house will also help to reduce heat loss. If you do not live over permafrost and you have water pipes beneath the house, insulate the skirting or foundation walls instead of the floor. Don't forget the vapor barrier!



### Cut down on drafts

by caulking wherever air can get into the wall. Caulk around door and window trim, where the siding and the skirting or foundation meet, where plumbing or wiring enter the wall. You can never caulk too much.



### Windows are poor insulators.

You can improve upon them by adding a second or third layer of glass or plastic on the outside of the window. Storm windows should be weatherstripped; visqueen should be drawn tight and sealed with caulk. Make sure the interior windows close tightly, otherwise moisture will build up between the layers.

