

inSTALLations

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Living Green Insulation

As the temperatures drop and we begin preparing for another Michigan winter, let's talk about insulation. Providing proper insulation for your home or work space can greatly reduce your energy use, but you can take another step and choose a 'green' product to get the job done.

In the construction of our Nature Preschool building, we used Structural Insulated Panels (SIP). Think of a SIP as a wall or roof segment made out of an Oreo® cookie. In our case, the "filling" of the cookie is twelve inches of rigid insulation and instead of a chocolate exterior it's made up of two structural pieces of oriented strand board (OSB). The SIPs are custom made for each building project and yield a highly insulated building, minimizing the heating and cooling requirements for the structure.



If you're interested in adding insulation to an already existing structure, you might consider denim or cellulose insulation. Denim insulation is made out of scraps from the blue jean industry or post-consumer jeans and is non-toxic. It typically comes in rolls or sheets. Cellulose insulation is made from recycled newspapers and is blown in to place. Both types of insulation are treated to make them fire retardant, mold and mildew resistant, and undesirable to rodents. They are both excellent alternatives to petroleum-based fiberglass insulation.

As you turn on the heat this winter, consider making an investment in the environment with a little 'green' insulation.

Nature's Layer of Warmth

People aren't the only ones seeking a little extra warmth as the temperatures begin to dip this fall. Animals have a few special ways to keep warm.

Some species such as woodchucks add layers of fat to their bodies and then spend the winter hibernating in an underground burrow where the temperature stays above freezing.



Other animals rely on dense undercoats to help insulate their bodies. The undercoat on beavers is thick and soft, trapping warm air close to their bodies. The combination of an undercoat and oily guard hairs allows them to swim in icy water.



During fall, white-tailed deer transition from a reddish brown, light weight summer coat, to a gray-brown thicker winter coat. This coat has a thick underfur as well as hollow guard hairs. The hollow hairs help trap air near the body, adding an important layer of insulation.

Visit the Temporary Visitor Center for program information.

This inSTALLation is available online at www.chippewanaturecenter.org under the Naturalist Section.