

energy savings

One of the biggest factors contributed by the Dome to energy savings, is the Dome shape. The unique quality of the Dome is that by eliminating the boxes' corners, rounding the cube so to speak, it eliminates 30% of the surface area assuming the same floor area. Which, right away, reduces the heat lost thru the walls and roof 30%.

We've taken the attic space of the conventional house (which you pay to have built) and used it to create more upper floor space along with the high ceilingED space for a glorious great room.

Another plus for our Dome is in the fact it has 60% to 70% less framing members in the walls and roof. This can contribute an additional 5%-10% in energy savings, a Natural Spaces exclusive.

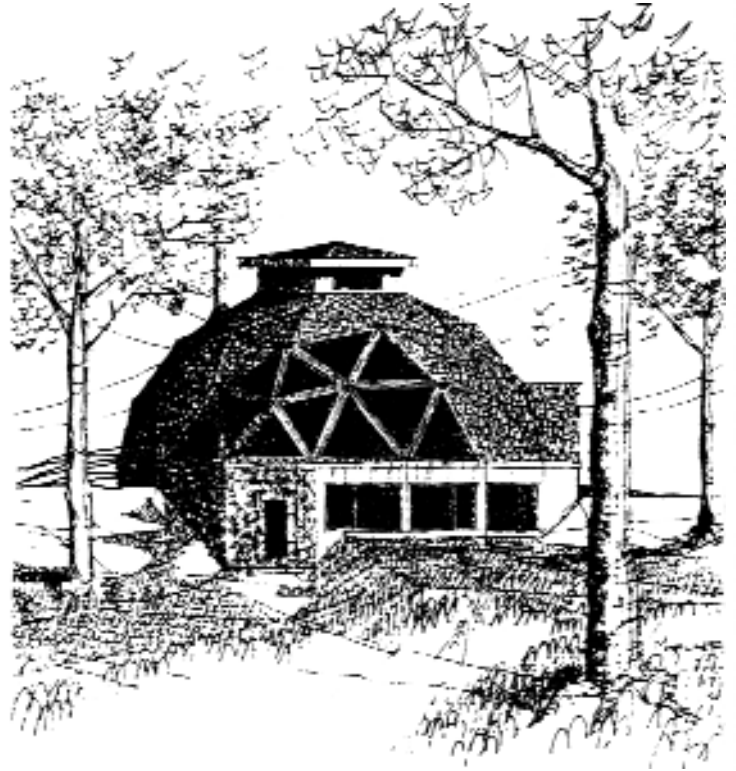
As we add more insulation and "tighten" up our wall/ roof system, indoor air quality becomes a critical issue. Natural Spaces understands this and offers a Dome system minimizing indoor air contaminants from building materials.

As an example, our standard interior surface of the Dome is made from natural spruce wood. In the typical modern house, where we've eliminated greasy food cooking and tobacco smoke, this wood does not require any chemical sealants or finish. If you need to Seal this wood, we specify a very low chemical content sealer/finish.

We also work with those that are chemically sensitive to specific elementS, creating a personally healthy custom Dome environment.

Indoor air quality can be enhanced by using fresh air-to-air exchangers or, in colder climates, an HRV (Heat Recovery Ventilator) system. These systems exhaust stale, moist air, and take in clean, dryer outdoor air (assuming you have cleaner, drler outside air).

Let us help you create a healthy indoor environment. After all, there was a reason we chose to call our company Natural Spaces Domes.



healthy homes



air circulation

Heat rises. One of nature's laws. During the winter, we need to produce heat in our homes. Conventional homes, with their heat supply next to the floor and their return duct next to the floor, have a hard time dealing with the heat sitting up at the ceiling level. So, it is usually 80 up high and 60 on the floor. All those square box rooms and air that doesn't like to move at right angles.

The Dome has an advantage with its round shape. Warm air, introduced at the floor around the outside of the Dome, flows readily to the top of the Dome

It would be nice if it would then circulate around and up and down inside the Dome by itself. That theory doesn't take into account the second floor system, skylights cooling off the air, chimneys and the like hindering the air flow. The warm air needs some help to move around.

Natural Spaces Domes utilizes a warm air

intake at the top of the Dome connected to the furnace air handler. This equalizes the temperature in the dome with dome owners reporting no more than 1° to 2° difference between the lower floor and the loft.

If you ARE using radiant floor heat, a large ceiling fan or an in-line fan in a return air duct would equalize the air temperatures.

Our domes are super-insulated with tight vapor barriers and super low infiltration. An air-to-air heat or energy recovery ventilator (HRV or ERV) will provide a source of fresh make-up air and especially important in colder regions of the country, will temper incoming air. An HRV/ERV will further help maintain desirable interior humidity levels in both summer and winter.

