indoor air quality

Indoor Air Quality has been a vital consideration throughout the design and construction of the UT SolarD SNAP House. We have applied sustainable design and sound engineering strategies to the goal of making the SNAP House healthy for both its occupants and the environment at large.

We have carefully selected the materials that compose our house, using only those that yield minimal or zero volatile organic compounds (VOCs). As examples, the cabinetry in the Office and Bedroom SNAPs is constructed from a sustainably harvested, zero-emission particleboard product; all paint used within the interior of the house is zero-VOC paint; and the Texas mesquite floors are finished with natural oils and wax.

The tightly sealed joints between the SNAPs maximize the system's overall insulation value and minimize uncontrolled air infiltration. Our open design utilizes both stack and cross-ventilation, encouraging users to take advantage of fresh air. When hot or cold weather requires doors and windows to be closed, the house is well ventilated mechanically. An energy recovery ventilator provides fresh air while limiting the need for additional temperature and moisture management.

A dedicated dehumidifier assists the ductless mini-split heat pump in maintaining healthy and comfortable indoor humidity levels and preventing the development of mold. Even our choice of indoor house plants has been influenced by our consideration of the occupants' health. The peace lilies (*Spathiphyllum*) that decorate the SNAP House's interior have been scientifically proven to reduce levels of airborne VOCs.



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