HOW PLASTICS HELP MAKE A TINY (OR NOT-SO-TINY) HOUSE MORE ENERGY EFFICIENT

PLASTIC SEALANTS & CAULKING
Strong yet flexible, water-resistant plastic (such as silicone) caulk and sealants help fill gaps around pipes, air ducts, plug outlets, and other places where outside air can enter a house.

POLYSTYRENE FOAM INSULATION
This durable plastic foam provides an insulating barrier beneath the flooring of the tiny house, which is particularly useful since the house is mounted to a platform on an outdoor trailer.

POLYISOCYANURATE FOAM BOARD
This stiff plastic foam board was applied to the outside of the tiny house walls (under the siding) to help prevent untreated air from even touching the wall materials/framing.

SOLAR SHINGLES
These tough, innovative plastic solar shingles play two roles: roof protector and renewable energy generator.

POLYCARBONATE SKYLIGHT
This tough plastic skylight provides natural daylight, thermal resistance, and UV protection to help save energy.

SPRAY POLYURETHANE FOAM INSULATION
This plastic foam insulation expands to fill spaces in walls and attics, sealing tough-to-reach corners and cracks to help dramatically improve energy efficiency.

VINYL SIDING AND TRIM
This plastic siding and trim can provide an additional barrier between indoors and out, plus they are low-maintenance, resilient, and do not need periodic painting.

LUXURY VINYL FLOORING
This luxury vinyl flooring adds a waterproof barrier layer between indoors and out.

CROSS-LINKED POLYETHYLENE (PEX) PIPE
Tough but flexible PEX piping retains more heat in hot water lines than traditional piping, which can reduce energy needs.


A growing number of Americans are joining the “tiny house” movement. One motivation: the environmental footprint can be as tiny as the house.

Innovations in building products made from plastics can help improve energy efficiency and drive down energy costs, in tiny and big houses. A key to energy efficiency is sealing the building “envelope,” the barrier between indoors and outdoors.

These plastic building products help create a barrier to heat/cold and air (plus water, light, and noise) to seal the building envelope and save energy in this tiny house. Imagine how much energy they could help save in a not-so-tiny house!

To learn more about plastics and energy efficiency, visit plasticsmakeitpossible.com/tiny-house

1Spray polyurethane foam courtesy of Dow Building Solutions and the Center for the Polyurethane Industries (CPI) and www.whysspfoam.org

2Vinyl siding and trim courtesy of Associated Materials, The Vinyl Siding Institute, Inc., National Housing Center, and the Vinyl Institute.

3Polyiso foam insulation Thermascrape 2 and RSeal construction tape courtesy of Rmax Operating, LLC, Asian Communications Group and Polyisocyanurate Insulation Manufacturers Association (PIMA).

4Dow POWERHOUSE™ Solar Shingles courtesy of Dow Building Solutions and Dow Solar Field Operations.

5FRONT DOOR
This traditional looking door is made with tough polyethylene-based fiberglass and an insulated plastic foam core to provide resistance to heat/cold.

6RECYCLED PLASTIC DECKING
Plastic composite decking is low maintenance, easy to clean, long lasting, and resistant to infestation and decay—and no wood splinters! Some plastic decking contains recycled plastics to prevent valuable materials from going to waste.

7POLYURETHANE/FIBERGLASS FRONT DOOR
This traditional looking door is made with tough polyethylene-based fiberglass and an insulated plastic foam core to provide resistance to heat/cold.

8POLYCARBONATE SKYLIGHT
This tough plastic skylight provides natural daylight, thermal resistance, and UV protection to help save energy.

9Luxury vinyl flooring courtesy of Acme-Cash.

Vinyl Shingles courtesy of Dow Building Solutions and Dow Solar Field Operations.

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Plastics Make It Possible®


2WASCO skylight courtesy of Wasco Products, Inc., and Covestro.

3Polyethylene cross-linked (PEX) pipe courtesy of Uponor and the Plastic Pipe and Fittings Association. Pipe installed is Acme-Cash.

4Luxury vinyl flooring courtesy of Metroflor and the Vinyl Institute.