



How to build an inflatable shelter that attaches to the exhaust vent of a building's heating system, thereby creating warmth and space in winter.

Designed by Michael Rakowitz.

Materials: 20 garbage bags (1 with drawstring), roll of duct tape or weather-proof packing tape, plastic tarp, thin gage electrical wire, scissors.







Cut the tops and bottoms off ten garbage bags so that they're straight and open on both ends. (In the images, these bags are white.) Arrange in two rows of five each, cut end to cut end, and tape across. Do this bag after bag, creating two long plastic tubes. Be sure to tape both sides.







Cut six more bags in the same fashion and make three two-bag tubes. (In the images, these bags are gray.) Tape the sides of these tubes to one another to form a grid. Lay the grid between the two white tubes.







Cut the inside edges of the white tubes from top to bottom. Tape the newly cut edges of the white tubes to the open edges of the grid. Also tape closed one edge of each white tube.



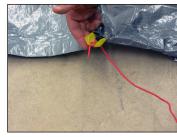




Make the extension tube by again cutting off the bottoms of garbage bags and taping the open ends together. More bags means a lengthier tube. Attach to the open end of one of the white tubes. Tape shut the open end of the other white tube.









Use a drawstring garbage bag to create the vent attachment. Most bags have two places to pull the string out; cut two more. At each of these four points loop hooks made from foot-long pieces of thin gage wire.









Unfold the plastic drop cloth and mark the desired floor space for the shelter. Cut accordingly. Tape the edges, lengthwise, to the white tubes. Turn the shelter over and it is ready to be inflated.







Check the seams for leaks. Any and all holes can be repaired with tape. If more privacy is desired, doors can be added using breathable fabric. The shelter will be warm enough regardless, and the double-membrane structure guards against contact with re-circulated air.

To use, find a suitable exterior heating vent and attach shelter using hooks.

IMPORTANT: Sleep with head at front or back of shelter. In the event of collapse, these areas will be the last to fall, are open to the outside, and the inhabitant will continue breathing free from obstruction.