



## **BUILD AN INEXPENSIVE CAT SHELTER**

Alley Cat Allies recommends that community cat colonies have proper protection from inclement weather. Following are detailed instructions needed to build a community cat shelter. These building plans are recommended for use throughout the United States. For extremely harsh, cold, and wet climates, insulation (as described) is advised. Other types of shelters, such as dog igloos, can be used in less harsh climates. Go to www.alleycat.org/BuildaShelter for additional shelter ideas.

# The following instructions are for building an insulated cat shelter 2 ft. x 3 ft. x 18in. high.

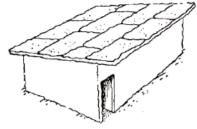
You should be able to buy the materials at a local lumberyard. An electric saw and screwdriver are highly recommended. Caution: If you are not experienced with an electric saw, ask a skilled person to cut the wood and paneling.

#### **Materials Needed**

- One 4-ft. x 1/2-in x 8-ft. sheet of exterior grade plywood or waferboard
- One 4-ft. x 8-ft. sheet interior paneling or thin plywood
- One package roofing shingles or enough to cover 8-sq. ft. roof
- Two 2-in. x 3-in. x 6-ft. untreated lumber
- Linoleum or other floor tiles (to cover 6-sq. ft. floor)
- One quart exterior house paint
- Two medium hinges ("T" or gate hinges)
- Fifty 2-in. flat head wood screws or grippers
- Four to nine bricks for foundation
- Small roofing nails (approximately 15)
- Fiberglass insulation (1 roll, or enough to cover 14-20 sq. ft.)

#### **Tools Needed**

- Hammer
- Saw
- Electric screw driver
- Angle brace or T-square
- Staple gun
- Measuring tape
- Marking pen



Completed shelter

### Things to consider before starting your project

These will help you determine what you need to buy and how much work will be involved, and also provide a few helpful hints.

• How many cats do you need to house? This number detemines how many shelters to build. Keep in mind that not all cats are likely to use the shelter, or at least not all at the same time. You can adjust this plan to make a larger shelter, or build more than one shelter as needed to house your cats.

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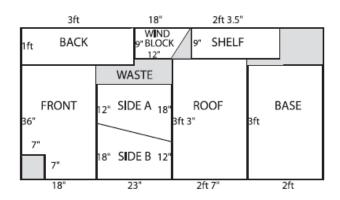
- Be sure to make the shelter small enough for transport in your vehicle. The shelter size described here will fit in a standard size car trunk with the trunk lid open.
- If you live in a climate that gets very cold, we recommend that you use insulation as described in the plans.
- Use only exterior paint to reduce weather exposure, preferably dark green or dark brown to match natural surroundings.
- Floor should have linoleum or tile square instead of carpet to reduce the chance of flea infestation. Carpets and towels retain moisture and should not be used.

- Use screws, not nails, for better durability.
- Roof should be hinged so bedding can be replaced, and for easy access when retrieving kittens who may be in the shelter.
- Roof must be slanted to drain off water.
- A wind block should be placed inside the door of the shelter to improve warmth. You may also consider a canvas flap to go over the door.
- Place wood chips or straw inside for warmth and comfort.
- Blankets, towels, and carpets retain moisture.

### **Assembly**

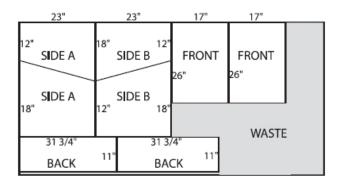
1. Cut wood. For easy assembly, cut all wood first, then assemble the shelter. Some pieces may need adjustment after cutting.

Cut plywood as shown at right. (This is only enough for one shelter.)



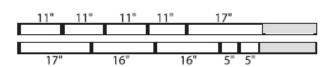
Plywood Cutting Guidelines

Cut paneling as shown at right. One sheet of paneling is enough for two shelters.



Paneling Cutting Guidelines

Cut 2-in. x 3-in. x 6-ft. lumber into eight posts and two shelf braces as shown at right.

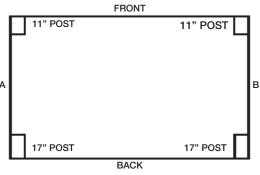


**Lumber Cutting Guidelines** 

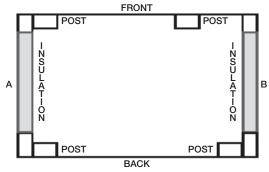
### **Fact Sheet:**

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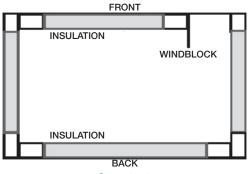
- Put side wall A in place on the left of the base and screw front wall and left side wall together using one 17-in. corner post.
- 3. Position side wall B on the right and attach to front wall using other 17-in. corner post.
- 4. Position back wall and attach to both side walls using two 11-in. corner posts. Note: Corner posts should rest on top of the base, as should the front, back, and side walls. All posts should be inside of the front, back, and side walls.
- 5. Turn walls upside down and place the 3-ft. x 2-ft. base on top. Mount base to sides, first screwing down corners then going along edges. Be careful that screws go straight into plywood walls, without protruding through sides.
- 6. Turn the shelter back to upright position.
- Cut and staple insulation blueboard to inside of side walls A and B.
- 8. Attach front and back posts for front and back wall supports. Note that the posts are placed flat against the front and back walls, at right angles to the corner posts, as shown. The post next to the front door should be 5-1/2 inches from the right interior wall to leave room for the wind block.
- Cut and staple the remaining insulation to the inside of front and back walls.
- 10. Put the wind block in place and screw it to the front of the shelter, then to bottom (do this from outside in).
- 11. For extra cat sleeping room, screw 5-in. shelf braces upright to the center of wind block and left interior wall near the front corner of shelter to support shelf, if desired. Then screw 9-in. x 2-ft. 3.5-in. shelf on top of braces.
- 12. Place the 2-ft. 7-in. x 3-ft. 3-in. roof on bench and turn shelter upside down. Center shelter on the roof with roof hanging over on all sides. Screw hinges to the underside of the roof and outside the front of the shelter so it will open easily and stand up straight on its own.
- 13. Turn the shelter back over and attach shingles with roofing nails in an offset pattern to seal against weather. After nailing shingles bend nail points over to avoid injuring cats.



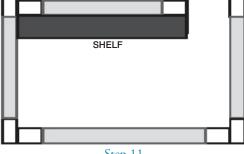
Steps 1-6



Steps 7-8



Steps 9-10



Step 11

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- 14. Place the vinyl floor tiles inside if desired for extra protection.
- 15. Paint the shelter (all exposed wood should be painted, including bottom, to protect it from rain and/or snow).
- 16. When installing the shelter, make sure to set it on top of bricks or other objects to keep it away from ground contact. Also take prevailing winds and exposure into account; placing shelter front facing south often maximizes warmth.

**Note:** You may also cover the interior underside of the roof with fiberglass or plastic foam insulation, but be sure to cover it with plastic or wood. Foam needs to be covered to hold it in place, and uncovered fiberglass will harm cats. You can insulate the shelter with strong plastic to keep out wind, rain, and cold. Leave a small opening for the cats to enter. A flap can be placed over the entrance for added protection.



Shelter Exterior



Shelter Interior

Shelter design and construction drawings by Bill McFadden and Ken Crawford. Shelter illustration by Doug Hall.