

Open source build guide

Pressure Relief Bed, a student concept for immobile shelter dogs

We wrote a short guide so shelters and volunteers can make the cushion themselves from cheap, easy to find materials.

Materials

CELLS

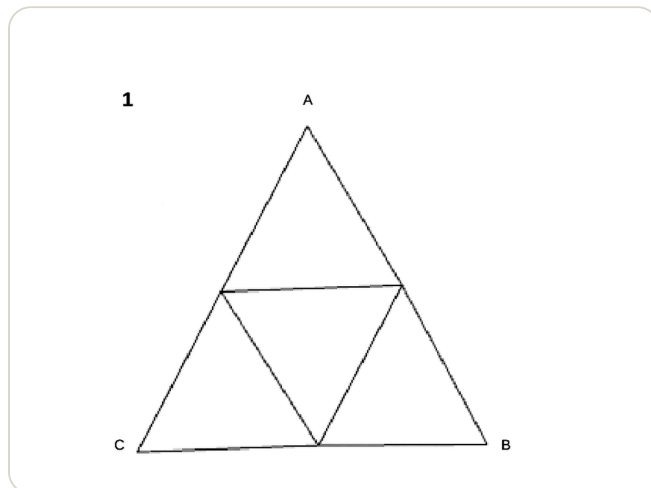
- Thin fabric

FILLING

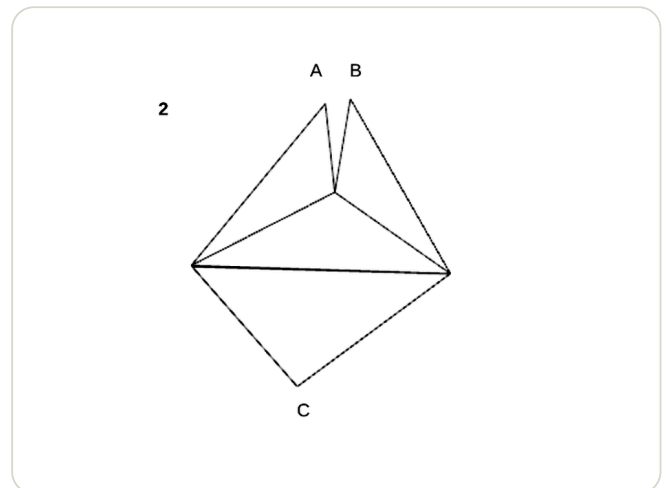
- Polymer beads
- Polymer fiber
- Cushion sponge

COATING

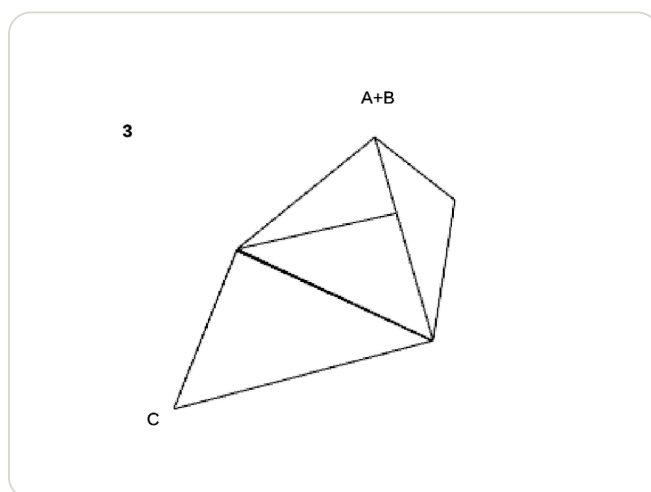
- Tent fabric (waterproof)
- Water repellent fabric



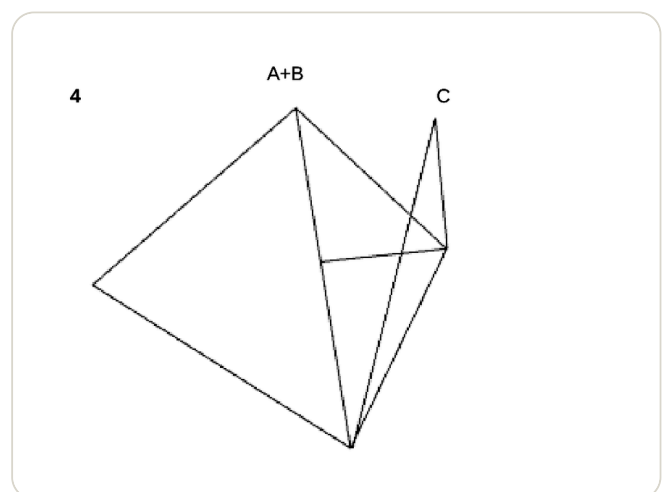
① Cut the fabric into a triangle, following the guide drawing.



② Fold the fabric so that corners A and B meet.



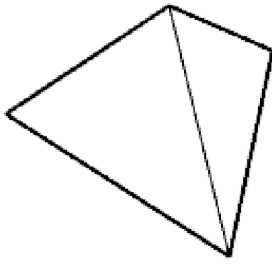
③ Sew the meeting corners together.



④ Bring corners B and C together and sew them.

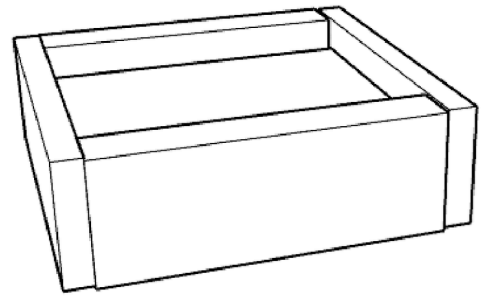
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A+B+C



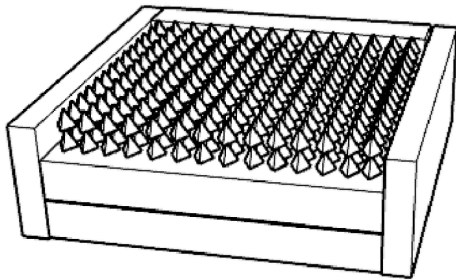
⑤ Close the open gap halfway. Fill the cell with 60 percent polymer beads and 20 percent polymer fiber, and leave some room so the pressure can distribute. Repeat for as many cells as you need.

6



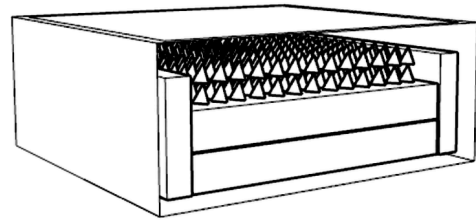
⑥ Form the sponge with walls to keep the cells in. The sponge should be twice as thick as the cell layer.

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⑦ Fill the sponge with the cells.

8



⑧ Cover with tent fabric to protect the cells from water. Add a layer of water repellent fabric to make the bed more comfortable.

This guide describes a student concept. It has not been clinically tested and does not replace veterinary advice.