

Research

I did some research on good shelter designs and found that most sites recommend using curved roofs to spread out the weight of the impact. I decided to use empty soup cans to do this.

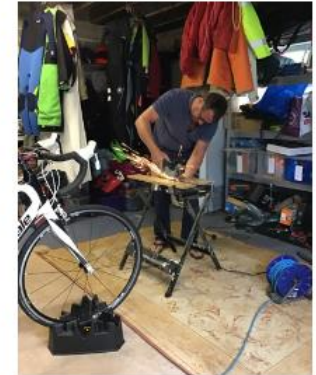
For the door, I came up with the idea of making it a flap door for easy access and two-way entry. The door would also have a metal lock to keep it shut when you needed to.

I also made it thin, so that it is a harder target to hit, but it still has enough space to walk in.

Instead of making all of it curved, I chose walls for the comfort of the people who will be inside.

Building

We (my dad and I) started off by cutting a soup can in half and hot gluing the sides together, using lollipop sticks for sturdiness. We then cut up a cardboard box and hot glued it to the can, making the walls. After we did this, we realised that it was bending, so we put lollipop sticks as wooden beams to hold the roof up. I also made holes in it for ventilation, they are not big enough for anything other than air to come in.



Zara Scott's fantastic air raid project!

Decorating

I decided to paint it green to disguise it into the ground, but the paint didn't stick! I asked my Dad what to do and he said that he had some paint made especially for metal. So I did it again with that paint and waited for it to dry - 3 hours! Once it had dried, it was ready to test.



Testing

I dropped a piece of gravel on it, representing a bomb, and it was perfectly fine, so then I dropped a handful of gravel on it, and once again it was fine. Then I dropped a rock on it, and it was ok! I also dropped it again from a greater height and it was still fine. It also survived my dad's air gun! In conclusion, my shelter should survive a WW2 air raid.

