

Cardboard Chair Infographic

Planning:

We had two designs:



The first design was a classic chair with only straight lines as we felt cardboard would work best with straight angles.



Our second design was more modern and aesthetically pleasing..

Building Prototype:



We started off by building our first design because we thought it would be simpler with straight angles. The first prototype ended up with a backrest that was not sturdy enough and armrests that could not support a load.



Our second prototype worked better and we modelled it after the popular egg chair. This prototype worked and ended up being the foundation for our final product.

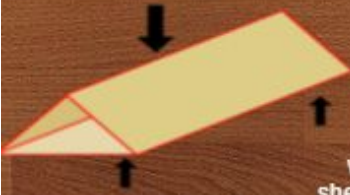
Building the Actual Chair:



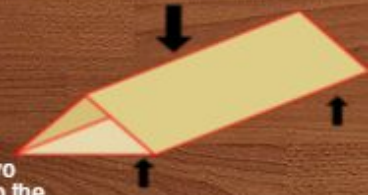
The actual building of the chair took around three classes to finish. It is modelled after the egg chair but cardboard is hard to bend into a curve so there is no roof to the chair. It is a safe and sturdy chair because it has 4 triangular beams under the seat to support the person's weight. We tested the chair with our teacher's weight so we know it supports at least 200 lbs. The chair is ergonomic for a child because the armrests are at a comfortable level.

This chair can be marketed to parents as a comfortable and modern chair for their child. It also has armrests that can act as shelves on both sides. This chair is also eco-friendly because it can be recycled when it is no longer needed.

How we made our Chair



We made our chair by starting off with cutting 6 triangles out of the two sheets. We then started to make 6 triangular beams and insert them into the side pieces. Then we made a big square on the bottom of our chair for stability. This helped our chair stand because it would fall over before.



Why it looks the way it does

The reason our chair looks the way it does is because we wanted to have a modern design that worked and that's why we chose this design. Our chair also had this design because it's a very different looking chair that works and it's box on the bottom of the chair made me look at how different our chair was from the others.

How It's Safe

Our chair is safe because the triangular beams can support your weight being threaded through the triangular holes. Then we added a square shape on the bottom so that it didn't all fall over which made our chair stable.



Does It support someone

Our chair does support someone but after repetitive use one of the triangular beams started to bend and it will eventually break.



Is It Ergonomic

Yes our chair is very ergonomic. It is a very comfortable chair and it is made on an angle that allows someone to be able to sit on an angle that is very comfortable.

How and to who is this Being Marketed

Our chair being marketed by an advertisement telling you about the payments of our chair, how it looks, and how it it works. This chair is being marketed to people 12 and older because a little kid may break the chair and it might not be appealing for a little kid to sit on a big chair. We have also chosen 12 and older because of the way it looks, this chair is different from any other and that is why I think people who are older will like it better because they can see how it looks and understand it.

powered by



Why you should buy our chair

5 legs for almost maximum Support and comfort and safety



Triangular back for supports

Cut slot through the backrest to add extra support.

One thing we did not have time to put in armrests so we made imaginary ones. Because of this it is not as safe as it could be sadly.



Wrap to look aesthetically pleasing. Because underneath it is not pleasing

MY GROUP AND I PUT A LOT OF HARD WORK INTO THIS CHAIR. IT TOOK US ABOUT 1 MONTH TO START FROM A PIECE OF PAPER TO COME TO A FULL SIZED CARDBOARD CHAIR. BECAUSE OF THE 5 LEGS BEHIND THE WRAP IT IS ABLE TO SUPPORT A LOAD OF A FULLY GROWN MAN. THE CHAIR IS MOSTLY STABLE AND BECAUSE OF THAT WE HAVE DECIDED TO MAINLY MASS PRODUCE THEM FOR CHILDREN.



The Square Chair



Our chair has been marketed to garage high kids from 10-14. It is being marketed through our comical that we made. The retail price is \$10.

How can it support a load:

Our chair supports our load by using the strength of triangular beams. That same concept is used in our armrests

Planning:

Our chair was prototyped with a more circle design. When we tried making the real chair we used a square design instead.

Is it ergonomic:
Our chair is ergonomic because of the way you can adjust where the armrests orre and our chair seat is ver comfortable.

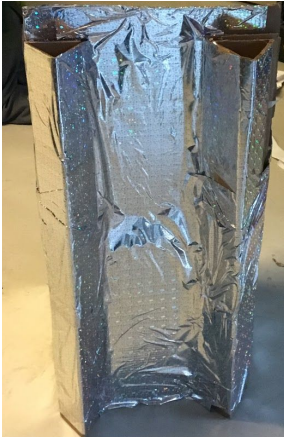
How is it safe: Our chair is very strong and safe. It can hold men such as our teachers.

How Was it Made
The Square chair was made up of a base that has 4 triangular pillars. We used hot glue to then attach a back rest.

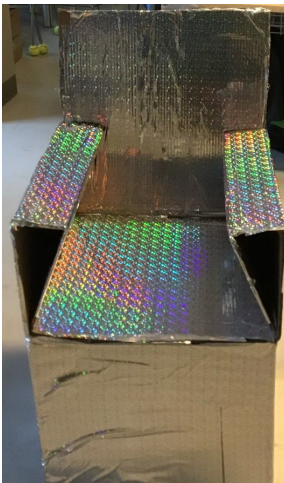


How was it designed:
The Square Chair was designed with triangular beams that supported it with a backrest put on the back. You can also fold out the armrests to be used as shelves. The armrests are made out of reinforced triangles.

Info Graphic for Cardboard Chair



- As you can see we used triangular beams to support the backrest and it also helped with stability.
- We did this because when we were testing it at first the back fell down so we need to support it. We saw another group do this and we just made our own version of theirs.
- This back part was wrapped in 3 different pieces of wrap so there is some lines but it is a pretty seamless finish.
- This all helped to support the backrest and made the chair stronger and better looking.



- For the base we made a net and folded it up to make a cube and in the middle of the cube we put two pieces of cardboard in a x position and that really helped support the chair.
- We ran into trouble when we were attaching the two pieces of cardboard in the x position so what we had to do is attach them together cutting half off in the middle of each piece and slotting one on top of the other. That also allowed us to to have a better shaped cube.
- All of that helped to make the chair look better and give more support to the arm rests by making the surface really flat.



- This part of the chair was the most important; the back, the middle, and the arm rests. To construct all this we used one big net and folded it up.
- For the back we made the dimensions to scale our biggest person and we made it so it was comfortable for him and all the rest of our group.
- For the arm rests we measured a desired height and put that into our net and that made it very comfortable.
- Lastly the middle, for the middle we made dimensions that would; one match the box and two make it comfortable to lean back on the back rest. It couldn't be too long and couldn't be too short. It had to be perfect or it wouldn't be luxurious or good looking.