

Gingerbread House

'Tis the season for some holiday cheer, and what better way to boost your STEM and artistic skills than our new Cori "Gingerbread" Automata House Kit. This STEM project goes beyond the traditional version, as we amplified the Cori "gingerbread house" with a dancing automata design in your chimney, functional door, and a removable roof for interior decorating. The use of the Santa included in the template is optional, and may be replaced with an object or symbol of your choice from your own materials. Limit the sweets this year, and reimagine the gingerbread house with this new modern twist to a classic holiday experience.

Measure twice, cut once

Our products are not your typical kits with pieces that fall perfectly into place. CORI building requires planning, constructing, testing and rebuilding. Things will fail, break and not align. That is the learning we thrive on and find so valuable. Enjoy the journey as much as the product you create.

Improvise and modify

You will be constructing this model from the ground up. Careful measurements, cutting, and gluing are required to complete this build. That said, feel free to improvise and modify as you please. You may even choose to incorporate other materials along the way. But most importantly, have fun!



2-3 hours



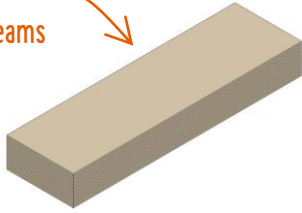
Grit required



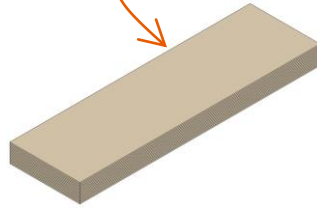
Ages 10+
(5+ with parent)

What's in the box

25 Cori sheets with tape for beams



15 Cori sheets without tape



One 12"x1/4"

Wood dowels



Two 1/2"x1/4"



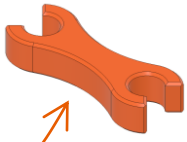
Three 2"x1/4"



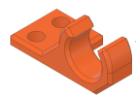
Pencil



Cori connectors

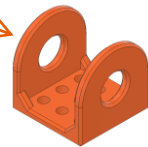


Crank arm



Four hinges

Double dowel bracket



Small wheel



Large wheel



Ruler



What's not in the box

Hot glue gun (recommended)



School glue (not recommended due to long dry time)



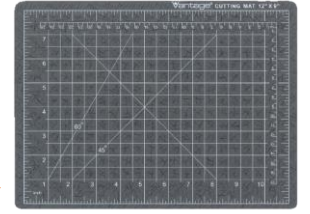
Scissors



Utility knife (adult supervision)



Cutting mat (optional)



Two single dowel brackets



Four handle brackets



Stickers (decorations)



How to create with Cori

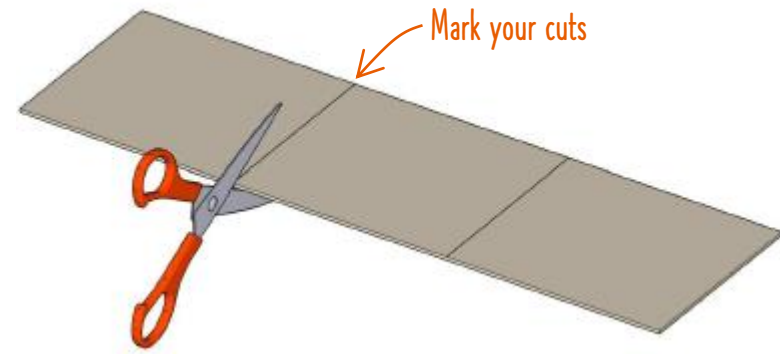
Cori sheet

It all starts with the Cori sheet. You will find Cori sheets with and without an adhesive tape strip in your kit. The Cori sheet with tape will be transformed into Cori Beams and the Cori sheets with no tape will be used for flat sheets in your creations.



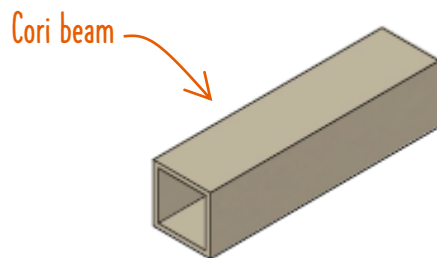
Cutting

Mark and cut the Cori sheet with scissors or a utility knife to get the desired dimensions.



Cori beam

To make a Cori Beam you will start with the flat sheet with the adhesive tape strip facing up. Next, fold the sheet along the four perforations until you have a square beam. Last, remove the tape liner and firmly squeeze along the tape to secure the bond. You have now created one of the key building blocks in any Cori creation.

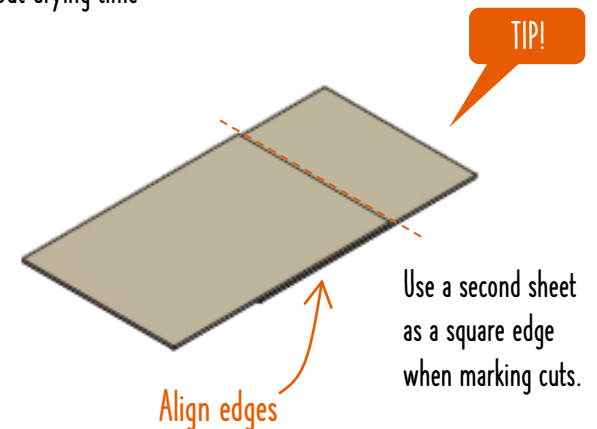


Gluing

Cori highly recommends hot glue for putting your creations together. It's quick curing makes building much more enjoyable. Any paper glue will work, but drying time will affect your build time.

Decorating

Don't forget to take your creation to the next level by tapping into your artistic skills by painting and decorating to make it uniquely yours.

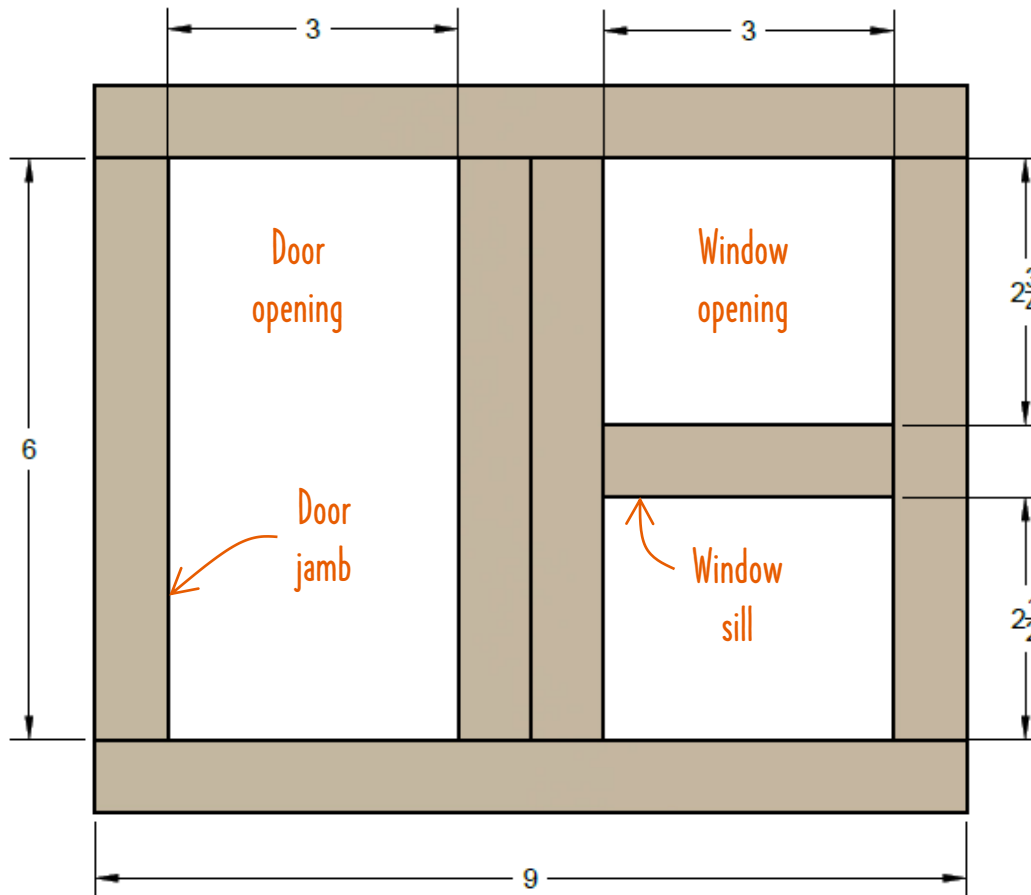
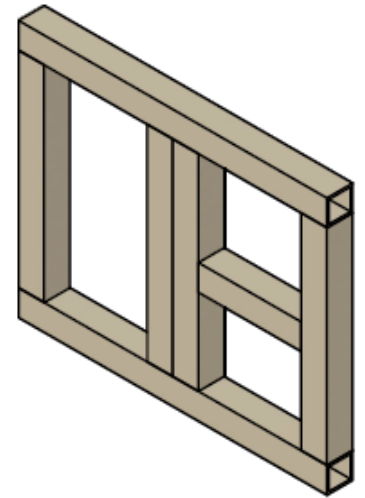


Step 1

Framing the front wall

Construct the front wall by gluing seven Cori beams as shown below.

Material list:
9" Cori beam x2
6" Cori beam x4
3" Cori beam



Cori tip: Build on top of a cutting mat, if you have one, to ensure straight angles!

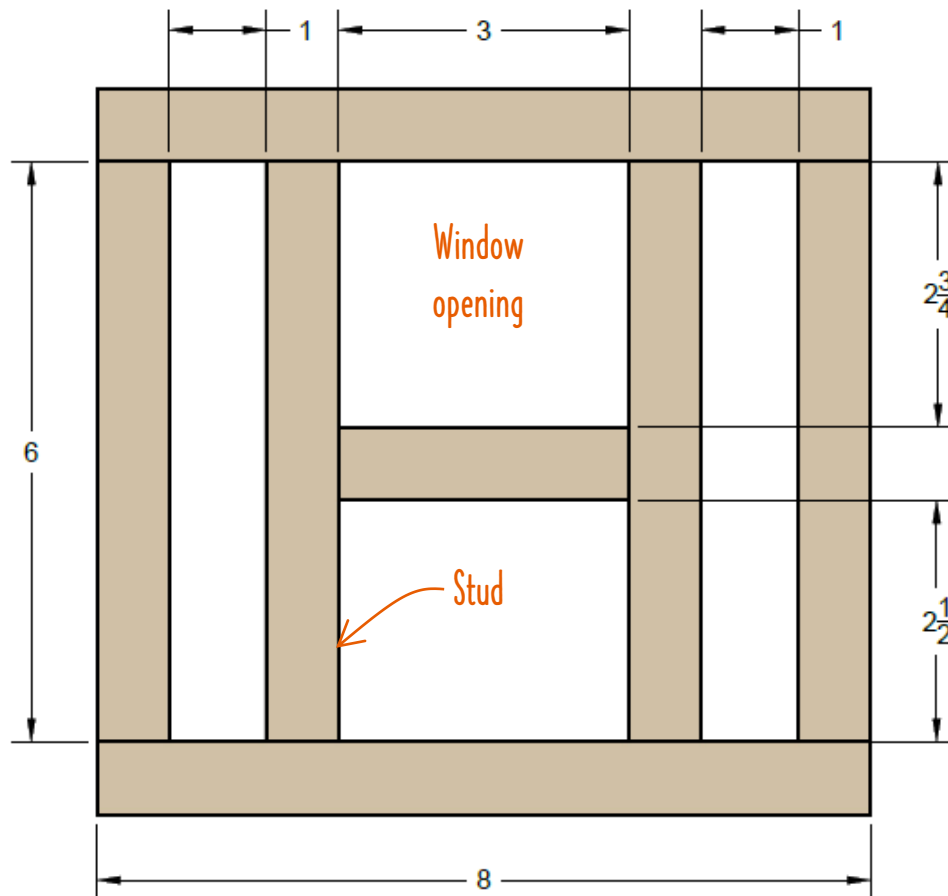
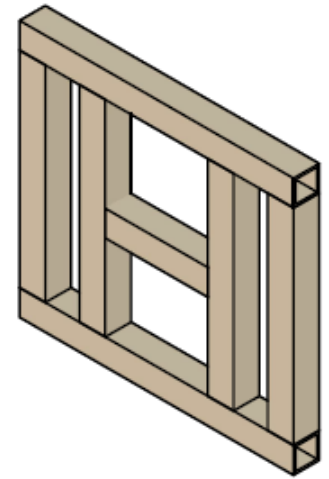


Step 2

Framing the side walls

Construct the front wall by gluing seven Cori beams for each of the side walls as shown below.

Material list:
8" Cori beam x4
6" Cori beam x8
3" Cori beam x2



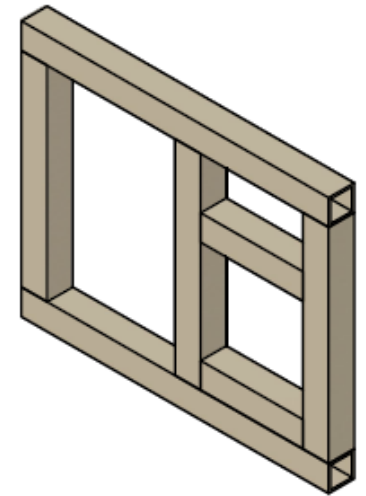
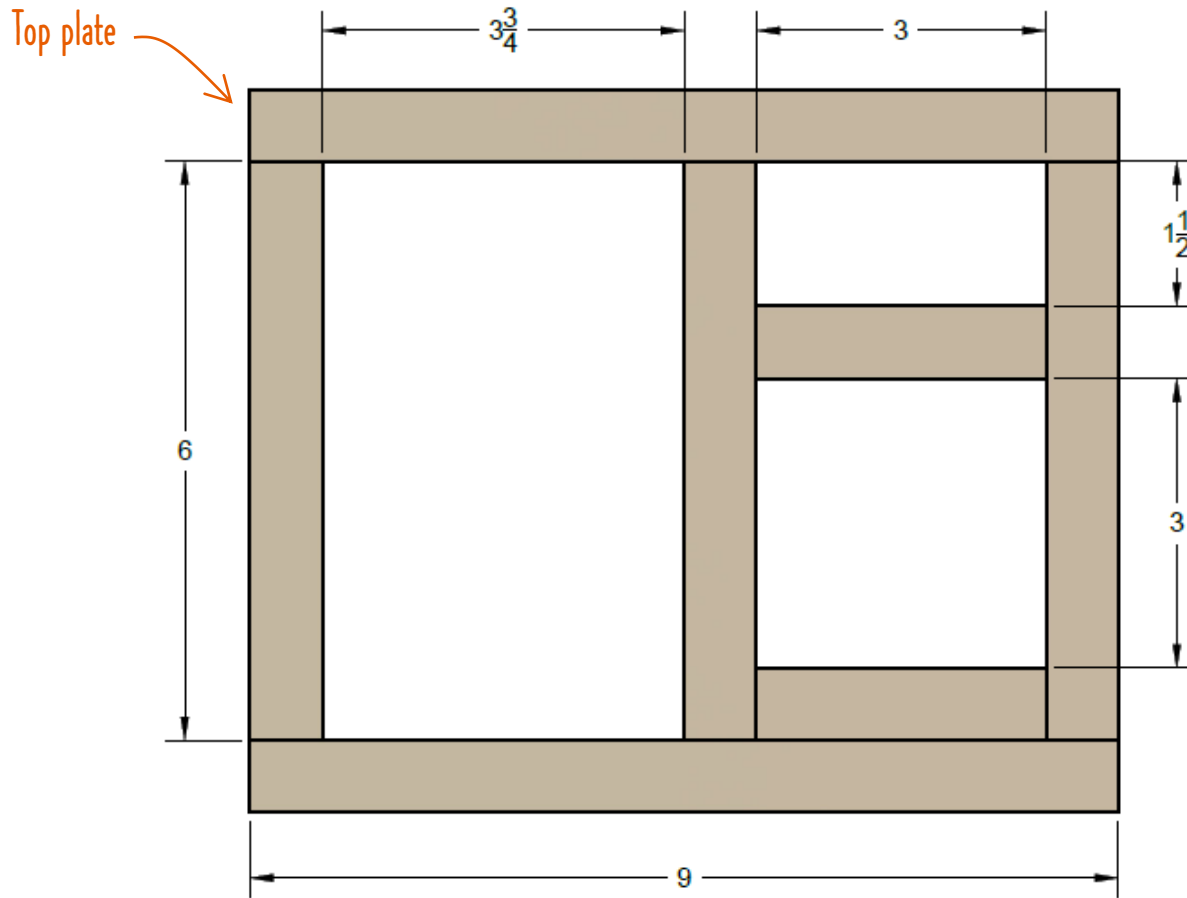
You will need two of these walls!



Step 3

Framing the back wall

The back wall consist of seven Cori beams assembled as illustrated below.

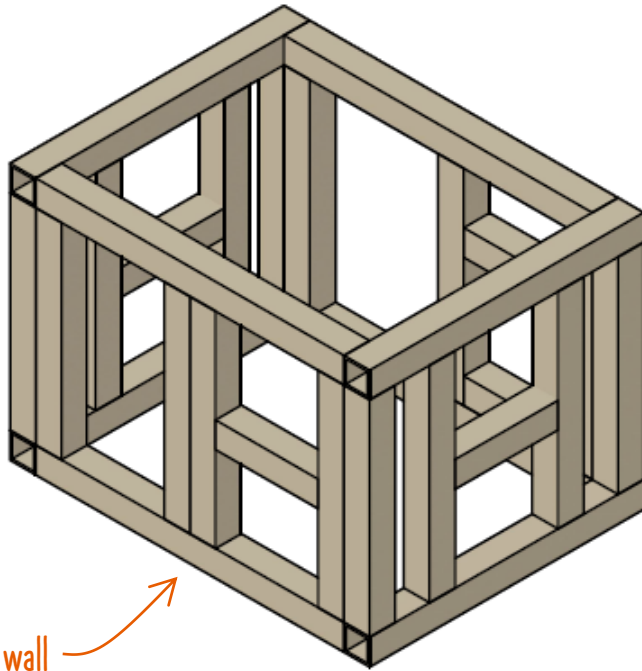


Material list:
9" Cori beam x2
6" Cori beam x3
3" Cori beam x2

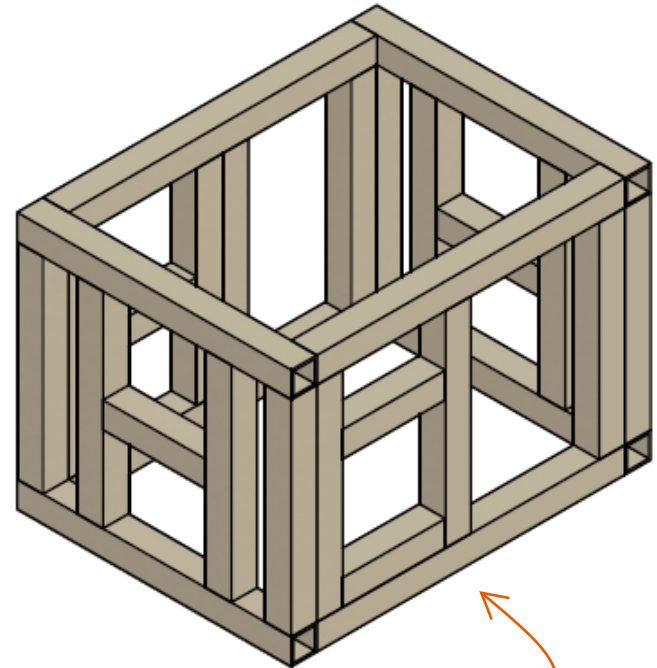
Step 4

Assemble the four walls

Glue each corner of the walls from steps 1-3 according to the illustration below. Note that the front and back walls mounts on the inside of the side walls.



Front wall



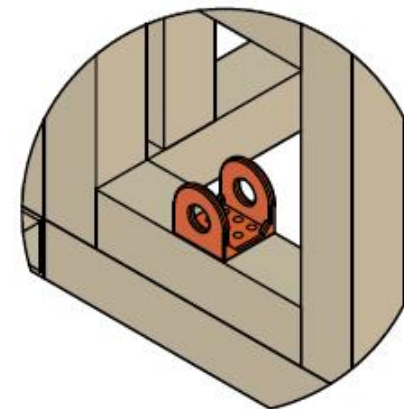
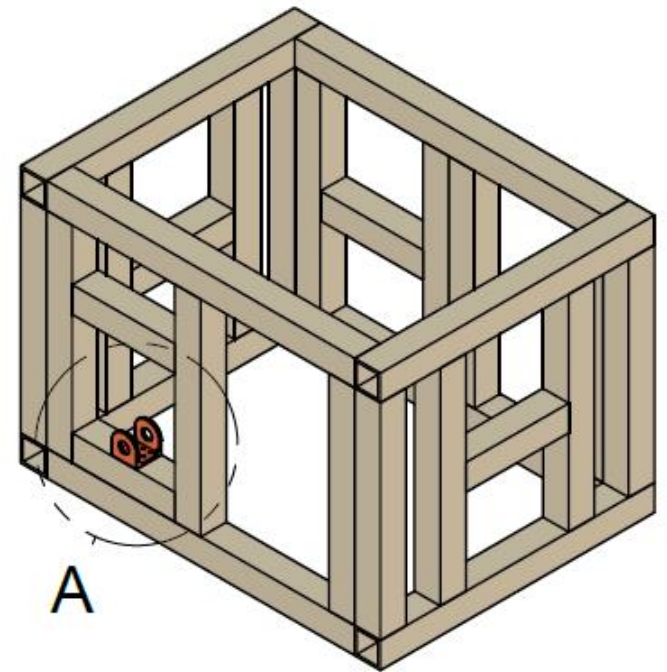
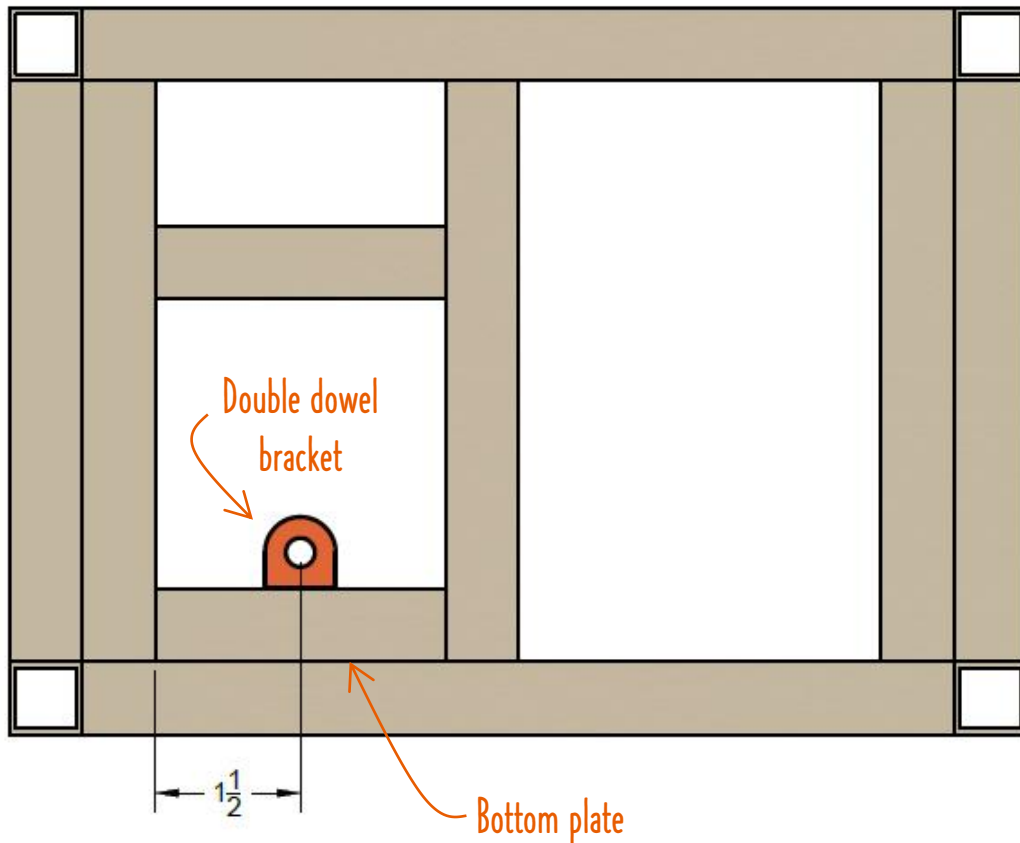
Back wall

Step
5

Install the dowel bracket

Install the double dowel bracket in the middle of the 3" bottom plate on the back wall in the orientation shown.

Material list:
Double dowel bracket



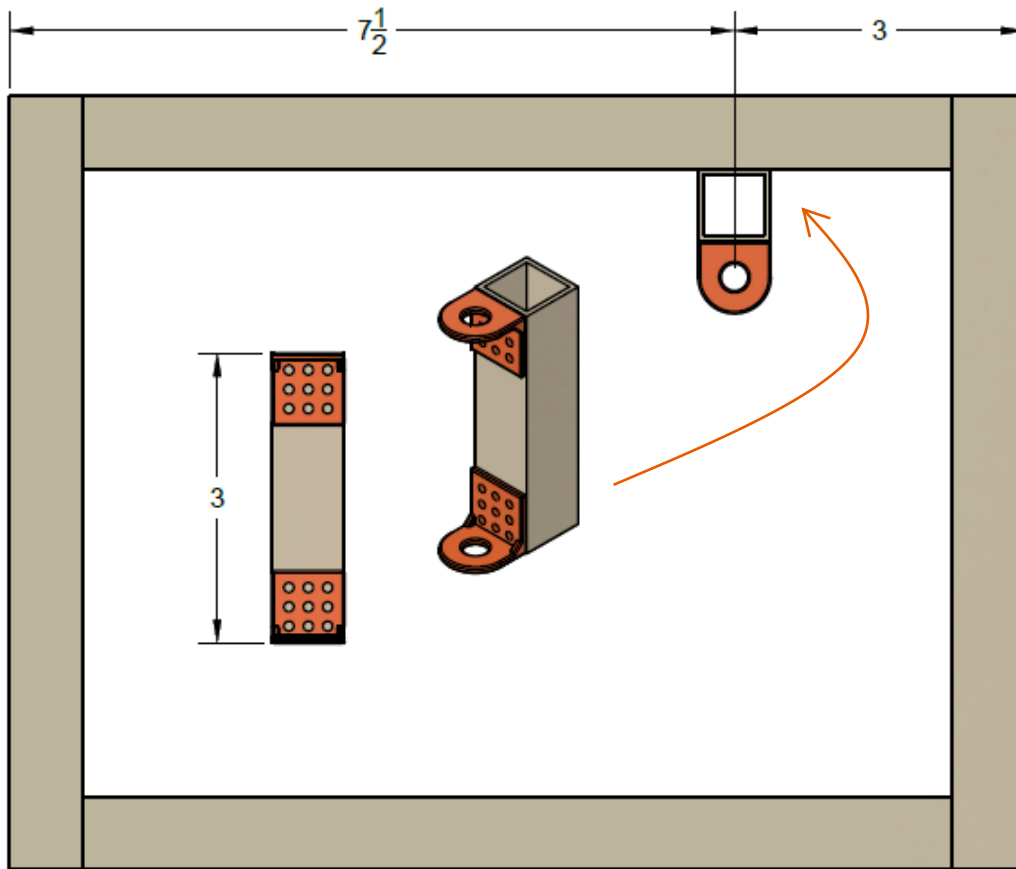
DETAIL A

Step
6

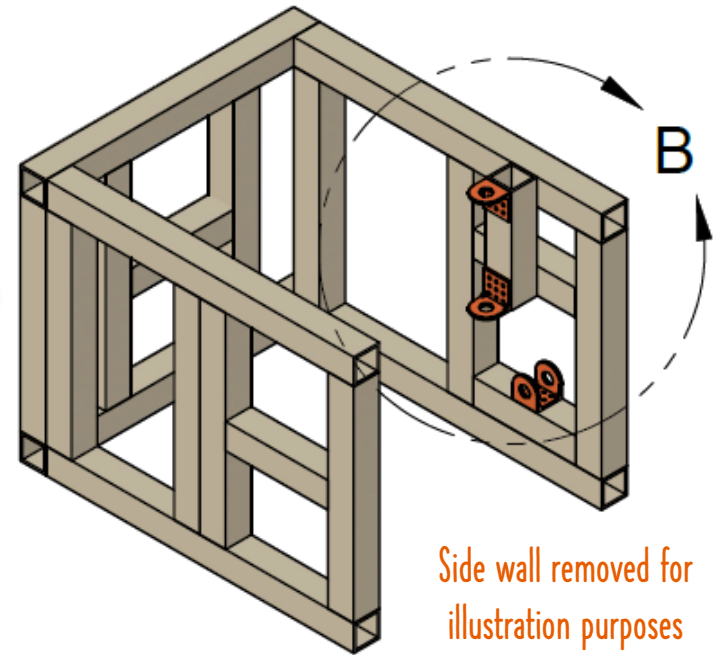
Install the vertical brackets

Cut and fold a 3" Cori beam to support the two dowel brackets for the vertical dowel. Glue to the back wall as shown. The brackets should vertically align with the double bracket from step 5.

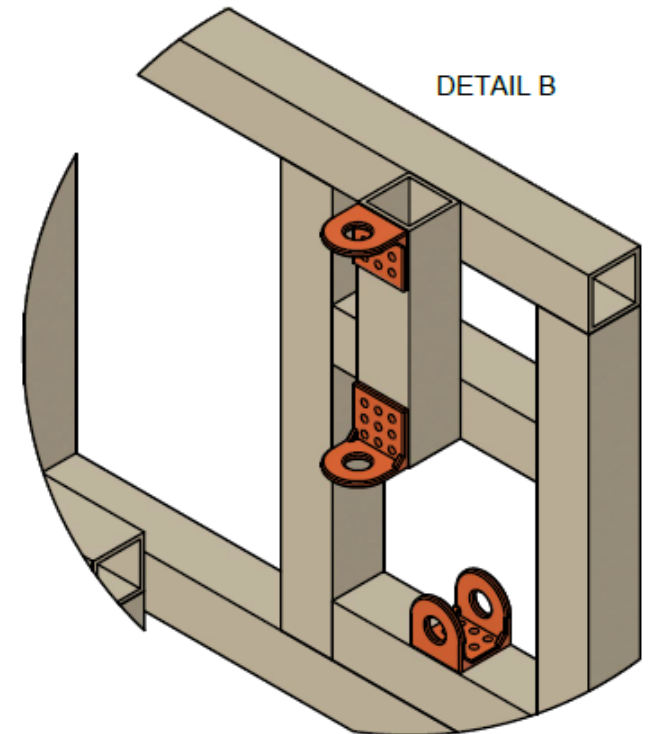
Material list:
Dowel bracket x2
3" Cori beam



Top view



Side wall removed for illustration purposes



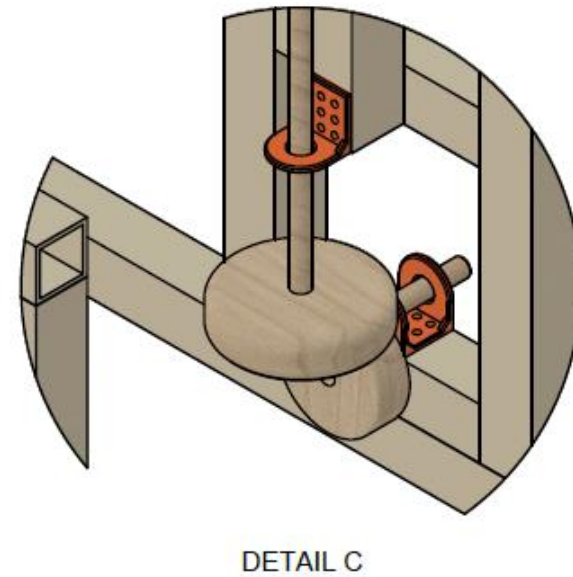
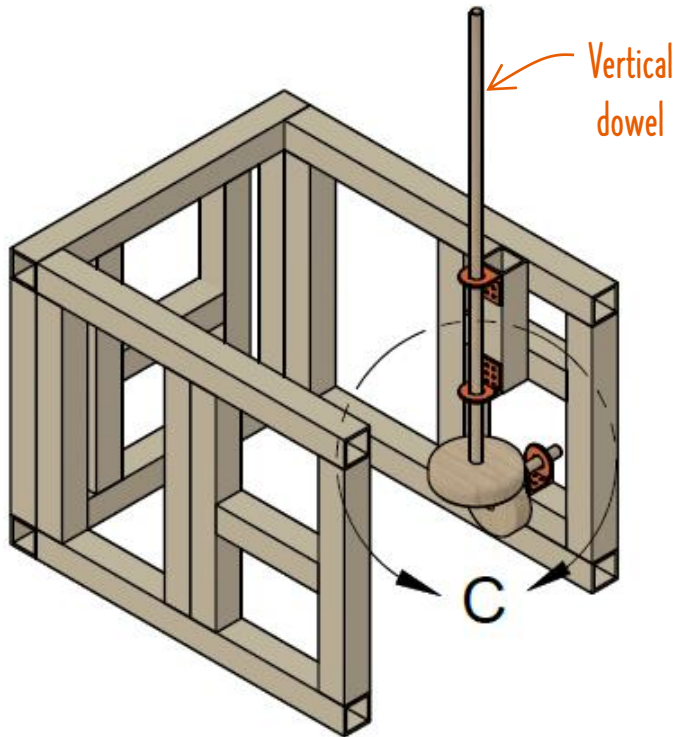
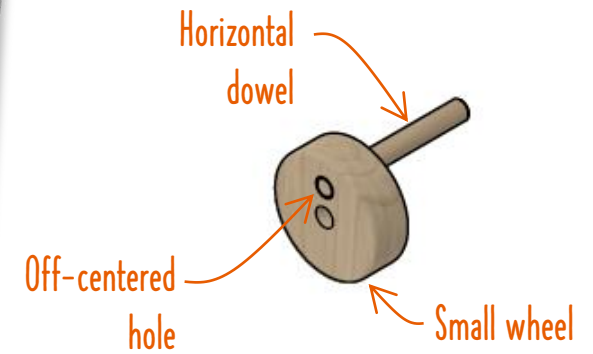
DETAIL B

Step 7

Install the vertical brackets

Cut and fold a 3" Cori beam to support the two dowel brackets for the vertical dowel. Glue to the back wall as shown. The brackets should vertically align with the double bracket from step 5.

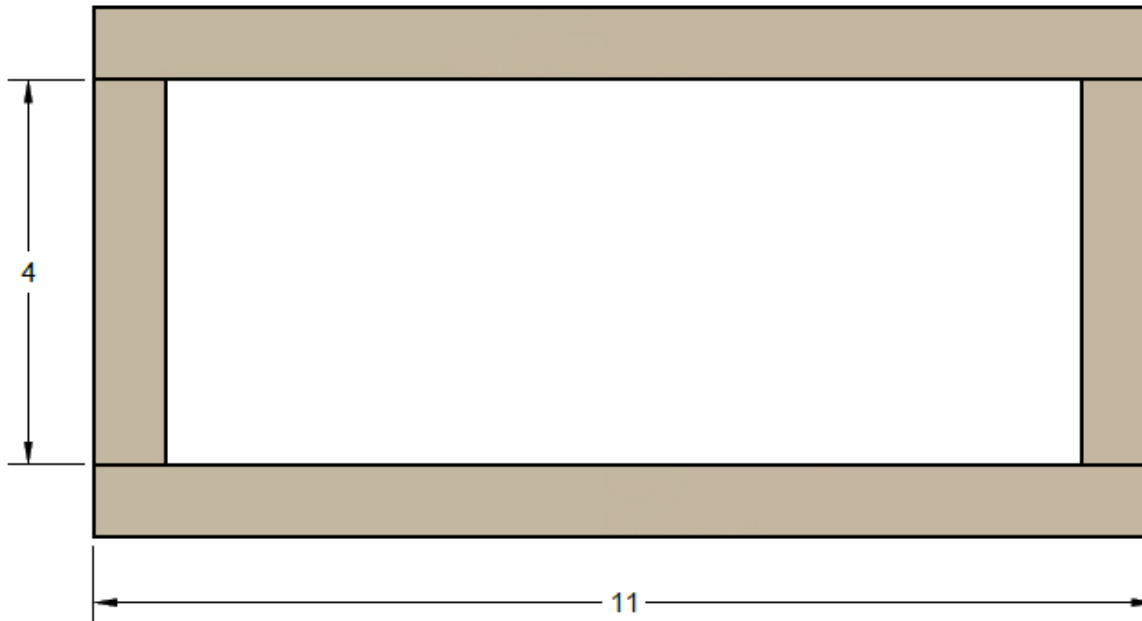
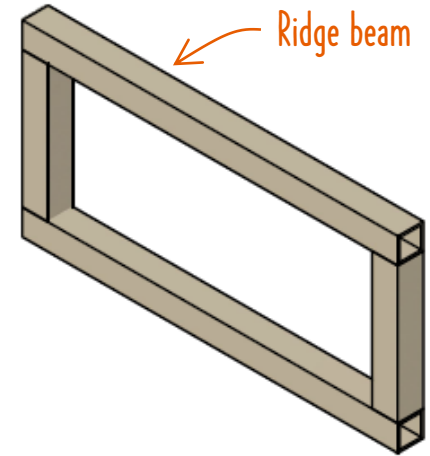
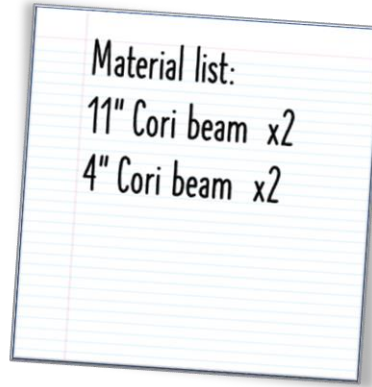
Material list:
Large wood wheel
Small wood wheel
12" wood dowel
2" wood dowel



Step
8

Framing the roof

Create one side of the roof by gluing four Cori beams according to the drawing below.

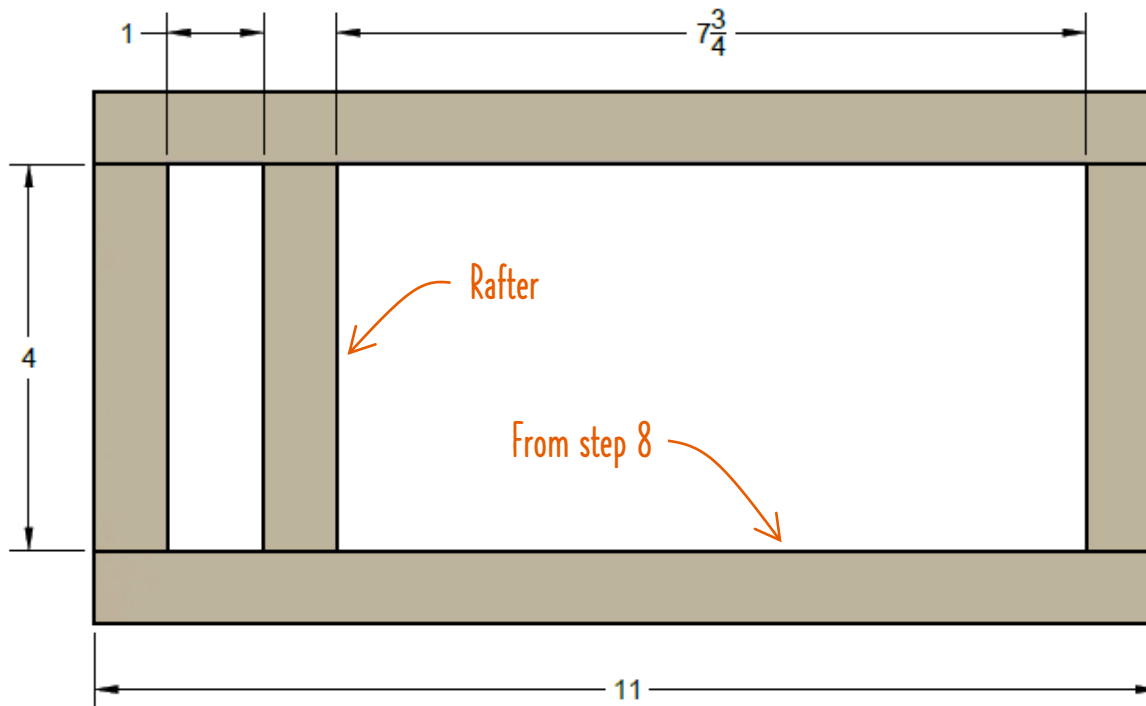
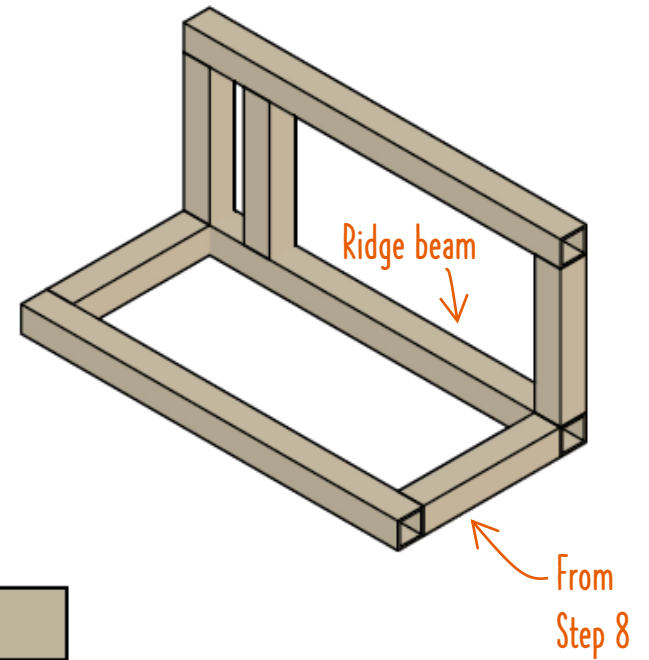


Step 9

Framing the roof

Add four more Cori beams to the roof from step 8 following the illustrations below.

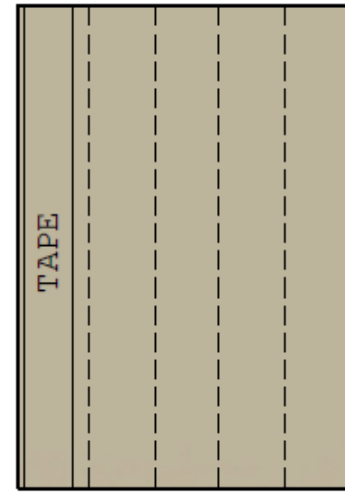
Material list:
11" Cori beam
4" Cori beam x3



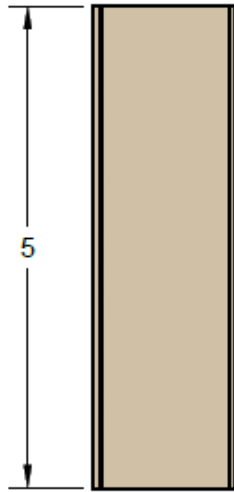
Step 10

Build the chimney

Cut two 5" Cori sheets and fold them on the perforations shown to the right. Use the adhesive tape strip to join the two pieces together to form the chimney.



You will need two of these



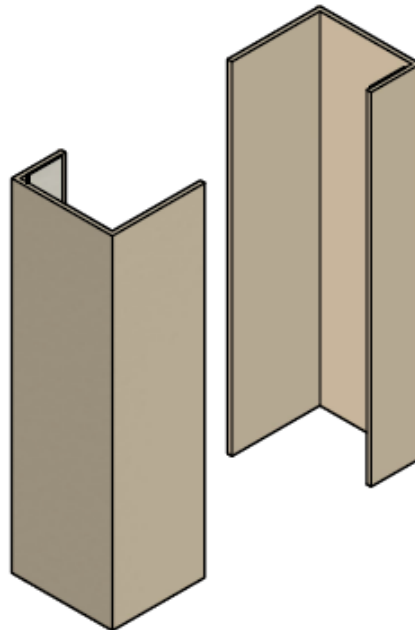
Fold here

Fold here

Chimney



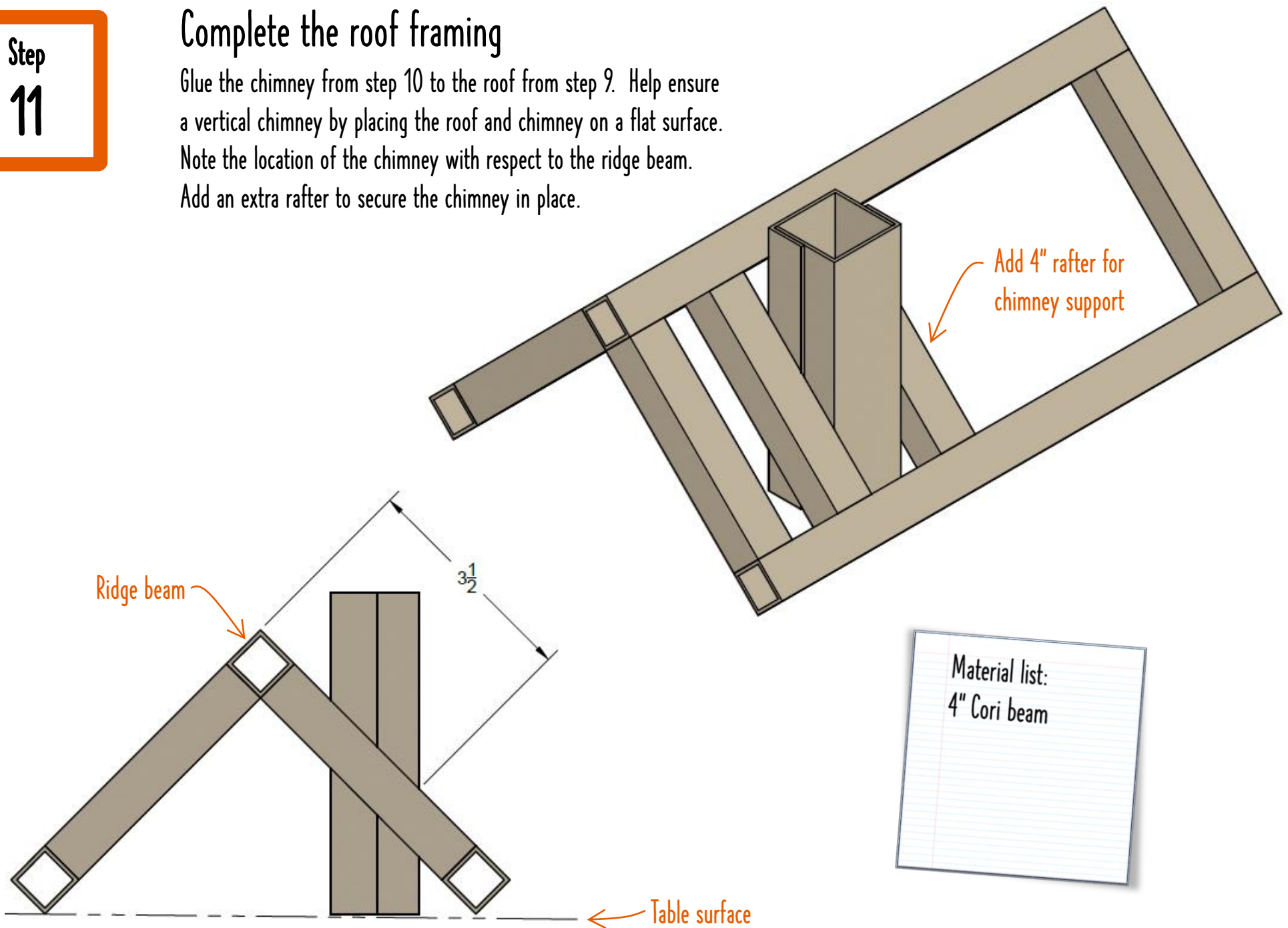
Top view



Step
11

Complete the roof framing

Glue the chimney from step 10 to the roof from step 9. Help ensure a vertical chimney by placing the roof and chimney on a flat surface. Note the location of the chimney with respect to the ridge beam. Add an extra rafter to secure the chimney in place.

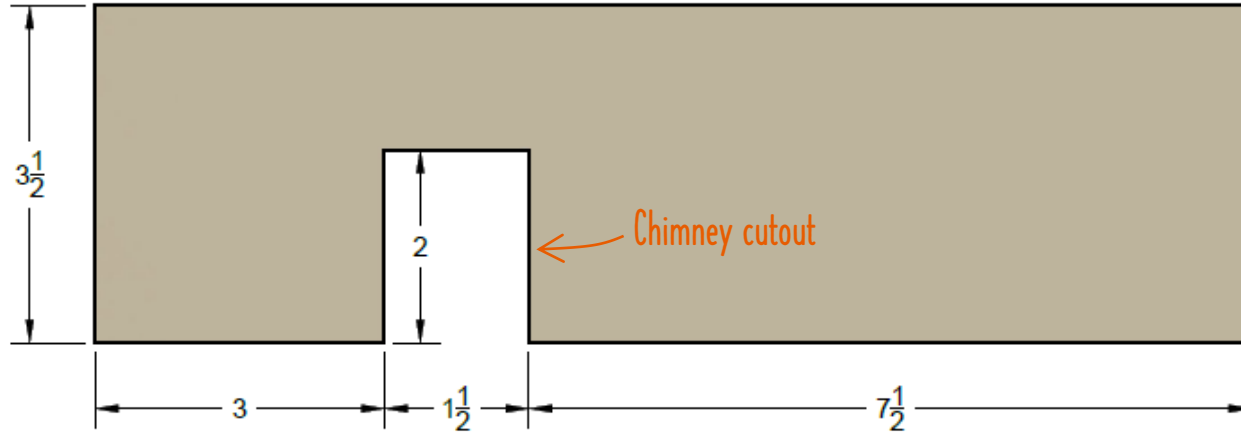
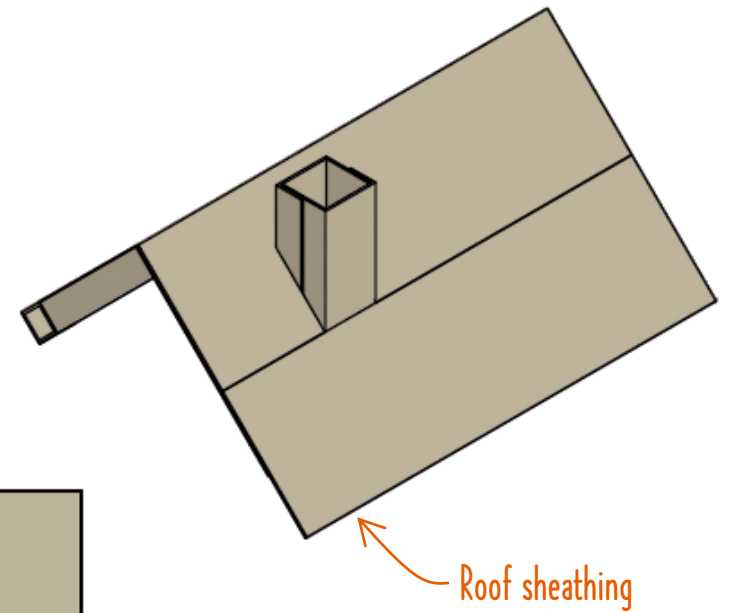


Material list:
4" Cori beam

Step 12

Cover the roof

Use untapped Cori sheets for roof sheathing. Adjust the chimney cutout if needed for your build. Glue sheets to the roof framing.

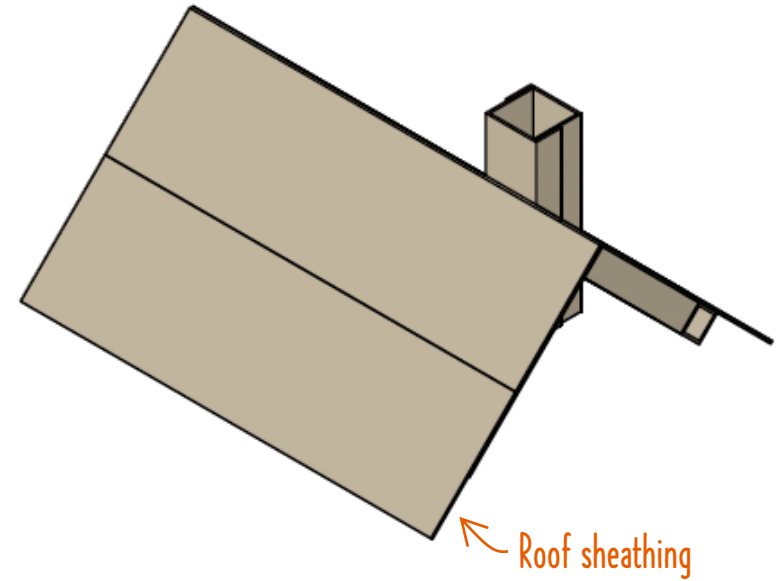


Material list:
Cori sheet without
tape x2

Step 13

Cover the roof

Complete the roof sheathing by adding two more untapped Cori sheets on the opposite side of the roof.



You will need
two of these



Material list:
Cori sheet without
tape x2

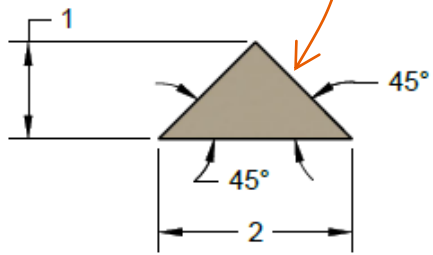
Step 14

Complete the roof

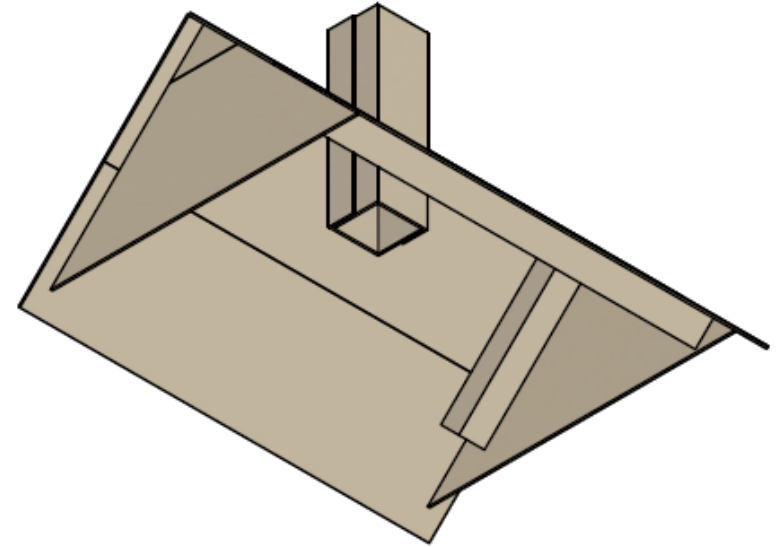
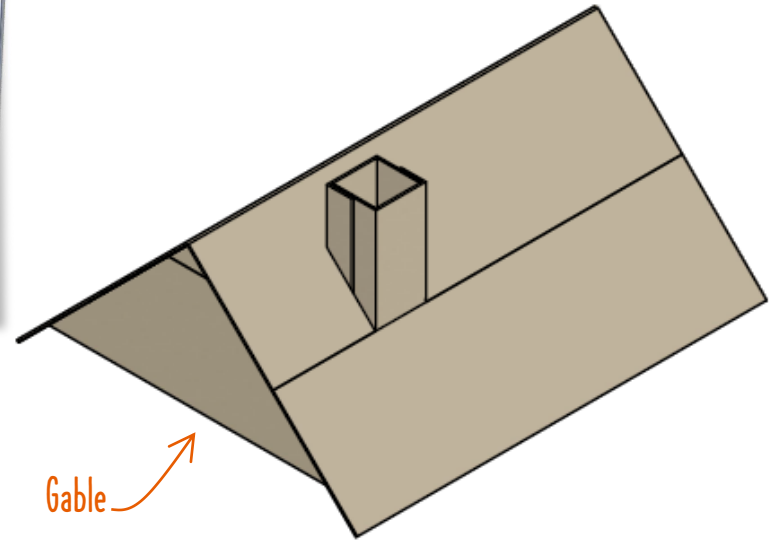
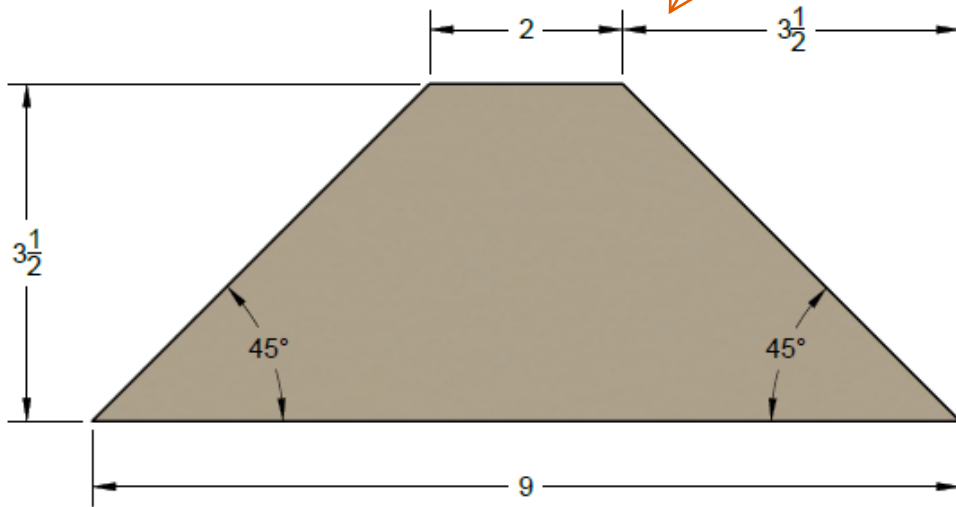
Finish the roof by installing the triangle shaped gable walls on each side using the dimensions below.

Material list:
Cori sheet without tape x2

You will need two of these



You will need two of these

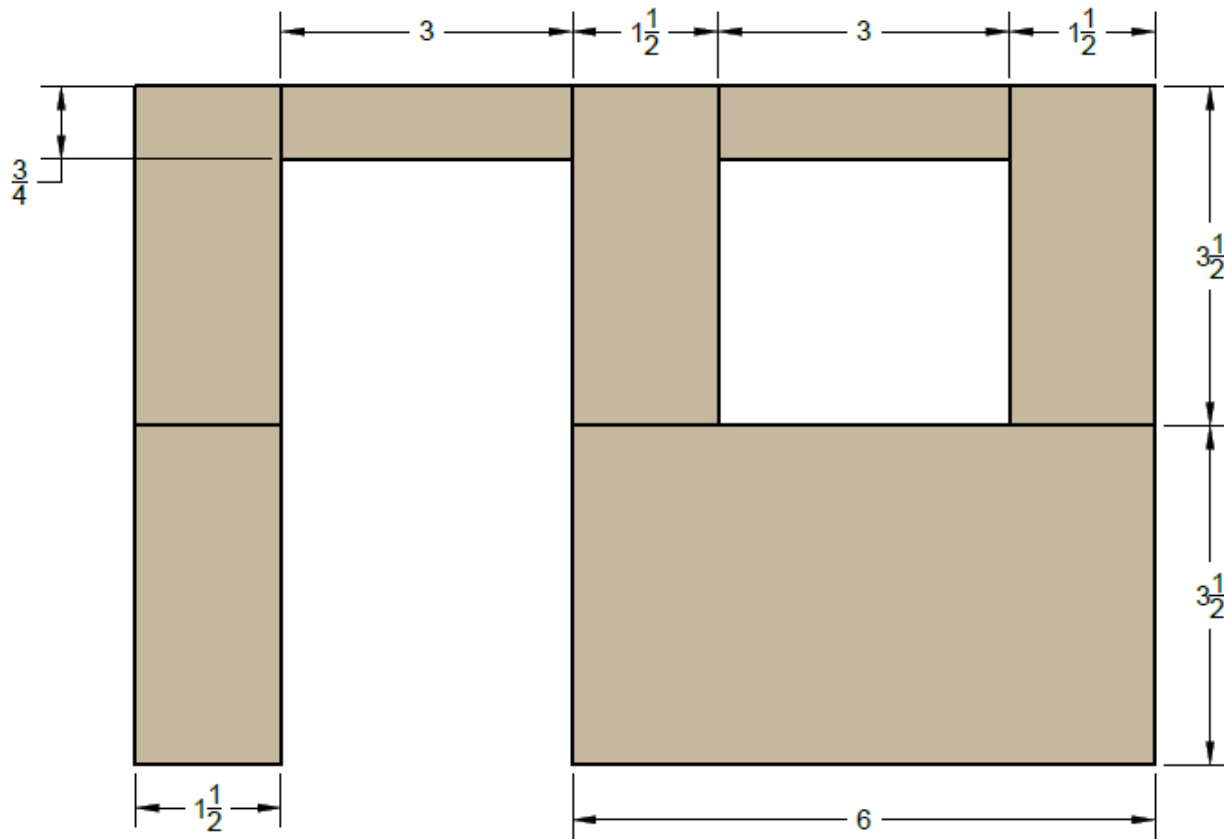


Step 15

Sheathing the front wall

Use un-taped Cori sheets for the front wall sheathing following the dimensions below. Adjust as needed if your wall dimensions are different. Glue each sheathing onto the frame from step 7.

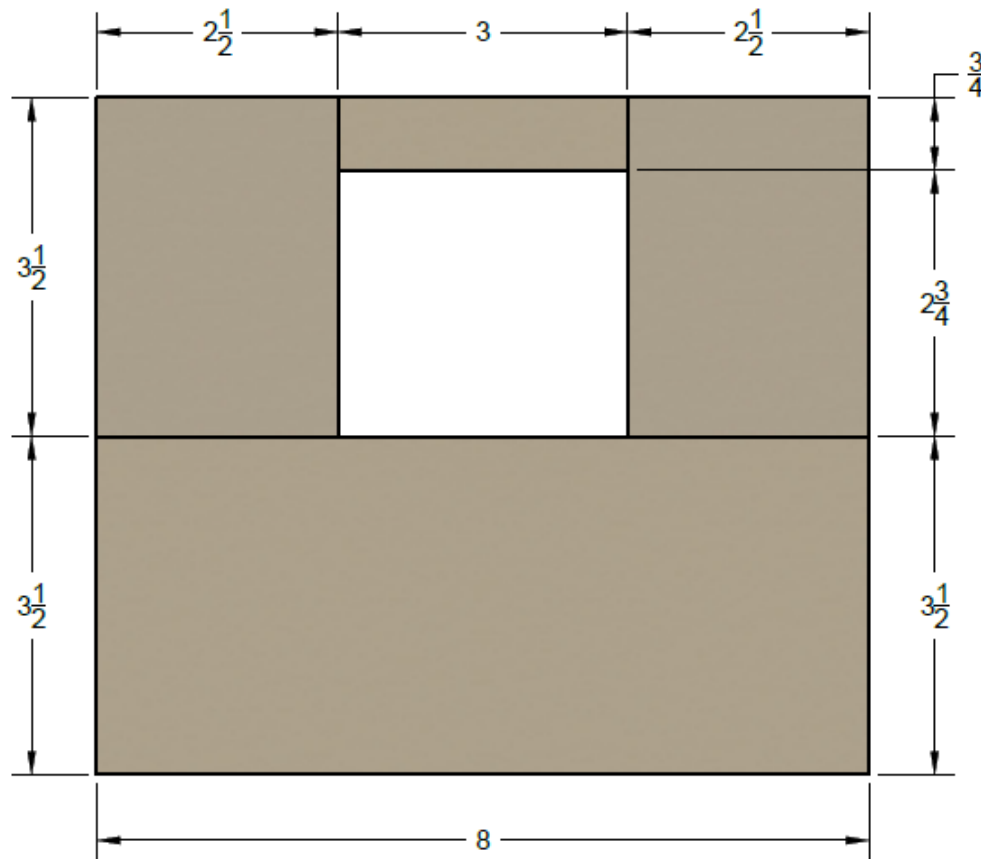
Material list:
Cori sheet without
tape x2



Step 16

Sheathing the side walls

Use un-taped Cori sheets for the side wall sheathing following the dimensions below. Adjust as needed if your wall dimensions are different.



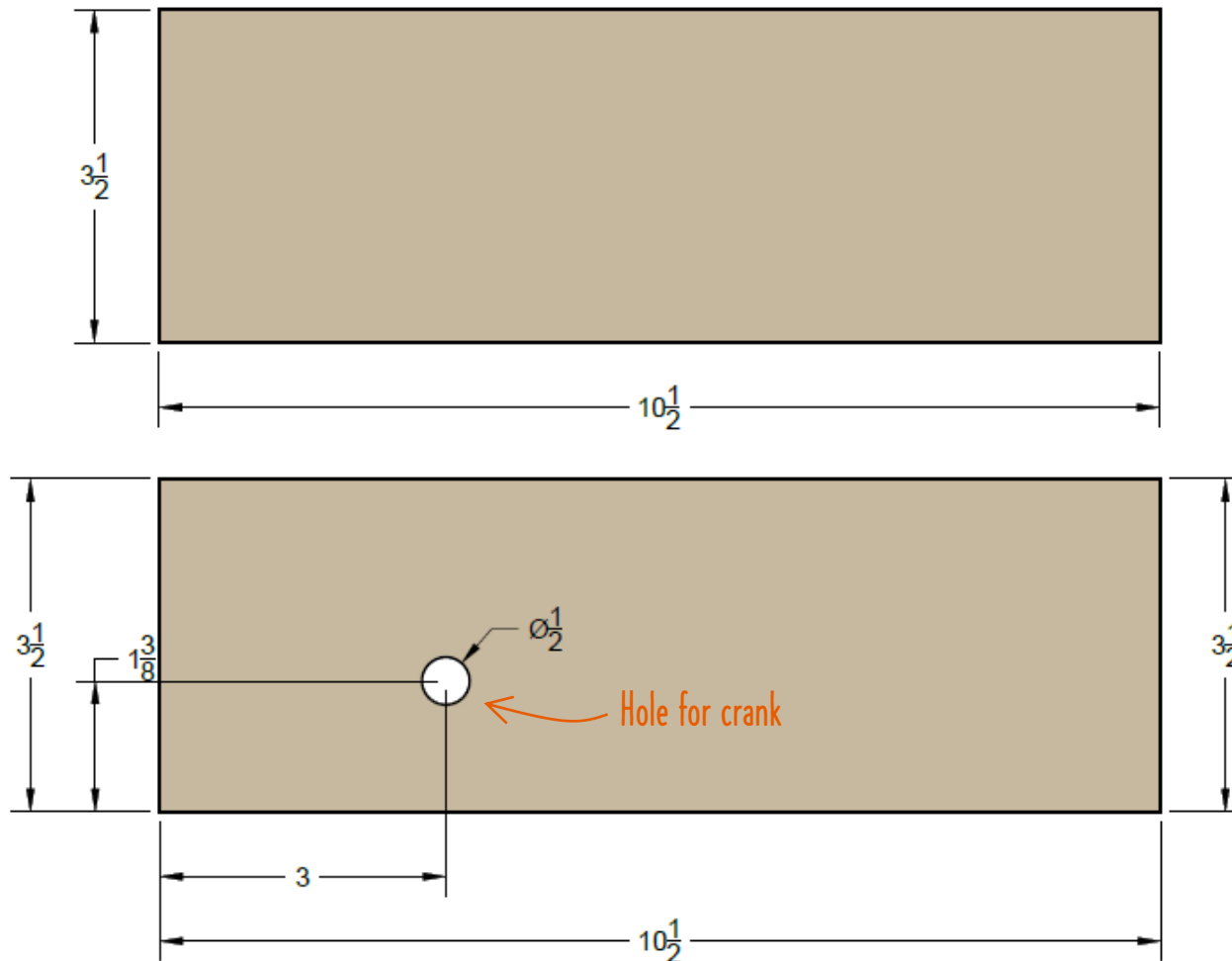
You will need
two of these

Step 17

Sheathing the back wall

Use un-taped Cori sheets for the back wall sheathing following the dimensions below. Use an awl or a sharp pencil to make the hole. Adjust as needed if your wall dimensions are different. Glue each sheathing onto the frame making sure the hole aligns with the horizontal wood dowel from step 7.

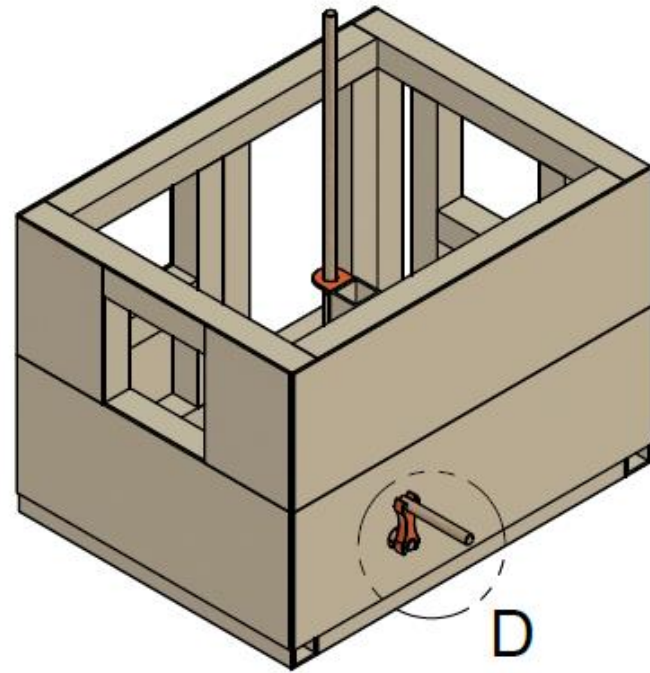
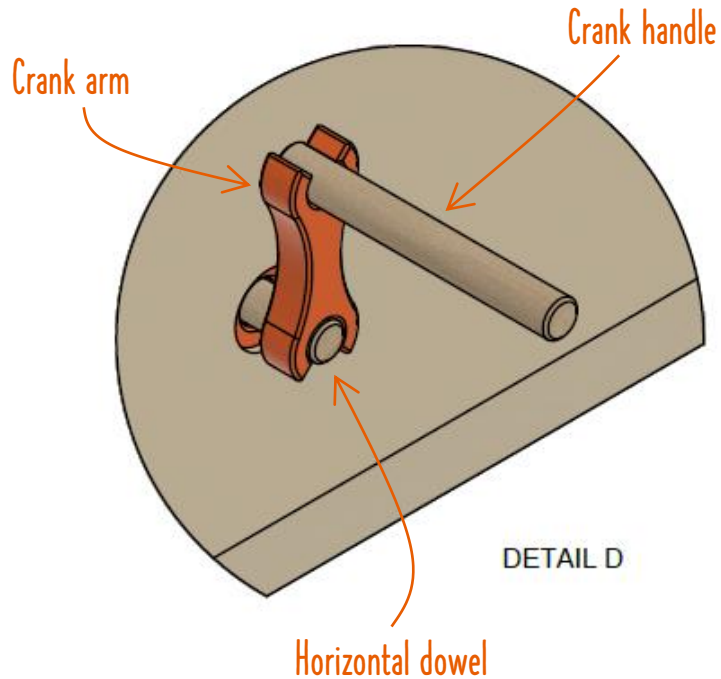
Material list:
Cori sheet without
tape x2



Step 18

Attach the crank

Slide the crank arm onto the wood dowel from step 7 and add another 2" wood dowel for the crank handle. Turn the crank to verify that the automata mechanism is functional. When turning the crank, the vertical dowel should rotate while moving up and down.

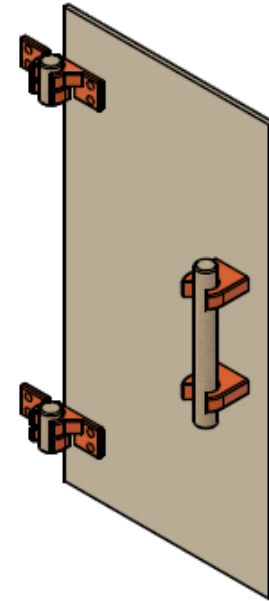
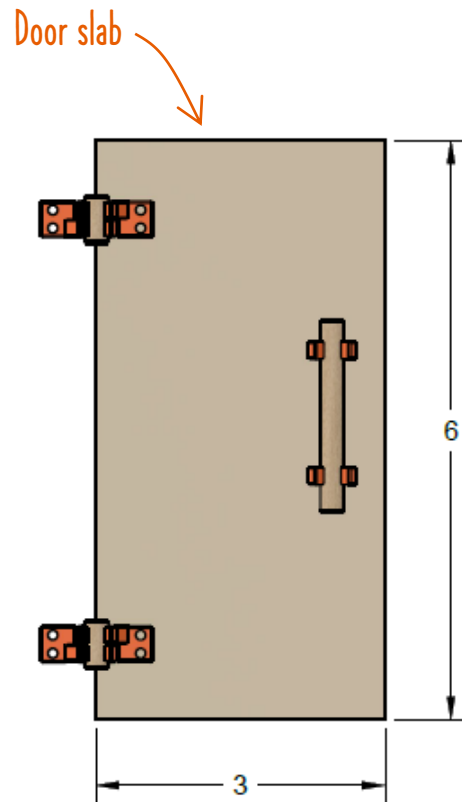
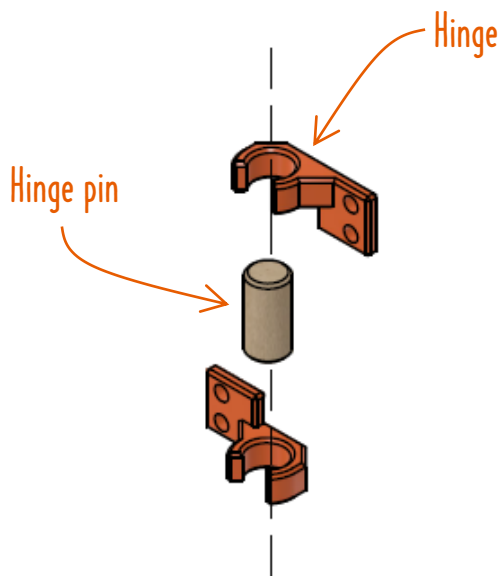


Material list:
Crank arm
2" wood dowel

Step 19

Build the door

Assemble the hinge by inserting the hinge pin into two hinge plates. Repeat for the second hinge assembly. Glue both hinges to the door slab aligning the hinge pins to the edge of the door as indicated below. Add handle. Glue door hinges to door jamb on the front wall.

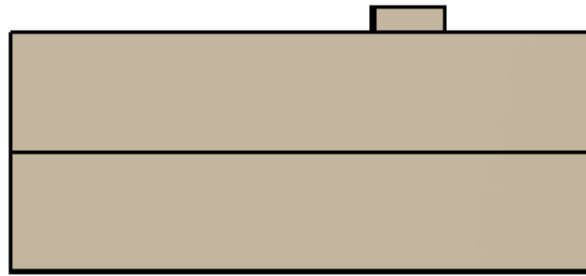


Material list:
Cori sheet
Hinges x4
Hinge pins x2
Handle brackets x2
2" wood dowel

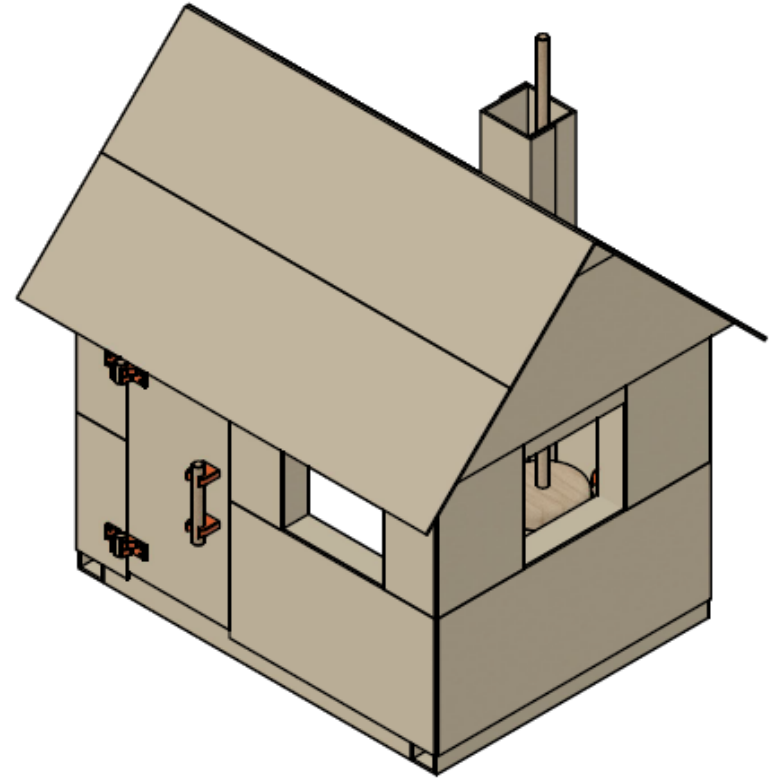
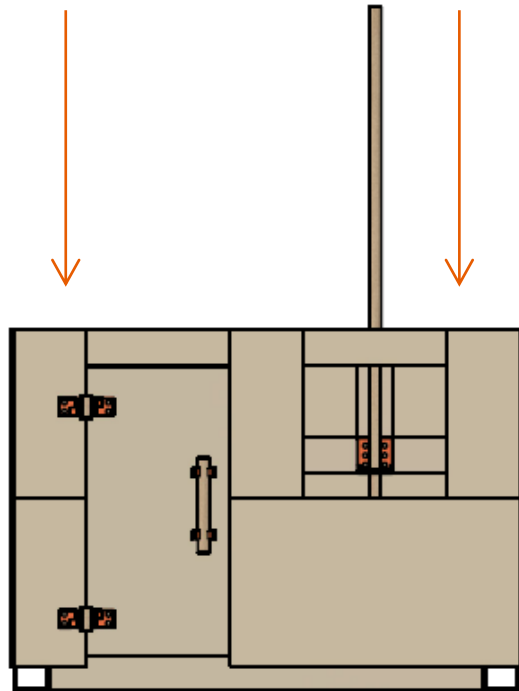
Step 20

Complete the house

Install the roof from step 14 by carefully sliding the vertical wood dowel through the chimney. You may choose to glue down the roof or leave it loose for better interior access.



Install roof

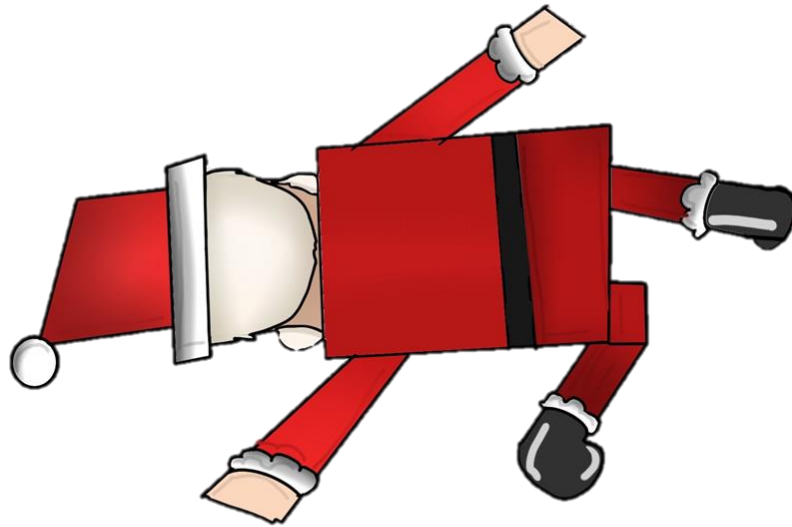


Now it's time to get creative! Install your art, a toy, or an ornament on top of the vertical wood dowel (or use one of the templates on the following pages). Paint the walls and roof, and use any craft or art supply that you have available. This is the time to make this gingerbread house uniquely yours!



Automata templates

Select your favorite character, print on cardstock, cut out, and glue to the vertical wood dowel for a festive dancing addition to your gingerbread house.



Automata templates

Select your favorite character, print on cardstock, cut out, and glue to the vertical wood dowel for a festive dancing addition to your gingerbread house.

