

MAKERS MANUAL #23

Thor Ter Kulve



ROKKAKU KITE

INTRODUCTION

This is a guide for making a paper Rokkaku kite with materials you can find around the home or in the supermarket. Making and flying kites is an activity practiced by many around the globe for millennia and this is your chance to join that club.

Feel free to play with the materials and dimensions set out in this guide, there are no strict rules of kite making. A very large part of flying a kite is about exploring your direct environment and identifying a location suitable for flying your kite. You will learn how the kite responds to the wind, explore how a longer tail might make it more stable or how a smaller frame might work better in strong winds. Make, explore, enjoy, repeat.

STEP 1

Cut off the pointy ends of your wood skewers, you'll need about 6 skewers per rib. For the Rokkaku frame we need to make 3 ribs. Cut one skewer in half and glue this to a full length skewer. Tightly wrap a thread around the skewers joining them together. Keep on adding full length skewers glue and wrapping them tightly until you reach a total length of 70 cm.

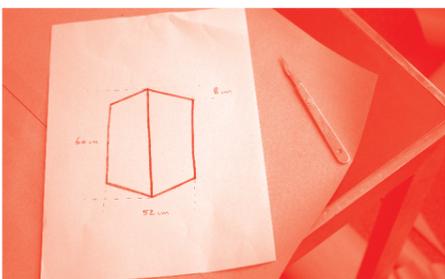


STEP 2

Using sellotape join your skin of paper together so that the total dimension is more than 60x 60 cm

STEP 3

Using a ruler measure out a diamond shape of 60cm high by 52cm wide with a point at 8 cm on the top and bottom. Cut the shape out using a knife or scissors.



STEP 4

Using masking tape, tape down your skin onto your sacrificial board or cutting mat, make sure the tape (from the paper joining) is facing down. Aim to get the masking

tape 50% on the paper edge and 50% on the surface.



STEP 5

Draw something on your kite, think about how it will be seen in the air. Remember it might be seen by many people!

STEP 6

Cut away the ends of the masking tape



STEP 7

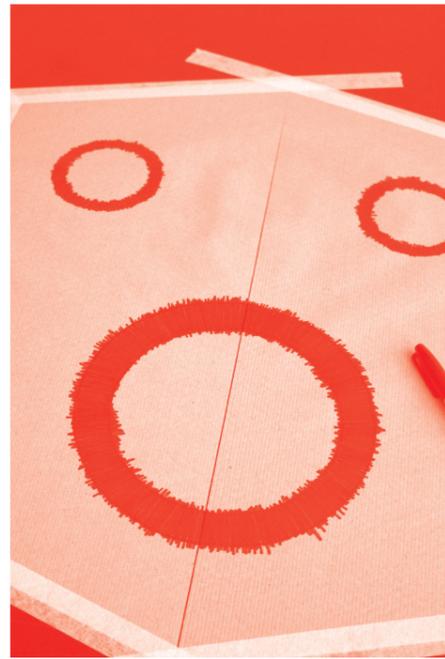
Carefully peel the skin off the surface and fold the masking tape over the edge of the paper, thereby reinforcing it.

STEP 8

Using masking tape reinforce the skin connecting the 6 corners of the diamond shape horizontally and vertically, these are the lines where the ribs will be.

STEP 9

Place the ribs on the skin. The first one vertical dividing the skin in half, use tape to permanently fix this in position leaving



LIST OF THINGS

- Bamboo skewers
- Tread
- Glue
- Paper
- Masking tape
- Sellotape
- Leaves

TOOLS

- Sharpie
- Scissors
- Pencil
- Craft knife
- Ruler/ tape measure
- Lighter
- Cutting mat/ sacrificial sheet

a good 8 cm at the bottom. The last 2 ribs are placed horizontally connecting the far corners. Again use tape to fix them onto the skin.

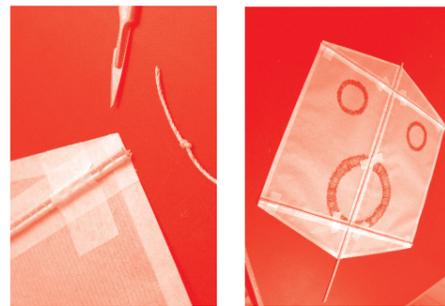


STEP 10

Trim the ribs to the final size using a craft knife.

STEP 11

Connect the ends of the horizontal ribs with a thin cord, these will become the tensing lines. A neat way of doing this is to make a small cut between the bamboo skewers at the end so that the cord will fit through but a small knot tied in the cord won't. A small knot at the end of this line won't slip through it.



STEP 12

Create a slight tension/bow by tying up the two horizontal ends with the tensing line.

BIO OF THE DESIGNERS

Thor Ter Kulve is a Dutch designer based in London, where he runs Studio Thor. His work re-defines public space, inventing products that enable natural or civic typologies to be transformed into tools, furniture, and solutions. Through interventions, he tries to enable everyone to re-think the rules of civic environments. His approach to design is practical and hands-on, which led him to become a skilled maker. Thor runs workshops and teaches at institutions in the UK and abroad.

In partnership with other designers and makers Thor runs a studio/workshop collective called Space 62. Together with long-term collaborator Adam Blencowe. He designs and makes commissioned furniture for the private and the public sector.

FURTHER READING

- The Kite Runner (Book/ Film) by Khaled Hosseini, 2003

- The complete book of kites and kite flying by Will Yolen, 1976

- <http://www.kiteman.co.uk>

Makers Manual is a collaborative project between exciting makers and STORE STORE. Participation is free and no design background is necessary. You can share your creations using #makersmanual. We will pick our favourite submissions and publish the results in a limited printed edition of all of the manuals. Everyone who makes it into the book will receive a free copy.

This project is supported by Coal Drops Yard.

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STEP 13

The bridle points of the kite are exactly at the places where the two horizontal ribs cross the vertical rib. Make a small incision in the paper and tie a cord between the points on the front of the kite. Leaving enough slack in the line that you can create a triangle sticking approximately 18 cm out from the surface of the paper.



STEP 14

Make a tail using 1.5 meter of cord and some leaves.



STEP 15

Tie the tail to the end of the vertical rib

STEP 16

Tie a line to the cord that connects to the bridle points and you are ready to fly your kite!

